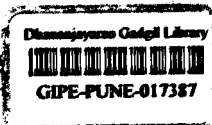


UNITED PROVINCES GOVERNMENT REPORTS: 1931-1941



- Report of the Commission of Enquiry into the Communal Outbreak at Cawnpore, 24th March 1931, with Government Resolution thereon. (Chairman: M. Keane.) 1931. Y:458:5(K).252CC.N3E G1 pp.1-24.
- Report of the Rent and Revenue Committee, 1932, with Government Resolution thereon. (Chairman: Mr. Drake-Brockman.) X72.252.N3E G pp.25-44.
- Statistics Relating to the Size of Cultivators' Holdings. pp.45-66.
X9(J).252.N3E G5
- Report of the Cottage Industries Committee, 1937. (Chairman: J. Nigam.) pp. 67-71.
X91.252.N37E G7
- Report of the Cawnpore Labour Inquiry Committee, 1938. (Chairman: Babu Rajendra Prasad.) X:9.252CC.N38E G8 pp.72-141.
- dto Government Resolution on the Committee, June 12, 1938. pp.142-143.
X:9.252CC.N38E G8
- Report of the Anti-Corruption Committee, 1938. (Chairman: Kunwar Sir Maharaj Singh.) V252, 8:(Y:45).N3E G8 pp.150-156.
- Report of the Committee appointed to inquire into the Working of the United Provinces Motor Vehicles Rules, 1938. (Chairman: W.C. Dible.) pp.157-165.
X43.252.N4E G8
- Report of the Joint Power Alcohol and Molasses Enquiry Committee (Bihar and the United Provinces), 1938. (Chairman: Dr. P. Lalbar.) pp.166-226.
X9(F55-54).252.N38E G8
- Report of the United Provinces Legal Education Reform Committee, 1939. (Chairman: Mr. Amanatullah.) T9(Z).252.N4E G9 pp.227-241.
- Report of the Special Committee to advise on Practical Training for Engineering students and ex-Students, 1940. (Chairman: Sir William Stamps.) T9(D);38.252.N4E H9 pp.242-254.
- Report of the Labour Commissioner on the Sahrapur Cigarette Factory Strike, 1940. (Chairman: S.S. Hasan.) X9(M45):9.25261.N4E H0 pp.255-256.
- Report of the Hindustani Academy Enquiry Committee, 1940. (Chairman: Karam Singh Kano.) P152.252,dN27:1.N4E H1 pp.257-267.
- Report of the Sanskrit College Syllabus Revision Committee, 1941. (Chairman: Dr. Bhagwan Das.) TA(F15):54.252.N4E H1 pp.268-304.
- Recommendations of the Report of the Universities Committee, 1938. TA.252.N4E H1 pp.305-337.
- Report of the Lucknow Improvement Trust Inquiry Committee, 1940. (Chairman: Rai Bahadur Babu Brijendra Swarup.) pp.338-347.
Y:811:7.252CL.N4E H1

Y: 4582; 5(z) (252 CC. N. 36
G1 Registered No. A380
17387



①

Government Gazette

THE UNITED PROVINCES OF AGRA AND OUDH.

Separate paging is given to this part, in order that it may be filed as a separate compilation

PUBLISHED BY AUTHORITY.

EXTRAORDINARY.

NAINI TAL, TUESDAY, JUNE 9, 1931.

GOVERNMENT, UNITED PROVINCES.

No. 2800/VIII—1263.

POLICE DEPARTMENT.

Dated Naini Tal, June 9, 1931.

RESOLUTION.

READ—

Report of the Commission of Enquiry into the Cawnpore riots of March 1931.

OBSERVATIONS.—The Governor in Council is indebted to the members of the Commission of Enquiry for a careful and balanced statement of the conditions precedent to the rioting in Cawnpore, and for a dispassionate review of the measures taken to suppress it. Their narrative of events makes it unnecessary to deal here with the actual incidents of the outbreak; and the Governor in Council can proceed at once to state his own conclusions on the views expressed by them as to the causes which led to such an unusual and deplorable exhibition of communal violence, and the action of the authorities on whom lay the duty of suppressing it.

2. Those who give an unbiassed study to the conditions prevailing in Cawnpore at the time of the outbreak will have little difficulty in accepting the view of the Commission that the explanation of the embitterment of feeling between the two communities which was responsible for the severity of the outbreak, is to be found in the course taken by the Civil Disobedience movement. In the words of the Commission, the movement had openly aimed at paralyzing Government, but it had come to be regarded in Cawnpore (more definitely perhaps than in any other

city of the province) as a Hindu movement, with Muslims actively or passively in opposition. It is not however sufficient merely to recognize this fact. Judgement on the predisposing causes of the outbreak cannot be complete without some reference to the question whether the action taken in Cawnpore to combat the Civil Disobedience movement, as distinguished from that taken elsewhere, was such as in itself to reduce respect for order, and to produce an atmosphere favourable to an outbreak of violence. Looking at the peculiar circumstances of Cawnpore, which are strikingly different from those, for instance, of Allahabad and Lucknow, the Governor in Council must now admit that he might with advantage have directed a firmer and more consistent recourse to the penal and preventive sections of the ordinary law during the earlier days of the agitation. That is a matter of policy for which the responsibility lies on Government and not on the local authorities. At a later stage of the agitation, the various ordinances dealing with Civil Disobedience were fully utilized, and some 1,400 persons were convicted of offences arising under them. As a consequence, in the period immediately preceding the Delhi Agreement (March 1931) outward respect for law seemed to have been re-established in the city; but the general course of events during the period of agitation, and the cessation of all police action which followed the conclusion of the Agreement, must have conduced to create a dangerous mentality among many of the more turbulent and criminal elements in the city.

3. The report proceeds next to deal with the immediate causes of the outbreak. Here also there can be no hesitation in accepting the view of the Commission, that it was directly due to the attempt to enforce a *hartal* in connection with the execution of Bhagat Singh. The attitude of the Congress Committee generally, and the action of some of its prominent men during the actual disturbances, acquit it of any deliberate intention of causing a communal outbreak. The local Government desire to take this occasion to associate themselves with the tribute paid to Mr. Vidyarthi in particular for the efforts made by him to prevent violence, in the course of which he sacrificed his own life. But the attempt made to enforce a *hartal* on Muslims, already excited by knowledge of what had happened at Mirzapur, Benares and Agra, was clearly the direct cause of the outbreak.

4. There is one further matter to which it is necessary to allude, before dealing with the findings of the Commission on the adequacy of the steps taken by the local authorities to quell the outbreak. They remark on the insufficiency of the police force in Cawnpore in normal times. They show that in 1929 the Inspector-General asked for a considerable increase in the force to meet the growth in the population of the city and for further expenditure on buildings, in order to provide for a more suitable distribution of the force. The province has for some years been working under severe financial restrictions, and the local Government, though recognizing the need for adding to the Cawnpore establishment, felt at the time obliged to postpone this item of expenditure. Events have shown the decision to have been unfortunate, and steps will now be taken to repair the deficiency. At the same time,

it must be remarked that (as the Commission recognize) no large city can be staffed in such a way as to ensure the immediate suppression of an abnormal outbreak such as occurred at Cawnpore. It will always be necessary in such circumstances to call in reinforcements from central police reserves or neighbouring districts.

5. In commenting on the action taken by the authorities responsible for dealing with the riots, it was inevitable that the Commission should attach the first importance to the part played by the District Magistrate. They hold that in the dispositions made by him during the first stage of the trouble he acted with care and foresight. They feel, however, that in the stage immediately following, namely, in the course of the afternoon and evening of the 24th March, he committed errors both in judgement and action. The Governor in Council considers that in weighing the facts given by the Commission which bear on the action of the District Magistrate at the time he left the city, full account should be taken of Mr. Sale's own explanation as given in his evidence. He clearly did not, in the light of what he had himself seen and heard up to that time, take a serious view of the situation; there were complaints of assaults from both sides, but he did not think that there was an immediate prospect of severe communal fighting. It is also necessary to state that the evidence points to the fact that no serious attack on the Meston Road temple, still less any actual burning of it, had started when he was near the spot. The burning of the Chauk mosque apparently took place later still. It is proper to state these facts in justice to the District Magistrate; as events showed, his judgement of the situation was at fault, but in leaving the spot to draw up and issue the curfew order, there was on his part no idea of shirking his duty. His mistake lay in failure to make a prompt and correct appreciation of the position. He failed also in realizing the necessity of that active personal handling of the measures for suppressing disorder which is incumbent on a District Magistrate in emergencies of this nature. His personal control of operations on the spot was the more essential as the Superintendent of Police was a comparatively junior officer, who had only taken charge four days before, with an Assistant Superintendent who had only arrived in the city on the 16th March. His failure to appreciate the situation is further evidenced by the fact that he did not until the morning of the 25th March ask Government for that further assistance both in troops and police, the need of which the position of affairs on the evening of the 24th should have clearly demonstrated to him. Throughout the course of the rioting he constantly visited the city and remained in close touch with the civil and military authorities actually engaged in the work of suppression; but he would have been better advised had he neglected all other duties, in order to take personal charge of the operations within the city itself. Had he done so, he would have inspired greater confidence not only among the two communities involved in actual disorder, but also among the Europeans, who showed considerable alarm at the spread of violence in the factory area. The Governor in Council records these conclusions with the greater reluctance, because Mr. Sale is an officer whose

career has been characterized by conscientious and devoted discharge of his duties and by proofs of a temperament which has secured for him much friendship and goodwill among the people of the districts in which he has served. While making full allowance for the heavy strain to which he had been subjected by the course of the agitation for Civil Disobedience, in a district which even in normal times is an onerous charge, the Governor in Council feels that it will not be possible to expect that measure of confidence which is essential to the restoration of peace between the communities in Cawnpore, if Mr. Sale remains in charge of the district. There is no reason to hold that the Superintendent of Police, Mr. Rogers, displayed any want of activity in dealing with the riots. If his efforts appear to have lacked in effectiveness, an adequate explanation lies in the fact, for which he is in no sense responsible, that he was entirely without experience of the city and the men under his orders. The Deputy Superintendent in charge of the city, Khan Bahadur Saiyid Ghulam Hasnain, is an officer with an excellent record in the past. The Governor in Council does not consider that he showed the leadership which was to be expected of an officer of his position and knowledge of local conditions; but it is noted here that he has lately been obliged to take leave for medical reasons.

6. It remains to deal with the findings of fact recorded by the Commission, which support the allegations that in specified cases subordinate officers of the police were guilty of lack of initiative, and constables of apathy or positive dereliction of duty. The Governor in Council is not in entire agreement with certain observations of the Commission, as for instance the possibility of warning crowds that they would be fired on, for the circumstances seem to have made this unusually difficult; a remark which applies equally to the difficulty of pressing home *lathi* charges. Again, the failure of communications and loss of touch with the *muhalla* police was certainly due in part to the unsuitable placing of the police stations and the lack of outposts. The Governor in Council also doubts whether it would, in the circumstances with which the police were faced during the evening of 24th March, have been possible to effect precautionary arrests of bad characters; the precedent of the 1927 riots has been quoted, but not only was the outbreak then on a different scale, but arrests on that occasion seem to have been made after the first outbreak of rioting had stopped. By the evening of the 25th, when arrests became possible, the bad characters had taken warning and disappeared from their homes. As regards firing on the crowds, the report of the Commission itself explains the difficulty arising from the rapid disappearance of rioters when the police approached. It may be noted that the police actually opened fire on thirteen occasions, four of these instances being by standing pickets, but so far as is known only two persons were killed by it. Nevertheless, taking into consideration the whole of the facts, the Governor in Council is obliged to agree that there seems no sufficient explanation of the fact that in certain typical cases in particular, such as the burning of the temple in Meston Road or the Bazaza mosque, no effective action was taken, in spite of the presence of bodies of police in the vicinity.

There is again evidence that individual constables, or bodies of constables failed in their duty to attack or apprehend rioters, or to keep in custody those handed over to them. It will be necessary for the local Government to undertake at once a departmental enquiry in order to assess the responsibility of any individual subordinate concerned in the incidents to which the Commission refer. The Governor in Council believes, however, that his position will be fully appreciated when, in announcing this decision, he states at the same time his conviction that, if the evidence taken by the Commission has revealed that individual members of the police force failed at Cawnpore, this is no indication of an impaired morale in the United Provinces Force as a whole. Throughout a long period of most exceptional strain, it has maintained its loyalty, its sense of duty, and a high standard of conduct. In recent communal disturbances, such as those which occurred at Benares or at Agra, its action was effective and decisive. Events which occurred in Cawnpore itself during the recent *Muharram* celebrations, show that it has not lost its capacity for prompt and effective action. It has been suggested that the policy adopted by Government in face of an agitation advocating disobedience to law, and the final issue of that agitation in an Agreement of which the first result was the general release of prisoners, must have impaired the mentality of the police force to such an extent as to render it reluctant to face its duties, even in the face of severe communal disorder. The Governor in Council declines to believe that this can be true; he will certainly not accept the incidents of Cawnpore in March last as evidence of its truth, for he regards the circumstances as in every way exceptional. The police establishment there had to face a sudden communal outbreak of unexampled ferocity at a moment when its attention had been primarily directed to the possibility of a demonstration against Government. Its strength was inadequate, and its disposition unsuitable, a fact for which Government has admitted its own responsibility. It unfortunately lost the initial control of the situation; and forces were at once let loose which for the moment overwhelmed it. There need be no desire to palliate any proved dereliction of duty; but those who are best acquainted with the composition and character of the Force, will be least disposed to draw conclusions unfavourable to it as a whole, if in these circumstances individual subordinates or some of the rank and file failed in their standard of duty.

7. The Commission describe in some detail the very valuable help given by the military authorities during the course of the disorder, and the Governor in Council desires to recognize the ready support given to the local Government by the District Commander, and the action taken by the officer in command of the troops at Cawnpore throughout the period of the disturbances. The report of the Commission refers to a change in the disposition of the troops on the morning of the 25th March which, in their opinion, involved consequences which if unforeseen at the time were undoubtedly serious in the result. The concentration at the District Board office was obviously based entirely on considerations of a military nature. It also refers to the fact that there were, in the initial stages of the operations, somewhat divergent views as to the most

appropriate method of utilizing the military forces available. The Governor in Council strongly deprecates any tendency to exaggerate the fact that divergent views existed, and he certainly does not wish to qualify on that account his acknowledgements of the value of the assistance rendered by the Officer Commanding and the troops under his charge. Moreover, it is clear that the difference of views caused no personal friction between the two authorities. If there is any inference to be drawn from these incidents, it is only of the necessity for agreeing in advance, and maintaining up to date, schemes for dealing with communal as well as other disturbances. Measures to ensure this are now being taken by the local Government in consultation with the General Officer Commanding-in-Chief, Eastern Command.

ORDER—Ordered—

- (1) that the resolution and the report be published in a gazette extraordinary; and
- (2) that a copy be forwarded to—
 - (i) the General Officer Commanding-in-Chief, Eastern Command,
 - (ii) the members of the Commission of Enquiry,
 - (iii) the Commissioner, Allahabad division,
 - (iv) the Inspector-General of Police, United Provinces,
 - (v) J. F. Sale, Esq., I.C.S., District Magistrate, Cawnpore, and
 - (vi) the Superintendent of Police, Cawnpore,

for information.

By order of the Governor in Council,
JAGDISH PRASAD,
Chief Secretary to Government,
United Provinces.

Report of the Commission of Enquiry into the communal outbreak at Cawnpore.

I

THE subject of this enquiry is the communal riot that broke out in Cawnpore on March 24, 1931. The occasion was a *hartal* following the execution of Bhagat Singh and two others in Lahore.

Bhagat Singh was a young Punjab revolutionary whose name first came into prominence in April 1929 when during a sitting of the Legislative Assembly in Delhi he and an accomplice flung bombs from the gallery of the Chamber into the Government benches below. No one was killed. He was arrested, tried, and sentenced to transportation for life. Later the existence of a conspiracy with wide ramifications was discovered. Bhagat Singh, among others, was charged as a member of this conspiracy with an offence under section 121, Indian Penal Code (waging war against the King-Emperor), and in particular with the murder of Mr. Saunders, a police officer, who had been shot in Lahore in December 1928. The remarkable course that the proceedings in that case took brought Bhagat Singh into further prominence. By various devices—hunger-striking was only one—the prisoners succeeded in bringing the usual procedure of the law to a standstill. Eventually, it became necessary to have them tried by a tribunal of three Judges constituted under a Special Ordinance. Bhagat Singh and two of his companions were sentenced to death on the murder charge. By this time he had become a hero to many of the youths of the country. Great efforts were made to secure for him a reprieve. Equally great efforts were made to find legal flaws in the long-drawn out procedure. All efforts failed. Nor was it only the revolutionary associations in the country who were sympathetic. The Congress whose creed is non-violence could not, of course, support methods of violence and murder, but in a carefully-worded resolution moved by the President at the Karachi session of the Congress, the bravery and sacrifice of Bhagat Singh and his companions were extolled and their execution was characterised as an act of wanton vengeance. Sympathy was not confined even to the Congress Party. The Nationalist Party—a confessedly constitutional party—walked out of the Assembly as a protest against the execution. It was even widely feared that the execution, coming when it did, would shake the position of Mahatma Gandhi himself. His Excellency the Viceroy explained publicly that though he was well aware of the interest taken in the fate of Bhagat Singh, he could discover no argument by which commutation of that sentence could have been justified that would not have involved, if justice was to be equal, the commutation of all other sentences involving the death penalty.

It will be seen, therefore, that the execution of Bhagat Singh excited strong feeling among parties covering a wide range of political thought. The Muslim community alone stood aloof.

This brief sketch of what the execution of Bhagat Singh meant has been necessary to explain why a *hartal* on such an occasion contained special elements of danger.

II

The execution took place on the evening of March 23. It became known in Cawnpore next morning.

The Town Congress Committee immediately proclaimed by beat of drum that *hartal* should be kept on March 24 and gave instructions for a procession of mourning to be taken out at 8 o'clock the same day. In the course of the *hartal*, Hindus

and Muslims came to blows. This developed into a riot of unprecedented violence and peculiar atrocity which spread with unexpected rapidity through the whole city and even beyond it. Murders, arson and looting were widespread for three days, before the rioting was definitely brought under control. Afterwards, it subsided gradually. The loss of life and property was great. The number of verified deaths was 300, but the death roll is known to have been larger and was probably between four and five hundred. A large number of temples and mosques were desecrated or burnt or destroyed and a very large number of houses were burnt and pillaged.

Serious accusations were made against the local authorities. It was maintained that vigorous action taken at once would have prevented or at any rate would have checked the riot in its initial stages and brought it under control in a few hours. The whole plan followed by the authorities to meet the situation was criticised as ineffectual and mistaken. The police were accused of being supine and indifferent. Some critics went further and said that a policy of inaction was deliberately adopted by the authorities for political ends.

III

In view of the heavy loss of life and property and the criticism of the measures taken to meet the situation, the Government appointed a Commission of Enquiry into the outbreak by an order no. 1998, dated April 13, 1931.

The terms of reference were:—

To enquire into and report—

- (1) on the pre-disposing and the immediate causes of the communal outbreak at Cawnpore from March 24, and
- (2) its course from day to day and how it was dealt with at each stage by the local authorities with findings on the adequacy of the measures taken.

The Commission which met in Cawnpore on April 15, and arranged preliminaries was constituted as follows:—

Mr. M. Keane, C.S.I., C.I.E., I.C.S., Member, Board of Revenue, *President*,
United Provinces.

- | | | |
|--|---|-----------------|
| <ol style="list-style-type: none">(1) Mr. G. O. Allen, I.C.S., District and Sessions Judge, Agra(2) Rai Bahadur Pandit Baldeo Ram Dave Sahib, Chairman, Improvement Trust, Allahabad.(3) Nawabzada Muhammad Liaqat Ali Khan Sahib, M.L.C., Deputy President, Legislative Council, United Provinces of Agra and Oudh. | } | <i>Members.</i> |
|--|---|-----------------|

The Commission had no authority in law to compel the attendance of witnesses, so we decided to get into immediate communication with, and invite the co-operation of, the Upper India Chamber of Commerce, the United Provinces Chamber of Commerce, the Chairman, Municipal Board, the Unity Board, the Congress Committee, the Hindu Sabha, the Muslim Defence Association, the district authorities, the military authorities, and the members who represent Cawnpore in the local Legislative Council, the Legislative Assembly and the Council of State.

We announced by beat of drum through the city and by advertisements in the local newspapers, the arrival of the Commission, the purpose for which it had been appointed, and our decision to commence the enquiry on April 17.

Notices were prepared in Hindi, Urdu and English and were distributed broadcast and posted in all public places. A copy of the public notice is reproduced here:—

“Notice is hereby published throughout Cawnpore that a Commission of Enquiry into the late riots, appointed by the Government, is now sitting at the Circuit House, Cawnpore.

- "They are enquiring into the causes of the riots, and the adequacy of the measures taken by the local authorities to deal with them.
- "The Commission trust that all persons who have useful knowledge of the events and any evidence to give will come forward and co-operate with the Commission.
- "Such gentlemen are requested to send in their names to the Secretary of the Commission at the Circuit House as early as possible.
- "The sittings of the Commission will be open to the public and evidence will be taken from Friday, April 17, onwards, beginning at 10 a.m. daily.
- "Accommodation being limited entrance will be by tickets to be obtained on application to the Secretary of the Commission."

M. KEANE,

President of the Commission.

The issues on which evidence was required, though grave and important in themselves, were few and simple. We prepared, therefore, no general questionnaire but confined ourselves to indicating in the letters which we sent to witnesses fixing the date for their attendance, the lines on which we proposed to examine them. The letter concluded thus :—

"Among other points on which the Commission are anxious to have your opinion, are the following :—

- "(1) the immediate cause or causes of the outbreak,
- "(2) any conditions existing in Cawnpore or any relations between the different communities that were specially favourable to such an outbreak,
- "(3) the dispositions made by the civil authorities before the outbreak,
- "(4) the day-to-day course of events, and
- "(5) the sufficiency of the arrangements made from day to day by the civil authorities to deal with the outbreak."

With one exception all the bodies mentioned above willingly co-operated in the enquiry and suggested lists of witnesses who possessed either general or special information. The exception was the local Congress Committee. Though witnesses in close touch with Congress or of the Congress Party gave evidence, no witness gave evidence as a representative of Congress. The President of the Commission invited Mr. Jog, who had been a Congress dictator and is now Vice-President of the Congress Committee, and who had himself been wounded in trying to prevent the outbreak, to give evidence on behalf of Congress. He was, personally, prepared to do so, but the Congress Committee declined to give him permission on the ground that officials had refused to give evidence before a committee which was, at the time, making an enquiry on behalf of the Congress.

A representation was made to us to allow counsel to appear, lead evidence and cross-examine witnesses. We agreed to allow counsel to attend and assist the Commission in elucidating facts, but the enquiry being general in its nature, we were not prepared to accord a right of cross-examination.

We began the enquiry on April 17 and closed it on May 8. We examined 96 witnesses orally and received written statements from 30 others. The leading men in Cawnpore came forward readily to put their information at our disposal.

Predisposing causes.

IV

Cawnpore is the second city of the province in population and the first in industrial and commercial importance. Its mills employ over 20,000 workmen and commerce has brought the city much wealth. In the past it can scarcely be said that Cawnpore has been politically prominent. Business rather than politics was the more active interest. Mr. Gandhi's movement, however, is believed to have attracted to itself, for various reasons, the active support of more businessmen than has been the case with previous political movements in India. "There is a general feeling", said a witness before us, "that the local authorities did not choose to take immediate and stringent measures because they were displeased with the businessmen for helping the Congress activities and they wanted to show that without the help of the authorities they cannot protect their lives and properties". This witness was himself a businessman and also an active member of the Congress. The District Magistrate also told us that the movement received substantial help (openly and covertly) from the subscriptions of Hindu commercial men. Certain it is that the Congress was active and strongly organised in Cawnpore. *Hartals*, processions, public meetings, and propaganda of every kind were utilised to keep up public enthusiasm. A strong light is thrown on these activities from an unexpected quarter. Mr. James of the Electric Supply Company gave us a statement of the traffic stoppages in the tramways of the city since August 6, 1930. The statement, which is more valuable and instructive than a mere appreciation of political conditions, might be set out in full here.

Statement showing traffic interruptions since August 6, 1930, to date.

Date.	Hours stopped.		Reason.
	Hours.	Minutes.	
6-8-30	0	20	Congress processions.
8-8-30	3	15	Muslim procession in connection with <i>tanzeem</i> .
10-8-30	1	0	Congress processions.
16-8-30	0	20	Opium raid in Halsey Road.
17-8-30	0	50	Muslim <i>tanzeem</i> procession.
23-8-30	0	20	Congress procession.
5-9-30	0	30	Ditto.
9-9-30	0	50	Ditto.
11-9-30	0	30	Ditto.
21-12-30	2	10	Muslim procession— <i>Rajb-i-Sharif</i> .
6-2-31	13	0	Traffic stopped 10 a. m. and cars returned to shed. <i>Hartal</i> for Moti Lal Nehru.
21-3-31	1	0	Congress demonstration in Halsey Road vs Bhagat Singh's appeal.
21-3-31	10	15	Cars to shed from 12.45 p.m.
24-3-31	...		All cars to shed at 10.50 a.m.

No traffic from 24th to 30th instant.

NOTE.—The procession under date December 21 was not shown thus in the list as originally given to the Commission. There was simply "ditto" shown in the column of "Reason". When the Commission pointed out to Mr. James that there was evidence that this was a *tanzeem* procession, he replied that "ditto" was a clerical error; the entry should be "Muslim procession (*Rajb-i-Sharif*)".

For the same period Mr. James put in a subsidiary list containing 15 other *hartals* which did not result in the stoppage of tram traffic. With one exception these were all Congress *hartals*.

The effect of Mahatma Gandhi's arrest which had its own repercussions in the the political world is recorded in the "Traffic report for the week ending 10-5-30" thus:—

"On Monday 5th instant the bazar closed down on account of Gandhi's arrest. There was considerable interference with car passengers who were compelled to get off the cars. This intimidation lasted for about three hours when the Traffic Superintendent saw the Kotwal who arranged with the Congress leaders not to interfere

with the cars. Traffic then became normal, but great care had to be used in passing processions, etc. No further untoward incidents occurred, and the cars were in great demand to carry people to the various meeting places."

We see in this, the chief police officer of the city working hand-in-hand with the Congress leaders but the last word is with Congress.

Side by side with all this interference and obstruction, the picketing of foreign cloth and liquor shops went continuously on.

How serious this was, in the view of the Government of India, will be seen from the Statement of Reasons given by His Excellency the Governor-General when he made and promulgated the Ordinance against intimidation in May 1930. The statement is in part given here :

" Statement.

"From the beginning of the civil disobedience movement it has been part of the programme of the Congress to use for various purposes the methods of picketing in order to make their will prevail. At the recent meeting of the Working Committee of the All-India Congress Committee, held at Allahabad, resolutions were passed which urged the adoption of such methods on more intensive lines. The information received by my Government makes it plain that activities of this kind are now being pursued in various places in such a manner as gravely to interfere with the liberty of individuals in many directions.

"2. The most common object with which picketing and other kinds of molestation and intimidation are being employed is for the purpose of preventing the sale of foreign goods or of liquor. It is no part of the duty of my Government, and certainly it is not their desire to take steps against any legitimate movements directed to these ends. They are anxious to see the promotion of indigenous Indian industries, and it is perfectly legitimate for any person, in advocacy of this object, to urge the use of Indian goods to the utmost extent of which Indian industry is capable. Nor have I anything but respect for those who preach the cause of temperance.

"But what is not legitimate is for those who desire these ends, proper as they are in themselves, to pursue them by means amounting in effect to intimidation of individuals, and to endeavour to force their views on others, not by argument but by the coercive effect of fear. When resort is had to such methods it becomes necessary for Government to protect the natural freedom of action of those who may wish to sell and those who may wish to buy.

"3. * * * * *

"4. In normal circumstances when intimidation is a comparatively rare offence the ordinary law suffices. But when, as now, intimidation in its various forms is carefully organised and constitutes an important part of the programme of a movement designed to paralyse the Government and to coerce the public, it is necessary to see that powers should be adequate to deal rapidly and effectively with a menace to the public liberty. I have accordingly thought it essential to promulgate an Ordinance which is designed to protect the public in general against molestation and intimidation and to check the boycott of Government servants. These powers will not be used to impede or interfere with the legitimate promotion of any economic movement which has for its object the furtherance of indigenous enterprise, nor will they be exercised in regard to any genuine labour dispute unconnected with political objects. The Ordinance is directed only against certain illegitimate activities which are being organised by the leaders of the civil disobedience movement. It will be withdrawn as soon as those activities cease. The Ordinance, moreover, has been so drafted as to be applied only where the

powers are actually required. It will not be applied to any province in which the local Government has not satisfied my Government that the activities of the civil disobedience movement have rendered its application necessary. Further, within a province, the powers to deal with molestation or with the boycott of Government servants will come into force only in those areas in which the local Government considers that the situation necessitates their application. But where the situation so demands, I have no doubt that it is my duty to empower local Governments to give protection to those who merely desire to carry on their lawful business and pursuits without let or hindrance, and to safeguard public servants, as far as may be, against the attempt to deprive them, by means of boycott, of the ordinary requirements of daily life."

This and other Ordinances dealing with the civil disobedience movement were applied to Cawnpore and there were no less than 1,433 convictions for offences arising out of the civil disobedience movement in Cawnpore city and district. How did all this affect the relations between the two communities? It affected them most seriously. The Muslims from the first had refused to join the movement. The effect of this was that as time went on, the Muslims, in Cawnpore at any rate, came to look on the Congress organisation as practically a purely Hindu body. Muslim politicians who belonged to the Congress came to speak in Cawnpore but were howled down. Politicians of a communal tinge were listened to eagerly. Picketing was deeply resented by Muslim shop-keepers. They stood outside the movement. They even actively disapproved of it. They could not understand why another community, as they had come to look on the Congress now, should be permitted to impose their will on them. The picketing of the schools and colleges led to similar resentment. Mr. Chatterji, the Principal of Christ Church College, Cawnpore, and now Chairman of the Unity Board, told the Commission :—

"In my own College, which was made a target of virulent attacks, sometimes accompanied by violence, the seventy or eighty Muslim students remain solidly loyal to their institution, and most of them showed great pluck in attending College in the face of obstruction and intimidation. On one occasion when the mob that usually accompanied the Congress picketers assaulted students, the majority of those who received injuries happened to be Muslims. This incident roused much feeling among Muslims in the town who held a protest meeting."

The civil disobedience movement, therefore, in the manner in which it developed, accentuated the estrangement between the two communities.

A move, the origin of which is somewhat obscure, was now made from the side of the Muslims, apparently to counter the growing menace from the Hindus. A *Tanzeem* movement appeared or was revived. We could not find that there was any Central *Tanzeem* Committee or a central organisation of any kind. None the less, small *tanzeem* processions appeared in and paraded through the mohallas every morning. These may have been copied from or suggested by somewhat similar small processions called "Prabhat Pheris" which on behalf of Congress or Hindus paraded the mohallas from time to time singing national or religious songs. The *tanzeem* processions grew in numbers and in frequency, and it is stated that on Sundays and on holidays larger processions were taken out on the main roads of the city. We have in evidence that at least on three occasions these processions were on a very large scale and consisted of several thousand Muslims. It is true that one of these was on the birthday of the Prophet (August 8) and the other on the *Rajb-i-Sharif* day (December 21). So it cannot be definitely said that they were distinctively *tanzeem* processions rather than ordinary Muslim processions. On the other hand, we have no clear evidence that these processions formed part of the celebrations in connection with the birthday of the Prophet and *Rajb-i-Sharif* in other years.

Hindu witnesses all maintained that the *Tanzeem* movement was directed not against the authority of the Government but definitely was anti-Hindu. The professed aim of the *tanzeem* was a religious awakening, but it is clear from the evidence before us that behind this was the idea that since the Hindus were organised in Congress so the Muslims should be organised too, and the *tanzeem* seems to have been intended to wake such a spirit among the Muslims. It appears to have been a fact, too, that the Muslims taking part in *tanzeem* processions made a parade of carrying swords, daggers, and spears. Mr. David, an independent witness, speaking of sometime in December 1930 states :—

“I happened to be in Meston Road when I saw a band of 60 or 70 Muslim youths dressed up in khaki with fur caps. They did not carry exactly what I should call *lathis* but they were certainly more than sticks. They were headed by two men who apparently were their officers and who had belts and curved swords. One was at the head of the procession with a sword in its scabbard and the other had a drawn sword. They came up Meston Road and stopped. Then from the other side—which is the Machhli Bazar mosque side—two men came out who were probably more senior officers and this band of 60 or 70 military looking people gave them what one would call ‘a military salute’.”

It was not till January 16, 1931, that Government cancelled the orders exempting swords, etc., from licences. The grounds urged by the District Magistrate for the cancellation was the use being made of these weapons by “bad characters”, as well as their display by volunteers of both communities. It is not clear whether any effective efforts were subsequently made to deal with the illegal possession of such weapons.

Hindu witnesses have stated, too, that the songs sung by these *tanzeem* volunteers who paraded the moballas were frequently strongly anti-Hindu. Booklets of the songs which were said to have been recited in the *tanzeem* processions were produced in evidence. There is nothing to indicate from the title page that they were published on behalf of the *tanzeem* or by any *Tanzeem* Committee. If they were the songs that were sung they might easily have a very unhealthy effect on uneducated or semi-educated minds.

One remarkable thing is that so far as we could ascertain no leading Muslims belonged at any time to the *tanzeem*; but the Commission feel that the *Tanzeem* movement had its effect in stiffening the determination of the Muslims and that its importance should not be ignored.

Whether the Muslims were organised or not, it is obvious that during the civil disobedience movement in 1930 the two communities came more definitely face to face with each other than they had been before. The Congress Hindus generally were irritated with the Muslims for standing aloof from what they believed to be a national movement and Hindu traders in Cawnpore were jealous of Muslims carrying on business as usual. The Muslims, on the other hand, were getting exasperated with what the Secretary of the Upper India Chamber of Commerce in his evidence calls the tyranny of the Congress. It appears that Congress leaders themselves were becoming awake to the position and they did try to temper the picketing of the Muslim shops and to moderate the zeal of their volunteers. On two different occasions during 1930, a clash between the communities was barely averted on this very question of picketing. The fact is that peaceful picketing, if not a contradiction in terms as Mr. Gavin Jones calls it in his evidence, is at any rate extremely difficult to carry out in its purity by the rank and file of any party. Mr. Hoon who believes that “the Congress people would not designedly provoke any man to close his shop against his wishes” told us his experience of picketing :—

“My cloth supplier is a Muhammadan and I have personally purchased cloth from his shop in the presence of Congress pickets. There is

no doubt that the volunteer on duty did approach me with a request not to buy foreign cloth, but when I politely told him to please leave me alone, he stood aloof with an expression of disappointment in his face."

Mr. Hoon is a prominent barrister in Cawnpore and the representative in the Assembly of the non-Muslim constituency. His experience would be different from the mass. Those who were not so sympathetic with the methods of the Congress—and Muslims were vastly the largest numerical party amongst them—felt that the Government were allowing to Congress followers a freedom in law-breaking and a licence to interfere with law-abiding citizens that amounted to a grave danger. Many independent witnesses were of opinion that the civil disobedience movement resulted in a weakening of authority and of respect for law and order. We do not attach too much importance to this in itself as a cause of the outbreak.

Its effect in Cawnpore was probably indirect. This is a city familiar with turbulence. Thirty years ago it gained notoriety for plague rioting accompanied by atrocious murders. In 1913, the Machhli Bazar mosque in Meston Road was the scene of a violent outbreak which was communal in its origin but not in its development. In 1927, a communal riot of the same type as the present trouble but less severe kept the city in turmoil for two or three days.

There are two factors special to Cawnpore which appear to add their quota to disorder. The number of mill hands is very large, over 20,000. They are a shifting population, many without any settled ties. Men with reasons to disappear are naturally attracted to such a big industrial centre. There are therefore elements among this large industrial population always ready for mischief. The second factor here is the existence of numbers of notorious *badmashes* and *goondas*. They are mostly engaged in the cocaine smuggling trade and gambling but they do not confine themselves to any one form of underground activity. The leaders have often large gangs at their disposal. There are wealthy men of the city who are said to pay and protect these *badmashes* and make use of them in various ways.

In touching on the presence of elements such as these the Commission do not wish to convey the idea that the mill hands or the *badmashes* were responsible for the riots. The mills were all working in full strength when the riot began and the men remained at work till about 6 o'clock when the riot was already well established. There is no evidence too that the *badmash* element was noticeable in the early stages. The existence of the turbulent elements contributed more to the spread, continuance and intensity of the trouble than to its outbreak. It is in the increasing embitterment of feeling between the two communities that the cause of the outbreak has to be sought, and the cause of that increased embitterment is to be found in the course taken by the civil disobedience movement. The movement had openly aimed at paralysing Government. It had become in Cawnpore, a Hindu movement with Muslims actively or passively in opposition. It had been carried to such lengths that on October 20, 1930, all Congress Committees in Cawnpore, and the "Youth League", the "Youth Guard", the "Satyagraha Committee", and the "Vanar Sena" were declared unlawful associations under the Criminal Law Amendment Act. Three months later the Congress leaders were released once more from jail when negotiations with Mr. Gandhi began. The Muslims read in these negotiations a recognition by the Government of the strength of the movement, if not a surrender to it. Several witnesses have also said that the Muslims were angered because during the long-drawn out negotiations Congress opinion, i.e., Hindu opinion, only was consulted and Muslim opinion was ignored. We put this point to the President of the Anjuman Islamia, Maulana Abdul Kafi, who would be more in touch with real Muslim feeling in the town than politicians would be, and he was definite that the ordinary Muslim, the man in the street, was not affected at all by the Irwin-Gandhi pact. What he held was that "after the

Irwin-Gandhi pact the Hindus considered they had achieved a success over the Government and wanted to subjugate the Muslims". The Muslims were certainly perturbed and depressed by the turn that events were taking and they attributed to the Hindus an arrogance of triumph which the latter were probably not feeling. It was at this time of suspicion, alertness and tension that unfortunate clashes between the communities in other places confirmed Muslims in their suspicions and fears. A communal riot broke out in Benares on February 11. The incident in which it had its origin is thus described by the District Magistrate, Benares :—

"On January 26, 1931, Government of India ordered the release of the members of the All-India Congress Committee. This release, coming as it did on Independence Day, was regarded by the people generally as a great victory for Congress, and Congress activities which had previously been on the wane immediately became more pronounced. Picketing was resumed with great vigour. Among other shops picketed in Benares was that of Agha Mohammad Jan, a well-known cloth merchant, who refused to close his shop at the dictation of Congress. The picketers were all Hindus, while Agha Mohammad Jan, as his name implies, was a Muhammadan. On February 10, customers coming to the shop were assaulted by the picketers and arrests were made by the police. That evening Agha Mohammad Jan was shot in a lane when returning from his shop."

The Muslims in Cawnpore saw in this the same imposing of the will of the majority on the minority which had already made them so restive. The news of this event is reported to have caused much excitement in Cawnpore. A month afterwards, in a wild and inaccessible part of the district of Mirzapur, Hindu villagers brutally massacred 11 Muslims. There was nothing modern, nor political, in this crime. A Muslim zamindar sent a haunch of venison to a tenant. Some Hindus said it was beef, not venison, and the massacre of the Muslim inhabitants was the result. This was a crime that might have happened in any period of history, but coming when it did it inflamed suspicion. In Agra, an outbreak occurred on March 15 and lasted off and on for several days over the very old question of music before mosques. All these things had their echoes in Cawnpore as over the rest of the province and beyond it, but in Cawnpore careful and impartial observers had by now concluded that feelings had reached such a stage of bitterness and tension that an outbreak awaited only the occasion and the time.

We have left to the last a cause of estrangement which many Muslim witnesses told us exists in Cawnpore. They feel that for the last three or four years municipal affairs are conducted more and more with a communal bias and the minority community are the sufferers. It would require a separate enquiry to adjudge the rights and wrongs of this charge but important Muslim witnesses maintain that this feeling has added undoubtedly to the suspicious and resentment prevailing in their community.

Immediate causes.

V

It was in such an atmosphere that the Congress Committee in Cawnpore ordered a *hartal* on the morning of March 24, as a mark of respect to the memory of Bhagat Singh and his comrades. This *hartal* was only part of a universal *hartal* throughout India. The Cawnpore Committee did not foresee that it would result in a communal outbreak. There was nothing that could have been so hurtful to the cause they had at heart than communal trouble at that time. They may therefore be discharged of any culpable responsibility for the immediate outbreak. The event, it is true, proved their action to be sadly unwise. They must have been

aware of the tense feelings in Cawnpore as others were. Lala Dewan Chand, Principal of the Dayanand Anglo-Vedic College, told us that when he heard in Basti of the riot in Agra he returned at once to Cawnpore fearful that there might be trouble in Cawnpore any day on account of "sympathetic contagion". Many others had the same feeling. It must have been present to the mind of the Committee that a *hartal* to the memory of Bhagat Singh would particularly stir the imagination of their younger people and it was through the younger people that *hartals* were accomplished and, if need be, enforced. They were aware, too, that over many of these younger people their control was loose. We have no knowledge of what exact orders, if any, regarding the strictness of the *hartal* were passed on by the Committee to their volunteers and others that day. Orders or none, the boys and young men would see that a *hartal* in honour of their own hero, Bhagat Singh, would be strict and complete. And in this lies the explanation and immediate cause of the outbreak.

Every effort was made to enforce the *hartal* strictly, and in doing so the volunteers on this occasion spared no community. People of all classes were made to get down from their conveyances and proceed on foot. This led to trouble in Halsey Road, one of the main thoroughfares of the city, about 11 a.m. It is stated that Muslim women were made to get out of their *tongas* and walk. A crowd collected and trouble seemed imminent. Some Congress leaders appeared and pacified the people and the crowd eventually dispersed. About 1 o'clock the forces of disorder were more definitely let loose in a sudden wild rush of about 150 students and youths known as "Vanar Sena" (monkey army) down the Mall from west to east smashing the windows of the big shops. They eventually turned down into the city. Somewhat later Colonel O'Neill, the Civil Surgeon, who was driving along the Mall, was met by a crowd of youths who tried to stop him. He refused to stop and they pelted his car with brickbats injuring his driver severely and also himself. An English lady driving alone from the Cantonments was also similarly assaulted about the same time. These isolated assaults at first gave the impression that the *emeute* was an anti-British movement in vengeance for the death of Bhagat Singh. This does not appear to have been the case. These attacks were merely part of the strict enforcement of the *hartal* according to which no one was to be permitted to proceed otherwise than on foot.

During the morning, Congress workers had been busy also on Meston Road, another main thoroughfare of the city. The Muslim shop-keepers in Meston Road had not closed their shops. The volunteers at first requested them to do so and subsequently backed up their request by stronger insistence. Meanwhile, the crowds had again begun to collect in Halsey Road about 1 o'clock, and this time a conflict ensued between the two communities in the course of which Mr. Jog, a prominent Congress leader, who had come there with the object of preventing a clash, was injured. In Meston Road, the interference with the Muslim shop-keepers continued, and about 1.30 p.m. it is said that some Hindus started throwing brickbats at a Muslim shop. This led to disorder and conflict. By this time, too, some looting of Muslim shops in Generalganj had been reported. Mr. Ganesh Shanker Vidyarthi, the most prominent of all the Congress leaders, who was passing that way, saw this looting and tried to stop it. Small parties of people collected now in all the lanes and appeared in Meston Road and Halsey Road and rioting in a big way began.

Some of the Hindu witnesses before the Commission have attributed the immediate outbreak to a plot on the part of the C. I. D. It is said that a C. I. D. officer was chased or got himself chased by a crowd of Hindu youths, that he cycled or ran through Moulganj, and on reaching the Muslim side of Meston Road he shouted that he was being beaten by Hindus, Muslims gathered to the rescue and so the riot began. The evidence of this story is so vague and meagre that we have no hesitation in rejecting it.

It has been put forward by Congress sympathisers as an excuse for the enforcement of a complete *hartal* that Muslims were the first to force a complete *hartal* on the occasion of the death of Maulana Muhammad Ali. We have no means of knowing whether Muslims did use force on that occasion, but we are able to say that the explanation cannot be wholly correct, because we can see in Mr. James' invaluable traffic statements that there was no stoppage of trams on January 6, the date of Maulana Muhammad Ali's *hartal*. The *hartal* of that date is entered in his subsidiary list when there was no stoppage of traffic.

We are led to think, therefore, that the *hartal* in honour of Bhagat Singh, owing to the strong appeal that his memory made to the younger people, was enforced with unprecedented strictness and that this coming on top of feelings already much embittered was the immediate cause of the outbreak.

Course of the outbreak and the measures taken to meet it.

VI

Before tracing the events from day to day it will be as well to set out roughly the main features of the topography of Cawnpore so far as they relate to the riots. On the north, next to the river Ganges, there lies a strip about three quarters of a mile wide comprising Civil Lines. Included in Civil Lines area are two outlying portions of the city, viz., Gwaltoli, half a mile north-west of Colonelganj, and Parmat, due north of Colonelganj on the bank of the river. Separating this area from the city proper is the Mall Road which runs roughly east and west. The main populated area of the city consists of an oblong block running east and west and about a mile and a half deep. At the north-west corner there projects an area comprising Colonelganj and Baoonganj, and immediately to the south of that lies Sisamau, one of the chief areas under the Improvement Trust. The main area of the city is divided up by two large thoroughfares; one runs north and south, of which the northern portion is Meston Road and the southern portion LaTouche Road. This is intersected by Halsey Road which runs north-west and south-east, the point of intersection being known as Moulganj cross-roads. All along Halsey Road run tram-lines. At the north-west end of Halsey Road are the tram-car sheds and at the south-east end lie the Kotwali and Collectorganj. One important feature of Meston Road that should be mentioned is the existence of a temple commonly known as the Teli's temple which lies, like an island, in the middle of the road towards the northern end. To the south of this, about half way down Meston Road on the east side and at right angles to it is a narrow lane about 200 yards long known as Chauk Bazaza. It is terminated at the eastern end by Kunjilal's temple, and close to it in the lane is the Chauk Bazaza mosque. On the western side of Meston Road just opposite the Teli's temple lies the Machhli Bazar mosque. Crossing the Chauk Bazaza at a short distance from Meston Road and running parallel to the latter is a narrow lane, the southern portion of which is known as Thathrai and the northern portion as Chauk Sarrafa, in which latter there is the Chauk Sarrafa mosque. The city is bounded on the east side by the Mall Road and the canal with the exception of a small area beyond the canal on the east side known as Sadar Bazar, and beyond Sadar Bazar on the east side lies the railway, and again beyond that Cantonments.

The Police Lines are situated near the bank of the river due north from Meston Road. In the city proper there are only three police stations, the Kotwali, another at Anwarganj, 100 yards to the west of the lower portion of LaTouche Road, and the third at Colonelganj, at the extreme north-west corner of the city. The Gillis Bazar police chauki lies just at the top of Meston Road, and close to it is the District Board office. The Municipal Board office is at the other end of the town half way between Collectorganj and the south end of LaTouche Road.

The population of Cawnpore Municipality, according to the latest census, is 242,356, of which the Hindus number over two-thirds. Of the portion of the city lying north-east of Halsey Road, the part to the east of Meston Road is predominantly Hindu whilst the part to the west is predominantly Muslim.

Queen's Park adjoins the north-east corner of the main city area and in it is situated the King Edward Memorial Hall.

VII

In narrating the course of events from day to day we are only giving an outline, and of the enormous number of over 2,000 registered crimes that occurred in the course of the riots we have referred to the more important that have been brought to our notice or which appeared to us the most typical.

When the news of the execution of Bhagat Singh became public in Cawnpore early on the morning of March 24, Mr. Sale, the District Magistrate, informed the Officer Commanding the Station and asked him to keep his troops in readiness against any emergency, whilst the Superintendent of Police, as usual, arranged to have his thana police "standing to". As soon as the District Magistrate received information of the "Vanar Sena" attack on the Mall, he telephoned to the Officer Commanding the Station requesting him to send a company of the Highland Light Infantry to Queen's Park to be kept in readiness, and the Superintendent of Police despatched some mounted police (*sowars*) to patrol the Mall. The troops reached Queen's Park at 3 p.m.

We have already traced the course of events under the heading "Immediate causes" down to 2 p.m. on the 24th. On getting news of rioting down Meston Road way, the District Magistrate at once despatched two Deputy Magistrates, Pandit Rameshwar Dayal and Mr. Islam Nabi Khan, to the spot and asked them to telephone him the exact situation there. They arrived there just after 2 p.m. At the southern end of the Thathrai they found brick-throwing going on freely between Hindus and Muslims. They intervened and managed to stop the fighting. They also found two Muslim shops being plundered at that spot. On the arrival of the Deputy Magistrates the assailants made off. Pandit Rameshwar Dayal telephoned at once to the District Magistrate pointing out the seriousness of the situation and asking him for immediate police aid and also requested him to come himself. At the same time, the Deputy Magistrate noticed that a bookseller's shop belonging to a Muslim under the Chauk Bazaza mosque had been plundered and that books and stationery were lying all over the road. He was also under the impression that some form of attack had been made on the mosque.

Meanwhile, hearing the news of rioting at Moulganj cross-roads, Khan Bahadur Syed Ghulam Hasnain, the Kotwal, had proceeded up Halsey Road from Kotwali with eight armed police, leaving a similar number of armed men to guard Kotwali. At Badshahi Naka he heard a rumour that Mr. Jog had been killed. Before reaching the cross-roads, he learnt that Mr. Jog had only been injured. He deputed the Station Officer, Kotwali, and the armed guard to stop the rioting at Moulganj cross-roads and himself went to see Mr. Jog. Finding Mr. Jog with a comparatively slight injury, the Kotwal returned to the crowd to contradict the rumour of Mr. Jog's death. He asked Mr. Vidyarthi also, whom he met there, to contradict this mischievous rumour. The Kotwal then went on to the cross-roads and dispersed the crowds there. He sent the Station Officer, Kotwali, up Meston Road to deal with the trouble there. About this time a cry arose in the Chauk also that Mr. Jog had been killed. Pandit Rameshwar Dayal, on meeting the Kotwal at Misri Bazar, learnt that this rumour was false. On getting this information he returned to the Chauk to reassure the Hindus about the falsity of the rumour regarding Mr. Jog's death. While there, the Deputy Magistrate saw a crowd of Muslims entering the Chauk

from Misri Bazar. In attempting to disperse it, a Muslim youth attacked him with a knife and he narrowly escaped injury. Here he heard news of fighting at Moulganj cross-roads and in consequence proceeded in that direction via Thathrai where he found a Hindu shop being looted. At this point he found a gang of about 50 Muslims attacking Shera Babu's Park with *lathis* and hammers. This park consists of a small railed enclosure on the western side of Meston Road. "Shera Babu" is the popular name of Lala Suraj Narain of Cawnpore. His father served under Lord Roberts during the Afghan campaign. This park was constructed in memory of Lord Roberts. As "Shera Babu" was of cosmopolitan views he had placed in the park stone tablets bearing quotations from religious books and statues and images representing various religions, including a cross. All these statues and the cross were broken by the mob.

Fighting was freely going on with brickbats between Hindus and Muslims. One or two Hindu shops were also being attacked near this park. By this time reinforcements from the Police Lines had arrived, Mr. Rogers, Superintendent of Police, having previously about 2 p.m. ordered all available forces at the Police Lines to proceed to Meston Road.

It was at this stage at 3 p.m. that the District Magistrate and the Superintendent of Police arrived at Meston Road. They left their car at Gillis Bazar outpost and walked down Meston Road. Pandit Rameshwar Dayal and the Kotwal met them there. They found a number of brickbats on the road in the vicinity of the Meston Road temple and also noticed angry crowds in the lanes on either side of the road. No actual fighting was going on at the time. Mr. Sale and Mr. Rogers accompanied by Pandit Rameshwar Dayal and the Kotwal proceeded down Meston Road as far as Shera Babu's house. Mr. Sale here held a conference with these officers at which it was decided that the police could still deal with the situation without military aid but that it was essential to issue prompt orders under section 144, Code of Criminal Procedure, prohibiting gatherings of more than five persons and the carrying of *lathis* and other weapons and enforcing the curfew. As the conference was closing the Superintendent of Police and the Kotwal had to go off to Moulganj cross-roads to stop a clash between the two communities there. While the District Magistrate was still at Shera Babu's house, some Muslims arrived and asked him to come and see the damage done to Muslim shops in Thathrai and to the Chauk Bazaza mosque. Consequently the District Magistrate accompanied by Pandit Rameshwar Dayal and a few Muslims and some Hindus left Shera Babu's house at 3.30 p.m. for Chauk via Thathrai. On the way a large crowd of Hindus also gathered complaining that Sarrafa was being looted. The District Magistrate, who was not accompanied by any police force, thinking that there might be a row, decided to return to Gillis Bazar where his car was and returned to Kutochery to issue the orders decided upon at the conference.

About 4 p.m. the frenzy of the mob considerably increased, the Meston Road temple and the Chauk Bazaza mosque being both set on fire about this time. The Fire Brigade arrived without delay and endeavoured to put out these fires. Meanwhile, the situation definitely grew worse between 4 and 5.

As to this period, Mr. Islam Nabi Khan, Deputy Magistrate, has told us how he found a large crowd of Muslims in the lane by the Machhli Bazar mosque, brick-throwing being in progress between the two communities. He went to them and told them to disperse but they paid no heed declaring that they could not tolerate another mosque in the lane opposite (Sarrafa mosque) being attacked. He continued to do his best and himself got struck by a brickbat. About this time, the Station Officer, Kotwali, arrived with a few armed police. On the Sub-Inspector's endeavouring to get between the two opposing mobs to give the necessary warning before opening fire, he was repulsed by an intensive shower of missiles from both sides, as well as from the houses. The Deputy Magistrate eventually, after threatening to fire, induced the Muslims to withdraw into the lane. The road being clear again, the temple was seen to be on fire.

Meanwhile, after seeing Mr. Sale off, Pandit Rameshwar Dayal returned to Meston Road and finding that a serious attack on the temple was going on he went at once to Gillis Bazar police chauki. There he found only a few constables. He tried to get the District Magistrate on the telephone but the line was engaged. He took a cycle and went off to the District Magistrate at his office. He told him of the attack on the temple and said that without a police force he was helpless. He added that the situation was serious and getting out of control. He then went back to Gillis Bazar and found the attack on the temple still going on. The temple by this time was on fire. He managed to get hold of a couple of constables but in the confusion they lost touch with him. He tried his best by shouting to quell the disturbance but failing in this he hurried back to Gillis Bazar to get some police help; finding a Sub-Inspector and a few constables there he directed them to proceed at once towards the temple while he himself went back to the Collectorate and told the District Magistrate that the temple was on fire and the outlook was dangerous. The latter wrote a note to the Superintendent of Police and sent it off. Pandit Rameshwar Dayal then returned to Gillis Bazar where he met S. Taqi Husain, Deputy Magistrate. They both rushed towards the temple, the former making for the Hindus at the exit of Naryal Bazar and the latter for the Muslims at the exit of Machhli Bazar. Fierce brick-throwing was going on, *charpais* being used on both sides as shields. In the course of this both Magistrates got struck by brickbats. The arrival of some police from the lower (southern) side of the temple resulted in the dispersal of the rioters.

As soon as Mr. Sale had reached his office on his return from Meston Road about 4 p.m. he dispatched two other Magistrates, Mr. Anand Swarup and Mr. Gauri Prasad, to go and help the police. These two got to Meston Road about 4.30, taking with them two Hindu lawyers as persons likely to have some influence with their community. They found the temple in flames. Mr. Anand Swarup succeeded in arresting two Muslims who were throwing bricks at the temple. On the dispersal of the crowds at this spot, as mentioned above, he proceeded further and saw at the corner of Misri Bazar a shop being looted and from this he managed to drag out one of the looters while the others ran away. On the Chauk side he noticed two Muslim stationery shops being plundered. Meanwhile the Superintendent of Police who was occupied at Moulganj cross-roads saw some wounded persons and four dead bodies of Muslims brought out from bye-lanes on the Kotwali side and got reports that rioting had commenced in different parts of the city. Realizing that the situation had got beyond his control, shortly before 5 o'clock he telephoned to the District Magistrate asking for the aid of the military. Orders were promptly issued for the company in Queen's Park to proceed to Meston Road. This force, consisting of two officers and 66 British other ranks, was conducted by Mr. Barron, City Magistrate, to Meston Road.

As they were on their way there in lorries they had some brickbats thrown at them in Halsey Road. They found the stretch of road between the Kotwali and Moulganj cross-roads covered with brickbats. At the cross-roads they observed an Indian in a dying condition. There were also large crowds assembled in the vicinity. They noticed too at that spot an Indian police officer armed with a revolver together with a body of about 30 or 40 civil police armed with *lathis*. The company then advanced up Meston Road as far as the Chauk reaching there shortly after 6 p.m. They met the Superintendent of Police at this point. The Chauk was full of people. A military force of twenty strong was sent down the Chauk to form a picket at Kunji Lal's temple, the mob dispersing as this body advanced. Two fire engines were by now at work at Chauk Bazaza, successful attempts having already been made by the mob to damage the hoses. The rest of the military force was utilised in the posting of two pickets, one by the Meston Road temple and the other at the Moulganj cross-roads.

The period up to the arrival of the military was one of tense anxiety. The rioting had become severe and strong rumours were constantly pouring in all this

time of trouble in various parts of the city. Some four or five dead bodies of Muslims were brought from the Chauk side of Meston Road and a dead body was also noticed on the pavement at the other side of Meston Road. By 8 p.m., Mr. Barron, in consultation with Mr. Rogers and the Officer Commanding the Company, realised that more troops were required. A message was accordingly telephoned to the District Magistrate and by 10.30 p.m., a second company of the Highland Light Infantry reached Meston Road. The question what arrangements should be made for the night had been discussed between the civil and military authorities on the spot. The civil authorities asked for ten military pickets but the military were unable to see their way to providing more than the existing three, being unwilling to divide up their force into small bodies. Accordingly, for the night there were three military pickets at Kunji Lal's temple in the Chauk, at the Meston Road temple, and at Moulganj cross-roads, and three military patrols were provided after the arrival of the second company, their respective routes being indicated by the following groups of mohallas :—

- (1) Naya Chauk,
Pech Bagh,
Taluq Mohal,
Baconganj,
Sisamau,
Deputy ka Parao, and back along Anwarganj lane.
- (2) Gillis Bazar,
Hijra Mohal,
Ram Narayan Bazar,
Sangam Lal temple,
Patkapur,
Sirki Mohal,
Feelkhana,
Bengalee Mohal,
Chauk.
- (3) Coolie Bazar,
Bara Butcherkhana,
Sabzimandi,
Collectorganj,
Nayaganj,
Generalganj,
Badshahi Naka,
Hatya,
Chhapar Mohal to Meston Road.

These patrols were each accompanied by a Magistrate and police guide. The civil authorities had drawn up a plan to provide police pickets at fifteen spots but found that the forces at their disposal did not admit of pickets being posted at more than the following seven places which were considered the most important :—

- (1) Bara Butcherkhana,
- (2) Pech Bagh,
- (3) Baconganj,
- (4) Sisamau,

- (5) Sabzimandi Street,
- (6) Ram Narayan Bazar,
- (7) Sirki Mohal.

Also Mr. Seward, the Assistant Superintendent of Police, patrolled with an armed force in Colonelganj and Anwarganj areas up to midnight. Each police picket consisted of five armed and five civil. These pickets were posted about 11 p.m.

Between 7 and 8 p.m. the large house of Ram Balak on the eastern edge of Baconganj was set on fire. There were also fires in Coolie Bazar and some other parts of the city. The Fire Brigade was busy all night.

About 11 p.m., Mr. Sale and Mr. Rogers went to Cantonments and had a conference with the Officer Commanding and after this about midnight Mr. Sale and Lieut.-Colonel McCallum visited Meston Road and found all quiet. The military patrols that were out during the night also reported all quiet except for their finding a certain number of people about in the streets.

VIII

Early on the morning of the 25th the central parts of the city appeared fairly quiet. By 6 a.m. Mr. Seward found arson and fighting in progress in Sabzimandi, Coolie Bazar, and Cooperganj, and between 8 and 9 a.m. fighting was going on to the south of Sisaman.

By now people were noticed coming in from outside, Mr. Gavin Jones having seen 200 people, all armed, coming along the Grand Trunk Road in three batches early this morning.

In the morning the military took up their head-quarters at the District Board office at the northern end of Meston Road, a third company of greater strength relieving the previous two companies by 10.30 a.m. The Officer in Command did not consider it necessary to retain the pickets at the Meston Road temple and at Moulganj cross-roads; these were accordingly withdrawn and a picket of reduced strength was apparently left all day at Kunji Lal's temple. Two military parties were out patrolling all day on either side of Meston Road.

With the exception of Meston Road the intensity of the rioting, including murders, arson and looting, increased throughout the day. For instance, at about 11 a.m. there occurred in Bengalee Mohal one of the most ghastly atrocities related to us. Here there are a few isolated Muslims living in a predominantly Hindu quarter. The previous day these Muslims had been assured by their Hindu neighbours that they had nothing to fear. This morning, however, the Muslim womenfolk tried to make good their escape with their children and procured an *ekka* for the purpose, but a Hindu neighbour sent the conveyance away assuring them of their perfect safety. When these women became alarmed by the arrival of a band of Hindus armed with spears and other weapons, they were advised by this Hindu to gather together for their greater safety in the house of a certain Muslim. They managed to reach this house over the roof tops but on arrival there they were stoned off the roof and had to take refuge down below. A gang of Hindus then proceeded to break open the main door of the house and effect an entrance. They then set fire to the house, thus almost suffocating the imprisoned women and children. A search in every corner was then made for the inmates who were dragged out to the number of thirteen and butchered one by one before the very eyes of the witness and her daughter-in-law and child, who were the sole survivors thanks to their feigning death by throwing themselves on the heap of corpses. Even so they did not escape injury as their assailants threw some sacking over the bodies and set fire to it, with the result that these three were very severely burnt. Soon after this there arrived on the scene a body of

Muslim volunteers who rescued them. Mr. Vidyarthi also reached this mohalla and successfully assisted in the rescue of a number of other Muslim families in the vicinity. Such murderous attacks on people in their houses of which there are many instances are a hitherto unheard of feature of communal riots and illustrate the pitch of fury reached.

As a counterpart to this ferocity we have the picture, for instance, on the Sisamau side, of armed bands of Muslim assassins setting on defenceless passers-by and killing them in cold blood. Mr. Onkar Singh, Deputy Superintendent of Police, has described how he found this morning three dead bodies and fifteen very severely injured Hindus huddled together in a verandah. The story of this incident is as follows: A postal clerk of a branch office living in the Sisamau area, was going to the General Post Office, to hand over the keys of his office to the Post Master, as owing to the disturbances he was unable to attend his office that day. A number of Hindus accompanied him to see to the safety of their shops in the city, and some wanted to enquire about the welfare of their relatives living in other localities. As the clerk had a gun with him these people felt that they were safer in his company. While on their way, the clerk passed the house of a relative of his and wanted to enquire after him. While he was knocking at the door, a number of Muslims armed with *kantas*, spears, etc., appeared on the scene and began to throw bricks at him and his companions. They were driven to take shelter in the outer verandah of this house and before the clerk was able to use his gun some one from behind came and struck him on the head with a *kanta*, with the result that he fell dead on the spot. This mob then fell upon his companions, killing two of them and severely injuring the rest. The mob took away the gun.

It was on the afternoon of this day that Mr. Ganesh Shankar Vidyarthi was killed while engaged in rescue work. Whatever may be said of the causes of the outbreak Mr. Vidyarthi deserves the highest praise for his selfless devotion during the riots and the fearless manner in which he met his death succouring the distressed. This was in keeping with his known character. When his death became generally known, it must have added greatly to the anger of the Hindus.

The general state of the city was so disturbed this morning that by about 10 o'clock the mills had closed down.

Rioting had also spread by this time to Gwaltoli which had been quiet the previous day. Some looting of Hindu shops in the bazar took place and by 2 p.m. some arson had commenced. Meanwhile rioting was in full force in Sadar Bazar, across the canal, where Mr. Seward was patrolling with a force of armed police. He noticed a huge blaze at a Muslim shop in Nayaganj where some looting was also going on. In Shutarkhana this officer came across large crowds of both communities engaged in throwing brickbats at one another. As they started to throw bricks at the police force as well and refused to disperse, Mr. Seward ordered the firing of nine rounds of buckshot which successfully broke up the mobs. The same morning, in Hoolaganj, at the other end of Sadar Bazar, a *sarai* and a mosque had been set on fire in the course of which five Muslims were murdered.

Looting and burning were also rife in Sabzimandi, and by the afternoon the trouble had also spread to Parmat where rioting, looting and an attack on a mosque took place. In the Baconganj area also much rioting and arson occurred during the day.

A small force of police reinforcements from Lucknow were proceeding from the railway station up Halsey Road about 2 p.m. when bricks were thrown at them. The assailants were dispersed by a *sowar* charge from the Moulganj cross-roads. The violence of the storm reached its height during the day time of the 25th and the following night when murders, arson and looting were rife all over the city and began to subside by the afternoon of the 26th. All night long of the 25th

there was continual din and shouting. By 8 p.m. on the 25th the Civil Hospital returns show 49 dead and 216 injured, which is by no means a complete record of all the casualties that had occurred up to that time.

As to the other arrangements made this day to deal with the riots, armoured cars were patrolling the main streets all day from early morning. Mounted patrols from the 50th Battery were also out from midday till evening. Throughout the day parties of police in charge of sub-inspectors were being sent out from Meston Road head-quarters in response to reports.

About 11 a.m. it was decided to call out the Auxiliary Force. Their main duty was to patrol Mall Road and prevent the spread of the disturbance into Civil Lines, the areas of Gwaltoli and Parmat that lie within Civil Lines being excluded from the area under the control of this force as they would be put under police guards.

During the afternoon some police reinforcements arrived from other districts which were used to increase the number of pickets in accordance with the original plan. At about 4.30 p.m. three military pickets were put out at the Carshed, Baconganj cross-roads, and Moulganj cross-roads. By about 7 p.m. two companies of the East Yorks Regiment arrived from Lucknow. They made their head-quarters at the Municipal Board office. Two pickets from the East Yorks were placed later in the evening at Collectorganj and Badabahi Naka. During the night two parties of the Highland Light Infantry were out patrolling on either side of Meston Road. At 10.45 p.m. a conference was held at the District Magistrate's bungalow at which Brigadier Orton and Mr. Bell, Deputy Inspector-General of Police, who had arrived from Allahabad, were also present. The whole situation was discussed. About midnight Mr. Bell, Mr. Rogers, and Mr. Barron went to Meston Road and made a tour of the main streets.

IX

On the morning of the 26th riots were still continuing in full force, particularly in the more outlying areas.

About 7.30 a.m. Mr. Souter, Chairman of the Improvement Trust, found some houses burning in the Sisaman area. A large body of Hindus armed with *lathis* and swords were organising a counterattack on a big crowd of Muslims who were standing some 300 yards away, these latter being undoubtedly responsible for the arson.

By 8 a.m. Gwaltoli Bazar, where there had been trouble the previous day, was a mass of flames, the fire engine being busy there. A large number of huts had been set on fire. Mr. Ryan, Secretary of the Upper India Chamber of Commerce, who was also in administrative charge of the Fire Brigade, describes finding here a crowd, apparently mostly mill hands, of about 150 Hindus and 40 Muslims armed with spears and *lathis* assembled for a battle. He managed to get between them and stop a fight.

When the main riots broke out, the Muslims in Parmat became nervous, but their Hindu neighbours assured them that they would not be molested. By 5 p.m. on the 25th, however, some Hindus began to arm themselves and started throwing bricks at the Muslims and attacking a mosque. The arrival, soon after, of Mr. Onkar Singh, Deputy Superintendent of Police, and two European sergeants with some armed police put the assailants to flight. Nine of them who had been demolishing the mosque and looting a Muslim house were arrested. One Muslim at least had up to now been killed and a Muslim house burnt.

The trouble in Parmat subsided for the time being, but by 10 p.m. on the arrival of armed persons from across the Ganges, arson, looting and murdering of isolated Muslims began again. Mr. S. M. Basheer, Barrister-at-Law, whose house is on the outskirts of Parmat, did his best to summon assistance. About 11 p.m.,

An Auxiliary Force patrol that passed through the main bazar, where no Muslims live, found all quiet with the exception of a house burning and some people sitting thereabout. Just afterwards, Mr. Barron and the Deputy Inspector-General of Police and the Superintendent of Police also passed through the main bazar of Parmat; they too found all quiet. Unfortunately Mr. Basheer did not happen to meet either of these parties and so could not point out to them where the crimes were being committed just off the main bazar. The Hindus are said to have been keeping a good lookout so as to disappear at once on the arrival of any help from the authorities.

Early on the 26th, Mr. Basheer went to the District Magistrate and then to the Superintendent of Police and to the Kotwal for help but unluckily his request fell on deaf ears as owing to the previous reports of all being quiet in Parmat no reliance was placed on his statement. By midday on the 26th, about 19 Muslims had been murdered and a number of houses looted and burnt. Some Hindus had given shelter to Muslim women and children who thus escaped with their lives. This is only one of the numerous instances where members of the two communities befriended one another during the riots.

At about 9 a.m. the large Annapurna temple in Patkapur, belonging to the family of Mr. Ghosh, a Bengalee, was burnt down by a band of Muslim hooligans. A number of other houses in that locality were also set on fire and looted. About this time, too, the Juma masjid in the same mohalla was attacked.

In Sabzimandi, trouble had started the previous afternoon (25th) when a number of Muslim houses were looted and burnt and some Muslims murdered. Whilst this was going on Mr. Barron with a force of military arrived on the spot. A gang of about 40 or 50 rioters, who were standing at the entrance of a lane, fled on the approach of this force; but Mr. Barron managed to trap six Hindus who were caught redhanded in a house where he found the still warm body of a recently murdered Muslim. This force also effected the rescue of about 50 Muslims who were conveyed to safety in Bara Butcherkhana.

About 7 a.m. on the 26th, Chaudhri Amjad Husain had gone to the Police head-quarters in Meston Road to try and get help for the safety of some Muslims who were reported to be in peril in Sabzimandi. On police being available he took them there about 9 a.m. On arrival they found that a number of murders had already been committed and several persons severely injured. Some houses had also been looted and burnt. They found in the adjoining mohalla of Ranjitspurwa that some more Muslims had been murdered and their houses set on fire. They rescued a number of people and took them to Bara Butcherkhana. All these murders appeared to have taken place on the morning of the 26th.

We have already referred to the occurrences of the 25th in the Sadar Bazar area. On the morning of the 26th a mob attacked the house of a Muslim contractor in Harbaus Mohal and murdered about eight of his men. They looted the house and set fire to his motor and other property. They also burnt an adjoining mosque and looted and burnt a number of Muslim shops in the neighbourhood.

Looting and arson were still going on today in the Baconganj and Colonelganj areas.

Early on the morning of this day Kunwar Maharaj Singh, the Commissioner, arrived from Allahabad. After a brief conference with the civil and military officials and leading non-officials he toured round the city in the area east of Meston Road. He was accompanied by Rai Bahadur Babu Vikramajit Singh and Hafiz Muhammad Siddiq, Chairman and Senior Vice-Chairman respectively of the Municipal Board. He was shown a large number of houses and shops that had been burnt and several mosques and temples damaged by fire or otherwise. He came across two wounded Muslims who, only a few moments before the arrival of his motor, had been very badly stabbed by a set of ruffians who were seen running away down

a lane in the distance. He also saw some looting in progress in Lathi Mohal. On subsequent days he made a number of tours in other parts of the city.

By the evening of this day the available police forces admitted of special precautions being taken to prevent the arrival of bad characters from outside.

Amongst the special measures taken by the authorities today was the division of the city into two circles each under a Deputy Superintendent of Police to patrol continually and supervise police arrangements generally. Owing to the arrival of more reinforcements many more pickets were put out today.

At a conference the military authorities agreed to allow more military pickets and by the afternoon eight in all were put out. Armoured cars were patrolling all day as on the 25th. The Auxiliary Force extended their patrolling at night to the Sisamau area.

In the evening the Inspector-General of Police arrived from Lucknow and was taken round the affected areas.

X

By the 27th on the arrival of large police reinforcements the situation showed marked signs of improvement, reports of riot and arson being few in number, though even now the tale of murders was not complete, a woman being done to death this morning in Sadar Bazar. Fires were going on in Etawah Bazar and Chamanganj and some looting was seen in progress in Baconganj where a large house was also set on fire.

Officials as well as private individuals and organisations, such as the Seva Samiti, were now very occupied in continuing rescue work of every kind. Thousands of people are said to have fled for safety by rail and road from the city during the riots as opportunity occurred.

By now one pressing need was the city conservancy which had been completely held up for the last three days; a start was made again today with the aid of a few armed constables to give confidence to the menial staff, extended arrangements being possible the following day and the regular service being in operation from the 29th.

By today also conditions admitted of the strict enforcement of the orders under section 144, Criminal Procedure Code, about the carrying of *lathis* and the curfew. The improvement in the more central areas is evidenced by the re-opening of a few shops in Meaton Road this afternoon.

XI

On the 28th the situation continued to show a definite improvement, only a few murders being reported. Arson and rioting had also considerably diminished. A very large number of weapons of all kinds were seized by patrolling parties. A few city shops began to reopen. His Excellency Sir George Lambert accompanied by the Home Member visited Cawnpore today and toured round the affected areas and met a number of prominent citizens.

One disquieting feature of the day was the spread of incendiarism to villages adjacent to Cawnpore.

In the dry bed of the river Ganges on the Unao side a number of Hindus and Muslims of Gwaltoli had fields under cultivation, mainly, melon fields. Early in the morning some 10 or 12 Hindus crossed over from the Cawnpore side and were joined by about 40 others from the Unao side. They set fire to the field huts and grain stacks of Muslims and then murdered about seven of them, including women

and children who were scattered about in the fields and huts. Later on a Muslim accompanied by three constables tried to cross the river to rescue his relations of whose dangerous position he had been informed. This party was, however, stopped at the ferry by some Hindu land chormeters who immediately asserted that these women and children had already been rescued earlier in the day by crossing at another ferry. In the afternoon on hearing of these crimes a Sub-Inspector with a force of police crossed the river and effected the arrest of several suspects and also recovered the bodies of the murdered persons referred to above.

XII

By the 29th heading and again had previously stated. The situation had been brought under such a degree of control that the military pickets were withdrawn. The mills, too, began to reopen.

From today the city was divided into three circles, each under a Hindu and a Muslim Deputy Magistrate. They were given a herry and an armed police guard and were instructed to do what they could in the direction of rescue work, general maintenance and pacification. One immediate result of this was the cessation of the constant shooting at night which had tended to keep up a state of panic.

The disposal of dead bodies, many of which in an advanced stage of decomposition were still lying in some houses and enclosures, had become a matter of grave urgency necessitating special sanitary arrangements on a large scale; from this morning bodies were disposed of freely instead of being brought to the hospital as hitherto, in many cases bodies having to be burnt on the spot.

XIII

The only instance of disorder reported on the 30th was the looting of a Hindu shop in the city by five Muslims. From this stage a daily narrative is no longer required as by now the situation had been brought fully under control, the military being finally withdrawn from the Municipal Board office on the morning of April 2, and from the District Board office on the morning of April 4; but military pickets continued on duty in the city till the evening of April 5. On the morning of April 7, all the troops of the garrison went for a route march through the city escorted by mounted police.

XIV

In connection with the measures taken to meet the outbreak the action of the District Magistrate and the police has been much criticised. Some have blamed them for the outbreak itself, but the majority for the intensity, the violence and the extent to which it grew.

The peace of a district is the special charge of the District Magistrate. His agency for maintaining public order and protecting the people in their daily lives is the police. A less tangible but no less important agency is his personal influence. Many of the critics, but by no means all, believe, to a political school who think that the power of the District Magistrate has been used to some extent still to a large to political purposes and that the police are too often used in representing legitimate political aspirations. Their judgment, therefore, may be easily biased by their political leanings and they may be over-ready to find or to exaggerate faults in the police and the Magistrate. It is an axiom too that wisdom comes easier after an event than before it. We have tried to keep these precautionary considerations before our mind in dealing with this section of our work.

Proceedings to try the execution of Bhagat Singh were still being taken in the High Court on March 23. When this final effort was unsuccessful, it was decided that the execution should take place the same evening. This information,

it is understood, was passed on to District Magistrates everywhere. Up to that time, therefore, there were no arrangements to be made or precautions to be taken by a District Magistrate. When the *hartal* and mourning procession were proclaimed by the Congress Committee next day in Cawnpore, the District Magistrate asked the Officer Commanding the Station to keep troops in readiness and police arrangements were also made for the procession. After the raid down the Mall by the Vanar Sena, the District Magistrate asked the Officer Commanding about 2.30 to send troops as quickly as possible to Queen's Park which is on the edge of the city. He had before this at 2 p.m. sent two experienced Deputy Magistrates to Meston Road whence trouble had been reported with instructions to let him know at once the exact situation there. They found rioting going on and shops being plundered. They acted energetically to stop it and at the same time telephoned to the District Magistrate that the situation was serious and asked him to come himself and send police aid. The Superintendent of Police had received similar news and had ordered all the available police force in the Lines to be sent to Meston Road. He then went to the Magistrate's bungalow and they both drove down at once to the city.

Throughout all these dispositions the District Magistrate in our opinion acted with care and foresight. It has been suggested that police ought to have been posted in the Mall to meet an attack in that direction. The Mall had never been affected by disturbances and when news came of the raid by the Vanar Sena, police *sowars* were sent there. This isolated raid had no further effects. A more common criticism is that troops should have been sent at once into the city, i.e., about 2.30 p.m. when news came of the fracas in Moulganj and Meston Road. We doubt if any one would at the time have seriously advised such action. There was in fact, as we know, a lull about 3 p.m. Pandit Rameshwar Dayal, one of the Deputy Magistrates who had been working so courageously in Meston Road, states :—

“By this time more police force was available. I cannot say what was its strength. This was now a few minutes past 3 p.m.

“Conditions on Meston Road and in its adjacent lanes, so far as one could see, appeared quiet on both sides and the situation on Meston Road for the time being had been brought under control.”

The District Magistrate had asked that the troops be sent to Queen's Park ; all the police in the Lines had been sent to the city and then he went down to the city himself. There is nothing more, we think, that he could have reasonably done on the information before him at the time.

The next phase in the day's events is crucial and in this the Commission regret to say that they cannot acquit the Magistrate of grave errors in judgement and in action. He reached the city after 3 p.m. and he very properly held a consultation with his officers at Shera Babu's house near the Moulganj cross-roads. Before the consultation ended, the Superintendent of Police and the City Kotwal had to leave to stop some rioting which had been renewed at Moulganj. Some Muslims then arrived and took the District Magistrate up the road to the Thathrai and Chauk to see the damage done to their shops and the damages alleged to have been done to the Bazaza mosque. He had no police force with him at that time. While he and his party were going down the Chauk, a crowd of Hindus ran towards him shouting that an attack was going on in Sarrafa—a neighbouring street. There was now much noise and uproar. The Magistrate, therefore, turned back and went away. We understand his position to be that he thought his presence there would lead to mutual complaints and recriminations between the two crowds resulting in an open fight, so he thought it better to go away. He did not unfortunately return by the main direct route up through Meston Road in which the temple stands. He crossed the road and went up through some bye-lanes inside and so emerged again at Gillis Bazar at the top of Meston Road where he had left his car. He does not remember clearly why he did this, but he thinks now that people told

him that fighting with brickbats was going on in Meston Road and he had better go by a side way.

His object in leaving the city was to go to his office which is in the Civil Lines about three-quarters of a mile away in order to write out orders under section 144 of the Code of Criminal Procedure. This was about 4 p.m. A careful comparison of evidence shows that it was at this time that the temple in Meston Road was attacked and set on fire. It was about this time too that the mosque in the Chauk already attacked appears to have been set on fire and probably the mosque in the Sarrafa nearby was set on fire then too or soon after. Word was brought almost at once to the District Magistrate by a Deputy Magistrate of the firing of the Meston Road temple. This was a grave situation. Rioting too was renewed at Moulganj. Before 5 o'clock the situation was out of control and the Superintendent of Police telephoned a message to the District Magistrate to send the troops. Mr. Barron, the City Magistrate, had all this time been kept at the Magistrate's bungalow to deal with any telephone calls or reports which might be received while the District Magistrate was in the city. About 5 p.m. the Magistrate left his office, came to his bungalow and sent Mr. Barron to take the troops who were at Queen's Park into the city. They reached Moulganj at 10 minutes past 6. Thus neither the District Magistrate nor his experienced City Magistrate was in the city in those critical hours from 4 o'clock to 6. It appears to us that the Magistrate was fatally slow in appreciating the seriousness of the situation. The temple in Meston Road had a history behind it. This very spot, where the temple and the Machhli Bazar mosque stand facing each other, was the scene of the serious riot in 1913. Muslims and Hindus both had special memories and antagonisms connected with these shrines. The District Magistrate knew this. He was not far from the spot. It was no time for him to turn aside and leave it. Had he taken a quick decision then, gathered a small force of police who, as we know, were available down the road and gone straight to the temple, he would almost certainly have beaten off the attack and saved the temple from being burnt. He could similarly in all probability have prevented the burning of the Bazaza mosque and the Sarrafa mosque too. It is the common opinion, and the District Magistrate has told us so himself, that it was the news of the burning of the temple and the mosque that caused that sudden fury of passion which swept the riot out of control and carried it with unprecedented speed out into the farthest quarters of the city. This failure to appreciate and to act was a grave error on the part of the District Magistrate. Further, the Commission believe it to be very important that the District Magistrate in periods of grave disturbance should himself be in the city as much as possible until the situation has been brought under control.

- Very many witnesses represented to us that the District Magistrate should at the outbreak of the riot have divided the whole city into circles and put a Deputy Magistrate with a force of police in charge of each circle. They claimed that this was done at the beginning of the riots in 1927 and proved most effective. Witnesses are mistaken in believing that the measures taken in 1927 are a precedent for this course. We examined Mr. Monro, who was the District Magistrate of Cawnpore in 1927, and we also went through the reports made by him to the Commissioner and the Government at the time. He did not during the stress of the riot divide the city into circles and place a Deputy Magistrate with a force of police in charge of each circle. He took this action about the third or fourth day, i.e., after the violence of the riot was over. He did it not to stop the riot but to restore confidence and bring about reconciliation. For this purpose, he put a Hindu and a Muslim Deputy Magistrate jointly in charge of each circle. He did not believe that the course suggested by witnesses would be of any value in stopping a riot. What he did with the Deputy Magistrates was to direct them to keep moving about in different parts of the town and to arrange between themselves that their movements did not overlap. Action similar to this might, we think, have been taken on this occasion but we are not prepared to stress it, for it has to be borne in mind

that the rioting then and now was on a different scale. In the fury and violence of the present riots, it would hardly have been safe for a Magistrate of either community to keep moving about alone in the inner mohallas. As the violence of the rioting subsided and as more police became available there were, we think, occasions when it would have been proper to give Deputy Magistrates a police guard to enable them to conduct rescue work more vigorously. It is on record that Deputy Magistrates did ask for such aid but were unable to obtain it.

More use, too, at that stage might have been made of the help of Honorary Magistrates and leading non-official gentlemen. At the same time, it ought to be said that high civic position entails special responsibilities and any one occupying such a position should have come forward freely to exercise his influence. In this there was conspicuous failure.

If the police force were in adequate strength, the suggestion to divide the city into Magistrates' circles each with its own police guard is probably sound. On this occasion the police force available during the first two days was not adequate, nor would it perhaps even be financially feasible to keep in peace time a police force that would be adequate in the event of a violent outbreak to guard the main lines of communication in the city and provide also separate guards for at least five city circles. We are not able, therefore, to endorse to any significant extent the criticisms of the dispositions made by the authorities in this particular respect.

XV

Complaints against the police range from accusations of indifference to actual participation in the riots. The most prominent charge was one of general inactivity which can only be satisfactorily judged by splitting it up under different heads.

A criticism that has been urged before us by many is that sufficiently strong action was not taken in the very beginning. Some witnesses pressed that resort should have been had to firing but exactly when this might have been justifiable is not specified, and is no easy matter for us to determine. Some of the animus, too, that has been aroused against the police has emanated from and been fostered by the large number of persons who made requests for assistance with which the authorities were, for the most part, quite unable to comply. A number of witnesses have expressed the opinion that owing to the "Go-slow" policy of the Government during the civil disobedience movement and the criticisms aroused against the police during this period, they were reluctant to use force. These are considerations to be kept in mind.

With reference to the actual events of the 24th we have first of all to consider the position in Meston Road and Moulganj cross-roads between 2 and 3 p.m. while the Kotwal was in charge of the police. In that area the only available force on the spot was the civil police of the Meston Road and Gillis Bazar outposts and the few armed police that the Kotwal brought with him. There were only two Deputy Magistrates there. Brick-throwing was undoubtedly taking place in Meston Road. During this period between 2 and 3 the Kotwal evidently hoped to be able to keep the two communities apart by following a policy of tact or *bich bachao* and by contradicting mischievous rumours. We feel that by now he ought to have realised that they were up against something quite different from the civil disobedience type of disorder with which Cawnpore had been familiar during the past twelve months.

During this earliest stage Pandit Rameshwar Dayal has instanced two cases of inactivity by constables. He found a couple of them in Meston Road making no attempt to interfere with two or three Muslims who were looting a shop on the

opposite side of the road and he also noticed half a dozen constables as "listless spectators" of the Muslim attack on Shera Babu's Park and neighbouring shops. That this inactivity on their part was reprehensible goes without saying, but one has to make allowances for a few constables left without an officer to lead them in face of a dangerous situation.

By 3 p.m. we enter on another stage with the arrival of police reinforcements from the Lines. Between 4 and 6 rioting increased to a dangerous degree. The main criticism arising at this point is that the police should have used more force, e.g., firing.

We feel that an opportunity for striking a hard blow must surely have arisen whilst the Meston Road temple was being attacked and set on fire, an operation that occupied a considerable period of time. The same very likely applies to the burning of the Chauk Bazaza and Sarrafa mosques.

On the subject of *lathi* charges it has been represented to us that one peculiar difficulty was that the mobs dispersed on the arrival of the police, but even so several *lathi* charges were in fact made at Moulganj cross-roads when the Superintendent of Police was present and at other places on Meston Road and Chauk. We think these charges might have been pressed home more.

We have heard too of more than one instance of crowds re-forming after being dispersed. We consider that something more might have been done in the direction of warning people that if they again collected together in crowds they would be liable to be fired upon.

As to this period we have not been informed of the dispositions made of the available police force which after the reinforcements from the Lines about 3 p.m. amounted in all to nearly 200, including 97 armed police, of all ranks; but it is clear from the evidence before us that a state of great confusion must have prevailed. More than one Deputy Magistrate who was present on the spot has described his difficulty in laying his hands on any police and the Kotwal himself speaks of there not being sufficient men to take any effective measure. Seeing the number of police that were actually available in Meston Road at the time we felt that the officers in the prevailing confusion must have lost touch with their own men and so failed to make the best use of them. This seems evident from the fact that in spite of the presence of this force the temple and the mosques were set on fire. In Queen's Park too we know that there was a force of between 20 and 30 armed police available who were entirely overlooked during the first day. Some men also were arrested about this time under the orders of Deputy Magistrates and handed over to the police but they could not be subsequently traced. It was the failure to deal with the situation on Meston Road during this period and particularly the burning of the temple and the mosques that led to the fury and rapid spread of the trouble into the adjacent mohallas.

With regard to the criticism made by several witnesses of the concentration of forces on Meston Road, we have definitely been told that the chief objective of the police in the initial stages of the riots was to prevent a clash at Meston Road and Moulganj cross-roads. The two considerations bearing on this scheme are that Meston and Halsey Roads are very wide thoroughfares and that the mohallas to the west of Meston Road are predominantly Muslim while those to the east are predominantly Hindu. Nothing was more easy therefore than for a pitched battle to take place in Meston Road in which hundreds of deaths might have occurred within a very short space of time. It seems clear that with the forces at the disposal of the police they could not have succeeded as they most certainly did in preventing such a battle, had they at the same time started dispersing their men into the network of lanes in the adjoining mohallas. This initial scheme of concentrating on Meston Road and sending out raiding parties together with increased picketing of mohallas as reinforcements arrived met with the approval of the

Deputy Inspector-General of Police ; and the Officer Commanding, when questioned on the subject by us, admitted that he would have adopted the same line of action himself had he been called upon to take over control of the riots. We are decidedly of opinion, therefore, that the authorities acted rightly in concentrating their forces on Meston Road at this stage with the objects above-mentioned.

There is the further question to be considered whether this concentration here was justified later on after the arrival of the military. The troops, of course, were not there till 6 p.m., on the 24th and the military pickets were withdrawn from Meston Road in the morning of the 25th and were not replaced till 4 p.m. There were several occasions, as Mr. Barron has told us, even during the first 48 hours, when the number of armed police on Meston Road fell as low as ten. After the 25th Mr. Barron considered it would have been possible to reduce the police force on Meston Road and at Moulganj, but he did not consider it safe to do so. We therefore do not attach much importance to this criticism. The possibility of a clash on the broad thoroughfares must have been an ever-present anxiety until the central parts had been brought under control.

As to a further criticism that the Kotwali and not Meston Road should have been made the Police head-quarters, there are several sound reasons for the selection of the latter during the initial stages of the riot. Though this probably did result in a difficulty to some extent in private individuals communicating with the police, there is the important point that this spot was far more central than the Kotwali, and indeed in the reorganisation proposals it was clearly pointed out by the Superintendent of Police that the Kotwali was very badly placed right out of the way in one corner of the city, and the proposal was to erect it on the site of the present Gillis Bazar outpost. It was also closer to the Police Lines and to the Mall, a most important line of communication. Another consideration in selecting Meston Road was the fact that the temple in it was one of the real danger spots. A telephone, too, was available in the house of Hafiz Muhammad Siddiq, one of the most respectable public men in the city, though it is unfortunate that recourse was necessarily had to a private telephone connection, and it is due to this that considerable misunderstanding arose on the part of the other community who felt that their requests for help were not receiving the attention they might otherwise have had.

Every class of witness before us who gave expression otherwise to widely different points of view agreed in this one respect, that the police showed indifference and inactivity in dealing with various incidents in the riot. These witnesses include European businessmen, Muslims and Hindus of all shades of opinion, military officers, the Secretary of the Upper India Chamber of Commerce, representatives of the Indian Christian community, and even Indian officials. It is impossible to ignore such unanimity of evidence. They have given a number of instances and though some of them are capable of explanation, yet there is no doubt in our mind that during the first three days of the riot the Police did not show that activity in the discharge of their duties which was expected of them. In coming to this conclusion we have in mind a number of cases which do not admit of any doubt, e.g., those in Parmat, Gwaltoli, Sadar Bazar, Sabzinandi and Patkapur.

At Parmat, as has been stated, the trouble started on the afternoon of the 25th. There is a police chauki there and in addition to this at 5 p.m. that day an armed guard was also posted. During the night of the 25th there were murders, arson, and looting going on and by noon of the 26th about nineteen persons were murdered, a number of houses looted and set on fire. All this happened not very far from where the police force was posted. They appear to have paid no attention to these crimes.

Then there is the case of Gwaltoli. Mr. Ryan tells us how he found on the morning of the 26th the whole bazar on fire and saw huge crowds armed with all sorts of weapons ready for a fight. A police armed guard was there but it was not

making any attempt to interfere. Mr. Ryan got between the two crowds and stopped them from coming to blows. He asked the guard what they were supposed to be doing and they said that they had come from Lucknow the day before and had been left there without any definite orders.

Then again there is the case of Sader Bazar. On the morning of the 26th there were two armed police pickets in that locality and yet we have an instance where eight people were butchered, a house looted and set on fire; at least one of these pickets was not very far from the place of occurrence. They must have been aware that this was going on as large gangs were engaged in committing these crimes in a leisurely manner.

In Sabzimandi, on the morning of the 26th a number of murders were committed and Mr. Islam Nabi Khan, Deputy Magistrate, has told us that from the place of occurrence a police armed guard, which he had posted the day before and which was still there, was only at a distance of about a hundred paces.

In Patkapur, there is a police outpost and in addition to this there was also a police picket, and yet the Juma masjid and the temple of Annapurna Devi were attacked and set on fire.

A number of witnesses have cited instances of serious crimes being committed within view of the police without their active interest being aroused.

It has been stated by the City Magistrate and the Superintendent of Police that all armed guards were given instructions not to hesitate to fire if they saw any one engaged in murder, arson or other serious crimes. It is very strange that all this havoc was wrought in the city and yet none of these police guards ever found occasion to fire on any one engaged in such serious crimes during the first three days of the riot. We feel that from the experience gained in these riots the value of standing pickets posted at wide intervals is over-rated.

In contrast to this, we see what effective action was possible from the success attained by Mr. Onkar Singh, Deputy Superintendent of Police, who was sent to Sisamau on receipt of news of trouble in that quarter and who by prompt action quelled the disturbances and effected over fifty arrests within a short time.

In this connection, we have to consider the question of the Watch and Ward beat patrols linking up the pickets and supplying information. We may take one instance as an example. On the morning of the 26th there were the terrible atrocities committed in Bengalee Mohal at a comparatively short distance from Meston Road head-quarters. No information seems to have reached the police though news was received by Mr. Vidyarthi in time to enable him to rescue a number of Muslims of the locality. We have only given this instance but the same applies to the whole of the beat police. It appears to us that these constables were not going on their beats. The authorities were relying on this force for their information but they ought to have realised by the noon of the 25th that their beat police were not doing their duty and they ought to have taken some immediate steps to improve their sources of information.

We are told by a number of witnesses, and the District Magistrate also has said so in his evidence, that complaints about the indifference and inactivity of the police were made at the time. It is to be regretted that no serious notice was taken of these complaints. The great tragedy throughout the worst days of the riots was the inadequate appreciation of the seriousness of the situation by the local authorities, their ignorance of happenings inside the mohallas and consequently their failure to take effective action to protect the lives and property of the people. Even when two circles under Deputy Superintendents of Police were constituted on the 26th, information did not come in as it should have done. In one instance, during the patrol of a Deputy Superintendent of Police in an area where crimes were being committed, the picket there and the beat police reported "all quiet".

The inactivity of the police is further illustrated by the very small number of arrests made at the beginning. On the 24th, there was only one and on the 25th only five with the exception of those made in a special raid by a Deputy Superintendent of Police in Colonelganj and on the 26th only two persons were arrested. These figures indicate either inactivity or that no importance was attached to the making of arrests as a means of checking the riots. More than one Deputy Magistrate has told us that no serious effort was being made to enforce the orders under section 144 of the Code of Criminal Procedure before the 27th.

The failure to make arrests and enforce these orders must have given the bad characters an idea that they were free to do as they liked; and of this opportunity they took full advantage. The policy of making arrests on a large scale at an early stage proved very effective in the 1927 riot. We are not able to get any official figure of the arrests on that occasion but a witness produced an extract from the *Pioneer* of a couple of days after the riots showing that nearly 250 arrests were made during the first 24 hours.

An exact reason for the lack of activity is difficult to assign. Pickets, we were told, even when posted in their places did little or nothing. "They were wanting", says Mr. David, "in any kind of initiative and had no idea or conception of what they were placed there for". Mr. Ryan gave an instance of exactly the same thing. The patrolling by the mohalla police was equally bad. Wherever in fact there were small parties of police on their own, the complaint is that they did nothing. All this points to a lack of leaders possessing drive and energy in charge of the smaller parties of police and a lack of supervision and indifference by immediate superiors. This leadership was particularly essential in the case of disturbances of such extent, magnitude and nature.

There may be some truth, too, in the theory advanced by some witnesses that the police had grown so accustomed to non-interference during the civil disobedience movement that they had neither the wish nor the will to intervene. Now they were not themselves the attacked party and so, to interfere as little as possible may have seemed to many of them to be the line of least resistance and danger. Whatever may be the true cause of the inactivity we consider that had the District Magistrate realised the effect his presence about the city was bound to produce it would have gone some way towards countering it.

In making the above adverse criticisms of police action we consider it only fair to mention the heavy handicap carried by Mr. Rogers in his having only taken over charge four days before the riots and hence being unacquainted both with the city and the officers under his command. Mr. Seward, his assistant, too had only arrived on the 16th of March.

In the detailed analysis of criticisms there are some considerations on the side of the police that are liable to be overlooked. They were called on suddenly to meet a very complicated situation. The strain thrown on them was very great. Many of them remained on duty without relief for thirty hours and longer. It was no doubt often in respect to these weary men that witnesses say they found the police sitting down and doing nothing. It was not possible in the stress of the time to distinguish the shirkers from the work-weary. The failure of some brought blame on all. In the open streets of the city—in Meston Road, Moulganj and Halsey Road—where the immediate supervision, control and leadership of superior officers were available, the activity of the police kept the combatants apart and prevented losses on a larger scale.

XVI

The District Magistrate and the Superintendent of Police have both complained of the insufficiency of the police force in Cawnpore in normal times, a fact to which the European commercial community was also alive. In 1928, the then Superintendent of Police prepared a very careful scheme for a permanent

increase in the civil police of three sub-inspectors, 12 head constables, 19 naiks, and 289 constables. This included increases on account of :—

- (a) Traffic duties.
- (b) District Intelligence staff.
- (c) Special requirements on the introduction of the Plain Clothes staff.
- (d) Prosecuting staff.

The Inspector-General of Police excluded the figures required on account of these four items and asked for an immediate increase of 10 head constables, 16 naiks and 188 constables.

This allocation scheme was put forward owing to the rapid growth in the population of Cawnpore and to the increase in the size of the inhabited area, particularly the parts under the Improvement Trust. An extensive area like Sisamau, for instance, has no thana nor even an outpost. The scheme involved the appointment of an additional Superintendent of Police and the construction of two new thanas and twelve outposts in the city area. It was aimed, too, at curing a very great weakness in the Watch and Ward system. The staff were housed far from their beats and that defect still exists. It may have been one of the reasons for the unsatisfactory beat work seen during the recent riots. The Government reply was that "In view of the present financial stringency the Governor in Council has dropped your proposal for an increase in the police in Cawnpore".

We are strongly of opinion that in view of the increase in the population and size of Cawnpore city the present police force is inadequate and quite out of date. It is true that on the outbreak of the riot there happened to be in Cawnpore 74 armed police that are not ordinarily there and they, to some extent, made up for the deficiency in the number of police that a city of this size and development requires; but this shortage had undoubtedly an effect, both morally and materially. The police officers must have felt that the strength and arrangements were not what they were entitled to expect them to have been. We are also of opinion that to meet any such emergency in the future a plan of action should be prepared beforehand based on forces that will be immediately available. There was a scheme of this nature in existence prepared after the trouble in 1927 but it proved to be of no practical value as it assumed a far greater police strength than the city had.

Government acted promptly as soon as they were informed of the insufficiency of the force at Cawnpore, and by the evening of the 25th seven officers and 210 British other ranks and 237 police had arrived in Cawnpore, and by the evening of the 26th another 239 police had also come.

XVII

In the dispositions made to deal with the outbreak the part taken by the military forces was of great importance. The Officer Commanding the Station, Lieut.-Colonel McCallum, responded promptly to the District Magistrate's request for military aid. He had one battery, an armoured car company (less one section) and three companies of his own regiment, the Highland Light Infantry in Cantonment. He sent one company of the Highland Light Infantry to Queen's Park at 3 o'clock on the District Magistrate's request and on a further request at 5.30, he sent this company at once into the city. The arrival of the troops had an immediate steadying effect within the area of their influence, and throughout the riots whenever and wherever the troops appeared their presence was a signal for peace. Three military pickets were at once posted at central points. As news came in of the spread of the rioting, Lieut.-Colonel McCallum sent a second company of the Highland Light Infantry to the city at 10.30 p.m. At this period a consultation was held between the military and civil officers on the spot. The latter were anxious that the military should extend the picket system as they now had two

companies. They proposed that ten military pickets in all should be put out. This the military officers refused to do. They were prepared to send out three patrols from the newly arrived company but their instructions and the King's Regulations forbade their splitting up their troops into small bodies.

Their contention was not, we think, unreasonable at that time. The trouble had arisen following the execution of revolutionaries whose aim had been the violent overthrow of the British Government. The first that the military officers knew of it was probably the attacks made on Europeans on the Mall. Their natural conclusion would be that the *emete* was aimed at the Government. Later they became aware, of course, that it was inter-communal, but in this first night their action might easily be influenced to some extent by their original information. It was then late at night and in face of their orders they would be particularly reluctant to put out small parties in pickets. This early difference of opinion caused, we think, a want of cordiality in the liaison between the military and civil officers. The military officers also undoubtedly held and have given open expression to this opinion that the police were, for whatever reason, not doing their own work and were inclined to expect from the troops work that was purely police work. It was arranged, therefore, that for the night of the 24th there should be three pickets and three patrols.

Next morning about 10.30 the Officer Commanding sent a fresh company to relieve the two companies that had been on duty. At this stage the military made what appears to us to have been an unfortunate decision. With the exception of a small picket of seven or eight men which was left in the Chauk they withdrew the troops altogether from the city proper. It is not to be understood as was at one time asserted that they withdrew them to Cantonment. They concentrated them at the District Board office which is only across the road from the top of Meston Road itself. They were, therefore, all the time within very easy reach of the main centres of the trouble. Still the withdrawal of troops is always liable to be misinterpreted, and in the watchful and vengeful mood in which fanatics of both sides then were, the withdrawal was bound to lead to trouble—which it did. The Moulganj picket had hardly gone when a riot broke out at the cross-roads. Military patrolling by armoured cars, mounted men from the battery and parties of the Highland Light Infantry went on through the day. In the evening three pickets were put out and with the arrival of two companies of East Yorks from Lucknow, the system of pickets was extended. This was completed in the afternoon of the 26th and this point—it may be no more than a coincidence—marked the end of the violent stage.

The Commission consider that the Officer Commanding and the officers under him acted throughout with promptitude and gave invaluable aid. There is one point of more general importance to which we would refer. The military officers laid great stress on concentration. They are perhaps bound to do so by their Regulations. We think that an occasion when the rigidity of the principle can and should be relaxed is a communal riot. In the present instance all the evidence goes to show that on the appearance of troops or police, even in the smallest number, the crowd melted away. There was no disposition to attack authority. The rioters wanted only to get at each other. The splitting up of troops in such circumstances into smaller bodies than usual is not attended with much, if any, danger and would be most effective in meeting scattered rioting.

The Auxiliary Force under Lieut.-Colonel R. Menzies, O.B.E., V.D., were called out on the 25th and the work they did has received universal appreciation.

XVIII

The Kirana Sewa Samiti have added to their reputation by their tireless and often dangerous work. They removed dead bodies without thought for themselves and helped the wounded. Their social service was of the greatest value, and

the Honorary Secretary, Mr. Bhasin, deserves high commendation for the excellence of their organisation.

The Fire Brigade of Cawnpore also did tireless and dangerous work day and night during the riots. Mr. Ryan, who worked personally with them and is also in administrative charge of the Brigade, and their Superintendent, Mr. Dwivedi, deserve great credit.

It is not to be forgotten amid this record of crime that there were many mohallas where a minority of either community lived in perfect security among their neighbours and many instances where in moments of danger, members of one community rescued and harboured members of the other community, particularly women and children.

We will only add that an aftermath of bitter feeling still remains in Cawnpore and extreme nervousness exists on both sides which may easily result in panic and a fresh outbreak. It is a most pressing duty and responsibility resting on the leading citizens of Cawnpore to put their heads together and devise a conciliation board of some permanence whose members would work together in a spirit of real co-operation and by their individual and combined influence assuage feelings and prevent actions that thoughtlessly or otherwise might lead to similar trouble again.

NAINI TAL :
May 22, 1931.

G. O. ALLEN.
BALDEO RAM DAVE.
LIAQAT ALI KHAN.
M. KEANE.

Papers attached :

- (1) A map of Cawnpore.*
- (2) Statement no. I showing the strength of Cawnpore Head-quarters Police, as supplied by the Inspector-General of Police, United Provinces.
- (3) Statement no. II showing the reinforcements of police arriving each day in Cawnpore from other districts under Government orders.
- (4) Statement no. III showing the outposts and beats in Cawnpore city excluding Cantonment and Nawabganj during the riot of March 1931.
- (5) Statement no. IV supplied by the Superintendent of Police, Cawnpore, showing the number of police necessary for patrol and picketing work (including a reserve for relief) during a riot in the city (excluding Cantonment and Nawabganj).
- (6) Statement no. V showing the number of houses and other properties burnt or damaged during the communal riot of March 1931, supplied by the Cawnpore Municipality.
- (7) Statement no. VI showing the number of deaths recorded at the Prince of Wales' Hospital, Cawnpore, up to March 28, and the number who died of wounds in hospital.
- (8) Statement no. VI-A showing the details of injury cases treated in the Prince of Wales' Hospital, Cawnpore.
- (9) Statement no. VII showing the number of dead bodies cremated and buried during the Cawnpore riots, supplied by the Health Officer, Cawnpore Municipality.
- (10) Statement no. VIII showing crimes reported mohalla-wise up to May 4, 1931, for the first four days of the riot.
- (11) Statement no. IX showing the number of arrests made each day for offences under the Indian Penal Code, Arms Act, and breach of the orders under section 144 of the Code of Criminal Procedure (supplied by the Superintendent of Police on May 12, 1931).

*Not printed.

STATEMENT NO. I.

Statement showing the strength of Cawnpore Head-quarters Police, as supplied by the Inspector-General of Police, United Provinces of Agra and Oudh.

		Sub-Inspectors.	Head Constables.	Naika.	Constables.
A.—CIVIL POLICE.					
Strength on paper ...	(1) Sanctioned for city ...	17	29	42	430
	(2) Temporary D. I. S. ...	1	...	2	15
	(3) Reserve, miscellaneous duties, courts, etc.	11	21	7	148
	Total ...	29	50	51	593
B.—CIVIL POLICE.					
Actual strength on March 24, 1931, excluding those on leave and on guard or escort duty who could not be relieved.	(1) City police stations ...	18	27	42	398
	(2) Reserve, miscellaneous duties, etc.	8	16	3	107
	Total ...	26	43	45	505
C.—ARMED POLICE.					
Strength on paper ...	(1) Sanctioned allocation (permanent).	2	24	32	300
	(2) Punitive police (temporary)	1	1	2	50
	(3) Range reserve ...	1	7	19	150
	Total ...	4	32	53	500
D.—ARMED POLICE.					
Actual strength on March 24, 1931, excluding those on leave and on guard or escort duty who could not be relieved.	(1) Out of sanctioned allocation	2	8	13	132
	(2) Range reserve ...	1	1	4	12
	(3) Punitive police ...	1	2	2	50
	Total ...	4	11	19	184
E.—CIVIL POLICE.					
Additional permanent increase.	(1) Asked for by district authorities in 1928.	8	12	19	289
	(2) Recommended by Inspector-General of Police.	...	10	16	188
	(3) Sanctioned by Government	...	...	...	...

STATEMENT NO. II.

Statement showing the reinforcements of police arriving each day in Cawnpore from other districts under Government orders.

Date.	Gazetted officers.	Other ranks.	Remarks.
1931.			
March 25 ...	1	236	Includes— Armed police ... 99 Mounted police ... 22
" 26 ...	1	237	
" 27 ...	1	37	
" 28 ...	...	84	
Total ...	4	564	

STATEMENT NO. III.

Statement showing the outposts and beats in Cawnpore City excluding Cantonment and Nawabganj during the riot of March, 1931.

Thana.	Outpost and allocated strength.		Serial no.	Beats. Mohallas concerned.
	Non-commissioned officers.	Constables.		
<i>Kotwali circle.</i>				
(1) Gillis Bazar	6	88	1 2 3 4 5 6	Parade. Chauk Sarrafa. Mahesari Mohal. Etawah Bazar. Bengalee Mohal. Sarsaiya Ghat.
(2) Moulganj	5	80	7 8 9 10 11	Eutoherkhana Khurd. Farrash Khana. Chapper Mohal. Chakia Mohal. Sabzimandi.
(3) Sirki Mohal	4	80	12 13 14 15 16	Naughara. Nakhas. Hata. Sbatranji Mohal. Generalganj.
(4) Filkhana	4	24	17 18 19 20	Nayaganj. Natebghar. Sirki Mohal. Roti Godam.
(5) Patkapur	3	18	21 22 23	Patkapur. Kursawan. Birhana.
(6) Naharpar	3	18	24 25 26	Danlatganj. Gadaria Mohal. Harbans Mohal.
(7) Collectorganj	2	12	27 28	Shutar Khana. Guards Barracks.
<i>Colonelganj circle.</i>				
No outpost (supplied from thana)	1	7	1	Half of Colonelganj, Chunniganj, Beshirganj, MacRobertganj, Khatikana, Idgh, Cemeteries, Talab Subedar, Lodhaura.
No outpost (supplied from thana)	1	6	2	Half of Colonelganj, Bazaria, half of Bacongani, half of Kanghi Mohal, Talaq Mohal, Hata Chotey Mian, Hata Gammu Khan, Muslim Orphanage.
No outpost (supplied from thana)	1	6	3	Half of Sisamau, half of Khapra Mohal, Humayun Bagh, Shafabad, half of Prem Nagar, half of Qasimganj.
(8) Outpost Jarib	1	6	4	Half of Sisamau, half of Prem Nagar, Akbar Bagh, Shafabad, Chamaanganj, Bhannanapurwa, half of Qasimganj, Deputy-kam-Parao, Anand Bagh, Hata Gulam Ali.
(9) Mannapurwa	2	7	5	Pechbagh, Farrash Khana, Munna-lal Street, Aminganj, Bhasina Hata, half of Bacongani, half of Kanghi Mohal, half of Khapra Mohal, Mannapurwa, Nazirbagh.
(10) Gwaltoli	2	8	6	Gwaltoli, Khalasi Lines, part of Civil Lines, Elgin Mills, Victoria Mills, Lal Imli.
(11) Parmat	3	12	7 8	Parmat, part of Civil Lines, Muir Mills, Parade, Carshed. Part of Civil Lines, Courts Jail, Dayanand Anglo-Vedic College, Hata Gulab, Police Lines.

Statement showing the outposts and beats in Cawnpore City excluding Cantonment and Nawabganj during the riot of March 1931—(concluded).

Thana.	Outpost and allocated strength.		Serial no.	Beats. Mohallas concerned.
	Non-commissioned officers.	Constables.		
<i>Anwarganj circle.</i>				
No outpost (supplied from thana)	3	20	1	Hiramanpurwa, Phulwali Gali, Beghis Mani Ram, part of Farash Khana, Bhooatoli, part of Pechbagh.
	(for three beats).		2	Jugrapurwa, Chappar Mohal, Kasimganj, Anwarganj, Khalkana, Bansmandi, Daleipurwa, Anwarganj, Hata Gur Prasad, Kinara Nahr Gang, Ranjit Purwa.
			3	Sabsimandi, Coolie Bazar, Hara Butcherkhana, Cooperganj, Collectorganj, Badshahi Naka.
Cooperganj	2	8	4	Lachmanpurwa, Cotton Mills, Town Hall, Flour Mills, Khalwa.
Juhi	2	6	5	Jubi, part of Bhannapurwa, Darshanpurwa, Chamarapurwa, Raipurwa, Rampurwa, Munshipurwa, Kotbi Opium, Babupurwa, Begampurwa and others.
Total	45	256		

STATEMENT NO. IV.

Statement supplied by the Superintendent of Police, Cawnpore, showing the number of police necessary for patrol and picketing work (including a reserve for relief) during a riot in the city (excluding Cantonment and Nawabganj).

	Armed Police.			Civil Police.		
	Sub-Inspectors.	Non-commissioned officers.	Constables.	Sub-Inspectors.	Non-commissioned officers.	Constables.
<i>Under Kotwali circle.</i>						
Pickets ... ..	...	20	80	...	4	16
Patrols ... ..	...	...	...	6	36	108
Reserve	1	12	48	...	...	...
<i>Under Anwarganj circle.</i>						
Pickets ... ..	...	10	40	...	5	20
Patrols ... ..	...	...	...	5	30	90
Reserve	1	6	24	...	...	...
<i>Under Colonelganj circle.</i>						
Pickets ... ..	...	8	32	...	5	20
Patrols ... ..	...	...	...	5	28	84
Reserve	1	4	16	...	...	...
Total	3	60	240	16	108	338

STATEMENT NO. V.

Statement showing the number of houses and other properties burnt or damaged during communal riot of March 1931, supplied by the Cawnpore Municipality.

1. Mosques ...	...	...	...	...	...	18
2. Temples ...	...	...	...	...	...	42
3. Hindu houses ...	...	...	...	...	...	248
4. Muslim houses ...	...	...	...	...	...	101
5. Municipal Board shops ...	...	...	...	...	...	2
6. Shera Babu's Park ...	...	...	...	...	...	1
7. Mr. Noronaba's houses ...	...	...	...	...	...	6
Total						418

STATEMENT NO. VI.

Statement showing the number of deaths recorded at the Prince of Wales' Hospital, Cawnpore.

Wounded who died in hospital.						Dead bodies received in hospital up to March 28, 1931.					
Muslims.			Hindus.			Muslims.			Hindus.		
Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
11	1	1	21	1	1	80	5	1	21	5	...
Muslims 93						NOTE—No dead (except one) were taken in the hospital after March 28.					
Hindus 49											

STATEMENT NO. VI-A.

Statement showing details of injury cases treated in the Prince of Wales' Hospital, Cawnpore.

Date.	Muslims.			Hindus.			Others.			Total.
	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.	
24-3-31	30	...	...	39	...	...	1	...	...	70
25-3-31	52	4	5	84	1	...	...	...	...	146
26-3-31	30	3	5	36	1	...	...	...	...	75
27-3-31	12	...	1	27	3	...	...	...	...	42
28-3-31	21	...	...	10	2	1	...	...	...	34
29-3-31	2	...	...	16	1	...	...	...	...	19
30-3-31	3	3	...	6	2	...	...	...	...	14
31-3-31	11	...	1	5	...	...	...	...	...	17
1-4-31	4	2	2	10	...	...	...	...	...	18
2-4-31	1	...	...	5	...	...	...	...	...	6
3-4-31	6	...	...	...	...	...	...	...	...	6
4-4-31	6	...	...	4	...	...	...	...	...	10
5-4-31	1	...	...	5	...	...	...	...	...	6
6-4-31	3	...	...	...	...	...	...	...	...	3
7-4-31	...	...	...	2	...	...	...	...	...	2
8-4-31	...	...	...	27	...	...	...	...	...	27
9-4-31	4	...	...	3	...	...	...	...	...	7
10-4-31	1	...	...	6	...	...	...	...	...	7
11-4-31	1	...	...	3	...	...	...	...	...	4
12-4-31	10	...	...	1	...	...	...	...	...	11
13-4-31	2	...	...	1	...	...	...	...	...	3
14-4-31	...	...	...	...	...	...	...	...	...	...
15-4-31	...	...	...	...	...	...	...	...	...	...
16-4-31	...	...	...	...	...	...	...	...	...	...
17-4-31	1	...	...	2	...	...	...	...	...	3
18-4-31	...	...	...	...	...	...	...	...	...	...
Total	201	12	14	292	9	1	1	...	...	530
Muslims.										
Death due to gunshot wound	...	...	...	...	1	...	...	...	...	8
Gunshot wound cases admitted	...	...	...	...	7	...	...	...	...	32
Gunshot wound cases operated	...	...	...	...	7	...	...	...	...	10
In outdoor	...	...	...	...	79	...	...	...	...	63
Hindus.										

Statement showing crimes reported mohalla-wise up to May 4, 1931, for the first four days of the riot—(concluded).

Mohalla.	Date.	Murder.	Attempt.	Decoy with murder.	Decoy.	Robbery.	Riot.	Arson.	Miscellaneous.	Total.
1	2	3	4	5	6	7	8	9	10	11
10. Kaughi Mohal ...	24-3-31	...	...	1	3	...	...	...	...	4
	25-3-31	...	...	...	7	...	2	...	...	9
	26-3-31	...	...	...	2	...	...	...	...	2
	27-3-31	...	...	...	1	...	1	...	...	2
11. Parmat ...	24-3-31	...	...	...	...	...	...	...	...	...
	25-3-31	...	...	6	20	...	...	...	...	26
	26-3-31	...	...	...	10	1	...	...	...	11
	27-3-31	...	...	...	...	...	...	...	...	...
12. Gwaltoli ...	24-3-31	...	...	...	...	...	...	...	...	...
	25-3-31	...	...	...	5	...	...	6	...	11
	26-3-31	1	1	3	4	3	...	...	1	13
	27-3-31	...	...	...	...	...	...	...	...	...
13. Parao Deputy ...	24-3-31	...	...	...	1	...	...	...	...	1
	25-3-31	...	...	...	...	...	...	...	...	...
	26-3-31	...	...	...	4	...	...	...	...	4
	27-3-31	...	...	...	...	...	...	...	...	...
<i>Police station Anwarganj.</i>										
1. Parwa Hiranman ...	24-3-31	...	...	2	12	...	2	...	3	19
	25-3-31	1	...	...	17	1	1	...	6	26
	26-3-31	1	...	...	1	...	...	1	...	3
	27-3-31	...	...	...	2	...	...	...	4	6
2. Anwarganj ...	24-3-31	...	...	...	18	1	5	...	1	20
	25-3-31	1	...	...	37	...	4	6	2	50
	26-3-31	...	1	1	8	...	1	3	1	15
	27-3-31	...	...	...	1	...	...	...	3	4
3. Cooli Bazar ...	24-3-31	2	1	1	48	1	7	2	3	65
	25-3-31	2	6	3	86	1	9	4	4	115
	26-3-31	...	...	5	22	...	...	...	...	27
	27-3-31	1	...	...	...	1	...	2	2	6
4. Cooperganj ...	24-3-31	...	...	...	1	...	...	...	...	1
	25-3-31	...	...	...	...	...	1	...	...	1
	26-3-31	...	...	...	1	...	...	...	...	1
	27-3-31	...	1	...	...	...	...	...	...	1
5. Jubi Khurd ...	24-3-31	...	...	...	4	...	...	1	...	5
	25-3-31	...	...	...	9	1	1	5	...	16
	26-3-31	...	...	...	25	...	1	5	...	31
	27-3-31	...	...	...	...	1	1	...	...	2

STATEMENT NO. IX.

Statement showing the number of arrests made each day for offences under the Indian Penal Code, Arms Act and breach of the orders under section 144 of the Code of Criminal Procedure (supplied by the Superintendent of Police on May 12, 1931).

Section.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	31st.
<i>Within Kotwali beat.</i>								
454 ...	1	...	...	...	...	...	1	1
307	1	2	...	...	...	1	...
148/307	1	...	...	...
144	11	32	6	1	28
457	1
302	1	1	...	...	...
379	4	...	...	...	1	...	...
19, A. A.	3	8	...	2	...
54/55	5	...	...	...	...
Total ...	1	5	2	20	42	7	5	80=112

Statement showing the number of arrests made each day for offences under the Indian Penal Code, Arms Act and breach of the orders under section 144 of the Code of Criminal Procedure (supplied by the Superintendent of Police on May 12, 1931)—(concluded).

Section.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	31st.
<i>Within Colonelganj beat.</i>								
144	...	27	...	13	28	8	1	...
19, A. A.	...	1	...	2	2	...	...	...
147/303	...	22	...	...	19	...	...	...
395	27	1	1	7	2
413	2	...	...	...
143	14	...	...	...
Total	...	50	...	42	66	4	8	2=172
<i>Within Anwariganj beat.</i>								
144	17	...	1	4	1
454	6	28	...	...	...
19, A. A.	3	...	2	2	...
302	11	...	...	...
54/55	5	...	...
307	1	...
385/436	4
Total	25	34	8	7	5=79
<i>Within Nasirganj beat.</i>								
379	1	...
19, A.A.	4	...
144	11	...
Total	16	=16
<i>Within Cantonment beat.</i>								
144	0
Total	0=0
GRAND TOTAL	885

723.252.N36
Gv

No. 4308/IB—
REVENUE (B) DEPARTMENT.
Dated Allahabad, October 28, 1932.

2

Government resolution on the report of the Rent and Revenue Committee.

BEFORE the detailed recommendations of the committee are dealt with, some general aspects of the question of revenue and rent should be considered, which must qualify the treatment of the problem in the present year. One member of the committee at the outset of the proceedings expressed the view that if the law does not cover the recommendations of the committee, the law should be amended. The Governor in Council entirely agrees with this view. He recognizes that the action which Government were compelled to take last year was not covered by any provision in the existing law, and he is as anxious as any party that the position should be regularized as soon as possible. But owing to the magnitude of the problem the process will inevitably take time. The law was not framed to meet such a position as has arisen from the recent severe fall in prices. Section 73 of the Agra Tenancy Act and section 19A of the Oudh Rent Act were designed for such visitations as scarcity or flood, which affect production. It is significant that the provisions of the Oudh Rent Act relating to abatement of rent do not, except in the case of tenants of a class which is rare, even include among the grounds of abatement by suit a fall in the average price of staple food grains. Section 54 of the Agra Tenancy Act does make this a ground for abatement by suit; but that provision is rendered almost useless, if there is a sudden slump in prices, by section 67 of the Act, which enacts that the rent of nearly all tenants is not, except in rare cases, liable to enhancement or abatement within 20 years of the date of the last change. Further, the situation arising from a sudden fall in prices cannot adequately be met by suit. If that were the only avenue by which tenants could have their rents remitted, the courts would be flooded with plaints in such numbers that they could not possibly deal with them. The procedure of altering rent by suit is not fitted to meet the case of purely temporary modifications. What is required is a system which will work automatically without suits and give temporary fluctuations in rent according to major fluctuations in prices. Government recognize that such a machinery may be difficult to devise, and it is equally difficult to decide what shall be considered the basic rent for the purpose of calculating the effect of fluctuations in price. Government are giving close consideration to this question, and if a suitable solution presents itself, will not hesitate to put forward the legislation which will be necessary to give effect to it. It is of course recognized that any system which can be introduced for providing for alterations in rents necessitated by major fluctuations in prices must also take account of the changes which would be involved in the revenue demand.

2. The committee had before them a statement which is reproduced as appendix A to this resolution, showing the valuation of the main crops at average prices prevailing in 1338 Fasli and in 1339 Fasli. This statement is important because it is now frequently alleged that prices have risen, and therefore there is no reason why remissions of rent for 1340 Fasli should be on as liberal a scale as for 1339 Fasli. This argument does not give two points the full weight which they deserve. Firstly, it tends to confine prices to prices of the *rabi* cereals. The price of wheat and barley is higher than it was a year ago; but the price of sugarcane, though it is rising again, is still lower; and sugarcane is for a large number of tenants the most important crop. Secondly, it does not fully recognize the principle on which rental remissions for 1339 Fasli were given. The average prices for the whole of the year 1338 Fasli were compared with the average prices for the whole of the year 1336 Fasli, and on the basis of that comparison rental remissions were given for 1339 Fasli. Therefore in order to decide whether there should be a change in rental remissions for 1340 Fasli from those for 1339 Fasli, the average prices of the whole year 1338 Fasli should be compared with those of the whole year 1339 Fasli, and not with prices prevailing at the beginning of 1340

Fasli. In order to give the committee all the material available, each of the whole years 1338 Fasli and 1339 Fasli were divided into halves and appendix A shows that figures were before them, enabling them to make a comparison between each of the half years as well as of the whole years. Further the figures for June 1338 Fasli, and June 1339 Fasli, were also given. Even so the committee held that changes in prices and valuation did not justify a change in rental remissions for 1340 Fasli. This was their view in July. In September a proposal was made to them that since prices had risen since July there should be no reduction of the rental remissions for the *khariif* of 1340 Fasli, but that there should be for the *rabi* a reduction of two annas in the rupee. The committee by a large majority did not accept this proposal. The Governor in Council agrees with the committee, and considers that except for the minor adjustments which are specified below, there should be no change in the rental remissions for 1340 Fasli.

3. As the question of the total remission of revenue is closely bound up with that of the total remission of rent, and the decision of the latter has important reactions on the former, it will be convenient to deal with the problem of the total remission of revenue at this point rather than after other matters concerned with rent.

The committee in their report of July proposed a scheme whereby districts should be divided into three groups:—

- (i) those which have been settled since 1925;
- (ii) those which were settled between 1912 and 1925;
- (iii) those which were settled before 1912.

They recommended that in group (i) the revenue remitted should bear the proportion specified by law to the total revenue which the rent remitted bears to the total rental demand. As regards group (ii) it was proposed that (a) if the existing revenue carried by the rental demand is not less than 30 per cent. and not more than 35 per cent. of the rental demand, Government may remit from the revenue a sum not less than 30 per cent. of the rental remitted; (b) if the existing revenue carried by the recorded rental is (1) less than 30 per cent. or (2) more than 35 per cent. of the rental demand, Government shall remit in revenue that percentage of the rental remitted. They proposed that in group (iii) 25 per cent. should be substituted for 30 per cent. The committee in the meeting in September had before them the figures given by this proposal except for the Benares division. They altered the proposal by recommending that for districts in Oudh which fall in group (i), section 73 of the Agra Tenancy Act should be substituted for section 19A of the Oudh Rent Act, and they made another proposal for the Benares division.

The committee then made two alternative recommendations:—

- (a) that remissions of revenue shall be proportionate to remissions of rent;
- (b) that if Government cannot find the money necessary for giving remissions of revenue on the proportionate system, they shall adopt the formula recommended by the committee.

The proportionate system would give remissions of revenue amounting to 152½ lakhs in the cash rented land, to which have to be added about 20 lakhs for *sir* and *khudkashit*.

The figures given by the committee's formula are shown in appendix B. If the same amounts are given as last year in the Benares division the total remissions of revenue for the province are increased by nearly 8 lakhs.

4. To enable Government to judge whether the total remissions of revenue given last year were inadequate appendices C and D have been prepared. Appendix C shows firstly what remissions of revenue would have been given if 40 per cent. of the assets remaining after remissions of rent had been taken as revenue, and secondly the amounts actually given as remission of revenue over and above those amounts in most districts, on the ground that remissions of rent in the district were heavy as compared with remissions of revenue at 40 per cent. of remaining assets. On this calculation the amount given as remission of revenue was over 40 lakhs in excess of the sum given by 40 per cent. of assets, and it was distributed according to the remissions of rent.

Appendix D compares the revenue and rent of 1931 after remissions with those of 1901. • It shows that except in Gorakhpur and Basti, where the real rents are not recorded, though rents after remission were well above those of 1901, revenue after remission was in most districts well below that of 1901. The Governor in Council considers that this is a sufficient argument against giving a further reduction of land revenue. Further he notes that although the formula recommended by the committee would increase the total remission of revenue in the province by 8 lakhs, it would decrease it in 13 districts. He thinks that the discontent which would result in these 13 districts would far more than outweigh any advantages which would accrue from the acceptance of the formula and that any such decrease could only be justified by clear proof that the remissions given last year in those districts were excessive. Of this there is no indication. No alternative scheme has therefore been proposed which can show clear advantages over the scheme adopted last year. The remissions of rent are with minor adjustments to remain the same, and the Governor in Council in these circumstances does not consider that there is sufficient reason for altering the total amount allowed last year as remissions of revenue in each district.

5. The committee considered the question of distribution of remission of revenue within the district. The question before them was whether remission of revenue should be uniform throughout the district as last year or should correspond closely with the loss of income. The latter alternative is theoretically so much the more logical that one would expect it to have met with general acceptance. But the Governor in Council notes that six members of the committee were in favour of the former alternative. The arguments which prevailed with them are as follows. Remission of rent is not a true measure of loss of income. If rents are excessive part cannot be realized unless the harvest is exceptionally good. In some districts also the custom is that though rent is recorded on the whole area in the holding at a flat rate, it is only paid on the area which is actually cultivated each year. If the excessive parts of rent area not first discounted the landlord who has raised his rents to the highest level will gain far more in remissions of revenue than the landlord who has refrained from excessive enhancements. If the rent is very high the Settlement Officer does not take into account the part which in his opinion is higher than it should be in estimating the assets, and no revenue is assessed on that part. Therefore no remission of revenue should be given on it. Further, any method which would relate remission of revenue closely to remission of rent must involve a comparatively elaborate formula, and the risk of mistakes is greatly increased. In order to minimise this risk the majority of the committee recommend the adoption of the form which is appendix E, and proposed that by its aid remissions of revenue should be worked out for each mahal and given accordingly for 1340 Fasli. The Governor in Council appreciates the merits of the proposal, but does not think it desirable to introduce the scheme for 1340 Fasli. By the scheme the remission of revenue will be decreased for some landlords and increased for others if the total remissions are kept at the same level as last year. There will undoubtedly be complaints by those whose remissions have been decreased that the concession given to others has been at their expense. The Governor in Council thinks it is undesirable to introduce a change of this kind until prices justify a general reduction of rental remissions, as, it may be hoped, will be the case next year. Redistribution will then be possible without causing discontent as there will probably be a general reduction of all remissions. He does not consider the present time opportune for an alteration of the kind. The total remissions of rent and of revenue will be substantially the same for 1340 as for 1339. Further it is doubtful whether redistribution can now be made before the first instalment of revenue falls due, and it is essential that every landlord should know by then what revenue he has to pay. It steps are now taken to introduce the change for 1341, should the general level of remissions for that year be lowered, it will be possible to make arrangements to discount rents which are excessive, and the time available will minimise the chance of mistakes. He therefore proposes to continue the arrangements made for 1339 in 1340 and to introduce the change in 1341, if circumstances then justify it, and district officers find that the scheme in appendix E is feasible.

6. The committee consider that the problem of revenue remission is different in permanently settled districts from those in which the revenue is temporarily settled. They think that in permanently settled districts remissions of revenue should only be given in rented areas. They also recommend that remissions of revenue should be in the same proportion to the total revenue as remissions of rent bear to the total amount of rental. There are practical difficulties in accepting the last proposal. In permanently settled districts rent includes the rent of fixed rate tenants who receive no rental remission. The percentage which the rent remitted bears to the total rental depends therefore largely on the extent of land at fixed rates in each district. The Governor in Council agrees that in permanently settled districts remission of rent is the only valid reason for remission of revenue, and that in this respect the distinction between permanently and temporarily settled areas is so marked that an exception should be made in the Benares division to the principle applied elsewhere. But he does not think that there is any case for increasing the total remissions of revenue in the division, as the proposal of the committee would. He considers the fairest method would be to total for the whole Benares division the rental and revenue remissions of last year, to ascertain the proportion of revenue remitted to rent remitted in the whole division and to allow as remission of revenue that proportion of the rent remitted in every khata khewat in which rent has been remitted.

Final orders however are reserved on this point until Government has received the result of certain inquiries which are being made through the Commissioner of the Benares division.

7. In the July meeting the committee recommended that landlords should be associated in greater degree than last year with remissions of rent. They proposed to achieve this by allowing landlords to apply for a copy of form Rem III issued in 1339, showing the amount of rent remitted to each tenant. Landlords should have authority to alter the remission allowed in 1339 to each individual tenant, provided that the total rental remission of the whole mahal was not altered by more than $1\frac{1}{2}$ annas in the rupee either way. The Governor in Council accepted this proposal. If effect were to be given to it, orders had to be issued at the beginning of August, as the proceedings were numerous and complicated which had to be completed before the first instalment of rent for the fasli year fell due in October. This is the only point on which Government have so far issued orders on the proposals of the committee. In this case time compelled them to do so, if the recommendation of the committee were to be made effective.

8. The committee were also asked whether they considered that steps should be taken now for a redistribution for 1341 of the remissions of rent. The advantage of the suggestion to take action now for 1341 is that there will then be sufficient time for landlords to examine thoroughly the remission given in each holding and to make considered proposals for their alteration and for the Collector to decide them before the committee meet next July, if they have to meet again next year. Under this scheme the Collector would only pass provisional orders on the landlord's proposal till the committee sat and Government came to a decision on their recommendations. The work of the committee in this connexion would then be only to examine the statement of prices and valuation, compare it with the statement prepared this year and advise in view of the comparison what change, if any, should be made in the remissions of this year. These changes due to a change in prices would be made in every holding in which a remission of rent had been allowed, but other changes due to redistribution would be confined to holdings about which the landlords had submitted proposals by the end of April. The committee did not accept this proposal. They thought that no orders should be issued now for 1341, as the level of prices which would prevail then could not be known now; that if the level of prices in 1340 justified a change in the remissions of rent for 1341, the change should be made by taking a new basic year and not by a percentage alteration of the remissions given for 1339.

On the first point the proposal of the committee seems to be due to a misapprehension. The level of prices must determine the general pitch of rents; but it ought not to affect the relative level of the rent of one holding to those of others. On the second point the proposal of the committee is strictly logical;

but its application in practice will mean that all the work done last year will have to be done afresh and the same task will have to be performed again on a new basis. The Governor in Council doubts if the difference in result given by the two methods will be nearly great enough to justify a choice of the more laborious. He therefore proposes to issue orders now that if any landlord considers that the remissions of rent given for 1339 could be improved by an alteration, he may submit by the end of March 1933 proposals for their alteration; that these proposals must not be based on changes in prices since 1931, which will be dealt with on general lines on the recommendation of the Rent and Revenue Committee, if one is necessary next year, but on other considerations such as the relative level of the rent and the quality of the soil; that separate proposals should be made for each mahal, or if the same landlord does not own the whole mahal, for all the holdings in the same form Rem. III for the collection of the rent of which he is responsible; that as a general rule the total amount of the rent should not be altered by more than $1\frac{1}{2}$ annas in the rupee; no hard and fast rule will be made to this effect, but if the proposals of the landlord involve a change in the total in excess of this limit, reasons for the excess must be given.

9. The Governor in Council accepts the recommendations of the committee on the following points:—

- (a) that remission of revenue should be given on sir and khudkasht;
- (b) that if no proposal to alter the distribution of rent is made by the landlord and accepted by the Collector, the same remission of rent should be allowed in 1340 as in 1339;
- (c) that if no change is made in the remission of rent in 1340 no slip need be issued to the tenant; but if any change is made, a slip should be issued to him showing the rent due for 1340;
- (d) that sub-tenants holding from tenants-in-chief should receive the same treatment for remission of rent as is laid down in para. 196 of the Revenue Manual, that is to say that the relief in rent of the sub-tenant should be proportionate to the relief in rent of the tenant-in-chief, but that no relief in rent should be allowed to the superior tenant, unless he agrees to a proportionate remission in favour of his sub-tenant;
- (e) that the same arrangements should hold good as at present as regards as the rent of thekadars, namely that if cases concerning thekadars are brought to the notice of the Collector he should decide each separately on the merits, but he should not go out of his way to inquire into all cases of thekas; but no relief in theka money should be allowed where the theka was given in 1339 or where one of the conditions of the theka is that its period extends only from year to year;
- (f) that there should not be remission of rent in the case of new tenants who have taken up land in 1339 or for 1340.

10. The committee have recommended by a majority that tenants of sir should receive no remission of rent, unless the landlord gives it. The Governor in Council recognizes that there are arguments for and against this proposal, but he does not think that the reasons against the proposal are sufficiently strong to justify him in refusing to accept the recommendation of the majority of the committee. Government have therefore decided not to give any remission of rent to tenants of sir in 1340; but they hope that landlords will give a remission, wherever necessary.

11. A majority of the committee have also recommended that no remission of rent should be given to occupancy tenants whose rent has not been enhanced for 20 years or more. Figures have been prepared which show the effect of rental remissions in 1339 on the different classes of occupancy tenants in the Agra province. The following percentages of the total rental of each class were remitted:—

	Per cent.
Old occupancy unenhanced at the last settlement	1·4
Old occupancy enhanced at the last settlement	16·2
Occupancy of over 20 years	15·0
Occupancy of over 12 years and not more than 20	23·0
Statutory	35·8

These figures show that the rental remissions given for 1339 took account of the needs of each holding. Indeed the principles applied ensured that they would. The recommendation of the committee would substitute for these principles an arbitrary test, namely non-enhancement for 20 years. Rents which were already full 20 years ago have generally not been enhanced since, because even on the standard of prices of 1336 and the preceding years they were full. On the level of prices of 1338 these rents required and received a remission. Other rents were not full 20 years ago, but have still escaped enhancement. These do not require any remission and have not received it. Again in some tracts there has been deterioration in the last 20 years and rents which were not full 20 years ago have since become so, and there has been no scope for enhancement. It is unfair that these rents should be deprived of the remissions which they received in 1339. Figures have been worked out for certain tracts of Saharanpur, Muttra and Cawnpore which give the results of the committee's proposals. In 168 villages comprising pargana Faizabad of the Saharanpur district tenants would by them be deprived of remissions amounting to only Rs. 461; in two settlement circles of the Sadr tahsil of Cawnpore on a total rental of Rs. 96,016 remissions of rent amounting to Rs. 4,296 would be cancelled; in the canal II circle of the Muttra district in a total rental of Rs. 24,944 remissions of rent amounting to Rs. 3,570 would be cancelled; but this circle has suffered from the spread of *rah* since the advent of the Agra Canal, and owing to deterioration much land has fallen out of cultivation; some of the old rents are therefore now full, though there has been no enhancement. The Governor in Council does not think that there is ground for singling out tenants of this class, and making an exception in their case from the general principles applied, especially since there is to be no change in the remissions of revenue in 1340. He considers that the discontent which would be engendered among an important class of tenants would more than outweigh the monetary advantage to the landlords; and that the labour involved would be disproportionate to the results; and the landlords already have power to correct anomalies by redistribution.

12. The committee also discussed the provision of last year allowing for cancellation of remission of rent in certain cases. They have made no proposal in the matter, but the general feeling of the committee was that this power should be used more freely. The present position is that tenants are liable to have remissions of rent on their holdings cancelled if they do not pay the balance of the rent after remission by a certain date; but Government have issued instructions that the liability should only be enforced in the case of recalcitrant tenants. The opinion was expressed in the committee that the tenants had come to regard this liability as a mere threat, and though it had been effective in 1339, it would not be so in 1340, unless the threat became an actuality. The Governor in Council considers that a power of this kind is so liable to abuse that it should not be freely used, unless the fears of some members of the committee are realized that unless the liability is enforced in more cases than last year it will be ineffective. He therefore thinks that at present at any rate the same orders should hold good for 1340 as for 1339; but he considers that, to avoid specific dates which ought to be different for different districts according to the date on which the rent falls due, the orders issued this year should provide that this liability will arise, unless the tenant pays each part of his rent due by the date on which the corresponding instalment of the land revenue falls due.

13. Finally the Governor in Council thanks the members of the committee for the time which they have given to the consideration of these difficult problems, and for their help in finding a solution. Practical considerations stand in the way of applying some important and useful suggestions to the current year; but the Governor in Council intends to apply them, wherever possible, to next year, unless by that time legislation has been passed, which will make executive action unnecessary.

By order,
H. A. LANE,
Secy. to Govt., United Provinces.

APPENDIX A.

Valuation of the whole province at the prices reported by various district officers averaged for the whole years and half years.

	Wheat.	Barley.	Gram.	Peas.	Linseed.	Rice.	Juar.	Bajra.	Cotton.	Til.	Maize.	Raw sugar.	White sugar.	Total (excluding raw and white sugar).	Percentage rise or fall (+ or -) of—	Total (excluding white sugar only).	Percentage rise or fall (+ or -) of—
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Average yield per acre (in maunds).	13.125	14.37	10.0	..	6.25	11.25	7.5	6.87	2.12	3.5	13.75	50.0	32.5	..	..	..	..
2. Normal area in acres (000's omitted).	6,887	4,915	5,701	..	495	7,282	2,516	2,032	1,135	290	2,094	1,197	1,197	..	..	..	..
3. Valuation at average of prices from July to December, 1938.	2,90,158	1,41,152	1,87,563	..	18,038	4,80,490	42,269	37,413	35,635	7,054	57,584	3,68,077	4,59,433	12,99,336 (a)	..	17,21,278 (a)	..
4. Valuation at average of prices from January to June, 1939.	2,31,403	1,14,859	1,42,526	..	13,366	3,66,475	28,682	25,326	33,706	8,080	40,597	2,68,726	4,20,142	10,06,427 (b)	..	13,29,013 (b)	..
5. Valuation at average of prices from July to December, 1939.	2,45,866	1,32,157	1,33,403	..	11,757	3,69,733	32,645	26,524	34,815	5,572	45,491	2,74,711	4,52,430	10,40,284 (c)	(c) over (a)—20 per cent.	13,07,669 (c)	(a) over (c)—20.5 per cent.
6. Valuation at average of prices from January to June, 1939.	2,70,272	1,34,232	1,31,123	..	11,045	3,45,301	39,768	25,128	42,313	5,176	43,476	1,86,133	4,64,400	10,40,093 (d)	(d) over (b) +3.3 per cent.	13,01,039 (d)	(d) over (b) +2.15 per cent.
7. Valuation at average of prices for the whole year, 1938.	2,83,945	1,28,005	1,64,759	..	15,717	4,23,482	35,476	31,550	35,538	6,587	48,946	3,18,402	4,39,693	11,56,399 (e)	..	15,28,666 (e)	..
8. Valuation at average of prices for the whole year, 1939.	2,57,617	1,32,846	1,32,263	..	11,417	3,57,517	31,702	25,826	38,528	5,369	44,628	2,30,422	4,58,266	10,39,476 (f)	(f) over (e)—10 per cent.	13,33,339 (f)	(f) over (e)—12.7 per cent.
9. Valuation at average of prices for June, 1938.	206,998	1,16,934	1,18,011	..	11,695	3,71,632	30,008	26,384	32,741	6,049	39,137	2,69,325	4,08,082	9,62,583 (g)	..	12,81,582 (g)	..
10. Valuation at average of prices for June, 1939.	2,53,098	1,26,306	1,24,852	..	19,398	3,55,558	39,341	24,799	36,478	4,740	42,036	1,68,717	4,55,931	10,20,062 (h)	(h) over (g) +6 per cent.	12,58,863 (h)	(h) over (g)—1.8 per cent.

APPENDIX B.

Committee's proposal.

(OMITTING 000s.)

District.	Revenue remitted in 1930.	Revenue which would be remitted by the original proposal of the committee.		Revenue which would be remitted if the figures in col. 4 are taken except in the districts of Oudh in group 1 of paragraph 7(g) of the first report, where section 73 of Agra Tenancy Act is applied.
		Maximum.	Minimum.	
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
PROVINCE OF AGRA.				
Dehra Dun	21,	35,	35,	35,
Saharanpur	3,86,	4,10,	4,10,	4,10,
Muzaffarnagar	3,85,	4,08,	4,08,	4,08,
Meerut	3,64,	4,18,	4,10,	4,10,
Bulandshahr	5,48,	6,16,	5,60,	5,60,
Aligarh	4,08,	5,20,	4,64,	4,64,
Muttra	1,93,	3,34,	3,34,	3,34,
Agra	3,85,	3,78,	3,78,	3,78,
Mainpuri	2,27,	2,09,	1,52,	1,52,
Etah	1,35,	2,23,	1,87,	1,87,
Bareilly	1,53,	2,35,	1,76,	1,76,
Bijnor	2,12,	2,75,	2,75,	2,75,
Budaun	3,24,	4,19,	4,19,	4,19,
Moradabad	2,92,	4,65,	4,65,	4,65,
Shahjahanpur	1,32,	1,75,	1,41,	1,41,
Pilibhit	96,	1,25,	82,	82,
Farrukhabad	1,51,	2,30,	1,86,	1,86,
Etawah	3,25,	2,89,	2,89,	2,89,
Cawnpore	3,36,	3,50,	2,52,	2,52,
Fatehpur	4,02,	2,35,	2,35,	2,35,
Allahabad	5,98,	4,47,	4,47,	4,47,
Banda	91,	1,49,	1,27,	1,27,
Hamirpur	1,02,	1,33,	1,28,	1,28,
Jhansi	75,	1,07,	98,	98,
Jalaun	1,12,	1,63,	1,36,	1,36,
Benares	47,	(47),	(47),	(47),
Mirzapur	34,	(34),	(34),	(34),
Jaunpur	62,	(62),	(62),	(62),
Ghazipur	52,	(52),	(52),	(52),
Ballia	34,	(34),	(34),	(34),
Gorakhpur	6,18,	4,98,	4,98,	4,98,
Basti	4,22,	4,69,	4,69,	4,69,
Azamgarh	2,44,	1,08,	1,08,	1,08,
OUDH.				
Lucknow	2,07,	5,73,	5,73,	3,43,
Unao	4,43,	6,40,	6,40,	5,22,
Rae Bareli	4,46,	5,29,	5,29,	4,08,
Sitapur	2,39,	2,23,	2,23,	2,23,
Hardoi	2,61,	7,74,	7,74,	4,98,
Kheri	1,01,	1,86,	1,86,	1,86,
Fyzabad	1,78,	2,67,	1,97,	1,97,
Gonda	2,16,	3,96,	3,42,	3,42,
Bahraich	1,80,	2,83,	2,83,	2,83,
Sultanpur	2,22,	1,70,	1,70,	1,70,
Partabgarh	2,93,	2,71,	2,71,	2,31,
Bara Banki	5,54,	9,20,	9,20,	5,98,
TOTAL, UNITED PROVINCES (EXCLUDING KUMAUN).	1,13,06,	1,38,84,	1,32,06,	1,20,99,

APPENDIX C.

Revenue remitted in 1339; how reached.

(OMITTING 000s).

District.	Revenue which would have been remitted if 40 per cent. of assets remaining after rent remission had been taken.	Rent remitted in 1339.	Addition to revenue remission in 1339 because figure in col. 3 was large compared with col. 2.	Total revenue remitted.	Remarks.
1	2	3	4	5	6
PROVINCE OF AGRA.					
	Rs.	Rs.	Rs.	Rs.	
Dehra Dun .. ..	..	1,77,	21,	21,	
Saharanpur	33,	15,17,	3,53,	3,86,	
Muzaffarnagar	56,	13,61,	3,29,	3,85,	
Meerut	2,33,	16,41,	1,31,	3,64,	
Bulandshahr	4,75,	18,87,	73,	5,48,	
Aligarh	30,	18,57,	3,78,	4,08,	
Muttra	1,70,	9,47,	23,	1,93,	
Agra	3,62,	9,06,	23,	3,85,	
Mainpuri	2,11,	6,08,	16,	2,27,	
Etah	12,	7,49,	1,23,	1,35,	
Bareilly	15,	7,04,	1,38,	1,53,	
Bijnor .. ..	..	10,98,	2,12,	2,12,	
Budaun	2,30,	11,82,	94,	3,24,	
Moradabad .. ..	..	20,93,	2,92,	2,92,	
Shahjahanpur	83,	5,63,	49,	1,32,	
Pilibhit	88,	3,28,	8,	96,	
Farukhabad	1,08,	7,42,	43,	1,51,	
Etawah	3,60,	7,42,	..	3,25,	
Cawnpore	3,13,	10,08,	23,	3,36,	
Fatehpur	3,50,	5,87,	52,	4,02,	
Allahabad	4,61,	12,15,	1,37,	5,98,	
Banda .. ..	..	5,06,	91,	91,	
Hamirpur	35,	5,10,	67,	1,02,	
Jhansi .. ..	..	3,91,	75,	75,	
Jalaun	95,	5,42,	17,	1,12,	
Benares	46,	3,19,	1,	47,	
Mirzapur .. ..	..	2,83,	34,	34,	
Jaunpur .. ..	..	1,20,	62,	62,	
Ghazipur .. ..	..	3,06,	52,	52,	
Ballia .. ..	..	1,34,	34,	34,	
Gorakhpur	7,15,	12,61,	..	6,18,	
Basti	4,56,	12,34,	..	4,22,	
Azamgarh	1,20,	3,00,	1,24,	2,44,	
ODDH.					
Lucknow	1,35,	11,37,	72,	2,07,	
Unao	5,30,	12,80,	..	4,43,	
Rae Bareli	4,27,	10,61,	19,	4,46,	
Sitapur .. ..	..	10,55,	2,39,	2,39,	
Hardoi	1,34,	15,48,	1,27,	2,61,	
Kheri .. ..	..	9,61,	1,01,	1,01,	
Fyzabad	1,63,	7,86,	15,	1,78,	
Gonda .. ..	..	13,66,	2,16,	2,16,	
Bahraich .. ..	..	13,23,	1,80,	1,80,	
Sultanpur	2,28,	4,27,	..	2,22,	
Partabgarh	3,25,	5,43,	..	2,93,	
Bara Banki	2,90,	18,40,	2,64,	5,54,	
TOTAL, UNITED PROVINCES (EXCLUDING KUMAUN).	72,89,	4,11,25,	*43,08,	1,13,06,	

* The actual difference between columns 2 and 5 is Rs. 40,17. The total in column 4 excludes the figures of six districts in which the revenue remission in column 2 was reduced when the finals were arrived at.

APPENDIX D.

Comparison of revenue and rent after remission in 1339F. with rent and revenue of 1901.

District.	Percentage by which revenue of 1931 after remission varied from revenue of 1901.	Percentage by which rent of 1931 after remission varied from rent of 1901.	Remarks.
	Per cent.	Per cent.	
PROVINCE OF AGRA.			
Dehra Dun	+25	+64	
Saharanpur	+10	+55	
Muzaffarnagar	+3	+51	
Meerut	-8	+26	
Bulandshahr	+6	+18	
Aligarh	-4	+21	
Muttra	-11	+11	
Agra	-17	+15	
Mainpuri	-9	+18	
Etah	-6	+26	
Bareilly	-7	+15	
Bijnor	-7	+25	
Budaun	+5	+29	
Moradabad	+2	+24	
Shahjahanpur	-5	+13	
Pilibhit	-3	+13	
Farrukhabad	-8	+20	
Etawah	-6	+18	
Cawnpore	-20	+8	
Fatehpur	-21	+16	
Allahabad	-19	+6	
Banda	-21	+20	
Hamirpur	-13	+39	
Jhansi	-18	+14	
Jalaun	-19	+10	
Gorakhpur	+23	+22	
Basti	+17	+18	
Azamgarh	-2	+10	
OUDH.			
Lucknow	-3	+16	
Unao	-16	+9	
Rae Bareli	-13	+8	
Sitapur	-9	+36	
Hardoi	-5	+14	
Kheri	-6	+53	
Fyzabad	-8	+7	
Gonda	-5	+32	
Bahraich	-3	+26	
Sultanpur	-14	+8	
Partabgarh	-10	+9	
Bara Banki	-14	+18	

APPENDIX E.

MR. DRAKEN-BROCKMAN'S *proposal for calculating the remission of revenue in each patti or mohal.*

1. Name of tahsil, pargana or assessment circle, i.e., the smallest area available.
2. Recorded rental demand.
3. Remission of rent given.
4. Assumption area (sir, khudkasht, thekadars' and mortgagees' cultivation, rent free and grain-rented land).
5. Rate at which 4 is to be valued.
6. Valuation (4 × 5).
7. Total revenue demand.
8. Percentage of assets taken by the settlement officer.
9. Revenue carried by assumption area (percentage in 8 of 6).
10. Revenue carried by rental assets (7—9).
11. Sanctioned revenue remissions.
12. Amount of revenue remitted allotted to the cash-rented land ($\frac{10}{7} \times 11$).
13. Amount of revenue remitted allotted to the assumption area ($\frac{9}{7} \times 11$).
14. Remission of revenue to be given per rupee of rent remitted $\frac{12}{3}$.
15. Remission of revenue to be given per acre of assumption area $\frac{13}{4}$.

The figures in columns 14 and 15 will be worked out at district headquarters and reduced to the nearest anna and patwaris will be told to apply this factor to each khata khewat.

REPORT OF THE RENT AND REVENUE COMMITTEE, 1933

THE 1933 Rent and Revenue Committee consisted of the following members under the Chairmanship of Mr. Drake-Brockman.

Thakur Rampal Singh.
Mr. Brijnandan Lal.
Rai Bahadur Babu Manmohan Sahai.
Khan Bahadur Maulvi Fasih-ud-din.
Khan Bahadur Syed Jafer Hosain.
Khan Sahib Maulvi Muhammad Maqsood Ali Khan.
Thakur Muneshwar Bakhsh Singh.
Thakur Balwant Singh Gahlot.
Pandit Joti Prasad Upadhyaya.
Sheikh Muhammad Habib-ullah.
Rai Sahib Rai Rajeshwari Prasad.
Shah Nazar Husain.
Rai Sahib Lala Anand Sarup.
Khan Bahadur Maulvi Obaid-ur-Rahman Khan
Captain Nawab Muhammad Jamshed Ali Khan.
Rai Sahib Sahu Jwala Saran Kothiwala.
Khan Bahadur Hafiz Hidayat Husain.
Rai Bahadur Mr. J. L. Sinha.
Babu Bindbasni Prasad.
Mr. A. C. Turner.
Mr. H. A. Lane.

The Committee met on April 10 and 11, on July 17 and 18 and again on November 22, 23 and 24.

2. In 1930-31 there was a sudden slump in prices and immediate and speedy action was necessary to give the relief demanded by the economic situation which was aggravated by the no-rent campaign. It was found that in 1931 prices had returned to the same level as in the year 1901. The incidence of rents in that year was ascertained for each circle, and rental remission was given so as to bring the rents down to the level prevailing in that year, subject to a proviso that in no case should remission exceed eight annas in the rupee of the recorded rent. A lump sum remission in revenue was calculated for each district by (i) reducing the full revenue demand of each district to 40 per cent. of the reduced assets, and (ii) giving further remissions to those districts in which the rental remissions were heavy compared with the revenue remissions resulting from (i). The extra remissions distributed under (ii) amounted approximately to 50 per cent. of those resulting from (i). It was ascertained for each district what its amount

of revenue remission represented in annas in the rupee of the total recorded revenue, and that number of annas was given in remission of the revenue in every holding throughout the district. In the time available this was the best that could be done. On the whole it worked fairly well as a temporary measure to meet special circumstances. But it is open to obvious objections. It gives rental remission on an incidence and therefore takes no account of the quality of the soil of different holdings or of whether the recorded rent is, having regard to the quality of the holding, high or low: in other words it takes as its basis an incidence and not rates. Secondly, while the remission of revenue in each district as a whole bears insufficient relation to the loss of assets, in the individual mahal it bears none at all. In one mahal there may have been a heavy drop in assets and in a neighbouring mahal none; but both mahals are given by the 1339 method the same percentage remission of revenue. A system which is open to these serious criticisms cannot form a satisfactory basis for a permanent scheme to adjust rent and revenue to the major fluctuations in prices, which the Government wish, if possible, to introduce. They have put before the Committee a scheme of this nature, which is intended to be a permanent feature of the rent and revenue system of the province. The main task of the Committee in 1933 has been to examine this scheme; in this report we give an outline of the scheme and express our opinion on it.

3. The procedure which has been adopted is as follows :

In April an outline of the scheme, Appendix I, was placed before us, and we were asked to give a general opinion on it. This we expressed our inability to do until some figures were available showing how the scheme would operate in practice; we considered that figures should be worked out, as *prima facie* the scheme appeared promising. Figures calculated on totals of each class of tenure in each assessment circle were ready by July for a sufficient part of the province to enable us to express an opinion. These figures, which appear as Appendix II, were put before us in July with a further general note explaining the scheme more briefly, Appendix III, and other notes on particular subjects. We considered that the scheme gave insufficient rental remissions, and that the rates which had been adopted for the calculation of rents which would be fair at different price-indices required liberalization. This process was carried out, and in November figures were presented to us which showed the result for the districts for which figures were available of applying the liberalized rates to individual holdings. These appear as Appendix IV.

4. Before we proceed to the conclusions which we have reached at the final meeting in November, we mention one minor point on which we came to a conclusion at the July meeting. As regards the groups mentioned in paragraph 4 of Appendix I, we considered it unnecessary to include in the scheme a group commanded by the price-index of 87½. The price-index is unlikely to fall to a level at which remissions are

necessary in excess of those given by the price-index of 100; and we thought that it would be unnecessary to make provision for that eventuality in the scheme.

5. We consider that the rental remissions resulting from the liberalization of the rates, as shown in Appendix IV, are too large at the price-indices prevailing in 1339 *Fasli*; they would exceed the rental remission given in 1339 by 21 lakhs or 307 lakhs in the part of the province for which figures are available. The total amount of rental remission given in 1339 was, in our opinion, at about the right level, though it could have been better distributed. On the other hand we think that the rental remission, which the scheme would give in 1341, when the price-index has risen one stage in each zone, *viz.*, a total of 260 lakhs instead of 307 lakhs in the areas for which figures are available, are at about the right level. We do not recommend that the basic rates should be changed, but we think that the amount given as rental remission should at price-index 100 be 11 annas of the difference between the valuation at the basic rates and the recorded rent, instead of 12 annas as suggested in paragraph 10 of Appendix I, and at price-index 112½ should be 10 annas instead of 11, but that at price-indices 125, 150 and 175 it should remain at 10, 7 and 4 annas respectively, as originally proposed.

6. The part of the scheme relating to revenue remissions stands on a different footing and the non-official members of the Committee unanimously reject it. The method adopted is explained in paragraphs 12 to 14 of Appendix I. At the April meeting we considered that 40 per cent. of assets suggested as one of the bases for calculating the amount of revenue for remission was in any case too high and we asked for figures at lower levels. In Appendix IV the results are shown using both 36 per cent. and 35 per cent. of assets in the formula. The non-official members of the Committee consider the revenue remissions given by these percentages still inadequate; they think that the only satisfactory method of calculating revenue remissions is to apply the same principle as in the case of calamities and to give revenue remissions in direct proportion to the loss of assets. This method cuts out altogether one of the suggested bases of calculating the revenue due at each price-index, *viz.*, a percentage of the assets remaining after rental remission, and retains as the sole basis the loss of assets.

7. It is argued that, if the former basis is excluded,

- (a) the districts in which the settlement was made many years ago where the proportion of revenue to assets is now very low, will get an undue advantage;
- (b) in the cash-rented area the whole of the remission of rent is not a loss of assets, because the recorded rent even at price-index 200 is in many cases so high that part of it is unrealizable, and that the higher the level of the recorded rent, the greater is the unrealizable portion; but this proportionate method treats the whole as regularly realized. If this method is adopted, the landlord will be encouraged

to screw up his rents to a higher level than that at which he can possibly collect even at price-index 200, in order to get greater remission of revenue ;

- (c) the Committee have agreed to that part of the scheme by which the tenant is not to get the whole difference between the valuation at basic rates and the recorded rent, but only a certain proportion of it. In other words the tenant will not get rental remission in direct proportion to his loss of assets, but something less. There is no reason why a different principle should be adopted in the case of the landlord from that adopted in the case of the tenant.

These arguments do not appeal to the non-official members of the Committee. They think unanimously that the remission of revenue in the case of a slump in prices should be given on the same principle as remissions in the case of calamities, in other words that they should be in direct proportion to the loss of assets. They think that any other system will amount to a re-settlement which Government have declared to form no part of the Fluctuation Scheme ; if any other system than that of remissions of revenue in direct proportion to loss of assets is adopted, the percentage which the revenue bears to assets will be higher after the remissions than before them, which is the essence of a re-settlement.

8. If remission of revenue had been given in 1339 in direct proportion to the loss of assets, in that part of the province, amounting to about $\frac{4}{7}$ ths of the whole, for which figures were placed before the November meeting of the Committee the remissions of revenue, which in 1339 amounted to Rs.85 lakhs would have been increased in that year to Rs.108 lakhs, or by 27 per cent. ; in 1341, though the price-index has risen throughout the province by at least one stage, the remissions of revenue will be about Rs.84½ lakhs ; in other words they will be practically the same as the remissions actually given in 1339 although the remissions of rent in 1341 will have decreased by about Rs.47 lakhs. By the alternative scheme put before the Committee, in that part of the province in which remissions of revenue were given in 1339 amounting to Rs.85 lakhs, the remission, had 36 per cent. of the reduced assets been associated with the formula, would have amounted to about Rs.91 lakhs and in 1341 would become about Rs.69 lakhs.

Had 35 per cent. of the reduced assets been associated with the formula the remissions in this area would have been Rs.93 lakhs in 1339 and Rs.71 lakhs in 1341.

9. Apart from the general consideration of the results of the scheme, there are two fundamental points which form an integral part of the frame-work of the scheme—zoning and price-indices. Both are shown in Appendix V ; seven zones have been formed ; all the crops which show big variations in area from zone to zone and of which the area shown is large enough to be likely to affect the price-index have been included among the crops of importance. The variation of the price-index from zone to zone in different years indicates that more zones have not been formed than are necessary.

10. The basis on which zoning has been effected is described in Appendix VI.

In July we examined the method of zoning. The province had first been divided into five zones according to differences in the principal crops which were important in the different districts. We found that from the crops which had been considered of importance cotton had been left out altogether. Cotton is important in some parts of the province, and we considered in July that where it was important a zone or zones should be provided in order to deal with it. The result has been that two more zones have been formed—*viz.*, nos. II and V. We have examined this division into zones in some detail, and though there has been some difference of opinion among us we consider that the proposed division into zones represents the main differences in cropping in different parts of the province. We recognize that the ideal would be to have no zones, but to work out a price-index for each assessment circle. But the practical difficulties of this are insuperable; some assessment circles have been formed since the basic period 1901—05 and for these, therefore, crop areas are not available for the basic period; also in many circles there is no centre from which prices are reported. Even, if it were possible to form assessment circles into zones, the work involved each year in calculating price-indices would be prodigious. We have also considered whether the zone should not be built up with the tahsil as the unit instead of the district. But tahsils vary in cropping nearly as much as districts, and it is mainly on account of variations in the cropping that tahsils have at settlement to be divided into assessment circles. We do not therefore consider that if zones were built up by tahsils instead of by districts, much advance would be made towards the ideal. We therefore accept the scheme of zoning proposed as the most practicable in the circumstances, and sufficiently accurate for a scheme which cannot hope to secure absolute mathematical exactitude.

11. The method by which price-indices have been calculated is described in Appendix VII. We have no comments to make on the method adopted. But there is one important matter, which requires mention. It may happen that the price-index suddenly rises. We consider that if the price-index rises in any year by more than one stage, remissions for the first year after the rise should be given as though the price-index were at the stage immediately below that at which it actually stands; but that in the second year, if the level of the price-index is maintained, remission should be given on the actual price-index prevailing. It may also happen that the price-index suddenly falls; we do not think that in that case the same principle should be followed, but that remissions at the actual price-index prevailing should immediately be given. At settlement there is progressive enhancement of revenue, but not progressive abatement.

12. We have so far considered the frame-work of the scheme and its general results. We now turn to subsidiary points.

The case of permanently settled mahals is different from that of mahals which are temporarily settled. The permanently settled mahals fall into two classes; firstly, those in the Benares division which have

been under a permanent settlement since 1798 ; secondly, those to which a permanent settlement was granted as a recognition of meritorious services, of which an example is to be found in the estates in Oudh, to which a permanent settlement was given as a reward for loyalty in the Mutiny. In the case of mahals in which a permanent settlement was given as a reward, we consider that if the permanent revenue demand exceeds 30 per cent. of the reduced assets at any price-index remission should be given at that price-index sufficient to bring the revenue payable to 30 per cent. of the reduced assets at that price-index ; but that in the case of other permanently settled districts, such as those in the Benares division, if the landlord thinks that the permanent revenue demand exceeds 35 per cent. of the reduced assets at any price-index he may apply to the Collector to have an amount of revenue remitted at any such price-index which will bring the remaining revenue to 35 per cent. of the reduced assets at that price-index. If the application is successful, Government will bear the cost of the calculation ; but if it is unsuccessful, the landlord will himself bear the cost.

13. We agree that there should be no remission of rent in holdings of old standing unless there has been deterioration. We therefore recommend that if a holding has been on the same rent since 1312 *Fasli*, and there has been no deterioration, there should be no rental remission at any price-index down to and including 100.

14. The rents payable to or by sub-settlement holders, holders of heritable non-transferable leases holding under a judicial decision, permanent lessees and plot-under-proprietors present their own problems :

- (i) We consider that the rental remissions for the tenants-in-chief of persons of all these classes should be given on the same lines as for tenants-in-chief in *khalsa* land.
- (ii) We further think that revenue remissions to superior proprietors on areas held by persons of all these classes should be given on the same lines that we have proposed for *khalsa* areas.
- (iii) As regards remissions in the rents payable by sub-settlement holders to superior proprietors we think that where the sum payable is the revenue plus a *fixed* sum as malikana, the remission should only be the revenue remission given on the area concerned and no remission should be given on the fixed malikana. In all other cases, however, the remission should be calculated on the full rent payable, in direct proportion to the revenue remissions given in the mahal.
- (iv) We think that for the rents payable by persons who hold heritable non-transferable leases under a judicial decision and by plot-under-proprietors, remissions at each price-index should be given in direct proportion to the remissions given in the revenue of the whole mahal at that price-index.
- (v) For permanent lessees we consider that if at last settlement the Settlement Officer changed the rent from that shown as payable in the lease, the permanent lessee should get a

remission in direct proportion to the revenue remission given in the mahal concerned, but that he should not get any remission if the Settlement Officer did not change the rent.

- (vi) In any revenue-free, Government owned or permanently settled mahal remission in the rents of plot-under-proprietors should be given at a flat rate equal to the proportion that the method described above is found to give to all the plot-under-proprietors of the temporarily settled revenue-paying mahals of the assessment circle concerned taken together.

15. The manner in which *thekadars* should be dealt with under the scheme has its own peculiar difficulties. We do not consider that there should be any general revision of the amounts payable under *thekas*. But if the *thekadar* considers that the terms of the *theka* are in the circumstances unduly severe, he may apply to the Collector for remission; if an application is made, the Collector should proceed on the following principle:

Where the terms of the *theka* disclose or suggest that the sum payable to the lessor is some proportion of the assets of the *theka* area, remission in the sum payable to the lessor shall be given in the same proportion as the loss in assets:

Provided that no relief shall be given if the sum payable is less than 75 per cent. of the assets after remissions.

We have also considered the case of the landlord who borrows money on a usufructuary mortgage and then regains possession as a *thekadar*. The sum which the *thekadar* has, by the terms of the *theka*, generally to pay to the lessor in such cases represents a sum which will cover the interest on the mortgage money and some of the capital. If in such circumstances no remission is given to the *thekadar*, he will lose the only chance which he has of redeeming the mortgage, and will therefore be deprived of his land. In such cases we think that there should be a remission in the *theka* money.

In the past two years *thekadars* have been allowed to apply to the Collector for relief if they have considered that relief is necessary, but no time limit has been fixed for such applications. We think that for future years a date by which an application must be made should be specified, and we suggest that the date should be January 1, if relief is desired in the *Fasli* year which includes that date. In other words, if a *thekadar* wants relief in respect of the year 1341 for example, he must apply by January 1, 1934. We have considered the question whether if a *thekadar* applies by January 1, 1934, for relief in respect of past years, the Collector should allow it or not. In view of the fact that if a *thekadar* considered that he required relief he would certainly have applied to the Collector last year or the year before, we do not consider that retrospective effect should be given to applications made now.

16. We have also considered whether the Fluctuation Scheme should apply to new holdings taken up for the first time in 1939 or subsequent years. These holdings fall into two categories. Firstly,

those taken up for the first time in 1339 or 1340 ; secondly, those taken up for the first time in 1341 or thereafter. As regards those taken up for the first time in 1339 or 1340, the non-official members of the Committee are with one exception unanimous that no remission of rent should be given in respect of them. The argument used in favour of treating these holdings in the same manner as holdings taken up before 1339 is that when the slump in prices first set in there was a general hope that it would only last for a short time and would pass away quickly. The tenants shared in this hope and so they were willing to agree to rents which were considerably higher than the quality of the soil justified on prices then prevailing. It is only recently that tenants, like other persons, have come to recognize that the slump is likely to be of long duration and that in future the normal level of prices is unlikely for a long time, if ever, to reach the pre-slump level. Further, tenants are faced with the alternative of taking land at any rent or starving. They are not free agents and were willing to accept any rent, however high, so long as they thought that there was any hope of prices again reaching or approaching the pre-slump level. On the other hand, it is argued that in 1339 and 1340 *Fasli* the slump had already occurred and new tenants took land with their eyes open, knowing what the level of prices was at the time and that there is therefore no reason to give remission in the rents to which they agreed.

As regards the rents of holdings taken up for the first time in 1341 or thereafter, we think that the scheme shall be tried experimentally for 1341, and that the decision whether it is to be adopted permanently should be left over till experience of its working has been gained. We do not therefore think it necessary at the present time to consider the question of rents of holdings taken up for the first time in 1341 or subsequent years.

17. The Fluctuation Scheme is based on soil-classification. There are some areas in which no soil-classification has ever been made. In some cases the areas consist of a few villages, mainly those which since the soil-classification was made in the rest of the district have been reclaimed from jungle. In other districts the area is larger, for example the Ganja in Sitapur: while at the other end of the scale are districts, such as Ballia, which are permanently settled and in which no soil-classification has been made in a large part of the district. We agree that the same principle should be followed in all cases, namely that in holdings of which the rent has remained unchanged since 1312 *Fasli* there should be no rental remissions. In the other holdings in the area affected the remission of rent should bear the same proportion to the recorded rent as in the total of a unit. The unit should vary in different cases. If only a few villages are concerned, the unit should be the smallest unit comprising the area concerned, for which figures are available, and which may be the assessment circle or the *pargana* or the *tahsil*. If the area is larger, such as the example quoted in Sitapur, the unit should be the *tahsil* or the district. In the case of bigger areas, such as in Ballia, the unit should be the neighbouring districts in the same zone where a soil-classification has been done.

18. We think that non-occupancy tenants should be included in the remission scheme. They are few in number and their exclusion would make little difference to the landlord; but though few, their rents are generally high and they will be subjected to considerable hardship individually if they are excluded from remissions. On the other hand, we do not consider that tenants of *sir* or lessees of groves should be included in the scheme. As regards sub-tenants we think that the same principle should be followed as in the case of remissions for calamities, namely that unless the tenant-in-chief allows rental remission to his sub-tenant in the same proportion as he receives it himself, he will be liable to have his own remission cancelled.

19. We think that alluvial mahals in Oudh should be given no remissions either in rent or revenue at any price-index, since they are in Oudh excluded from the areas in which statutory rights can accrue.

In Agra alluvial mahals should come under the scheme for remissions, since in these areas statutory and even occupancy rights do exist.

20. We consider that a scheme of this magnitude, which will affect most of the rents and revenue of the province, should be tried experimentally before any final decision is taken about it or any attempt is made to legislate on the basis of it. We therefore recommend that the scheme, so far as rental remissions are concerned, should with the alterations which we suggest be brought into effect for 1941 *Fasi*, and that an opportunity should be given to anyone, who thinks that the remissions given by the scheme are unsuitable, to present an application to the Collector. If the application concerns an individual holding, the Collector should dispose of it himself; but if it concerns the rates applied to any village, he should forward it to the Board of Revenue with his recommendations and the decision should rest with them. We think it impossible to pass a final verdict on a scheme of this nature till experience has been gained of its working, and an opportunity has been given of ascertaining whether in individual cases correction of the rates applied or other small alterations will suffice to make the scheme applicable permanently.

The non-official members consider that revenue remissions in direct proportion to the loss of assets should be given at once.

D. L. DRAKE-BROCKMAN.
J. L. SINHA.

*BRIJNANDAN LAL.
MAN MOHAN SAHAI.
JAFER HOSAIN.

*MUHD. MAQSUD ALI KHAN.
*MUNESHWAR BAKHSH
SINGH.

*BALWANT SINGH GAHLOT.
*JOTI PRASAD UPADHYA.
*RAI RAJESHWARI PRASAD.
*SHAH NAZAR HUSAIN.

*OBAIDUR RAHMAN KHAN.
*MUHD. JAMSHED ALI KHAN.
ANAND SARUP.

JWALA SARAN KOTHIWALA.
*HAFIZ HIDAYAT HUSAIN.

H. A. LANE,
A. C. TURNER.

*BINDBASNI PRASAD.
*RAM PAL SINGH.

FASIH UDDIN.
*SHEIKH HABIB-ULLAH.

*Subject to the note appended.

Notes on the Report by Members

Note by Thakur Muneshwar Bakhsh Singh

The scheme when it was presented in the beginning appeared to me quite sound and reasonable so I gave my wholehearted support to it. But later when the figures were worked out the expectations were not fulfilled. The figures given in Appendix IV cannot be taken as a sure guide and hence conclusions drawn from them are *prima facie* misleading. I would therefore like to reserve the right of putting my point of view when this report comes up before the Council for discussion. In the end I have also to point out that at certain places much prominence has been given to the view of the minority.

Note by Mr. Brijnandan Lal.

Unfortunately I could not attend the meetings of the Committee which were held in the month of November. In my absence they arrived at conclusions as regards the following matters with which I regret I cannot agree:—

1. There is no reason why the tenant should not get rental remission in direct proportion to his loss of assets. There is no justification for reducing the amount given in rental remission at price-index 100 to 11 annas of the difference between the valuation of the basic rates and the recorded rent from 12 annas as suggested in paragraph 10 of Appendix I and at price-index 112½ to 10 annas from 11.

2. It is not fair to deprive the holdings that have been on the same rent since 1312 *Faski* of remission which they have been getting so far. The selection of the year 1312 *Faski* seems to be arbitrary. It will be equally hard to exclude the tenants of *sir* from the scheme because they cannot afford to part with their holdings as they have either to starve or take land at any rent.

3. I am afraid according to the proportionate method of remission of land revenue the considerate landlord and those who have raised the rent considerably are treated alike. I shall prefer a scheme which will take into consideration the proportionate method as well as percentage (30 to 35 per cent.) of assets as it will be more equitable.

Note by Rai Rajeshwari Prasad.

As I do not agree with the new scheme I sign this report subject to the observations which I made in dissent during the course of the discussions and which have been noted in the proceedings of the Committee. I reserve to myself the right of making further comments when this report is discussed in the Council.

Note by Captain Nawab Muhammad Jamshed Ali Khan.

I sign the report of the Rent and Revenue Committee with the following brief comment thereon.

There is no doubt about it that the scheme is of highly technical nature and it is difficult indeed to say at this stage what it will prove itself to be in its actual working. I am of definite opinion therefore that this whole scheme should be given a reasonable period for experiment to show its merits and demerits before it is made an absolute law.

With reference to paragraph 16 of the report I observe that the line of reasoning is not sound with regard to inclusion in the fluctuation scheme of holdings taken up for the first time in 1339 *Faski* and subsequent years.

It is a clear fact that holdings were taken up with eyes open to the prevailing slump in prices. "Tenants are faced with the alternative of taking land at any rent or starving" as the report says is not a fact. Tenants who did not like to

keep holdings on the prevailing rents on account of slump in prices gave up their holdings freely. It was this vacated land which was given to new tenants who willingly and without any sort of persuasion from the zamindar side took up the holdings at a new contracted rent. Now there is no justification to interfere in this contract.

The other very important point is the question of remission in revenue. The question has been well discussed and hardly requires further comments. It is the unanimous demand of the zamindars and has always been pressed that remission in revenue must and should be in proportion to the loss in assets. I once more urge upon this claim of the zamindars.

I want to say a word about the price-index. According to this scheme the price-index forming the basis of rent remissions are to be based on the prices of the year previous to the year which remissions are to be announced for. It is just possible that prices may rise and fall during the year. So I do not find the scheme a desired solution of the problem.

—————

Note by Thakur Rampal Singh.

I sign the Rent and Revenue Committee report subject to my liberty of moving or supporting any amendments as I may later on be advised.

—————

Note by Thakur Balwant Singh Gahlot.

In clause 15 last paragraph the date of application for a thekadar has been fixed to be January 1 for every *Fasli* year which includes it. This date should be extended in the case of this year in 1341 *Fasli* because in the past years there was no time limit for such applications and it is already the middle of December and it would take some time to get this approved by the Government. In those cases in which the thekadars have not applied for the remissions for the past years and have also not paid full amount of the theka money, it may be left to the discretion of the Collector to grant them remissions or not. This may be done specially in the case of mortgagor—thekadars—their case being different and requiring special consideration.

—————

Note by Messrs. Muneshwar Bakhsh Singh, Muhammad Maqsood Ali Khan, Muhammad Jamshed Ali Khan, Joti Prasad Upadhyaya, Hidayat Husain, Shah Nazar Husain and Obaid-ur-Rahman Khan.

We sign the report of the Rent and Revenue Committee subject to the following observations :

- (1) We decide that the rent of any holding should not be less than what it was in 1312 *Fasli*.
- (2) In the permanently settled mahals also remission of revenue should be in direct proportion to the loss of assets. We do not accept the principle incorporated in the paragraph 12 of the report regarding remission of revenue in the permanently settled mahals.

—————

Note by Babu Bind Basmī Prasad.

In paragraph 5 of the report, I do not agree with the majority of the members that the amount given as rental remission should at price-index 100 be 11 annas of the difference between the valuation at the basic rates and the recorded rent, instead of 12 annas, and at price-index 112½ should be 10 annas instead of 11 annas. This cut is being made arbitrarily. The general condition of the tenants does not justify the reduction in the rates of remission in this way.

In paragraph 16 of the report, I do not agree with the majority that no remission of rent should be allowed to tenants who took up land in 1339 *Fasli* and onwards. The important fact to be borne in mind is that the tenant enters into the contract not under the free play of economic laws, but as one who is pressed by his needs. He has either to face starvation or to take the land. He naturally prefers the latter in the hope that he would somehow manage to pay the rent, or at least for one year his wants would be met and then he would be ejected. Once we apply the principle of remission by reason of the slump, there is no justification to make any distinction. The slump affects all. If a tenant who took up land in 1339 or onward is liable for rent higher than that which is payable by other tenants holding land of equal quality, he should also be brought in line with the latter.

Each case should be examined on merits.

For the same reason, I do not see any convincing reason why the tenants of *str* should be excluded from the operation of this scheme, as is suggested in paragraph 18 of the report. Remissions are allowed to afford relief to agriculturists. Why should this class be denied that relief?

—————
Note by Sheikh Habib-ullah,

I sign this report subject to my note herewith sent.

In paragraph 2 of the report it is said that in making remissions in Revenue it was the best that could be done. I disagree with this. The fairest that could be done was what was recommended by the Committee. The application of the principle of 40 per cent. of the reduced assets was wrong.

The Provinces of Agra and Oudh have been divided into zones for purposes of preparation of prices-indices. The most important crops such as *arhar* or *urd* have been omitted from the statement and this must have affected the zoning of the districts. In fact the principle of zoning in itself appears to be defective and unnecessary.

The present scheme is to give rental remission on the basis of soil classification. So far as occupancy areas and holdings of which the rent has been determined on the basis of soil classification it may be of some use but in cases where the rents have not been fixed on the basis of soil classification and are the results of bargaining the scheme is likely to be very ineffective and might prove detrimental, in the case of tenants who have not got the same facilities for cultivation of the same class of soil as the other tenants in the village better circumstanced. I am of opinion that the old system of making remission on the basis of incidents of rent has on the whole proved satisfactory. The only change in this connexion that occurs to me to be of some benefit is to accept for purposes of incidence the year 1312 *Fasli* as the basis. There is an indication in the report as regards the application of the formula of remission in respect of holdings newly assessed to rent after the year 1338 *Fasli*. This is totally incorrect both in theory and in practice and no sound argument has been advanced in favour of the application of remission formula in respect to contracts made between landlords and tenants after their experience in the drop of the prices of agricultural produce.

As regards remission in revenue it will be a pity if permanently settled areas are excluded from the general scheme. If the revenue in such areas is lower than in areas subject to settlement the remission in revenue will be automatically lower. I have however suggested that in no case the proportion of revenue to reduced assets should be more than 35 per cent. in permanently settled areas generally and 30 per cent. in areas permanently settled on account of loyalty of the owners of lands. As regards the general policy of revenue remission I would apply the same principle as we applied in the case of calamities and recommend the revenue remission in direct proportion to the loss

of assets. The argument that the districts which have been assessed long ago would be in a better position than those recently assessed when examined critically does not appear to be sound for after all the settlements are for 40 years and they come by rotation in various districts and this is the normal course; hence it will be mistake to consider the period of settlement in making remission in revenue.

Lastly I have great doubts as to the working of any formula which will automatically adjust rent and revenue on the basis of prices without introducing a system of periodic assessment of rent and revenue. Anyhow if any such formula can be devised it ought to be a boon both to the landlords and tenants. If any measure is to be introduced it should not be brought on the Statute book without giving at least a few years trial. I would lastly recommend that any remission in rent should be left to the land owners who should have as their guide rough and ready rules on the point and that a remission in revenue should be made subject to their giving remission according to rules that may be framed. It is a bad policy to reduce the influence of the landlords over the tenants. The safest and the wisest course is to deal with the landlords in the matter of revenue and to let landlords deal with the tenants in the matter of rent subject to clear and rigid rules which should be followed.

APPENDIX I

Note on a scheme for fluctuation of rent and revenue with major fluctuations in prices.

BEFORE an attempt is made to explain briefly the scheme for fluctuation of rent and revenue with major fluctuations in prices, it must be stated what this scheme purports to do and what it does not attempt to do. It does not attempt to set up fair rent tribunals or to say what the recorded rent of any holding should be. That will remain, as at present, a matter to be decided between landlord and tenant, with the intervention of a revenue court only in cases in which there is intervention now, for example, occupancy holdings in Agra. The scheme only states what remissions of rent and revenue will be given at all price levels which so far as can be foreseen are ever likely to prevail. It will remain inoperative so long as prices are at or near the level of the period before the slump and will only come into play when prices are substantially below that level. At the commencement of each year a calculation will be made of the average price level of the previous year. That will give the price-index of the year commencing and the amount payable as rent or revenue for the year will be adjusted, automatically if necessary, without any application from either landlord or tenant. There will be no interference with the liberty of landlord and tenant to fix what rent they please by agreement. There will be no interruption of the ordinary processes of law. There will eventually be an addition to the law to make provision for circumstances for which no legal provision at present exists. Minor adjustments of the law as it now stands may be necessary on account of this addition as regards the procedure at settlement or at roster operations or in other minor respects; but there will be no major change.

2. Any permanent scheme which purports to devise a method for fluctuation of rent and revenue with major fluctuations of prices must take as its basis a standard valuation of an acre of the soil of each class at a certain price level. Valuation of the kind is a familiar feature of settlement and the scheme uses the settlement rates with percentage variations when necessary according to the year in which the settlement was made. This valuation will not represent the rent or revenue payable; a variation from it will be made as it is at settlement, but it will form the basis.

3. There are then two distinct sides to the problem—

- (a) points connected with the price level,
- (b) valuation, on which will depend both the rent and the revenue payable in any year at the price level prevailing.

4. Points connected with the price level may be taken first. The Rent and Revenue Committee of 1931 found that prices of 1901—05 were at about the same level as those of the first year of the slump, 1338 *Fasli*. That level is taken as represented by the index number of 100. Figures show that in 1338 *Fasli* when prices were at their peak before the slump, they were at about double the level of 1338. This price level is therefore taken as represented by the index number of 200. It is unlikely that prices will move far outside those points and to take the possibility into account would complicate the problem unnecessarily. The scheme provides for a range of prices between levels represented by the price-index numbers of 81½ to 212½. This range is divided into seven groups. The group is smaller at the lower levels of prices and larger at the higher: each has a governing point, which is the median point of each group except that of which the governing point is 125. The rent and revenue payable at the different governing points will be declared now and that rent and revenue will be payable at all price-indices in the group. The meaning is best explained diagrammatically.

87½	100	112½	125	150	175	200
81½ to 93½	93½ to 106½	106½ to 118½	118½ to 137½	137½ to 162½	162½ to 187½	Above 187½

No fluctuation in prices will be considered a major fluctuation, and there will be no change in remissions, unless the price-index of the year moves from the group which contained the price-index of the previous year into another group.

5. It will be the duty of the Secretariat to calculate at the end of each *Fasli* year the average price-index of the year just ended which will be the price-index of the year commencing. Each district officer will be informed of the price level of the year and from it every tenant and landlord will know his dues as explained below.

6. For calculating price-indices, the province will be divided into five zones according as different crops are prevalent in each zone, in order to allow for different variations in the price of different important crops. For example, in the west sugarcane is the most important crop; in the sub-montane tracts, rice; in the east, both sugarcane and rice; Bundelkhand stands by itself, and in the remainder of the province cereals are the most important. Each zone will have its own price-index.

7. Next comes the valuation. Two years ago the valuation of tenants' holdings was based on an incidence which cannot take into account variations in classes of soil and cannot form a satisfactory basis for a permanent scheme such as the present. The scheme, therefore, takes rates, not incidences, as its basis.

8. If rates are to allow for fluctuations in prices, there must be rates to suit different price levels, i.e. one set of rates if the price-index is 100, another if it is 125, and so on. All sets of rates proposed take that suitable at a price-index of 100 as their basis and vary them as the price-index varies.

9. At any price level there is a certain rent which is the minimum which a tenant can reasonably be expected to pay for land of the soil classes of which his holding is composed. The main problem in valuation is to determine what that rent is. It is proposed to take the reasonable minimum rent with the price-index at 100, at about the level of rents which were generally fixed between 1901-05. At that time there was hardly any difference between the level of occupancy and non-occupancy rents. The material necessary for determining suitable rates is in the rent-rate reports of settlements. The settlement rates with percentage variations, where necessary, will supply the requirements. The settlement volumes give the soil class of every field and every soil class has a settlement rate. It is easy then to value each holding at selected rates. The primary rates will give the valuation with the price-index at 100. From it the valuation at the higher price-indices will for rents be derived by simply increasing the rates by $\frac{1}{4}$ if price-index is 125, by $\frac{1}{2}$ if it is 150, and so on, up to double as the price-index increases to 200.

10. The method of valuation, of comparison of recorded rents with the valuation, and of allowing for fluctuations of rent as prices fluctuate which Government think the most suitable, is as follows:

For each tenant's holding there will be shown—

- (a) the recorded rent,
- (b) the valuation at the selected rates appropriate to different price levels,
- (c) the difference between (a) and (b), which will vary as (b) varies with the price level.

If the price-index is in the 87½ group the remission of rent will be 13 annas of (c). If the price-index is in the 100 group, the remission of rent will be 12 annas of (c). If the price-index is in the 112½ group, the remission of rent will be 11 annas of (c). If it is in the 125 group, the remission of rent will be 10 annas of (c). If the price-index is in the 150 group, the remission of rent will be 7 annas of (c). If it is in the 175 group, the remission will be 4 annas of (c). If the price level is 200 or above, there will be no remission. In no case, however, will the

remission of rent exceed the proportion of the recorded rent, which is the same as the proportion by which the price-index of the year falls short of 200. For example, the price-index of the year is 150. It is therefore short of 200 by $\frac{1}{4}$. In no case shall the remission of rent for that year make the rent payable for it less than $\frac{1}{4}$ of the recorded rent.

11. For holdings of which the rents are fixed in future there will be no remission of rent unless the price-index falls into a group lower than that prevailing at the time when the rent was fixed.

12. For remission of revenue two factors will be taken into account—

(a) the assets at the price-index prevailing, i.e. for rented land the rent after remission and for the assumption area the valuation at the rates selected for the fluctuation of rent with suitable variations ;

(b) the fall in assets from the level prevailing when the price-index was 200, assets including both the rents of the rented land and the valuation of the assumption area at the same rates as in (a).

13. The rates suitable for the valuation of the assumption area are not the same as those suitable for the valuation of cash-rented land. At settlement, the assumption area is valued at rates below those at which the cash-rented land is valued, and this difference increases as the price level increases. The same principle is applied here. If the price-index of the year is in the 100 group, the rates applied for valuation of the assumption area will be 6 $\frac{1}{2}$ per cent. lower than those applied to the cash-rented land. These rates we will call Z. If the price-index of the year is in the 87 $\frac{1}{2}$ group, the assumption area rates will be Z-6 $\frac{1}{2}$ per cent. ; if the price-index of the year is in the 112 $\frac{1}{2}$ group the assumption area rates will be Z+6 $\frac{1}{2}$ per cent. ; if in the 125 group, Z+12 $\frac{1}{2}$ per cent. ; if in the 150 group, Z+18 $\frac{1}{2}$ per cent. ; if in the 175 group, Z+25 per cent. ; if in the 200 group, Z+31 $\frac{1}{2}$ per cent.

14. For remission of revenue two calculations will be made. A percentage of (a) will be calculated in the region of 40 and that will give the revenue which would be payable at that percentage (Y). For (b) the assets will first be calculated at the 200 price-index. Then the assets will be calculated at the price-index prevailing for the year. Thus will be found the percentage by which assets have fallen. This percentage will be applied to the existing revenue and thus will be found the revenue which would be payable if the proportionate system of remission were adopted (Z). (Z) will be added to (Y) and the sum divided by 2, which will give the revenue that would be payable if the mean were taken between the results given by the two methods (a) and (b). If this mean figure between (Y) and (Z) is less than the existing revenue demand, a remission will be given equal to the difference. If this mean figure is equal to or greater than the existing revenue demand, no remission is due. The remission of revenue is therefore the difference between the recorded revenue and the mean between (Y) and (Z). If the mean is not considered suitable, it is easy to add $\frac{1}{3}$ rd of (Y) to $\frac{2}{3}$ rd of (Z), or any other fraction which may be chosen.

15. This process will be applied to every mahal and the same percentage remission of revenue will be applied to each khata khewat within the mahal. In the case of revenue the maximum amount payable on the mahal was fixed at settlement and development during the term of settlement is never used as a reason for increasing the total amount due during the term, as it is in the case of rent. That total is distributed at settlement proportionately to the assets. The distribution within the mahal should not be disturbed again during the term of settlement as it would be if the remissions of revenue were calculated on the khatas of the khewat instead of being calculated on the whole mahal and then given in the same proportion to every khata in the mahal.

16. The rent and revenue payable at each price level will be recorded now in a special register. It is estimated that this work can be done by patwaris supervised by a special staff in two months. This register will be permanent and changes will only be allowed in it by order of a court or at settlement. The average price-index of the year will be worked out in the Secretariat from information supplied regularly by the districts and district officers will be told that the price level of the year is so and so. Every zamindar and tenant will be given a slip now showing what the revenue or the rent of holding will be at different price levels so long as the recorded rent remains unchanged. When the recorded rent is changed, a fresh calculation will be necessary and a new slip will be given to landlord or tenant as the case may be, giving exact information of what he has to pay in any year at the price-index fixed for that year.

17. A scheme such as that described above will ensure not only that the total amount of relief is fair but also that the distribution of relief is even. The distribution is most important. A sum evenly distributed is far more relief than the same sum if the distribution is uneven.

APPENDIX II

Comparison with the remissions actually given in 1939 *Fasli* of those resulting from the Fluctuation Scheme at the same price-index using the tentative valuation rates selected in May, 1933 (i.e., before liberalization).

Zone	District	Rent remitted in 1939 <i>Fasli</i>	Revenue remitted in 1939 <i>Fasli</i>	Rent that would have been remitted by the fluctuation scheme at the 1939 <i>Fasli</i> zone price-index	Revenue that would have been remitted, by the fluctuation scheme at the zone price-index of 1939 <i>Fasli</i>		
					If in direct proportion to loss of assets	If the mean between column 7 and 85 per cent of the reduced assets	If the mean between column 7 and 85 per cent of the reduced assets
I	2	3	4	5	6	7	8
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I	Bareilly ..	1,77,066	97,974	89,854	32,078	8,168	14,009
	Bijnor ..	10,87,474	2,11,728	2,89,873	1,85,318	7,482	16,028
	Pilibhit ..	2,67,419	78,822	84,546*	29,716*	28,660*	26,478*
	Azamgarh ..	2,70,540	2,36,408	56,668	1,46,642	76,264	1,14,469
	Total, Zone I..	18,02,499	5,49,930	4,89,935	3,43,649	1,15,534	1,70,964
II	Aligarh ..	17,08,847	8,86,010	14,73,728	5,03,747	8,27,971	6,78,551
	Mainpuri ..	6,02,806	2,26,680	4,77,785	2,11,085	1,89,813	1,99,720
	Etah ..	7,40,521	1,85,008	6,50,840	2,27,544	1,68,121	1,71,604
	Budaun ..	11,19,278	3,24,424	6,02,021	3,70,585	1,58,404	1,97,452
	Farrukhabad ..	7,19,959	1,56,553	5,28,745	2,29,178	1,94,285	2,08,159
	Etawah ..	6,99,125	3,25,004	3,52,442	1,98,867	1,89,610	1,92,423
	Cawnpore ..	9,84,416	3,26,626	7,24,069	3,28,374	2,89,167	3,06,685
	Fatehpur ..	5,67,046	4,01,585	2,78,614	1,76,081	1,72,117	1,74,089
	Lucknow ..	9,04,089	2,08,965	8,23,017	2,88,851	2,20,976	2,48,588
	Unao ..	12,80,061	4,48,948	5,80,191	2,78,079	2,44,819	2,60,427
	Hardoi ..	14,97,814	2,64,309	8,64,988	3,45,180	1,28,117	1,66,107
	Total, Zone II..	1,08,43,907	32,02,386	73,64,960	30,42,052	22,62,609	24,97,759
III	Dehra Dun† ..	1,77,058	21,352	1,54,196	27,991	3,068	5,188
	Allahabad‡ ..	8,46,450	4,01,508	2,08,684	1,52,478	1,87,662	1,46,922
	Basti ..	12,84,287	4,49,213	8,55,071	3,18,838	1,63,851	2,20,889
	Rae Bareilly ..	9,57,476	4,40,261	4,32,780	2,21,714	2,05,163	2,16,651
	Fyzabad ..	6,70,825	1,79,236	2,66,199	1,66,416	83,877	64,860
	Gonda ..	8,27,575	1,67,779	2,64,950	1,88,645	4,211	8,640
	Bahraich ..	3,99,985	1,67,267	1,42,890	1,84,619	15,413	21,808
	Sultanpur ..	1,87,080	1,08,743	1,94,698	92,584	48,190	66,851
	Partabgarh ..	4,97,166	2,92,895	3,00,174	1,78,886	1,61,870	1,69,704
	Bara Banki ..	17,06,610	5,72,408	10,58,711	3,74,000	2,16,809	2,66,449
	Total, Zone III	73,93,662	27,90,639	33,18,333	17,98,771	9,89,464	11,86,477
IV	Saharanpur ..	15,17,183	8,85,580	13,50,391	5,18,318	3,37,373	3,69,709
	Meerut ..	14,46,977	3,64,864	13,06,564	6,64,967	2,97,846	3,14,836
	Bulandshahr ..	18,33,748	5,58,242	11,71,847	4,92,927	4,33,268	4,64,760
Total, Zone IV	47,97,903	13,03,656	38,37,302	16,16,222	10,07,977	11,48,795	
Total, four zones	2,48,37,971	78,46,611	1,49,90,530	67,98,694	43,75,584	50,03,995	

* Based on *nijkari* rents.

† Dehra tahsil only.

‡ Excluding the Jamsapar tahails.

Notes.—1. In many cases the above figures are for part of the district only.

2. The figures for some districts are not yet available.

3. Rental remissions to plot-under-proprietors and their tenants have been excluded from the figures of the Oudh districts.

APPENDIX III

General note on the Fluctuation Formula

I.—RENT

1. In the period 1901—05 prices were at a level which may be represented as price-index 100; figures show that just before the slump prices were about double those prevailing in 1901—05, i.e. about price-index 200.

2. The rents fixed in 1901—05 were at rates fair at price-index 100.

3. Find for each district the rates of rents fixed in 1901—05. The information is available in the rent-rate reports or roster reports. The rates taken as fair at price-index 100 are represented as the settlement rates or the roster rates either unaltered or plus or minus a percentage. These rates are for each soil class and for each village and allow for the particular conditions of each holding.

4. Value each holding at these rates: the recorded rent will then be equal to the valuation at the rates plus excess, if there is any. As these rates are fair at price-index 100, the excess if any is the excess at price-index 100.

5. If prices rise, the price-index will rise in direct proportion; as also will the fair rates, and with them the valuation at fair rates. If the price-index rises from 100 to 125 i.e. by $\frac{1}{4}$, so also will the valuation at fair rates with the price-index 125 rise by $\frac{1}{4}$ from the valuation in paragraph 4. If the price-index rises to 150 i.e. by a half from 100, the valuation given in paragraph 4 will rise by one half; and so on. Prices just before the slump were at about the level represented by 200. If prices rise to the 200 level there is no need of remissions on any rents and the scheme will cease to come into operation until prices again fall to the level of the price-index 175.

6. To give an example. The recorded rent of a holding is Rs.18. The valuation at the rates fair at the price-index 100 is Rs.10. The excess at the different price levels is as follows:

Recorded rent..	..	Rs.18	Rs.18	Rs.18	Rs.18	Rs.18
Price-index ..	..	100	125	150	175	200
Valuation at different price-indices.		Rs.10	Rs.12 $\frac{1}{2}$	Rs.15	Rs.17 $\frac{1}{2}$	Rs.20
Excess ..	..	Rs.8	Rs.5 $\frac{1}{2}$	Rs.3	Rs.1 $\frac{1}{2}$	...

7. The remission of rent proposed is a percentage of the excess which decreases as the price-index rises thus:

with price-index 100, 12 annas in the rupee of the excess or in the example in para. 6, 12 \times 8 annas.
with price index 125, 10 annas in the rupee of the excess or in the example in para. 6, 10 \times 5 $\frac{1}{2}$ annas.
with price-index 150, 7 annas in the rupee of the excess or in the example in para. 6, 7 \times 3 annas.
with price-index 175, 4 annas in the rupee of the excess or in the example in para. 6, 4 \times 1 $\frac{1}{2}$ annas.
with price-index 200 nil.

8. The same principle will apply to every cash-rented holding, whatever the recorded rent. If in the example given in paragraph 6 the recorded rent had been Rs.12 instead of Rs.18, the excess at price-index 100 would have been Rs.2 and there would have been no excess at a price-index of 125 or any higher price-index. At price-index 100 there would have been a remission of 12 \times 2 annas, i.e. 12 annas in the rupee of the excess of Rs.2, but there would have been no remission at price-index 125 or at any higher price-index.

9. The principle of paragraph 7 is however subject to the proviso that in no case shall the remission of rent be a bigger percentage of the recorded rent than the percentage by which the price-index has fallen from 200. For example the price-index is 150. It has, therefore, fallen from 200 to 150, i.e. by one quarter. The remission of the rent of no holding at price-index 150 shall exceed one quarter of the recorded rent.

II.—REVENUE

1. Revenue is fixed on assets, which are of three kinds :
 - (a) assets of cash-rented land ;
 - (b) assets of assumption area, i.e. *sir*, *khudkasht*, grain rented land and the like, of which there is no cash rent recorded ;
 - (c) *sayar* income.
2. The scheme deals with all three kinds separately.
 - (a) It takes the assets of the cash-rented land as the recorded rent minus the remission at each price level minus an allowance for short collections at 10 per cent. of the balance.
 - (b) It values the assumption area at the following rates :—
 - (i) at price-index 100 at the rates used for the valuation of the cash-rented land at that price-index minus 6½ per cent.,
 - (ii) at price-index 112½ at the rates of (i) plus 6½ per cent.,
 - (iii) at price-index 125 at the rates of (i) plus 12½ per cent.,
 - (iv) at price-index 150 at the rates of (i) plus 18½ per cent.,
 - (v) at price-index 175 at the rates of (i) plus 25 per cent.,
 - (vi) at price-index 200 at the rates of (i) plus 31½ per cent.
 - (c) It values at all price-indices *sayar* income at the same figure as the settlement officer, unless there are special reasons to the contrary.
3. The assets of each mahal are thus calculated at each price level.
4. In addition to the assets it is easy to ascertain the loss of assets at each price-index by comparing the assets at the price-index with the assets at price-index 200, i.e. the price-index prevailing just before the slump.
5. There are thus two bases at each price-index :
 - (a) assets,
 - (b) loss of assets,
 - (a) is taken first, and figures are worked out showing what the revenue would be if (i) 36 per cent., (ii) 38 per cent. of the assets were taken as revenue,
 - (b) is then taken, and the revenue which would be payable is worked out if the revenue were reduced in the same proportion as assets,
 - (a) and (b) are added together and divided by two and the result is the revenue payable at each price-index, subject, of course to the proviso that the revenue payable shall in no case exceed the recorded demand.
6. The principal of 5 is subject to the condition that the remission of revenue shall in no case be in higher proportion than the loss of assets. This is the utmost that has ever been claimed.
7. Thus the revenue payable at each price-index is worked out for the whole mahal. This gives the percentage by which the revenue would be reduced on the whole mahal at each price-index, and the same percentage is applied to each *khata khawat* in the mahal.

III.—GENERAL

1. Both for rent and revenue the price-index shall be held to govern all price-indices in its neighbourhood as follows :

Price-index 87½	will govern all price-indices from	..	81½ to 93½
Do. 100	ditto	above	93½ to 106½
Do. 112½	ditto	do.	106½ to 118½
Do. 125	ditto	do.	118½ to 137½
Do. 150	ditto	do.	137½ to 162½
Do. 175	ditto	do.	162½ to 187½
Do. 200	ditto	do.	187½

APPENDIX IV
The remissions given by the liberalised valuation

Zone and district	RENT					Full demand	Actually given in 1889 Fasi	Un					
	Total recorded rent	Remissions			Full demand				Actually given in 1889 Fasi	Un			
		Actually given in 1889 Fasi	Under Fluctuation Scheme at price-index of—								Full demand	Actually given in 1889 Fasi	Un
			1889 Fasi	1841 Fasi										Full demand	Actually given in 1889 Fasi	Un
1	2	3	4	5	6	7	8						
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.							
I			(125)	(125)									
Bareilly	89,95,666	6,68,557	5,41,083	5,41,083	1, 10,656	1,59,461							
Bijnor	40,79,072	9,20,695	8,50,476	8,50,476	14,10,111	2,10,352							
Pilibhit	15,85,798	2,61,042	2,08,204	2,08,204	6,70,764	84,238							
Benares	17,52,572	8,13,681	2,85,063	2,85,063	2,860*	146							
Jaunpur	13,12,446	1,20,875	1,52,850	1,52,880	•	•							
Ghazipur	17,35,094	2,89,960	2,60,653	2,60,653	170*	42							
Ballia	5,52,189	59,183	73,639	73,039	•	•							
Gorakhpur													
Asamgarh	81,41,472	2,57,105	8,50,383	8,50,383	18,97,867	2,36,551							
Kheri	29,51,081	6,43,150	5,36,599	5,36,599	7,23,565	72,356							
Total	2,10,45,190	35,42,027	32,54,080	32,54,080	62,15,553	7,57,151							
II			(100)	(112)									
Aligarh	70,93,814	17,43,813	13,94,150	14,70,226	24,54,411	4,09,028							
Muzaffarnagar													
Agra	44,01,170	8,77,569	10,56,183	7,71,485	19,05,220	8,81,068							
Mainpuri	83,85,584	6,06,806	7,17,315	5,38,196	13,56,473	2,26,560							
Etah	85,88,552	7,40,321	8,84,280	64,902	12,27,341	1,35,008							
Total	1,84,39,970	39,67,712	45,52,423	34,64,809	69,43,945	11,51,659	1						
III			(100)	§			figu						
Budaun	44,44,270	10,52,120	11,70,315	9,15,462									
Farrukhabad	82,01,784	6,82,679	8,06,416	6,14,105	12,04,419	1,55,885							
Etawah	86,10,018	6,76,942	8,42,456	6,26,948	15,72,332	3,25,004							
Cawnpore	48,24,908	9,08,971	11,43,315	8,64,341	20,09,184	3,35,655							
Fatehpur	80,41,022	5,46,314	7,10,694	5,13,757	14,36,965	4,01,514							
Lucknow	81,26,782	10,10,642	9,69,512	7,57,357	10,27,344	2,04,616							
Unao	40,75,105	12,46,603	13,98,177	0,17,194	16,50,911	4,12,646							
Sitapur	81,22,222	7,20,951	7,83,303	5,74,094	11,60,641	1,67,646							
Hardoi	49,75,733	14,60,733	14,65,259	11,32,039	17,67,336	2,64,485							
Total	3,44,21,960	83,06,855	91,89,443	70,20,347	1,18,26,131	22,66,901	26						
IV			(112)	(135)									
Dehra Dun (Dehra tahsil)	4,62,074	1,46,192	1,56,324	1,29,469	1,15,571	21,359							
Allahabad (Ois-Jumna tahsils)	21,55,799	4,68,337	4,96,946	8,73,906	10,01,940	2,17,328							
Mirzapur	9,75,536	2,05,253	2,38,311	1,81,422	•	•							
Basti	50,92,073	12,02,974	13,00,732	9,98,361	27,31,072	4,50,975							
Rae Bareilly	41,61,084	10,10,760	10,28,406	7,81,713	17,54,301	4,39,491							
Fyzabad	33,54,323	6,03,621	6,61,894	4,76,331	14,27,339	1,76,003							
Gonda	36,15,146	8,77,544	9,40,025	7,15,420	13,92,755	1,67,100							
Muzaffarnagar	56,12,435	11,71,035	12,95,797	9,78,966	11,68,343	1,57,783							
VI													
Moradabad	64,51,471	18,92,585	18,54,887	14,71,579	17,55,335	1,92,352							
Shahjahanpur	25,12,456	4,59,333	4,86,472	3,60,684	8,51,606	1,04,352							
Total	1,86,57,136	49,61,784	51,58,754	41,10,301	67,30,384	11,66,352							
VII			(100)	(112)									
Jhansi	6,630	1,250	1,422	1,055	3,609*								
Jalaun													

APPENDIX V
Zones and price-indices

ZONE			PRICE-INDEX						
Number	Description	Districts	Basic period 1908— 1919 Fasli	1897 Fasli		1899 Fasli		1840 Fasli	
				Actual	Controlling	Actual	Controlling	Actual	*Controlling
1	2	3	4	5	6	7	8	9	10
I	Cane and rice important.	Bareilly ..	100	199-86	200	120-60	125	119-60	125
		Bijnor ..							
		Pilibhit ..							
		Benares ..							
		Jainpur ..							
		Ghasipur ..							
		Balla ..							
		Gorekhpur ..							
		Asamgarh ..							
Kheri ..									
II	Cotton important	Aligarh ..	100	172-11	175	94-28	100	114-55	112½
		Muttra ..							
		Agra ..							
		Mainpuri ..							
		Etah ..							
III	Neither cane, rice nor cotton important.	Budaun ..	100	181-44	175	105-16	100	120-94	125
		Farrukhabad ..							
		Etawah ..							
		Cawnpore ..							
		Fatehpur ..							
		Lucknow ..							
		Unao ..							
		Sitapur ..							
		Hardoi ..							
IV	Rice important	Dehra tahsil of Dehra Dun, Cis-Jumna tahsils of Allahabad, Mirzapur ..	100	189-71	200	114-83	112½	119-09	125
		Basti ..							
		Rae Bareilly ..							
		Fyzabad ..							
		Gonda ..							
		Bahraich ..							
		Sultanpur ..							
		Partabgarh ..							
		Bara Banki ..							
		V								Cane and cotton important.	Meerut ..	100	203-81	200	119-08	112½	121-68	125
Bulandshahr ..									
VI	Cane important	Saharanpur ..	100	199-92	200	118-25	112½	118-99	125
		Muzaffarnagar ..							
		Moradabad ..							
		Shahjahanpur ..							
VII	Bundelkhand .. (neither cane, nor rice, nor cotton important).	Jhansi ..	100	205-87	200	92-48	87½	116-92	112½
		Jalaun ..							
		Hamirpur ..							
		Banda ..							
		The Jamnagar tahsil of Allahabad.							

* Controlling the remissions of 1941 Fasli.

APPENDIX VI

Zones

1. In calculating a price-index three factors have to be considered, viz. :—

- (i) the proportion of the cultivated area under each of the crops on which the index is to be based,
- (ii) the yield per acre of each crop, and
- (iii) the price per maund of the produce of each crop.

2. These factors vary throughout the province and so the province has been divided into zones more or less homogeneous in respect of the above factors.

3. The crops which have been taken into consideration are :

- (1) wheat,
- (2) barley,
- (3) *juar*,
- (4) *bajra*,
- (5) gram,
- (6) maize,
- (7) rice,
- (8) sugarcane,
- (9) cotton.

The prices of nos. (1) to (6) move more or less together, while the prices of rice, sugarcane and cotton move independently of each other and of the other crops. The zones have therefore to be formed having regard to whether any one or more of the last three crops are important or not.

4. (i) The percentage that the area under each of the nine crops bears to the total area under all nine crops was calculated for each district.*

(ii) This percentage was multiplied by the yield per acre of each crop.

(iii) The products under (ii) were totalled.

(iv) The percentage of the total under (iii) represented by the products under (ii) for rice, sugarcane and cotton were worked out (i.e., the weights).

(v) Districts were then placed into seven zones on the basis of the results, as follows :—

Zones	Description	Districts	Weights for—		
			Rice	Cane	Cotton
I	Rice and cane important, but not cotton.	(1) Breilly ..	17	32	..
		(2) Bijnor ..	18	34	..
		(3) Pilibhit ..	26	33	..
		(4) Benares ..	24	21	..
		(5) Jaunpur ..	16	21	..
		(6) Ghazipur ..	24	19	..
		(7) Ballia ..	19	22	..
		(8) Gorakhpur ..	33	25	..
		(9) Azamgarh ..	29	24	..
		(10) Kheri ..	19	17	..

* In the case of crops, that are sometimes irrigated and sometimes grown dry the "wet" and "dry" areas were kept separate, and "wet" and "dry" unit-area figures were used. Differentiation was similarly made between "improved" and "ordinary" sugarcane areas.

Zone	Description	Districts	Weights for—		
			Rice	Cane	Cotton
II	Cotton important, but neither cane nor rice.	(1) Aligarh ..	..	5	8
		(2) Mathra ..	..	7	4
		(3) Agra ..	..	2	2
		(4) Meerpur ..	..	3	1
		(5) Etah ..	..	7	11
III	Neither cotton, rice nor cane important.	(1) Budann ..	4	7	..
		(2) Farrukhabad ..	8	9	..
		(3) Etawah ..	8	6	..
		(4) Cawnpore ..	6	4	..
		(5) Fatehpur ..	15	4	..
		(6) Lucknow ..	17	4	..
		(7) Unao ..	12	7	..
		(8) Sitapur ..	14	15	..
		(9) Hardoi ..	6	11	..
IV	Rice important, but neither cane nor cotton.	(1) Dehra Dun* ..	82	4	..
		(2) Allahabad† ..	20	4	..
		(3) Mirzapur ..	85	9	..
		(4) Basti ..	40	15	..
		(5) Rae Bareilly ..	27	8	..
		(6) Fyzabad ..	32	16	..
		(7) Gonda ..	35	8	..
		(8) Bahraich ..	27	2	..
		(9) Sultanpur ..	38	9	..
		(10) Fatehgarh ..	22	6	..
		(11) Para Banki ..	24	14	..
V	Cotton and cane important, but not rice.	(1) Meerut ..	1	82	1
		(2) Bulandshahr ..	..	16	2
VI	Cane important, but neither rice nor cotton.	(1) Saharanpur ..	8	26	..
		(2) Muzaffarnagar ..	8	39	..
		(3) Moradabad ..	1	21	..
		(4) Shahjahanpur ..	12	28	..
VII	Bundelkhand (neither rice, cane nor cotton important).	(1) Jhansi ..	8	..	..
		(2) Jalaun ..	..	..	..
		(3) Hemirpur ..	1	1	..
		(4) Banda ..	8	1	..
		(5) Allahabad ‡ ..	..	..	..

* Dehra tahsil only.

† Cis-Jumna tahsils only.

‡ Jannesar tahsils only.

5. Rice and sugarcane have been taken as important when the weight is 17 or over.

The cotton weight is always small, so cotton has been taken as important where it covers 5 per cent. or more of the total area under the nine crops.

6. The seven zones will be found to form for the most part consolidated *chaks*, which is desirable as then prices are likely to be similar throughout any one zone.

This consideration decides the zone into which a district is placed when its weights are on the border line between important and not important, *e.g.*, Jaunpur with a rice weight of 16 finds itself in a zone in which rice is important, because of its proximity and similarity to Benares, Ghazipur and Ballia; Lucknow with a rice weight of 17 goes into zone III; and Bulandshahr with a sugarcane weight of 16 goes into zone V.

7. Zoning may, in future, be revised every five years.

APPENDIX VII

Calculation of price-indices

1. (i) For each zone the average percentage area under each of the eight (in zones II and V nine) crops, mentioned in paragraph 3 of Appendix VI, in the years 1308-12 *Fasli* (1901-05) was calculated.

The irrigated proportion was kept separate from the unirrigated in the case of crops that are sometimes irrigated and sometimes grown dry.

(ii) These percentage areas were next multiplied by the yield figures (for irrigated and unirrigated areas separately).

(iii) The total yield of irrigated and unirrigated areas was next multiplied by the average price of each crop in the zone.

(iv) The total of the products from (iii) above for all crops represents the price-index of 100.

2. To ascertain the price-index of any other year a similar calculation is made.

(i) The average total area under the eight (or nine) crops for the five preceding years is calculated and from this the percentage under each crop (irrigated and "dry" areas being kept separate, and also the areas under improved and ordinary cane).

(ii) These percentages are multiplied by the yield figures supplied by the Director of Agriculture for the previous five years, and by the average zone price of each crop for the year in question.

(iii) The resulting products are then totalled.

(iv) The price-index is found by dividing this total by the figure in paragraph 1 (iv) and multiplying the result by 100.

3. The price-index calculated thus in one year will control the remissions of the ensuing year.

4. (i) It is proposed to calculate the percentage of each crop ("dry" and "wet" separately) once every five years, and to employ these figures for the next five years.

(ii) In the case of sugarcane the proportion of the total area under sugarcane will be calculated every five years, but the division of this proportion between improved and other sugarcane will be adjusted each year on the basis of the average proportion in the three preceding years.

5. The average price of produce in any zone will be taken as the average retail price based on the fortnightly returns of prices during that period of the year when the cultivator normally sells his produce. Thus—

Wheat and barley—April, May and first fortnight of June.

Juar and bajra—Second fortnight of October, November and first fortnight of December.

Gram—March, April, May and first fortnight of June.

Maize and rice—October, November and December.

Sugarcane—Second fortnight of January, February, March and first fortnight of April.

Cotton—October, November, December and January.

X9(U).252.N2S
95

For the use of the Tenancy and Land Revenue Committee

3

STATISTICS RELATING TO THE SIZE OF CULTIVATORS' HOLDINGS

In all the estimates so far made, the 'holding' has been taken to mean the estimated area cultivated by a cultivating family. The estimate most in use has been that made in 1926 for the Agricultural Commission. It was made by dividing the holdings area by the number of houses in the rural area estimated to be occupied by cultivating families. The statement attached to this note gives the results worked out in 1926, and, for comparison, the results worked out in 1927 by the same method (1931 census and 1935 holdings area).

2. The figures may serve for a rough picture, but for nothing more. At census, no correlation was made between the number of 'earners' in the various occupations and the number of houses, or the total population, in the rural area. The 1926 figures were based on the 1911 census, but on the 1924 statistics of the holdings area. As between districts, marked variations follow from variations in the amount of poor soil (e.g. *bhur* and alluvial soil) existing and cultivated. The soil factor also vitiates figures for the district itself. For example, in Ghazipur district the fact that *uparhar* holdings are probably little larger than in Jaunpur is masked by inclusion of large areas of alluvial soil cultivated in large holdings in the Ganges *khadar*.

3. Fair inferences, however, seem to be first, that the average size of holdings in Meerut division was over-stated, and the average size of holdings in Eastern districts was understated, in 1926; secondly, that the average size of holdings has slightly declined, the increase in houses or families outstripping the increase in the area of holdings. Many, however, would be inclined to hold that any decrease in the size of holdings has been made good by a rise in the average yield.

4. In most of the settlements started in the last 10 years detailed enquiries were made as to the various sizes of holdings by groups, usually by 'sampling' 10 per cent. of the holdings in a particular tract. Space forbids the quotation of more than typical results and conclusions, from the investigations of settlement officers, but the results are of more value than general conclusions about 'average' holdings.

Agra.—Mr. Mudie, Settlement Officer, in 1931 classified the holdings of two *tahsils*, and the results are given in a pamphlet entitled "Cultivators' Debt in the Agra District." The main results in Agra *tahsil* are reproduced below:—

	Holding				
	Less than 2½ acres	2½ to 5 acres	5 to 10 acres	10 to 17½ acres	Over 17½ acres
<i>All cultivators</i>					
(1) Percentage of total number	27.3	23.3	28.9	14.3	6.2
(2) Percentage of total cultivated area so held	5.1	12.5	31.5	27.8	23.1

(a) The average size of a cultivating *samindar's* holding was 10 acres; of a tenant, 6.1 acres.

(b) The average area of tenants who rely *solely* on cultivation for livelihood was 11.3 acres.

(c) To eliminate the part-time cultivator would increase the size of holdings, but would create unemployment.

(d) There was no sign that holdings were decreasing in size.

Budawn.—(Tasail Sahaswan) 1929—

- (a) 50 per cent. of holdings were of less than 5 acres.
 (b) In 60 years the percentage of cultivator's holding $2\frac{1}{2}$ acres or less to the total holdings had risen from 23 to 37 per cent., and the area of such holdings had risen from 4 to 8 per cent. of the total holdings area.
 (c) Sub-letting by tenants became considerable when the holding exceeded $7\frac{1}{2}$ acres.

Bara Banki.—1929—

67 per cent. of holdings were of less than 5 acres. The Settlement Officer (Mr. Owen) pointed out that "3 acres and a cow" was for long regarded as the ideal of landlord reform in England.

Summary of Enquiries Holding—

Rae Bareilly and Unao—(1929)	$2\frac{1}{2}$ acres or less	$2\frac{1}{2}$ to 5 acres	5 to $7\frac{1}{2}$ acres	More than $7\frac{1}{2}$ acres
<i>Rae Bareilly</i>				
Percentage of cultivators	35	35	15	15
Percentage of holdings area	50		10	40
<i>Unao</i>				
Percentage of cultivators	37	33	16	14
Percentage of holdings area	12	29	23	36

In Unao, high castes were found to sublet 26 per cent. of holdings, others 11—14 per cent. high castes were said to be severely hit by the law's restrictions on sub-letting.

Lucknow.—(1928)—

- (a) Holdings averaged just under 5 acres a piece.
 (b) 80 per cent. of tenants, with an average of 3.38 acres, cultivated more than half the area.

Hardoi.—(1930)—

- (a) Average size of holdings was 5.6 acres.
 (b) 80 per cent. of tenants, with an average of 3.38 acres, cultivated 46 per cent. of the area.

Meerut.—(1931)—

	<i>Pargana Garhmukhteswar</i>					Average size of holdings
	Upto 5 acres	5 to 10 acres	10 to 20 acres	20 to 50 acres	over 50 acres	
Percentage of cultivators	26	38	26	9	1	10 acres
Percentage of holdings area	8	25	34	23	10	
	<i>Pargana Hastinapur</i>					
Percentage of cultivators	19	33	33	14	1	} All 12.3 acres Tenants 11.8 acres
Percentage of holdings area	5	20	37	32	6	
Non-agriculturists:—						
Percentage of total numbers	94	} 84 per cent. held less than $2\frac{1}{2}$ acres.				
Percentage of their total area	64					

- (a) The largest holdings were of Jats, averaging 16 acres.
 (b) Average size of holdings of sub-tenants was 2.4 acres.
 (c) A main reason for the relatively large average size of holdings is the substantial area of sandy (*bhur*) and alluvial soil cultivated in large lots.

In *Sitapur* (tahsil Sidhauri, 1930), *Sultanpur* (tahsil Musafirkhana, 1932) and *Bahraich* (various tahsils, Charda selected, 1932) the figures were analysed by agriculturists and non-agriculturists, and by castes.

The main results were in these tracts—

Agriculturists' holding—

		Upto 2½ acres.	2½ to 5 acres.	5 to 7½ acres.	7½ to 10. acres.	10 to 20. acres.	20 and over.	Average size of holding.
56 Sitapur ...	(a) Percentage of total number of cultivators.	21	35	25	9	7	3	5.8 acres.
	(b) Percentage of total area.	6	25	24	17	19	9	
74 Sultanpur ...	(a) Percentage of total number of cultivators.	42	32	12	5	5	4	4.3 acres.
	(b) Percentage of total area.	15	25	17	12	17	14	
51 Bahraich ...	(a) Percentage of total number of cultivators.	23	28	23	11	10	5	6.4 acres.
	(b) Percentage of total area.	5	11	22	14	21	18	

Non-agriculturists' holdings.

		Under 2½ acres.	Over 2½ acres.
Sitapur ...	(a) Percentage of total number of cultivators.	73	27
	(b) Percentage of total area.	37	73
Sultanpur ...	(a) Percentage of total number of cultivators.	100	nil
	(b) Percentage of total area.	100	nil
Bahraich ...	(a) Percentage of total number of cultivators.	98	2
	(b) Percentage of total area.	81	19

Analysis of holdings under 2½ acres.

In Sitapur ...	330 agriculturists	held	479 acres	(average 1.5 acres.)
In Sultanpur	127 non-agriculturists	"	123 "	(" 1.0 ")
	4,212 agriculturists	"	6,422 "	(" 1.5 ")
In Bahraich ...	2,905 non-agriculturists	"	1,610 "	(" 0.6 ")
	389 agriculturists	"	700 "	(" 1.8 ")
	*172 non-agriculturists	"	54 "	(" 0.3 ")

United Provinces Banking Enquiry Committee (1929).

(a) The report collected the statistics for the villages analysed by the settlement officers of Bara Banki, Rae Bareilly and Lucknow as follows :—

	Under 5 acres	5 to 10 acres	10 to 20 acres	20 acres and over
Number of tenants	15,516	5,743	1,657	263
Percentage of total number	68	24	7	1

(b) The report also gives the following figures of *indebted cultivators only* from enquiries in 1,389 villages in 43 districts by the district revenue staff :—

	Under 5 acres	5 to 10 acres	10 to 20 acres	20 acres and over
Number of tenants	14,156	7,614	3,990	1,790
Percentage of total number	51	28	14	17

(c) While cultivator's debt is a matter which Government are examining separately, some of the Committee's conclusions have a bearing on consideration of the size of holdings.

(i) The smaller the holding, the less the debt per acre; and the larger the holding the greater the debt per acre. This is indicated by the figures under (b) above, and the Settlement Officers making enquiries in the last 10 years have arrived at the same conclusion generally. The main reasons are the extent to which tenants with small holdings follow subsidiary occupations, which bring them some daily maintenance and reduce the necessity of borrowing, and also their lack of realizable assets as security for the lender.

(ii) Of all tenants, 46 per cent.* were found to be free of debt; 12 per cent. owed an amount equal to less than one year's rent; 10 per cent. owed an amount equal to one to two years' rent; 32 per cent. owed an amount equal to more than two years' rent.

(iii) The average size of indebted tenants' holdings was found to be 6.4 acres (c.f. the estimated average for all tenants, = 5½ acres).

(iv) Of tenants debts, it was estimated that—

40 per cent.	was owed to landlords;
11	“ “ “ other tenants;
39	“ “ “ other money-lenders;
7	“ “ “ Government and Co-operative Societies.

Census 1931.

Some details of the subsidiary occupations of agriculturists are relevant in considering size of holdings.

(a) Of non-cultivating landlords, 41 per cent. had subsidiary occupations.

Of cultivating landlords,	20	“	“	“
Of non-cultivating tenants,	21	“	“	“
Of cultivating tenants,	15	“	“	“

(b) The subsidiary occupations of this 15 per cent. of cultivating tenants were as follows :—

	Per cent.
(i) Blacksmiths, carpenters, barbers, oil pressers, washermen, potters and others	37
(ii) Agricultural and general labour	34
(iii) Trading and money lending	10

* According to the district revenue staff. According to Settlement Officers enquiries in six districts the figure was 61 per cent.

	Per cent.
(iv) Land owning	9
(v) Cattle raising and the like	5
(vi) Sub-letting	3
(vii) Public service	2

(c) Of non-agriculturists, 10 per cent. had agriculture as a subsidiary occupation.

(d) The Census Officer (Mr. Turner) estimated that 57 per cent. of the population equivalent to 5,780,000 families were dependent on the income derived from agriculture; that 5 per cent. of this total were mere allotment holders cultivating small plots of land in their spare time; and that if this class be excluded, the average size of holdings was 6.7 acres.

Value of produce of holding; cost of production, rent and revenue as proportions of the value of the produce.—(a) An attempt was made in 1926 to arrive at general conclusions for four divisions, in chapter 26 of the report for the Agricultural Commission. The calculation fill 8 closely-printed pages, with 15 tables. It was concluded that in 1924-25 rent represented 5 to 17 per cent. of the value of the outturn, and a cultivating proprietor's revenue from 1.5 to 2.5 per cent. of the value of the outturn. In both cases the percentage was lowest in Gorakhpur division, where average holdings are smallest.

(b) The United Provinces Banking Enquiry Committee re-calculated the figures and attempted to estimate what the "minimum economic holding" in the four divisions should be. They found that the average holding was well above the minimum except in Gorakhpur where it was slightly below it. As explanation for the latter fact, they cited figures showing that the percentage of cultivators with subsidiary occupations was higher in Gorakhpur than any where else, while the effects of emigration were seen in the fact that of money orders received in the province, 56 per cent. of the value was received in 15 districts, mostly eastern, from which emigration is known to be considerable (paragraphs 56-68). According to the Census Report, this figure rose in 1929 to 69 per cent.

(c) All estimates of produce-value, and of cost of production and of cultivators' surplus if any are extremely controversial. The outturn of crops varies from year to year, and nobody can give any proof of average outturn.

As to costs of production, the Imperial Council of Agricultural Research have spent some years and lakhs of rupees in research. It is believed that so far they have been unable to arrive at reliable conclusions of a practical nature.

(d) In recent years settlement officers of various districts have examined the relation of rent and revenue to the value of produce. These enquiries are, however, of value only for the particular tract concerned and only as results for an assumed holding of 'average' size and of 'average' soils and of 'average' rent, in the tract. Actually there is no such thing as a 'typical' holding; only a theoretical holding.

6. *Some tentative conclusions.*—Statistics previously furnished indicate that 99.3 per cent. of landlords pay less than Rs.1,000 land revenue, and 93.8 per cent. less than Rs.500 land revenue. It would be extremely difficult to differentiate between classes of small revenue-payers with any accuracy. It would be even more difficult to lay down any criterion of the 'minimum economic holding' for any district or tract, or even for village, within which the soil may vary from heavily manured irrigated vegetable-growing soil to the poorest *dhur* or *usar*. While the *area* in very small holdings is not large, the *number* of persons concerned is very large. Any attempt to lay down artificial limits to the size of holdings must seriously interfere, on the one hand, with the life of families who live both by cultivation and by other pursuits; on the other hand with the life of those who by habit or tradition live as large joint families, extending their cultivation as opportunity offers without splitting the family. To interfere with existing holdings would, it is submitted, at once create

District	Average size of holdings		Incidence of cash rents for 1935-36
	As calculated in 1928	As calculated in 1937	
PROVINCE OF AGRA			
			Per acre Rs.
Dehra Dun	?	?	..
Sahasranpur	10.4	6.8	..
Musaffarnagar	11.6	6.7	..
Meerut	8.7	6.0	..
Bulandshahr	7.9	6.0	..
Meerut Division			7.7
Aligarh	9.8	6.2	..
Muttra	10.8	8.7	..
Agra	7.6	6.4	..
Mainpuri	5.9	5.8	..
Etah	6.5	6.5	..
Agra Division			5.4
Bareilly	5.8	5.7	..
Bijnor	9.1	6.2	..
Budaun	5.7	6.8	..
Moradabad	6.7	7.2	..
Shahjahanpur	5.7	6.6	..
Pilibhit	6.5	6.9	..
Rohilkhand Division			4.8
Farrukhabad	5.8	5.7	..
Erawah	6.0	6.8	..
Gawnpore	8.8	7.8	..
Fatehpur	6.6	6.0	..
Allahabad	5.7	6.0	..
Allahabad Division			4.9
Banda	10.9	11.8	..
Hamirpur	11.9	12.6	..
Jhansi	11.7	11.7	..
Jalaun	12.4	12.9	..
Jhansi Division			2.2
Benares	4.6	5.0	..
Mirzapur	5.0	7.0	..
Jaunpur	3.5	4.2	..
Ghazipur	4.9	7.1	..
Balia	5.1	5.9	..
Benares Division			4.2
Gorakhpur	4.1	4.9	..
Basti	4.0	4.8	..
Asamgarh	3.4	4.5	..
Gorakhpur Division			4.0
Naini Tal Government Estates .. .. .	..	..	3.0
Almora .. .. .	..	..	..
Garhwal .. .. .	..	..	..
Kumaun Division			?
Province of Agra			4.7
• OUDH			
Lucknow	4.9	4.6	..
Unao	4.7	5.0	..
Rae Barail	4.5	4.0	..
Sitapur	6.8	6.1	..
Hardoi	5.6	6.4	..
Kheri	6.8	7.3	..
Lucknow Division			5.8
Fyzabad	4.2	4.4	..
Gonda	5.8	5.7	..
Bahraich	6.6	6.1	..
Sultanpur	4.2	4.0	..
Parbatgarh	4.0	4.0	..
Bara Banki	4.8	4.5	..
Fyzabad Division			5.5
Oudh			5.8
UNITED PROVINCES			5.0

STATISTICS AND ESTIMATES RELATING TO ZAMINDARS.

48/

The total number of revenue-payers was reported in 1935 as 12,27,258 (Agra 10,81,882; Oudh, 1,45,376). Various attempts have been made to classify revenue-payers according to the revenue paid. But no estimate is reliable, because land revenue is based on the land not on the individual, and the same individual often appears many times in the khewat, or in different ~~parts~~ parts of the khewat, or in several khewats.

An attempt to arrive at precise figures would involve prolonged enquiries. As transfers of proprietary rights go on all the time, the results would not be of much value. However, for the sake of a general if inaccurate picture, the following estimate is given:-

(See attached)

<u>Class</u>	<u>Number</u>	<u>Land Revenue demand without remissions.</u>	<u>Remarks.</u>
		Rs	
<u>Total revenue-payers</u>	<u>12,27,258</u>	<u>712,00,000</u>	
<u>Kumaon</u>	1,02,000	6,00,000	75 % of the land is cultivated by <u>hissaders</u> under special hill tenures
<u>Plains: paying -</u>			
(a) Rs 24 or less-	8,00,000	180,00,000	Average of less than Rs 18 per head; based on estimates in 1926.
(b) Rs 24 - Rs 100	2,08,000		
(c) Rs 101 - Rs 250	73,000	85,00,000	These figures are only conjectural, and are calculated on the assumption that the figures under (a) (b) (h) and (i) are roughly true. It will be seen that, of 11,25,000 revenue-payers in the plains, all except some 8000 odd pay less than Rs 1000 land revenue.
(d) Rs 251 - Rs 500	24,000		
(e) Rs 501 - Rs 1000	11,000		
(f) Rs 1001 - Rs 2500	6,000		
(g) Rs 2501 - Rs 5000	1,374		
(h) Rs 5001 - Rs 10,000	469	32,00,000	Approximate estimate of 1937
(i) Rs 10001 and over	390	160,00,000	do
Total-	<u>12,27,223</u>	<u>712,00,000</u>	180,00,000. 90 Lakhs of acres.

FURTHER STATISTICS RELATING TO LAND REVENUE.

In districts coming under settlement the 'forecast' gives figures of certain classes of revenue-payers. They are as follows.

District	Number paying revenue of -					
	Rs 100 or less	Rs 101 -Rs 500	Rs 501 -Rs 1000	Rs 1001 to Rs 5000	Rs 5000 or more	Total revenue payers
	5157	441	64	53	21	5736
Percentage of total	89.9	7.6	1.1	1.4		100
	8864	798	142	57	27	9888
Percentage of total	89.6	8.1	1.4	0.9		100
	56,611	3,467	650	190	41	60,969
Percentage of total	92.9	5.9	1.1	0.04		100
	15,884	3779	1077	199	29	20,968
Percentage of total	75.8	18.0	5.1	1.1		100
DISTRICTS	10,08,000	97,000	11,000	7374	859	1,09,033
Percentage of total-	89.6	8.7	1.0	0.7		100
per district- (45)	22,400	2,155	244	164	19	25,000

III. Comparative incidence of land revenue, major provinces.

Province.	Cultivated area.	Land Revenue (without remissions).	Temporarily settled area.	Permanent-ly settled area.	Percentage of permanently settled area to total.
	Acres.	Rs. Lakhs.	Rs. Per acre.	Rs. Per acre.	Per cent.
Uttar Pradesh	32,560,000	738	2.3	0.7	25
Bihar	24,480,000	483	1.9	--	--
Madhya Pradesh	25,000,000	291	2.2	0.6	88
Madhya Pradesh	25,770,000	465	1.5 ^(a)	--	--
Central Province	21,550,000	233	1.1	--	--
Uttar Pradesh & Bihar	24,200,000	164	?	0.7	81
Punjab	35,030,000	711	2.1 ^(b)	1.5	11

(a) 1.4 after remissions for slump (average).

(b) 1.7 " " " "

Year	1 Sir, Khud- kasht, mortgagees and theke- dars culti- vation. (i.e. Proprietors)	2 Acres	3 Underpro- prietary, Exproprie- tary, occu- pancy and other ten- ants with a heritable right.	4 Acres	5 Statutory & heirs of statutory tenants.	6 Acres	7 Others (non-occu- pancy, grovehol- ders, rent- free, etc.)	8 Total Acres
1900		60,30,000	97,30,000	-		113,70,000		271,30,000
1927		57,90,000	156,50,000	60,10,000		11,40,000		285,90,000
1936		62,00,000	145,00,000	70,90,000		15,90,000		293,80,000

1900	11,20,000	5,10,000	-		75,50,000	91,80,000
1927	11,40,000	6,40,000	70,40,000		10,30,000	98,50,000
1936	11,30,000	6,80,000	69,40,000		11,80,000	99,30,000

U.P.

1900	71,50,000	102,40,000	-		189,20,000	363,10,000
1927	69,30,000	162,90,000	130,50,000		21,70,000	384,40,000
1936	73,30,000	151,80,000	140,30,000		27,70,000	393,10,000

Percentage of total holdings under each head
Per cent per cent per cent per cent per cent

1900	22.2	35.9	-		41.9	100
1927	20.2	54.8	21.0		4.0	100
1936	21.1	49.0	23.7		6.2	100

1900	12.2	5.6	-		82.2	100
1927	11.6	6.5	71.4		10.5	100
1936	11.4	6.8	69.9		11.9	100

U.P.

1900	19.7	28.2	-		52.1	100
1927	18.0	42.4	33.9		5.7	100
1936	18.7	38.6	35.7		7.0	100

RENTAL STATISTICS

Year	Total area of all holdings	Sir, khudkash, rent free, etc.	Total area of tenants holdings	Area in which rent is <i>hita ta-ta</i> <i>Rent unknown</i>	Cash-rented		Grain-rented		Reported <i>gross</i> demand <i>of 25%</i>	Total known rental demand	Incidence of cash rents per acre	Valuation of areas in columns 3 and 4 at incidence in column 12	Apparent gross assets (columns 11+12)	Land revenue demand
					Area	Rent	Area	Reported value of rent						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Acres	Acres	Acres	Acres	Acres	Rs.	Acres	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1926-27	885,00,000	7,400,000	811,00,000	960,000	287,00,000	17,70,00,000	1,440,000	86,00,000	58,00,000	19,09,00,000	6.0	5,01,60,000	24,00,00,000	6,92,00
1927-28	387,00,000	7,400,000	818,00,000	1,050,000	288,00,000	17,86,00,000	1,450,000	70,00,000	49,00,000	19,05,00,000	6.2	5,39,90,000	24,28,90,000	6,91,00
1928-29	868,00,000	7,450,000	818,50,000	1,088,000	289,00,000	18,00,00,000	1,361,000	68,00,000	68,00,000	19,16,00,000	6.2	5,39,86,000	24,45,86,000	6,94,00
1929-30	889,00,000	7,480,000	814,20,000	1,147,000	290,00,000	18,18,00,000	1,376,000	68,00,000	47,00,000	19,28,00,000	6.3	5,48,50,000	24,66,50,000	7,08,00
1930-31	890,00,000	7,500,000	815,00,000	1,212,000	290,50,000	18,26,00,000	1,382,000	40,00,000	45,00,000	19,11,00,000	6.3	5,48,10,000	24,59,00,000	7,08,00
1931-32	890,00,000	7,600,000	814,00,000	1,312,000	288,00,000	18,78,00,000	1,287,000	87,00,000	41,00,000	14,66,00,000	4.8	4,27,78,000	18,88,78,000	5,96,62
1932-33	891,00,000	7,700,000	814,00,000	1,388,000	287,50,000	18,81,00,000	1,286,000	42,00,000	44,00,000	14,67,00,000	4.9	4,46,10,000	19,12,10,000	5,96,98
1933-34	892,00,000	7,700,000	815,00,000	1,445,000	288,00,000	18,90,00,000	1,282,000	88,00,000	87,00,000	14,65,00,000	4.8	4,89,00,000	19,04,00,000	5,98,00
1934-35	898,00,000	7,700,000	818,00,000	1,522,000	288,00,000	14,21,00,000	1,278,000	41,00,000	45,00,000	15,07,00,000	4.9	4,51,88,000	19,58,88,000	6,00,00
1935-36	898,00,000	7,700,000	816,00,000	1,586,000	287,50,000	14,40,00,000	1,278,000	48,00,000	89,00,000	15,22,00,000	5.0	4,64,80,000	19,86,00,000	6,01,00
Compara														
1899-1900	86,800,000	8,000,000	283,00,000	Not known	255,00,000	11,29,00,000	2,504,000	87,00,000	26,00,000	12,86,00,000	4.4	2,42,00,000	14,78,00,000	6,19,00

NOTE.—Slump remissions have been taken into account, but not remissions for agricultural calamities.

Note for Government on rural indebtedness by the Hon'ble Sir JWALA P. SRIVASTAVA, Minister of Finance and Industries, United Provinces

THE problem of rural indebtedness is one of the greatest importance. The Banking Inquiry Committee went into it thoroughly and latterly Mr. Darling has devoted considerable time and labour to it. His book "The Punjab Peasant in Prosperity and Debt" will repay perusal. So far as the United Provinces are concerned, the peasant has to face unusual odds. He must borrow to secure his crop. Secondly, he must borrow to support more persons than his earning can support. His caste and his religion compel him to borrow a third time to meet the cost of customary festival or customary ceremony. As the debt grows repayment of it becomes more difficult and to use the words of the Banking Inquiry Committee "at last some calamity comes upon him, repayment becomes impossible and he sinks into a state of chronic indebtedness from which death alone can release him." Economic freedom is a condition precedent to progress and to the Indian cultivator no progress is possible till the power of the money-lender is broken.

Economic condition of tenant cultivator

In a valuable note recently prepared by Mr. Kharegat he has given some striking figures showing the economic condition of the average tenant cultivator. There are about 55 lakhs of tenant cultivators in the province. Each of them has a holding of 5½ acres of which half acre is fallow or unculturable and 5 acres are culturable, but he has one acre of *do fasli* cultivation and so the area which he cultivates every year is acres. The value of the agricultural produce raised by him every year varies from Rs.150 to Rs.180 or is roughly about Rs.165. Out of this income he pays a rent of Rs.5 per acre of holding, i.e. Rs.27-8 in all a year. The debt of tenant cultivators has been variously estimated as from 30 to 50 crores. As some 46 per cent. of tenants are debt free, Mr. Kharegat estimates that this debt is divided between 30 lakhs of tenant farmers and so the debt of each indebted tenant is assumed to be Rs.100 to Rs.150.

The Banking Inquiry Committee found that of the total debt of the province some 30 per cent. was productive, 34 per cent. was unavoidable being taken by cultivators for maintenance, etc. till their crops were ready, 36 per cent. was unproductive and borrowed owing to social obligations. The classification may or may not be correct, but it would appear that roughly two-thirds of the debt is for agricultural purposes and one-third for discharging social obligations. The Banking Inquiry Committee gives further figures in regard to those from whom the debt has been borrowed. Nearly 43 per cent. of the total debt is owed to landlords, 14 per cent. to other tenants, 39 per cent. to money-lenders and 7 per cent. to Government and Co-operative Societies. The Banking Inquiry Committee gives yet another interesting fact in connexion with debt. They have computed that 46 per cent. of tenants are debt free, 12 per cent. indebted for less than one year's rent, 10 per cent. for between one and two years' rent, and 32 per cent. for over two years' rent; thus 17½ lakhs of cultivators seem to be comparatively speaking, heavily in debt and it is their problem that has to be tackled or roughly 36,500 tenants per district.

The Banking Inquiry Committee's report

The Reserve Bank in compliance of the requirements of section 55 of the Reserve Bank Act recently made a report to the Governor-General in Council on the question of the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer connexion between agricultural enterprise and the operations of the Bank. They have not yet been able to complete their inquiry, but have recently submitted a brief report giving their broad preliminary views on the subject. This report is very interesting and has just

The Reserve Bank report

been dealt with in the Finance Department of this Government. According to the report, the requirements of the cultivator are of a twofold nature:—

- (1) Long-term credit for purchase of land, provision of the more expensive durable improvements and the repayment of past debts;
- (2) Short-term credit for the expenses of production, including the cost of maintenance of the farmer and his family until the crops are sold, and the marketing of crops or the holding of crops while in transit or awaiting sale.

The report has made certain valuable suggestions. It recommends *inter alia* that conciliation boards should be set up as in the Central Provinces. These boards would endeavour to get the debts reduced to a level which they consider to be within the capacity of the debtors to pay. The report suggests that some regular machinery should then be provided whereby the assessed debts could be recovered in small instalments with provision for the levy of additional collections in good years. For those whose debts cannot be reduced by voluntary agreement within their paying capacity and whose assets are insufficient to cover the debts it is suggested that some simple rural insolvency legislation might be considered like the Bengal Agricultural Debts Act, 1936. The report in dealing with measures for preventing a relapse into debt once provision has been made for the liquidation of existing debt affirms that education is the only real and lasting solution but realizes that this will take a long time. Meanwhile educative propaganda and legislation should be resorted to. It suggests that legislation should be aimed at preventing the cultivator from—

- (a) borrowing in future more than a suitable multiple of the land revenue or rent,
- (b) borrowing from more than one source and
- (c) bringing money-lenders within the purview of enactments prohibiting or restricting the transfer of agricultural land.

Informal conference at Naini Tal in May, 1937

In order to discuss the problem of agricultural indebtedness in the United Provinces an informal conference was held at Naini Tal on May 24, 1937. This conference was attended by Mr. Rangaswami (Managing Editor of *Indian Finance*), Messrs. Mudie, Kharegat, Waugh, Vishnu Sahay, Teyen, Turner and myself. The conclusions that were arrived at were as follows:—

- (i) Attention should now be concentrated on dealing with debts of tenants, no further measures being adopted for dealing with landlords' debts.
- (ii) Conciliation boards or officers should be appointed for scaling down the debts of tenants.
- (iii) An agricultural credit bank should be established in the province for advancing money for the cultivation of crops and on the security of produce deposited with it.
- (iv) Establishment of conciliation boards should go hand in hand with the starting of work by the bank, i.e. there should be no attempt at conciliation except where the bank is functioning; nor should the bank start work in areas where the debts of tenants have not been conciliated.

A full note on the discussion is appended hereto.

Discussion with Sir James Taylor of the Reserve Bank

The matter was discussed at length with Sir James Taylor in Bombay and he expressed the following views:—

- (1) Egypt is in a very favourable position for such activities, as cultivation in that country is confined practically to one crop, namely cotton, and their cotton is of a first class quality, very even quality and readily marketable. Further, there is very little probability of crop

failure in Egypt and, lastly, the Egyptian Government are closely concerned with the marketing of the produce. Sir James pointed out that this favourable position does not hold good in the case of the United Provinces. Firstly, the United Provinces organization would be handling many varieties of crops, these very greatly in quality and crops such as they are might easily be tampered with by dishonest cultivators by adding water, earth, etc. This province is also faced with the probability of crop failure, which would of course complicate matters considerably for the proposed bank. Sir James felt that the proposed method is not the correct method of approach to the problem. In his opinion the first thing to do is to organize the marketing of crops and to arrange for standardization of the different crops. He was of opinion that this could not be done for all crops at once but that Government should take up one crop at a time starting, say, with wheat. Sir James thought that this could only be done through co-operative societies which should arrange for their own godowns and organization for dealing with such matters as grading, etc. Sir James stated that if grading and marketing were first organized finance would follow suit, and he thought that once co-operative societies had put their house in order and made satisfactory arrangements about their bad debts, they should in future be able to arrange for short-term finance for agriculturists.

- (2) As regards conciliation of debt Sir James stated that in his opinion it is desirable from a financial point of view that conciliation of debt and making provision for future finance for agriculturists should be taken up together and the only reason which he could see for scaling down debts before making provision for financing the remaining debts and future requirements would be a political one.
- (3) Another difficulty which Sir James mentioned is that once the crop is deposited in the godown it would be difficult for the cultivator to arrange for sale and further it would be difficult for the bank themselves to sell. The cultivator could not sell on sample unless the bank gave him possession of the crops and once possession had been given to the cultivator the bank would have lost their lien on the crop.
- (4) Sir James also pointed out that these proposals would virtually eliminate the village *bania* and he felt that the time has not come for this. The village *bania* is on the spot and knows everything about each of his clients and it would mean that the proposed bank would have to keep a very large staff in order to replace efficiently the *bania*. The *bania* is of course the pivot not only for the cultivator's credit but also for the sale of the produce.

In short, Sir James Taylor did not recommend this Government proceeding with Mr. Mudie's scheme in the form in which it was at present proposed. He recommends that the question of grading and marketing in the case of a selected crop or crops should be taken up first and that this should be done through co-operative societies and not by a bank such as is proposed. He also deprecates the scaling down of debts before some provision for cheap credit for agriculturists is made. In fact Sir James Taylor felt pretty sure that unless the two items are carried out together tenants will rapidly get into debt as badly as ever to the same creditors and it was for this reason that he stated that to effect conciliation without making any provision for financing the reduced debts and future needs would do no permanent good, though such a course might be politically expedient, even if the latter part of the proposal could not be started.

Sir Digby
Drake-Brockman's
scheme

Sir Digby Drake-Brockman has recently formulated certain proposals which aim at—

- (1) voluntary liquidation of the debts of agriculturists, artisans and labourers, and
- (2) creation of a provincial marketing and banking corporation for financing agriculturists.

The former proposes the constitution of conciliation boards. The second proposal suggests that a corporation should be floated which would—

- (a) undertake repayment of the debts of its agricultural clients and subsequently recover the amounts from them,
- (b) finance agricultural and domestic requirements of its clients *without security* to the extent of their "credit" which is defined as a multiple (to be prescribed by rule) of the average net profits of their holdings plus the ascertained value of any unencumbered immovable property, and also finance *on security* up to a prescribed percentage,
- (c) open centres for collecting, grading and selling produce by public auctions or otherwise.

It will be seen that in addition to what is proposed in Mr. Mudie's scheme the bank is to assume responsibility for the tenants' debts and also to make advances for house building. The main difference between Mr. Mudie's scheme and that of Sir Digby Drake-Brockman is that advances will be made not against the crops but on the basis of the credit worthiness of each cultivator. In Sir Digby's scheme there is no need for storage godowns, grading, etc. Sir Digby claims that his proposals seek—

- (i) to provide much needed marketing facilities for all primary producers of agricultural produce so that they may obtain the best value for their produce,
- (ii) to encourage the banking habit among all and sundry,
- (iii) to liquidate the debts of agriculturist clients between whom and the general public a distinction is drawn, provided that the debts have been reduced to manageable proportion by a wide measure of composition,
- (iv) to finance the ordinary needs, including domestic requirements and rental demands of its clients, and
- (v) to finance the improvement of housing conditions which Sir Digby regards as disgraceful and without any improvement in which he does not believe any substantial improvement will be achieved in social conditions.

Sir Digby attaches considerable importance to the debts which every cultivator has to contract in order to satisfy his *izzat* in the matter of social ceremonies like the marriage of daughters or the funeral of father or mother. He thinks any arrangement for the provision of credit to the cultivator which will not take into account these social needs is bound to fail and accordingly his scheme for promoting the banking habit among the cultivators and making them loans on the basis of their credit worthiness is of more than passing interest. He rightly lays stress on the imposition on restrictions of the bank client borrowing from various sources. He would impose severe penalty on any client who would approach money-lenders.

Existing debt
legislation

The Temporary Regulation of Execution Act enabled petty cultivators to obtain a reduction of 75—25 per cent. of the decreed debt by cash-down payment of 25 per cent. This Act has expired and very few debtors took advantage of it.

The Regulation of Sales Act gave the creditor the option of postponing the execution of a pending decree or of taking the land or its value at pre-slump rates in satisfaction of his decree. At the time the Act was passed execution of decrees against land had been stopped by the local Government for the past three years, and decrees were awaiting execution with Collectors against land to the extent of about seven crores. The details are not available, but it is believed that the creditors accepted satisfaction at pre-slump rates probably to the extent of two to three crores under this Act and that, where the creditors elected to postpone execution until the Act expired, a majority of debtors made application under the Encumbered Estates Act. The Regulation of Sales Act has also expired.

The Encumbered Estates Act allowed a landlord debtor to apply to Special Civil Courts for the settlement of his debts. Immediately on his doing so he obtains a moratorium against all executions, and the Special Civil Judge arranges the debts in order of priority and if necessary restricts each individual debt by the principle of *damdupat*. He then sends the case to the Collector for liquidation. The Collector transfers part of the property to the creditors, leaving enough for the debtor to live on while paying off the remainder of the debt by instalments which generally should not exceed 20 years with interest at 4½ per cent. The debtor pays these instalments to Government who will meanwhile have paid off the creditors with transferable bonds bearing interest at 3½ per cent.

Liquidation has not yet begun, as proceedings in the Civil Courts are going on very slowly. The time for applying under this Act has expired. There were roughly 32,000 applications, the average debt being Rs.7,500. It appears probable that something like 10,000 applications have been dismissed in default or for failure to deposit costs. Default may mean settlement out of court. While this Act gives a temporary moratorium to the debtor pending the decision of claims in the Civil Court, it is likely to prove ruinous to him. The cost of the publication of notices prescribed by this legislation is very heavy, interest runs on at 4½ per cent. during the hearing of the suit, and it is roughly estimated that on the average a debtor will lose 2/5ths of his property and have to live on one-third of the profits of the remaining 3/5ths of the property for 20 years.

The Agriculturists' Relief Act is a permanent Act. Its provisions are complicated, but roughly speaking its main clauses are as follows :—

In passing a decree against an agriculturist the Civil Court must fix instalments, which may extend to four years in the case of petty agriculturists and 15 years in the case of bigger landlords. A debtor can apply for the fixing of instalments in the case of decrees already passed. The provisions for limiting the rates of interest both on decrees past and future and on fresh loans are most unnecessarily complicated; but roughly speaking an ordinary cultivator seeking an ordinary loan from a money-lender must not be made to pay more than six per cent. or else the transaction is illegal and the money cannot be recovered. This provision is futile, because the money-lender can easily get round it by putting down a fictitious amount as borrowed, and in fact this practice is very common. There is no provision for the registration of money-lenders as there is in the Punjab, but they are compelled under the Act to keep accounts in a prescribed form, and to give the debtor a statement of account every year; and they are penalised if the account is proved to be wrong. There is also provision in this Act intended to make it easier for mortgagors to redeem mortgages of land.

The Usurious Loans Act has been amended to make it impossible for a money-lender to obtain a decree based on a rate of interest higher than 12 per cent. in the case of secured loans and 24 per cent. in the case of unsecured loans.

The High Court and Chief Court have recently been asked to be good enough to obtain figures showing the use made of the Agriculturists' Relief Act and the Encumbered Estates Act. A step taken by Government every harvest since the

spring of 1932 is to exempt one-third of a judgment-debtors' crop from liability to attachment or sale in execution of a decree, and according to Commissioners and District Officers this step has regularly proved to be of great value.

Conciliation of debts

The idea of a conciliation board was first taken up by this Government in 1933 but was then dropped as it seemed doubtful if it could function effectively, but it may be safely assumed that there is now a large degree of agreement as to its necessity. It is argued that though compulsory conciliation disturbs the sanctity of the contract, the higher social importance of the prosperity of the agriculturist necessitates such interference. The sanctity of contract is merely a legal sanctity created by an act of Legislature and is not a moral or spiritual sanctity. The rise in the value of money is one obvious argument in support of compulsory conciliation. Another objection that is raised against measures of conciliation is that they will result in undue restriction of credit. The Central Provinces Government have stated that conciliation operations in that province have not unduly restricted credit. Secondly, if compulsory conciliation goes hand in hand with co-operative credit there need be no fear that any agriculturist will not be able to sow his crops for lack of necessary current finance.

The most talked of scheme of conciliation is the Bhavanagar scheme. This is a small State of less than 3,000 square miles with a population of half a million only. The tenants have permanent and heritable but not transferable rights in the land. The Bhavanagar Government's plan for liquidating the debts contemplated the voluntary co-operation of the *sahukars* and the tenants. The Debt Conciliation Committee, which was entrusted with this duty, started work in April, 1930 and after a preliminary rebuff from the money-lenders in the first village which they visited, the Committee carried conviction to both parties and by March 1934 all the villages in the State had come within their operations. The success of the Bhavanagar remedy, it must be pointed out, lies largely in the fact that the sum to be paid is advanced originally by the Government, the advances being repayable in instalments by the addition of 4 per cent. to the annual revenue. The basic idea has a close family resemblance to Sir Daniel Hamilton's drive against the *mahajans* in his colony at Gosaba when the co-operative-cum-zamindari machinery paid them off and realized the money thus paid in instalments. In Bhavanagar when the tenants acknowledge their debts and the *sahukars* their loans, settlement is arranged by the Committee on the following terms:—

- (1) The sum to be paid by an individual debtor must not exceed an amount equal to three times the annual assessment payable by the debtor. (Compare this with four times the repaying capacity suggested by Mr. Mudie).
- (2) The total amount to be paid by a group of neighbouring villages must not exceed one-quarter of the total outstanding debts of the peasants. It is remarkable that the nominal debts in the money-lenders books were settled by payments amounting to less than a quarter, totalling Rs.20 lakhs annually. In the estimate of the Debt Conciliation Committee about half the debts were either fictitious or usurious and were wiped off. The State now starts with a clean slate on a programme of rural reconstruction on a village community basis. As regards future lending by *sahukars* the Kheduts Protection Act in Bhavanagar fixes a maximum rate of 12 per cent. as interest and gives the courts the power of examining accounts of transactions.

The C. P. Debt Conciliation Act

In 1933 under the Central Provinces Debt Conciliation Act, conciliation boards were set up. Though described in the Act as voluntary, in practice the process of conciliation is not entirely so. The boards constituted under it have

statutory existence, and are invested with certain powers of the Civil Court. They are not invested with any powers to compel a creditor to relinquish any portion of his claim, but if a creditor refuses a fair and reasonable offer, the Act directs that he shall be deprived of his costs in subsequent proceedings as well as of interest in excess of simple interest at 6 per cent. from the date of the Board's certificate to that effect. The recovery of claims of creditors who agree to conciliation also receives precedence. These two provisions may be said to be the only elements of indirect compulsion in the Act. The Boards are empowered to call upon all creditors to submit a true statement of their claims, failing which the debts due to them are deemed to have been duly discharged for all purposes. The creditors have also to produce all documents in support of their debts and the document which is not so produced becomes inadmissible in evidence against the debtor. The Act also provides that if the creditors accept a fair offer made by the Board, they need not go to the Civil Court for recovering the instalments fixed, as they are to be recovered by the Deputy Commissioner on their behalf as arrears of land revenue.

The scope of the Act is restricted to proprietors, cultivators and tenants of average status. Agriculturists whose total indebtedness does not exceed Rs.150 generally and in particular areas to which this provision has been specially applied Rs.50 are excluded from the purview of the Board; while those whose indebtedness exceeds Rs.50,000 can apply to the Board only in areas where the local Government has increased this limit. Debts which can be conciliated include rental arrears and the dues of co-operative societies, but not land revenue or sums recoverable as land revenue.

The procedure outlined in the Act is a very simple one and lawyers have been deliberately prohibited from appearing before the Boards. Parties are, however, allowed to be represented by agents authorized in writing. Both debtors and creditors can apply to the Board, but the application has to mention full details of the liabilities and assets of the debtor. On receipt of an application, the applicant is examined, and if the Board is satisfied that it is desirable to effect a settlement, notices are issued to all creditors to submit an account of the debt owed to them. On the day fixed for enquiry, the claims are scrutinized, the debtors' income is determined, and efforts are then made to reduce the debts so as to bring them within the paying capacity of the debtor.

The compounded debt is spread over a certain number of years, generally 10 to 15, and instalments are fixed at amounts which the debtor can be expected to repay from his annual income, after making due allowance for the cost of his maintenance and other obligatory commitments. If the creditors to whom 40 per cent. of the debts are owing agree to the proposed settlement, an agreement is signed embodying the terms and is registered forthwith under the Indian Registration Act.

If any creditor refuses to accept the Board's proposals, the Board may grant the debtor a certificate in respect of that creditor's debt, and the consequences of such a certificate have been stated already. It is also provided that a decree obtained for a debt in respect of which a certificate has been granted shall not be executed until all the amounts recorded as payable under the agreement with the other creditors have been paid or the agreement has otherwise ceased to subsist. This restriction directing postponement of decrees does not apply to secured creditors over whom the Act does not provide any effective control.

In order to remove the present hesitancy on the part of secured creditors and to facilitate the conciliation of secured debts on a larger scale, the Act has been amended so as to provide that if a secured creditor joins an agreement his existing lien or charge on the immovable property of the debtor shall subsist until the amount due to him has been paid or the property has been sold for the satisfaction

of such debt. In cases in which the debts are too heavy to be liquidated from surplus annual income in a reasonable number of years, one way out of the difficulty is to satisfy a portion of the compounded debt by the transfer of a part of the property. Strictly speaking, such settlements are not within the purview of the Act, but there is no bar to the Board using its good offices to bring them about, and in practice they are made whenever possible.

The Bengal
Debt Conciliation
Act

The Bengal Act is also on the lines of the Central Provinces Debt Conciliation Act. If a creditor fails to comply with a notice to appear, the Conciliation Board can pass an order that the debtor's statement of the debt due from him to that creditor will be the amount declared payable. In the Central Provinces non-compliance with the notice results in a declaration that the debt is discharged. In both Central Provinces and Bengal if creditors to whom not less than 40 per cent. of the total debts are owing make an amicable settlement, such settlement will be accepted. In both Bengal and Central Provinces the amounts declared as due can be recovered as arrears of land revenue. The penalties in both Bengal and Central Provinces to those creditors who do not accept the offer approved by the Board are depriving of costs in a subsequent Civil Suit, and the restriction of interest to simple interest at 6 per cent. There are special provisions for arrears of rent. The principal of any debt due in respect of arrears of rent may not be reduced. When the Board is satisfied that the debts of a debtor after reduction cannot be repaid within 20 years, he may be declared an insolvent and may be ordered to pay up a sum which he can pay within 20 years. The Board may also for recorded reasons order the sale of the insolvent's property.

The results of the Bengal Act of 1935 are not yet known. According to a review of the working of one of the Debt Conciliation Boards in the Central Provinces, namely the Khorai Debt Conciliation Board, in a year and a half about 2,800 applications involving debts amounting to 30 lakhs were received. In 900 cases certificates to debtors that creditors had unreasonably refused settlement with its attendant penalties were given. In 1,700 cases debts aggregating 16 lakhs were moderated, there being a 50 per cent. remission of the demand. There is a weakness in the Central Provinces Act relating to secured debts. The mortgagee is at liberty to proceed against the property. In the review just quoted it is reported that even in regard to secured debts 20 per cent. came under agreement and also there was a certain amount of private conciliation under moral pressure.

The Punjab Re-
lief of Indebted-
ness Act

The Punjab have a Regulation of Accounts Act of 1930 which provides for the keeping of accounts by the creditors and the supply of a statement for six months to individual debtors. In 1935 they passed a Relief of Indebtedness Act. It modifies the provincial Insolvency Act by reducing the minimum assets of an insolvent to Rs.250 from Rs.500 and also by raising the jurisdiction for the summary administration of the debtor's property from Rs.5,000 to Rs.15,000. They have also modified their Usurious Loans Act by making compound interest illegal. Regarding Debt Conciliation Boards the Punjab Act further lays down that if a creditor does not submit a statement of debt after receiving notice, the debt shall be deemed to have been duly discharged.

Madras Debt
Conciliation Act,
1936

This Act also contemplates Boards examining individual cases and moderating the demand. Rent is excluded from the category of debts. The effects are not known.

Marketing

Something must be done to develop marketing. The cultivator loses a great deal in the process of selling his produce; the money-lender, the *arahaia* and the wholesale purchaser derive a good deal of unjust profit out of it. There is a general mistaken notion that marketing implies the holding up of produce in order to realize a better price. As Mr. Kharegat has pointed out, this is not marketing but speculation and must be definitely discouraged; it may result in profit but it

may also result in loss and statistics show that the chances are even both ways. If marketing is to be taken up systematically, the first step must be to improve the quality of the supply, i.e. to arrange that the grain is reasonably clean and free from impurities and, if possible, also of a uniform nature. If this improvement of the quality is adopted it is clear that the problem must be tackled in the village and not at the *mandi*. The villager must be taught to clean his grain and see that it is of a reasonably uniform quality. Some staff will be needed to train him as regards the methods to be adopted and the standards required, but once he gets a higher price he will begin to train himself and the staff will have to supervise and check that the work has been properly done. A good deal of useful information on the question of marketing is contained in the report on wheat recently issued by the Government of India. During our recent visit to Bombay Mr. Turner at my suggestion had a talk with Mr. Damala of Messrs. Ralli Brothers, Bombay. On the general question of trade in grain from the United Provinces Mr. Damala explained that the export trade overseas from the Punjab and the United Provinces had dwindled in recent years to practically nothing, although when world prices rise to a satisfactory level some export trade does begin but this disappears again as soon as world prices fall. Messrs. Ralli Brothers, have at present practically no export business from the United Provinces at all. Mr. Damala added that what export trade there is from the United Provinces is merely inter-provincial and is done entirely by small traders, *arabattias*, etc. Mr. Damala further pointed out the grave difficulties that have to be faced in the matter of grading and disposal of crops of such various types as are grown in the United Provinces. The cessation of the export trade is due very largely to this factor.

My recommendations

If the Government decides seriously to tackle the question of agricultural indebtedness and to lose no time in bringing forward its definite proposals I would suggest that a Bill should be drafted immediately on the lines of the Central Provinces Debt Conciliation Act. There appears to me no need for setting up a committee to go into this matter. The Central Provinces Act has been working satisfactorily and although some of the provisions may have to be varied to suit the conditions in the United Provinces yet these are not of such great importance as to warrant the rather lengthy procedure of an inquiry by a committee. The main point to be determined by the Cabinet is whether conciliation should be voluntary or compulsory. I am not in favour of compulsion. The chief danger of compulsion seems to be that if the Board or officers are hard on the creditor credit may dry up and moreover there are greater chances of dishonesty. Composition which is entirely voluntary may however prove abortive. I am therefore of the opinion that conciliation with some penalties for non-acceptance of the amount settled is the only solution. These penalties may be—

Conciliation of
debt.

- (i) no cost,
- (ii) no future interest (the Central Provinces and Bengal allow 6 per cent. but this may be eliminated),
- (iii) consolidated debts to have priority for recovery over others.

Mr. Kharegat suggests a further provision to the effect that the civil court may not grant a decree for more than, say 30 or 40 per cent. above the offer of the conciliation board or officer. This will serve as a deterrent to the money-lender who may be inclined to refuse the offer of the conciliation board. The main inherent defect in all conciliation boards is that unless the cultivator is prepared to break away from the money-lender (and this can only be done when he is sure of obtaining his requirements of money from elsewhere) he may be prevented from applying for the composition of his debts or the decision of the conciliation board may remain merely a paper decision and the cultivator may never be able to

extricate himself from the clutches of the money-lender. It is well-known that a *sabardast* moneylender takes no notice of even a court decree and extorts from his clients whatever amounts he considers himself entitled to. However there can be no remedy to this so long as a really suitable credit machinery is not available. The principle to be adopted for deciding the amount which would be paid might be the same as in the Central Provinces, viz. the paying capacity of the debtor and the compounded debt may be spread over ten years. Arrears of rent should be left out of the scope of such conciliation. The agency to be employed for the purpose of effecting conciliation should not be so cumbersome as in the Central Provinces. It may also be considered desirable to make the proposed enactment applicable to every cultivator irrespective of the amount of his debt. If these points are cleared up, it would be an easy matter for the Secretariat to draw up a Bill which can be presented to the next session of the Council.

Provision of Credit

(2) Considering the difficulties which have been pointed out in giving effect to Mr. Mudie's proposals and which would also apply to Sir Digby Drake-Brockman's proposals, I would recommend that a committee should be set up to go into the entire question of agricultural credit and make considered recommendations to Government about a scheme which would be free from the defects of Mr. Mudie's scheme. This committee may be of a non-political nature and should consist largely of experts and Government officials who know something about the subject. Suggestions regarding personnel can be made if required.

Pending the settlement of the question of establishing a comprehensive system of credit for the cultivators, steps should be taken to reform the existing agencies of rural credit. Co-operative societies should be established in as many areas as possible for paying off the consolidated amounts and supplying future needs. The societies may have to take hold of the produce guaranteeing his current rent to the zamindar. If for any reason Government do not like the idea of entrusting this work to co-operative societies, there is no objection to their doing this direct through their own staff, either revenue or agricultural, as may be thought convenient. The only satisfactory way to stop the ravages of the money-lender is to give the cultivators the choice to establish an alternative credit machinery and I suggest that the Co-operative Department may be harnessed to do this work for the present.

Prevention of undue exploitation and economic oppression of debtors by creditors

(3) Some measures must be adopted to control the money-lenders and amongst these I would mention the following:—

- (i) compulsory registration of money-lenders and a system of inspection of their accounts,
- (ii) Rural Insolvency Act,
- (iii) abolition of arrest and imprisonment except in the case of recusancy or fraud,
- (iv) power to revise contracts,
- (v) exemption of certain incomes from attachment.

Marketing

(4) As suggested by Sir James Taylor, an experiment into marketing should be undertaken immediately. There is no reason why work on standardization of grain should not be taken up in the rural development villages. The work of marketing should generally be entrusted to co-operative societies and the Registrar, Co-operative Societies should be asked to submit full proposals.

General

(5) Intensive propaganda to inculcate habits of thrift and to make the peasants realize the advantages of keeping out of debt should be undertaken. This may be done through the Rural Development Department and the Agriculture Department.

14. The rental remissions given at the time of the slump in prices had, owing to the emergency of the situation, to be calculated on rather a rough and ready basis. Consequently they have proved uneven in incidence and many tenants have been enjoying more remissions than the situation justified (notably the old occupancy tenants in Agra) while others have been getting too little (notably the highly rented statutory tenants in Agra and Oudh). Further the revenue remissions being, as they were, calculated on a districtwise basis have proved equally uneven and unfair.

Land Revenue
Policy

For this reason revision of rents and revenue has now been undertaken in those districts not yet due for re-settlement and re-settlement has been started where this is due. The whole programme will take some years to complete. These operations are essential from the administrative point of view, but the result will also be important from the financial aspect. Partly because of the fact that the remissions were in some cases unjustifiably large and partly because prices are now substantially higher than when the present remissions were calculated the existing slump revenue remissions of 112 lakhs per annum are likely to be ultimately reduced by some 75 lakhs per annum. It will therefore be seen that, apart from the desirability of reducing the recorded rents permanently on account of the fall in prices after a thorough and detailed examination of each and every holding, provincial revenues will generally benefit substantially by increasing amounts each year. I therefore consider it very desirable that the present revision policy should continue as the possibilities of expansion of provincial revenues are restricted and the extra money will be required to finance development and expansion of beneficent activities in the nation-building departments.

15. The Excise policy I have followed is designed to secure minimum consumption by the adoption of measures calculated to reduce illicit supplies as far as possible, the ultimate aim being total abstinence, not by direct compulsion but by the indirect methods of educative propaganda, measures to raise the general standard of living of the poorer classes, the urge of public opinion, comparatively high prices and diminution of illicit supplies. I consider that money wisely spent on raising the comfort and general standard of living of the masses will gradually produce greater self-respect and will lead to that change in social habits which in turn will lead to a voluntary restriction of liquor and drug consumption. Such a policy is, in my opinion, likely to be far more effective and less costly in the long run than the policy of compulsory prohibition, which has recently proved such an expensive failure and so corruptive of public morals in the United States of America.

Excise

Apart from the above moral and social considerations it would be quite wrong to create such a gap in the provincial revenues as would result from total prohibition unless and until new revenues have been actually realised from other taxation sources. The question is a big one and it was for obvious reasons not possible for the Finance Minister of a minority Government to tackle it.

16. Court fees and stamp duties were enhanced from May 1936, by an Act of the late Council for a period of three years only. The measure would have been passed permanently but for an unfortunate misunderstanding during the passage of the Bill. Of the 10 lakhs extra revenue expected four lakhs recurring was devoted to recurring new expenditure in the nation-building departments. It is to be hoped that at the end of the three years the measure may be made permanent by the Legislature. This is all the more necessary because hopes were falsified and the extra yield has proved not much more than sufficient to maintain the receipts under this head at their former level. The cause of this is the recent debt legislation which has resulted in a tremendous reduction in the number of civil suits filed, mainly money suits.

Stamps

In order to assist indebted landlords and tenants Government enacted that applications under the debt Acts should not be liable to ordinary court fees but only to a court fee of 8 annas. On all it is calculated that this concession alone by Government will amount to 2½ crores.

Apart from this handsome contribution by Government the effect of the reduction in the number of mortgage deeds executed and the number of civil suits filed has caused receipts to fall every year. It is doubtful if we have yet touched bottom.

The Eastern
Grid Project

17. Government have had under consideration a project for an Electric Grid in the east of the province. Proposals have been drawn up and are now under scrutiny by a specialist firm in England (Alexander Gibb and Company). When their views are received the proposals will be examined in detail in the Irrigation Branch and Finance Department. It is not expected that any construction work will be taken in hand on this scheme in the financial year 1938-39. The year will be devoted to the above scrutiny of the proposals and completion and consolidation of the Western Grid and State Tube-wells scheme and the small Fyzabad Scheme. This year's rest is, in my opinion, desirable from many points of view.

Road
programme

Pro.

We are now in the third year of our five-year Road Development Programme. The schemes have all been sanctioned by the late Legislature and the Government of India. The programme is being financed partly from our accumulated revenue in the Road Development Fund (constituted from our annual share in the Petrol Fund) and partly from loan funds expected to amount to some 40 or 43 lakhs. In the current financial year for the first time we expect to have to borrow 13 lakhs on this account and the remaining 30 lakhs will be borrowed in the two subsequent years. The Government of India have agreed to the amortisation charges being met from our yearly receipts from the Petrol Fund.

Finance Department's share in this arrangement is to provide the borrowed funds, calculate the amortisation charges and arrange for them to be paid each year out of our share of the Petrol Fund.

Note on the discussions on the problem of agricultural indebtedness in the United Provinces held on May 24, 1937, at which Hon'ble Minister of Finance, Mr. RANGASWAMI, Managing Editor, "Indian Finance" and Messrs. MUDIE, KHAREGAT, WAUGH, VISHNU SAHAI, TEYEN, and Finance Secretary were present.

It was stated that the recent Debt Legislation has done nothing to help tenants finance their debts.

2. The problem is to devise means—

Problem "

(i) to reduce the indebtedness of tenants, which is computed at between 30 and 50 crores, and

(ii) to finance tenants for the future—

(a) by short-term advances for seasonal purposes;

(b) by medium-term loans for improvements.

3. The present position is that tenants are financed by—

Present position

(1) money-lenders who charge high rates of interest in spite of the recent Debt Legislation, it being admitted that the Agriculturists' Relief Act in this respect is a dead letter;

(2) Co-operative Credit Societies. Throughout the whole of India only 6 per cent. of the credit is afforded by these Societies. On the whole Co-operative Credit Societies have not been a success either in this province or elsewhere in India. They have an accumulation of bad debts and have not given the assistance that was expected of them.

The main difficulty lies in the fact that in this province the tenant's only security is his crop, against which there are the following prior charges:—

First charge: Rent.

Second charge: Water rates.

Third charge: Debt to the Co-operative Society if the tenant's crop has been financed from a loan given by the Society for this purpose.

Mr. Rangaswami inquired the present position with regard to the capital of Co-operative Societies in this province. Mr. Kharegat mentioned that although two years ago the Societies had large surpluses of uninvested money the case now is different. This change has occurred because the Societies not wishing to maintain such large deposits have reduced their rates of interest on the deposits and so deposits have shrunk. It was mentioned that at present the deposits of the 7,000 Societies which exist in the province amount to 1½ crores and that most of the deposits come from towns. Interest at 4 per cent. per annum is paid on the deposits and interest at the rate of 12 to 15 per cent. per annum is charged from borrowers. It was explained that this large difference is necessitated by the very large proportion of debts that prove bad. It is estimated that bad debts amount to no less than 80 per cent. of advances. Sixty per cent. of the funds that the Societies work with represent their own capital.

Hon'ble Minister of Finance pointed out that one of the reasons for failure on the part of Co-operative Societies is that they consist largely of borrowers themselves and thus they do not insist on the recovery of dues at the proper time. It is therefore essential that any credit system that may be evolved should be run on commercial lines and kept separate from Co-operative Societies, though of course there would be no objection to this commercially run Credit Company financing Co-operative Societies.

Mr. Kharegat pointed out that one of the big difficulties of Co-operative Societies has been that arrears occur in bad agricultural years and it is well-nigh impossible to recoup these arrears in favourable years.

Mr. Vishnu Sahai stated that some of the remarks made in the Reserve Bank's report on agricultural credit concerning the failure of the co-operative movement do not apply to the United Provinces.

Hon'ble Minister of Finance stated that in many cases co-operative societies are not so popular with tenants as the ordinary village money-lender because the latter gives more latitude.

The Agricultural
Credit Bank of
Egypt

4. Mr. Mudie then related that in Egypt an Agricultural Bank of Credit was started. Cultivators there are peasant-proprietors. A measure was passed as a result of which it became impossible to sell up any debtor who had a holding of less than 5 acres. The result of this measure was that the Bank, although it was a Government Bank to a great extent, went into liquidation

In 1931, however, a new venture was started known as the Agriculture Credit Bank of Egypt whose activities were limited to short-term credit. This Bank had four main objects:

- (i) money-lending;
- (ii) selling grain and manure to the cultivators;
- (iii) marketing;
- (iv) acting more or less as a Government agent.

Grain and manure advances are made to the cultivators and debited to their accounts. During the cultivation of the crop cash advances up to certain limited amounts, based on the acreage and crop, are made to the cultivators. When the crop is harvested the cultivator deposits the crop in a godown owned by the Bank, these godowns being at distances of about 5 miles apart. At that time the cultivator is advanced 80 to 85 per cent. of the value of his crop less the advances which have already been made to him. He can then if he wishes sell his crop. If he does not, the Bank sells it for him and credits him with the difference between the money received and the advances made to the cultivator. The Government have first charge and the Bank the second charge on the proceeds of the crop. Debts are collected through the equivalent of our tahsildars. The Bank makes considerable profit on retailing seed and manure.

Mr. Mudie stated that the activities of the Agriculture Department of the Government of Egypt are restricted to research.

The Bank was financed to roughly half a million pounds by the Egyptian Government, another half-million was subscribed by banks of various nationalities.

Mr. Mudie's
scheme

5. Mr. Mudie then made the following proposal. The first thing to be done is to scale down the existing debts of the tenants to a level which it is possible for them to pay from the proceeds of their cultivation within a limited number of years.

It should be ascertained what balance is left over from the price of the crop after the costs of seed manure and cultivation and maintenance of the cultivator and his family have been deducted. Let this be X rupees.

A limit to the number of years in which he should make this payment should be fixed. Mr. Mudie thought that possibly five years should be the outside limit.

All the outstanding debts of the tenant should then be reduced to an amount which is equal to the amount which would be repaid together with interest at 8 per cent. per annum by five yearly payment of X rupees. Any debt beyond this amount would be quashed.

The tenant's crop would have to be deposited in the godown of the Bank and after sale of the crop the Bank would have over X rupees to the creditor or creditors each year for five years after which the debts would be considered to have been liquidated in full.

It was mentioned that the crops in the Bank's godowns would have to be ensured against fire, since no commercial undertaking could afford to incur a fire risk in connexion with such large volumes of crops in storage. Incidentally Government might be able to take up this insurance at some profit.

(It was mentioned that although this might mean much scaling down of the debts there is sound argument in its favour on the following lines. A tenant's debt may be high because the rate of interest was exorbitant, or it may for other reasons have swollen because it was already beyond his capacity to pay and part is in fact a bad debt. In either case there is justification for a reduction of the amount of debt so as to bring it within the paying capacity of the tenant within a reasonable period of years).

6. The matter of Conciliation Boards was then discussed. Mr. Waugh stated that in his opinion the Conciliation Boards of the Central Provinces had not taken sufficiently drastic action and the terms fixed for repayment were in general too prolonged. Mr. Waugh stated that the last figures he had seen indicated that 41 lakhs of debt had been settled by the Conciliation Boards involving a reduction of 47 per cent. in the debts so settled.

Conciliation
Boards

It was generally accepted that the scaling down of debts by Conciliation Boards must be accompanied by an improved system of credit for the future.

It was considered that each Conciliation Board should consist of an officer and perhaps one assessor who would deal with the debts by villages. It would probably not be advisable to make conciliation compulsory. It might be arranged so that if a cultivator wants a loan from the Credit Bank such loan would be refused unless he agreed to come into the conciliation scheme. Such would be the case with villages as well as individuals. It would be desirable to get as many solvent cultivators into the scheme as possible as this in time would attract indebted cultivators as well. For this reason it is considered that any Act that may be passed in respect of Conciliation Boards should only be an enabling Act and not force cultivators to seek the aid of the Conciliation Boards. There is no need for a Conciliation Board in every village. The officer should be a Government officer of the type of the present day roster officer or assistant settlement officer and he should tour from village to village. The procedure should be as summary as possible and no lawyers, pleaders, vakils, etc., should be permitted. Priority might have to be given in respect of arrears of rent.

The conciliation of debt should not be taken up until the Agricultural Credit Corporation is working.—This is most important.

Mr. Mudie pointed out that Conciliation Boards and debt reduction can be provided for by local legislation and Corporations can be floated under the Co-operative Act by the local Legislature but that banking and banking corporations form a Central subject.

Hon'ble Minister of Finance stated that the position as he understands it is that if a Corporation is floated with special rights then the legislation will have to be Central.

Mr. Mudie stated that his idea was that the scheme should start on a small scale and gradually extend. Government might guarantee 10 lakhs and when the Bank had accumulated 10 lakhs reserve then they might expand by means of this fresh 10 lakhs. Mr. Rangaswami pointed out that if this were so it would take a considerable time before the scheme could be extended throughout the province.

The functions of the Bank would be advancing money for the cultivation of crops and on the deposited produce. It would be necessary for the Legislature to give the Bank a claim on the crops. It was pointed out that if this were to be done then the present power of distraint on a site by the landlord would have to be abolished and replaced by the power of distraint in the godown. This matter requires investigation. Mr. Mudie went on to say that at first it might be desirable to build godowns near tube-wells as a convenient centre and that in respect of selling, the grading of crops would be essential.

Hon'ble Minister of Finance suggested that it might be desirable to endeavour to interest some big firms like Ralli Brothers in the scheme. It might be possible to charge them for storage of manure and seed and to take a commission from them on the sales. It might even be possible to get such a firm to provide for the initial cost of the godown. The godowns should be constructed probably with steel frame covered by iron sheeting so that they will always have a salvage value. Secondhand railway lines might be used for this purpose. But as any rate Hon'ble Minister of Finance considered that the cost of these godowns should be kept to the minimum essential.

The proposed
Bank

7. The next point that was considered was the capital required for the Bank. Mr. Mudie mentioned that the annual turnover might eventually rise to 15 to 20 crores. Mr. Rangaswami suggested that financing to a very large extent could be done by 9-months agricultural bills.

It was considered that the Bank might start with an authorized capital of five crores and a paid-up capital of one crore.

Mr. Rangaswami, however, did not agree that as much as one crore would be necessary to start with. He suggested that 50 lakhs at the outside should prove ample.

Mr. Rangaswami further explained his proposal of financing a good deal of the work of the Bank by 9-months agricultural bills in the following manner.

A cultivator takes a loan from the Agricultural Bank of Rs.5,000, the resulting bill would be passed by the Credit Bank to the Allahabad Bank and would virtually become a *hundri*. This would be passed to the Central Office of the Allahabad Bank who having accumulated bills, say, up to five lakhs would endorse them to the Reserve Bank and get them rediscounted.

Government's
liability

8. Hon'ble Minister of Finance stated that in his opinion there are three items for consideration—

- (1) the dead weight of the cost of godowns;
- (2) reserve for bad debts;
- (3) working expenses.

Hon'ble Minister of Finance considered that Government might help towards the cost of the godowns either directly or by taking up some shares in the Bank and that some annual contribution should be made for bad debts and perhaps a subsidy towards the working expenses. The last two contributions should be subject to revision every five years or so.

Mr. Mudie's view was that it would be better if Government subscribed to the capital and guaranteed a minimum dividend of about 3 per cent. per annum and fixed a maximum dividend at 4 or 5 per cent. per annum on condition that the Bank put aside so much each year into reserves.

Connexion with
the co-operative
movement

9. The majority were definitely of opinion that the Bank should be run on strictly commercial lines and should have no connexion with the co-operative movement, but the Bank could make loans to Co-operative Societies and may be, give them something by way of a concessional rate of interest.

The majority were also of opinion that no loans should be made by the Credit Bank for non-productive purposes.

10. The next question that was discussed was the extent of Government control and it was allowed that this should be on the following lines—

Government
control

- (1) One Government director.
- (2) Government should scrutinize and approve the Articles of Association, etc., etc. (It will probably be necessary also for Government to enter into a definite agreement with the Bank).
- (3) It may be necessary to have a provision similar to that which exists in Egypt to the effect that any resolution which is passed by the Board which Government does not approve may be sent back to the Board for reconsideration and can only be given effect to if passed again by a special majority.

11. It was next considered whether the landlords could be associated in any way with this scheme. Mr. Mudie was definitely against it. Hon'ble Minister of Finance was wondering whether loans could be advanced by the Bank at a somewhat lower rate of interest provided the landlord offered collateral security.

Connexion with
the landlords

Mr. Waugh pointed out that one *prima facie* objection to the scheme is that the proposal would to a large extent cut out the landlord in his dealings with the tenant.

May 25, 1937.

A. C. TURNER.

Note on Conciliation of Debts in the Central Provinces and Berar

THE Central Provinces Government decided in 1932 to undertake legislation to provide for conciliation of debts of agriculturists. The problem of agricultural indebtedness had by then become acute, particularly in the northern districts of the province as the result of an unprecedented series of poor harvests and the position was aggravated by the economic depression, the effects of which had begun to make themselves felt in 1931. Taking advantage of the experience of the informal and voluntary debt conciliation tried after the famines of 1897-98 and 1899-1900 it was decided to repeat the experiment on a formal basis and to strengthen it by providing certain deterrents to creditors who refused to be accommodating and certain inducements to those who were helpful. The Debt Conciliation Act, II of 1933 was passed by the local Legislature in January, 1933, and came into force on April 1, 1933. It was applied to Berar in 1934. The first two boards established were at Khurai and Seoni and these have since concluded their operations. The boards have been established in all the districts of Central Provinces and Berar except one. Out of these four have now concluded their operations but one board still continues to work for conciliation of debts above Rs.25,000 and up to Rs.75,000. There are now 41 boards working.

2. The system of debt conciliation followed after the famines of 1897-98 and 1899-1900 was limited to six districts and the agency used consisted of local *panchayats* under the direction of a Government Officer of the grade of an Extra Assistant Commissioner. The debtors and creditors were collected in each village and after the settlement of debts had been effected they were called upon to sign an agreement to abide by the decision of the conciliators. The creditors were also required to sign a certificate that the statements of their claims were complete and that any item omitted therefrom would be considered void. An award was then given with the consent of the parties, and on being produced before a court was converted into a decree. The proceedings were thus on an informal voluntary basis and the success of the operations depended upon the executive pressure exercised by the presiding officers. Evidence regarding the exact effect of these operations is somewhat conflicting, but there can be no question that they did an appreciable amount of good.

3. The basis of the present Act is also voluntary settlement, but the boards constituted under it have statutory existence and are invested with certain powers of the civil court. Instead of a *panchayat* being formed for each village, the boards under the present Act are constituted for one or more tahsils, or for a district as a whole. They generally consist of eight influential local non-officials nominated by Government with an official Chairman of the status of an Extra Assistant Commissioner or a Sub-Judge. They are not invested with any powers to compel a creditor to relinquish any portion of his claim, but if a creditor refuses a fair and reasonable offer, the Act directs that he shall be deprived of his costs in subsequent proceedings as well as of interest in excess of simple interest at 6 per cent. from the date of the Board's certificate to that effect. The recovery of claims of creditors who agree to conciliation also receives precedence. These two provisions may be said to be the only elements of indirect compulsion in the Act.

4. The Act requires all creditors to submit a statement of their debts by a particular date: otherwise the debts are deemed to have been duly discharged. The creditors have also to produce all documents in support of their debts, failing which the documents cannot be admitted in evidence against the debtor in any suit brought by the creditor or by any person claiming under him. The Act also provides that if the creditors accept a fair offer made by the board, they need not

go to the civil court for recovering the instalments fixed, as they are to be recovered by the Deputy Commissioner on their behalf as arrears of land revenue. This simplified method of recovery is one of the main inducements for conciliation held out to creditors. The scope of the Act is restricted to proprietors, cultivators and tenants of average status. Agriculturists whose total indebtedness does not exceed Rs.150 are excluded from the purview of the board; while those whose indebtedness exceeds Rs.25,000 can apply to the board only in areas where the local Government has removed this limit. Debts which can be conciliated include rental arrears and the dues of co-operative societies, but not land revenue or sums recoverable as land revenue. The procedure outlined in the Act is a very simple one and lawyers have been deliberately prohibited from appearing before the boards. Parties are, however, allowed to be represented by agents authorized in writing. Both debtors and creditors can apply to the board, but the application has to mention full details of the liabilities and assets of the debtor. On receipt of an application the applicant is examined, and if the board is satisfied that it is desirable to effect a settlement, a notice is issued to all the creditors to submit an account of the debt owed to them. On the day fixed for enquiry, the claims are scrutinised, the debtor's income is determined, and efforts are then made to reduce the debts so as to bring them within the paying capacity of the debtor. The compounded debt is spread over a certain number of years, generally 10 to 15, and instalments are fixed at amounts which the debtor can be expected to repay from his annual income, after making due allowance for the cost of his maintenance and other obligatory commitments. The board then places its suggestions before the debtors and the creditors; and if the creditors to whom 40 per cent. of the debts are owing agree to the proposed settlement, an agreement is signed embodying the terms and is registered forthwith under the Indian Registration Act. If any creditor refuses to accept the board's proposals, the board may grant the debtor a certificate in respect of that creditor's debt, and the consequences of such a certificate have been stated above. It is also provided that a decree obtained for a debt in respect of which a certificate has been granted shall not be executed until all the amounts recorded as payable under the agreement with the other creditors have been paid or the agreement has otherwise ceased to subsist.

5. This restriction directing postponement of decrees did not apply to secured creditors, over whom the Act did not provide any effective control. If a secured creditor agrees to participate in an agreement section 12(1) of the Act extinguishes his mortgage lien on the assets of the debtor, and places him on a par with the unsecured creditors, who are parties to the agreement. Secured creditors, therefore, naturally prefer to stand out of an amicable settlement and often hasten to obtain a decree from the civil court after their debtors have made an agreement with other creditors. In practice this nullifies a certain number of agreements. In order to remove the present hesitancy on the part of secured creditors and to facilitate the conciliation of secured debts on a larger scale, the Act has recently been amended by Act no. XV of 1936 so as to provide that if a secured creditor joins an agreement, his existing mortgage lien or charge on an immovable property of the debtor shall subsist until the amount due to him has been paid or the property has been sold for the satisfaction of such debt. Apart from difficulties connected with secured debts, the creditors generally respond to the board's appeal that having regard to the age of the debt, rate of interest charged, repayments made and the altered circumstances of the debtor, some remission must be given.

6. The Debt Conciliation Act of 1933 was amended by Act no. I of 1934 so as to increase the number of members of a board under section 3 from five to nine. The Act has been further amended by the amending Acts nos. XIV and XXVIII of 1935 so as to remove the difficulties experienced in the working of

sections 3, 8, 9, 12, 13, 15 and 21. The Civil Courts set aside a number of agreements for debt conciliation under section 12 of the Act on more or less technical grounds. These cases indicated the necessity for a more unequivocal provision for debarring the jurisdiction of civil courts. The Act has now been further amended by Act no. XXXIII of 1936 so as to prevent the submission of false documents by the creditors, to empower the board to order the deposit of an amount due under an agreement, in case the creditor refused to accept it or in the event of a dispute about the personality of the creditor and to empower a board to review its orders on its own motion, if necessary. The Legislative Council also passed in November last two Bills. The first is a non-official Bill and its object is to enhance the financial powers of the boards. Under the present proviso to subsection (1) of section 4 of the Act debts exceeding Rs.25,000 cannot be conciliated. Big landlords whose debts exceed this amount are deprived of the benefits of the present Act and this Bill has raised the limit to Rs.50,000. The second is a Government Bill to lower the limit of debt, for purposes of conciliation, to not less than Rs.50 in backward and aboriginal areas to be notified.

7. The crux of the whole problem of debt conciliation is the judicious fixation of instalments. A *sahukar* can always be persuaded to agree to a substantial reduction of his claim, provided that the reduced amount is paid in cash or in the near future. But he will naturally not agree if the instalments are spread over 20 or 30 years, particularly when no future interest is allowed to him. On the other hand, if the instalments are limited to about 10 years, the annual sum to be paid generally exceed the paying capacity of the debtor. The success of the operations therefore lies in steering a middle course. In cases in which the debts are too heavy to be liquidated from surplus annual income in a reasonable number of years, on way out of the difficulty is to satisfy a portion of the compounded debt by the transfer of a part of the property. Strictly speaking, such settlements are not within the purview of the Act, but there is no bar to the board using its good offices to bring them about, and in practice they are made whenever possible. In immediate satisfaction of a part of the claim, particularly in the case of small claims, some boards induce creditors to accept movable property, such as non-agricultural cattle. But the most powerful inducement for any substantial reduction of the debt is undoubtedly immediate payment in cash. In order to facilitate this, land mortgage banks for providing consolidated long-term loans in cash have been established in certain centres to work in collaboration with the boards. The amount of each instalment fixed is generally not more than the annual rent paid by the debtor, and no interest is allowed in future, excepting in the case of debts due to co-operative societies, the bulk of the capital of which is derived from public deposits on which interest has to be paid.

8. The real test of the success of these operations will, of course, be the punctuality with which the instalments are paid. It is too early yet to conclude whether, given normal harvests, the instalments will be recovered without recourse to coercion; but the reports received so far indicate that debtors are making efforts to respect their agreements. Except in certain areas, where the agriculturists have been hit particularly hard by a long succession of lean years and the slump in prices, the percentage of instalments which had to be recovered by coercion has not been high. For example, in a district which has had a normal rice crop ever since 1921-22, 95 per cent. of the instalments have been paid voluntarily.

9. Up to the end of November 1936, the boards conciliated debts amounting to Rs.410.37 lakhs for Rs.217.31 lakhs, resulting in a remission of 47 per cent. of claims. Besides this, certificates under section 15(1) of the Act, declaring that the creditors had unreasonably refused amicable settlements, were issued in 5,248 cases for claims amounting to Rs.45.22 lakhs. As stated above, these creditors will

not be entitled to costs when they sue for the recovery of their claims and will also be deprived of interest in excess of 6 per cent. simple from the date of the certificates.

10. The proceedings of the boards have substantially lightened the burden of the agriculturists as will be seen from the statistics given above and have provided them considerable relief from harrassment by other creditors. The tenants have been benefited more than the landlords by the establishment of the boards.

11. There have been complaints of contraction of agricultural credit as a reaction to the operations of the boards. Enquiries made twice have, however, shown that although *sahukars* have undoubtedly been cautious in making large advances to agriculturists, there has been no appreciable restriction in the supply of crop loans and current finance required for meeting current expenditure. This is also borne out by the fact that there has been no disproportionate fall in the nett cropped area of the province. Some restriction of credit is, of course, inevitable, but this is not an unmixed evil as it has compelled agriculturists to practice thrift, avoid large ceremonial expenditure, and live within their budget. The rush of applications both from the debtors and creditors in places where the boards are at work, and the demand for the establishment of boards in new areas, demonstrate that conciliation proceedings are popular and are meeting a genuine want. There is no doubt that these proceedings have substantially lightened the burden of the agriculturists and have given them respite from the immediate harrassment of their creditors. So far, therefore, it is fair to conclude that the advantages outbalance the disadvantages.

Notes on the proposed reduction of certain occupiers' rates in the Irrigation Department

Eight annas per
acre flow
Four annas per
acre lift

At the cabinet meeting of May 28, last, Hon'ble Minister of Revenue submitted a note proposing certain reductions in the occupiers' rates in force for wheat and its allies sown, pure or mixed with other crops on the productive canals of the United Provinces. The reductions proposed involved a loss of Rs.6,34,000.

It was ordered that, as the financial aspect of the proposal has not been considered or examined, the case should be referred to the Finance Department.

2. Before submission to the Finance Department, Hon'ble Minister of Revenue discussed the matter further with the Chief Engineers of the Irrigation Department and subsequently submitted revised proposals to the Finance Department for consideration on the following lines.

3. Instead of applying the reductions of eight annas flow and four annas lift on wheat, barley, etc. merely to the productive canals, it was considered that any reductions given should also be applied to the Betwa Canal on which it was proposed the rate should be reduced from Rs.4 flow and Rs.2 lift to Rs.3-8 flow and Re.1-12 lift. This concession would cost a further Rs.54,000.

4. It was further considered that any reduction allowed in the case of wheat, barley, etc. should apply to linseed, lucerne, peas, poppy, tobacco, etc. on the Upper and Lower Ganges, the Eastern Jumna and Agra Canals as it would be difficult to argue that the present rate on other *rabi* crops should be maintained if the rates for wheat and barley were reduced. The cost of this latter reduction is Rs.1,03,000.

The total reductions thus visualised by Hon'ble Minister of Revenue would cost Rs.7,91,000. It was suggested however that this considerable loss of revenue could be minimized if the reduced rates are allowed only to cultivators who irrigate their fields by means of *kiaris* and *barhas*. Such a condition whilst

securing the prevention of excessive watering would also increase the average out-turn per acre, at the same time saving a considerable amount of water. The Chief Engineers estimate that a saving of 5 per cent. in the water applied, could be effected by this means. It is estimated that this saving would suffice for the irrigation of an additional 100,000 acres of *rabi* crops with an approximate increased revenue of 3 lakhs. Thus the net cost to the provincial revenues of the proposals suggested above is estimated to be Rs.4,91,000.

5. It should be noted that as the reduction of rates is to be given only in the case of fields in which *kiaris* are made, the provincial revenues will only be affected to the same extent as the practice of making *kiaris* extends. If the economical practice of making *kiaris* does not increase then the net effect on the provincial revenues will be nil.

6. The above proposals as directed by the Cabinet are now under the review of the Finance Department. A note stating Hon'ble Minister of Finance's view will be circulated in due course.

W. L. STAMPE,
Secretary, Irrigation Branch,
 For the Hon'ble Minister for
Revenue and Agriculture,
 United Provinces.

June 26, 1937.

15 or 20 men and was asked to go, to his own shed, but he did not go back and remained absent up to 9.15 a.m. That day he was discharged.

Amirat Lal is a very prominent member of the Mazdur Sabha. He was one of the prominent workers who organized one of the strikes. Though he was not specifically mentioned by the Manager to Dr. Gupta as having incited the men in the Carding Department not to work the 10 hour overlapping shift, he was one of those who stood up to defend the workmen when Dr. Gupta was addressing them.

To rebut the charges against him Amirat Lal has produced 4 witnesses.

Mohammad Yunis Khan the President of the Mill Committee and a co-weaver in the Mills, Kalika Prasad a workman of the Carding Department, Puran Chand another weaver in the Mills and Ram Gopal Mistri.

The first three stated that Amirat Lal did not leave his machine and did not address any meeting. The last witness said that he had addressed a meeting outside the Mill premises. I was not favourably impressed with the evidence of these men and I do not believe their testimony.

It is significant that Yunis Khan the President of the Mill Committee has not been the victim of the alleged victimization by the Mill owners.

I am satisfied from the evidence that Amirat Lal did do propaganda work within the mill premises; he left his own work and went and talked to other workmen and he was undoubtedly one of those who asked the Cardmen not to work the 10 hour overlapping shift. He pasted a notice within the mill premises to hold a meeting. He admitted this to Mr. Entwistle but now says that he had pasted the notice to an electric pole outside the mill premises. He did not attempt to substantiate this allegation. I believe it to be untrue.

In my opinion the charge against him that he was "attempting to undermine the authority of the Mill Officers, working against the interests of the Company and neglecting his duties" was true and his dismissal was amply justified. It would have been very unsafe to allow him to work further within the mills. His allegation that he was victimized is untrue.

In the result I find that not one of the five workmen was victimized, and none of them is entitled to any compensation over and above what he has already received from his employers.

P. R. MISRA,
Enquiry Judge.

Dated the 9th October, 1937.

4

Report of the Cottage Industries
Committee, U.P. 1937

X91. 252. N376

9)

No. 2827/XVIII—498

INDUSTRIES DEPARTMENT

21st October, 1937

THE following report of the Committee appointed to draw up a practical scheme for the development of cottage industries in the United Provinces is published for general information.

2. Suggestions or criticisms should be addressed to the Secretary to Government, United Provinces, Industries Department, Lucknow. The report will be taken into consideration after 1st December, 1937.

By order,

P. M. KHAREGAT,

Secretary.

Report of the Cottage Industries Committee, United Provinces

CHAPTER I—Introductory

Appointment of
and terms of
reference.

THE United Provinces Legislative Council on the 12th April, 1934, adopted the following resolution moved by Khan Bahadur Maulvi Fasih-ud-din Sahib :

"That this Council recommends to the Government to appoint a committee to draw up a practical scheme for the development on co-operative lines of cottage industries such as cotton silk and *dari* weaving and leather manufacture in rural areas and to set apart a sum of rupees five lakhs for this purpose."

Government accordingly constituted this committee by G. O. no. 1121/XVIII—271, dated the 30th June, 1934, to "draw up a practical scheme for the development of cottage industries on co-operative lines."

Personnel.

2. The Committee consisted of the following members :

- (1) The Director of Industries, United Provinces, *Chairman*.
- (2) The Registrar, Co-operative Societies, United Provinces.
- (3) Khan Bahadur Maulvi Fasih-ud-din, M.L.C.
- (4) Rai Bahadur Babu Vikramajit Singh, M.L.C.
- (5) Shri Sahebji Maharaj (now Sir) Anand Sarup of Dayalbagh, Agra, Nominee of the Board of Industries.
- (6) Mr. I. D. Varsheni, Proprietor, United Provinces Glass Works, Bahjoi, Nominee of the Board of Industries.
- (7) The Hon'ble Rai Bahadur Lala Mathura Prasad Mehrotra, Nominee of the U.P. C. U.
- (8) Rai Bahadur Babu Triloki Nath Kapur, Nominee of the U.P. C. U.

The Secretary of the Board of Industries, then Mr. J. A. H. Duke, Deputy Director of Industries and late Mr. B. K. Ghoshal, Divisional Superintendent of Industries, was appointed to work as Secretary to the Committee.

Method of
enquiry.

3. We have not considered it necessary to take oral evidence. Useful notes have, however, been received from officers of the Industries and Co-operative departments and by some non-official gentlemen interested in cottage industries. A list of these papers is given in Appendix I. The Committee's task has been greatly facilitated by these notes.

Four meetings of the Committee were held, the last one on 10th July, 1937, at which the final draft of the report was considered and adopted.

Scope of
proposals.

4. We are glad to be able to submit an unanimous report. We do not claim that it contains schemes complete with figures of costs and similar details. There are so many details to be examined that it is practically impossible for a committee to put forward concrete schemes complete with details of the cost involved without exhaustive preliminary surveys. Some surveys have been made in the past but they do not furnish the up-to-date commercial and technical data necessary for the organization of an industry. Detailed surveys will have to be made for the selected industries and we think they can best be made by an officer of the Industries Department working in conjunction with an officer

of the Co-operative Department. In the absence of such surveys we have had to content ourselves with broad outlines only.

5. Our thanks are due to all those who have furnished us with very interesting and instructive notes. We also acknowledge with thanks the good work of our Secretary, Mr. B. K. Ghoshal, whose knowledge of the subject was of great assistance to us.

Acknowledgments.

We have to record with deep regret the sad and untimely death of our revered colleague, Shree Sahebji Maharaj Sir Anand Sarup, Kt., of Dayalbagh, who though he was able to bless the draft report with his approval, died before the final meeting could be held. As a great pioneer and champion of small industries his valuable advice at our deliberations was of great assistance to us.

CHAPTER II.

6. We do not think it necessary to give an exhaustive historical account of the cottage industries of this province and the causes of their decline. To serve as the background to our proposals we shall, however, describe briefly the typical economic structure of most of our cottage industries and the steps that have been taken through co-operative societies for their development.

Present position and methods of the cottage industries.

7. The term cottage industries is used in contrast with organized large scale industries carried on in mills and factories and includes subsidiary industry which absorb only part of the time of the worker. They cover a wide range from simple village crafts as those of the potter and the *charsa* maker to the highly skilled wood-work of Nagina or Saharanpur. Many of these do not need State assistance others do not invite co-operative organization. For instance co-operation will not benefit the village potter to whom the supply of raw materials or the sale of his products presents no difficulty. There are a number of tiny undertakings which use no machinery, where the demand is sporadic or for small quantities of different patterns, where standardization and bulking and centralization of sales will not add to the profit, or where finance is not a problem for these co-operation will be of little help. Again, workmen specializing in high class objects of arts are notoriously individualistic. These industries will also have to be left out. We should concern ourselves mostly with staple articles. The following is a list of possible industries :

Possible industries.

(i) Textiles—(a) Weaving of cotton, silk and woollen fabrics, (b) durrie weaving, (c) carpet weaving, (d) hosiery, (e) dyeing and printing.

(ii) Leather including flaying and curing of hides.

(iii) Oil pressing.

(iv) Utensil making.

(v) Ghee making.

(vi) Iron utensils, agricultural implements and cutlery.

(vii) Lock-making.

(viii) Glass.

(ix) Making of toys, wooden, paper, bamboo and cloth.

(x) Wood-working, including carving and inlay work.

(xi) Basket-making.

(xii) Needle work including tailoring of ready-made garments.

8. There is little organization among cottage industrialists in the sphere of production. Contact between the consumer and producer is usually lacking. Designs and shapes have got stereotyped and have deteriorated. In the case of some industries, i.e. the Moradabad brassware, it is true that the middleman (karkhanedar) does pay some attention to the production side by passing on designs and shapes to the workers. The karkhanedars engage the craftsmen, supply material and get goods prepared according to their direction on payment of piece wages ; but the organization is crude and unprogressive. An exception does, however, exist in the case of the carpet industry of Mirzapur where the production is well organized.

Organization of production.

9. There are dealers of raw materials at every centre of cottage industry. Where the demand is small, the suppliers are usually made by itinerant dealers who visit the different village bazaars. These dealers either themselves get their supply direct from manufacturers or from big wholesale suppliers of raw materials. The dealers in raw materials are often the purchasers of the finished products. Independent workers and karkhanedars get their supplies both for cash and credit. Credit buyers have to pay higher prices. It is difficult to say what the rate of interest is for credit purchases because the charge for

Organization of supply of raw materials.

interest is not always openly made and is concealed by the lower price ultimately paid to the producer. Owing to the supplier of the raw material being also the buyer of the finished products, workers and karkhanedars often remain at their mercy. They have little resources to wait or bargain for better prices and the result is not merely low profits to the workers but also loss of morals.

Organization of
marketing.

10. There are various stages of development in respect of marketing. Some independent workers hawk about their own goods on village market days. There are dealers in the village itself who buy the products and sell it retail or wholesale or collect them as agents of outside dealers. There are also itinerant dealers who perform the same functions. Then there are the karkhanedars referred to already and lastly, there are the big wholesale dealers who buy from individual workers, karkhanedars or four village arhatias.

11. In addition to the dependence of the workers on the buyer of his finished products for the supply of raw materials he has also to rely on him for credit for maintenance. The dealers give loans for the personal expenses of the workers and recoup these later from the price of the products supplied. This further reduces the independence of the worker and the position generally is that the artisan can rarely earn more than even an agricultural labourer. The vast majority are deep in debt.

Position of the
industries

12. It will thus be seen that the cottage worker is more or less a wage-earner and does not get a proportionate return for his labour. The middleman in his turn suffers from the absence of an organized system of marketing and does not perform the functions of an enlightened *entrepreneur*. As he is usually a *mahajan*, he wants to make profits at the rate of and under the system of money-lending. The worker on his side depreciates the quality of his work so as to make whatever profit he can at the low price he receives. He takes little pride in his work as there is little return for quality. The result is that workmanship steadily deteriorates. Neither the worker nor his financier studies the demand and there is little initiative in introducing new designs. Each cottage industry has its own individual and peculiar problem, but taking a broad general view of the conditions prevailing among cottage industrialists, the following difficulties appear to be common to all :

(i) There is no studied supply of raw material especially those that are partially manufactured like yarn, brass sheets, etc. The original suppliers of the raw material aim only at pushing their products while dealers do not care to select the best material for the cottage worker.

(ii) There is no arrangement for the supply of the right type of raw material to the workers who are independent in the sense that they do not produce goods to order. They have to buy what is offered by the dealer and at his prices. There is occasionally in some places competition between dealers but the existing system of credit purchase makes it impossible for even independent workers to take full advantage of it.

(iii) Workers do not get proper guidance regarding designs and there is little control over the quality of production, that is to say, there is no standardization.

(iv) The demand is not intelligently studied and there is over-production in varieties which have a sale in the known markets.

(v) Out-station business and foreign trade is not developed on scientific lines of fixed prices standard quality and timely supply. There is no combined organization for proper marketing and the dealers depend upon individual efforts only.

(vi) The worker has to pay too much for his working capital.

The U. P. Arts
and Crafts
Emporium,

13. The Industries Department have paid special attention to supplying some expert advice and trained men for certain industries. For the artware of the province they have made an experiment with a state-run organization for marketing called the Government Arts and Crafts Emporium, which is now at Lucknow. The Emporium was expected to supply standardised designs, secure better payment of wages to the craftsmen and establish markets both in India and abroad for the artware of United Provinces. For various reasons it does not appear to have achieved the desired degree of success and a committee of commercial and financial experts presided over by Sir Sorabji Pochkhanewala of the Central Bank of India has recently recommended the establishment of a subsidised marketing company. Until that is established the organization of the Emporium will doubtless furnish a useful model for the marketing of other cottage and village industries.

14. The record of co-operative societies in regard to cottage industries may be noted in a little greater detail. The earliest co-operative experiment for helping cottage workers started in 1906 with a silk workers' association in Benares. The objects of the association were to supply raw material to members on credit or cash payment and to sell the manufactured goods either on commission or after purchasing from the members. The direction of the business was in the hands of a Committee elected by members, who included the poorer weavers as well as the wealthier members of the community. The latter were also dealers and this combination of weavers who were also dealers with the property-less weavers led to trouble almost immediately. The members would not trust any of themselves with the distribution of orders. For lack of capital and market it was not possible for the association to take over all the products of the members' looms and discrimination in the matter of disposal of members' products led to charges of favouritism. An outsider was then put in as manager. He was impartial but he had to buy his experience. On the supply side, it was found difficult to compete with the prices given by the private traders and there was very little sale of raw material. On the marketing side, sales steadily went down largely for lack of advertisement, though there were occasional spurts, as during the Allahabad Exhibition. The marketing arrangements for silk goods needed modern methods of publicity and advertisement and this side was incompetently handled by the association. The result was a large accumulation of unsaleable stock and bad debts. It was then thought that the best service to weavers could be rendered in the matter of finance and urban credit societies were started for the benefit of the poorer members. These were mismanaged; there was heavy over-loaning and ultimately they had to be dissolved, leaving a legacy of heavy losses behind for the financing institution—The Kashi Co-operative Bank. The only survivors of this period of co-operative effort in Benares are the said Raja weavers societies, where also the principle of homogenous membership was neglected and both dealers and weavers were included in the hope that the former would give the society the benefit of their business ability. The result, however, was only exploitation. Recently there has been reorganization and some work is now being found for the members through a co-operative store.

Co-operative efforts.

The next attempt was with weavers of cloth in Sandila. An ordinary credit society for weavers was split into five and these were affiliated to a central weavers bank, which in addition to credit undertook the supply of yarn to the members and managed the factory for manufacture and sale. The capital came partly from a Government loan and partly from deposits. The beginning was good but supervision was weak. The weavers themselves lacked the necessary capacity to guard their interests and in practice control was in the hands of a single honorary worker who later on committed large embezzlements and the bank had to be liquidated. Subsequent re-organization has, however, been successful. There is a separate registered store for the supply of raw materials and for the sale of finished products on commission and sale and return basis. The United Provinces Co-operative Union maintains special staff for supervising the society and for obtaining orders for it. The society has a special line of its own, viz. the making of jaconet cloth and has been able to obtain Government orders for its supply. The work is progressing, largely because of close official supervision and because of the initiative taken in securing orders.

In Tanda there are 22 weavers' credit societies of over 25 years' standing which have done well under the close supervision of the Managing Director of the Tanda Co-operative Bank. There is no co-operation in production and the weavers are also reluctant to undertake joint marketing. Instruction in the use of improved looms has, however, been given and recently marketing has been facilitated, though on an individualistic basis, by the bank agreeing to store the goods of the weavers till they find purchasers for them and advancing them a portion of the estimated price to enable them to purchase raw materials and produce more goods.

Agra has credit societies and a store for the benefit of the durri and pugree weavers and shoe makers. The store supplies raw materials and supplements their efforts in the sale of finished products. The credit societies have not done well but the store has avoided loss and has undoubtedly saved the weavers from going under completely. Government help the store by paying the salary of a store-keeper and an instructor-supervisor and outside supervision is given by a non-official co-operator. Here also, however, the difficulty is in finding sales.

At Bara Banki a federation of weavers' societies was organized in 1927-28. The organization was the usual one, viz. a store for the supply of raw material and the purchase and sale of finished products. Capital was obtained from a loan by Government but there was an important omission inasmuch as no trained staff was provided for securing orders, for supervision of the work or for instruction. Little useful work was done till two years ago when effective

arrangements for supervision could be made with the help of the Government of India subsidy for assisting the hand-loom industry. A trained supervisor was given to the federation and facilities for marketing were arranged through the Government Emporium in Lucknow.

A blanket weaving and spinning society was started in Najibabad (Bijnor) six years ago with an old plant borrowed from the Industries Department. Capital has been obtained from loans by Government, from co-operative banks and from a private capitalist on promise of a half share in the profits. So far the society has not been able to earn profits as the wool purchased was too expensive and finishing was defective. There are no effective arrangements for the sale of the blankets and some difficulty is also being experienced in finding the necessary capital. Co-operative banks meant for agricultural societies are naturally shy of putting their money in industrial ventures and there is little security with the society to attract outside capital. A raising and milling machine is now going to be put in at Government expense.

A small co-operative factory was set up at Nagina for glass workers. It did well in the first year but unexpected floods in the second year cracked expensive furnaces and later on when foreign glass became cheap the society had to be liquidated after heavy loss.

A co-operative tannery was started in Jaitra in Bijnor District some seven years ago. There were profits in the beginning but faction, want of proper technical advice and heavy overhead expenses have ruined the society.

Small leather workers' society started 2 years ago in Amroha in which the purchase and sale of raw material is done by the individual while processing is done collectively has worked profitably but here also initial capital and the services of an accountant had to be provided free.

There is a society of brass workers at Oel (Kheri). At one time it forced many of the karkhanedars of the town out of business; but after some years faction set it and business stopped completely. A year ago the disloyal party was excluded and the society has again started working though on a smaller scale.

This short résumé brings out the difficulties of productive co-operation among ignorant workers owning no assets in the shape of tool or machinery, no security, and used to years of exploitation. It is easy to put the blame on their lack of the co-operative spirit but the root of the matter is that these societies need detailed guidance and elaborate assistance on every side of the business and such assistance must be given in a concerted manner. This was not always done—partly for fear of incurring heavy liabilities. But the fact remains that unless a business is set up as a complete economic unit it has little chance of success in the open market. For example, though the Government gave assistance to the Najibabad Factory in the shape of a spinning plant, no arrangement was made for finishing the goods and it was, therefore, only to be expected that the blankets would be unable to compete with the mill-made products. Supervision also was quite often left to the sporadic attentions of an untrained and changing staff. If the illiterate weavers out of touch with the market and unfamiliar with business methods are to be taught how to run a factory, they need more guidance than that of an inspector of agricultural credit societies burdened with the care of a normal inspector's circle. However, as the revival of the societies at Bara Banki or Sandila or the work done at Tanda shows the difficulties are not insurmountable provided arrangements are made for giving continuous trained guidance and for assisting the societies with capital where necessary and with marketing facilities.

CHAPTER III

OUR PROPOSALS

15. Cottage industries are suited to the genius of our people and in many respects enjoy natural advantages against large scale production. We do not wish to indulge in an academic discussion on the controversy as to the merits of supporting such industries but we wish to emphasize that given a proper organization for instruction, finance, production and marketing, many of them can be firmly established, to the benefit of a section of the population which has no alternative means of livelihood.

16. The difficulties of the co-operative experiments to which a reference has been made indicate that it is a mistake to attack any one aspect of the problem and that if success is to be achieved, a comprehensive policy of assistance is necessary. We advocate direct state-aid to selected cottage industries for (1) developing production, i.e. improving the technique of manufacture, use of improved appliances and the introduction of new

and better designs, (2) the supply of raw materials, (3) finance and (4) the marketing of the finished product. It is not necessary that the assistance should be given through co-operative societies alone. The worker is conservative and suspicious and very often it will be only when he has tangible benefits coming to him from state-aid schemes that his confidence will be won and the soil will be prepared for his being organized co-operatively. The cohesion and public-spirit required for co-operative production will grow after experience, and to begin with, there should be no hesitation in making a start with groups of individual workmen and arranging for technical guidance and marketing for them.

17. We have in paragraph 7 given a list of industries to which we consider assistance could be given. Of these we select the following for intensive assistance through the organization proposed by us later :

(a) *Textiles*—The foremost place among cottage industries in this province is occupied by textiles. There is already a scheme for assisting the handloom cottage weaving industry which is being subsidized by the Government of India with an annual grant of Rs.86,400. We understand that a similar scheme is being inaugurated for the development of the cottage woollen industry with the help of another grant from the Government of India. We recommend that the silk industry should be included in the scheme and further, that in the scheme for assisting textile, the hosiery industry should be included.

(b) *Leather*—Next to textiles come leather. This industry is in the hands of the poorest and the most backward classes and provides a living to thousands of workers. The main branches of this industry requiring attention are three—(1) flaying of hides and skins, (2) preserving and curing of skins and (3) tanning.

We do not recommend for the present that the production of high class leather be taken up as that requires capital outlay beyond the means of the cottage workers.

(c) *Glass*—We suggest that manufacture of glass bottles and phials and bangles should be taken up. Some training could be given to the workers at Bahjoi.

(d) *Brassware*—Electroplating of Moradabad brassware needs special attention.

(e) *Locks*—There is, in our opinion, a future for pressed locks made in the country, particularly from scrap iron.

(f) *Toys*—Japan was made rapid strides in the industry and we suggest that toy-making in Japan be studied and an experimental factory be started here under the guidance of a man trained in Japan.

(g) *Basket making.*

(h) *Oil pressing.*

(i) *Ghee making.*

18. In our terms of reference we have been asked to draw up a practical scheme of development of cottage industries on co-operative lines. We have already explained in paragraph 4 of this report that we are unable to submit a detailed scheme. Such schemes will best be prepared by departmental officials specially deputed for surveying the industries concerned. They could then be examined by the Cottage Industries Board, the constitution of which we are proposing, before they are given effect to. We may mention, however, that too long a time need not be taken over these surveys. Mr. Varsheni suggested that assistance of businessmen may be sought in conducting surveys.

19. Since co-operative societies will necessarily take time to develop and the need is urgent, the burden of organizing the cottage industries will fall upon Government in the beginning. Government will have to perform functions similar to those of the carpet firms of Mirzapur. These have established business connexions based on approved designs and specifications. They purchase yarn in bulk and give it out to approved weavers who prepare carpets on fair wages and these carpets are then taken over by the firms and sold. The worker shares his profits not only with the firms, but with its subordinate agents. A similar scheme will be necessary for Government also and grants will be needed to meet the overhead expenses. As the material benefits in the form of ready sales and cheap supply of raw materials become more and more appreciated by the workers, they would be more and more associated with the management of the entire organization till the aim of organizing them into co-operative societies would be achieved.

We have examined the scheme which the United Provinces Government have approved for the development of the handloom (cotton) weaving industry and we recommend that organized state aid as proposed therein should be given to the other selected cottage industries also.

20. Further, we feel that a standing organization is necessary to keep the interests of the cottage industries prominent before the Industries and the Co-operative departments and to assist their mutual collaboration. We propose, for this purpose, the constitution of a small body called "Cottage Industries Board" which is to be composed as follows:

- | | | |
|---|---------|-----------|
| (1) The Director of Industries and Commerce, United Provinces | .. .. . | Chairman. |
| (2) The Registrar, Co-operative Societies, United Provinces | .. .. . | Member. |
| (3) One nominee of the Government to represent Cottage Industries | .. .. . | Do. |
| (4) One nominee of the United Provinces Co-operative Union | .. .. . | Do. |
| (5) One member of the United Provinces Legislature to be elected by the Council | .. .. . | Do. |
- Khan Bahadur Maulvi Fasihuddin pressed for two representatives of the United Provinces Legislature but it was decided by majority to have only one.
- | | | |
|--|---------|---------|
| (6) One nominee of the Board of Industries, United Provinces | .. .. . | Member. |
| (7) Secretary of the Board | .. .. . | Do. |

The Industries Department Reorganization Committee has recommended the appointment of a wholetime Assistant Director of Industries for cottage industries. We recommend that that officer should work as Member-Secretary to this Board and be responsible for executing its decisions. The other industries, i.e. those not selected for intensive work may be looked after by the Industries Department as hitherto.

21. The first step will be in the organization of production. Experience shows that even when orders can be secured, they are not exactly complied with. When goods are made without a previous order there is even less conformity to standard. Specifications should be drawn up for each variety of goods to be produced. Further, it is necessary that new designs should be introduced and that improved appliances be supplied to the workers after sufficient trial. This will involve the establishment for each industry of a central technical institution and we recommend that the existing central technical institutions of the Industries Department be required to undertake this work. We do not think that special staff should be provided. The heads of these institutions should be relieved of routine work and should consider the development of industry to be of as much importance as the work of teaching, which appears to be absorbing almost the whole of their attention at present. Suitable rewards should be given to members of the staff who do some special work for the improvement of an industry and some provisions made for engaging men for assistance in research. The schools should, however, have the assistance of designers and funds provided for design work. Attractive salaries will have to be offered to designers as industrial designs is a specialized art and is beyond the competence of ordinary painters or drawing masters. Designs should be invited from outside also and there should be provision for payment for such designs. In addition, exhibitions and competitions for designs should be held annually to obtain the best results.

22. *Local centres*—To control production at the manufacturing centres, there should be a local organization at each centre. A technical man of the status of a supervisor of the United Provinces Co-operative Union should be employed to see that the work is done according to instructions. He should be able to demonstrate to the workers the use of improved appliances. Where this work is heavy, i.e. where the workers need regular training in the use of improved appliances an instructional class as suggested by the Industries Re-organization Committee should be held.

23. *Supply of raw material*—There should be a store at each centre under the technical supervisor just referred to, which will arrange to supply raw material to collect finished products, and to finance the workers. To begin with, one inspector should be employed for a group of such centres and when later on the work develops their number may be increased. These men should primarily be recruited for their knowledge of the trade and not for their academic qualifications only. They should also do their monthly audit of the Stores. There should be an advisory committee of management for the local store which should consist of such local businessmen as may be interested in it, representatives of co-operative

societies affiliated to the store, and of officials of the Co-operative and Industries departments. In the beginning the store will be a Government institution affiliated to the central marketing organization suggested later.

24. One of the main complaints against the products of cottage industries is that of lack of finish and we recommend the establishment of organization, central or local as the case may require, where goods could be collected for finishing, fitting up or treating them in other ways necessary to make them more marketable. We understand that for handloom weaving a finishing plant is proposed to be set up under the Government scheme. Similar arrangements should be made for other industries, e.g. a central institution for making up textiles into ready made goods like curtains and covers, for fitting up baskets, for electro-plating. These organizations should be self-supporting, but where expensive machinery has to be installed as in the case of finishing of cloth, adequate Government grants should be given as the work will be in the nature of an experiment.

Finishing.

25. Individual workers or even local organizations will be able to arrange for local sales or to obtain orders from neighbouring markets but this will not be sufficient. A wider market must be sought if good value is to be obtained for the improved products which are likely to be produced after the assistance recommended has been given. We, therefore, propose that there should be a central marketing organization for all the selected industries. The United Provinces Government Arts and Crafts Emporium can be enlarged to include non-art products also in its scope, and should make arrangements to market the products of the local centres discussed above. It should maintain a show room both for retail sale and for display of samples. It will carry stock both for retail sale, and in the case of standard goods, in anticipation of wholesale orders. The stores at the local centres will have to take over the members' goods, and offer them the prevailing prices. These goods will be sold locally or through the central organization.

Organization of sale.

In addition to a show room, the central marketing organization should maintain commercial travellers. They may be paid a small allowance, but they should depend for the bulk of their income on commission on the business actually secured. They should be required to suggest new lines in demand and to keep the management of the central organization in touch with the rival lines competing with the United Provinces products.

26. The central marketing organization should establish branches or agencies at the important consuming centres and for this purpose should subsidise the existing dealers. The amount of subsidy would vary with the amount of the business done.

Marketing.

The central marketing organization will charge a profit for the sale of the products varying naturally with the class of goods sold. In effect it will work as the commission agent of the local organization. It may not charge any profit on wholesale business in the beginning. The manager of the central marketing organization should be a man of business experience and should be provided with sufficient assistants for the different industries to be tackled.

The local organizations will also be permitted to employ canvassers and subsidised dealers for finding a market in their own neighbourhood but they would do this in consultation with the central marketing organization to prevent clash between the various centres.

27. Since the producers will not be co-operatively organized in the very beginning it will not be possible to finance them from loans obtained from co-operative banks. In any case the existing co-operative banks are intended for financing agriculture and it would be unsafe and difficult for them to finance industrial societies without having Government at their back to share the risk. Work should begin with finance from Government and as co-operative societies of producers are organized at each centre, arrangements should be made with the local co-operative bank to find the capital required and in order that this be possible each loan should bear at least a partial Government guarantee—the terms of the guarantee being settled by negotiation.

Finance.

We recommend a Commercial Operation grant of up to five lakhs for the Central Marketing Association either directly or through co-operative banks.

28. In addition to the Commercial Operation grant referred to above and guarantees to co-operative banks as may be settled later, we recommend that Government should give a grant of 1½ lakh a year for five years to the proposed Cottage Industries Board. It will utilize it for (1) maintaining the central controlling organization, (2) for getting surveys made of the selected industries, (3) for research, experiment and designing at the central technical institutions and (4) for maintaining the local centres of the Central Marketing Organization. The profits of the business would go to

Expenditure involved

form the capital of the local stores and of the marketing association and would enable the scheme to continue when the Government grant is reduced or withdrawn. It is not possible for the whole business to be carried on from the profits alone as the introduction of new designs, advertisement, instruction, demonstration of new appliances and supervision of production will cost more than the profits of the business. Later on when the business expands we hope that the structure we suggest, viz., a central marketing organization with local centres each with producers' co-operative societies affiliated to it will be able to function without outside assistance.

29. We recommend that one economist and at least one engineer be sent to Japan to study the cottage industries of that country, their commercial methods and their technical organization.

30. We attach a rough budget showing how the proposed grant would be spent.

J. Nigam, I.C.S., Director of Industries and Commerce, United Provinces	Chairman.
Vikramajit Singh (Rai Bahdur, M.B.E.)	Members.
Fasihuddin (Khan Bahadur, Maulvi, M.L.A.)	
Vishnu Sahay (I.C.S., Registrar, Co-operative Societies, United Provinces	
Trilokinath Kapoor (Rai Bahadur)	
Mathura Prasad Mehrotra (Rai Bahadur)	
I. D. Varsheni	Secretary.
Anand Sarup* (Shree Sahebji Maharaj, K.T.)	
B. K. Ghoshal	

* He approved the draft report but died before the last meeting was held.

BUDGET

(1) Cottage Industries Board:

	Rs.
One Head Assistant at Rs.80—4—120	960
Two clerks at Rs.40—2—60	960
One despatcher at Rs.20—5—35	240
One steno-typist at Rs.40—2—60	480
Two peons at Rs.10-8	252
Office contingencies including library	1,500
Non-recurring furniture and two typewriters	1,500
	5,892
House-rent if space not available free at Rs.50	600
	6,492
or Rs.	6,500

(2) Survey—

Eight industries need survey lasting from three to six months :	
Six investigators for six months on Rs.100 per mensem including traveling allowance Rs.75 plus 25 fixed travelling allowance ..	3,600
Six peons for investigators at Rs.15 per mensem including travelling allowance	540
Travelling allowance for controlling officers	2,000
Allowance to controlling officers at Rs.50 per officer per month for six officers including peons	1,800
Two typist-clerks for typing reports at Rs.50 per mensem for eight months	800
Two office peons at Rs.10 for eight months	160
Contingencies including hire of typewriters if necessary	600
Purchase of samples	1,000
	10,500

No separate survey would be necessary if Government accepts the scheme already submitted by the Industries Department.

(3) Research and Design at Central institutes—

Regular research work may not be necessary in each case. A minimum of laboratory assistants and four servants is being provided	
Four designers at Rs.80 according to qualifications	3,840
Contingencies for research and design	3,000
Two laboratory assistants for research Rs.40—2—60	960
Four servants for research at Rs.12	576
Four draftsmen with designers Rs.30—2—40	1,440
Reward for research	1,000
	10,816

	Rs.	Rs.
(4) Stores for Local Control—		
Twenty stores with a budget for Rs. 2,500		50,000
(5) Tuitional classes—		
Eight industries to be covered by classes each class to have 3 instructors each		15,000
(6) Grant for finishing arrangements at stores or Central places		5,000
(7) Inspectors—		
Three Inspectors for stores and Training classes at Rs.100—10—150	3,600	
Three peons at Rs.10 per mensem	360	
Travelling allowance at Rs.30 per mensem per inspector including peon	1,080	
Contingencies Rs.10 per mensem per Inspector	580	
		5,400
(8) Marketing :—		
Extra expenditure over Emporium including pay of staff, commercial travellers, house rent, branches with subsidy and contingencies		20,000
Advertisement including participation in Exhibitions, preparation of catalogue, etc.		10,000
	Total	36,000
(9) Supply of Tools and appliances		10,000
(10) Miscellaneous including grant for Co-operative organization		5,000
<i>I—Abstract of Expenditure</i>		
1. Cottage Industries Board		6,500
2. Research and Design		10,816
3. Stores		50,000
4. Tuitional classes		15,000
5. Finishing		5,000
6. Inspectors		5,400
7. Marketing		30,000
8. Supply of Tools and appliances		10,000
9. Miscellaneous including grant for co-operative work		5,000
	Total	1,27,716
10. Non-recurring for survey		10,800

The non-recurring expenditure will be met from saving in the first 6 years when all sections will not be working in full swing.

II.—Commercial operations grant Rs.5,00,000. This may be a permanent advance to Co-operative Banks for commercial operations and turnover may be permitted. The Emporium will also be financed from this grant. The total amount of 5 lakhs may not be paid in the first year and may be spread over 70 to three years.

APPENDIX I

List of notes on certain industries received by the Committee, vide paragraph 3 of the Report

1. A note on the present condition of the cottage industries giving the efforts made by the Department of Industries to assist them and his views for their future development by Mr. J. A. H. Duke, Director of Industries.
2. Two notes on lock-making and allied industries by Mr. J. A. H. Duke, Director of Industries.
3. Two notes on art pottery and tile manufacture in the United Provinces by Mr. J. A. H. Duke, Director of Industries.
4. Two notes on the Mainpuri Tarkashi industry by Mr. J. A. H. Duke, Director of Industries, United Provinces.
5. A few suggestions on Moradabad Brass Industry by Mr. P. P. Khanna of Moradabad.
6. A note on Art Brass-Work of Benares, by Mr. Narsing Dass, B.A., Honorary Secretary, Benares Industrial and Trade Association.
7. A note on gold thread and wire drawing industries of Benares by Mr. Nar Singh Dass, B.A., Honorary Secretary, Benares Industrial and Trade Association.
8. A note on the assistance required for the furniture and wood-working trade of these Provinces by Mr. M. B. Hudlikar, M.Sc., Deputy Director of Industries (Education), United Provinces.
9. A note on the methods of helping the village tanners by Mr. M. B. Hudlika M.Sc., Deputy Director of Industries (Education), United Provinces.
10. United Provinces Industries Department's scheme for the development of handloom weaving industry.
11. A note on cottage industries by Rai Bahadur Pandit Radhey Lal Chaturvedi, Deputy Registrar, Co-operative Societies, United Provinces.
12. A note on the furniture industry by Mr. B. P. Agarwal, Assistant Stores Purchase Officer, United Provinces.
13. Scheme for the development of cottage industries by the Secretary Mr. B. K. Ghoshal, M.A., Divisional Superintendent of Industries, United Provinces.
14. A scheme for co-operative stores by Mr. I. D. Varsheni (a member of the Committee).
15. A scheme for developing the wood-working industry by Mr. S. B. Naidu, Wood Technologist, United Provinces, Bareilly.
16. Secretary's note on the above scheme with special reference to co-operative organization.
17. Note on ginning industry based on the note of Mr. B. K. Murthy, Principal, Government Textile School, Cawnpore, to develop small ginning factories in the grid area.
18. Scheme for improving the textile dyeing and printing industries by Mr. H. B. Shroff, Principal, Government School of Dyeing and Printing, Cawnpore.
19. Scheme for Textile Dyeing and Printing industries by Mr. E. I. Ahmad, of Budaun.
20. Note on manufacture of soft toys based on Mr. S. B. Naidu's scheme for introducing manufacture of soft toys among workmen.
21. A note on the scissors industry of Meerut by Mr. A. P. Mathur M.A.
22. A note on Basket-making by the Secretary Mr. B. K. Ghoshal, M.A., Divisional Superintendent of Industries, United Provinces.
23. A note on wool weaving by Mr. B. K. Murthy, Principal, Government Textile School, Cawnpore.
24. A note by the Secretary Mr. B. K. Ghoshal, M.A., Divisional Superintendent of Industries, United Provinces, regarding metal utensil industry.
25. A scheme showing the ways and means to finance, organize and develop cottage industries on co-operative lines by Mr. Jagannath Prasad Srivastava, Assistant Registrar, Co-operative Societies, United Provinces, Lucknow.
26. A scheme for introducing power looms in small units owned and run by cottage workers by Mr. B. K. Murthy, Principal, Government Textile School, Cawnpore.

X.9.252 CC. N38 E

G4

5

Report of the Cawnpore Labour Inquiry Committee appointed
by the Government of the United Provinces

CHAPTER I

INTRODUCTORY

1. The Labour Enquiry Committee was appointed by the United Provinces Government, notification no. 3275/XVIII, dated the 11th November, 1937, which is reproduced below :

Appointment and
terms of reference.

"The Governor has been pleased to appoint with effect from 30th August, 1937, a Committee of Enquiry to examine and report on the conditions of life and work of the labourers employed in factories at Cawnpore"

2. The Committee consists of—

- (1) Sriyut Rajendra Prasad Saheb, Chairman,
- (2) Sir Tracy Gavin Jones,
- (3) Mr. Harihar Nath Shastri,
- (4) Sriyut Gulzari Lal Nanda, and
- (5) Professor S. K. Rudra, M.A. (CANTAB).

3. The terms of reference to the Committee are as follows :

- (1) Whether wage cuts have taken place direct or indirect, and if so, where and to what extent?
- (2) In case any such wage cut is established, whether there should be any increase in wages, and if so, what?
- (3) How to the present rates of wages in Cawnpore compare with those prevailing elsewhere in India and whether, taking also, into consideration the profits made by the mills and the cost of living in Cawnpore they should be increased and if so, to what extent?
- (4) Is it desirable to prescribe any minimum rate of wages for any class of labour at Cawnpore and if so, what should such rate be?
- (5) What is the most suitable arrangement for shifts to enable a factory to continue working as long as it desires to do so without unduly inconveniencing the labourers?
- (6) Whether schemes of rationalization and intensification of labour have been, are being or are intended to be introduced, and if so, on what lines? What are the effects of such schemes on the labourers as regards their earnings, health, efficiency, etc.?
- (7) What abuses, if any, are associated with the present system of supervision, recruiting, suspending and dismissing labourers and what steps should be taken to remove the same?
- (8) What days, if any, should be observed as holidays in factories in addition to or in lieu of Sundays?
- (9) On what terms should emergency leave be granted in the case of (a) piece workers and (b) time-workers?
- (10) Are the general conditions of labour in factories satisfactory and what, if any, improvements are needed?

The Committee will also adjudicate on questions of interpretation of the terms of settlement arrived at on the 9th August, 1937, as well as on other matters referred to it by either party during the pendency of the inquiry.

4. The Director of Industries, United Provinces, is the Secretary to the Committee.

5. The Committee is empowered to co-opt technical advisers who will not have the power to vote.

6. The Committee will please submit its report before the end of January, 1938.

7. The Government hopes that the parties concerned will render all possible assistance to the Committee."

2. The terms of reference were supplemented by G. O. no. 3275(3)/XVIII, dated the 11th November, 1937, which ran as follows :

"I am directed to say that it has been suggested to Government that steps may be taken to introduce welfare work and to effect improvements in the housing conditions, etc. of the labourers at Cawnpore with a view to ameliorate their condition and promote their happiness and well-being.

2. I am therefore to request that the marginally-noted three points may kindly be placed before the Labour Enquiry Committee, so that it may consider them and make such recommendations to the Government on the subject as it thinks necessary."

- (1) What improvements are required in the conditions in which the labourers live in Cawnpore especially as regards housing, sanitation, etc., and what steps should be taken to effect the same ?
- (2) What welfare activities are desirable and through what agencies should they be carried out ?
- (3) What statistical data should be maintained in regard to labour conditions and welfare and by what agency ?

3. Sriyut Gulzari Lal Nanda could not be spared by the Government of Bombay to serve on the Committee. By notification no. 4543/XVIII, dated the 13th January, 1938, the Government therefore appointed Mr. B. Shiva Rao, Press Correspondent, New Delhi, to take his place. Sriyut Gulzari Lal Nanda, however, took a lively interest in our proceedings. He visited Cawnpore once and helped us with advice. Mr. Babu Shiva Rao actually took charge of his duties on 6th January, 1938.

4. The constitution of the Committee underwent a further change when Sir Tracy Gavin Jones and Mr. Harihar Nath Shastri offered to retire on certain conditions. It was felt that it would be more conducive to the work of the Committee if the representatives of the parties to the dispute, which had given rise to the Committee, did not function as its members. The Government accordingly issued notification no. 143/XVIII—735, dated the 16th January, 1938, which is reproduced below :

"The Governor is pleased to direct that with effect from 12th January, 1938, the Committee of Enquiry appointed in notification no. 3275/XVIII, dated the 11th November, 1937, as amended by notification no. 4543/XVIII, dated the 13th January, 1938, to examine and report on the conditions of life and work of the labourers employed in factories at Cawnpore shall consist of—

- (1) Sriyut Rajendra Prasad Saheb, Chairman,
- (2) Professor S. K. Rudra, and
- (3) Mr. B. Shiva Rao, Press Correspondent."

5. On the retirement of Sir Tracy Gavin Jones and Mr. Harihar Nath Shastri the Committee co-opted Mr. B. K. Murthy, B.E. (MECH.), M.Sc., TECH., A.M.C.T., Textile Expert to the United Provinces Government, as a Technical Adviser.

Account of the dispute.

6. The events leading to the appointment of the Committee may be briefly summarized.

Immediately after the assumption of office by the Congress in July, 1937, a number of strikes took place in several textile mills in Cawnpore with a view

to securing an increase in wages and general improvement in the conditions of employment. It was stated at a number of meetings of workers that the employers had reduced their wages from time to time during the last few years, either directly by a revision of wage rates, or indirectly by the abolition or curtailment of bonuses and allowances. It was also alleged that the policy of the employers in introducing rationalization and other methods of intensification was responsible for increasing unemployment among factory labourers at Cawnpore. Allegations were also made that the members and office-bearers of the Mazdur Sabha, the only organization of textile workers in Cawnpore, were harassed and victimized by the employers with a view to crush Trade Union activities. The Hon'ble the Premier, Pandit Govind Ballabh Pant, explained the attitude of his Government on the subject and promised to take all legitimate steps to secure to factory workers in Cawnpore reasonable standards of work and living. He also announced the decision of the Government to appoint a special Labour Officer to deal with labour disputes arising from day to day. This Officer, Dr. Raj Bahadur Gupta, M.A., Ph.D., was appointed in the beginning of August, 1937. On the 5th August, the Hon'ble the Minister for Industries, Dr. Kailash Nath Katju, visited Cawnpore and discussed the demands of the workers with the representatives of Labour and the Employers' Association of Northern India which had been brought into existence on the 3rd August, 1937. Unfortunately, however, the negotiations fell through because the employers would not agree to recognize the Mazdur Sabha as the mouthpiece of labour. The radical section of the Mazdur Sabha thereupon organized a systematic campaign of agitation which resulted in a general strike in almost all the textile mills. The Employers' Association reviewed the situation on the 6th August, and agreed to grant recognition to the Mazdur Sabha provided all the mills in Cawnpore resumed normal work by 9th August. The workers, however, refused to go back to work until all the demands of the workers, including the restoration of cuts in wages, had been agreed to by the employers. The district authorities considered it necessary, in the interests of peace, to promulgate orders under section 144, prohibiting meetings and the assembly of more than five persons. Action was also taken against certain individuals, including the General Secretary of the Mazdur Sabha, Mr. S. S. Yusuf, under section 107, of the Criminal Procedure Code. On the 8th August, the Hon'ble the Premier decided personally to intervene in the matter and came down to Cawnpore to discuss the situation. His efforts were successful in bringing about an agreement between the representatives of the Employers' Association and the Mazdur Sabha in the afternoon of 9th August. That agreement provided for the appointment of an Enquiry Committee to go into the demands of labour. A full copy of the agreement will be found in Appendix I to this report.

7. Although the terms of reference were general the Committee confined itself to consideration of the conditions in the textile industry at Cawnpore, more particularly cotton. The jute mills were not looked into at all. This was necessitated by the circumstances under which the enquiry was held. The dispute had occurred in the textile industry which is also the most prominent industry in Cawnpore. There was no statistical material available to formulate any opinion about other industries and the time-limit imposed by Government circumscribed the sphere of our investigations. According to its terms of reference the Committee was also called upon to adjudicate on all interim disputes. At the very commencement of its career, it was faced with a deadlock that had arisen on account of strikes or lockouts in three mills. We requested the Government to refer this matter to a separate body and they

Scope of the inquiry.

accordingly appointed a Court of Inquiry under section 3 of the Trade Disputes Act, 1929. With regard to other interim disputes that arose from time to time, the Committee expressed its inability to take them up on the ground that their consideration would prejudice the general enquiry and delay the findings on the main issues. The Government then directed that "questions of interpretation and other matters which are referred to it during the pendency of the enquiry can be taken up later after the main enquiry is completed and the report thereon prepared."

Procedure.

8. At our sittings both the Employers' Association and the Mazdur Sabha were fully represented by their members or nominees. The Government appointed Mr. Shitla Prasad Saksena, M.A., Lecturer in Economics, Lucknow University, as a technical adviser to assist the Mazdur Sabha in presenting their case to the Committee and he was present throughout. The procedure for examining the witnesses was that after they had been examined by the Chairman and other members of the Committee, both sides were allowed to examine or cross-examine them, as the case may be.

Press.

9. The Press was admitted to all public sittings of the Committee, except in the early stages of the enquiry when the Secretary issued *communiqués* briefly summarizing the proceedings of the day. In view of the tension prevalent in the city, appeals were made on more than one occasion to the Press to co-operate with the work of the Committee. We are grateful for the response made to these appeals.

Questionnaire.

10. A comprehensive questionnaire was issued which is reproduced as Appendix II to this report. We received only two written replies, one from the Employers' Association which gave general answers on behalf of the cotton textile industry as a whole and the other from the Executive Committee of the Mazdur Sabha. At a later stage the Employers' Association supplemented its reply by supplying copies of the replies of the individual mill members. Nineteen out of 29 textile mills in Cawnpore are members of the Employers' Association. The non-member mills did not care to reply to the questionnaire and took no part in the proceedings.

Our handicaps.

11. The work of the Committee was greatly hampered in more ways than one. Apart from the complications and the delays caused by lightning strikes, frequent allegations from the workers' side of victimization and the generally disturbed conditions in Cawnpore, which culminated in the murder of an employee of the Elgin Mills, we felt that the lack of precise information, of the kind which was available to a similar Committee in Bombay, was a very serious handicap. The Bombay Labour Office is a unique institution in India with a well-equipped staff and through its experience of over 17 years has accumulated a wide and intimate knowledge of all aspects of the labour problem especially in relation to the cotton textile industry. It has a wealth of well ascertained and well assimilated facts and figures at its disposal. Such an institution is a powerful factor in the elucidation of complex and intricate problems, such as we have been called upon to determine. It has carried out, on at least four occasions, a through wage census, such as has not been attempted even once in these Provinces. Unlike Bombay, Ahmedabad and Sholapur, Cawnpore has not even had the advantage of the service of an accurately constructed and regularly maintained cost of living index number, so valuable in any investigation of the wage problem. We are glad to note, however, that a useful beginning in this direction has been made by the Bureau of Statistics and Economic Research, United Provinces, Cawnpore. Moreover, there have been, during the last 12 years, three detailed investigations by Tariff Boards into the conditions of the textile industry, but none of these visited Cawnpore.

12. Though the enquiry started in November, our Committee did not receive detailed material from the Employers' Association until a very late stage of our investigations. It was, in fact only after several reminders that the documents, to which reference was made in the written memorandum of the Employers' Association, were made available to the members of the Committee, on the strict understanding that these would not be disclosed to the representatives of the Mazdur Sabha, except at the time of cross-examination. Protests were made to us by the latter that this placed the Mazdur Sabha's representatives at a great disadvantage in cross-examining witnesses appearing on behalf of either individual mills or of the Employers' Association. Greatly as we sympathized with this point of view, we felt bound by the restriction imposed on us by the employers. This procedure prolonged the stage of oral evidence, with results which could not in any way be regarded as satisfactory.

13. We orally examined altogether 23 witnesses, of whom 7 were drawn from amongst the management of the various mills and 9 were workers, 3 having been produced on behalf of the employers and the rest on behalf of the Mazdur Sabha. The other witnesses were—

- (1) Sir Tracy Gavin Jones, President and representative of the Employers' Association, assisted by Messrs. A. L. Carnegie and C. W. Tosh;
- (2) Mr. A. L. Carnegie, President of the British India Corporation;
- (3) Mr. Harihar Nath Shastri, President of the Mazdur Sabha;
- (4) Mr. Shit'a Prasad Saksena, representing the Mazdur Sabha;
- (5) Mr. B. P. Srivastava, Chairman, Municipal Board, Cawnpore, assisted by Dr. S. N. Tiwary, Executive Officer.
- (6) Rai Bahadur Lal Srinaran, Executive Officer, Improvement Trust; and
- (7) Mr. A. Hai, Chief Inspector of Factories and Boilers, United Provinces.

A complete list of the witnesses will be found in Appendix III.

14. Members of the Committee visited from time to time various mills and the localities where the workers live. Mill Directors and Managers gave every possible assistance and freedom to see their mills and to interrogate their workers. Opportunity was also given to see the mills at work during the night shift. The Chairman of the Improvement Trust, Mr. E. M. Souter, C.I.E., M.L.A., with the Executive Officer showed us some *ahatas* and the new area reserved for factory workers. The Mazdur Sabha officers, particularly Mr Suraj Prasad Avasthi, M.L.A., enabled us to visit their premises and see the Reading Room and Dispensary facilities they provide for the workers. Mr. Carnegie of the British India Corporation conducted us over the MacRobert-ganj and Allenganj Settlements. Mr. H. A. Wilkinson gave us the opportunity of acquainting ourselves with the welfare work carried on for several years through the agency of well-trained Y.M.C.A. Secretaries.

15. There was a preliminary meeting at Lucknow on the 10th September, 1937, attended by the Hon'ble the Premier and Hon'ble the Minister for Industries, at which the programme of the Committee was decided. The formal sittings of the Committee commenced at Cawnpore on the 15th September. After the meeting of the 16th September, there was a long adjournment to enable those interested to prepare their answers to the questionnaire. The Committee reassembled on the 15th November, and except for a few short breaks and two long breaks, one of a week in November and the

other of about a fortnight in December, it met almost from day to day until the 31st January, 1938, when the evidence was closed. In all we had 38 sittings.

16. We have to record with regret that our President, Sriyut Rajendra Prasad, was prevented by serious illness from attending the sittings except in September, 1937, and from 7th to 14th January, 1938. It is, however, a matter of profound satisfaction that he was able to take part in the final discussions relating to our recommendations. In his absence Professor S. K. Rudra presided over our deliberations. He was present throughout from the 15th November, 1937. Mr. Shiva Rao was present at our sittings from the 7th to 24th January, 1938.

Acknowledgements.

17. We must express our gratitude to Sir Tracy Gavin Joines who, even after his retirement from the Committee, continued to take a keen and active interest in our deliberations. We are indebted to Pandit Harihar Nath Shastri for presenting the case on behalf of the workers, in spite of serious handicaps, with marked ability. We would also like to place on record our high appreciation of the very valuable help that we have received from Mr. B. K. Murthy, our technical adviser and Mr. J. Tinker, Managing Director, Cawnpore Cotton Mills, on technical matters. They have given us their time ungrudgingly and assisted us in all possible ways. The work done by Mr. Shitla Prasad Saksena, ably assisted by Mr. R. D. Bharadwaj, has been of immense value and contributed greatly to the unravelling of the problems before us.

Our thanks are also due to the various gentlemen who came to give evidence before us. The lucid and unreserved manner in which they answered our questions evoked our admiration on several occasions.

The small staff of the Industries Department placed at our disposal did their work with commendable expedition and efficiency. They worked unsparingly under great difficulties. Our special thanks are due to them and particularly to Messrs. Debi Prasad and Faiyaz Ali.

We would like to make special mention of the help we received from Dr. Raj Bahadur Gupta, the Government Statistician and his able assistant, Mr. Jugal Kishore Pande, M.A., in supplying us with needful statistical statements.

We would also like to mention with appreciation the name of Mr. D. M. Arrindell, the Employers' Labour Officer, for helping to elucidate the employers' point of view.

18. Lastly, our Secretary, Mr. J. Nigam, I.C.S., Director of Industries and Commerce, United Provinces, has been our efficient and tireless collaborator both on the Committee and in the office. The work of assembling material, the production of witnesses, the arrangements for meetings and all other matters connected with our work, was carefully thought out and planned by him. This has been a matter of peculiar difficulty. For after the end of the public sittings of the Committee on the 31st January, the members dispersed to their respective stations. He acted as the liaison officer, and coordinated our work. His ability and particularly his judicial training and experience were of invaluable help to us in our task. To him we owe our sincerest thanks.

CHAPTER II

THE WAGE PROBLEM

19. Wages have usually formed the main cause of trouble in most labour disputes the world over. Cawnpore has been no exception. The reason for this is obvious. In most countries, and it is daily becoming truer of India also, wages form the major, if not the sole source of the worker's income. His livelihood and that of his entire family depend upon the wages he receives. Income from other sources, if they exist at all, are strictly limited. Amounts so gained are meagre. Supplementary sources of income, in terms of money or real wages, are therefore not an appreciable part of a workers' total income. Hence the matter of the wage-rate and the total amount of wages secured, per unit of time, month or fortnight, is of the supremest importance to him. His welfare and the welfare of all those who depend upon him, are based upon the amount of earnings received. And since the majority of the community consists of wage-earners and their dependants the well-being of society is intimately connected with the wages received, individually as well as in the aggregate. The wage question is therefore of vital importance.

20. In India it was often said that the wage-rate or the wage itself, was not of such significance, because the so-called industrial worker was really an agriculturist. He came into industry as a matter merely of tiding over pecuniary difficulty for a period in his village home. He had his secondary source of income, and as soon as there was general improvement in agricultural conditions, he resorted back to his traditional means of gaining his livelihood. This undoubtedly was in large measure true. Parenthetically this accounted, amongst other reasons, for the migratory habits of our industrial population. It also formed one of the important causes of the slow development of trade unions, for collective bargaining purposes, even in our main industries. But the present day facts reveal a situation in the countryside where these old conditions are changing very rapidly. With increasing pressure upon the soil*, with greater and greater fragmentation, holdings are becoming uneconomic. Even our staple crops, for instance wheat, are not so secure in our own markets and *mandis*. Crops, such as, wheat, cotton, rice, and sugarcane, are elsewhere in the world being more and more scientifically raised and economically handled and marketed. The result is that the position of our food and commercial crops—and incidentally our cattle-raising and dairy-product industries also—has been thoroughly jeopardized. Our village arts and crafts too are being annihilated by the more attractive and cheap machine-made products. For instance, Japanese celluloid dolls are replacing the traditional "Guriya" made of cloth, and the crude toys of the potter are giving way to the more enticing mechanical toys of the West. The extension of the means of transportation is rapidly transforming our tastes and habits in these and other matters. Thus the economic security of life, has, for the present, been cut from beneath. The villager is becoming, in ever-increasing numbers, a landless agricultural labourer. He is drifting slowly but surely,

*The population of the Province has been increasing rapidly. The mean density per square mile in United Provinces increased from 418 in 1881 and 427 in 1921 to 456 in 1931.

city-ward. He is coming now to stay and not to run away back to his village home. Statistics can be cited to substantiate this trend of the movement of population. City populations are now in increasing proportions being composed of "native-born" people. Hence we must regard the industrial wage of the worker as the mainstay, both of himself and his family. Every large industrial centre including Cawnpore, has now built up a stable industrial population which regards industry as its life occupation. Indian economy must necessarily shift in this direction, unless disaster is to overtake its vast and rapidly expanding population. The industrial wage is therefore of national significance.

Interests to be considered in determining an equitable wage.

21. This wage has, however, to be equitable. The theory of marginal productivity is not a mere pastime problem for the intellectual gymnastics of the economist. It is a stern reality of the market place. It is in the opinion of many economists definitely and decidedly the ultimate factor which determines the distribution of the national dividend. Other agents or factors of production have also to be taken into due regard. Under existing conditions the industrial worker is not the only consideration. The industrialist, the businessman, the technician, the supervisory and administrative functionaries have also to be taken into account. The *entrepreneur* and the financier play an important part in the economic organization of the country. The modernization of the industrial structure of this land depends very greatly upon their initiative, capacity and energy. Much that has been achieved in India is largely due to their efforts often against heavy odds. Cawnpore itself is manifestly a monument to the courage and the enterprise of the employers, firstly British, and now British and Indian both. If it is desired that India should be rapidly industrialized, the confidence of the captain of industry and of the financier in the conduct of affairs should not be impaired. The profit motive has to be kept in mind, unless indeed it is contemplated to transform the very basis of the economic structure of the country.

22. While we accept the importance of the profit motive as a stimulus to economic enterprise, we at the same time wish to emphasize that the position of the worker must equally be safeguarded and secured. This factor has often not been considered as of much significance. In fact, there has been great exploitation. Wages have been the first to suffer for any decline in industry and the last to benefit from any increase in prosperity. The workers' standard of living appears to have been the last consideration. The various ways and means that have been adopted in other countries to safeguard the worker's position, are here, on the whole, conspicuous by their absence. Profit motive should not however be interpreted to mean indiscriminate profits, particularly in the case of a protected industry.

23. Besides the worker and the employer, there is yet a third party to be considered. He is no less important. Though be it that he is silent. He is the consumer. He is the ultimate person who pays for the final commodity sold. He, usually, has to bear the higher costs of production, no matter how they may have been incurred. Rising prices and deteriorating quality are very often the dual evils he has quietly to endure. The consumers represent the vast masses of the country. They are unorganized and like most consumers, unless they are in the co-operatives, they are non-vocal. The State therefore must keep the interest of the ultimate consumer and his welfare constantly in mind. The endeavour should be to organize economic life in such a fashion as to promote productivity with a tendency to declining prices and improving quality. It is thus alone that material satisfaction and increased content can be secured for the good of the country.

24. It is chiefly to investigate this wage question that the present Committee came into existence. According to our terms of reference we are to discover—

“(1) Whether wage cuts have taken place direct or indirect, and if so where and to what extent?

(2) In case any such wage cut is established, whether there should be any increase in wages and if so what?

(3) How the present rates of wages in Cawnpore compare with those prevailing elsewhere in India, and whether, taking also into consideration the profits made by the mills and the cost of living in Cawnpore, they should be increased and if so to what extent?

(4) Is it desirable to prescribe any minimum rate of wages for any class of labour at Cawnpore and if so what should such rates be?”

25. In this connection we have regretfully to record that we were poorly served with the aid of statistics, indispensable in an inquiry of such a nature. Neither with regard to wages nor with regard to cost of living index series, had we much to go by. Unlike Bombay, with its well-equipped, well-staffed and well-organized Labour Office, which has made several wage census investigations and has records, facts and figures relating to industrial conditions of workers, we had next to nothing to guide and direct us in our inquiry. Such figures as we did obtain cannot be regarded as wholly reliable. The source, the method, and the time of collection somewhat vitiated their value. We desire to state it at once that this lack of accurately collected data is an outstanding defect in the industrial equipment of the Province in general and of Cawnpore in particular. This state of affairs must be rapidly repaired. We make suggestions elsewhere in this connection. We regard these as an essential part of our recommendations.

26. The Employers' Association did not give us much information. Such information as they did eventually supply us, was given piece-meal and after much persuasion. One of the main causes which held up the work of the Committee was this unwillingness and delay on the part of the employers to provide us with the necessary figures. The completed wages statement, which we call the third millwise wage statement, we actually received on the eve of our final consideration of the report. We feel bound to express surprise that the employers have neglected the statistical study of their major industry in Cawnpore. We suggest that they should “rationalize” their system of keeping records of their data. It is vital to their individual as well as to their collective interests to do so. Committees like ourselves would, incidentally, be grateful for such information properly collected and recorded.

27. The contention of the workers, as represented by the Mazdur Sabha is that there has been both a direct as well as an indirect wage cut as between 1929 and 1937. They also maintain that, apart from the Madras Presidency, the wages in Cawnpore are lower than in Bombay, Ahmedabad and even Sholapur. They say quoting from the Royal Commission on Indian Labour (the figures given are for 1929):

“In the United Provinces where Cawnpore is the most important centre the Chief Inspector of Factories gives the rates of wages for male weavers as Rs.33 and for male spinners as Rs.25 per month. In the Punjab, Delhi and Bengal rates stand to rule substantially higher than in the United Provinces” (Royal Commission on Labour Report, page 198). In Bombay the average earnings of the two loom weavers in 19 selected mills varied between Re.1-9-1 to Rs.2-1-6 per day. This works out a monthly average on the basis of 26 working days in a month from Rs.40-12-2 to Rs.45-7 which shows that even the minimum wage at Bombay was higher by 23.5 per cent. than Cawnpore wages.”

28. They also refer to the Report of the Indian Tariff Board on the Textile Industry, 1927, and give the comparative wages for various categories of workers for different textile centres in the country as follows :

TABLE I
The comparative wages for various categories of workers for the different textile centres in India

Standard muster, 1st April, 1926	Bombay	Ahmedabad	Cawnpore	Delhi	Nagpur	Madras
	Rs. a	Rs. a. p.	Rs. a. p.	Rs.	Rs. a.	Rs. a. p.
Blow room tenters ..	29 0	23 10 0	16 14 6	19	24 0	25 14 6
Card room tenters ..	27 4	24 7 6	23 12 0	14	24 0	23 8 8
Frame tenters ..	87 12	29 6 0	27 8 0	25	80 12	25 2 0
Ring frame side boys ..	29 12	26 7 6	15 10 0	20	24 0	(a) 14 10 8 (b) 17 15 0
Winders ..	21 4	23 1 0	27 13 0	25	18 8	21 8 0
Weavers ..	47 12	47 15 9	33 7 0	35	41 0	34 7 0
Folders ..	29 0	25 11 3	14 6 0	20	24 0	26 8 5

29. They also give the comparative table furnished by the Upper India Chamber of Commerce at Cawnpore.

TABLE II
The comparative wages furnished by the Upper India Chamber of Commerce, Cawnpore

	Bombay		Ahmedabad		Cawnpore
	Per day	Monthly	Per day	Monthly	Monthly
	26 days working				
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Weaver 2 looms (ring frame) ..	1 13 4	47 10 8	1 13 5	47 12 10	39 1 4
Siders (mindars) ..	1 3 0	30 14 0	0 15 2	24 10 4	18 10 6
Tarwalas (pisicars) ..	0 15 5	25 0 10	Not given		17 6 1
Doffers ..	0 12 1	18 10 2	0 10 7	17 3 2	12 8 9

30. They proceed to quote from the Tariff Board, 1932, and give the following percentages for the labour costs of production at various textile centres.

TABLE III
The comparative labour costs of various textile centres

	Per cent.	Excess or deficiency as compared with Cawnpore
(1) Ahmedabad	58'6	13'05
(2) Baroda	52'65	11'90
(3) Delhi	51'60	10'85
(4) Bombay	49'40	8'65
(5) Calcutta	42'40	1'65
(6) Cawnpore	40'75	..
(7) Nagpur	38'60	-2'15

31. Some comparative figures compiled from the above sources are given in Table no. IV.

TABLE IV
The comparative wages for some categories of workers which comprise a high percentage of the total workers in the industry

	Cawnpore	Bombay	Ahmedabad
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Inter frame tenter	14 0 0	23 15 8	85 8 4
Roving frame tenter	14 0 0	27 10 8	80 14 0
Doffers	12 0 0	14 12 1	18 4 6
Mule (mindere)	34 0 0	89 9 9	44 11 6
Side piecers (mule)	22 0 0	25 11 1	85 1 2
Coloured winders	25 3 0	20 9 0	21 10 8
Sizing (mixere)	20 0 0	23 10 0	24 11 1
Weavers (3 looms)	17 8 0	33 8 5	49 13 4
	to		
	30 6 0		
Bleaching (bleach croft minder)	14 0 0	21 7 5	23 1 2
Coolies	14 8 0	18 18 6	20 15 10
Sweepers	12 0 0	16 15 4	17 5 0
Fitters	22 8 0	38 14 7	87 7 0

32. And they say—

“Thus wages at Cawnpore have throughout been comparatively low. At least the facts do not bear out the assertion that wages at Cawnpore compared favourably with other parts of the country. Though Cawnpore is the next important cotton textile centre in the country after Bombay and Ahmedabad, at times, wages of Cawnpore workers have actually been lower than the wages in smaller textile centres like Sholapur, Delhi, Baroda and Calcutta. It is rather paradoxical that the employers at Bombay and Ahmedabad have always demanded wage reductions and protection on the ground that the upcountry wage rates are comparatively low which has every time been accepted by the Tariff Boards on the Textile Industry, while the employers at Cawnpore are contending that the wages at Cawnpore compared favourably with those paid in other parts of the country.”

33. They proceed to argue that the economic depression began in the year 1929, and went on deepening until 1934. In keeping with other textile centres, Cawnpore also experienced wage cuts. They state—

“Although no authentic or official wage statistics are available for this period, meagre, data which we have in our possession goes conclusively to prove that wages at Cawnpore have substantially been reduced during this period.”

34. They indicate that the reduction has taken place in various ways classified as follows:

A—DIRECT CUTS—

- (i) Reduction in the rates.
- (ii) Reduction through the abolition of bonuses on production and attendance and reduction of dearness allowance, *khoraki* (midday meal) allowance and the like.

B—INDIRECT CUTS—

(iii) Introduction of new varieties of cloth at rates which do not bring the wages to the level of those earned on old varieties.

(iv) Reduction of piece-rates to meet unprecedented high production by individual operatives.

(v) No adjustments are made consequent upon a substitution of finer for coarser counts.

(vi) Introduction of inferior raw material which affects output considerably.

(vii) Short work and consequently loss of time and wages.

(viii) Introduction of new methods of work involving a reduction in the number of operatives employed and the consequent extra work that has to be looked to by the workers.

(ix) Changes in the speed of the machine which affect wages in various ways.

(x) (a) The introduction of the system of giving forced leave instead of the old system of fines which have been limited under the Payment of Wages Act.

(b) The introduction of different rates for damaged cloth on the same machine. This is another substitute for the old system of imposing fines.

(xi) Reduction in the hours of work since January, 1935, and the consequent fall in the wages of piece-workers and alterations in the system of the payment of wages to time-workers.

(xii) Deduction of a fixed percentage from wages for the substitution of old machines by new.

(xiii) Changes in the cost of living resulting in the reduction of real wages.

35. The memorandum states—

“With regard to the direct cut in the wages and bonus it is not possible for us to give exact and detailed information.”

But under the reduction or withdrawal of bonuses they estimate the loss to 12½ per cent. in the workers' income. They calculate that the shortening of the hours has meant a 7 per cent. cut in workers wages. They reckon that due to cut in the rates, the decreases in wages averages about 20 per cent. They proceed therefore to say—

“The wages on the whole therefore have been reduced by about 40 per cent. since the beginning of the economic crisis due to these three factors alone. It is not possible to assign the proper share of other factors in the reduction of wages. But there is no doubt that it is quite so important as to make itself felt and make the workers complain against it very bitterly.”

36. On the other hand, the employers in their memorandum state—

“Answer to question no. 1—There was a difference in the rates of time wages paid by the various mills; this difference being due to unavoidable factors, such as, age and design of machinery; lay-out of the factory and quality of the material being worked, etc. Statements have been prepared showing the workers average earnings of each of the mill members, and, so far as the Association could ascertain, there had been no reduction in the rates of wages paid since 1929.”

37. Further they proceed to say—

“Answer to question no. 4—See Association’s remarks to question no. 3 (Piece-rates for different operations were calculated and based on traditional practical experience, and on such factors as speed of machinery, type of material being made, etc.) There has been no reduction in the piece-rates which have adversely affected the earnings of the workers and, in fact, the reverse has obtained, particularly on the weaving side. In this connection, consideration must be given to the reduction in the working hours, as now laid down in the Factories Act.”

“Answer to question no. 5—When changes are made in piece-rates due to variations in quality of material, etc., careful consideration is always given by mill managements to ensure that earnings of the workers should not be reduced below the basic figures as shown in the answers submitted by the various mill members to questions relating to rates of wages paid.”

38. The Employers’ Association supplied us three mill-wise wages statements. They refer to eleven principal cotton mills which employ all but a small fraction of the workers in the industry at Cawnpore. Wage statements supplied by the Employers’ Association.

39. The statement which accompanied their memorandum was the following:

Average monthly wages earned by mill-workers at Cawnpore for the year 1929-37 based on 9 hours per day*

	Cawnpore, 1929			Cawnpore, 1937		
	Rs.	s.	p.	Rs.	s.	p.
Mixing room	15	15	8	17	4	8
Blow room	15	2	8	16	10	5
Cards	15	6	9	17	4	1
Drawings	26	10	0	28	9	2
Blubbers	28	7	3	30	2	2
Inters	25	10	8	26	6	9
Bovers	28	1	9	26	1	11
Rings (twist)	16	11	9	20	4	9
Rings (weft)	16	14	0	20	18	5
Mules (spinners)	83	9	9	84	18	2
Mules (piecers)	21	6	0	28	0	10
Winding (old)	19	8	6	22	12	6
Winding (H. S.)	21	6	0	22	11	9
Warping (old)	88	8	6	42	14	7
Warping (H. S.)	Nil			58	6	2
Sizing (back)	17	7	9	20	9	1
Sizing (front)	27	9	9	32	10	8
Drawers	26	13	9	31	18	2
Weaving	35	9	8	40	0	6

*As explained in a later paragraph in this chapter only three mills out of eleven supplied detailed figures for 1929.

This statement gives the wages for the entire department or for the whole of a particular occupation for the entire industry in Cawnpore. The figures for 1929 as given in this statement were obtained by reducing the actual averages by 10 per cent. in order to base them on a 9-hour working day. Wages of mistries and fitters and others were included. It did not show the number of persons employed. Very little could be learnt of the actual situation from such a statement as this. And yet this was all that the Association would let us have. The statement could not be briefer and balder.

40. It was only in the middle of January, that we obtained the first mill-wise statement as contained in Table no. VI. Had even this kind of a statement been supplied to us early in our inquiry, or at least in the beginning of January, after the Christmas recess, we could have proceeded more swiftly and satisfactorily with our work.

41. The second mill-wise statement reached our hands as late as the middle of February. A summary of that statement is contained in Table no. VII.

TABLE VI
Wages Statement—1929 or nearest year
(P.=Piece work, T.=Fixed wage)

Departments	1930	1936	1932-38	1931	1939					1930	1934	1935
	Mill (A)	Mill (B)	Mill (C)	Mill (D)	Mill (E)	Mill (F)	Mill (G)	Mill (H)	Mill (I)	Mill (J)	Mill (K)	Mill (L)
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Mixing Room ..	15 8 0	16 0 0	T.17 1 0	28 8 4	(1) 21 5 8	Narayan .	Contract ..	T.18 8 0	14 8 3	15 8 0	18 0 0	17 0 0
2. Blow Room ..	15 8 0	17 0 0	T.17 14 0	18 0 0	(2) 18 14 0	..	T.15 10 0	T.19 8 0	14 2 9	15 8 0	18 0 0	17 0 0
3. Cards.. ..	15 8 0	16 0 0	T.17 1 9	18 9 2	(3) 23 18 6	..	T.15 10 0	T.18 8 0	14 1 9	15 8 0	18 0 0	18 0 0
4. Drawings ..	88 9 0	95 6 8	P.89 13 0	22 4 7	(4) 25 18 8	..	P.24 4 0	P.27 2 0	29 6 3	32 8 0	43 8 6	22 6 1
5. Slubbers ..	33 1 0	25 8 11	P.43 6 0	32 5 10	(5) 35 5 0	..	P.25 6 0	P.27 7 0	28 12 9	31 10 0	43 10 0	22 5 4
6. Inters ..	28 11 0	27 6 1	P.37 18 0	29 14 4	(6) 32 0 0	..	P.23 12 6	P.22 15 0	27 4 9	28 7 0	34 12 9	22 4 8
7. Rovers ..	25 18 0	24 11 1	P.36 0 0	27 8 2	(7) 25 6 0	..	P.19 9 9	P.19 0 0	24 0 0	25 4 0	31 12 9	23 7 2
8. Rings (Twist) ..	24 15 0	18 0 0	P.21 2 0	19 7 0	(8) 15 10 0	..	T.16 4 0	T.19 0 0	15 1 6	..	18 8 0	18 0 0
9. " (Wet) ..	..	19 8 0	P.21 2 0	..	(9) 15 10 0	..	T.14 14 0	T.19 0 0	..	..	20 8 0	..
10. Mule (Spnrs) ..	37 12 0	..	..	..	(10) 37 6 8	..	P.32 13 0	..	41 0 0	37 5 0	..	..
11. " (Piecers) ..	24 4 0	..	..	..	(11) 25 12 0	..	T.20 15 0	..	21 0 1	26 0 0	..	..
12. Winding (Old) ..	19 18 0	19 8 0	P.20 0 0	20 6 10	(12) 28 3 6	..	P.24 11 0	P.17 13 0	27 13 0	..	17 10 6	..
13. " (H. S.) ..	..	..	..	23 11 9	(13) ..	..	..	..	..	..	..	..
14. Warping (Old) ..	34 11 0	48 14 5	44 4 0	25 9 11	(14) 49 1 6	..	P.22 0 0	P.23 7 0	43 14 0	..	43 9 3	..
15. " (H. S.) ..	..	..	..	29 15 7	(15) ..	..	..	..	..	..	..	..
16. Bising (Back) ..	20 5 0	20 0 0	T.22 12 0	18 4 6	(16) 20 7 0	..	T.16 4 0	T.18 8 0	18 8 0	..	20 0 0	..

15

TABLE VI—(contd.)
Wages Statement—1929 or nearest year
(P.= Piece work, T-Fixed wage)

Departments	1930	1936	1932-38	1931	1929					1930	1934	1935
	Mill (A)	Mill (B)	Mill (C)	Mill (D)	Mill (E)	Mill (F)	Mill (G)	Mill (H)	Mill (I)	Mill (J)	Mill (K)	Mill (L)
	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.
17. Sising (Front) ..	29 4 0	37 0 0	T.35 12 0	28 0 6	(17) 29 8 0	..	T.32 8 0	T.30 0 0	26 8 6	..	38 0 0	..
18. Drawers ..	26 9 0	30 15 8	P.32 9 0	34 8 8 (1-9-'35)	(18) 26 13 3	..	T.22 12 0	P.30 6 0	37 2 0	..	25 1 9	..
<i>Weaving</i>												
26/28° ..	..	..	..	..	..	..	..	..	..	..	..	..
29/32° ..	..	..	..	..	..	..	P.36 12 0	P.31 4 0	31 4 4	..	40 10 6	..
33/36° ..	35 0 0	49 0 0	..	39 11 0	40 14 0	..	P.37 8 0	P.40 2 0	..	..	42 6 9	..
37/40° ..	37 5 0	50 11 10	..	..	..	..	P.30 1 0	P.29 8 0	38 12 0	..	41 2 9	..
41/46° ..	37 14 0	54 15 1	..	35 7 8	42 0 0	..	..	P.36 12 0	42 8 7	..	38 13 9	..
47/50° ..	38 15 0	51 2 9	..	32 8 8	38 5 0	..	..	P.38 13 0	..	..	42 8 8	..
51/54° ..	..	..	..	..	..	..	..	..	47 14 9	..	..	..
55/60° ..	37 11 0	..	..	..	43 8 0	..	P.30 8 0	..	..	..	38 8 6	..
61/66° ..	35 12 0	48 2 1	..	..	45 0 0	..	P.38 6 0	..	..	..	35 1 9	..
67/72° ..	..	..	..	..	..	..	..	..	..	..	..	..
78° ..	..	..	..	..	..	..	..	P.25 11 0	..	..	..	..
Average for all the above workers.	37 1 6	49 12 9	40 3 0 (78° not included)	32 7 5	41 13 0	..	34 10 2	35 11 6	40 0 10	..	39 15 3	..

TABLE VI—(contd.)

Wage Statement—1937

(P=Piece work, T=Fixed wage)

Departments	Mill (A)	Mill (B)	Mill (C)	Mill (D)	Mill (E)	Mill (F)	Mill (G)	Mill (H)	Mill (I)	Mill (J)	Mill (K)	Mill (L)
	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.
Mixing Room ..	14 14 0	16 0 0	17 1 0	20 0 8	(1) 29 1 6	10 0 0	Contract	T. 18 8 0	18 13 6	15 8 0	18 0 0	17 0 0
Blow Room ..	15 5 0	17 0 0	17 14 0	17 14 0	(2) 17 1 0	14 10 0	T. 15 10 0	T. 19 5 0	14 11 0	15 4 0	18 0 0	17 0 0
Cards ..	15 5 0	16 0 0	17 14 0	22 9 9	(3) 21 12 9	14 10 0	T. 15 10 0	T. 18 8 0	14 8 0	15 4 0	18 0 0	16 0 0
Drawings ..	25 9 0	27 6 7	40 14 0	27 11 4	(4) 28 13 8	29 6 0	25 5 0	P. 29 8 0	38 4 8	26 5 0	31 8 0	22 8 6
Slubbers ..	25 2 0	26 4 2	42 3 0	33 8 9	(5) 31 2 3	30 14 0	24 14 9	P. 27 13 0	34 7 9	26 5 0	33 5 3	20 9 10
Inters ..	26 6 0	30 3 0	36 15 0	29 14 8	(6) 28 7 9	23 10 0	24 0 9	P. 24 9 0	28 2 3	22 13 0	26 8 0	20 12 2
Revers ..	21 6 0	40 4 2	25 3 0	27 5 2	(7) 26 14 9	24 2 0	21 0 9	P. 20 9 0	26 14 2	22 4 0	21 0 0	24 7 11
Rings (Twist) ..	28 9 0	26 0 0	21 2 0	20 6 1	(8) 22 4 0	..	T. 16 4 0	T. 19 0 0	17 14 0	..	18 8 0	18 0 0
.. (Walt) ..	28 15 0	27 0 0	..	19 6 8	(9) 21 1 3	21 10 0	T. 16 14 0	T. 19 0 0	18 1 9	..	20 8 0	..
Mules (Sprrs) ..	24 6 0	..	..	..	(10) 21 12 3	..	80 0 0	..	42 1 6	35 18 0	..	..
.. (Piecers) ..	28 5 0	..	..	..	(11) 23 4 9	..	T. 20 15 0	..	21 1 8	25 11 0	..	..
Winding (old) ..	26 7 0	22 13 7	22 8 0	27 11 8	(12) 24 0 3	27 8 0	27 6 0	P. 17 15 0	34 2 0	..	17 8 0	..
.. (H. S.) ..	18 9 0	..	25 1 0	28 12 9	(13) ..	..	..	P. 19 12 0	..	..	21 8 0	..
Warping (Old) ..	52 7 0	42 0 10	24 3 0	48 15 9	(14) 28 4 2	..	44 12 0	P. 47 1 0	41 8 0	..	42 4 3	..
.. (H. S.) ..	71 1 0	..	63 7 0	50 4 9	(15) ..	..	..	P. 48 12 0	..	..	..	..
Sizing (Back) ..	21 2 0	20 0 0	22 12 0	18 4 6	(16) 20 7 9	..	T. 16 4 0	T. 21 0 0	23 8 9	..	22 0 0	..

Rupees

TABLE VI—(concl.)

Wage Statement—1937.

(P=Piece work, T=Fixed wage)

Departments	Mill (A)	Mill (B)	Mill (C)	Mill (D)	Mill (E)	Mill (F)	Mill (G)	Mill (H)	Mill (I)	Mill (J)	Mill (K)	Mill (L)
	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.	Rs. s. p.
Sising (Print)	35 12 0	37 0 0	35 12 0	38 7 0	(17) 29 4 0	..	T. 22 8 0	T. 33 0 0	34 1 6	..	38 0 0	..
Drawers	32 9 0	34 13 1	46 16 0	32 13 5	(18) 30 1 9	..	38 10 0	P. 27 3 0	37 2 0	..	26 3 8	..
Weaving												
26/38 ²	..	..	..	..	..	..	..	P. 35 11 0	..	..	..	..
29/32 ²	..	..	..	..	..	..	..	P. 34 5 0	32 5 6	..	35 12 11	..
33/36 ²	38 1 0	49 0 4	..	39 0 8	35 0 0	..	34 3 0	P. 35 9 0	..	..	37 10 0	..
37/40 ²	37 9 0	50 5 8	..	..	..	..	34 1 0	..	44 12 5	..	37 11 9	..
41/46 ²	38 9 8	..	..	41 4 6	36 1 0	..	32 5 0	P. 37 5 0	44 15 7	..	34 12 8	..
47/50 ²	39 14 0	3 2 3	..	41 13 4	40 13 9	..	..	P. 36 13 0	45 13 6	..	34 12 3	..
51/54 ²	..	..	..	..	..	..	..	..	..	..	..	..
5/60 ²	48 2 0	58 13 7	..	..	37 12 0	..	35 14 0	..	..	..	41 8 6	..
61/68 ²	41 5 0	..	..	..	35 10 3	..	38 8 0	..	..	..	..	..
67/72 ²	..	..	..	..	..	..	..	..	..	..	..	..
78 ²	..	..	..	..	..	..	..	38 5 0	..	..	..	..
Average for all the above weavers.	29 12 0	52 0 8 (78 ² not included)	40 5 0	40 11 6	37 1 0	..	35 0 0	35 13 6	41 15 6	..	37 7 0	..

TABLE VII.

Summary.

Num- ber	Category	Earnings per month		Earnings per hour		Earnings per hour	
		1932*	1937	1932*	1937	Decrease Per cent	Increase Per cent
	Designation	Rs.	Rs.	As.	As.		
1	T. opener attendants	16'84	16'51	1'042	1'129	..	8'85
2	T. stutcher	16'82	16'06	1'035	1'068	..	8'08
3	T. lap carriers	17'64	17'57	1'098	1'196	..	8'92
4	T. card machine attendants	16'36	16'66	1'000	1'189	..	18'90
5	T. fly gatherers	18'27	18'49	1'128	1'264	..	12'55
6	T. strippers and gids	17'13	17'48	1'054	1'195	..	13'40
7	B. drawing tenters	27'85	27'91	1'714	1'867	..	8'54
8	P. gubbing	31'87	30'61	1'961	2'088	..	6'73
9	P. inter	29'09	26'44	1'790	1'808	..	1'005
10	P. roving	26'26	24'28	1'616	1'520	5'96	..
11	T. doffers carding	12'20	13'01	751	821	..	9'32
12	T. " spinning	12'98	13'94	799	912	..	14'16
13	T. P. siders	17'57	19'68	1'081	1'246	..	14'51
14	T. doubling tenters	16'70	15'75	1'028	1'077	..	4'75
15	P. reelers	18'08	14'83	1'165	1'014	12'05	..
16	P. grey winders (O. T.)	18'26	18'57	1'124	1'262	..	12'90
17	P. " winders (H. S.)	25'18	22'76	1'426	1'556	..	9'12
18	P. warpers (O. T.)	41'44	36'79	2'550	2'515	1'37	..
19	P. " (H. T.)	38'40	39'08	2'368	4'081	..	72'72
20	T. warping creelers	14'05	14'75	865	1'008	..	16'53
21	T. front sizer	31'80	32'40	1'957	2'216	..	13'24
22	T. back	20'25	20'12	1'246	1'87	..	10'42
23	P. drawers-in	28'28	31'30	1'740	2'140	..	22'98
24	P. weavers	13'25	14'08	815	957	..	17'67
25	P. weavers	37'88	37'08	2'391	2'532	..	6'61
26	P. T. folders machine	16'27	15'90	1'001	1'046	..	4'50
27	P. folders hand	15'78	16'45	971	1'225	..	15'87
28	T. spoolies	..	..	..	..	..	..
29	T. oil men	17'02	16'17	1'047	1'089	..	4'98
30	T. sweepers (D)	12'80	12'50	787	923	..	17'43
31	T. " (compound)	12'40	12'44	763	851	..	11'54

* Or nearest year

42. The third mill-wise statement reached us literally at the eleventh hour, or the night of 10th of March, 1938. We had already formulated our chapter on wages, and were to assemble for our final deliberations on the 11th March when we received the completed mill-wise statement.

A summary of this statement is given in Table VIII. Detailed statements on which the summary is based will be found in Appendix IV. These statements are merely the statements supplied with the summary in Table VII in a completed form. In the earlier statements information regarding two mills which became available subsequently had been omitted.

TABLE VIII

No.	Category - Designation	Earnings per month		Earnings per hour		Earnings per hour	
		1929*	1937	1929*	1937	Decrease Per cent.	Increase Per cent.
1	Opener attendants	16'35	16'03	1'006	1'098	..	8'94
2	Scutcher	16'12	15'70	'992	1'074	..	8'26
3	Lap carriers	17'15	16'92	1'058	1'157	..	9'67
4	Card machine attendants ..	15'20	16'15	'978	1'104	..	12'88
5	Fly gatherers	17'31	17'41	1'085	1'180	..	11'73
6	Stripers and geds.	16'46	16'59	1'018	1'184	..	11'94
7	Drawing tenters	25'23	28'00	1'553	1'914	..	23'25
8	Slabbing	27'75	29'07	1'707	1'988	..	16'46
9	Inter	25'84	25'52	1'590	1'745	..	9'76
10	Roving	23'80	21'69	1'465	1'483	1'22	..
11	Dofters carding	13'08	11'45	'742	'788	..	5'52
12	" spinning	12'58	12'68	'771	'887	..	12'45
13	Siders	17'63	18'84	1'085	1'288	..	18'71
14	Doubling tenters	16'74	17'10	1'030	1'169	..	18'50
15	Reelers	15'69	12'15	'866	'831	13'60	..
16	Grey winders (O. T.)	20'05	19'92	1'233	1'262	..	10'46
17	" " (H. S.)	23'18	22'76	1'426	1'558	..	9'12
18	Warpers (O. T.)	40'17	38'05	2'472	2'602	..	5'26
19	" (H. S.)	38'40	59'68	2'368	4'081	..	72'72
20	Warping reelers	14'14	14'88	'870	1'014	..	16'55
21	Front sizers	29'20	31'80	1'797	2'175	..	21'03
22	Back sizers	19'61	20'61	1'208	1'409	..	16'88
23	Drawers-in	26'57	30'47	1'685	2'084	..	27'46
24	Reachers	12'65	13'65	'778	'983	..	19'92
25	Weavers	36'67	37'07	2'256	2'535	..	12'36
26	Folders machine	16'01	15'15	'985	1'086	..	5'18
27	" Hand	15'86	16'58	'976	1'184	..	16'19
28	Coalies .. ..	..	..	..	..	..	..
29	Oil men	17'02	16'07	1'047	1'099	..	4'96
30	Sweepers (D)	13'64	13'83	'778	'912	..	17'23
31	" (compound)	12'40	12'44	'763	'851	..	11'24

* O: nearest year

43. A comment is necessary at this stage on the figures supplied by the employers. Though the statements are supposed to refer to 1929, it will be clear from a reference to these statements that of the eleven mills only four supplied the figures for 1929, two for 1930, one for 1931, two for 1933, one for 1934 and one for 1935. And even as regards the figures for 1929, one important mill did not supply the numbers employed in the different

departments in 1929 and in 1937. We could therefore make no use of the wages statement of this mill without this essential item of information. In other words, only three of the eleven mills were able to supply data on which a comparison could be made on the basis of the figures of 1929. It may be stated that two mills were not in existence in that year and therefore could supply their figures only for the years in which they started working. In view, therefore, of the paucity of information we consider that it would be unsafe to draw any definite and general conclusions with regard to the variations in wages between 1929 and 1937. With this caution, we proceed to analyze to the extent we can, the statements given by the employers.

44. The first mill-wise statement was compiled on the basis of only these workers, though their number was not disclosed, who had put in a complete 26 days' attendance in the mills. This statement gave only a few categories of occupations and in some cases gave the wages of the department only. The information thus given was not deemed satisfactory. This statement referred to the month of January for 1929 (or a later year as explained in the previous paragraph) and 1937. Analysis of the various mill-wise statements.

45. With regard to the second and the third mill-wise statements, it must be indicated at once that these refer to the month of March in the two respective years, and not to January, as in the first statement. The change was made at the request of the members of the Mazdur Sabha. They contended that January was the best month in the year and the wages for January, would not really be a correct representation of the wages position. They thought March to be a more typical month of the year. This month was accordingly selected. Some of the discrepancies therefore that appear between the first and the subsequent statements, must partly be explained on the basis of the change of month. We were informed that actually March proved an even better month than January from the employer's point of view.

46. Both the subsequent statements refer to the same eleven mills. They give the earnings of 31 categories of occupations. These include all the major processes, and can, therefore, be regarded as representative. These 31 categories represent 13,567 workers out of a total of 23,218. The occupations which have not been included are those which comprise only a few men in each category. They are in the majority of cases on monthly or daily rates. In these statements only a general average for the weavers has been given, while the first statement gave averages separately for wages earned on different widths of looms. The number of workers in each occupation has been given except of one large mill. The percentage of attendance is also recorded. It should also be added that in these statements a comparison has been made of the actual earnings between 1929 (when there was a 10-hour day) and 1937 (when the limit of working hours had been reduced to nine).

47. The second and the third statements are an improvement on the first. We shall, for our purpose, confine our attention to the third statement. We do so for two reasons. One is that, as we have stated above, the Mazdur Sabha representatives desired a comparison for the month of March. And secondly this statement is in comparison with the two previous ones, more informative, as it gives the weighted averages. At the same time we must add that owing to the very belated submission of the statement we were not in a position to cross-examine the representatives of

the Employers' Association with regard to the methods adopted in its preparation. There are several doubtful points. We are not clear, for instance, how the different mills have calculated the average earnings per month. Our work would have been simplified to a certain extent if the statements had disclosed the actual wages bill for each category. These items of information which would have been of considerable value were not furnished to us by the Employers' Association. Further, information is not available as to the extent to which rationalization has proceeded in different departments and in the various mills from year to year, and to what extent the figures of earnings given represent the effect of this factor.

48. In the absence of specific information on these relevant points, a proper comparison of the present wages with those prevailing in the previous years so as to ascertain the variations that have taken place becomes practically impossible. Moreover, we find that if the figures given by the Employers' Association for the earlier years are compared with those that are quoted by the Mazdur Sabha from the report of the Royal Commission and the Report of the Tariff Board, there is considerable divergence between the two; and we have no means to ascertain which accurately represent the position. We, therefore, feel that unless we have well shifted data on all these essential points, it is not possible to draw any general conclusions of a positive character.

49. The Mazdur Sabha's contention that wages have been cut down by 40 per cent. was based on the evidence presumably of a certain number of workers from some of the mills. In arriving at this conclusion the Mazdur Sabha did not, we believe, take into account certain important factors. We mean to cast no reflection by this remark on those responsible for the Mazdur Sabha's memorandum and in particular Mr. Shitla Prasad Saxena. In fact, against great odds, and with limited resources at their disposal, they were able to collect much data which have proved helpful. But it is of course likely that only those who had lost a portion of their earnings brought grievances to the notice of the Sabha, while those who had either not had any cut in their wage or even had an increase did not bring this fact to their notice.

50. At the same time, it is not possible to accept the employers' statement that there has hardly been any drop in the wages between 1929 and 1937 in any category. It may be noted that while they attributed the apparent drop in wages to a reduction in working hours from 10 to 9 between these two years, in evidence most their representatives admitted before the Committee that the workers have been able to make good by approximately 5 per cent. in a large number of cases, due to increased efficiency whether of man or machine, or possibly both. It is clear that a fall of 5 to 6 per cent. must have taken place in the earnings of the piece-workers owing to the reduction of hours from 10 to 9 from 1935. We understand that in Bombay a proportionate compensation was given by the mill-owners in the wages of the piece-workers to make up for the fall in earnings; but so far as our information goes, no such increase seems to have taken place in Cawnpore.

51. A second point to be borne in mind is that the annual bonuses have not been included in the employers' figures. It is true that only a few mills pay these, and of course the employers contest the point that they are part of earnings. For that reason, while monthly bonuses have been taken into

account, annual bonuses have not. We have dealt with the question of annual bonus elsewhere. But for the worker a bonus is an addition to his earnings and for that reason welcome however the employer may regard it.

52. There is yet another point. It is admitted that with the coming into operation of the Payment of Wages Act, there has been a cut in the workers' earnings through increasing resort to suspension or forced leave of a fairly drastic character in some mills; also the payment of differential rates for so-called good, bad or indifferent work. We have condemned this practice in another chapter. Here it is sufficient to say that it has had the effect of lowering wages by an appreciable amount in the mills in which the practice has obtained. The employers' figures are all based on 26 days' full work in a month, making no allowance for leave, whether voluntary or forced, playing off, differential rates of payment, etc., all of which must reduce the actual figure considerably. Precisely by how much, we are unable to determine, without the total wages bill before us.

53. In the summary attached to their detailed wages statements they have shown the earnings per month in 31 different categories in 1929 and 1937 respectively. They have also worked out the earnings per hour in these two years and come to the conclusion that there has been a decrease in earnings (per hour) only in two categories and an increase in 28. But from the summary itself it is obvious that there has been a diminution in earnings on a monthly basis in 12 categories. To take a few instances, the average earnings per month of opener attendants dropped from 16'35 to 16'03; but according to the employers there was an increase of 8'94 per cent. in the earnings per hour. Again, in the case of later tenters, though there was a drop from 25'84 to 25'52, on the employers' calculation there was an increase by 9'75 per cent. Quite clearly, therefore, the millowners' contention cannot be accepted.

54. The difficulty of arriving at any conclusions on the general question whether there has been a rise or drop in wages may be illustrated from another point of view. Carding machine attendant's earnings have risen from 15'90 to 16'15, representing, on the employers' statement, an increase of 12'88 per cent. Actually, however, of a total number of 126 workers for whom comparative average earnings are given only 78 had an increase in wages while 46 had a decrease. It cannot be a source of satisfaction to these 46 that because of an increase in wages in some other mills for workers in the same department the general average wage-rate has risen. Again in the case of the spinning doffers, though the average details are given 256 had an increase and 209 a decrease in their earnings. Conversely, where there has been a decline in the average earnings it does not follow that every worker included in that category has suffered a decrease. There must be some who have earned an increase. For instance, the average earnings of Roving tenters, 487 in number, decreased from Rs.23'80 to Rs.21'69 but of these 239 got an increase and the rest a decrease. Again, the earnings of Grey winders (old type machines) declined from Rs.20'05 to Rs.19'92 but 206 out of 605 got an increase in their average earnings. It is seldom that one comes across in the statement instances of either a general rise or a general drop in wages in all the mills. Mention, however, may be made of Reelers whose average has dropped from 15'69 to 12'15 owing to a decrease of wages in practically all the mills, though even this has not been on a uniform basis.

55. An analysis of the wages statements is given as Table IX in regard to the 31 main categories.

TABLE IX

Earnings per month as between 1929 and 1937

A.—Decrease

Number	Designation	Number of men in 1937	increase in rupees	Percentage decrease
1	Opener attendants	71	0.32	2.0
2	Scutcher tenters	124	0.42	2.6
3	Lap carriers	94	0.33	1.8
4	Inter tenters	254	0.32	1.2
5	Roving	546	2.11	8.9
6	Doffers carding	531	0.61	5.1
7	Bealers	1,161	8.54	22.6
8	Grey winders (old type machine)	637	0.13	0.6
9	Grey winders (H. S.)	142	0.42	1.3
10	Warpers (O. T.)	124	2.12	5.3
11	Folders machine	118	0.86	5.4
12	Oil men	87	0.95	5.6

B.—Increase

Number	Designation	Men 1937	Increase in rupees	Percentage increase
1	Card machine attendants	139	0.25	1.6
2	Fly gatherers	46	0.10	0.6
3	Stippers and gres.	130	0.13	0.6
4	Drawing tenters	401	2.77	11.0
5	Slabbing tenters	152	1.32	4.8
6	Doffers spinning	790	0.15	1.3
7	Siders spinning	1,953	1.21	6.9
8	Doubling tenters	89	0.26	2.3
9	Warpers (H. S.)	8	21.28	55.4
10	Warping creelers	77	0.69	4.2
11	Front sizers	88	2.60	8.9
12	Back sizers	87	0.79	4.0
13	drawers-in	161	3.90	4.7
14	Reachers	172	1.00	7.9
15	Weavers	4,895	0.39	1.1
16	Folders hand	207	0.72	4.5
17	Sweepers (D)	128	0.69	5.5
18	Sweepers (compound)	112	0.74	0.8

56. These figures illustrate vividly the point to which we refer again in the chapter on standardization that there has never been any

attempt made in the past to bring about any standardization in wage-rates. They vary consequently, in the most chaotic fashion. Lap carriers in some mills get over Rs.22, while in others they drop down to Rs.14 and even Rs.11-6. Similarly the wages of Carding machine attendants range from Rs.10-11 to Rs.22-8-6. Drawing tenters' wages range between Rs.14-12-3 and Rs.40-15-5. Slubbing tenters' wages vary between Rs.15-10-11 and Rs.43-5-8. Those for Intel tenters range between Rs.12-15-8 and Rs.38-1-4. Roving tenters' wages range between Rs.13-15 and Rs.37-2-8. Grey winders' wages range between Rs.10-5 and Rs.27-0-6. The minimum and maximum for Warpers (old type machine) are Rs.21-6-7 and Rs.47-1 respectively. Drawers-in-wages range between Rs.23-9-6 and Rs.43-14-5.

57. In regard to the wage rates prevalent for the same category of workers in the different mills, it is clear that some mills have carried out rationalization in certain departments. While the wages have remained stationary or even dropped in some mills, they have risen substantially in one or two with however an appreciable decrease in the number of workers employed. For instance, a mill which engaged 12 lap carriers on Rs.17-14 a month in 1931 had only 8 in 1937 on Rs.22-8-6 a month, the total wages bill being Rs.214-5 and Rs.180-25 respectively. The same results are perceptible in some other categories such as fly-gatherers, strippers and grinders, roving tenters, etc. namely throwing a number of workers out of employment, increasing the wages of the rest, with obvious material advantage to the mill concerned.

58. To sum up therefore; it is impossible to answer with precision the question what wage cuts have taken place during the years 1929 to 1937 because the figures relate, as we have already said, only in the case of three mills to the earlier year and the statements of the employers, such as they are, have not been tested by cross-examination.

59. Having thus dealt with the question of wage cuts, we have now to consider whether according to our third term of reference there should be any increase in wages. But before we give our award in this connection, it is necessary that we should examine whether it is possible for the industry now to bear an additional burden. We have also to take into account the disparity in the wage levels between Cawnpore and other centres and its relation to the cost of living.

Can the industry bear an increase in wages.

60. It is admitted that 1929 was a prosperous year. Since then the world has been in the throes of a depression. India too, has suffered, though with a time lag. It is certain that its agriculture has had a severe set-back. The prices of most of the agricultural commodities declined as shown in the following table:

Decline in the prices of agricultural commodities.

TABLE X

Index numbers of agricultural wholesale prices in the United Provinces (1913=100)

Year							General Index number
1929	..	..	..	..	..	..	100
1930	..	..	..	..	..	..	114
1931	..	..	..	..	..	..	78
1932	..	..	..	..	..	..	85
1933	..	..	..	..	..	..	89
1934	..	..	..	..	..	..	77
1935	..	..	..	..	..	..	87
1936	..	..	..	..	..	..	82
1937	..	..	..	..	..	..	89

61. Due to this cataclysmic decline of agriculture prices the agriculturist's debt burden, and other fixed payment obligations, impoverished him considerably, and very greatly diminished his purchasing power. The Indian peasant after all is the most important buyer of the Indian cotton mills' products in the aggregate. For, as is well known, the great bulk, if not the whole amount of our mill production is consumed in the home market. Only about 2 to 3 per cent. of the total production finds foreign markets.

Its effect on textile industry counterbalanced by other factors.

62. This situation one might naturally have expected would have led to a deterioration of the Indian mills' position. Actually, however, for various reasons the Indian cotton mill industry made considerable progress. One important reason is the increasing efficiency in the methods of production. There has been a steady, almost rapid, decline of imports of cotton manufacture particularly from England. This decline of supply of yarn and piece-goods from abroad was made good by the Indian Cotton Mills manufacturers as would appear from the following table:

TABLE XI
Table showing the imports of piece-goods excluding Fents into India from the United Kingdom, Japan and other countries
(Quantity in millions of yards)

Year	United Kingdom	Japan	Total from all countries	Mill production in India
1929-30	1,296	569	1,865	2,419
1930-31	590	831	892	2,561
1931-32	376	340	758	2,990
1932-33	583	579	1,198	3,170
1933-34	415	341	761	2,945
1934-35	552	374	944	3,397
1935-36	440	496	947	3,571
1936-37	834	417	764	3,572

Expansion of the textile industry in Cawnpore.

63. It has to be stated that in this increased supply of cotton goods to the Indian market Cawnpore is rapidly increasing its share. The figures in the following tables XII to XIV, show without mistake that between the years 1929 to 1937 Cawnpore has gained much ground.

TABLE XII

Abstract statement of the quantity (in lb.) of yarn, spun and woven goods manufactured in India and the United Provinces

Description	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	Percentage increase in 1936-37 over 1928-29
1	2	3	4	5	6	7	8	9	10	11
Yarn (British India) ..	557,675,108	730,819,228	753,665,250	843,126,656	885,772,179	796,711,480	853,240,814	904,288,959	890,584,020	59·7
Do. United Provinces ..	60,328,887	76,466,492	85,049,828	89,731,242	98,129,775	93,865,084	99,701,305	108,020,179	116,002,739	90·8
Cloth (British India) ..	376,512,950	434,820,732	507,870,845	585,295,638	597,951,966	551,328,085	621,619,141	687,619,634	650,755,442	72·8
Do. United Provinces ..	95,699,080	30,339,280	33,954,485	36,369,851	41,466,090	47,410,379	54,335,840	53,789,915	62,922,007	144·9

TABLE XIII(a)

United Provinces Mill Industry

Year ending 31st August	Number of mills	Number of spindles installed	Average number of spindles at work daily	Number of looms installed	Average number of looms at work daily	Approximate quantity of cotton consumed in bales during the year	Average number of workers employed daily	Total number of days worked
1	2	3	4	5	6	7	8	9
1929	24	661,624	579,510	8,394	7,623	187,164	23,988	(a)
1930	24	668,788	614,308	8,961	8,151	199,768	25,133	261
1931	23	658,850	623,792	8,688	8,261	235,522	26,514	297
1932	22	654,504	626,919	8,611	8,278	251,820	26,687	270
1933	22	664,476	633,648	8,906	8,505	279,006	27,476	263
1934	22	639,614	615,741	9,172	8,491	280,520	27,386	272
1935	25	709,653	621,999	10,163	8,824	297,282	28,105	261
1936	25	784,664	664,769	10,784	9,914	319,740	30,113	273
1937	25	741,061	680,198	11,245	10,459	312,484	30,148	(a)
Percentage increase in 1937 over 1929..	4.2	12.0	17.4	30.8	37.2	66.9	25.6	..

(a) Not available.

TABLE A.II.I(D)

Detailed statement of the quantity (in million lb.) and the Counts of yarn spun in the United Provinces

Counts	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	Percentage increase in 1936-37 over 1928-29
1	2	3	4	5	6	7	8	9	10	11
18 to 10S	8,392,618	10,368,783	14,877,286	16,221,014	16,058,959	15,744,759	17,571,807	19,495,485	19,711,515	187.7
11S to 20S	87,884,652	50,110,855	53,538,086	58,858,866	54,686,584	58,018,828	58,154,692	58,180,156	59,186,766	56.2
21S to 30S	12,254,972	12,838,992	18,910,484	16,488,544	19,100,422	22,969,571	26,578,765	27,942,904	30,696,564	152.1
31S to 40S	1,843,700	1,819,189	1,698,270	1,805,079	1,971,395	861,843	724,581	1,847,883	2,010,298	116.6
Above 40S	426,282	1,124,324	1,442,908	1,199,895	1,045,934	989,748	956,459	324,793	42,195	-80.1
Waste etc.	126,718	145,649	162,447	159,104	272,881	348,720	415,001	929,008	2,255,411	1679.9
Grand Total	60,828,897	76,456,492	85,042,826	89,731,242	88,129,775	92,855,084	99,701,806	108,020,129	115,002,789	90.6

TABLE XIII(c)

Statement of the quantity and description of woven goods manufactured in the United Provinces

Description	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	Percentage increase in 1936-37 over 1928-29
Khaddars (yards)	2.6	2.4	3.2	4.2	2.8	5.6	9.6	3.08	4.0	48.1
Dhoties (yards)	52.06	64.05	69.5	86.7	102.2	112.7	127.3	119.85	133.8	157.0
Drills and Jeans (yards)	3.6	4.2	3.6	2.9	3.5	4.8	3.5	3.7	4.8	33.3
Cambric and Lawns (yards) .. .. .	.8	.2	2.0	1.7	.6	.39	.2	.1	.4	33.8
Printers (yards)	1.7	1.1	1.0	1.3	1.1	.7	3.1	2.47	4.3	152.9
Shirting and long cloth (yards)	9.7	12.4	13.9	9.2	9.8	12.9	14.8	16.8	27.4	182.5
T. cloth and sheetings (yards)	17.2	21.1	25.1	28.8	31.0	20.7	44.7	42.9	44.5	158.7
Tent cloth (yards)	1.3	1.4	.9	.6	1.1	1.5	1.2	1.4	2.8	55.6
Khaddar (yards) .. .. .	.9	.8	1.5	.6	.6	1.5	1.1	1.6	1.8	100.0
Other sorts (yards)	2.1	1.9	1.7	2.1	2.5	2.5	1.6	3.2	3.2	52.4
Total (yards)	91.9	109.0	122.5	138.1	154.7	172.4	200.6	194.7	227.0	147.0
Coloured piece goods (yards)	6.9	8.9	7.5	6.08	8.2	8.4	9.2	9.7	10.0	44.9
Grey and coloured other than piece goods (lb.)	.8	.8	.8	.8	1.0	.8	.7	.9	1.0	66.7
Hosiery (lb.) .. .. .	.06	.1	.1	.1	.1	.1	.2	.5	.6	900.0
Miscellaneous goods (lb.) .. .. .	.07	.04	.2	.06	.04	.09	.07	.02	.05	-28.6
Mixed with wool and silk (lb.) .. .. .	.002	.01	.03	.02	.00003	..	..	.000004	.000002	-99.9
GRAND TOTAL (YARDS)	98.8	117.9	130.0	141.2	162.9	180.8	209.8	204.4	237.0	139.9

N.B.—All figures are in millions.

TABLE XIV(a)

Abstract statement of progress of Cotton Mills in Cawnpore, United Provinces

Year ending 31st August	Number of mills	Number of spindles installed	Number of spindles working daily average	Number of looms installed	Average number of looms at work daily	Approximate quantity of cotton consumed in bales	Average number of workers employed	Average total number of days worked
1	2	3	4	5	6	7	8	9
1929	10	470,816	440,861	7,774	7,223	135,524	18,014	Not available.
1930	10	476,242	464,246	7,919	7,688	162,876	18,795	299
1931	10	473,946	446,988	7,882	7,525	155,678	19,568	298
1932	10	468,252	450,179	7,911	7,490	170,940	19,688	299
1933	10	475,898	455,749	7,980	7,646	192,714	20,285	274
1934	10	449,408	482,580	8,327	7,835	199,106	20,810	299
1935	13	529,087	455,188	9,288	8,019	218,802	21,162	304
1936	13	547,884	499,661	9,796	9,102	248,910	23,218	303
1937	18	554,225	512,719	10,257	9,746	244,840	28,627	298
Percentage increase in 1937 over 1929..	80.0	17.7	16.5	31.9	34.9	80.0	51.2	..

TABLE XIV (b)
Mill statement for India

Year ending 31st August	Number of mills	Number of spindles installed	Number of spindles at work daily	Number of looms installed	Number of looms at work daily	Average number of hands employed daily	Approximate no. of bales (3½ cwt.) of cotton consumed
1	2	3	4	5	6	7	8
1929	244	9,807,064	6,957,388	1174,922	133,682	346,925	2,161,166
1930	348	9,124,768	7,979,454	179,350	116,622	384,022	2,398,714
1931	389	9,811,953	8,098,714	182,429	157,609	395,475	2,689,176
1932	389	9,506,088	8,338,082	186,341	161,340	403,326	2,811,264
1933	344	9,571,668	8,202,149	189,040	162,818	400,005	2,837,168
1934	352	9,618,174	7,845,077	194,968	8,302	384,938	2,702,990
1935	365	9,68,775	8,441,464	198,667	174,114	414,884	3,128,414
1936	379	9,885,658	8,504,406	200,062	177,935	417,303	3,109,618
1937	370	9,742,798	8,458,001	197,810	177,111	418,386	3,156,380
Percentage increase in 1937 over 1929 ..	7·6*	10·6	21·5	13·1	32·3	20·6	45·0

*E including Burma.

64. It would appear that the quantity of woven goods in the United Provinces (millions of yards) rose from 98·8 in 1929 to 237·0 in 1937 (vide Table XIII(C)). In other words, there was an increase of about 140 per cent. This compares very favourably indeed with the all-India increase between these years, from 3,419 to 3,572, or of about 47 per cent. The figures for Cawnpore alone are not available. But we have reasons to believe that it is responsible for the vast bulk of the woven goods produced in the United Provinces.

65. A study of the variations in the number of spindles and looms installed at Cawnpore shows that although there was a fall in the number of spindles between 1930 and 1934 by an average of 4·6 per cent. the deficiency was more than made up by 1937, when it rose by 17·7 per cent. as compared with the year 1929. The rise in the number of looms was 31·9 per cent. The corresponding rises for the rest of India in 1937 were 8·9 and 12·2 per cent. respectively.

66. The average numbers of working days in all the textile mills at Cawnpore between 1930 and 1937 were as follows:

Years							Average number of working days per year
1930	..	..	..	..	..	..	299
1931	..	..	..	..	..	..	298
1932	..	..	..	..	..	..	299
1933	..	..	..	..	..	..	274
1934	..	..	..	..	..	..	299
1935	..	..	..	..	..	..	304
1936	..	..	..	..	..	..	302·5
1937	..	..	..	..	..	..	298

The all-India average, excluding Cawnpore, for the year 1936 was 297. Thus there has been an increase in the number of working days by slightly more than 1 per cent. over 1930 and about 2 per cent. over the average of the rest of the country. The figure for 1937 has been affected by the strikes in that year and is, to that extent, uncomparable with the other figures.

67. Another clue to the expansion of the industry is provided by the figures of cotton consumption per year given in Table XIV. In this case an important consideration will be the counts of yarn spun. The spinning of finer counts might show a lower cotton consumption, even though the production actually goes up. From the evidence led before us we conclude that in the case of Cawnpore taking all the mills together, the tendency in recent years has on the whole been to go finer. One mill during the course of its evidence said that it had gone 17 counts finer. An increase of 80 per cent. in the quantity of cotton consumed may, therefore, mean a still higher percentage of increased production, due to the tendency of going in for finer counts.

68. The question now arises whether this expansion is an index of the prosperity of the industry. We are satisfied that the expansion is due to the industry attracting more capital on account of its prosperity; but we have to refute the likely contention that the position of the industry was so precarious that it was necessary to expand the existing plant or to work a longer number of hours per day in order to reduce the overhead charges per piece of cloth woven and thus to re-capture the market at depressed prices, or in other words, to recoup the losses by savings in the total cost of production. It would have been easy to find out the true position if detailed information regarding the profits and losses of the various mills had been available, but even in the absence of this information the position can be ascertained on the basis of circumstantial evidence and the implications of certain tendencies and facts which have struck us during the course of our inquiry.

69. The expansion of the industry began in 1935 when the process of economic recovery had begun and the price level was rising. If the industry had been expanded for meeting losses, expansion would have taken place during the period of acute depression. On the other hand, between 1930 and 1934 when the depression was deepening, the mills at Cawnpore acted in just the reverse way by following a policy of reducing the number of spindles, and looms in order to restrict production. This means that the mills tried to push up the prices by controlling the supply even at the cost of higher overhead charges per piece of cloth woven.

70. Then again, the expansion which began in 1935 did not mean an extension of the old plant only. As a matter of fact, some of the important mills, e.g. the Cawnpore Cotton Mills Co. Ltd. (Kakomi) and the Juggi Lal Kamlapat Cotton Spinning and Weaving Mills did not increase their spindles and looms at all; rather they reduced them to some extent. The Cawnpore Textiles Ltd. curtailed the number of their working spindles rather heavily. Further the expansion in the industry was not confined only to working double shifts instead of a single shift. If this was the only method of expansion it could be taken as a process of doubling the number of looms and the spindles. During the depression only a few mills worked double shifts. The fact is that as many as three new mills with a total spindlage of 49,600 and a total loomage of 803 were started during the period. The starting of new mills necessarily indicates attraction of new capital to the industry—most likely due to comparative advantage in investment. Coupled with this, the extension of the old plant and the additions to spindles and looms may also be taken to be further signs of prosperity in the industry which were visible at the beginning of the process of recovery.

71. In further support of our conclusion regarding the strength of the industry in Cawnpore, we now turn to such figures relating to profits as are available to us. A consolidated balance sheet covering eleven mills has been supplied to us by the Employers' Association. This is reproduced as Table XV. The figures have been certified by Messrs. Billimoria and Company, a firm of chartered accountants in Bombay and we have no hesitation in accepting them as correct. But the statement regarding the working results of the industry from the year 1929 to 1937 is not quite satisfactory, inasmuch as it does not give any information on the following points :

(1) Depreciation Fund;

(2) Amounts borrowed to finance the block and the interest paid thereon;

(3) Remuneration paid to the agents as commission;

(4) Depreciation deducted.

Even so it is clear that the block accounts show a sliding rise, as also the Reserve Fund. This steady increase is, we consider, the result of greater prosperity.

Though the statement does not give information on all necessary points, it shows beyond doubt that the mills have all along been making decent profits.

The following figures show what return the trading profit and the dividend amounts distributed work out on the paid-up capital :

Name of year	Percentage of trading profit on paid up capital	Percentage of dividend on paid up capital
1929	7.59	4.85
1930	6.18	6.94
1931	8.06	6.51
1932	8.70	6.46
1933	4.92	5.79
1934	13.50	8.46
1935	8.11	6.78
1936	8.79	6.70
Average	8.2	6.48
Average of total trading profit on total of block and paid up capital for 8 years	8.15	6.43

The above percentages mean, therefore, a fair return, considering the present money conditions and the general rate of interest now available to investors in sound and satisfactory concerns. It may not be irrelevant in this connection to compare the working results of the Cawnpore industry with the Bombay mills. The following figures show what return the trading surplus works out on paid-up capital and the block account in the two centres :

Paid up capital

Year	Bombay		Percentage	Cawnpore		Percentage
	Paid up capital (crores)	Trading surplus (lakhs)		Paid up capital	Trading surplus	
				Rs.	Rs.	
1931	13.18	148	11.22	2,25,25,380	18,16,261	8.06
1932	13.64	90	6.59	2,25,25,380	19,60,040	8.70
1933	11.60	50	4.81	2,25,25,430	11,09,851	4.92
1934	11.32	130	11.89	2,11,54,620	28,56,768	13.50
1935	11.78	85	7.21	2,11,79,620	17,19,526	8.11
1936	11.76	111	9.48	2,27,54,620	20,01,587	8.79
Totals	73.28	614	..	13,26,65,050	1,14,64,028	..
Average percentage .. .. .	..	..	8.37	..	..	8.64

Even if the block account be taken into consideration the following table will show the comparative advantage of Cawnpore over Bombay :

Block account

Year	Bombay		Percentage	Cawnpore		Percentage
	Block account (crores)	Trading surplus (lakhs)		Block account	Trading surplus	
				Rs.	Rs.	
1931	86.25	148	4.08	4,77,41,580	18,16,261	8.80
1932	37.40	90	2.40	4,86,03,891	19,60,040	4.08
1933	80.71	50	1.62	4,26,00,488	11,09,851	2.26
1934	81.56	130	4.11	5,12,42,839	28,56,768	5.57
1935	81.28	85	2.71	5,32,79,181	17,19,526	3.18
1936	80.92	111	3.58	5,27,86,860	20,01,587	3.88
Totals	198.13	614	..	20,99,54,359	1,14,64,028	..

TABLE XV

Number of returns	Year			Paid up capital	Total Block Account A	Reserve Fund	Trading Profit	Percentage of Trading Profit on Block	Total amount of dividend declared	Percentage of dividend paid on Block
1	2			3	4	5	6	7	8	9
				Rs.	Rs.	Rs.	Rs.		Rs.	
8	1929	..	..	8,25,26,215	4,60,78,968	75,86,000	24,70,189	5.36	15,78,500	3.42
8	1930	..	..	2,25,40,515	4,71,66,514	87,58,532	18,82,707	2.98	15,66,000	3.22
8B.	1931	..	..	2,25,25,380	4,77,41,590	86,78,532	18,16,261	3.80	14,66,600	3.07
8	1932	..	..	2,25,25,380	4,66,08,891	89,92,532	19,60,040	4.08	14,56,533	3.00
8	1933	..	..	2,25,25,430	4,66,00,468	92,30,014	11,09,851	2.26	13,05,600	2.69
8	1934	..	..	2,25,54,630	5,12,42,809	95,46,322	13,66,763	5.57	17,83,855	3.48
8	1935	..	..	2,11,79,620	5,89,79,161	98,69,387	17,19,526	3.18	14,37,730	2.66
11	1936	..	..	2,27,54,620	5,97,86,860	1,01,82,940	20,01,567	3.33	12,98,565	2.18

NOTE— A. Total Block Account does not include amounts written off under Capital Reduction Schemes.
 B. Further Reduction in Capital due to surrender of shares.
 C. Profit on Investments is included in the amount of Trading Profits, as these amounts were used for paying dividend.

1932	1934	1935
Rs.	Rs.	Rs.
2,05,908	60,316	1,38,108

72. We have worked out the figure of trading profits and dividends on the paid up capital rather than on the undepreciated block, because allowance must in fairness be made for the interest or the remuneration earned on the use of the depreciation, reserve and other funds and also for provision in the normal profit and loss account on borrowed loans, if any. These factors have been accorded due weight, we observe, also by the Bombay Labour Enquiry Committee, (vide para. 83, interim report). Money conditions, as pointed out by that Committee, are much easier today than they were two or three years ago when the Special Tariff Board considered a 6 per cent. return on the total fixed capital as a fair one; the bank rate is lower today and there is greater willingness on the part of the investor to come forward in support of industrial enterprise.

73. While the working results of the mills in Cawnpore show a fairly satisfactory position over a series of years, we may now examine the improvement that has taken place particularly during the course of the last six months. As we have no statement regarding the working results of the mills during the year 1937, we can only fall back on the general conditions prevalent in the trade to form an idea of the improvement that has taken place. Generally speaking the prices of cloth, on the one hand, and of cotton, on the other, give a fair indication of the measure of profits in the textile industry, as the other conditions ordinarily remain more or less stationary. If we follow the trend of prices of these in 1937, it will be found that there has been a very heavy fall in the prices of cotton during the year, synchronizing with a slight rise in cloth prices in Cawnpore; and this has helped to widen the margin of profit to a very considerable extent. It is not possible to make any exact calculation regarding the extent to which the margin has increased; but some estimate may be formed of the consequence of this fall in the price of cotton.

74. The Cawnpore mills consume largely "Bengal" and "Punjab American" cottons. The prices of this variety of cotton together with the prices of cloth during the year 1937 and the beginning of the current year are given below:

Month	Price of cotton (per maund)	Price of cloth	
		*Sheetings per yard	*Dhoties per pair
1937			
January	Rs. a. 20 0	a. p. 5 8	Rs. a. p. 1 9 6
February	17 12	5 8	1 8 6
March	17 8	5 8	1 8 6
April	16 4	5 8	1 9 3
May	15 12	5 8	1 9 0
June	15 12	5 8	1 9 0
July	15 12	5 8	1 9 0
August	16 0	5 8	1 9 0
September	15 12	From 8th 5 10 " 20th 6 0	1 9 0
October	13 8	6 0	1 9 0
November	13 2	6 0	1 9 0
December	13 2	6 0	1 9 6
1938			
January	13 0	6 0	1 9 8
February	13 0	6 0	..
March	11 8	6 0	..

*These figures relate to standard Muir Mill sheetings and Dhoties and have been obtained through the Upper India Chamber of Commerce.

The above figures show that cotton prices came down from Rs.20 per maund in January, 1937 to Rs.13-2 in December, 1937. This latter price which remained practically stationary until February this year, has dropped to Rs.11-3 in March. If we compare the average of cotton prices for the first quarter with that of the last quarter of 1937, we find that the fall works out at 28 per cent. The effect of this variation on the profit margin will be better understood if we compare the cost of the total cotton consumed in a year by the Cawnpore mills at prices ruling in the first quarter of 1937 with those at prices prevailing during the last quarter. The total cotton consumed by the Cawnpore mills during 1937 comes to 244,340 bales. It is safe to say therefore that the profits made on this score must be substantial.

75. In this connection, it was argued before us that the price of cotton must be a variable factor and that the present rates cannot last indefinitely; conversely, it was pointed out that if they should continue to rule low, prices of cloth must come down in sympathy with those of raw cotton and a substantial part of the advantage passed on to the consumer. Moreover, low prices for cotton must sooner or later affect the purchasing power of the agriculturist and thus lead to a slackened demand for cloth. We do not deny the force of these arguments. At the same time, the facts of the present situation are incontrovertible. Despite the low prices of cotton which have been prevalent for several months, the prices of cloth have shown no tendency to drop; nor is there evidence to show that the demand for cloth is slackening. So far at any rate the mill-owners have had practically the full benefit of this favourable factor. The question is whether it is likely to undergo any sudden or considerable change in the near future. The difficulties of our exporters of cotton to Japan have been accentuated in recent weeks, and it is considered most likely that Japan, our biggest buyer, will absorb the normal quantity. So far as Lancashire, our next most important customer, is concerned, it is equally doubtful whether she will increase her quota so long as she can obtain American cotton at more favourable prices. We note that the Bombay Labour Enquiry Committee, after a study of all the relevant factors, has come to the conclusion that the average price level for Indian cottons during the current year will continue to be lower than it has been for some time. We are satisfied having regard to all aspects of this question that the industry can well afford to meet the extra cost involved in giving effect to our recommendations.

Cawnpore and
Bombay wage
levels compared.

76. As regards the disparities in the wages prevailing in Cawnpore and other places particularly Bombay and Ahmedabad which are the leading industrial centres, a pointed reference has been made in the memorandum of the Mazdur Sabha which we have already noticed in paras. 27 to 35. Even allowing for the fact that the figures given in Tables I, II, and IV are not the latest and in several cases also liable to error, the broad fact remains that the Cawnpore wage level is far lower than that of Bombay and Ahmedabad. In the following Table no. XVI, an attempt has been made to compare the latest available Bombay figures with the Cawnpore figures of 1937 in respect of 31 categories to which we have confined our detailed examination. The Bombay figures have been taken from the General Wages Census Report of 1934, and are weighted averages, as in the case of Cawnpore. Figures of a later period are not available for all categories. Daily wages have been converted into monthly by multiplying by 26 for the sake of comparison. It should, however, be pointed out that in 1934 the Bombay mill industry was working 10 hours a day and this factor should be allowed for in making the comparison.

TABLE XVI

Comparative statement of wages of selected categories in Bombay and Cawnpore Cotton Mills.

No.	Name of occupation	Average earning per month of 26 working days in Rs.		Percentage increase or decrease of Bombay wages over Cawnpore wages
		Bombay, 1934	Cawnpore, 1937	
1	Opener attendants	21'2	16'08	+32
2	Scutcher „	21'0	15'7	+34
3	Lap Carriers	20'8	16'92	+23
4	Card Machine Tenters	19'6	16'15	+22
5	Fly Gatherers	19'8	17'41	+14
6	Strippers and Grinders	23'8	16'56	+43
7	Drawing Tenters	26'0	28'0	-7
8	Slubbing „	29'2	29'07	+0'5
9	Outer „	27'7	25'53	+8
10	Boving	26'2	21'69	+22
11	Doffers Carding	17'8	11'45	+54
12	„ Spinning .. .. .	..	12'68	..
13	Siders	22'0	18'84	+17
14	Doubling Tenters .. .. .	..	17'10	..
15	Reelers	16'6	12'15	+36
16	Grey Winders (O. T.)	16'2	19'92	-19
17	„ „ (H. S.) .. .. .	..	22'76	..
18	Warpers (O. T.)	44'6	39'05	+16
1	„ (H. S.) .. .. .	..	59'68	..
20	Warping Creelers	17'85	14'83	+20
21	Front Sizers	68'0	31'8	+116
22	Back „	84'4	20'61	+66
23	Drawers-in	42'5	30'47	+38'7
24	Reachers	22'8	18'65	+68'0
25	Weavers	35'8	37'07	-7
26	Folders Machine .. .. .	..	15'15	..
27	„ Hand	21'8	16'58	+29
28	Coolies .. .. .	..	..	..
29	Oilm an	25'5	16'07	+58
30	Sweeper (inside)	17'4	18'33	+32
31	Sweeper (outside) .. .. .	..	12'44	..

77. The differences thus disclosed are too glaring to escape attention. It is not possible for us to say what part of the difference should be attributed to factors such as greater efficiency, higher cost of living and finer counts in Bombay. Generally speaking, however, it appears to us that these causes cannot explain or justify the whole of the difference. These disparities will be further accentuated as a result of the recommendations contained in the interim report of the Bombay Textile Enquiry Committee which we gather have been accepted by the Bombay millowners. They will push up the general wage level in Bombay by about 12 per cent.

Rise in wages justifiable.

78. Relying on such data as we have and which we have indicated we are of the opinion that the industry in Cawnpore is in a strong and healthy position and it is possible to attempt a reduction in the difference between the Bombay and Cawnpore wage levels. It would, therefore, be justifiable to suggest that a rise in wages should be given to all the workers engaged in the industry. If our analysis of the situation is at all correct, the comparative position of the industry as between 1929 and 1937, we believe, justifies us in making this call upon the industry.

Our proposals.

79. Our proposal is that for the purpose of giving increments in wages the workers should be divided into the following five wage groups and given increases as indicated against each.

Wage groups	Increases
I—Between Rs.13 and Rs.19 ..	2½ annas in the rupee, subject to the condition that no one gets more than Rs.21-8.
II—Between Rs.19 and Rs.25 ..	3 annas in the rupee subject to the condition that no one gets more than Rs.27-8.
III—Between Rs.25 and Rs.32-8 ..	1½ annas in the rupee subject to the condition that no one gets more than Rs.35.
IV—Between Rs.32-8 and 40 ..	1 anna in the rupee subject to the condition that no one gets more than Rs.41-8.
V—Between Rs.40 and Rs.59 ..	½ anna in the rupee subject to the condition that no one gets more than Rs.60-8.

We would add that the cases of those workers who are receiving less than Rs.13 are dealt with separately in the next chapter.

80. Further we recommend that all time-workers wherever they are on a daily basis should be put on a monthly basis. In 1929 the monthly basis was the usual rule and we do not see why that salutary practice should not be reverted to. The conversion of a monthly rate into a daily one on the basis of a 26 day month not only deprives the workers of the wages during the holidays, but in effect reduces their earnings because it is not often that a mill works for full 26 days.

Effect of our proposals.

81. On a rough calculation we believe that these proposals will raise the general wage level in Cawnpore by between 10 and 12 per cent. and their effect therefore will be to prevent the disparity between Bombay and Ahmedabad on the one hand and Cawnpore on the other being further widened in consequence of the interim recommendations of the Bombay Enquiry Committee (1938). They will leave unimpaired the comparative advantages which Cawnpore enjoys over Bombay and Ahmedabad.

Relation of cost of living to our wage proposal.

82. We have to recognize the fact that both the employers as well as the Mazdur Sabha agree that there has been a reduction in the cost of living as between 1929 and 1937. In the subsequent statements made in the course of evidence there was considerable agreement between the employers and the Mazdur Sabha on this point. There are, however, certain considerations which we would urge in applying the principle of lower cost of living to the determination of wages. We deal in the succeeding chapter with the question of the minimum wage which cannot properly be fixed without relation to the cost of living. But no one will dispute the point that the lower paid workers who form such a large proportion of the total number do not get a living wage. To the extent, therefore, that the cost of living dropped during the years of the depression they were able to approximate towards standards compatible with a living wage. The cost of living theory cannot have in reality valid application to those classes of workers whose wages are below a living wage

level. Our wage increment proposal will mean a definite betterment in the standard of living of the worker over the 1929 level. Present prices have not caught up to the 1929 point though they show a distinct trend towards a rise.

We have no desire to see the men wedded for all time to a given standard of the past, even if it be that of 1929. A progressively rising standard is desirable. For eventually this must lead to a general promotion in their efficiency. We could suggest a rise in wages, adjustable to the difference between the cost of living between the two years. We, however, refrain from taking this course. The one reason is given above, namely, we do not desire to see the workers fixed to a given level permanently. The other reason is that we cannot depend too surely on the reliability of the cost of living index supplied.

83. Regarding bonuses the employers contended that these are *ex gratia* Bonus payments and the workers cannot make any claim to them. However, if bonuses have been paid for considerable periods, they increase earnings to that extent, and thereby help workers to reach a particular standard of living. Workers soon become accustomed to such a standard, so that when employers, however justifiably from their point of view, withdraw these bonuses, or effect reduction in the rates, the workers feel it immediately. Obviously, they dislike the idea of a lowering of their standard of living. Our idea is that wherever the bonuses are of a monthly character, they should be incorporated with the wages. Wherever the bonuses have been of an annual nature, they should be converted into profit sharing schemes.

84. We have, however, one exception to our general rule in this connection. This is in regard to the bonus given to compensate for the high cost of living, whenever prices tend to go up as compared with some basic year. There should be a sliding scale arrangement in this connection, agreed upon between the employers and the representative of the Mazdur Sabha. Given a reliable cost of living index series, which we propose should be maintained by the Labour Office, the adjustment of wages should become almost automatic for a given rise or fall in the index number.

85. In order that this arrangement should function smoothly we propose a Wage Fixation Board. This should be constituted and function somewhat on the lines of the British Trade Boards. It may consist merely of employers' and workers' representatives, with their own chairman. Or they may have neutral chairman, the Commissioner of Labour for instance. Such machinery would prove, we believe, highly useful. Wage troubles are likely to crop up. The cotton industry is not a static industry. We are anxious to provide all means possible to adjust factors liable to lead to industrial strife. We consider none of greater importance than machinery for the adjustment of the wages.

CHAPTER III

MINIMUM WAGE

The principle of the minimum wage.

86. The principle of the minimum wage has now been accepted as being reasonable, fair and necessary in almost all advanced modern nations. Starting from the British colonies, it spread to England, the Continent and now is found to be on the Statute books of both the old and the new world countries. It is not necessary to elaborate either its history or its significance, fascinating though such a task would be in itself. Abundant literature is available on the subject and students may refer to that for further knowledge. The principle of the minimum simply stated is to guarantee to the worker a living wage.

The principle accepted by the Employers' Association, but certain conditions demanded.

87. We are happy to acknowledge that the employers have accepted the principle of the minimum wage. In their answer to question no. 12, they say—

“The Association see no objection to minimum rate of wages being fixed for factory adult labour, provided that under no circumstances should the standard of minimum rate of wage be so fixed that the textile industry of the United Provinces would be unduly handicapped in competition with the textile industry in other centres. It is not feasible to deal with a minimum wage for one industry without considering the possibilities of a minimum wage for all industries. Moreover, the establishment of a minimum wage would involve taking evidence about whole of India's economic activity and the Central Government's fiscal policy.”

It is therefore in its practical application rather than in its intrinsic principle that the employers apprehend several difficulties.

Danger of selecting a single industry.

88. For instance, it is not without justification that the employers state that it would be unfair to single out any one industry for the imposing of this piece of legislation. It would impose a burden upon it, not borne by other industries. It would be an act of discrimination against it. It would, therefore, lead to the flow of resources away from it, into other industries presumably not so worth while in themselves. This deflection would be artificial and to that extent may injure the national dividend. Theoretically speaking, this objection against the introduction of the minimum wage principle is correct. Marginal productivity is a guiding principle which cannot safely be abandoned in the gainful employment of the agents of production. Yet a judicious interference may, from the long period point of view, be actually more beneficial than it appears to be from the short period standpoint. It is practically due to such consideration, that either protection or subsidy or some aid is given by the State to particular industries. Such deliberate interference with the economic laws of supply and demand is regarded as necessary and worthwhile from the long range point of view. People in the cotton industry should not find it difficult to grasp the implications of such action.

Desirability of all-India action.

89. We appreciate, however, the force of the contention of the employers that it should be promulgated as an all-India piece of legislation. This is sound in principle. Otherwise, fear of inter-provincial and Indian States competition, would emerge as a stern reality in the disposal of Cawnpore products. Already industry is migrating into Indian States in consequence of the progressive labour legislation which is being adopted in the British

Provinces in the country. The injury of such a geographically localized legislation has to be taken into due consideration. Also the factor of foreign competition cannot be overlooked. The labour costs of production in the Indian cotton industry are phenomenally high per 1,000 spindles or per 100 looms. We, therefore, have to be careful in adding to the burden of this, our leading industry in the country. We are, however, confident that our suggestion in this regard will not be burdensome. If anything it will tone up the industry in Cawnpore.

90. In fixing a minimum wage, we have necessarily to take the cost of living into consideration. We have to determine the standard. This is not an easy matter. Physiological, social and environmental elements of the problem have all to be carefully examined. Data have to be collected. Family budgets have to be obtained, studied and analysed. The requisite items have to be selected with care, and accurately weighted, quantitatively and qualitatively. All this work of a high order, requiring patience, precision and understanding of the classes on whose behalf the cost of living is being determined. The family unit itself has to be defined and fixed. In the Indian social system this is not a matter of easy achievement. Traditions and social usages of the peoples have to be respected and duly appraised.

The standard of living-difficulty of determination.

91. Another important factor that has to be considered is the prevailing rates of wages in similar occupations, or the general wage rate in the neighbourhood. In this connection the background of rural conditions and the prevalent wage-rate for the agricultural labourer cannot be kept out of mind, especially when it is recognized that the bulk of the textile mill workers come from the agricultural classes. Then, the many trades and occupations in the city, including, for instance, wages given to municipal and domestic servants, cannot be overlooked. The manual worker toiling in the street, pushing a hand-cart, or lifting heavy burdens in the bazaar, has to be kept in mind. All these are considerations that are relevant to the question.

Wages in other occupations.

92. There is one consideration, however, of a different nature which has caused us much uncertainty. It is this. We cannot overlook the fact that in most countries, where minimum wage legislation has been introduced, it has been in regard to minor trades and occupations. Major industries, except under special circumstances and considerations, for instance, the coal trade in Great Britain—have not been brought under the action of such legislative measures. Big industries have evolved their own guarantees. Labour, through its own organized strength, has secured for itself terms which protect it adequately, including a basic minimum wage. They have not resorted to State assistance in this connection. By their inherent strength, with admirable perseverance, through the process of collective bargaining, they have carved out for themselves this protection, with the full recognition and agreement of their employers.

Minimum wage legislation usually applied to minor trades.

93. If conditions were not abnormal and other factors were equally helpful, as for instance public policy regarding the provision of education, health and other matters, we would be very greatly inclined to leave the large industries, the cotton industry in particular, to settle the question for itself. We cannot help feeling that in the long run, this would be the very best procedure to adopt in the interest of textile labour itself. But, reviewing affairs as a whole we feel that our proposal for a minimum wage for the cotton industry is desirable. We are impressed with the thought that our proposal will benefit particularly those categories of workers in the cotton industry who are the lowest paid and the least vocal in Union activities. Hence we feel

Our view.

justified in recommending a minimum which we know will help these low paid categories of workers.

Need of a minimum wage to other trades and occupations in Cawnpore.

94. There is another aspect of the proposition which weighs with us. While we have confined ourselves exclusively to the cotton mill workers, we were nevertheless styled the Labour Enquiry Committee. We actually received requests from other grades of labour, for instance the depressed class workers, to take up the inquiry of their conditions of work and wages. The scavengers too desired that their wages and conditions of work should be investigated. It is probably true that the cotton operatives, comparatively speaking, are well off. Certain categories amongst the cotton workers, particularly the weavers, are definitely better off, in every way, than low-paid clerks, *munseems*, shop-assistants, and ill-paid municipal or district board school-masters and school-mistresses. It is well to recognize these facts. Other categories of workers, and probably no one more than the general labourer, man and woman, need far greater consideration and protection. But it was impossible, under the circumstances in which we were placed, to undertake such an inquiry, however desirable it may have been in itself. We are glad to note that the labour leaders in Cawnpore are alive to this aspect of the labour question. They are increasingly bending their energies in this direction. We feel that in accepting the minimum wage principle and in prescribing a figure, we shall be able to bear indirectly at any rate, on the wages rate in other ill-organized and low-paid trades and occupations. We are not very hopeful about the wage rate for the class of the general labourer. His wage is related to the wage rate of the landless agricultural worker in the country-side. It is only when general economic conditions improve, will his wage also increase. The population factor looms large in this consideration. It is inescapable.

Decent standard essential for children—the future generation.

95. We must state it frankly that we desire to see our workers living a decent and self-respecting life. We wish them to be adequately housed, cleanly clad, and sufficiently fed. We desire their children to be well-nourished, well-cared for, and sufficiently educated, to grow up to be efficient workmen and workwomen, and enlightened and responsible citizens. We realize how stunted, cribbed and confined is their present existence. For instance, even the budget estimate that has been prepared by the Mazdur Sabha does not include the item of milk. How essential milk is for little children and nursing mothers, and the sick and suffering, is too obvious to require emphasis. For a people who are mostly vegetarian, the need for milk is even greater. Yet this item is not included in the budget estimates either by the workers or by the employers.

Indebtedness.

96. There is another aspect of the worker's economic situation which has been neglected. It is the fact of his indebtedness. The indebtedness of the workers is proverbial. It is one of the largest single causes of their depressed economic condition. But no item towards interest payment as a cost in the items of expenditure in the workers' budget has been included. For several reasons this exclusion is correct. Yet it is an expenditure that weighs heavily upon the worker. It is not possible for him to escape it, especially if he has had the misfortune to contract that debt from that sturdy fellow the Kabuli. For he is a moneylender and liquidator combined, thanks to his invincible *lathi*! But be it recorded to the honour of the worker that he has no intentions of defaulting. Debt repudiation is not in his line. This faithful repayment of debt, interest and compound interest, was a fact which amazed and elicited the admiration of the foreign experts on the Central Banking Enquiry Committee. We cannot analyze here the causes

for which a large portion of these debts are incurred. However, it cannot be gain-said that partly these debts are incurred for meeting the bare needs of life. This is especially true when sickness intervenes, as it must in a sub-tropical province like ours and when the principal bread-winner is himself sick, and all income stops immediately. He has next to no savings to fall back upon, except perhaps his wife's few pieces of jewellery, for which again by the way we see no item of expenditure entered in the budgets submitted to us. It is unlikely that he will be a member of a 'Co-operative Society'. So the incurring of debt becomes a matter of dire necessity. The stark possibility of starvation faces the worker and his family.

97. Workers reduced to such a situation cannot but view with bitterness the entire arrangement of things. Little wonder that pictures of a different type of civilization, which they are informed is a reality, and not a mere Utopian dream, have such an irresistible fascination and attraction for them. If they can bring about such a change, which they are taught they can, if they only "will", they are prepared to face untold hardships, even worse, if need be. This situation we are convinced is not a mere creation of our academic imagination. We have been sufficiently long in Cawnpore, in raw personal touch with the workers, to see that this type of mentality has been fostered and engendered amongst them with zeal and tireless energy.

98. Be this as it may, we are not in a position to recommend a minimum of the magnitude indicated in the Mazdur Sabha memorandum, i.e. Rs.33-4-10 or even the figure of Rs.25 indicated by its President in the course of his evidence upon this matter. Such a figure would require, definitely, all-India deliberation, and much comprehensive calculation of a number of factors. Also we may indicate that a number of very powerful, prosperous and wealthy countries, like the United States, England, or Japan have not fixed such minimum wage exclusively on the basis of cost of living. The principle of what the industry can reasonably be expected to bear, is the method employed fixing the figure. We ourselves therefore cannot go beyond this method. Nearer home, we find that the Bombay Committee (Interim Report, 1937-38) have fixed Rs.15-8 as the upper limit for the lowest paid categories of workers in the cotton industry. We, therefore, suggest Rs.15 as the minimum. We suggest this figure as the minimum in the cotton and woollen industry in Cawnpore. No adult male worker should receive less than this amount reckoned either on a daily or monthly basis, except those who cannot reach the minimum standard of efficiency on account of old age or infirmity.

99. It is not necessary for us to point out that to safeguard the value of our minimum wage rate per month, there will have to be the apparatus of the cost of living index number. For it is in terms of real wages that we wish to relate the money wages of the workers. The sliding scale system will have to be recognized and operated upon. For this purpose mutual co-operation between the employers and workers will have to be brought into play. The wage fixation machinery we have suggested elsewhere will have to function in connection with this matter also.

100. We desire to point out that the minimum we suggest is not to be regarded as the minimum for all time. Examination of the question, seven yearly or ten-yearly, may warrant revision of the minimum. Workers are entitled to an increasing share in the good things of life. Less disparity is the only sure guarantee of civic security.

CHAPTER IV

STANDARDIZATION OF WAGES

Existing
disparities in
allocation of work
and wages.

101. We have been struck by the wide disparities both in regard to the nature of work entrusted to an operative having the same occupational designation and his earnings in the different mills. The various mill managements have supplied us with statements of average earnings of the workers in some of the principal occupations in their mills. They are not strictly comparable in the absence of detailed information regarding the allocation of work. But they conclusively establish the facts that no attempt has hitherto been made to fix any wage standards for the various occupations, and that the existing disparities cannot be explained on any rational basis. In the following table the data supplied by the various mills have been tabulated for four important occupations in which a large number of operatives are engaged.

Frequency table showing the range of variation in the earnings of operatives in four occupations in Cotton Mills in Cawnpore in 1937

Average earning per month of 26 working days		Number of mills in which the average earnings are as per column (1)			
		(a) Roving tenters	(b) Ring spindlers	(c) Grey winders, old type	(d) Two loom weavers
Below	Rs.15	1	2	2	..
Between	15 to 17 .. ..	..	..	1	..
Do.	17 to 19	1	2	1	..
Do.	19 to 21	3	4	3	..
Do.	21 to 23	1	1	..	1
Do.	23 to 25	2	1	2	..
Do.	25 to 27	2	..	..	1
Do.	27 to 29 .. ..	..	..	1	..
Do.	29 to 31 .. ..	..	..	..	..
Do.	31 to 33 .. ..	..	..	..	..
Do.	33 to 35 .. ..	..	..	..	1
Do.	35 to 37 .. ..	..	..	..	3
Do.	37 to 39	1	..	..	3
Do.	39 to 41 .. ..	..	..	..	1
Do.	41 to 43 .. ..	..	..	..	..
Variation from	Variation from	Variation from	Variation from		
Rs.13 15 0 to	Rs.12 6 0 to	Rs.10 5 0 to	Rs.32 14 0 to		
Rs.37 2 8	Rs.23 10 0	Rs.27 0 6	Rs.39 12 0		

Necessity for a
uniform system of
wage
determination.

102. It will be noticed that the variations are of a magnitude which cannot be overlooked. We can understand that there are bound to be certain variations in earnings between the workers in the same occupations from mill to mill on account of variations in type of and conditions of machinery, material, working conditions, character of goods and the efficiency of workers. But the disparities disclosed are too big to be accounted for by all these

reasons. They can only be due to the lack of uniformity in the system prevailing in the various mills for determination of wages. In our opinion, such wide disparities in wages paid to workers in similar occupations are sources of discontent and endanger peace in industry. We would therefore urge on the Employers' Association the immediate need of their carefully examining the wages paid for different occupations in the different mills and evolving a uniform system of wage determination suitable for the textile industry of Cawnpore.

103. Such a work would necessarily involve the preliminary work of fixing standard names for various occupations. What we find at present is that the workers designated by the same name have different duties in different mills. It is obvious that before any uniform system of wage determination can be evolved for the industry as a whole, the nomenclatures for various occupations must first be standardized. The drawing up of standard designations must therefore be taken up as soon as possible. It is quite probable that the attempt to do so may arouse the suspicion of the workers, particularly when some readjustment of duties is involved. We therefore consider that the Employers' Association will be well advised to consult and enlist the co-operation of the Government Textile Expert and the representatives of Labour before they finally draw up a list. We suggest that they should appoint a technical committee for this purpose.

104. As regards the actual standardization of wage rates, we are aware that there are numerous difficulties. But we find that a standardization scheme was prepared by the Bombay Millowners' Association in June, 1928, vide Appendix VIII on pages 202 to 235 of the Report of the Bombay Strike Enquiry Committee, Vol. I. This scheme was discussed by that committee and their recommendations with regard to it are contained in para. 197 on page 94 of the report. We understand, however, that the Bombay Millowners' Association has adopted a standard wage list for time-rate occupations only. It may not be possible immediately to lay down standard rates providing for automatic adjustments for every conceivable variety of work, but we are inclined to believe that progress in certain directions is certainly possible. Representatives of some of the mills examined by us admitted the desirability of the levelling up of wages.

105. So far as the time-workers are concerned, we do not think that there should be any insuperable difficulty. Once standard designations for the various classes of time-workers and the duties attaching to those designations have been determined it should be possible to lay down standard rates of their wages. In the case of the piece-rate workers, the system to be evolved will have to allow for variations in production arising out of maladjustment of speed, variations in quality of material and working conditions. The view of the Employers' Association is that the fixing up of standard rates for piece-rate workers is too technical to be practicable. But the present system (if it can be called a system at all), according to which the rates for piece-workers are so adjusted as to limit the maximum earnings of the operative, is, in our opinion, certainly wrong. Though the employers representatives denied the application of any such limit it was clear from the evidence that a limit arbitrarily fixed is in operation. The rates must be so fixed that an average worker should be enabled to earn an average earning for a particular occupation at a reasonable standard of efficiency, while no arbitrary limit should be imposed on his earnings which result from his greater efficiency. The system should be so designed that it encourages him to increase his efficiency and earn a higher wage. One of the mills did evolve

a system of automatic adjustment in wages in their spinning department which made allowances for variations in quality of output due to changes in twist inserted in yarn and changes in working conditions. We consider this to be a commendable effort, but we were told that the workers were opposed to it as they did not understand its principles and the management had therefore decided to revert to the old system which provides no stimulus for increased efficiency or adjustments for changes in quality, etc. On a personal inquiry of the case from some of the workers of the mill we found, however, that their dislike was not based so much on their inability to understand the system, as on the basic rates being fixed at such a low level that the actual average earnings fell short of the earnings of workers on the old system. The representatives of the Mazdur Sabha have urged the desirability of introducing a system of wage determination for piece-workers which would take variable factors of work into consideration. While, as we have said above, we realize the technical difficulties involved, we do not regard them as insuperable. Even if a uniform rates list cannot be laid down for the industry as a whole immediately, standard rates can certainly be laid down to start with by individual mills for themselves which will provide for automatic adjustment on the introduction of new varieties. Variable factors from mill to mill may be many and of considerable diversity, but the limits of variations in a given mill can be laid down with sufficient precision.

Standardization of wages.

106. It has been suggested to us that, instead of considering the determination of standard rates, we should aim at the determination of standard wages. That is to say, the actual earning of an operative in the various mills should be compared occupation by occupation and where the earnings in a certain mill is below the average of the industry as a whole, an effort should be made to pull up the average of that mill by inducing it to enhance either its rates, or its efficiency. This is no doubt possible and may have the result of increasing the earnings of the under-paid operatives. But mere standardization of wages (as distinguished from rates) cannot provide the stimulus which is necessary for a workman to increase his efficiency. The only sound method, in our opinion, is to standardize the rates which will enable an operative to earn according to his efficiency without any arbitrary limitations.

CHAPTER V

RATIONALIZATION

107. The movement towards rationalization has been one of the most important features of industry throughout the world in the post-war period. According to the International Labour Office, Geneva, rationalization means "the methods of technique and of organization designed to secure the minimum waste of either effort or material. It includes the scientific organization of labour, standardization both of material and of products, simplification of processes and improvements in the system of transport and marketing." The International Economic Conference which met at Geneva in May, 1927, passed a number of resolutions on the subject of which, for our purpose, the following is important :

"The Conference considers that one of the principal means of increasing output, improving conditions of labour and reducing costs of production is to be found in the rational organization of production and distribution. The Conference considers that such rationalization aims simultaneously—

- (1) at securing the maximum efficiency of labour with the minimum of effort;
- (2) at facilitating by a reduction in the variety of patterns (where such variety offers no obvious advantage), the design, manufacture, use and replacement of standardized parts;
- (3) at avoiding waste of raw materials and power;
- (4) at simplifying the distribution of goods; and
- (5) at avoiding in distribution unnecessary transport, burdensome financial charges and the useless interposition of middlemen.

Its judicious and constant application is calculated to secure—

- (1) to the community, greater stability and a higher standard in the conditions of life;
- (2) to the consumer, lower prices and goods more carefully adapted to general requirements; and
- (3) to the various classes of producers, higher and steadier remuneration to be equitably distributed among them.

It must be applied with the care which is necessary in order while at the same time continuing the process of rationalization, not to injure the legitimate interest of the workers and suitable measures should be provided for cases where during the first stage of its realization it may result in loss of employment or more arduous work.

It requires further, as far as regards the organization of labour in the strict sense of the term, the co-operation of the employees and the assistance of trade and industrial organizations and of scientific and technical experts.

108. It will therefore be seen that rationalization covers every aspect of industry, on the manufacturing, the selling and the distribution sides. In this enquiry we are, however, concerned primarily with the human factor, that is to say, the effect on the worker of methods designed to secure the efficiency of labour and of the machines on which he works.

109. In this sense schemes of rationalization include (1) changes in the plant, (2) changes in the character of production, and (3) intensification, Rationalization in Cawnpore Textile Industry.

that is asking one operative to tend more machines. As far as we could gather from the statements and the oral evidence produced before us, there is enough evidence to show that there has been a fair amount of rationalization in various mills at Cawnpore. Some of them have introduced high-draft system in ring spinning, self-stripping devices on cards, high speed winding and warping machine in their preparatory processes. In the case of a few mills new humidification plants have been installed and some mills have gone in for repairs and adjustment on a large scale; replacement of parts; putting up of new and up-to-date machinery; and improved methods of drive. The character of production has also altered in the case of some mills, and there appears to be a tendency towards better mixings. Rationalization in the sense of intensification is to be found only in two or three mills on any extensive scale, and only rarely has intensification been introduced in complete sections.

Its effect on
Workers'
earnings.

110. All these changes must result in greater efficiency both of the machine and of the operative. It is difficult to evaluate the increase in the efficiency of the operatives in terms of money, or to arrive at any figure which could show how the average production of the worker has risen because of the introduction of better plant, better mixings and improved working conditions. Speaking generally, we find, however, that the results of rationalization have not been reflected in the earnings of the operatives to the extent that one might have expected. This is specially true in the case of the spinning department and other departments where the operatives are paid by time and not by piece. While in some cases the piece-workers could derive the benefit of rationalization by way of higher wages on increased production, we have noticed a definite tendency on the part of the employers to adjust the piece-rates in such a way as to limit their maximum earnings. The time-worker has not only not obtained an increase in the wage due to intensification, but his work also has increased. This point is, however, strenuously disputed by the employers. They maintain that with better grades of cotton, more suitable and careful mixing, superior machinery, and better conditioning within the department's work is much easier. There are fewer breakages and fewer stoppages, and less running about to do. We must bear testimony to this fact that whenever conditioning plants have been installed, and modern methods adopted, to our untrained observation, there seemed to be less strain on the workers, especially in the spinning sections of the industry. Some of the departments in some of these mills appeared to us to resemble University Laboratories, so clean and orderly were they in contrast with those mills where work is still carried on in the old ways. We have no doubt whatsoever that work in those mills is far more strenuous and exacting than in the newly reconditioned mills. An experienced, 'go-head' and sympathetic employer affirmed before us that those modern methods of production in the textile industry actually meant less exertion, because of layout of frames and other factors, in spite of the fact that the men were called upon to look after more spindles than before.

Views of
Employers'
Association.

111. The views of the Employers' Association on this question of rationalization are summarized in the following quotation from their memorandum:

"The Association desire to state that rationalization and intensification as known in other centres in India has not been introduced into Cawnpore as yet. But the Employers' Association appreciate their tardiness in this direction since they fully realize that rationalization and intensification were today a world-wide policy. Therefore

if the textile industry of Cawnpore is to survive, it must be placed in a position to compete with other centres both indigenous and foreign and this can only be achieved by introducing rationalization and intensification.

The Association further desire to stress that schemes of rationalization and intensification assist both the employer and the employee. The former is able to retain his market and so continue to give employment to the latter. Such schemes increase the earnings of the operatives and therefore raise their standard of living and comfort. Health and efficiency are not impaired and, as there is no appreciable difference in the productive efficiency, it would indicate that it is well within the capacity of the operatives to look after more machines than at present."

112. The Mazdur Sabha in their memorandum state—

View of the
Mazdur Sabha

"We accept the principle of rationalization as a necessary factor in social and economic progress. But it is at the same time necessary to safeguard the interest of labour.

"To sum up, rationalization should be permitted only if all additional profits resulting from intensification after deducting interest on additional investment and depreciation charges is paid to the workers, there is no throwing out of employment of the present workers in the mill, additional facilities for training and rest are provided, and the whole scheme is subject to the approval of the representative of the workers' organization."

113. It will be observed that even the Mazdur Sabha accept the principal of rationalization, and the conclusion emerges that a wider adoption of rationalization schemes or intensification and efficiency schemes as known in the local and other textile centres, is desirable. In fact, it is inevitable if the industry at Cawnpore is to maintain its present rate of progress. We welcome the tendency towards rationalization mentioned in a previous paragraph. It is essential, in the face of world competition that Indian industry, of which textiles is the premier industry, should employ up-to-date methods. Economy and efficiency cannot otherwise be secured. Constant and comprehensive vigilance and adaptation is necessary. Exploitation not of the worker, but of material and machinery should be the key-note, of our employers. One important employer, we are glad to note, in the course of his evidence stated that his main concern was to exploit his machines rather than his men. If this spirit became general, the suspicion against intensification and rationalization would be very greatly diminished.

114. We note that Japan within a period of 30 years, from the first establishment of a spinning concern, has risen to the third position as a cotton manufacturing country, in the world. She has adopted intensification and rationalization whole-heartedly. But it is on all sides. It is not merely confined to labour. From the buying of cotton to its mixing and final sales of the woven fabrics, every single aspect of the business including finance, management and control is thoroughly rationalized.

115. Whatever the reasons, we have to admit the undeniable fact of Japanese rationalization schemes that gives them high efficiency and low operating costs. This is in spite of the fact that individual Japanese wages are higher than the Indian wages, especially when we take into consideration the welfare costs that Japanese employers incur on behalf of their workers. A cotton authority reckons these costs to be about 6d. to 7d. per worker per day on the average. Due to all these causes we find there are for every 1,000 spindles 6.1 operatives in Japan as against 15 in India, or to put it in another

way, an operative in India will look after one side of a spinning frame whereas in Japan a girl will be minding three sides. As for weaving, a girl weaver in Japan looks after 6 looms while our weaver minds about two. Regarding the famous Japanese Toyoda automatic looms, an operative will look after 50 such looms with 95 to 96 per cent efficiency. The weekly wages per worker in yen, in 1932, in Japan, for 20s. counts yarn, was 5·8 as against 9·07 in India. The weekly wage-bill per, 1,000 spindles in Japan was 35·3 yen, and in India 136·1 yen. Thus clearly, intensification and rationalization are indicated, if the Indian cotton industry is to withstand foreign competition at all. We have the great advantage over Japan in this that while Japan does not grow a single bale of cotton within her islands, we grow it at our mill doors, so to speak. More than half of our cotton crop has to find markets abroad. Also while Japan has to seek markets abroad we have the buyers within our own borders. The position is therefore both humiliating and tragic at the one and the same time.

Conditions preliminary to rationalization.

116. Our advocacy of rationalization is, however, conditioned by several considerations. As urged by the Mazdur Sabha, the interests of labour should be safeguarded in certain respects before rationalization schemes are introduced. We believe the fulfilment of conditions specified in succeeding paragraphs will not merely prevent an excessive burden falling upon the operatives in consequence of indiscriminate rationalization, but will also be of benefit to the industry.

Standard allocation for each occupation.

117. It is not possible for us to lay down a standard of allocation of work for each occupation in the textile mills in Cawnpore. Such allocation would necessarily vary within certain limits from mill to mill, depending upon the conditions of the machines, quality of material used, character of goods manufactured and the general conditions of work. We would, however, recommend that the Employers' Association should examine this matter carefully and lay down a fair standard regarding the allocation of duties in each occupation of the industry. This standard allocation should precede any attempt at rationalization. Unless the nature and quantum of work normally attaching to any given occupation are clearly defined, it will not be possible to judge at what point intensification begins. It is obviously of great importance to determine whether a particular scheme is or is not an intensification scheme by some fixed standards. If there are fixed standards of work for each occupation, it should be easy to prevent the confusion or misunderstanding that may arise from reallocation of work, which one mill may consider to be an intensification scheme and another may not in the absence of such standards. In the attempt that the Employers' Association may make to lay down the standards that we have just advocated, we would suggest to them that they should take the representatives of labour into confidence and seek their co-operation without which any scheme of rationalization may prove a failure, even though it may be of some benefit to the workers and enable them to earn a better wage.

Extra remuneration to workers and conditions for various types of efficiency schemes.

118. There are two other matters the examination of which should be undertaken immediately by the technical experts of the Employers' Association. We refer to the question of extra remuneration to be paid to an operative for undertaking work above the normal under an efficiency scheme, and the control of conditions under which efficiency schemes may be introduced. We regard it as only fair that with higher productivity the employers should be prepared to share with the workers more largely than they have hitherto done the proceeds of the industry. In this connection, we may draw the attention of the Employers' Association and the Mazdur

Sabha to the report, dated the 15th August, 1934, of the Spécial Sub-Committee of the Bombay Millowners' Association which has gone into both these questions carefully. We reproduce the report as Appendix V. We agree in general with the principles laid down by that sub-committee, both as regards the conditions preliminary to the introduction of efficiency schemes and the mode of remunerating the extra work involved in the various sections of a textile mill. They have laid down for all main occupations what additional work may be imposed and what the payment therefore should be. When the standard allocations for various occupations have been determined, it should be possible to evolve a similar system in Cawnpore. Here again we would impress on the Employers' Association the desirability of close collaboration with the representatives of labour in order to remove likely misgivings. As regards the actual conditions under which efficiency schemes may be introduced it may be pointed out that intensification generally comes into play when new machinery is introduced or the existing machines are replaced or realigned. As two of the mills in Cawnpore where such schemes are already in progress to any appreciable degree pointed out, there should be better mixings of cotton processed. There must also be suitable working conditions inside the sheds, such as controlled humidity so that extra work does not result in an avoidable increase of fatigue on the part of the workers. A careful examination should be made of these and similar considerations and it should be possible to lay down what set of conditions should be fulfilled for the various types of rationalization schemes.

119. We now come to the question of unemployment that may result from the introduction of rationalization. Rationalization schemes should be so adjusted with schemes of expansion that as far as possible all the workers that may be thrown out of employment are absorbed in their own mills or in some other mills without an intervening period of unemployment. The task would be greatly simplified if the names of all the workers engaged in the industry could in the first instance be brought on a common role maintained by the Labour Exchange so that a worker rendered superfluous by rationalization in one mill may promptly be absorbed by another, in the event of his own employer being unable to retain his services. One prominent employer while giving evidence before us stated that rationalization in his mill, if freely allowed, could proceed side by side with expansion, and if assured of peace, he could guarantee that all workers discharged as a result of rationalization would be re-employed. We commend this example to the notice of the other millowners. Every effort should be made to see that no worker is thrown out of employment as a result of rationalization. When, however, absorption is not immediately possible, we would recommend that the workers who have put in two years or more of service be paid an employment benefit of a fortnight wages for every year of service to enable them to return to their villages or to assist them to tide over the period till they secure some other employment. Further, the names of such workers must be on the waiting list of the Labour Exchange, and they should receive preference over other workers at the time of recruiting at a future date. The obligation should be cast on the employers that no fresh workers be entertained until those on the waiting list have all been absorbed. Such an arrangement would allay any misgivings on the part of labour regarding efficiency schemes and promote the chance of their success, to the advantage both of the employers and the employed.

Unemployment
due to
rationalisation.

CHAPTER VI

SHIFTS

Shift systems in
Cawnpore.

120. There are four systems of shifts prevailing in the Textile Mills at Cawnpore. They may be called (1) the Single Shift System, (2) the Double Shift System, (3) the Overlapping Shifts System and (4) the Multiple Shift System.

121. Only a few mills have the single shift system. The work is carried on during the day and is continuous for nine hours except for an interval of one hour when the work is suspended.

122. The majority of the mills have two straight shifts, one during the day and the other at night. In either shift the work is continuous for nine hours except for an interval ranging from one hour to two hours during the night. During the intervals the work is suspended.

123. The overlapping shift system is a modification of the double shift system by which the continuity of the work is not interrupted during the intervals. All the workers are not allowed to recess at the same time. They are split up into groups, and while one group is enjoying the interval, its work is looked after by the other group. When the first group returns to duty, the second group goes to recess, the first group taking charge of its work. In this way every worker is called upon to do double the ordinary work for one hour or more, according to the length of the interval. In effect, therefore, this system is a form of intensification for a short period every day. This system also obtains only in a few mills.

124. The multiple shift system is in force only in a group of mills under the same management. It is meant to ensure continuous work for 24 hours without any breaks. The workers are divided into a large number of groups and some group or other is always working. The result is a spread-over of the hours of work to 12 hours for practically every group, although no one is called upon to work on the machines for more than 9 hours.

125. None of these systems technically contravenes the Factories' Act which allows a maximum spread-over of 13 hours. Serious objection has, however, been taken to the overlapping and multiple system on behalf of the workers. As regards night shifts, it is not contended that they should be done away with, but it is urged that night work should be paid for at enhanced rates.

Drawbacks of over-
lapping and
multiple shifts.

126. One great drawback of the overlapping and multiple shifts arises from the fact that every piece of work has to be handled by more than one workman. This entails a division of responsibility which may result in inefficiency and damage which could otherwise be avoided. It also leads to friction amongst workmen who naturally blame their partners for the defect. The unscrupulous amongst the mistries get a chance of backing their favourites and reporting against those who have incurred their displeasure. We are aware that certain mills have recently taken the precaution of distinguishing the work of one operative from that of another by getting suitable marks placed at points where one operative leaves the work and another takes it up; but there can be no gainsaying that this system is liable to abuse by unscrupulous persons and even when conscientiously practised may prove to be unfair.

127. The overlapping system is certainly unfair to the time-worker in another way. While the piece-rate worker may be able to earn increased wages for the period that he is engaged on increased work the time-worker gets no extra return for the increased work that he is called upon to shoulder. This appears to us to be grossly unjust.

128. There is yet another good reason why the overlapping and multiple system should be condemned. They make supervision extremely difficult. They make it possible for unscrupulous employers to break the provisions of the Factories Act relating to hours of work with impunity. The Chief Inspector of Factories in his last annual report noticed the increasing tendency to adopt overlapping shifts, and commented upon it adversely. He said, "it is very difficult and in some cases practically impossible effectively to check periods of employment and detect irregularities." In giving evidence before us also the officiating Chief Inspector of Factories was clear that the overlapping and the multiple-shift system were not easy to supervise. He declared himself definitely in favour of the straight shift system. We attach much value to his evidence. For the same reason the Royal Commission on Labour appointed in 1929 disapproved of these systems.

129. From the point of view of the workers, a larger spread-over will naturally be more inconvenient, in spite of longer intervals, than a shorter one. Except in those few cases where his house is within a reasonable distance from the mill, he has to remain loitering about the premises and waste his time which he could better employ away from the scene of his work. Whatever the interval, it cannot be utilized for proper rest inside the mill, for no mill in Cawnpore has adequate accommodation or satisfactory rest arrangements. The rest interval so spent within the mills cannot be recuperative as it is intended to be. Tired limbs and bodies remain unrefreshed. This process cumulatively has bad effects. Also in so far as the workers cannot get back home, their prolonged absence from the family cannot be healthy. Everything that can be suggested to make family life normal and natural should be considered with great care.

130. For all these reasons we are forced to the conclusion that the overlapping and multiple systems should be abandoned. As we have said above, only a few mills resort to them and we do not see why they should not fall into line with the rest. There may be some force in the contention that seasonal changes in the products of the textile mills tend to throw the various units out of balance and differing shifts might have to be adopted in different departments in order to keep the successive departments fully occupied. But we have found that the better managed mills are always more evenly balanced than those not so well managed, and the great majority of mills in Cawnpore actually do not find it necessary to resort to complicated systems. One or two employers giving evidence before us expressed a definite dislike for them, and we agree with their views.

Our opinion of the various systems.

131. As for night work in general, while we cannot conceal our dislike of it, we cannot go so far as to recommend its discontinuance. Night work unquestionably involves greater strain than day work, except during the hottest months of the year, when it was suggested by some employers that the men preferred to work in the cool of the night. It is inconvenient and, if enforced for long periods, must prove prejudicial to health. Some workers in Cawnpore have to do continuous night work; that is to say, they are always employed on night shifts alone. This is extremely undesirable. Even the President of the Employers' Association in his evidence before us said that

Inevitability of night work.

he disliked night work. But under the present conditions obtaining in India and elsewhere night work becomes necessary at times.

Analogy of
Japanese
conditions.

132. While, therefore, night work is to be looked upon as a necessary evil for periods of brisk demand an effort should be made to alleviate its rigours. One method is to change the working hours on the Japanese lines. The Japanese mills usually work the two straight shift system. Their shifts are of 8½ hours each, with half-an-hour's rest. The first shift is from 5 a.m. to 2 p.m. and the other from 2 p.m. to 11 p.m. The second shift is known as the afternoon shift. The advantage of this arrangement is that the workers can get back to their homes for the greater part of the night.

133. We would suggest to the Employers' Association that they should make a serious attempt to evolve two straight shifts on the Japanese model having regard to Indians' conditions and hours of work.

CHAPTER VII

RECRUITMENT

134. The existing methods of recruitment of labour by the mills, our inquiries have convinced us, lend themselves greatly to the evils of bribery and corruption. The existence of these evils have been acknowledged even by the Employers' Association. In their memorandum they say, "It is the Association's view that all members can and do endeavour to combat bribery and corruption, and they cannot, nor can they be expected to eradicate a system which appears to be the accepted idea of obtaining, or continuing in, employment."

135. We are convinced that as long as bribery and corruption remain a feature of our labour situation, we can never attain that high degree of industrial efficiency reached in other countries, intensification and rationalization notwithstanding. It is a deadly cancer which will destroy our industrial structure. It requires the combined efforts of employers and workers to eradicate it. Happily we find that both the employers and the Trade Union leaders are fully alive to the necessity of dealing with this evil. It injures the moral stuff which is, after all is said and done, the ingredient that builds up the quality and dignity of the workman and adds to his efficiency.

136. The main reason for this state of affairs is to be found in the employment of the mistries for the recruitment of labour. One witness who has been associated with the textile industry for over 25 years and to whose opinion we attach great weight described the mistri system of recruitment as a "baneful" one. A mistri is really a fitter and his job should be to keep the machine in order and supervise the operatives working thereon. He should have no concern with the obtaining of labour. This important work, the mishandling of which has been and is bound to be a source of friction and irritation, must be undertaken directly by an officer who is not of a lower standing than the department head. It is not enough, as we have found in the case of some mills, that he merely supervises the recruitment. If mistries are called upon to advise and assist him, they are apt to become *de facto* recruiters. We have found that even where the new appointments have ultimately to be approved by the departmental manager, the preliminary selection of candidates, who are presented for interview and test, is made by the mistries. In other words, they are associated with the process of recruitment at a stage which is most susceptible to corruption. We consider it essential that there should be complete dissociation of mistries from recruitment.

137. We are glad that the Employers' Association have recently started the experiment, recommending by the Royal Commission on Labour of securing labour through a special Labour Officer of their own. We cannot too strongly endorse the Commission's view that "integrity", personality, energy, the gift of understanding individuals and linguistic facility are the main qualities required" in such a Labour Officer. We agree too, that it should be among his functions to ensure that no worker is discharged without adequate cause. We would draw the attention of both the Government and the employers to the further remark of the Commission, that where trade union is in existence, its co-operation should be sought in stamping out bribery.

The best among the existing systems.

138. On the whole, the most satisfactory system now in force in Cawnpore appears to us to be that adopted by one of the mills. Its main features may be briefly described. The great majority of appointments are made on written applications. All applications are filed on a waiting list. When a vacancy occurs on the substitute list, a selection is made from the waiting list directly by the manager of the department concerned, and the selected candidate is sent for a medical examination. If the medical report is satisfactory, the candidate is made a substitute and issued a brass disc bearing a number. Each department has a recognized quota of substitutes, and all substitutes are supposed to present themselves at the mill each day and their attendance is recorded. When a permanent worker absents himself a substitute is offered the vacancy and those substitutes who are not required leave the mill premises. When a permanent vacancy occurs, it is filled by the substitute with the longest service, as far as possible. On leaving the substitute list, the worker returns his substitute disc and is issued another disc bearing his departmental number.

Labour Exchange.

139. Even this system, it was admitted, is not completely free from corruption. The trouble seems to us to lie at the first stage, namely, the preliminary enrolment in the waiting list. To overcome it, we strongly recommend the establishment of a Labour Exchange. Both the employers and the workers have advocated it. We believe that if vacancies on the substitute list are filled by reference to the Labour Exchange, a very important step will have been taken towards the elimination of bribery and corruption associated with recruitment.

Control of Labour Exchange.

140. In the opinion of the employers the Labour Exchange should be an unofficial body. In the conditions obtaining at present in Cawnpore, we cannot accept this view. If there had been wholehearted co-operation between the employers' and the workers' organization, that factor in itself would have gone a long way towards removing corruption and other evils, but until such relations are firmly established, we think that the Labour Exchange should be under the supervision of, and controlled by Government. Attached to it there should be a Recruiting Officer, with whom skilled and semi-skilled workers in search of employment should register themselves and whose main function it will be to provide employment to the applicants on demand from factories. It is perhaps needless to add that between the Government's Recruiting Officer, the Labour Officer of the Employers' Association and the Central Executive of the Workers' Union, there should be frequent contact and close liaison.

Factors contributing to efficiency of labour force.

141. Before we conclude our remarks about the question of recruitment, we wish to invite attention to certain factors which must have a direct bearing on the efficiency of the workers. We shall have to say a good deal about this matter in other chapters dealing with the problems of housing, medical facilities and welfare work. But at this stage we would confine our observations to three main factors in the matter of the recruitment of labour.

Physical fitness.

142. One is the question of physical fitness. Particularly in all the preparatory processes and in spinning, we noticed a considerable number of persons with weak physique, bad teeth, and defective eye-sight. From an examination of the registers kept by several of the mills in their mill dispensaries (which, by the way, are rendering commendable services to the workmen and their relatives under the care of qualified and devoted doctors, dispensary and nurses and are not merely administering doses of "iodine" as deposed to by one of the witnesses) we find that there is a general prevalence of elementary and skin diseases. It is obvious that physically a "C" class

labour force cannot be an asset to industry. We, therefore, consider that it would be advantageous to have a preliminary medical examination before recruitment. Further in our opinion, it will be desirable to have a periodical medical examination of all the permanent workers. In this examination special attention should be given to eyes, teeth, skin and pulmonary troubles. In the periodical reports of mortality in India, Cawnpore occupies an unenviably high place. A feature which inevitably attracts attention in the detailed statistics is the regrettably high incidence of what in general are called "respiratory diseases." It is difficult to resist the conclusion that tuberculosis claims an increasingly large number of victims. Another matter which, in our opinion, should receive particular attention is venereal disease. As the Royal Commission on Labour pointed out in its report, Cawnpore is prominent among the industrial centres in India where the sex disparity is striking. Investigations in regard to these diseases seem to us urgently called for, both in the interests of the general health of Cawnpore and, in particular, of the working class population of the city. The trouble and extra cost will be amply rewarded, we are confident, in a healthier and more satisfactory labour force. It is essential for a comprehensive tackling of the problems enumerated above that there should be a co-ordination of the activities and a pooling of the resources of the Government, the municipal board and the employers.

143. The second point to which we would draw attention is the desirability of some kind of educational test in the recruitment, particularly of child and adolescent labour. For adult labour such a requirement would obviously be utopian. It is desirable in making permanent selections to give preference to such adolescents as satisfy the required educational test—simple reading, and writing and arithmetic—the three R's—Mental welcome is always good, and at this stage particularly desirable. It will impart intellectual alertness and promote efficiency, which are both essential features for industrial expansion under modern conditions. We trust that such a demand upon our young labour force will not be resented. In fact, if facilities for reading and writing are provided, through municipal schools or other agencies, the response, we are sure, will be keen and full-blooded. A literate labour force, it can hardly be denied will contribute to the efficient conduct of industry.

144. The third matter to which we would call particular attention is the question of technical training of the operatives. While, undoubtedly, experience in the mills themselves is the best teacher, yet we are certain that instruction in a technical institution would yield good results. A preliminary training, or subsequent part-time course of instruction, should be required from workers seeking permanency. It was brought to our notice by Mr. Murthy, our Technical Adviser, that a certain number of his students have found employment in some of the mills. Active efforts, it seems to us, should be made by the Government to expand the possibilities of such absorption of trained young men far beyond the present rate. We can see great advantage in recruiting educated men of this type, some of whom, at any rate, are bound to possess the requisite qualifications, both moral and technical, for leadership to replace the present mistri type. This is a point which in the long run will so vitally affect the foundations upon which the industrial system in India has been reared that we trust that the Government will recognize the advantage of regarding the Textile Institute at Cawnpore as a nursery for all but the workers of the unskilled type. We would suggest the addition of continuation and night classes to the Central Textile Institute, Cawnpore.

Causes of the lower efficiency of the Indian Workers.

145. In the course of our inquiry we were frequently reminded of the greater efficiency of the cotton operatives in Lancashire and Japan. We were also pointedly informed that they were mostly girls. Our workers, who are mostly men, were shown up in contrast as being lethargic, unambitious and inefficient. But even assuming the description to be correct, the main responsibility for the admittedly lower efficiency of our operatives must be borne, we fear, by the State and the employer rather than by the worker himself. What steps has the State, the municipality or the employer so far taken in removing illiteracy or in imparting technical training? In Japan technical schools abound and lead through a chain of institutions right up to the polytechniques and the universities. Where again are the well-planned and well-conducted welfare schemes which are so common a feature of the Japanese cotton textile industry? We make no excuse for the workers' individual and personal lack of effort. Nor do we stand for these aspects of the social system which are unhelpful. But today the worker is the helpless victim of circumstances beyond his control, and we would invite attention to forces that have not been brought into play for increasing his efficiency. More positive and energetic steps will have to be adopted if we wish to put a stop to this ceaseless cry of the inefficiency of the Indian workmen. Unaided he can do little for himself. He must be helped. We hope to indicate in other parts of the report ways by which this may be done.

Terms of employment.

146. Having discussed the methods of recruitment we may make a few observations as to the terms of engagement. We are glad to note from the memorandum of the Employers' Association that it is considering the question of establishing a standard form of recruitment. When this is considered the Association will, no doubt, also turn its attention to the question of laying down a uniform set of rules for all mills governing the terms of employment. It is very desirable in our opinion that these rules should be evolved in consultation with the representatives of the Mazdur Sabha. Not all mills have at present any written rules on the subject. We have two comments to offer on the rules that have been presented to us. One or two mills prohibit their employees from being members of any labour organization. It is extremely surprising, to put it mildly, that any employers should place such a ban on the right of association of the workers. Trade Unionism has come to stay in India, and we are convinced that it is as much in the interests of the employers as of the workers that this fact should be recognized without qualification. We deal with this question in greater detail in another part of the report. But it is most essential in the interests of industrial peace that the employers should make it clear, both in their terms of engagement of labour and in actual practice, that active membership of a Trade Union will not stand in the way of a worker, either in regard to recruitment or the improvement of his prospects.

Display of wage rates.

147. Another matter which seems to us to deserve the immediate attention of the Government is in regard to the rules made under the Payment of Wages Act. The display of wage rates on the notice board by all mills would minimize the possibilities of misunderstanding on the part of the workers. In the course of our inquiry we found no serious objection from the employers to the adoption of this course. But it was pointed out to us, by at least two witnesses that this is not obligatory in the United Provinces under the Payment of Wages Act. We would therefore suggest the inclusion of such a provision by a suitable amendment of the rules under the Act.

148. It may be convenient here to refer to another suggestion made by the Mazdur Sabha that every worker should be provided with a wage card at the end of each wage period. This card should indicate both the amount of his wage and the rate or rates on which the calculation has been based. This suggestion would remove a possible cause of misunderstanding and has our support.

CHAPTER VIII

Punishments

Circumvention of
the Payment of
Wages Act.

149. One of the primary objects of the Payment of Wages Act, 1936, was to regulate the scale of deductions from workers' wages either on account of fines or other causes. We found that the actual result in Cawnpore has been an almost complete abolition of fines and other deductions imposed as punishments, followed in some mills by the adoption of various devices which deliberately or otherwise have the effect of circumventing the law.

Forced leave.

150. It seems to have become a more or less general practice in Cawnpore to send a worker, guilty of negligence or some other offence which in the pre-Act days would have merited a fine, on what is euphemistically described as forced leave: that is to say, he is asked to stay away from work for a certain period which may be as long as a week or ten days or even more, at the discretion of the employer. One witness referred to it as tantamount to fining and expressed the opinion that it was an illegal practice. Its effect is certainly to curtail a worker's earnings by a proportion which in several instances has far exceeded the maximum for fines laid down in the Act. This practice is, therefore, to be strongly deprecated; and we would suggest to Government that legal opinion should be obtained without delay on the matter. If Government are advised that it is not an illegal practice, we recommend that steps should be taken for amending the Payment of Wages Act suitably so as to render it illegal.

Playing off.

151. While on the subject of forced leave or suspension, we may refer to what is called "playing off" in the textile industry. Owing to maladjustments in the work of various departments, it may sometimes happen that the volume of work in one or more departments falls below the normal. Under such circumstances all the workers in those departments cannot be kept fully employed, and the necessity arises to "play off" some of them for brief periods. This playing off is not a form of punishment, but results from a temporary reduction in work. Our proposals relating to forced leave would not apply to a genuine case of playing off, though in view of the ingenious practices adopted in some of the mills for circumventing the Payment of Wages Act, we think a word of caution is called for in this respect. Even as regards genuine playing off for trade reasons some restrictions are necessary. Where the playing off is a species of "short time" and involves merely the giving of less work to an operative than he would normally have, no limitation is ordinarily called for; but where it means complete cessation of work for him, a maximum limit should be imposed, and if the period exceeds that limit, he should be duly compensated. The question has been discussed at length in the Fawcett Committee Report at pages 33 to 36. That Committee considered that playing off should be limited to two days at a time. This limit may, in our opinion, be accepted in Cawnpore subject to the further limitation that the total period for playing off in a year should not exceed twelve days. We would have no objection to a revision of this limit by mutual agreement between the employers and the workers, but if it is exceeded we consider it would be fair to give a worker 50 per cent. of the normal wages for each extra day over the maximum.

152. We found another practice in mills under one employer which we have even less hesitation in regarding as a gross violation of the Payment of Wages Act. Three differential rates of payment have been introduced for the same work, one for "good quality", another for "indifferent quality" and a third one for "poor quality." The good quality rate is the pre-Act rate, while the other two are reduced so as to cover possibly more than what the former fines would have yielded. The wages of the workers are undetermined and remain indeterminate until the end of the wage period when the employer pays at one of the three rates, according to his judgment of the work. This, in our opinion, is obviously a most objectionable method of evading the provision of the Payment of Wages Act which limits fines and deductions to half an anna per rupee of the wages earned. Our attention was drawn to a circular issued by the Chief Inspector of Factories in Bombay (dated 27th November, 1937) to factory managers in the Presidency declaring such a practice to be against the law. We would suggest immediate action on the same lines in the United Provinces.

153. We now come to the question of dismissals which is of paramount importance, particularly in the present tense atmosphere of Cawnpore. Though it is true that five cases of alleged victimization by the employers were referred to a judge in the month of November, 1937, and his judgment unreservedly supported the action of the employers concerned, it is necessary to bear in mind that the workers attach the greatest importance to security of service. If one examines the history of industrial disputes in India, it will be found that the major cause for several of them was the extreme discontent caused by victimization, direct or indirect. The Mazdur Sabha does not question the right of the employers to dismiss a worker for a sufficient cause, but the criticism is that active members of the Mazdur Sabha or of the Mill Committees are dismissed on some pretext or the other which would not have led to dismissal in the case of other workers. On the other hand, the employers contended in their evidence that the number of dismissals in recent months had not been appreciably larger than at any other period. We have not had the time for a detailed inquiry nor could we even otherwise afford to be diverted from our main task to a detailed investigation of the matter. At the same time, we must say that we regard it as of the greatest necessity that some machinery should be provided whereby the workers can be satisfied that a particular dismissal was justified. It is vigorously denied by the employers that any dismissals have taken place for other than a just cause. There should, therefore, be no difficulty in explaining to the worker concerned, or to a responsible representative of his Union the precise reasons for such action. The worker should have the right of having his case taken up by the Trade Union of which he is a member with the mill concerned. The services of the Labour Officer and the Conciliation Officer may be utilized at a later stage, if necessary. If the reason for dismissal hinges on a technical matter, the services of an independent technical expert may also be requisitioned. The main point is that the worker should be convinced that there has been no victimization. If on inquiry the grounds for dismissal are found to be inadequate, we trust that there would ordinarily be no difficulty in getting him reinstated.

154. It is impossible to lay down with precision what should be regarded as adequate grounds for dismissal. Arguing, however, on the analogy of one of the provisions in the Payment of Wages Act, which limits the power of an employer in regard to fines, both as regards the amount and

as regards the reasons for such punishment, it seems to us that the right of dismissal should be restricted in a similar manner to gross misdemeanour or wilful and serious neglect of duty. This is not a challenge to the inherent right of an employer to employ or dismiss, but we wish merely to ensure that dismissals are imposed only for offences of a certain gravity. Even at present a worker who feels that he has been wrongfully dismissed, is at liberty to go to a civil court and sue his employer for damages. But this procedure is so tedious, cumbersome and costly that it is seldom, if ever, resorted to. Our proposal that the dispute should be referred to a Conciliation Officer is merely a simplification of that procedure. What we urge further is that the Conciliation Officer should have the power, if on investigation he is convinced that the dismissal was unjust or based on inadequate grounds and reinstatement is not agreed to, to convert it into a discharge and reckon, the compensation to be paid either at the rate of 15 days' wages for every year of service or a lump amount not exceeding six months' wages. He may in addition award at his discretion the full or a part of the wages of the period subsequent to the dismissal.

155. We wish to bear witness to the fact that previous to recent months, the number of dismissals in Cawnpore mills on the whole was small. We hope that this record may soon be recaptured and mutual trust established. Employers themselves informed us that they had no desire to lose their good workmen.

Censure notices.

156. Apart from summary dismissals, which we trust will be few and far between, we would recommend the practice now adopted in some mills in Cawnpore, of issuing censure certificates or warning notices. In these mills three warnings, given within a fixed period of time, will render a worker liable for dismissal. The fault for which he is warned has to be duly adjudicated and recorded in his service sheet or card. In this manner men will gain a sense of security. Nothing is feared by the workers so much as the liability to dismissal. We cannot accept the proposition that this feeling of insecurity of retaining their jobs is an element which keeps them up to the mark. Such fear inhabits and depresses the faculties. We rather think that a sense of security, coupled with the assurance of fair dealing, will lend confidence to men, and release and promote in them all those latent forces which make for a contented and efficient labour force. We cannot too strongly emphasize this point.

CHAPTER IX

Leave

157. One of our terms of reference asks us to lay down the terms under which leave should be granted to workers in cases of sickness or other emergency. We have given this question our anxious consideration. At present all leave is without pay both for time and piece-workers. From the employers' evidence led before us the position seems to be that reasonable facilities are afforded to operatives who wish to go on leave and, except perhaps during some special periods, for example the marriage season, occasions when reasonable requests for leave are turned down are not many. The operatives seldom, if ever, give any previous intimation of their intention to take leave, and sanction of leave must necessarily sometimes take two or three hours. On the other hand, we have had the allegation from the workers' side that mistries create impediments in the way of a worker getting leave, and that they expect a cash payment or other benefit before they make a recommendation in favour of the applicant. Unless the general tone of the mistris system, about which we have made observations elsewhere, is improved, complaints of this nature are bound to occur, and we trust that the employers will continue to investigate them with care whenever they are brought to their notice and take punitive action as the circumstances of the case may warrant.

158. We feel, however, no hesitation in coming to the conclusion that there should be some provision for leave with pay. The average Cawnpore worker comes from the countryside where he is accustomed to work in the open. In the factory he is employed on work which needs constant attention and vigilance. The change is bound in time to impair his health. Further, in Cawnpore he has to live in surroundings whose squalor and filth defy description. This places an additional handicap on him. Though detailed figures of the incidence of sickness among the workers are not available, we have reasons of believe that it must be very high. Ill-health accounts for a large number of leave applications and under the present conditions, a worker is deprived of his earnings at a time when he most needs them. Anything that is done therefore to alleviate his sufferings should be looked upon by the employers as a part of welfare work. While we recognize the merit of the welfare work that is already being done by the employers in Cawnpore, we think it is fair to add that they are doing comparatively little and have been less responsive in this direction than employers in many other textile centres. We would therefore, strongly urge the adoption of the proposals that we are going to make for leave with pay. The weekly holiday is utilized by the workers for much needed rest after a strenuous week, and for such purposes as washing their clothes and making sundry purchases for themselves and their families. The various religious holidays serve a definite purpose and are not designed to suit the workers' health or other personal requirements. What is needed is some relief from the financial burden of the periods during which the worker must of necessity stop work.

159. We believe that suitable provision for leave with pay will also tend to reduce the evil of absenteeism. When leave is without pay, a worker will frequently overstay it. On the contrary, if he were granted leave with

Desirability of a provision for leave with pay.
Effect of leave with pay on absenteeism.

pay, it would act as a psychological incentive to return to work punctually. If a yearly limit for leave with pay were fixed, we are of the opinion that most of the workers would not exceed that limit. We propose therefore to relate our proposals to the extent of absenteeism.

Extent of
absenteeism.

160. We have no definite date by which to judge the actual extent of absenteeism in the Cawnpore mills. Most of the mills informed the Committee that they had kept no records of absenteeism. On behalf of the Mazdur Sabha it was contended that normal absenteeism was about 10 per cent., a statement which we are inclined to accept. The report of the Royal Commission on Labour, Evidence, Vol. III, Part I, page 250, contains the written evidence of the Upper India Chamber of Commerce which says: "In regard to absenteeism, it has been extremely difficult to arrive at any precise figure but it is stated that absenteeism prevails to the approximate extent of 10 per cent. with a 10 per cent. loss of wages." The "Wages and Labour Conditions in Cawnpore" at page 114 gives a statement showing absenteeism in a representative textile mill, day by day, for one month which leads to the conclusion that in that month absenteeism amounted to 10.5 per cent. One employer in the course of his evidence before us said that absenteeism in his weaving shed was 7.2 per cent. while another estimated it to be just under 15 per cent. for the entire mill. It will, therefore, be safe to conclude that the average absenteeism is approximately 10 per cent. or 30 days in a year, the average number of working days being 300.

Our recommenda-
tion about leave
with pay.

161. We therefore recommend that provision should be made for 15 days' privilege leave with full pay subject to the limitation that only workers with not less than two years' continuous service should be entitled to it. In addition, such workers should be eligible to get 15 days' sick leave on half pay. This should be converted into full pay for those whose period of service extends beyond five years. The sick leave is intended to be given only in cases of actual sickness to be certified either by the mill doctor or any other registered physician. Either kind of leave may be obtained either at one stretch or in broken periods, according to the necessities of the case. These provisions, we are sure, will ensure efficiency, and make industrial life more attractive than it is. They will also help to build up a permanent labour force. If the millowners afford facilities to their workers to go home to recoup their health or to join their relations on occasions of marriage or other ceremonies, they would return with better health and increased efficiency and be more ready to face the difficulties and hardships of city life.

It is of interest to note that the Bombay Government are proposing legislation for sickness and old age benefits which according to the estimate of the Bombay Labour Enquiry Committee would impose a burden on industry equivalent in amount to 21 days' wages per worker in a year.

162. We suggest that necessary rules in this connection may be made by the Employers' Association in consultation with the Mazdur Sabha and the Government Labour Commissioner.

Financial effect of
our proposals.

163. The proposals that we have made are by no means an innovation for the textile industry. Somewhat similar schemes are already in operation elsewhere, for instance in Madras in the Buckingham and Carnatic Mills. The financial burden that they will impose on the employers will not be heavy. If all the workers were entitled to 30 days' leave with full pay, the addition to the labour costs would be about one-eleventh or about 9 per cent. But in view of the qualifications we have suggested above for the grant of such leave, the total addition should not exceed 6 per cent. The

greater contentment and efficiency, which will result will lighten the burden on the industry still further.

164. As regards the determination of the rate of pay during the period of leave, in the case of the time-workers there is no difficulty. They are paid either at a daily or a monthly rate and the calculation will be simple, but there may be some difficulty in the case of the piece-rate workers. A ready method will be to reckon on the basis of the average of three months' previous to the leave, and we recommend this for adoption. To take the yearly average may introduce unnecessary complications and cause misunderstanding and discontent.

Determination of
rate of pay
during leave.

CHAPTER X

GENERAL WORKING CONDITIONS

165. In this chapter we propose to pass in brief review some aspects of the general conditions of work inside the textile mills in Cawnpore of which mention has not been made elsewhere in the report.
166. The general standard of cleanliness and ventilation in Cawnpore textile mills is up to the requirements of the Factories Act. Lapses are not frequent and the factory inspectorate has not had many occasions for finding fault on this ground. The same may be said of lighting arrangements.
167. Some criticism was made of the arrangements for the supply of drinking water. The complaint was not about the adequacy of water supply, but it was alleged that during the hot weather the water was not cool enough for drinking. One or two mills stated that they had a provision for the supply of ice-cooled water, but it was alleged on the other side that the arrangement was ineffective. We bring this complaint to the notice of the employers in the hope that they will do what they can to remedy it. We would recommend for their consideration the spray system of providing drinking water adopted in some centres in India wherever water is supplied outside in mill compound. We desire that adequate shade should also be provided to protect the workers from sun and rain. If some kind of creepers could be run on such structures it would make the drinking spot cooler and pleasanter.
168. From the workers' side an allegation was made that in several mills undue restrictions were placed on the use of latrines and urinals. For instance in one case it was said that no worker was allowed to use them for an hour after the work was started and an hour before the work closed. In another case the complaint was that if a worker went to the latrine very often or stayed there for a period of time, which in the opinion of his supervisors was too long, he was taken to task. The majority of the mills, however, impose no such restrictions, and in our opinion the others should fall into line. We would wish that more urinals at least should be provided at convenient points to save the workers and particularly the older workers from going up and down a great deal. Wherever possible flush latrines should be provided.
169. Complaints against cooling and humidification arrangements were louder. Some mills are equipped with air-conditioning plants which operate in the main departments of the mill and secure for the worker the best possible atmospheric conditions. Arrangements, however, in several other mills leave much to be desired. In view of our advocacy of rationalization schemes, we must lay the greatest emphasis on cooling and humidification arrangements. The workers must be saved unnecessary exhaustion and physical exertion. Exhaust fans are in some cases admittedly not very efficient and they should be improved in order to meet the dust evil effectively.
170. The mills, generally, do not provide any resting place where the workers can take shelter during the recess periods. The shade of the mills is the only protection from heat and rain, and we fail to understand how any worker can sleep during the night recess in winter. Some mills allow him to bring his bedding and blanket, but he has to find for himself where he can sleep. Generally the only place available is the space between two machines or the corner of a shed where sleep is impossible owing to the noise of the

Scope of the chapter.

Cleanliness, ventilation and lighting.

Drinking water facilities.

Use of latrine and urinals.

Cooling and humidification arrangements.

Resting places.

mill. The rules framed under the Indian Factories Act empower the Local Government to compel the owner of any premises, where 50 or more men work, to provide adequate resting places. We advocate the use of that power. Resting places should be provided separately for men and women. The provision of adequate resting places would be a substantial gain to the workers, especially during the hot days of the summer months. Mere erection of sheds will not be satisfactory. Large halls, with due protection from heat and cold would be better.

171. Some mills have mill-gardens. We advocate the adoption of this practice by all. Every effort to make mill premises pleasant and attractive reaps its own reward. Rest halls that we advocate should be located near such mill-gardens.

172. There has been some complaint of lack of facilities for taking meals. Facilities for taking meals. The practice in this respect differs from mill to mill. While some mills allow freedom within certain hours, others insist that meals can be taken only during the recess. Dining sheds are provided only by a few mills but even these are hardly adequate.

173. We recommend uniformity of rules in respect of meal hours. Regarding the provision of dining sheds, the problem is complicated by caste restrictions and differing social customs in this country. But there is no reason why a beginning should not be made. Conditions are changing rapidly and the existing barriers are fast crumbling. We are of the opinion that more dining sheds should be erected.

174. We now come to an important question, namely, the number of Holidays. working days in a year. Under the Factories Act, the maximum number of working days in a year of 365 days is 313: all that the Act requires is a weekly holiday. In the course of their evidence before us the workers expressed a desire that Sundays should be observed as holidays invariably. In addition they wanted holidays on the occasion of the principal Hindu and Mohammedan festivals. These total up to about 30 days. If therefore all Sundays and festivals are allowed, the number of working days will be reduced to about 285 days in a year. This will manifestly be unfair to the Cawnpore textile industry. The productive capacity of the industry should not be handicapped to such an extent as to give other centres an undue advantage over Cawnpore. According to the Employers' Association, in some other parts of India the number of working days varies from 300 to 313, with certain Indian States working up to 316 days. The lists of holidays observed by the Bombay mills show that their average number of working days is 310. From the figures supplied to us by the Mazdur Sabha the all-India average, excluding Cawnpore, for 1936 was 297 days. The average of Cawnpore itself in that year was 302.5. Any serious departure from the proximity of these figures is therefore likely to tell adversely upon Cawnpore industry.

175. We, feel, however, that the practice of allowing a fixed day every week (which can only be Sunday) is a very salutary one. The workers are very keen on a fixed weekly holiday which introduces in their lives a much-desired regularity. It gives them rest after a strenuous week and enables them to meet their friends and relatives. At the same time, national and local festivals are equally important. Their observance enable the workers to participate in religious, social and cultural functions. A compromise has therefore to be evolved which will allow the workers the necessary holidays facilities and at the same time give the industry a reasonable number of working days.

176. We are of opinion that it will be reasonable to work up to an average of 305 working days in Cawnpore. The Employers' Association should prepare a list of holidays in consultation with the labour representatives in such a manner that it contains the maximum possible number of Sundays and the minimum number of festivals.

177. Before we conclude this chapter we should like to draw the attentions of the Government to the inadequacy of the factory inspectorate in these provinces. Besides the Chief Inspector of Factories, there is at present only one wholtime Assistant Inspector of Factories.

Factory
Inspectorate

The four Inspectors of Boilers are also empowered to inspect factories, but they seldom find time to make any factory inspections. With this staff we are convinced that it is not possible effectively to enforce the provisions of the various Acts and Rules which the department of the Chief Inspector of Factories is called upon to administer. The total number of registered factories in the province was 576 in 1936, and there is likely to be a rise in the future. The question is not merely one of visiting the factories once or twice every year. What is of equal and perhaps of greater importance is the follow-up work these visits involve. A factory inspector should have adequate time and resources at his disposal to see that defects discovered by him are speedily removed. He should not be content, as is the case at present, with a visit of inspection; it is his duty also to apply remedial measures effectively and promptly. He is not able to do this at present; in fact, we are told that some factories even escape inspection altogether every year. We would therefore suggest an immediate strengthening of the staff by the addition of at least two wholtime assistant factory inspectors.

CHAPTER XI

LABOUR ORGANIZATION

178. It is hardly necessary for us to stress the desirability of a sound labour organization in every industry, which in the present circumstances of Cawnpore may be regarded as a matter of vital importance. Practically every employer who appeared before the Committee stated that he would welcome one run on sound Trade Union lines. In fact, some of them expressed an anxiety to deal with a properly constituted trade union. We felt that such anxiety was genuine, whatever may have been the attitude in the past. It is essential for the industrial and general peace of Cawnpore that the employers should unreservedly accept the principle of organization of the workers for the purpose of collective bargaining. The experience of Cawnpore confirms that of other industrial centres in India that where Trade Unionism has been discouraged by the employers, more extreme principles have found congenial soil. It would be both shortsighted and wrong for the employers to deny to the workers any longer the right of organization and to refuse to discuss with their accredited representative, matters affecting their wages and working conditions. From the point of view of the worker too, we are confident that provided he feels assured of the effectiveness of a healthy Trade Union capable of protecting his legitimate interests he will submit to its discipline and willingly accept its guidance in his relations with the employer. His present mood in Cawnpore we interpret as essentially one of despair, and there is probably some justification for such an attitude. Some employers told us that complaint boxes in their mills had always been empty. It would be impossible to infer that there were no complaints to register. According to our reading of the situation, complaints were not registered, either because the complainants thought such procedure to be futile, or because they feared that the complaints might recoil on themselves. In these circumstances it is abundantly clear to us that a proper Trade Union should be allowed to function without any obstacles being placed in its way. A strong Union is an invaluable asset in several ways and is an insurance against unauthorized, irregular and lightning strikes.

179. We have examined in some detail the constitution and working of the Mazdur Sabha which is practically the only labour organization of textile workers in Cawnpore. The Sabha was registered under the Companies Act in 1920 and later on under the Trade Unions Act in 1927. Immediately after registration under the Trade Unions Act, the President sent a circular letter to all the employers of labour in Cawnpore asking for an opportunity to work in co-operation with them for the discussion and redress of the workers' grievances. Only one concern agreed to consider representations made by him regarding the workers employed in the mills controlled by them. Another mill recognized the right of the Mazdur Sabha to represent the workers' grievances in 1929; but this recognition was also withdrawn in a short time. It was on August 9, 1937, after the acute unrest amongst the workers had culminated in a general strike and only through the personal intervention of the Premier, that the Employers' Association, representing most of the mills in Cawnpore, recognized the Mazdur Sabha as a representative Union on behalf of the workers. But this recognition again proved a short-lived phase.

Employers' objections to Mazdur Sabha.

180. The employers have challenged the representative character of the Mazdur Sabha and its ability to control and guide labour on proper lines. They have complained seriously of lack of discipline among the workers who, they consider, are deceived and misled by Communist propaganda. In their memorandum the Employers' Association allege that "the men at present do not understand the true function of Trade Unions and seem to be under the impression that they can form mill committees by arbitrary methods and dictate the action of the management in the control of labour." The memorandum points out that this attitude has to be abandoned before there can be any real peace, and proceeds to lay down a series of conditions which should be fulfilled before a Trade Union can be recognized.

Reorganization of Mazdur Sabha.

181. It is relevant to point out, however that the past attitude of the employers in general towards the Mazdur Sabha cannot be described as either sympathetic or liberal-minded. Yet no one, we think, can fairly deny that the present constitution of the Mazdur Sabha is weak. It needs overhauling in certain respects. The existing rules prescribe an annual payment of subscription and contact between the Central Executive and the members has been at best slender and fitful. Mill committees have in recent months sprung up under the guidance and inspiration of left wing leaders without any place in the constitution, and acted on their own initiative without the consent of the Mazdur Sabha. Steps are, however, being taken to remedy these inherent weaknesses, and we have reasons to believe that in its new form the Mazdur Sabha will be run on generally accepted Trade Union principles. Without in any way wishing to dictate to the Mazdur Sabha we would like to make particular mention of some salient features which may suitably find a place in the reorganized constitution.

Method of election.

182. It will generally be conceded that the method of election of the office-bearers and of the Executive should be by secret ballot. The importance of this in the interests of the workers cannot be denied, for it would furnish them with experience in the conduct of all elections and thus train them in one of the most essential arts of citizenship, namely, correct procedure in voting. We have no doubt that the value of this will be appreciated by the Mazdur Sabha as lending both reality and strength to the organization.

Representation of various interests.

183. Equally desirable, in our opinion, is the necessity for adequate representation on the Executive for all categories of workers, so that no particular section or grade obtains predominance. Also in view of the peculiar problems of unskilled workers and of women, who form a small but important proportion of the total number, the advantage of securing special representation for them in the Executive of the Mazdur Sabha need hardly be elaborated.

Principle of rotation.

184. Due weight will no doubt be accorded to the principle of rotation in the composition of the Executive Committee, without impairing the principle of continuity or sacrifice of efficiency. The essential point, it seems to us, is that the Mazdur Sabha must remain and function on a thoroughly representative and democratic basis.

Declaration of strikes.

185. The procedure in regard to the declaration of strikes is also a matter of considerable importance. The workers' right to strike is undeniable. But the strike weapon is a double-edged sword and needs to be wielded with the greatest of caution and only in the last resort. It is extremely undesirable from any point of view that lightning strikes should be declared, any more than sudden lock-outs. Both are reprehensible methods of industrial warfare and inflict injury not only on the two disputant parties, but tend seriously to dislocate industrial activity, and may, on occasions, endanger the peace of the city.

186. Strikes and lock-outs should be the last possible step in the settlement of a dispute. Strikes should be undertaken with due deliberation. In

the first instance, the Executive Committee should not decide upon a strike by a bare or simple majority of votes. Some proportionate majority, say two-thirds, should be required over a simple majority.

187. The decision of the Executive Committee in favour of the strike should be submitted for ratification to a properly constituted general body of voters of the Trade Union. The decision in favour of the strike should be by a similarly proportioned majority and not by a simple majority.

188. Voting on this matter of strike, both in the Executive Committee and in the general meeting, should not be by show of hands as now, but by the well-recognized democratic process of the secret ballot. Secrecy of voting is fundamental.

189. We were glad to note from the evidence of the representatives of the Mazdur Sabha that there is a growing realization among the workers that due deliberation should precede the declaration of strikes and that the normal method of settlement of grievances should preferably be through representation and negotiation. We are confident that in reorganizing the Mazdur Sabha its leaders will attach proper weight to the need for outlining the procedure in regard to strikes so that such direct action may not be forced upon a large body of workers by an assertive but well-organized and militant minority. The assurance was given to the Committee by the President of the Mazdur Sabha that he would have no objection to accepting the method of representation and conciliation in regard to matters in dispute and to adequate notice being given in the event of a strike becoming a necessity.

190. Mill committees may perform a useful service and be given a definite place in the constitution, provided they undertake the duty of collecting information regarding wages and general conditions of work in their respective mills. They should not, however, be empowered to take any independent action, much less declare a strike without the consent of the parent body. They should, in short, act merely as agencies to gather and supply to the Mazdur Sabha such information as the Central Executive may call for.

191. As regards the constitution of the Executive Committee, its present strength is fifty members, of whom only nine are outsiders. This proportion is much less than is permissible under the Trades Union Act and was accepted as a fair one by the representatives of the Employers' Association in giving evidence before us. The time must come sooner or later in India when leaders of the Trade Union movement will be found from amongst the workers themselves. But at present an outside element is both necessary and inevitable and for that reason the Trade Unions Act has made suitable provision in that regard.

192. As we have already pointed out, with one or two exceptions, the employers have not only not recognized the Sabha but have consistently ignored its existence in the past, except for short periods at the end of a strike. It is only after the general strike in July last, when the membership of the Mazdur Sabha grew from 3,000 to 12,000 that any notice seems to have been taken of it by the employers. In these circumstances it is not possible to take seriously the objection of the employers that the Mazdur Sabha is not sufficiently representative of the workers. In any case, we would refer to the view of the Royal Commission on Labour which pointed out with great cogency that the argument of a Union not being sufficiently representative of the workers is unsound in principle. We would urge, therefore, that the Mazdur Sabha reorganized on sound lines, should be recognized by the employers without any further conditions being imposed. We are glad to note that the representative of the Employers' Association while giving evidence before us said that the conditions laid down in the Association's memorandum were not the final word on the subject.

193. The suggestion was made to us that there should be a statutory obligation upon employers to recognize all registered Trade Unions. This is certainly not an unknown method and is adopted in a leading democratic country. Industries that receive special State protection or assistance may well be obliged to accord such recognition. We are, however, not disposed at this juncture to make such a recommendation. We feel that automatic adjustment rather legislation is more salutary in the mutual relationship of employers and workers. We are confident that both employers and workers will recognize the imperative need of this essential matter and accord to each other the consideration due. Permanent peace and progressive collaboration cannot otherwise be guaranteed.

Welfare activities
of the Mazdur
Sabha.

194. The present activities of the Mazdur Sabha include institution and prosecution of cases under the Workmen's Compensation Act for its members; a free charitable dispensary; and a library and reading room. After reorganization it should be possible for the Sabha to systematize and expand these activities and to take up some other pressing problems of the workers with the support and co-operation of the employers. One has already been mentioned, namely, the elimination of bribery and corruption. Then there are problems connected with housing, the education of the workers and their children in regard to some of which, at any rate, there should be no difference of opinion between the workers and their employers. Such co-operation will go far towards the improvement of the lot of workers, encourage joint efforts by their organization and that of the employers and thus strengthen the prospects of industrial peace. As long as our economic structure is based upon the right of personal property and the principle of private profit, divergence of interests is bound to appear from time to time. A struggle at times becomes inevitable. Unions therefore cannot afford to neglect their fighting efficiency. But that should not form their only concern.

195. We would invite the Trade Union officials to devote particular attention to the education of their members and especially of that of their children and young people. The Municipality should be called upon to assist in this matter through Trade Union representatives. Next to education, the Sabha officials must take up the problem of workers' indebtedness. Factors leading to workers' indebtedness should be thoroughly scrutinized. Public opinion should be fostered and brought to bear upon all anti-social expenses leading to indebtedness. Frugality should be inculcated through savings banks, co-operative credit societies and investment in workers' building societies. We have dealt with some aspects of the matter elsewhere in the report.

196. We would also draw the attention of the Sabha officials to the need of a statistical department as a constituent element of their Trade Union structure. Maintenance of accurate facts and figures will well repay the trouble and expense involved. "An ounce of fact is worth a ton of theory" is an adage that is especially applicable to all types of labour disputes. This is an aspect of Trade Union activity that cannot too forcibly be emphasized. The Sabha should endeavour to secure the services of men who are conversant with the intricacies and technicalities of the question involved.

Contact between
employers and
Mazdur Sabha.

197. We express the hope that when the Mazdur Sabha has been reorganized and has secured the recognition of the Employees' Association, the fears expressed before us by workmen—however ill-founded they may have been—that the Mazdur Sabha officials or members draw to themselves the hostility of the employers will completely disappear. Men should know that merely active work on behalf of their Trade Union would not jeopardize the

security of tenure of their jobs. Also the fear of espionage of the workers—they often used the "C.I.D." of the employers—should be completely eradicated. An atmosphere of fairplay and freedom must be created and maintained. It is only under such conditions that a healthy and helpful workers' organization can grow up. Any other attitude displayed by the employers is bound to deflect it into unwholesome and undesirable channels. The intelligent and active co-operation of the workers is an essential requisite in the conduct of modern industry. Employers in their evidence before us, we are glad to note, have begun to accept this fact.

198. The progress of the industry, many of them told the Committee, would be impossible beyond a certain limit without the active co-operation of the workers. Collaboration rather than conflict should be the new note, and employers must give every encouragement to this attitude. It is essential that contacts should be fostered between employers and workers and not brought about only when there is likelihood of friction or a dispute to be settled. Consultations for their mutual benefit and the good of industry in general cannot but produce wholesome and lasting results. It is for the employers no less than for the responsible leaders of the workers to strive for the building up of this mutual regard and thus create confidence in each other.

CHAPTER XII

HOUSING

Cawnpore the biggest industrial centre in Northern India.

199. Cawnpore has developed in recent years into the biggest industrial centre in Northern India. In 1900 its population was 172,694, in 1931 it was 219,189, and now it is estimated to be nearing 3 lakhs. The area covered by the Municipality during this period has remained the same, i.e. about 9 square miles. In one section of the city, Talaq Mohal of Anwarganj ward, the density of population is 1,229 persons per acre.

200. Besides having a large number of cotton, spinning and weaving mills, Cawnpore is an important centre for the tanning and manufacture of leather goods. There are also a number of sugar refineries, engineering works, foundries, brushware factories, oil and flour mills, jute and woollen mills, ice factories and chemical works. The total number of persons employed in all the factories is about 75,000. A number of mills namely the Cawnpore Woollen Mills, the Elgin Mills, the Muir Mills, the New Victoria Mills, Cooper Allen Co., the North-Western Tannery and the Electric Power House are situated in the heart of the city.

Housing accommodation provided by employers.

201. Very little attention was, until recently, paid to the question of housing this large and rapidly increasing population. The British India Corporation, which controls a number of important cotton, woollen and leather factories did pioneer work towards the provision of suitable house accommodation for various classes of their employees. The actual provision consists of three settlements known as (1) the MacRobertganj settlement, (2) the Allenganj settlement, and (3) the Kakomiganj settlement for the workers employed primarily in the Woollen Mills, the Cooper Allen Tannery and the Cawnpore Cotton Mills. These settlements provide accommodation for about 8,000 people. Besides these, several tanneries, sugar works and other factories also provide accommodation for a limited number for their workers. Recently, the Elgin Mills Co., Ltd., purchased over a hundred quarters from the Improvement Trust for their employees. Altogether the accommodation provided by employers consists of about 3,000 tenements which house about 10,000 persons. Details about accommodation including rents charged, in the important of the settlements, are given below :

I—MacRobertganj—

Number and type of quarters				Rent per month.	
				Rs.	a. p.
655	single	..	..	..	1 4 0
105	double	..	..	..	4 8 0
30	double (superior)	..	..	..	8 0 0
12	bungalow type	..	..	..	16 0 0
Total number of houses—802					
Number of workmen—937					
Total village population—3,084					

The average size of single quarter is 12' x 10' with a verandah 10' x 6'.

II—Allenganj—

Number and type of quarters				Rate per month.	
				Rs.	a. p.
72	single	..	..	..	1 2 0
700	single	..	..	..	1 10 0
50	double	..	..	..	3 4 0
8	double	..	..	..	4 0 0
14	double (superior)	..	..	..	5 0 0
5	4-unit	..	..	..	10 0 0
2	6-unit	..	..	..	11 0 0
4	6-unit	..	..	..	12 0 0
2	6-unit	..	..	..	17 0 0
Total number of houses—853					
Number of workmen housed—1,102					
Total village population—3,472					

The 72 single quarters with the lowest rent measure 10' x 8' with a verandah 8' x 5'3"; the other 700 single quarters have in addition a courtyard measuring 8' x 6'.

III.—Kakomiganj—

Number and type of quarters	Rent per month	
	Rs.	a. p.
167 single	1	8 0
143 single	2	0 0
1 double	7	8 0
1 shop	3	8 0
5 shops	5	0 0

Total number of houses—318

Number of workmen housed—318

Total village population—1,000

Of the single quarters, there are 165 measuring 9' x 9' with a verandah 9' x 5'4"; 11 have in addition a courtyard 10' x 9'; 61 have rooms 9' x 9' and verandah 9' x 8'; 63 have built-in verandahs, fitted with doors; and 10 of similar construction also have, courtyard measuring 18'6' x 9'.

IV.—Elgin Settlement—

The settlement is situated on the banks of the Ganges. The total number of quarters is 145. They are of three kinds—a room with a verandah at Re.1-2 per mensem; a room with a verandah and a walled courtyard with door at Re.1-8; two rooms with a verandah and a courtyard with door at Rs.3-8 per mensem. The last mentioned are provided with electric lights. Besides his wife and children no relations other than a widowed mother and sister are allowed to stay with an occupant. Workmen, unaccompanied by wives, are permitted to live in groups of three and four. Flush latrines are provided for both men and women.

V.—Mazwelliganj Khalasi Lines Settlement for the Elgin Mills workers :—

The total number of quarters is 104. The "A" type of house has two rooms, a verandah and a storeroom with wall shelves, a pucca cooking place, a walled courtyard with door and a two-seated latrine. The rent is Rs.6-8 per mensem. The "B" type is the same as "A" but only one room. The rent is Rs.3-4. The "C" type has only one room and a verandah. The rent is Rs.2-8 per mensem. The roofs of "A" and "B" types are flat and cemented.

VI.—Jaggeryganj (The Cawnpore Sugar Works, Ltd.)—

There are 120 houses for the sepoy, the workmen, the sweepers and the clerks. These are all rent-free. The settlement is adjacent to the factory.

VII.—Nishartganj (The Cawnpore Sugar Works, Ltd.)—

There are 70 houses, all rent-free. The settlement is situated outside the municipal limits on a canal bank and enjoys all the advantages of open village life. Every house has a plot of land for cultivation. There are two blocks of quarters of pucca bricks and each block is made up of houses built back to back. Two rows of the quarters are of one type, with a room and verandah, and the other two have a room a verandah, and a walled courtyard. The settlement has three wells, ten kerosine oil lights and a clock.

VIII.—The Cawnpore Textiles, Ltd.—

There are only 40 quarters in this settlement, intended mainly for the sepoy and watchmen who are housed free of rent. When workmen occupy them they pay a rent of Re.1 per mensem per quarter.

202. Apart from the above, the general housing conditions are extremely unsatisfactory. The Census of India, 1931, shows that in the city of Cawnpore 62·5 per cent. of the families live in one room tenements; 24·8 per cent. in two rooms; 7·5 per cent. in three rooms; 2·9 per cent. in four rooms and 2·3 per cent. in five or more rooms.

203. Most of the workers have to live in slums locally know as *ahatas*. where small dingy rooms are let out on exorbitant rents. Most of these *ahatas* are extremely insanitary and over-crowded and lack adequate sunshine and ventilation, to say nothing of water, light and conservancy. Quite a number of huts are under the street level. The conditions under which men, women and children in their thousands—about 40,000 souls—live in these *ahatas* are indescribable. The space within each tenement where the worker with his family lives, often numbering 8 to 10 persons, is smaller than the space we usually have in our bathrooms. An animal, specially if it be a horse or a cow is given more room than the poor owner. A night visit for a stranger to these areas is a positively risky undertaking a sprained ankle is almost a certainty, while a broken neck by stumbling into a blind well, or a goodly-sized hole, would not be an impossibility. Even the elementary service of public lighting is denied to these people. As for drainage and water-supply, such luxuries are thought to be superfluities. The underground rooms, in which thousands of Cawnpore workmen live, reminded one of the members of the Committee of the "dug-outs" of France during war-time. While the slum-dwellers would be somewhat protected from shot and shell in the event of an aerial bombardment, they are but an easy victim to those ever active enemies of mankind, namely, the germ and the bug. These have wrought havoc especially amongst the ranks of infants, the young and the women. The rate of infant mortality in Cawnpore is still appallingly high. The paradox of the situation is that the *ahata*-owner, who has done the least for his tenants, stands to gain the most at the time of acquisition of land either by the Municipality or the Improvement Trust. The entire situation is iniquitous. It should not be permitted to continue a day longer than possible. Little wonder that the so-called agitator in Cawnpore has such widespread and whole-hearted response from the labouring classes. The wonder is that they have kept silent for so long.

204. The pathos of the position is deeply impressed upon one's mind when one actually visits these workmen's quarters and spends some time in their homes. Far from within, these hovels are spotlessly neat and clean. We have not found the houses of the well-to-do people neater. We know several which would not be considered as clean. On the walls within and without there are to be seen drawings of human and animal figures, and floral decorations, all giving expressions, be it however so primitive, to the inherent instinct for beauty in these slum-dwellers. Animal pets are also kept with great care and devotion. Wherever possible tiny plots of kitchen vegetables are grown with skilled attention. There is great richness of creative instinct within our workpeople. If only they could be given the opportunity to express and develop it! The frequent processions and endless shouting of slogans and the parading of streets are but manifestations of a restless energy which needs opportunities for expression. None could equal the absorbing outlet that good housing with garden plots could provide. What we saw in the Gutaiya area, developed by the Improvement Trust, convinces us beyond a shadow of doubt, that workmen have to be provided with such facilities, if Cawnpore is to enjoy civic security and tranquillity.

205. There are about 200 such *ahatas* within the municipal limits which provide living accommodation to a very large number of people. They have existed in manifest contravention of municipal by-laws with regard to ventilations, building, water-supply, conservancy, etc. They must be hot-beds of disease and judged on accepted standards of health most of them are absolutely unfit for human habitation. Both the Chairman and the Executive Officer of the Municipal Board in their evidence before the Committee deplored this state of affairs, but pleaded helplessness in the matter, firstly because of powerful vested interests and secondly because of the lengthy and uncertain legal procedure involved.

206. The Improvement Trust has now earmarked a separate area outside the city proper on the Kalpi Road for mills and factories. A number of factories have already been set up in this area and the workers employed therein reside either in the surrounding villages or in the workmen's dwellings constructed near about in the area not apart by the Improvement Trust for the purpose. The Executive Officer of the Improvement Trust stated in his evidence before the Committee that this area would provide house accommodation for about 40,000 people. At present, however, there is a distinct shortage of workmen's houses, resulting in congestion and high rents.

Efforts of the Improvement Trust.

207. The Committee attaches the greatest importance to the question of housing. We have been unable to get any definite figures to establish the relation between good housing and efficiency of work, but we have it on the authority of Mr. A. L. Carnegie, who has 30 years' experience of the problem that the incidence of sickness amongst workers living in the settlements is substantially lower than amongst those living outside, particularly during August and September when malaria is prevalent and that their general record of attendance is also more satisfactory. We firmly believe that better housing and better efficiency go together and it is therefore of the utmost importance to devise suitable means of meeting the housing needs of the industrial workers of Cawnpore.

Relation between housing and efficiency.

208. The problem is clearly two-fold. The first is to improve or reconstruct the existing workmen's dwelling which fall below the minimum standard of health and sanitation. This will apply to most of the existing *ahatas* in the city proper as well as to many so-called temporary quarters set up by private individuals outside the city limits. The second and more important problem is to construct model workmen's dwellings both within the city as well as in the new industrial area. These dwellings should be designed to provide the maximum of comfort on the least possible outlay and be within the reach of the lowest classes of workers.

The housing problem.

209. As regards the question of dealing with the existing *ahatas* it is desirable that determined action should be taken to improve or acquire and refashion them. A joint committee of the members of the Municipal Board and the Improvement Trust styled the Slum Clearance Committee has been formed, and we understand that a list of 15 of the worst *ahatas* has been prepared so that they may be taken up first. Schemes for acquiring them are said to be ready and will be considered shortly by the Improvement Trust. Action on these lines should be pursued with determination and persistence. What is necessary is the provision of funds to meet the losses in acquiring and improving the slums and a suitable amendment of section 25 of the United Provinces Town Improvement Act providing for a less cumbersome procedure in dealing with the matter. Under the

Action to deal with existing *ahatas*

existing law, the preparation of a detailed improvement scheme with complete plans and estimates is necessary before Government will sanction a slum acquisition proposal. The number of slums is large and the preparation of schemes in detail takes considerable time. A simplification is therefore necessary by which the necessity for detailed schemes will be done away with and the Trust will be authorized to assume powers under section 49(1) of the United Provinces Town Improvement Act and prevent further undesirable constructions in the *ahatas*. The Trust has already moved the Government for amending section 25 of the Act and we support that request. As we conceive it, the general plan of action will be that the *ahata*-owners will first be persuaded to improve the *ahatas* themselves according to the Trust design, but if they fail to do so within a specified time no time should be lost in undertaking the acquisition and improvement proceedings. Not only should this procedure result in better progress in the absence of adequate finances, but it is probable that the *ahata*-owners who may not like to part with their property will welcome it.

New dwellings to be constructed by Improvement Trust.

210. As regards the new dwellings to be constructed, local bodies have constructed houses for industrial workers in several foreign countries out of loans raised directly or by the State. There is no reason why the same should not be possible in Cawnpore. Both the Chairman, Municipal Board and the Executive Officer, Improvement Trust consider the need for industrial housing imperative, and expressed readiness to undertake the work provided Government could make available the necessary funds and invest them with reasonable powers to administer the scheme. Since the Improvement Trust has undertaken construction work on a large scale within recent years and is fully equipped with technical staff for the purpose this work may suitably be entrusted to it, with this provision that there should be some representative of the workers on the Trust. Men in whose interest the houses are being constructed should be consulted. The Mazdur Sabha or the Workers Building Co-operative Society, if such a body should be revived once more in Cawnpore, would be the fittest channel of representation.

Money to be raised by loan.

211. The Executive Officer of the Municipal Board considered that a loan of rupees three crores would be needed to solve the housing problem in Cawnpore. On the other hand the Executive Officer of the Improvement Trust placed before us a more modest scheme involving a loan of rupees fifty lakhs. The full details of these schemes we need not discuss in this report. According to the rough estimates given by the Executive Officer of the Improvement Trust workmen's quarters consisting of a room 12 feet x 9 feet, a verandah 12 feet x 7 feet and a courtyard 12 feet x 10 feet will cost Rs.475 each including the cost of land, overhead charges, water, conservancy, etc. When the houses are constructed on a large scale further economies will be possible. By judicious planning and rigid economies it may be possible to bring down the cost to about Rs.400 per house. If double-storeyed houses are constructed within the city limits, the cost may be still further reduced. Houses of a better type consisting of an additional kitchen or also an additional room, a separate water tap and latrine can also be designed for superior grades of workmen. These may cost Rs.600, Rs.800 or Rs.1,000 each. Houses of various types could be constructed in blocks of 20 to 50 houses, each block having separate water-taps, latrines and open spaces. If a sum of rupees ten lakhs per annum is placed at the disposal of the Improvement Trust, about 2,000 cheaper and 500 superior quality houses can be constructed every year, and in five years there should

be available about 13,000 houses giving accommodation to approximately 40,000 persons. Taking the present conditions of the money market into account it should not be difficult to float a loan repayable in about 20 years at 3 per cent. interest. If the sort of houses that we have proposed are let out at rents varying from Re.1-4 to Rs.3-8 per mensem according to size, the realizations should cover the interest and depreciation charges. We strongly recommend, therefore, to the Government to float a loan for the purpose of providing suitable dwellings for industrial workers in Cawnpore.

212. The Improvement Trust has already constructed about 200 model workmen's quarters. Half of this number has been sold to Messrs. Elgin Mills Co., for the use of their workmen and the rest have been sold directly to workmen themselves on a 12 years' hire-purchase system. From the evidence led before us it appears that the hire-purchase system has been popular but there are considerations which seem to us to qualify the advantages of extending facilities of purchase to individuals. Outright sale carries with it the inevitable risk of the house passing from the hands of the original purchaser to those of one belonging to a class for whom it is not intended. Purchase facilities should, in our opinion, be restricted to genuine house building Co-operative Societies such as may be started by the Mazdur Sabha. We contemplate that the majority of the houses to be built by the Improvement Trust under the scheme proposed by us should be built for renting to the workmen. In order to enable the Trust to do this provision will have to be made legislatively to invest it with powers to collect the rents expeditiously. If it has to resort to the lengthy and tedious process of the civil court to collect rent from or obtain ejections of the defaulting tenants, the scheme is bound to fail. A suitable remedy will be to invest it with powers similar to those possessed by the Municipal Board to collect taxes and we commend this proposal to the notice of the Government. Another burden from which the Trust will have to be freed is municipal taxation to which property owned by the Trust will be subject under the present rules. Under the existing rules a house or a set of tenements having a letting value of Rs.6 or more per month has to pay a tax to the Municipal Board on a graded scale. We recommend that the property owned by the Improvement Trust which is used exclusively for housing the industrial workers should be exempted from this tax.

213. A number of employers of labour explained during their oral examination by the Committee that the Improvement Trust and the Municipal Board had not co-operated with them in providing suitable house accommodation for their workers. It was suggested that if the Improvement Trust were directed to make available suitable plots of land at a special rate and the Municipal Board could provide water and sewage facilities, many employers of labour would be willing to construct model workmen's settlements in Cawnpore. In particular Mr. H. Horsman of the Swadeshi Cotton Mills offered to build quarters for 5,000 workmen if the Municipality could provide sewage and water-supply. This is certainly one method of solving the housing difficulty. The existing workmen's settlements constructed by the employers in Cawnpore are definitely superior to private houses available in the town and are besides distinctly cheaper. The workmen living in these settlements are also better looked after and have facilities of medical aid, education and sanitary arrangements which are not available elsewhere. We think, however, that if the Trust would be responsible for the scheme for building colonies, it would be a better proposition than allowing private

speculators to profiteer at the expense of the poor workers or even allowing employers to build quarters. However good the intentions of an employer may be, the workers are at a disadvantage in living in quarters provided by them. They cannot feel absolutely free in such colonies; rightly or wrongly they feel that they are under some sort of surveillance. During a strike they are liable to be turned out, although no employer has done it in Cawnpore. Psychologically also it is not good for a worker to feel that he is under some restriction or other imposed by the employer not only during the working hours but also for the rest of the day.

Transport
arrangements.

214. We would like to see the relief of congestion in the over-crowded areas of the city by the development of the new Factory Workmen Area, under the Improvement Trust. The movement of the work people will be facilitated by a cheap and quick bus transport service developed between this area and the other mills situated within the municipal areas. For, it is for obvious reasons that men wish to live as near to their place of work as possible. This matter of the bus service should not prove difficult of solution. There is already the municipal bus service in existence. Arrangement with mill authorities for the transport of their workmen could be worked out. In any case, the transportation problem has to be considered in close relationship with the housing difficulty. In Cawnpore, as in most other congested industrial cities, the two are intimately connected with each other, and should command careful consideration.

Provision for
open spaces.

215. We would also wish to indicate that in the Factory Workmen's area scrupulous care should continue to be exercised to maintain sufficient open spaces for parks and playing-fields and other requisites for the institutional and co-operative life of modern cities. The planning out of workmen's dwelling areas should not be considered merely from the point of view of brick and mortar, but should be considered from the larger and broader aspect of the citizen of the future, who will be demanding and desiring a richer and fuller life. Houses are erected not for the day, but for the generations to come.

216. We would like to conclude this chapter with a pregnant statement from one of the great English authorities on the subject, and leave it for the reflection and we trust also the action, of those who are in authority in one way or the other for the good of the working classes. The statement reads "no housing evils are necessary none need be tolerated. Where they exist, they are always a reflection upon the intelligence, right-mindedness and moral tone of the community."

CHAPTER XIII

Labour Welfare

217. Modern methods of production in big factories have put an end to the personal relationship between the employer and his workmen characteristic of the earlier systems of production where the workman apprentice used to work with the artisan in his house under more or less homely and human surroundings. In the present complex organization of production, the individual proprietor or the shareholders rarely have any personal contact with the workers. Even the Managing Director or the Manager is surrounded by such a large and varied class of overseers and has to look after such an ever-increasing and pressing variety of technical, administrative and financial problems that personal contact between the employer and the employees is hardly possible. The modern *entrepreneur* or captain of industry is a hard-worked individual. He is involved in the study of things and situation rather than in the direction or development of the human factor in industry. Modern industry has been depersonalized, if not actually dehumanized. It is one of the basic reasons for friction and strife in industry.

Absence of personal contact between the employer and the employees in modern factories.

218. Under these circumstances, the good employer, in order to improve the lot of the worker, provides some recreation and amenities of life. The growth of competition with producers in other countries and at home, however, has necessitated the concentration of all the energy and ingenuity of the management on reducing expenses of production and distribution rather than on the betterment of the conditions of labour. The gross illiteracy among the workers coupled with low wages, unemployment, inefficiency and lack of organization intensify the separatist tendencies between the employers and the employees. With a view to provide some bounds of mutual interest and sympathy, employers in Western countries have often spent their accumulated fortunes in providing comfortable conditions of life and work for their employees. The numerous garden-cities and industrial suburbs scattered over England, the United States and the Continent serve to remind one of their benevolence, sense of humanity and fellow feeling. Even in India many employers have spent large sums of money to provide suitable dwellings and other amenities of life to their workmen. In fact it is being realized that the welfare and contentment of the workers may not be looked upon merely as a humanitarian and charitable proposition. It is in many ways a profitable expenditure or an investment in so far as a contented healthy and intelligent labour force is a great asset to industry. Far-sighted and enlightened employers, therefore, not only cater for the housing, medical relief and recreation of their workers, but also welcome organization, education and enterprise among them.

Value of labour welfare work to employers.

219. We have dealt with the question of housing in a separate chapter and will therefore confine ourselves here to other welfare activities.

Scope of this chapter.

220. In Cawnpore the British India Corporation led the way by establishing three workmen's settlements, namely MacRobertganj for the employees of the Cawnpore Woollen Mills, Allenganj for the employees of the North-Western Tannery and the Cooper Allen Boot Factory and Kakomiganj for the employees of the Cawnpore Cotton Mills. They are

Welfare work by employers in Cawnpore.

justifiably proud of these settlements which provide house accommodation for 2,358 workmen or about a third of the total employees of these mills. The accommodation available in these settlements is distinctly better and cheaper than that available in private *basties*. The settlements are, besides, clean and sanitary a feature conspicuous by its almost entire absence in private *basties*. Education is provided free in boys', girls' and night schools maintained by the Corporation. Medicine and medical attendance are also available to the residents free of cost. Free milk is distributed to children and also food and clothing to specially necessitous cases from time to time. A fully qualified doctor is in charge of each of these settlements. Co-operative Societies have also been organized. Detailed information regarding welfare work under the British India Corporation settlements is given below :

	MacRobertganj	Allenganj	Kakomiganj
I—Education—			
(1) Enrolment in boys' school	177	120	..
(2) Enrolment in girls' school	186	97	..
(3) Enrolment in night school	85	84	..
II—Medical Aid—			
(1) Cases treated in male dispensaries during last year.	12,770	8,488	..
(2) Cases treated in female dispensaries during the last year.	10,887	1,708	18,326
(3) Cases in baby welfare centres during the last year.	8,810	6,856	3,698
(4) Cases treated in mill dispensaries ..	84,214	80,448	62,717
	Lalimli	Cooper Allen	Kakomi
III—Co-operative Societies—			
(1) Number of shareholders	504	642	870
(2) Loans advanced during the last financial year.	Rs.42,988	28,422	42,728
(3) Reserve Funds	Rs.9,779	1,189	2,362
(4) Rate of interest per annum*	12 per cent.	9 per cent.	12½ per cent.

* 6½ per cent. charged on loans for building purposes

Messrs. Begg Sutherland & Co. also finance welfare activities among the employees of the Cotton and Sugar Mills, Brushwares and the Electric Supply Corporation under their charge. These activities have been placed under the charge of the Y.M.C.A. (the present secretary being Mr. Manohar Lal who has been in charge of the work for some years). They conduct boys' and girls' schools, distribute milk to school children and organize indoor and outdoor games, sports, dramas, etc. Medical attendance is also provided free of charge to workmen. Messrs. Juggilal Kamapat, another important factory group in Cawnpore under the direction of Mr. Padampat Singhania have started a club for the recreation of the workers. They held an annual sports meet. This is a great event. One striking feature of this annual function is that women also participate. This should be encouraged more. They have also recently acquired a big plot of land from the Improvement Trust where they intend to set up model houses for various classes of workers.

Messrs. H. & A. Horsman of the Swadeshi Cotton Mills Co. have made a munificent donation of Rs.3 lakhs for the construction of the Ursula Horsman Memorial Hospital which has just been completed and provides the most modern conveniences for the treatment and care of the poor.

221. The pioneer work in the field of labour welfare has thus been done in Cawnpore through the generosity and far-sightedness of some of its industrial magnates. But what has been accomplished is nothing as compared to what is required. There are about 75,000 industrial workers in Cawnpore today. The welfare work organized by factory owners does not reach a great majority. The conditions of housing, sanitation, water-supply and conservancy for most of the other workers are appalling. Education and medical relief are of the most primitive type and recreation facilities there are none. The average worker starts with debt which he secures from the Kabulee, the mistri or the bania who alike manage to keep their principal intact from month to month and year to year in spite of substantial contributions from the workers' monthly or fortnightly earnings. The only relief available to the worker from the dirt and squalor of his house and its surroundings and the clutches of the money-lender is the liquor or the grog shop. To raise the worker from degradation and disease it is necessary not only to provide cheap and sanitary house accommodation and clean and healthy surroundings, but also wholesome and healthy recreation, medical relief and education. It is necessary that the State and the municipality should come forward to relieve the sufferings of the factory workers whose importance to national and municipal economy none can deny. It also should be borne in mind that with the shortening of the working day, and consequent increasing leisure at the disposal of the worker, steps should be taken in time to create amenities which the worker can utilize gainfully. Idle hands are otherwise apt to find unhealthy and anti-social outlets. Utilization of leisure for pleasure and for profit requires planning. It cannot just be left to hazard.

nt of work
rto done.

222. It is a matter for satisfaction that Government have come forward with a modest grant of Rs.10,000 in the present budget to provide some amenities of life to the workers. This grant deserves to be continued and substantially increased with a view to start a number of well-equipped welfare centres for the moral and material improvement of the workmen. The administration of the money has been vested in a welfare committee consisting of the Director of Industries and Commerce, the local M.L.A.'s and M.L.C.'s and a representative of the Municipal Board and the Labour Officer, who acts as Secretary. Four welfare centres have been started at Gwaltoli, Deputy-ka-Parao, Juhi and Jarib-ki-Chowki. The work of each centre is controlled by a paid organizer with the help of an assistant. Mr. Suraj Prasad Avasthi, M.L.A., the representative of unorganized labour in the Legislative Assembly has been appointed the Honorary Chief Organizer to supervise and co-ordinate the work of the various centres.

Welfare work
undertaken by
Government of
United Provinces.

223. Each welfare centre has an allopathic dispensary with a whole-time compounder and a part-time qualified doctor incharge. A reading room, a library and a gymnasium are also attached to each centre. It is intended to organize sports, picnics and welfare entertainments for the benefit of the workers in each centre. It is also proposed to arrange useful talks on subjects like health, cleanliness, co-operation, education and organization with the help of the microphone and magic lantern for the instruction and benefit of the workers. On the representation of the Welfare Committee the local Municipal Board has passed a resolution sanctioning a sum of

Rs.500 per month for the distribution of milk to working class children and for the supply of warm clothing to labour class women in confinement through the Government welfare centres. Much will depend upon the personnel and qualifications of the staff available and the amount of zest which they put into their work. But there can hardly be two opinions as to the usefulness of the project which deserves all encouragement. We should, however, very much wish to make the Welfare Committee more comprehensive. We are convinced that room on the Committee should be found for Employers' representatives. Welfare work is a type of activity where the largest measure of co-operation between employers and men can be secured. Full advantage should be taken of this. Hence employers' representatives should be given adequate representation.

224. We feel that the educational institutions which have experience of welfare work should be brought into close touch with these activities. In the local educational institutions enough men of ripe and rich experience can be found, who could with distinct advantage be made members of this committee. Their presence would be a desirable and at the same time a valuable addition to the Committee.

225. The Y.M.C.A. throughout India have rendered helpful service in this field. In many ways they were the pioneers of such activities. At various industrial centres they have much developed work, which is being efficiently carried on. We suggest that they should be given representation on the committee. Their trained assistants should be enlisted in this direction.

226. The Seva Samiti should also be included in this committee. They have much valuable experience to offer in this connection.

227. Athletics form a very large part of welfare work. It is good that this is so. We therefore suggest that the United Provinces Olympic Association should be linked with the welfare activities in Cawnpore. We suggest that the Secretary of the Cawnpore District Olympic Association should be given a place on the committee. This is a very necessary addition.

228. The Rama Krishna Mission have rendered commendable work in ministering to the sick. This useful work should be recognized. They should find a place on the committee. Their varied and valuable experience will supply much strength to the committee.

229. In view of the increasing attention paid to balanced diets it will be appropriate to have on the committee at least one who has had the benefit of training in dietetics facilities for which exists in more than one centre in India.

230. A welfare work committee without women on it is but a one-sided affair. One of the reasons of the great success of welfare work in Bombay has been due to the active participation of women in this type of work. We hope the enlightened ladies from Cawnpore may find place on this committee. They will import keenness and zest into the work and grace which men are incapable of achieving, however much they may wish it.

231. We, therefore, suggest a general Welfare Council, where all these interests can be combined for this whole purpose and then a representative Executive Committee.

232. It is satisfactory to note that the United Provinces Government have brought forward a Bill providing for the payment of maternity benefits to women employed in industry both before and after confinement for a total

period of 8 weeks. The necessity of such benefits has been emphasized time and again by the International Labour Office, the Royal Commission on Labour and other authoritative persons and bodies.

233. Another important direction in which attention may be directed is maternity and child welfare. The Red Cross Society had generally taken up this work with the assistance of funds from the Municipal Board. It is, however, desirable to extend further these activities and to have an organization of health visitors and child welfare centres in important centres of industry like Cawnpore for the medical examination of industrial workers and their children. These centres might also form the nuclei of systematic propaganda on diet, prevention of disease and general principles of health. These centres have largely to be organized and financed by big employers of labour or important factory groups. Financial assistance might also be given by municipal authorities and provincial Governments for approved schemes, subject to inspection, supervision and maintenance of reasonable standards of efficiency. Arrangements should also be made by Government for the training of health visitors and midwives for employment in these centres.

Maternity and
Child Welfare work

234. We have been particularly impressed by the great want of adequate arrangements for medical assistance to working class families. The ravages of malaria, tuberculosis and respiratory diseases among the industrial population are responsible for loss of efficiency and irregularity of attendance. Medical facilities are no doubt available in some measure at factories but these are generally inadequate. It is, therefore, desirable to examine the possibilities of a regular scheme of sickness insurance for industrial workers. As the Royal Commission on Labour has pointed out, the incidence of sickness in India is substantially higher than in the West. The wages generally paid make it impossible for most of the workers to get through more than a very short period of illness without borrowing. The Commission have recommended a scheme of sickness insurance by the employer on a contributory basis by small deductions from wages of the workers. We unhesitatingly endorse that recommendation for adoption in Cawnpore. One witness suggested a contribution of 2½ per cent. of the wages earned by the workers and an equal amount to be subscribed by the employers for the purpose. The scheme deserves further consideration. There is no doubt that it could be worked. It will, however, be necessary to collect much more detailed statistical data before the details could be filled in. Organization and expansion of the medical arrangements will also be necessary. Probably the State should also make some contribution to the scheme, either directly or by the provision of a larger number of free dispensaries in workmen's areas.

Sickness insurance.

235. We are anxious that some provision should be made for the worker in his old age. We, therefore, suggest a contributory Provident Fund Scheme. This too is not an innovation. We indicate the broad lines on which this may work. Modifications may be introduced by the Employers' Association in consultation with the Mazdur Sabha.

Provident Fund
scheme.

236. Since we have suggested in an earlier chapter that the minimum wage should be Rs.15 in the textile industry, it follows that no adult male worker will get less than this amount. Those receiving this wage and above will contribute every month half anna per rupee of wages earned, and the employers will add an equal amount. No worker would be entitled to receive the employers' contribution until he has put in at least ten years' service, or is discharged earlier for physical disability or in consequence of rationalization or retrenchment. But in cases of dismissal, no forfeiture of

the employer's contribution should be assumed, unless the employer has obtained an award to that effect from the Conciliation Officer. Similarly, in cases of voluntary resignation, the primary responsibility for proving the claim to the employers' contribution rests on the worker. We need hardly add that the Provident Fund should be duly invested by each employer in accordance with rules to be made for the purpose. All women workers receiving less than Rs.15 will be exempted from making any contribution, but will be entitled to receive the employers' contribution.

Protection of
indebted workers.

237. More than one witness pointed out the necessity of protecting industrial workers from molestation and intimidation by unscrupulous money-lenders whose methods and practices are too well known to need description. We ourselves attach great importance to the solution of the problem of indebtedness amongst the industrial workers. The exorbitant rates of interest charged and the rough and ready methods adopted by some classes of money-lenders need to be definitely controlled, and we recommend that a measure for the protection of debtors somewhat on the lines of the Central Provinces Protection of Debtors' Act of 1937, be immediately considered by Government. The main features of that Act are that molestation of a debtor by a creditor has been made a cognizable offence punishable with imprisonment up to three months or fine up to Rs.500, and molestation has been so defined as to include the use of violence, intimidation, persistent following about and loitering near a debtor's residence or his place of work. There is a more restricted Act in force in Bengal, but the Central Provinces Act is of wider application and we would prefer action on the Central Provinces lines in order that it may be effective. At the same time the formation of co-operative societies for lending out money at reasonable rates of interest should be fostered.

Co-operative
stores and
canteens.

238. In another direction also the co-operative principle must be applied, namely the formation of co-operative stores in each mill. The establishment of canteens is another matter which should engage the attention both of the employers and the workers. Pure and wholesome food at the cheapest rates should be provided, as is in fact being done at several industrial centres. These canteens may be utilized also as centres for propaganda in regard to cleanliness, nutrition, etc.

CHAPTER XIV

Labour and Industrial Statistics

239. The need for detailed and accurate statistical data regarding earnings and expenditure of factory labourers as also prices, employment, labour turnover, industrial disputes, etc., has been stressed from time to time by various committees and commissions appointed by Government. We have ourselves indicated in our report how very seriously we have been handicapped in our inquiry for lack of sufficient and reliable statistical information and other data. In the absence of such details conclusions, however carefully arrived at, cannot be precise. Statements and counter-statements were made before us by the Employers' Association and the Mazdur Sabha regarding the rates of wages, bonuses and allowances which we were not in a position to confirm or challenge. It is imperative both in the interests of labour and of industry in general that systematic information should be collected and published on various problems affecting them by an impartial authority. From the point of view of Government also it would be extremely helpful to have accurate data so that prompt and remedial action may be taken at the proper time. Our Committee was greatly handicapped in its work by the lack of precise material regarding wages and cost of living without which it is not possible to form any precise idea of the adequacy of prevailing wages. We consider it absolutely necessary that detailed statistics should be collected, maintained and published periodically by Government.

Government to maintain detailed statistics

240. We would therefore strongly recommend the establishment of a regular Labour Office on the lines of the Bombay Labour Office for the collection and publication of information regarding labour conditions and welfare. In this connection, we would suggest, further, that an officer may be deputed for a reasonable period to Bombay, to study the working and constitution of its Labour Office. As soon as possible thereafter, a detailed wages census should be undertaken in Cawnpore, and in other industrial towns to obtain accurate information regarding attendance, turnover of labour, rates of wages, actual monthly earnings, bonuses, allowances, fines, etc. It seems to us also desirable to collect information regarding prices and the cost of living with a view to measure the standard of living of the workers and to see how far wages have kept pace with the cost of living. The information so collected should be carefully compiled and published for general information. It will be desirable to keep this information up-to-date by periodical inquiries. Another detailed census may be necessary after a period of say five to seven years.

Establishment of a Labour Office.

241. Statistics of the number of factories of each class together with the number of persons employed in each are published by the Chief Inspector of Factories. Information regarding rest, intervals, holidays and hours of work in these factories is also given. Statistics of the number of accidents, strikes and lock-outs and the number of factory inspections carried out by the Factory Inspectors together with the number of convictions obtained for violations of the provisions of the Factories Act are also maintained by him. The information, is, however, of a bald nature and needs to be presented in an intelligible and readable form. It is for example important to know the number of persons employed during the day and the night and the variations

The supplementing of statistics maintained by the Chief Inspector of Factories.

in attendance from season to season. In the case of industrial disputes, detailed information regarding the causes of such disputes, the terms of settlement and the loss to labour and industry in the form of wages and production needs to be ascertained and published. The number of members of registered Trade Unions is recorded by the Chief Inspector of Factories. It is desirable, however, to have further information regarding the constitution of such Unions; the benefits, if any, conferred by them on their members; the subscriptions realized and other relevant details. It is also desirable to have some information regarding Unions which are not registered.

Statistics maintained by the Municipal Board.

242. Statistics of births, mortality and disease are collected by the Municipal Officers of Health. This information, however, is not classified according to the nature of the population. It will be useful to analyse the incidence of mortality and disease amongst industrial workers. Statistics of the number of persons treated for various diseases at municipal and other dispensaries, if systematically compiled, will yield valuable information on the prevalence of sickness among various classes of people and possibly suggest the need for special measures of prevention and cure.

243. Statistics of the number of houses per acre and the number of occupants per house and per room were collected at the time of the 1921 and the 1931 censuses. But no attempt has been made to compile such statistics annually by municipal boards. In view of the grave congestion and insanitation in the city, it seems desirable to undertake a comprehensive survey of housing conditions in Cawnpore. Such a survey is likely to be of great value in determining the policy and line of action that can most usefully be pursued and besides help welfare workers and health visitors in their work. Records of rent for different types of workmen's houses should be maintained. The rise and fall of rent is a very important matter intimately connected with the health and comfort of workpeople and their families. The rent behaviour, as it were, should be ascertained over a period of years.

Detailed list of subjects under which statistics should be collected.

244. We give below a detailed list of subjects and heads under which statistical data should be collected and maintained by Government:

PRINCIPAL HEADS OF LABOUR STATISTICS

I—Wholesale and retail prices—

(1) Wholesale prices, raw material and manufactured goods—cotton, *gur*, oilseeds, oils, *ghee*, tobacco sugar, coal, hides and skins, leather, iron and steel, yarn, textiles, metals, machinery building materials, etc.

(2) Retail prices, consumption of goods—Wheat, wheat flour, barley, gram, rice, maize, *juar*, bajra, *bejhar*, pulses (*urd*, *arhar* and *mung*), sugar *gur*, *ghee*, mustard oil, castor oil, kerosene oil, milk, meat, salt, potatoes, firewood, coal, matches, shirtings (*markin*), *dhotis* (Muir) and bar-soap.

Employment—

(1) Number of workers employed in factories—

- (a) men,
- (b) women, and
- (c) children.

(2) Number employed during day and during night.

(3) Classification of workers by occupation.

(4) Classification of workers by literacy and technical qualification.

(5) Unemployed workers of various grades.

III—Wages—

- (1) Rates for piece-work.
- (2) Average wages of various classes of workers—
 - (a) Time-workers.
 - (b) Piece-workers.
- (3) Bonuses, allowances, overtime, pay, etc
- (4) Fines and other deductions from wages.
- (5) Average attendance.
- (6) Period and method of payment.

IV—Cost of living—

- (1) Heads of expenditure.
- (2) Weights allotted per head.
- (3) Indices of cost per head.
- (4) General Index number of cost of living.

V—Sickness and Mortality—

- (1) Statistics of sickness—
 - (a) Number of persons treated for principal diseases.
 - (b) Rates per mille of population.
- (2) Statistics of mortality—
 - (a) Number and rate of births, deaths and causes of deaths by sex, age and *chaks* (municipal sub-wards).
 - (b) Number and rate of infantile and maternal mortality.

VI—Education and Welfare—

- (1) Education—
 - (a) Number of institutions and scholars—adults, boys, girls, average number of scholars attending.
 - (b) Source of finance—
 - (i) Private funds.
 - (ii) Municipal grants.
 - (iii) Government aid.
 - (iv) Fees charged.
 - (c) Nature and standard of education imparted.
 - (d) Reading rooms and libraries.

(2) Facilities of medical aid—

- (1) Public dispensaries—
 - (a) Allopathic. Number of dispensaries and number of cases treated.
 - (b) Homœopathic. Number of dispensaries and number of cases treated.
 - (c) Ayurvedic. Number of dispensaries and number of cases treated.
 - (d) Unani. Number of dispensaries and number of cases treated.

(2) Private practitioners—

- (a) Allopathic. Number of dispensaries and number of cases treated.
- (b) Homœopathic. Number of dispensaries and number of cases treated.
- (c) Ayurvedic. Number of dispensaries and number of cases treated.
- (d) Unani. Number of dispensaries and number of cases treated.

- (3) Maternity and Child Welfare—
 - (a) Number of centres.
 - (b) Cases attended at each centre.
 - (4) Gymnasiums.
 - (5) Other Welfare work.
- VII—Housing conditions and rents—*
- (1) Classification of houses and inmates.
 - (2) Number of tenements provided by—
 - (a) Employers.
 - (b) Municipality.
 - (c) Improvement Trust.
 - (d) Others.
 - (3) Conditions of sanitation, ventilation, lighting, water-supply, conservancy and roads.
 - (4) Rents—
 - (a) Settlements.
 - (b) Private Abatas.
 - (c) Municipal quarters.
 - (5) Playgrounds and open spaces.
- VIII—Hours of labour—*
- (1) Working hours and intervals.
 - (2) Number and arrangement of shifts.
 - (3) Overtime work.
 - (4) Holidays.
- IX—Accidents and compensations—*
- (1) Number of accidents, fatal, serious and minor.
 - (2) Amount of compensation allowed in each.
- X—Absenteeism—*
- (1) Sickness.
 - (2) Compulsory leave and play-off.
 - (3) Other causes.
- XI—Conditions of work and recruitment—*
- (1) Methods of recruitment.
 - (2) Number of dismissals and discharges—
 - (a) For rationalization.
 - (b) For reduction in work.
 - (c) Summary dismissals.
 - (d) Other dismissals or discharges.
 - (e) Resignations.
 - (3) Fines.
 - (4) Facilities of latrines, drinking water, places of eating, cresses, medical aid, etc., inside the mills.
 - (5) Conditions of leave for maternity, sickness, etc.
 - (6) Miscellaneous reports.
- XII—Trade Unions—*
- (1) Names, organization and strength of registered Unions.
 - (2) Other Unions.
 - (3) Subscription rates and funds.

XIII—Trade disputes—

- (1) Nature, duration and cause of strikes and lock-outs.
- (2) Number of workmen involved.
- (3) Loss in wages, working hours and production.
- (4) Method and terms of settlement.

XIV—Statistics of industrial production—

- (1) Number and size of factories of each class.
- (2) Details of production number of quality.
- (3) Wage bill—
 - (a) For workmen.
 - (b) For supervising staff.
 - (c) For clerical staff.
- (4) Profit and Loss Accounts—
 - (a) Capital invested.
 - (b) Gross profits.
 - (c) Depreciation and Reserve funds.
 - (d) Net profits.

CHAPTER XV

Summary

245. In conclusion we might usefully summarize our findings and proposals, and examine as far as possible their financial effect.
246. In Chapter I we have given a brief account of the dispute which gave rise to our Committee and outlined the procedure followed by us in conducting our investigations into the questions referred to us for determination. We have explained our handicaps, and the causes of the delay in the inquiry.
247. In Chapter II we deal with the wage problem. The respective cases of the Mazdur Sabha and the Employers' Association have been set out in detail. Thirty-one categories of occupations in cotton textile mills were selected for a detailed examination. These categories may be taken to be representative of the entire working population in the sense that they account for over two-thirds of the total number of operatives. As explained in para. 48, we have been unable to make a proper comparison of the present wages with those prevailing in the previous years. The material at our disposal was not enough to draw any general conclusions of a positive character. An analysis of the statements furnished showed, however, that in 12 categories there was a decrease in monthly earnings, while 18 showed a rise. The decrease varies from 22·6 per cent. to 0·6 per cent. while the increase ranges from 55·4 per cent. to 0·3 per cent.
248. We have then dealt with the position of the textile industry at Cawnpore, and come to the conclusion that not only has it expanded considerably since 1929, but that it is in a strong and healthy position. We have examined the disparity in the wage levels between Cawnpore and Bombay and found no justification for the markedly lower level in Cawnpore. We have therefore recommended that there should be a general rise in the wages of all the workers. We have divided the workers into five wage groups and suggested a graded increment from 2½ annas in the rupee in the case of workers getting between Rs.13 and Rs.19 per mensem to half-an-anna in the rupee in the case of workers getting between Rs.40 and Rs.59 (para. 79). We have also recommended that all time-workers wherever they are at present engaged on a daily basis should be put on a monthly basis (para. 80).
249. Although the cost of living has gone down since 1929, we do not let this factor influence our wage increment proposals for several reasons. The cost of living theory cannot, in our opinion, have valid application to those classes of workers whose wages are below a minimum wage level. More important still, we do not wish to see the workers wedded for all time to a given standard of the past.
250. Regarding bonuses, we urge that all monthly bonuses should be consolidated with wages and all annual ones converted into profit sharing schemes (para. 83).
251. Finally we recommend the establishment of a Wage Fixation Board to function on the lines of the British Trade Boards for the adjustment of wages from time to time (para. 85). This Board may consist only

of employers' and workers' representatives with a chairman who might either be one of themselves or an independent outside authority, the Commissioner of Labour for instance.

252. In Chapter III we consider the principle of a basic minimum ^{Minimum wage.} wage for the textile industry in Cawnpore, and lay down that no worker should get a wage of less than Rs.15 per month of 26 working days (para. 98). This limit will operate really in the case of the unskilled workers who in some mills draw even less than Rs.10 per month.

253. In Chapter IV we deal with the desirability of standardization of ^{Standardization of wages.} wages and ask the Employers' Association to take up this question (para. 102). Standard designations for various occupations should first be laid down and duties attaching to them defined as precisely as possible (para. 103). It should then be possible to take up the question of the standardization of wage rates which should provide for automatic adjustments required by variable factors of work (paras. 104 and 105). We are opposed to mere standardization of wages as distinguished from rates as it cannot provide the stimulus which is necessary for a workman to increase his efficiency (para. 106).

254. In Chapter V we state what we understand by "rationalization" ^{rationalization.} and describe the extent to which rationalization has taken place in the Cawnpore textile industry. We advocate the adoption of rationalization and intensification schemes on condition that the workers' interests are duly safeguarded (paras. 113 and 116). Any attempt at rationalization should be preceded by the determination of a standard allocation of work for each occupation, so that it may be possible to judge at what point intensification begins (para. 117). Then it will be necessary to lay down principles both as regards conditions preliminary to the introduction of efficiency schemes and the mode of remunerating the extra work involved (para. 118). All these matters should be considered by the Employers' Association in close collaboration with the representatives of labour without whose active help even the soundest rationalization scheme may fail. The next point that we urge is that the adoption of the various efficiency schemes in a mill should be gradual, so that the resulting unemployment is reduced to a minimum (para. 119). Given an atmosphere of peace and good-will, we anticipate that the industry will expand and be in a position to re-employ workers discharged in consequence of rationalization. Where, however, such absorption is not immediately possible, we recommend that the workers, who have put in at least two years' service should be paid an unemployment benefit of a fortnight's wages for every year of service (para. 119).

255. In Chapter VI we examine the various shift systems prevailing in ^{Shift systems.} Cawnpore, and condemn the overlapping and multiple systems (para. 130). The majority of the mills have two straight shifts, and we consider that the others should fall into line.

256. We consider night work to be a necessary evil, but to alleviate its rigorous we recommend if possible the adoption of the Japanese hours of work and the replacement of the night shift by what is called an "afternoon shift." (para. 133).

257. Chapter VII deals with the question of recruitment of labour. We ^{Recruitment.} find that the existing methods lend themselves greatly to the evils of bribery and corruption and urge the complete dissociation of mistries from recruitment (para. 136). We recommend the establishment of a Labour Exchange under Government control which would provide employment to applicants

on demand from factories (paras. 139 and 140). In the matter of recruitment of labour we lay emphasis on the questions of physical fitness, educational qualifications and technical training. Recruitment should, ordinarily be preceded by a preliminary medical examination and arrangements should be made for a periodical medical examination of all permanent workers (para. 142). We think that some kind of educational test is desirable particularly in the case of child and adolescent labour (paras. 143). A part-time course of technical instruction for workers seeking permanency will, we consider, be extremely desirable (para. 144).

Terms of
employment.

258. Next we turn to terms of employment and urge that a uniform set of rules applicable to all mills should be evolved by the Employers' Association (para. 146). It should be made clear in the rules that active membership of a Trade Union will not stand in the way of a worker either in regard to his recruitment or promotion (para. 146). Another matter on which we lay emphasis is the display of wage rates on the notice board by all mills. This should be made obligatory in the rules made by the Government under the Payment of Wages Act (para. 147). We support the proposal that every worker should be given a wage card at the end of each wage period (para. 148).

Objectionable
punishments.

259. In Chapter VIII we condemn the practice of "forced leave" resorted to by practically all the mills as a mode of punishment (para. 150). In a group of mills under one employer we found that three differential rates of payment have been introduced for the same work, one for "good quality" another for "indifferent quality" and a third one for "poor quality". Payment is made at the end of the wage period at one of the three rates at the discretion of the employer. This practice, in our opinion, is a gross violation of the Payment of Wages Act, and should be abandoned at once (para. 152). As regards "playing off" we think that it should be limited to two days at a time and twelve days in a year. If this limit is exceeded, we consider it would be fair to give the worker 50 per cent. of the normal wages for each extra day (para. 151).

Dismissal.

260. On the thorny question of dismissal we argue that just as the employers' right to fine has been limited by the Payment of Wages Act, dismissals should be restricted to gross misdemeanour or wilful and serious neglect of duty. In our view, it is of the utmost importance that the workers should be satisfied that the punishment of dismissal when inflicted is justified. A dismissed worker should have the right of having his case taken up by his Trade Union with the mill concerned. The services of the Labour and Conciliation Officers may be utilized at a later stage, if necessary. If on investigation a dismissal is found to be unjust and the employer cannot be persuaded to reinstate the worker, the Conciliation Officer should have the power to convert it into a discharge and ask the employer to pay compensation either at the rate of 15 days' wages for every year of service or a lump amount not exceeding six months' wages. He should also have the power to award at his discretion the full or part of the wages for the period subsequent to dismissal (para. 154).

Leave with pay.

261. In Chapter IX we deal with the question of leave and recommend that a provision should be made for 15 days' "privilege" leave with full pay for workers with not less than two years' continuous service to their credit. In addition such workers should also be eligible to get 15 days' "sick" leave on half pay. This should be converted into full pay for those whose period of service extends beyond five years (para. 161). We justify this recommendation on the grounds that it will promote contentment and efficiency in the

workers, reduce the evil of absenteeism, and help to build up a permanent labour force without an undue burden on the industry.

262. Chapter X deals with the general working conditions. We recommend greater facilities regarding supplies of drinking water (para. 167), better cooling and humidifications arrangements (para. 169), provision of resting places (para. 170); and dining sheds (para. 172); and 60 holidays in a year (para. 176). We conclude by pointing out the urgent necessity of increasing the strength of the factory inspectorate by the addition of two whole-time assistant factory inspectors (para. 177). Working conditions.

263. In the next chapter we impress on the employers' the desirability of placing no obstacles in the way of a Workers Union, and examine in some detail the constitution of the Mazdur Sabha. We make various recommendations regarding its reorganization particularly with regard to the method of election (para. 182), representation of various interests, (para. 183), composition of the Executive Committee (para. 191), and declaration of strikes (para. 195). Mill committees should, in our opinion, be given a definite place in the constitution, but should not be empowered to take any independent action (para. 190). In our opinion, contacts should be fostered between employers and workers and not brought about only when there is a dispute to settle. Labour organization.

264. In Chapter XII we discuss the housing problem. We begin by describing the housing accommodation at present available to the factory workers through various agencies. The first problem is to improve or reconstruct the existing workmen's dwellings which fall below the minimum standard of health and sanitation. For this purpose, the Improvement Trust should be given adequate powers by an amendment of section 25 of the United Provinces Town Improvement Act in the manner they have asked for (para. 209). The second and the more important problem is to construct new dwellings which should be available to workmen on rent. This work should also, in our opinion, be entrusted to the Improvement Trust (para. 210). For this purpose it will be necessary to finance the Trust, to give it the power to collect rents as a tax, and to exempt Trust property meant solely for the use of workers from municipal taxation (para. 212). We recommend that the Government should float a loan of rupees fifty lakhs and place a sum of rupees ten lakhs every year for five years at the disposal of the Trust (para. 211). In our opinion, this will not be a losing, if not a profitable, venture, and at the end of five years about 12,000 houses providing accommodation to approximately 40,000 persons will be available. Housing.

265. We would prefer facilities for constructing workmen's houses being given to the Improvement Trust rather than to the employers or other private persons with the proviso that there should be some representative of the workers on the Trust (paras. 219 and 213). We say further that the facilities for purchasing houses should be restricted to genuine house-building co-operative societies (para. 212).

266. In Chapter XIII, we deal with the various aspects of labour welfare work. We point out what has hitherto been done by the employers and the Government and urge the establishment of a welfare council containing the representatives of various institutions interested in this work (para. 231). We lay emphasis on maternity and child welfare work and urge the necessity of a sickness insurance scheme on a contributory basis. We also lay down the frame work of a contributory Provident Fund scheme. All workers getting Rs.15 per mensem or over will contribute half-an-anna per rupee of the wages earned and the employers will add an equal amount. No worker will be entitled to receive the employers' contribution until he has Labour welfare.

put in at least ten years' service or is discharged earlier for physical disability or as a consequence of rationalization (para. 236).

267. For the protection of indebted workers, we recommend a measure on the lines of the Central Provinces Protection of Debtors' Act, 1937, and the formation of co-operative societies for cheap credit (para. 237).

268. We also advocate the formation of co-operative stores in each mill and the establishment of canteens (para. 238).

269. In Chapter XV we urge on the Government the desirability of maintaining and publishing detailed labour and industrial statistics. We recommend the establishment of a regular Labour Office on the lines of the Bombay Labour Office (para. 240), and append a detailed list of subjects under which statistics should, in our opinion, be collected.

270. Having thus outlined our proposals we now proceed to assess, as far as practicable, the burden that they are likely to place on the textile industry in Cawnpore.

271. It is not possible to say with great accuracy what the financial effect of our wage increment proposal will be. But as pointed in para. 81 on a rough calculation it will enhance the wage bill by between 10 and 12 per cent. The increments that we have proposed vary from 10 pice in the rupee to 3 pice. The lower the wages the greater the increase and the vast majority of workers get below Rs.30, but the wage bill of the better paid workers is comparatively higher. If on an average the increment is assumed at 7 pice in the rupee, the additional cost will be about 11 per cent. of the present labour costs.

272. The burden of our proposal of a basic minimum of Rs.15 per mensem will be very light. Those getting Rs.13 and over will be covered by the wage increment proposal, and only those getting below Rs.13 will be affected by the minimum. The percentage of such workers will not be more than 4, and if their average earning is assumed to be Rs.12 they will get an increase of Rs.3. The addition to the wage bill should not therefore exceed $4 \times 3/12$ or 1.0 per cent.

273. There are no data on which we may calculate the effect of our proposal to give an unemployment benefit to the workers discharged as a result of rationalization. The number of workers so discharged will not be appreciable and in any case it will be only the newest workers who will be discharged. We think it is safe to say that this proposal will impose only an insignificant addition to the wage bill.

274. As we have shown in Chapter IX, our leave proposals will add to the wage bill about 6 per cent. Together with the restrictions placed on playing off, the addition may be said to be 6 per cent.

275. The cost of our Provident Fund scheme should be about 2.5 per cent. of the present wage bill. The employers will have to contribute half-anna per rupee of the wages earned. This gives an addition of 3.1 per cent. to the labour costs, but the burden will be lightened on account of the restriction that only workers with a minimum of ten years' service will be entitled to the employers' contribution.

276. To sum up, as a result of all our proposals, the labour costs will be enhanced by about 21 per cent. As we have pointed out elsewhere, the labour costs in Cawnpore are lower than those in Bombay and Ahmedabad, and if our analysis of the present position of the Cawnpore industry is at all correct, we are confident that this burden will be easy to bear. In addition to this increase in the wage bill, there will be some rise in the cost of production

owing to the reduction in the possible number of working days to 305. We cannot assess it exactly, but it should not be appreciable.

277. Before concluding we wish to make it clear that our proposals apply both to cotton and woollen industries. We have not examined the case of other industries and have therefore been unable to frame any specific proposals with regard to them.

J. NIGAM,
Secretary.

RAJENDRA PRASAD,
Chairman.

S. K. RUDRA,
Member.

B. SHIVA RAO,
Member.

The 4th April, 1938.

APPENDIX I

Agreement, dated the 9th August, 1937, between the Employers' Association of Northern India and the Cawnpore Mazdur Sabha

THE strike situation at Cawnpore was further discussed today and the terms suggested by the Mazdur Sabha were considered. The following terms were accepted by the representatives of the Northern India Mill-owners' Association as well as by the office-bearers of the Mazdur Sabha and Labour leaders of Cawnpore :

(1) The Mazdur Sabha shall be recognized by the Mill-owners as a duly constituted organization to represent the factory labour of Cawnpore.

(2) There shall be no victimization of workers for the active participation in strike or in normal Union activities.

(3) The Mill-owners shall continue to stop bribery, maltreatment and dismissal by the jobbers.

(4) Wage rates shall be displayed in the mills and the rates for each variety and count shall be made known to each worker before he is required to begin work on that particular variety or count.

(5) Each worker shall be supplied with a card showing the rates of wages for each variety and the total produce of the same to be stated indicating the total earning.

(6) Wages shall be distributed to the workers one by one and each worker shall be given opportunity to examine the coins and money received by him.

(7) There shall be no overtime work without payment.

(8) All workers joining the work within five days of the opening of the mill shall be employed.

(9) The existing practice, according to which wages are distributed in one or two days fortnightly shall be maintained wherever it obtains at present, and as regards other mills wages will be paid up in not more than three consecutive days every fortnight.

(10) All notices issued by the company shall be written and placed on its notice-board.

(11) There will be no work on Sundays during the pendency of the inquiry and the question as to whether Sundays should be observed as holidays after the completion of the inquiry, irrespective of any holiday in the week, shall also be referred to the Committee of Inquiry. In the meanwhile, the question may be further discussed between the Mill-owners' Association and the Mazdur Sabha and whenever they agree any mill may be worked on any Sunday even during the pendency of the inquiry. The provision that no work need be done on Sundays during the pendency of the inquiry should not prejudice the inquiry into the question for the future.

(12) The question of short shifts and the proposal that every worker shall be continuously employed for ten hours with an interval of one hour shall also be referred to the Committee of Inquiry.

(13) Workers dismissed during the last two months for participating in strikes or other Trade Union activities shall be reinstated in their original posts.

(14) No wage cuts, direct or indirect, nor any further intensification shall take place pending the report of the Committee of Inquiry.

(15) If any dispute arises regarding the execution of the terms of this Agreement, it will be referred to the Committee of Inquiry to be appointed by the Government.

(16) There shall no strike without due notice and none during the pendency of the inquiry.

(17) The mill-owners will not make any rule prejudicial to the general conditions of labour without reasonable notice to the Mazdur Sabha.

(18) An inquiry committee consisting of one representative of the Mazdur Sabha, one representative of the employers and such number, not exceeding three, as may be nominated by Government, shall be appointed to inquire into—

(a) the question of wage cuts,

(b) the percentage of increase in wages in case the wage cut is established,

(c) the question of increase in wages in case they are found to be too low irrespective of whether or not there has been a wage cut,

(d) the schemes of intensification of labour introduced or intended to be introduced by the mill-owners and ways and means of safeguarding the rights of workers in this connexion,

(e) the general condition of labour in factories,

(f) the working of the jobber system and the advisability or otherwise of abolishing the same, and

(g) the question of emergency leave with pay for 15 days in a year.

(The Committee to submit its report within two months of the date of appointment.)

(19) The strike will be called off and labourers shall return to work by Tuesday morning (August 10).

(20) The above Agreement shall apply to all the mills and mill-workers in Cawnpore.

The terms of reference to the Committee of Inquiry shall be settled by the Government and it will be open to them to refer any matter or matters besides those mentioned above to the said committee.

HARIHAR NATH SHASTRI,

President,

Cawnpore Mazdur Sabha.

S. S. YUSUF,

Secretary,

Mazdur Sabha.

ARJUN ARORA,

RAJA RAM SHASTRI.

Joint Secretary,

Mazdur Sabha.

The above terms are the outcome of an undertaking intimated on the 8th August, 1937, on behalf of the Employers' Association of Northern India to the Hon'ble the Prime Minister personally and having been submitted to the Association by the Prime Minister are accepted by the Employers' Association of Northern India.

The Association wish to point out that clauses nos. 3, 6, 7 and 10 have continually been adhered to by the employers in the past and involve no change in procedure. Accordingly it is not apparent why these points have been raised at all.

H. W. MORGAN,

Secretary.

T. GAVIN JONES,

Chairman.

9-8-'37.

APPENDIX II

Questionnaire for an inquiry into the alleged over-production of sugarcane in the United Provinces

I—GENERAL

- (1) What are the causes of the recent expansion of the area under sugarcane? In this connexion please indicate the relative importance of—
- (i) introduction of improved varieties of sugarcane,
 - (ii) the provision of additional irrigation facilities, e.g., the tube-well zone, the Fyzabad canal, etc.,
 - (iii) the increased demand for sugarcane by factories,
 - (iv) the favourable prices of *gur*, and
 - (v) the fixation of minimum price of cane by Government?
- (2) Please compare the expansion of the area under sugarcane in places where there is demand for cane from sugar factories with that in areas where there is no such demand.
- (3) To what extent (if any) is there overproduction of sugarcane in your district/locality? At what rates were cane, *gur*, *rab* and juice sold in the season 1936-37? How much cane or *gur* remained unsold?
- (4) Is sugarcane the most profitable crop in your district/locality? What other crops are about equally profitable? Is there any tendency among cultivators to replace sugarcane by any such crops? If so, by which?
- (5) Please give figures of area under sugarcane in your district/locality during the three years from 1934-35 to 1936-37, under the following heads.
- (a) improved varieties;
 - (b) *desi* varieties;
 - (c) first ratoon;
 - (d) second and subsequent ratoons.
- (6) Please estimate the importance of sugarcane among the profit-yielding crops in your locality. Are there any instances of cultivators not making a profit/suffering a loss from the cultivation of cane in a normal year?
- (7) Considering the conditions in your district/locality do you think that a policy of discouragement of any extension of sugarcane production is desirable or necessary? Do you consider that any restriction of the present sugarcane area in your district/locality desirable or necessary? If so, what methods of discouragement or restriction would you propose and what other crops, if any, would you suggest for encouragement in place of sugarcane?

II—DISPOSAL OF SUGARCANE

- (8) Is local cane sold chiefly to factories or converted into *rab/gur*? If both practices are current, please give approximately their relative importance and the margin of profit from each.

A—Sale to Factories

- (9) Is cane sold to factories because its sale is more profitable than its conversion into *rab/gur* or because it provides the cultivators with ready money or for some other reason or reasons?
- (10) What is the maximum distance to which cane is transported (a) by rail, (b) by road for sale to a factory and what is the cost of such transportation?

(11) What price per maund of cane is actually obtained from the factory? How does it compare with the minimum price fixed by Government?

(12) Are there any instances of factories refusing to buy cane brought to the factory gate? Does the cane seller in such cases return to the village with his cane or sell it at a lower price? If the latter, what is this lower price and from whom is it obtained?

(13) Are there any other expenses, difficulties or hardships associated with the sale of cane to factories?

B—Conversion into *rab* or *gur*

(14) Please state the quantitative relation between cane and *rab/gur*. What is the cost of manufacturing the latter from cane?

(15) What price does the cultivator usually obtain for *rab/gur*? What are the marketing charges which he has to bear? How does the net price received by the cultivator compare with the wholesale price of *rab/gur*?

(16) Are there any special difficulties or hardships associated with the sale of *rab/gur* in the *mandi* (or in the village), e.g. underweighment, price-cutting, etc.?

(17) Please name the important places, if any, to which *gur*, *rab*, molasses, jaggery, etc. are exported from your district/locality and estimate the quantity exported to each during the three years from 1934-35 to 1936-37 (a) by rail and (b) by road.

(18) Please give an estimate of the quantity of *gur*, *rab*, molasses, jaggery, etc. exported by road during each of the three years from 1934-35 to 1936-37, to places outside the United Provinces from or through one of the following districts situated on the border of the province:

- (i) Dehra Dun, (ii) Saharanpur, (iii) Muzaffarnagar, (iv) Meerut, (v) Bulandshahr, (vi) Aligarh, (vii) Muttra, (viii) Agra, (ix) Etawah, (x) Jalaun, (xi) Jhansi, (xii) Hamirpur, (xiii) Banda, (xiv), Allahabad, (xv) Mirzapur, (xvi) Benares, (xvii) Ghazipur, (xviii) Ballia and (xix) Gorakhpur.

(19) To what extent have exports of *gur* from your district/locality increased or decreased during the last ten years? What are the tendencies for the near future? What factors are responsible for the increase/decrease in the past and for the future tendencies?

(20) Is there any scope for increasing the exports of *gur* to places outside the United Provinces? If so, to what extent? Please suggest means by which such an increase can be secured.

III—DIRECT CONSUMPTION OF CANE AND GUR

(21) Please estimate the average monthly consumption of *gur* in your district/locality by (a) an adult and (b) a child (below 15 years) during (i) winter (November to February), (ii) summer (March to June) and (iii) rains (July to October).

(22) Is *gur* or cane fed to cattle, horses or other animals in your district/locality? If so, please give an estimate of the average quantity of *gur*/cane consumed per animal of each class in one year.

(23) Please estimate the amount of sugarcane used for (i) sets and (ii) chewing per acre of area under sugarcane in your district/locality.

(24) If the cost of manufacture of *gur* could be decreased by mechanical means such, for instance, as the introduction of cheap power crushers in areas where widespread electricity is available, would cultivators manufacture more *gur*?

(25) Would the consumption of *gur* increase (i) if the price were to fall as a result of (a) decreased manufacturing costs or/and (b) increased supplies of *gur* due to greater production of cane in the sugarcane areas, (ii) if the quality were improved by adopting better methods of manufacture?

APPENDIX III

Names of witnesses who appeared before the Labour
Inquiry Committee*On behalf of the Employers' Association of Northern India, Cawnpore*

- (1) Sir T. Gavin Jones, President, Employers' Association, assisted by Messrs. Carnegie and Tosh.
- (2) Mr. H. A. Wilkinson, Managing Director, Elgin Mills, assisted by Mr. S. Catterall, Manager (3 days).
- (3) Mr. J. Tinker, Managing Director, Cawnpore Cotton Mills, assisted by Mr. B. Shaw, Manager.
- (4) Mr. Padampat Singhania, representing the Juggilal Kamlapat Group of Mills (4 days).
- (5) Mr. G. D. Price, Managing Director, Muir Mills, assisted by Mr. Rhodes, Weaving Master.
- (6) Rai Bahadur L. Bhagwan Das, Proprietor, Messrs. Bevis & Co., assisted by Mr. P. L. B. Ridsdale, Manager.
- (7) Mr. H. Horsman, Managing Director, Swadeshi Cotton Mills.
- (8) Mr. C. A. Watt, Managing Director, Cawnpore Woollen Mills, assisted by Mr. Bancroft.
- (9) Mr. Ali Ahmad, Mistri, Cawnpore Cotton Mills.
- (10) Mr. Abdul Latif, Mistri, Cawnpore Cotton Mills.
- (11) Mr. Mohammad Khan, Mistri, Cawnpore Cotton Mills.

On behalf of the Mazdur Sabha, Cawnpore

- (12) Mr. Harihar Nath Shastry, President, Mazdur Sabha.
- (13) Mr. Shitla Prasad Saxena, M.A., Lecturer, Lucknow University, Government Adviser to Mazdur Sabha.
- (14) Laloo, employed in the weaving department of the Elgin Mills.
- (15) Shivadhar, working on a winding machine in the Elgin Mills.
- (16) Ram Charan, employed in the weaving department of the Cawnpore Textile Mills.
- (17) Zawwar Husain, employed, in the weaving department of the Cawnpore Woollen Mills.
- (18) Mangli Prasad, employed in the drawing department of Cawnpore Cotton Mills.
- (19) Musahib Ali, ex-employee of the Lakshmi Ratan Cotton Mills. (His evidence could not be completed and it was decided to ignore it altogether).

On behalf of the Municipal Board, Cawnpore

- (20) Mr. B. P. Srivastava, Chairman, assisted by Dr. S. N. Tewari, Executive Officer.

On behalf of the Improvement Trust, Cawnpore

- (21) Rai Babadur L. Sri Narain, Executive Officer.

On behalf of the British India Corporation

- (22) Mr. A. L. Carnegie, Chairman of the Board of Directors.

On behalf of the Department of Factories and Boilers, United Provinces

- (23) Mr. Abdul Hai, officiating Chief Inspector of Factories and Boilers, United Provinces.

APPENDIX IV

Category no. 1—Opener attendants

N.G.=Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	8	14 18 8	91	91	118'825	1937	10	14 14 7	1'02	89	149'114
B	..	Not working	..	Started	1935	..	1937	9	17 0 0	1'16	N.G.	34'000 April given.
C	1933	4	17 9 7	1'08	1'0	70'406	1937	4	17 14 0	1'22	N.G.	71'500
D	1931	15	18 0 0	1'11	95	70'000	1937	10	17 10 6	1'21	86	176'562
E	1929	12	16 14 0	1'04	95'5	202'500	1937	12	17 1 0	1'17	96'5	204'750
F	..	Not working	..	Started June,	1933.	..	1937	9	11 6 0	78	N.G.	22'750
G	1929	18	15 10 0	96	..	281'250	1937	18	15 10 0	1'07	..	281'250
H	1929	N.G.	19 8 0	1'20	N.G.	..	1937	N.G.	19 8 0	1'33	N.G.	..
I	1929	6	14 1 8	87	N.G.	94'468	1937	7	18 12 8	94	N.G.	96'350
J	1930	2	15 6 0	95	50	30'750	1937	2	16 0 0	1'09	100	32'000
K	1934	2 Feeder	16 8 0	1'02	N.G.	38'000	1937	2 Feeder	16 8 0	1'13	N.G.	38'000
		3 Front	18 0 0	1'11	..	54'000		3 Front	18 0 0	1'22	..	86'000
Total columns 3 and 7	..	70	..	..	..	1144'999	..	71	..	..	..	1,137'265

Result of 7 ÷ 8 average per person reported 16'35
 Result of 7 × 16 (to give annas) ÷ 260 to give annas per hour 1'036
 X by 16 to give annas ÷ 264 = annas per hour 16'08
 Decrease 8'94 (annas per hour)
 Increase 1'96

Category no. 2—Scutcher tenters

N. G.—Information not given

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1980	16	18 5 0	1'00	91	261'000	1987	17	15 12 11	1'08	91	268'728
B	..	Not working	..	..	..	..	1987	1	17 0 0	1'16	N.G.	17'000
C	1989	..	17 12 2	1'09	N.G.	108'562	1937	6	17 14 0	1'22	N.G.	143'000
D	1981	9	18 0 0	1'11	95	162'000	1987	9	17 10 6	1'21	96	158'906
E	1929	8	16 14 0	1'04	100	135'000	1987	8	17 1 0	1'17	100	138'500
F	..	Not working	..	..	..	..	1987	6	11 6 0	78	N.G.	68'250
G	1929	31	15 10 0	96	N.G.	481'375	1987	31	15 10 0	1'07	N.G.	481'375
H	1929	N.G.	19 8 0	1'20	N.G.	..	1987	N.G.	19 8 0	1'33	N.G.	..
I	1929	27	15 4 9	94	N.G.	418'015	1937	28	14 15 8	1'02	N.G.	418'687
J	1980	9	14 15 0	92	70	134'437	1937	9	14 0 0	96	95	128'000
K	1984	7	18 0 0	1'11	N.G.	128'000	1937	7	18 0 0	1'28	N.G.	128'000
Total columns 3 and 7	..	113	..	..	..	1,822'889	..	121	..	..	..	1,947'441

Result of 7÷3 average per person reported .. 16'12
 Result of 7×16 (to give annas) ÷ 260 to give annas per hour .. 992

× by 16 to give annas ÷ 23 = annas per hour .. 13'70
 Decrease 8'36 per cent. (annas per hour) .. 1'074
 Increase

Category no. 3—Lap carriers

N.G.=Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	13
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 8 and 4 multiplied
			Rs. s. p.	%		Rs.			Rs. s. p.			Rs.
A	1920	12	15 15 7	'98	94	191'687	1927	18	14 2 4	'97	85	254'624
B .. .. .	..	Not working	..	..	..	..	1937	8	1 0 0	1'00	N.G.	96'030
C	1929	7	16 5 9	1'00	N.G.	114'818	1927	8	17 7 6	1'19	N.G.	189'750
D	1921	12	17 14 0	1'10	96	214'570	1927	8	21 8 6	1'54	95	180'250
E	1929	17	20 14 6	1'29	94'8	855'406	1927	16	22 8 6	1'52	98'8	855'500
F .. .. .	..	Not working	..	..	..	..	1927	8	11 6 0	'78	N.G.	84'125
G	1929	16	13 10 0	'96	N.G.	250'000	1927	16	15 10 0	1'07	N.G.	281'275
H	1929	N.G.	19 8 0	1'20	N.G.	..	1927	N.G.	19 8 0	1'88	N.G.	..
I	1929	8	15 4 0	'94	N.G.	122'000	1927	10	14 14 6	1'02	N.G.	149'082
J	1920	6	15 4 0	'94	72	91'500	1927	6	18 9 0	'98	81	81'875
K	1924	8	16 8 0	1'02	N.G.	49'500	1927	4	16 8 0	1'18	N.G.	66'000
Total columns 8 and 7	..	81	..	..	..	1,888'936	..	94	..	..	..	1,591'061

Part of a team.

Results of 7÷8 average per person reported 17'15
 Results of 7×16 (to give annas) ÷ 260 to give annas per hour 1'065

× by 16 to give annas ÷ 234 = annas per hour 16'62
 Divide by 9'67 per cent. (annas per hour) 1'157
 Increase

Category no. 4—Carding machine attendants

N. G.—Information not given.

440

UNITED PROVINCES GAZETTE, 23RD APRIL, 1938

[PART VIII

1			2	3	4	5	6	7	2	3	4	5	6	7
Name of mill			1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per centage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per centage attendance	Total columns nos. 3 and 4 multiplied
					Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	..	..	1930	12	11 6 0	70	92	136'500	1927	16	10 15 5	75	88	175'416
B	..	..	..	Not working	..	..	..	..	..	6	16 0 0	1'09	N.G.	96'000
C	..	..	1933	9	16 11 6	1'08	N.G.	150'468	1937	14	17 7 6	1'19	N.G.	244'552
D	..	..	1931	16	17 14 0	1'10	96	260'000	1937	14	22 8 6	1'54	95	315'437
E	..	..	1929	15	20 14 6	1'29	94'3	318'193	1937	14	22 3 6	1'32	93'3	311'062
F	..	..	..	Not working	..	..	..	..	..	5	11 6 0	78	N.G.	55'875
G	..	..	1929	31	15 10 0	96	N.G.	484'375	1937	29	15 10 0	1'07	N.G.	453'125
H	..	..	1929	N.G.	17 8 0	1'08	N.G.	..	1937	N.G.	17 8 0	1'20	N.G.	..
I	..	..	1929	26	15 4 3	94	N.G.	398'906	1937	24	14 14 9	1'02	N.G.	358'124
J	..	..	1930	8	10 14 0	67	96	87'030	1937	8	10 11 0	73	94	85'550
K	..	..	1934	9	16 8 0	1'02	N.G.	148'500	1937	9	16 8 0	1'13	N.G.	148'500
Total columns 3 and 7			..	126	..	..	..	2,003'342	..	139	..	..	..	3,244'601

Result of 7÷3 average per person reported 15'90
 Result of 7×16 (to give annas) ÷ 260 to give annas per hour '978
 X by 16 to give annas ÷ 231=annas per hour 16'15
 Decrease
 Increase 12'83 percent. (annas per hour) 1'104

Category no. 5 - Fly gatherers.

N. G. = Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total, columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1980	4	13 6 1	95	87	81'590	1937	4	15 6 9	1'05	100	61'687 98'000
B	..	Not working	..	..	..	..	1937	6	16 0	1'00	N.G.	85'938
C	1938	9	16 14 1	1'04	N.G.	83'768	1937	2	17 15 6	1'23	N.G.	133'187
D	1931	10	17 14 0	1'10	96	178'750	1937	6	22 8 6	1'54	95	177'750
E	1929	9	20 14 6	1'29	94'3	188'156	1937	8	23 3 6	1'52	93'3	22 750
F	..	Not working	..	..	..	..	1937	2	11 6 0	'78	N.G.	125'000
G	1929	7	15 10 0	'96	N.G.	109'375	1937	8	15 10 0	1'07	N.G.	..
H	1929	N.G.	17 8 0	1'08	N.G.	..	1937	N.G.	17 8 0	1'20	N.G.	84'468
I	1929	5	14 6 6	'83	N.G.	72'081	1937	6	14 1 3	'96	N.G.	20'250
J	1930	2	16 4 0	1'00	100	82'500	1937	2	14 10 0	1'00	100	33'000
K	1934	1	16 8 0	1'02	N.G.	16'510	1937	2	16 8 0	1'13	N.G.	801'030
Total columns no. 3 and 7	..	40	..	..	..	692'598	..	46	..	..	..	..

Result of 7 ÷ 8 average per person reported .. 17'31
 Result of 7 × 16 (to give annas) ÷ 260 to give annas per hour .. 1'065
 × by 16 to give annas ÷ 260 = annas per hour 17'41
 Decrease 1'180
 Increase 11'73 per cent. (annas per hour)

Category no. 6 - Strippers and grinders

N. G. = Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	18	16 1 10	'99	91	290'062	1937	16	14 8 6	'99	87	232'500
B .. ..	..	Not working	..	..	..	..	1937	2	20 0 0	1'37	N.G.	40 000
C	1938	10	16 12 8	1'08	N.G.	167'987	1937	10	17 14 0	1'22	N.G.	178'750
D	1931	14	17 14 0	1'10	96	250'250	1937	10	22 8 6	1'54	95	225'312 } Part of a team.
E	1929	7	20 14 6	1'29	84'3	146'843	1937	7	22 8 6	1'52	93'3	155'531
F .. ..	..	Not working	..	..	..	..	1937	3	11 6 0	'78	N.G.	84'125
G	1929	42	16 4 0	1'00	N.G.	682'500	1937	39	16 4 0	1'11	N.G.	633'750
H	1929	N.G.	19 8 0	1'20	N.G.	..	1937	N.G.	19 8 0	1'38	N.G.	..
I	1929	27	15 1 6	'98	N.G.	407'531	1937	25	14 12 0	1'01	N.G.	366'750
J	1950	9	14 10 0	'90	76	131'025	1937	9	18 15 0	'95	84	125'437
K	1934	9	18 0 0	1'11	N.G.	162'000	1937	9	18 0 0	1'23	N.G.	162'000
Total columns 3 and 7	..	136	..	..	..	2'233'248	..	130	..	..	..	2'156'155

Result of 7+3 average per person reported 16'46 X by 16 to give annas = 264 = annas per hour .. 16'59
 Result of 7 x 16 (to give annas) + 360 to give annas per hour .. 1'018
 Decrease 11'94 per cent. (annas per hour) 1'184

Category no. 7—Drawing tenters

N. G.=Information not given.

1	2	3	4	5	6	7	8	9	10	11	12			
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-centage attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-centage attendance	Total columns no. 8 and 4 multiplied		
			Rs. a. p.			Rs.			Rs. a. p.			Rs.		
A	1930	41	80 14 0	1'90	95	1,265'875	1937	59	25 1 9	1'72	94	1,481'458		
B	..	Not working	..	..	..	..	1937	16	28 8 6	1'93	N.G.	451'500
C	1933	28	89 5 11	2'43	N.G.	1,102'437	1937	32	40 15 5	2'80	N.G.	1,811'078		
D	1931	48	19 8 8	1'18	90	921'749	1937	36	27 5 6	1'87	98	984'375		
E	1929	45	28 6 0	1'81	97'4	3,051'875	1937	6	28 12 0	1'61	98'8	172'731. New.		
F	..	Not working	..	..	..	..	1937	(11) 30	24 4 9	1'88	98'7	728'008. Old.
G	1929	77	95 5 0	1'55	N.G.	1,949'062	1937	86	27 7 0	1'87	N.G.	2,359'625		
H	1929	N.G.	27 7 0	1'69	N.G.	..	1937	N.G.	27 18 0	1'80	N.G.	..		
I	1929	100	19 14 8	1'92	N.G.	1,939'062	1937	82	30 8 9	2'09	N.G.	2,524'848		
J	1930	21	82 15 0	2'09	98	631'687	1937	21	25 7 0	1'74	92	584'187		
K	1934	22	34 11 7	2'14	N.G.	763'937	1937	24	30 7 0	2'08	N.G.	730'500		
Total columns 8 and 7	..	352	..	..	..	9,735'674	..	401	..	..	..	11,392'188
Correction	..	To correct Elgin to 10 hours subtract					95'625	..	To correct Elgin to 9 hours subtract					163'942
Net total	..	..	..	..	..	9,640'049	..	..	..	..	..	11,228'186

Result of 7+8 average per person reported .. 25'23 X by 16 to give annas -284-annas per hour .. 28'00
 Result of 7+13 (to give annas) -250 to give annas per hour .. 1'653 Decrease 28'25 (annas per hour) .. 1'914
 Increase .. 1'914

NOTE—Elgin new machine rates are 10 per cent. lower than old machines yet earnings higher. Worked 11 hours in 1929 and 1937.

Category no. 8—Slubbing tenters

N. G.—Information not given.

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earnings per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earnings per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A .. .. .	..	14	30 14 0	1'80	88	432'560	1937	19	24 8 7	1'88	83	466'192
B	1980	Not working	..	..	..	..	1987	7	27 8 0	1'86	N. G.	190'812
C	1938	10	42 14 2	2'64	N. G.	428'859	1987	14	43 6 8	2'97	N. G.	607'891
D	1931	16	26 11 9	1'65	94	427'749	1937	12	37 15 9	2'60	95	455'812
E	1929	18	82 8 0	1'80	95'5	579'976	1937	(11)15	36 2 0	2'02	94'2	103'975
F .. .. .	..	Not working	..	..	..	..	1937	3	32 3 6	1'80	89'6	483'281
G	1929	20	24 14 0	1'53	N. G.	646'710	1937	8	15 10 11	1'07	N. G.	47'046
H	1929	[N. G.]	27 2 0	1'67	N. G.	..	1937	32	22 12 0	1'55	N. G.	728'000
I	1929	85	31 4 9	1'81	N. G.	745'890	1937	N. G.	29 8 0	2'02	N. G.	..
J	1930	7	32 11 0	2'01	93	228'812	1937	31	31 8 0	2'13	N. G.	966'812
K	1934	8	35 4 0	2'17	N. G.	282'000	1937	7	25 11 0	1'75	77	179'812
Total columns 3 and 7	..	134	..	..	..	3,771'18	..	152	..	..	..	4,526'695
Correction	..	To correct Elgin to 10 hours subtract	..	..	..	52'489	..	To correct Elgin to 9 hours subtract	..	..	..	107'572
Net total	..	..	..	..	..	3,713'696	..	..	..	..	..	4,419'023

Result of 7+3 average per person reported 27'75 X by 16 to give annas ÷ 234=annas per hour 29'07
 Result of 7x16 (to give annas) ÷ 260 to give annas per hour 1'707 Decrease 16'46 per cent. (annas per hour) 1'988

Category no. 9—Inter tenters

N.G. = Information not given

1	2	3	4	5	6	7	8	9	10	11	12	13
Name of mill	1920 year or nearest	Number employed	Average earnings	Annas earning per hour	Percent age attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percent age attendance	Total columns nos. 8 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1927	22	26 18 0	1'65	91	589'875	1927	27	20 15 6	1'44	87	559'156
B	..	Not working	..	..	..	..	1927	14	29 15 8	2'05	N.G.	419'848
C	1928	20	39 4 2	2'35	N.G.	765'236	1927	28	38 1 4	2'60	N.G.	1,068'487
D	1921	22	24 12 9	1'53	85	545'531	1927	(10)22	29 5 0	1'80	96	644'875
E	1929	31	32 0 0	1'79	90	992'000	1927	(11)29	28 10 9	1'63	92'9	881'484 (old)
F	..	Not working	..	..	..	..	1927	7	12 15 6	89	N.G.	90'654
G	1929	44	24 6 0	1'50	N.G.	1,072'500	1927	43	22 8 0	1'52	N.G.	954'082
H	1929	N.G.	22 15 0	1'41	N.G.	..	1927	G.	24 9 0	1'68	N.G.	..
I	1929	66	20 12 8	1'28	N.G.	1,370'531	1927	56	25 8 6	1'74	N.G.	1,439'750
J	1920	10	29 12 0	1'83	96	297'500	1927	10	22 14 0	1'53	88	228'763
K	1924	18	25 9 0	1'63	N.G.	478'125	1927	18	25 14 9	1'77	N.G.	466'528
Total columns nos. 8 and 7	..	238	..	..	..	6,111'338	..	254	..	..	..	6,698'804
Correction	..	To correct Elgin to 10 hours subtract	..	..	..	90'182	..	..	..	..	..	215'865
Net Total	..	..	..	..	..	6,021'146	..	..	..	..	..	6,482'689

Result of 7-8 average per person reported .. 25'34
 Result of 7 x 18 (to give annas) ÷ 260 to give annas per hour .. 1'593
 X by 16 to give annas ÷ 234 = annas per hour .. 15'54
 Increase .. 9'75 per cent. (annas per hour)
 .. 1'745

115

Category No. 10—Roving tenters

N. G.=Information not given

446

UNITED PROVINCES GAZETTE, 29th APRIL, 1938

[PART VIII

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1938 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent tags attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent tags attendance	Total columns nos 8 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	48	24 14 8	1'83	94	1,071'418	1937	44	19 11 0	1'35	88	866'250
B	..	Not working	..	..	..	..	1937	10	37 2 8	2'54	N.G.	37,666 Two frames per man, 1,675'406
C	1938	51	35 9 5	2'19	N.G.	1,815'297	1937	64	25 2 10	1'79	N.G.	1,237'500
D	1931	50	21 18 8	1'84	95	1,091'406	1937	(10)50	24 12 0	1'52	95	1,237'500
E	1939	72	25 5 0	1'42	91'8	1,532'500	1937	(11)69	26 13 9	1'50	93'8	1,852'286
F	..	Not working	..	..	..	..	1937	14	18 15 0	'95	N.G.	195'125
G	1939	85	20 8 0	1'26	N.G.	1,749'500	1937	99	18 5 0	1'25	N.G.	1,812'937
H	1939	N.G.	19 0 0	1'17	N.G.	..	1937	N.G.	20 9 0	1'41	N.G.	..
I	1939	117	20 8 8	1'24	N.G.	2,368'765	1937	121	28 0 0	1'57	N.G.	2,783'000
J	1930	20	25 2 0	1'55	88	502'500	1937	24	21 4 0	1'45	82	510'000
K	1934	49	27 8 1	1'69	N.G.	1,347'754	1937	51	19 9 9	1'34	N.G.	1,000'078
Total columns 8 and 7	..	487	..	..	..	11,757'188	..	546	..	..	..	13,805'268
Correction	To correct Elgin to 10 hours subtract					165'681	To correct Textiles to 9 hours and Elgin to 9 hours subtract					460'712
Net total	..	..	..	..	..	11,691'456	..	..	..	..	..	11,844'546

Result of 7-8 average per person reported. 23'80 X by 16 to give annas ÷ 231=annas per hour 21'09
 Result of 7 X 16 (to give annas) ÷ 260 to give annas per hour 1'465
 Decrease 1'22 per cent. (annas per hour) 1'483
 Increase

Lakshmi Rat an provide one boy to help. Paid for by the mill.

Category no. 11—Doffers (carding)

N. G.—Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	60	11 10 8	72	88	698.437	1987	60	11 4 6	77	80	676.875
B	..	..	Not working	..	..	..	1987	8	12 0 0	82	N.G.	95.000
C	1989	27	11 12 0	72	N.G.	317.250	1987	24	11 12 0	80	N.G.	299.500
D	1981	67	18 0 0	80	90	871.000	1987	50	18 0 0	89	91	650.000
E	1989	72	18 2 0	81	98	945.000	1987	69	18 8 6	90	92	912.098
F	..	..	Not working	..	..	..	1987	14	11 6 0	78	N.G.	159.250
G	1929	..	10 10 0	65	N.G.	Boys	1987	128	10 10 0	78	N.G.	1,306.875
H	1929	N.G.	12 12 0	78	N.G.	..	1987	N.G.	12 12 0	87	N.G.	..
I	1929	185	11 11 6	72	N.G.	1,582.031	1987	155	10 15 0	75	N.G.	1,695.812
J	1980	58	10 15 0	67	80	579.687	1987	63	10 11 0	78	88	566.437
K	1984	26	12 8 0	74	N.G.	312.000	1987	28	12 0 0	82	N.G.	296.000
Total columns 3 and 7		440				5,805.405		594				6,798.842

Result of 7 ÷ 8 average per person reported .. 12.08
 Result of 7 × 16 to give annas ÷ 260 to give annas per hour .. 742

× by 16 to give annas ÷ 260 = annas per hour .. 11.46
 Decrease 5.52 per cent. (annas per hour) .. 788
 Increase .. 788

Category no. 12—Dofers (spinning)

.N. G.=Information not given

1	2	3	4	5	6	7	8	9	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1929	74	11 13 7	73	92	876-832	1937	116	11 5 6	78	77	1,315-874
B .. .. .	..	Not working..	..	..	..	..	1937	24	20 0 0	1-87	N. G.	480-000
C	1933	122	12 1 2	74	N. G.	1,478-000	1937	166	12 1 11	88	N. G.	2,011-875
D	1931	80	14 5 6	78	90	1,147-500	1937	76	15 11 6	1-07	90	1,194-625
E	1929	51	15 10 0	86	95	843-750	1937	70	16 6 3	1-12	82-8	1,147-843
F .. .. .	..	Not working..	..	..	..	..	1937	20	11 6 0	78	N. G.	327-500
G	1929	94	11 14 0	73	N. G.	1,116-250	1937	103	11 14 0	81	N. G.	1,228-135
H	1929	N. G.	12 12 0	78	N. G.	..	1937	N. G.	12 12 0	87	N. G.	..
I	1930	135	11 11 6	72	N. G.	1,532-029	1937	155	10 15 0	75	N. G.	1,695-812
J	1930	All Mule spinning.	..	..	..	..	1937	..	All Mule spinning.	..	..	..
K	1934	58	12 0 0	74	N. G.	696-000	1937	60	12 0 0	82	N. G.	7,20-000
Total column nos. 3 and 7	..	617	..	..	..	7,785-321	..	790	..	..	..	10,015-654

Result of 7 ÷ 8 average per person reported. 12-63
 Result of 7 × 16 (to give annas) ÷ 260 to give annas per hour 771

× by 16 to give annas ÷ 234 = annas per hour 12-67
 Decrease
 Increase 12-45 per cent. (annas per hour) 8-67

Category no. 13—Siders (spinning)

N. G.—Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-centage attend-ance	Total columns nos. 3 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1930	120	17 13 0	1.09	90	2,137.500	1937	264	20 6 4	1.29	87	5,384.500
B .. ..	..	Not working..	..	..	..	..	1937	69	23 10 0	1.62	N.G.	1,630.125
C	1933	299	18 0 6	1.11	N.G.	5,383.187	1937	370	19 13 8	1.36	N.G.	7,344.813
D	1931	160	15 14 9	.98	87	2,547.489	1937	180	18 13 0	1.29	94	3,380.250
E	1929	103	15 10 0	.96	95	1,687.500	1937	108	21 8 9	1.45	93.2	2,353.811
F .. ..	..	Not working..	..	..	..	..	1937	58	12 6 0	2.35	N.G.	717.750
G	1939	220	16 4 0	1.00	..	3,675.000	..	..	16 4 0	1.11	..	4,562.500
			18 14 0	1.04	N.G.	4,125.000	1937	282	16 14 0	1.16	N.G.	4,768.750
H	1929	N.G.	18 12 (L)	.85	..	..	..	..	18 12 0	.94	..	L—Gaiter (Boys).
			19 0 (B)	1.17	N.G.	..	1937	N.G.	19 0 (B)	1.30	N.G.	B—Big Piecer.
I	1939	571	18 2 8	1.12	N.G.	10,358.286	1937	424	17 14 3	1.22	N.G.	7,655.824
J .. ..	..	All Mule spin-ning.	..	..	..	..	1937	..	All Mule spin-ning.	..	..	..
K	1934	198	19 2 6	1.18	N.G.	3,792.987	1937	198	19 2 6	1.31	N.G.	3,792.987
Total columns 3 and 7	..	1,676	..	..	..	29,530.682	..	1,958	..	..	..	36,805.985

Result of 7÷3 average per per-on reported .. 17.63 X by 16 to give annas÷234= annas per hour .. 1.184
 Result of 7X16 (to give annas)÷260 to give annas per hour .. 1.083 Decrease 12.71 per cent. (annas per hour) .. 1.088
 Increase

Category no. 14—Doubling tenters.

N. G.=Information not given.

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total, columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total, columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	26	16 8 4	1'02	94	429'541	1937	26	14 10 6	1'00	'91	381'082
B .. .. .	..	Not working	..	..	..	..	1937	..	Nil	..	..	..
C	1933	Nil	..	..	..	..	1937	..	Nil	..	..	..
D .. .. .	..	Nil	..	..	..	..	1937	..	Nil	..	..	..
E	1929	27	16 14 0	1'04	96	455'823	1937	29	17 1 0	1'17	89'5	494'812
F .. .. .	..	Not working	..	..	..	..	1937	3	12 7 11	'86	N.G.	87'484
G .. .. .	..	Figures not available.	..	..	..	..	1937	17	21 13 0	1'49	N.G.	370'012
H	1929	N.G.	19 10 6	1'31	N.G.	..	1937	N.G.	19 7 6	1'33	N.G.	..
I	1929	15	16 14 3	1'04	N.G.	358'859	1937	14	16 15 6	1'16	N.G.	237'562
J .. .. .	..	Nil	..	..	..	..	1937	..	Nil	..	..	..
K	1934	Seldom worked	..	..	..	..	1937	..	Seldom worked	..	..	..
Total columns 2 and 7	..	83	..	..	..	1,138'545	..	89	..	..	..	1,521'732

Result of 7÷3 average per person reported 16'74
 Result of 7 × 16 (to give annas) ÷ 260 to give annas per hour 1'080
 × by 16 to give annas ÷ 234 = annas per hour 17'10
 Decrease 18'50 per cent. (annas per hour)
 Increase 1'169

Category no. 15- Reelers

N. G.=Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total, columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 9 and 10 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1930	199	15 5 11	92	83	8,058*537	1937	198	10 5 5	71	88	1,995*888 Very little work.
B	..	..	Not working..	..	..	..	1937	18	12 14 0	88	N. G.	137*875
C	1938	..	Very few	..	..	..	1937	..	Very few.	..	..	..
D	1931	42	22 13 11	1*41	95	960*531	1937	Nil	..	..	..	..
E	1929	188	17 13 0	1*10	83*2	8,348*750	1937	285	15 8 0	1*11	86*1	8,320*450
F	..	..	Not working..	..	..	..	1937	11	16 4 10	1*12	N. G.	179*822
G	1929	159	12	77	N. G.	1,987*500	1937	215	11 4 0	77	N. G.	3,418*750 Very little work.
H	1929	..	Not working regularly.	..	..	..	1937	..	Not working regularly.	..	..	..
I	1929	812	11 9 3	71	N. G.	8,613*874	1937	869	8 8 0	58	N. G.	8,186*300
J	1930	100	25 14 0	1*60	89	2,587*500	1937	100	18 7 0	1*26	87	1,848*750 Less work.
K	1934	24	21 4 8	1*81	N. G.	510*374	1937	24	22 15 0	1*57	N. G.	551*624
Total columns 3 and 7	..	1,044	..	..	..	16,055*816	..	1,161	..	..	..	14,112*909

Result of 7-3 average per person reported .. 15*69
 Result of 7x16 (to give annas)-260 to give annas per hour .. 966

X by 16 to give annas-284= annas per hour .. 12*15
 Decrease 18*96 per cent. (annas per hour) .. 0*881
 Increase

599

121

Category no. 16—Grey winders (old type machines).

N. G. = Information not given.

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 8 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	96	12 7 4	76	82	1,195*999	1937	48	15 12 2	94	87	660*499
B .. ..	..	Not working	..	..	..	..	1937	40	20 18 6	1*48	N. G.	838*750
C	1933	98	19 15 10	1*23	N. G.	1,919*297	1937	100	19 9 10	1*34	N. G.	1,961*422
D	1935	80	18 12 0	1*28	87	592*500	1937	19	27 0 6	1*85	90	518*593
E	1929	80	23 5 6	1*44	82*6	1,887*500	1937	68	23 15 0	1*64	93	1,827*750
F .. ..	..	Not working	..	..	..	..	1937	35	10 5 0	71	N. G.	860*937
G	1929	125	23 18 0	1*45	N. G.	2,976*662	1937	125	23 5 0	1*69	N. G.	2,914*062
H	1929	N. G.	17 18 0	1*10	N. G.	..	1937	N. G.	17 15 0	1*23	N. G.	..
I	1929	108	21 14 0	1*25	N. G.	2,363*500	1937	120	20 11 0	1*41	N. G.	2,482*530
J .. ..	..	Nil	..	..	..	..	1937	..	Nil	..	..	..
K	1934	70	16 14 11	1*04	N. G.	1,185*260	1937	72	15 12 2	1*03	N. G.	1,137*374
Total columns 3 and 7	..	605	..	..	..	12,069*618	..	637	..	..	..	12,491*887
Correction	..	To correct Textiles to 10 hours add	..	..	..	62*500	..	..	..	..	..	..
Net total	..	..	..	..	..	12,132*118	1937	..	..	..	..	..

Result of 7+3 average per person reported .. 30*05
 Result of 7x16 (to give annas) + 260 to give annas per hour 1*238

x by 16 to give annas = 284 = annas per hour 19*92
 1*262
 Decrease 10*46 per cent (annas per hour)
 Increase

Category no. 17—Grey winders (high speed type machine)

N. G. = Information not given.

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Percentage attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1980	None	..	..	..	..	1987	40	15 4 9	1'05	90	611'875
B .. .. .	..	Not working	..	..	..	..	1987	..	Nil	..	..	..
C	1988	None	..	..	..	..	1987	70	25 1 2	1'71	N. G.	1,755'000
D	1985	82	2 13 9	1'48	98	667'499	1987	82	27 0 6	1'85	90	865'000
E	1929	None	..	..	..	..	1987	None	..	..	..	..
F .. .. .	..	Not working	..	..	..	..	1987	See no. 10	..	..	..	..
G .. .. .	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
H	1929	Nil	..	..	..	..	1987	N. G.	19 12 0	1'85	N. G.	..
I	1929	Nil	..	..	..	..	1987	Nil	..	..	..	..
J .. .. .	..	None	..	..	..	..	1987	None	..	..	..	..
K	1984	Nil	..	..	..	..	1987	Nil	..	..	..	..
Total columns 3 and 7	..	82	..	..	..	667'49	..	143	..	..	..	8,281'875
Correction	..	To correct Textiles to 10 hours add				74'187	..	..	..	..	..	..
Net total	..	..	..	..	..	741'666	..	..	..	..	..	..
Result of 7÷3 (average per person reported)						23'18	X by 19 to give annas—234=annas per hour.. 23'76					
Result of 7X16 (to give annas)—290 to give annas per hour						1'426	Decrease					
							Increase 2'12 per cent. (annas per hour) .. 1'558					

PART VIII UNITED PROVINCES GAZETTE, 23RD APRIL, 1938 453

Category no. 18. *Warpers (Old Type Machines)*. N.G.=Information not given

454

UNITED PROVINCES GAZETTE, 23RD APRIL, 1938

[PART VIII

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns, nos. 8 and 4 multiplied	Years	Number employed	Average earnings	Annas earning per hour	Per cent attendance	Total columns, nos. 8 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	19	35 10 0	2'19	97	676'875	1937	11	44 15 11	8'08	94	494'942
B .. .. .	..	Not working..	..	..	..	..	1937	8	40 19 9	2'79	N.G.	336'375
C	1931	28	44 11 1	2'75	N.G.	893'875	1937	18	32 7 11	2'23	N.G.	584'988
D	1935	2	33 6 0	2'28	80	66'750	1937	2	43 2 0	2'95	96	86'250
E	1929	12	48 14 8	3'01	87'2	535'687	1937	13	40 12 0	2'79	98'2	531'750
F .. .. .	..	Not working..	..	..	..	..	1937	5	21 6 7	1'46	N.G.	107'087
G	1929	26	36 13 0	2'26	N.G.	937'125	1937	23	44 8 0	8'04	N.G.	1,023'500
H	1929	N.G.	51 7 0	3'60	N.G.	..	1937	N.G.	47 1 0	3'22	N.G.	No change in rate.
I	1929	26	40 1 8	2'47	N.G.	1,042'031	1937	26	35 14 2	2'46	N.G.	933'958
J .. .. .	..	Nil ..	..	..	..	..	1937	Nil	..	..	..	..
K	1934	1	39 7 7	2'43	N.G.	710'531	1937	18	35 0 1	2'89	N.G.	630'093
Total columns 8 and 7	..	128	..	..	..	4,933'874	..	75	..	..	..	4,716'873
Correction .. .. .	..	To increase Textiles from 9 to 10 allow	..	..	..	7'417	..	..	..	..	..	..
Nett Total .. .. .	..	..	..	..	..	4,941'291	..	..	..	..	..	..

Result of 7 ÷ 3 (average per person reported) 40'17
 Result of 7 × 10 (to give annas) ÷ 360 to give annas per hour 2'472
 × by 16 to give annas ÷ 234 = annas per hour 83'05.
 Decrease 5'26 per cent. (annas per hour) 2'63p.
 Increase

Category no. 19. *Warpers (High Speed Type Machine). N. G.=Information not given*

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earning	Annas earning per hour	Per cent. attendance	Total columns nos. 8 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	Nil	..	..	..	..	1987	2	71 0 11	4'88	100	842'11
B .. .. .	..	Not working	..	..	..	..	1987	Nil	..	..	..	..
C	1985	Nil	..	..	..	..	1987	4	60 4 1	4'12	N.G.	241'081
D	1985	2	84 9 0	2'86	50	69'125	1987	2	47 2 6	3'22	96	94'812
.. .. .	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
F .. .. .	..	Not working	..	..	..	..	1987	See no. 18	..	..	..	..
G .. .. .	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
H	1929	Nil	..	..	..	..	1987	G.	48 12 0	3'28	N.G.	..
I	1929	Nil	..	..	..	..	1987	Nil	..	..	..	..
J .. .. .	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
K	1984	Nil	..	..	..	..	1987	Nil	..	..	..	..
Total columns 8 and 7	..	2	..	..	..	69'125	..	8	..	..	..	477'457
Correction .. .. .	..	}To correct Textiles to 10 hours add				7'680	..	..	..	..	..	..
Nett Total .. .. .	..	..	..	..	..	76'805	..	..	..	..	..	..

125

Result of 7+8 (average per person reported) 88'4
 Result of 7 x 16 (to give annas) + 280 to give annas per hour 2'968

X by 16 to give annas +284 = annas per hour 59'68
 Decrease 72'72 per cent. (annas per hour) 4'081
 Increase

Category no. 20. Warping Creelers. N.G.=Information not given

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per-cent. attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per-cent. attendance	Total columns nos. 8 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1930	6	15 2 7	'98	100	90'868	1937	9	16 8 0	1'11	98	145'687
B .. .. .	..	Not working	..	..	..	..	1937	2	15 0 0	1'08	N.G.	80'000
C	1933	24	12 7 5	'77	N.G.	299'076	1937	27	8 11 4	'94	N.G.	70'126
D	1935	8	15 14 0	1'09	95	127'000	1937	(9) 5	16 10 0	1'14	86	88'195
E	1929	9	18 3 9	'82	100	19'109	1937	13	15 0 6	1'08	100	195'403
F .. .. .	..	Not working	..	..	..	..	1937	5	13 10 2	'98	N.G.	68'177
G	1929	..	..	..	..	..	1937	..	..	..	..	..
H	1929	N.G.	19 0 0	1'17	N.G.	..	1937	N.G.	16 8 0	1'26	N.G.	..
I	1929	8	14 11 8	'90	N.G.	117'625	1937	12	15 4 8	1'04	N.G.	188'187
J .. .. .	..	Nil	..	..	..	..	1937	Nil	..	..	..	..
K	1934	4	16 8 0	1'02	N.G.	66'000	1937	4	16 8 0	11'3	N.G.	66'000
Total columns 8 and 7	..	59	..	..	..	819'780	..	77	..	..	..	1,141'707
Correction'	..	..	To correct Textiles to 10 hours add			14'111	..	..	..	..	..	..
Nett Total	..	..	..	..	..	833'891	..	..	..	..	..	..

Result of 7÷8 (average per person reported) 14'14
 Result of 7x16 (to give annas)÷260 to give annas per hour '87

x by 16 to give annas ÷ 234=annas per hour .. 14'89
 Decrease
 Increase 16'55 per cent. (annas per hour) .. 1'014

Category no. 21. Front Sizers. N.G.=Information not given

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year of nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	10	35 0 0	2'15	99	850'000	1987	9	88 7 4	2'29	97	801'124
B .. ..	..	Not working	..	..	..	..	1987	4	87 0 0	2'58	N.G.	148'000
O	1988	9	29 4 4	1'80	N.G.	268'422	1987	13	88 18 6	2'31	N.G.	499'922
D	1985	4	27 10 0	1'89	92	110'500	1987	4	28 7 0	1'94	91	118'750
E	1929	12	37 12 3	1'71	92'2	398'187	1987	14	27 14 6	1'91	98'9	890'687
F .. ..	..	Not working	..	..	..	..	1937	2	26 0 0	1'78	N.G.	52'000
G	1929	13	27 7 0	1'69	N.G.	329'250	1987	12	27 7 0	1'68	N.G.	330'250
H	1929	N.G.	30 0 0	1'85	N.G.	..	1987	N.G.	88 0 0	2'26	N.G.	..
I	1929	12	21 14 6	1'35	N.G.	262'875	1987	17	88 0 3	2'26	N.G.	561'265
J .. ..	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
K	1984	7	38 0 0	2'34	N.G.	268'000	1987	8	88 0 0	2'80	N.G.	304'000
Total columns 3 and 7	..	68	..	..	..	1,915'284	..	88	..	..	..	1,749'488
Correction	..	To increase Textiles to 10 hours add	..	..	..	12'277	..	..	..	..	..	..
Nett Total	..	..	..	..	..	1,927'561	..	..	..	..	..	..

Result of 7+3 (average per person reported) 29'20
 Result of 7x16 (to give annas) -+ 285 to give annas per hour 1'797
 X by 16 to give annas + 284 = annas per hour 2'180
 Decrease 21'08 per cent. (annas per hour) 2'17
 Increase

Category no. 22. Back Sizers. N.G.=Information not given

458

UNITED PROVINCES GAZETTE, 23RD APRIL, 1938

[PART VIII

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total, columns nos. 3 and 4 multiplied
			Ra. a. p.			Rs.			R			Rs.
A	1930	11	20 9 4	1.27	95	226.416	1937	9	19 6	1.32	95	174.875
B .. ..	..	Not working	..	..	..	..	1937	4	10 0 0	1.37	N.G.	80.000
.. ..	1938	13	1 2 0	1.30	N.G.	274.625	1937	14	1 1 11	1.44	N.G.	395.687
D	1935	4	18 4 6	1.25	85	73.125	1937	4	18 4 6	1.25	90	73.125
E	1929	20	18 14 3	1.16	11.3	377.812	1937	18	19 1 1 0	1.35	99.8	354.375
F .. ..	..	Not working	..	..	..	..	1937	2	17 12 0	1.21	N.G.	33.500
G	1929	12	19 8 0	1.20	N.G.	234.000	1937	12	19 8	1.23	N.G.	234.000
H	1929	N.G.	18 8 0	1.14	N.G.	..	1937	N.G.	21	1.44	N	..
I	1929	12	16 12 0	1.03	N.G.	201.000	1937	12	23 1 0	1.58	N.G.	392.062
J .. ..	..	Nil	..	..	..	..	1937	Nil	..	..	..	..
K	1934	7	22 0 0	1.25	N.G.	154.000	1937	7	22	1.50	N.G.	154.00
Total columns 3 and 7	..	79	..	..	..	1,541.058	..	87	..	..	..	1,798.134
Correction..	..	To increase Textiles to 10 hours add				..	..	..	..	..	..	..
Nett Total	..	..	..	..	..	1,549.188	..	..	..	..	..	..

Result of 7+3 (average per person reported) .. 19.61
 Result of 7x16 (to give annas) + 3x0 to give annas per hour .. 1.206

X by 16 to give annas ÷ 234=annas per hour .. 23.4
 Decrease 16.83 per cent. (annas per hour)
 Increase .. 1.40

Category no. 28, Drawers-in. N.G.=Information not given

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	22	24 11 6	1'59	86	549'819	1937	19	21 7 8	2'15	92	598'104
B	..	Not working	..	..	..	..	1937	10	23 9 6	1'61	N.G.	235'937
C	1933	18	38 0 11	2'34	N.G.	684'524	1937	19	43 14 5	3'00	N.G.	824'081
D	1935	6	34 4 0	2'34	95	205'500	1937	9	34 0 6	2'38	96	272'250
E	1929	22	26 18 0	1'65	92'7	589'875	1937	22	30 1 0	2'08	91'8	983'000
F	..	Not working	..	..	..	..	1937	3	25 10 11	1'76	N.G.	77'046
G	1929	36	23 5 0	1'48	N.G.	839'250	1937	24	27 9 0	1'68	N.G.	661'500
H	1939	N.G.	30 6 0	1'87	N.G.	..	1937	N.G.	27 8 0	1'86	N.G.	..
I	1929	19	24 12 8	1'52	N.G.	470'546	1937	25	29 9 0	2'02	N.G.	739'000
J	..	Nil	..	..	..	..	1937	Nil	..	..	..	..
K	1934	21	22 6 6	1'38	N.G.	470'581	1937	21	25 1 1	1'71	N.G.	522'421
Total, columns 3 and 7	..	144	..	..	..	3,504'498	..	161	..	..	..	4,906'289
Correction	..	To increase Textile to 10 hours add	..	..	..	22'638	..	..	..	..	..	..
Nett Total	..	..	..	..	..	3,527'136	..	..	..	..	..	..

Result of 7 ÷ 3 (average per person reported) 26'57
 Result of 7X 16 (to give annas) ÷ 280 to give annas per hour 1'685
 X by 16 to give annas ÷ 284 = annas per hour 30'47
 Decrease
 Increase 27'46 per cent. (annas per hour) 3'084

Category no. 24. *Teachers. N.G.=Information not given*

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent attendance	Total columns nos. 9 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1920	24	18 5 5	82	93	820*125	1937	19	12 14 0	88	91	244*625
B	..	Not working	..	..	..	..	1937	10	15 5 6	1*05	N.G.	1 59*487
C	1932	24	18 1 8	81	N.G.	918*06	1937	26	18 18 0	94	N.G.	359*125
D	1935	6	14 8 3	89	90	87*083	1937	8	14 4 9	98	92	114*875
E	1939	30	11 8 3	71	86*2	945*468	1937	30	18 11 0	94	91*1	410*625
F	..	Not working	..	..	..	..	1937	4	14 10 0	1*00	N.G.	58*500
G	1929	24	12 8 0	75	N.G.	292*500	1937	24	12 8 0	83	N.G.	292*500
H	1929	N.G.	18 0 0	80	N.G.	..	1937	N.G.	18 0 0	89	N.G.	..
I	1929	28	10 2 8	64	N.G.	938*984	1937	30	18 5 0	91	N.G.	399*875
J	..	Nil	..	..	..	..	1937	N=1	..	..	..	..
K	1934	21	15 0 0	82	N.G.	815*000	1937	21	15 0 0	1*08	N.G.	315*000
Total columns 9 and 7	..	152	..	..	..	1,913*076	..	172	..	..	..	2,347*562
Correction	..	To correct Textiles to 10 hours add				9*877	..	..	..	..	..	..
Nett total	..	..	..	..	..	1,922*953	..	..	..	..	..	..

Result of 7+8 (average per person reported) 12*65

Result of 7x10 (to give annas) +260 to give annas per hour .. 778

x by 16 to give annas+234=annas per hour .. 13*56

Decrease 19*62 per cent. (annas per hour. .. 933.

Increase

Category no. 25. Weavers (basis 2 looms per weaver except where mentioned). N.G.=Information not given

1	2	3	4	5	6	7	8	9	10	11	12	
Name of mill	1999 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent attendance	Total columns nos. 8 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1980	536	32 15 8	2*08	89	18,930*698	1987	566	35 15 0	2*46	89	20,340*625
B	..	Not working	..	..	..	..	1987	125	50 5 1	3*44	N.G.	6,369*718 4 looms per weaver.
C	1983	666	38 9 8	2*35	N.G.	25,443*047	1987	(10) 871	38 5 8	2*62	N.G.	33,886*818
D	1935	806	31 10 0	2*16	92	9,877*250	1987	832	38 8 0	2*37	87	12,782*000
E	1920	745	41 0 6	2*52	93	30,568*281	1987	753	39 12 0	2*72	92	29,931*750 1,203 looms
F	..	Not working	..	..	..	..	1987	900	22 14 0	1*56	N.G.	4,875*000 per 2 looms
G	1929	665	80 5 0	1*87	N.G.	20,167*812	1987	788	33 14 0	2*32	N.G.	24,830*875
H	1928	N.G.	39 12 9	2*45	N.G.	..	1987	N.G.	36 14 6	2*52	N.G.	..
I	1939	723	37 10 0	2*32	N.G.	27,202*875	1987	715	37 9 0	2*57	N.G.	26,857*187
J	..	Nil	..	..	..	..	1987	Nil	..	..	..	..
K	1934	623	39 8 4	2*48	N.G.	24,631*477	1987	600	25 8 9	2*41	N.G.	21,140*625
Total columns 8 and 7	..	4,284	..	..	..	1,56,001*880	..	8,447	..	..	..	1,80,188*588
Correction	..	To correct Textiles to 10 hours add	..	..	..	1,075*250	To correct Textiles to 8 hours subtract					1,2 8*200
Nett Total	..	..	..	..	..	57,016*880	..	..	..	..	..	1,81,411*788

Result of 7-3 (average per person reported) 34*87
 Result of 7x16 (to give annas)+230 to give annas per hour 2*256
 *Laxmi Baban actual 125 weavers average Rs.57-5-1 paid on the basis of full earnings for two looms plus half the earnings of the other two.

x by 16 to give annas +234=annas per hour .. 37*07
 Decrease 12*36 per cent. (annas per hour) .. 2*585
 Increase

131

Category no. 26. *Folders (Machines). N.G.=Information not given*

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
A	1980	19	Rs. a. p. 16 0 9	*99	95	Rs. 804*890	1937	24	Rs. a. p. 14 2 4	*97	92	Rs. 339*499
B .. .. .	..	Not working	..	..	..	..	1937	10	18 0 0	1*23	N.G.	160*000
C	1933	18	15 0 6	*93	N.G.	240*500	1937	22	14 2 9	*97	N.G.	453*406
D	1926	6	15 0 0	1*03	95	90*000	1937	6	15 0 0	1*03	95	90*089
E	1929	8	14 6 0	*83	100	43*135	1937	5	14 5 9	*93	96*2	71*796
F .. .. .	..	Not working	..	..	..	..	1937	Nil	..	..	..	..
G	1929	Not known	15 0 0	*92	N.G.	..	1937	7	15 0 0	1*03	N.G.	105*000
H	1929	N.G.	18 8 0	1*14	N.G.	..	1937	N.G.	13 8 0	1*26	N.G.	..
I	1929	8	14 1 6	*87	N.G.	113*750	1937	13	14 2 3	*97	N.G.	183*828
J .. .. .	..	Nil	..	..	..	..	1937	Nil	..	..	..	..
K	1924	8 Back	17 0 0	1*05	..	136*000	1937	8 Back	17 0 0	1*16	..	133*000
		8 Front	19 0 0	1*17	N.G.	152*030	1937	8 Front	13 0 0	1*30	N.G.	153*000
Total columns 3 and 7	..	..	..	..	..	1,079*265	..	113	..	..	..	1,711*29
Correction	..	To increase Textiles to 10 hours add	..	..	..	10*000	..	..	..	..	..	..
Nett Total	..	..	..	..	..	1,089*265	..	..	..	..	..	..

Result of 7÷3 (average per person reported) 16*01
 Result of 7×16 (to give annas) ÷ 101 to give annas per hour *985

× by 16 to give annas ÷ 233=annas per hour 15*15

Decrease 2*15 per cent. (annas per hour) 1*036
 Increase

Category no. 27. Folders-hand. N.G.=Information not given

1	2	3	4	5	6	7	8	9	4	5	6	7
Name of mill	1939 year of report	Number employed	Average earnings	Annas earnings per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.			Rs.			Rs. a. p.			Rs.
A	1930	12	16 4 0	1'00	95	195'000	1937	16	16 4 0	1'11	92	260'000
B .. .. .	..	Not working..	..	..	..	..	1937	10	19 0 0	1'30	N.G.	190'000
C	1933	8	15 0 6	'83	N.G.	120'250	1937	16	16 10 10	1'14	N.G.	265'766
D	1935	5	15 0 0	1'08	95	75'000	1937	5	15 0 0	1'08	95	75'000
E	1929	87	15 8 6	'94	95	1,019'656	1937	182	16 4 9	1'12	96	2,151'187
F .. .. .	..	Not working..	..	..	..	..	1937	4	10 0 0	'68	N.G.	40'000
G .. .. .	..	Not known	14 6 0 10 15-10 0	'83 .. '96	N.G.	..	1937	..	14 6 0 to 15 10 0	'98 .. 1'07	N.G.	..
H	1929	N.G.	18 8 0	1'14	N.G.	..	1937	N.G.	18 8 0	1'26	N.G.	..
I	1929	9	16 11 8	1'08	N.G.	150'328	1937	13	18 9 9	1'27	N.G.	241'921
J .. .. .	..	Nil	..	..	..	..	1937	Nil	..	..	..	..
K	1934	11	18 14 0	1'16	N.G.	207'625	1937	11	18 14 0	1'29	N.G.	207'625
Total columns 3 and 7	..	112	..	..	..	1,767'859		207	..	..	..	3,432'499
Correction	..	To correct Cawnpore Textiles to 10 hours add				8'833						
Nett Total	..	..	..	..	..	1,776'192						

Result of 7+3 (average per person reports) .. 15'85
 Result of 7x16 (to give annas) +130 to give annas per hour .. '978

x by 16 to give annas +234=annas per hour 16'68
 Decrease 16'19 per cent. (annas per hour) 1'124
 Increase

Category no. 28. Coolies. N. G.-Information not given

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. a. p.						Rs. a. p.			
A	1930	201	18 15 0 to 19 5 0	.86 to 1.19	81 to 100	29 categories	1937	245	12 10 0 to 17 4 0	.86 to 1.18	83 to 100	29 categories.
B .. ..	..	Not working until 1935.	..	..	..	..	1937	154	12 10 8 to 16 12 0	.86 to 1.15	N.G.	6 ..
C .. ..	..	Particulars not given.	..	..	..	..	1937	..	Particulars not given.	..	..	..
D	1931	63	16 0 0 to 19 0 0	.95 to 1.17	95	4 categories ..	1937	54	14 0 0 to 18 4 0	.96 to 1.25	95	5 categories.
E	1929	180	14 12 0 to 16 0 0	.91 to .98	95 to 97.3	5	1937	503	12 12 0 to 16 14 6	.87 to 1.16	96 to 93	5 ..
F .. ..	..	Not working	..	..	..	..	1937	47	9 12 0 to 14 10 0	.67 to 1.00	N.G.	9 ..
G .. ..	..	..	13 12 0 to 16 4 0	.83 to 1.01	..	..	1937	..	12 12 0 to 16 4 0	.94 to 1.11	N.G.	..
H	1929	N.G.	18 8 0	1.14	N.G.	..	1937	N.G.	18 8 0	1.26	N.G.	..
I	1929	80	14 6 6	.80	N.G.	Wearing 1152-500	1937	117	14 11 0	1.00	N.G.	Wearing 1718' 84.
J	1930	83	14 9 0 to 16 0 0	.89 to 1.11	83 to 100	3 categories ..	1937	94	11 6 0 to 15 14 0	.78 to 1.09	86 to 100	3 categories.
K .. ..	..	Particulars not given.	..	..	..	..	1937	..	Particulars not given.	..	..	..

There is so much diversion in the work allotted to cooly la hour that it is not possible to classify on a single sheet of paper.
 Result of 7+3 (averages per person report) X by 16 to give annas+234=annas per hour
 Result of 7x16 (to give annas)+133 to give annas per hour
 Decrease (annas per hour)
 Increase

Category no. 29. Oilmen. N.G.— Information not given

1			2	3	4	5	6	7	8	9	10	11	12	
Name of mill			1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 8 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 8 and 4 multiplied
					Rs. a. p.			Rs.			Rs. a. p.		Rs.	
A	..	..	1930	37	17 5 4	1'07	98	641'883	1937	31	15 4 9	1'05	96	321'234
B	..	..	..	Not working	..	..	..	..	1937	8	16 8 0	1'13	N.G.	132'000
C	..	..	1933	6	21 11 4	1'84	N.G.	130'266	1937	6	22 7 7	1'54	N.G.	134'875
D	..	..	1931	4	18 0 0	1'11	95	72'000	1937	6	17 5 0	1'18	98	103'875
E	..	..	1929	17	17 7 6	1'08	98	298'969	1937	18	15 7 6	1'06	93	278'537
F	..	..	..	Not working	..	..	..	..	1937	2	16 4 0	1'11	N.G.	32'500
G	..	..	1929	..	14 8 0 to 15 10 0	'88 to '96	..	..	1937	..	14 6 0 to 15 10 0	'96 to '07	N.G.	..
H	..	..	1929	N.G.	19 8 0	1'20	N.G.	..	1937	N.G.	19 8 0	1'33	N.G.	..
I	..	..	..	..	..	..	..	..	1937	..	..	..	..	..
J	..	..	1930	8	14 11 0	'90	90	117'500	1937	10	15 9 0	1'06	95	155'825
K	..	..	1934	16	15 4 0	'82	N.G.	240'000	1937	16	16 0 0	1'03	N.G.	240'000
Total columns 8 and 7			..	88	..	..	..	1498'068	..	87	..	..	..	1,398'546

Result of 7+3 (average per person reported) 17'02

Result of 7x16 (to give annas)+280 to give annas per hour .. 1'047

x by 16 to give annas+234= annas per hour .. 16'07
 Decrease 4'96 per cent. (annas per hour) .. 1'099
 Increase

135

Category no. 80. Sweepers (Departmental). N.G.=Information not given

465

UNITED PROVINCES GAZETTE, 23RD APRIL, 1938

[PART VIII

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1939 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1930	18	12 12 0	'75	99	157'625	1937	19	11 10 7	'80	86	221'567
B .. .. .	..	Not working	..	..	..	..	1937	14	13 12 0	'94	N.G.	192'500
C	1933	6	14 11 5	'91	N.G.	83'231	1937	7	14 15 7	1'04	N.G.	104'818
D	1931	8	15 10 0	'96	80	40'875	1937	12	14 0 0	'96	96	168'000
E	1929	9	14 12 0	'31	97.8	132'750	1937	9	14 12 0	1'01	98	132'750
F .. .. .	..	Not working	..	..	..	..	1937	1	9 12 0	'67	N.G.	9'750
G	1929	..	10 0 0 to 11 4 0	'62 '69	..	..	1937	..	10 0 0 to 11 4 0	'68 '77	..	..
H	1929	N.G.	12 8 0	'77	N.G.	..	1937	N.G.	12 8 0	'85	N.G.	..
I	1929	87	12 2 6 to 13 6 8	'75 '82	N.G.	449'781 Boys 160'687 Weaving	1937	81	12 12 9 to 13 8 0	'67 '92	N.G.	896'708 Boys 162'090 Weaving
J	1930	4	18 12 0	'84	75	55'000	1937	4	18 11 0	'93	85	54'750
K	1934	18	11 0 0	'68	N.G.	193'300	1937	19	13 14 0	'65	N.G.	263'625
Total columns 3 and 7 ..	..	102	..	..	..	1,288'999	..	128	..	..	..	1,706'458

Result of 7+8 (average per person) reported 12'64

Result of 7x16 (to give annas) ÷ 360 to give annas per hour '778

X by 16 to give annas ÷ 234 = annas per hour .. 13'33

Decrease
Increase 17'22 per cent. (annas per hour) .. '512

Category no. 31. Sweepers (Compound). N. G.=Information not given

1	2	3	4	5	6	7	2	3	4	5	6	7
Name of mill	1929 year or nearest	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos 3 and 4 multiplied	Year	Number employed	Average earnings	Annas earning per hour	Per cent. attendance	Total columns nos. 3 and 4 multiplied
			Rs. s. p.			Rs.			Rs. s. p.			Rs.
A	1980	20	14 1 3	'87	99	281'562	1987	19	18 4 1	'91	97	251'848
B	..	..	..	..	..	..	1987	4	18 12 0	'94	N.G.	55'000
C	1988	3	14 12 10	'91	N.G.	44'406	1987	5	14 4 10	'98	N.G.	71'500
D	1981	7	11 15 0	'74	90	88'562	1937	9	13 11 6	'94	90	123'468
E	1929	25	11 1 9	'68	95	277'784	1987	31	12 0 0	'82	98	372'000
F	..	Not working	..	..	..	..	1937	Not working	..	..	..	..
G	1929	..	8 12 0 to 10 0 0	'54 '62	..	..	1937	..	8 12 0 to 10 0 0	'60 '63	..	..
H	1929	N.G.	14 0 0	'86	N.G.	..	1937	N.G.	14 0 0	'96	N.G.	..
I	..	..	..	..	..	..	1937	..	..	..	..	..
J	1980	15	10 1 0	'62	79	150'297	..	21	10 14 0	'74	85	228'375
K	1984	32	13 12 4	'85	N.G.	302'958	198	28	12 10 7	'87	N.G.	291'218
Total columns 3 and 7	..	92	..	..	..	1,141'159	..	112	..	..	..	1,393'404

Result of 7÷3 (average per person reported) .. 12'40
 Result of 7×16 (to give annas) ÷ 280 to give annas per hour .. '68
 X by 16 to give annas ÷ 284=annas per hour .. 12'44
 Decrease 11'54 per cent. (annas per hour) .. '851
 Increase

APPENDIX V

Terms of Reference—Our terms of reference include consideration of not only the rates of pay which shall be paid for time and piece-workers in any efficiency scheme which has been or may be introduced by individual mills, but also conditions which should be provided for the various occupations prior to the introduction of any efficiency scheme. Taking these two factors into consideration, we have the following recommendations to make regarding the main occupations in the mills :

Blow Room

Efficiency scheme recommended—We consider that, with very few exceptions, mills should be able to introduce a system of one man per two machines in the case of Exhaust and Lap Machines, Breaker Scutchers, Intermediate Scutchers and Finishing Scutchers. No additional expenditure on equipment would be required before introducing the system recommended, nor would it be essential to make any changes in the cotton used as far as this process is concerned, though it needs to be pointed out that the type of cotton used will necessarily affect the possibilities of introducing schemes in most subsequent processes.

Wages—Where two machines per man are being worked, we recommend that the wage paid should be on a time-work basis and should be consolidated ; the minimum rate recommended is Rs.23-7 per month of 26 working days.

Card room—The possibility of increasing the allotment of cards per Stripper and Grinder depends to a very large extent on the quantity of cotton put through the card during the day. With conditions varying so greatly between mill and mill owing to the difference in the average count being spun it is not possible for us to recommend any general system for adoption other than a minimum which should be achievable in any mill. The minimum allotment of cards per Grinder and Stripper and should, in our opinion, be that laid down in the Association's Standardization Scheme, namely, one Grinder and one Stripper per 20/24 cards where patent strippers are not in use.

As regards other occupations in the Card Room, the minimum number of cards allotted to each operative should be as under :

- | | | |
|----------------------------|-----|------------------------------|
| (1) Fly Gatherer | ... | One man for 40/50 cards. |
| (2) Lap Carrier | ... | One man for 27/30 cards. |
| (3) Card Tenter or Can Boy | ... | One man to each preparation. |
| (4) Sweeper | ... | One to 40/50 cards. |

If greater numbers of cards than those specified above are allotted to each operative, the wages paid should be somewhat higher than those specified in the schedule recently adopted by the Association for unrationalized occupations.

Drawing Frames—Efficiency scheme recommended—We consider that a system of two men per three heads of Drawing irrespective of the number of deliveries, could be introduced in all mills for 12s. and over. No further expenditure on equipment would be necessary. As regards cotton, see note under Blow Room.

Wages—The wages recommended for this system of work should be on a piece-work basis, and payment should be made at the rate of 20 per cent. higher than the rate paid per operative on the 3 head system.

It has been brought to our notice that the system of estimating the wages payable to Drawing Frame Tenters varies in different mills, and we are of the opinion that, if and when standardization of wages is attempted in the future, the system of payment of drawing tenters should be made uniform.

Slubbing Department—We do not advocate any change in the present system of one man per machine.

Intermediate Frames—We recommend the continuance of the system of one frame per man. In certain cases where conditions are exceptional, it would be possible to introduce a system of two frames per man with a back tenter, but the saving in such a system is, in our opinion, too small to justify our advocating its general adoption.

ROVING DEPARTMENT

Efficiency scheme recommended—We consider that where rovings are being made for counts 12s. and over, a system of one man per two rovers is possible in all mills without any additional expenditure on equipment. The cotton used should, however, be sufficiently good to reduce sliver breakages to a minimum, as otherwise the possibility of introducing the efficiency system in the spinning department will be affected adversely.

Wages—We recommend that the wages paid for the system of work recommended should be on a piece-work basis with wages for two-frames equivalent to two-thirds of the calculated wage, with 35 per cent. Dear Food Allowance for a 10-hour day, and two-thirds of the calculated wage with 40 per cent. Dear Food Allowance, when the 54-hour week is introduced.

Complement of Doffer boys—Though not essentially an efficiency scheme recommendation, we consider it desirable that the attention of all mills should be drawn to the necessity of maintaining their complement of Doffer boys, according to the scales recommended in the original Standardization Scheme of the Association framed in the year 1930, namely—

- 1 per 130 roving spindles when hank roving is $2\frac{1}{2}$ and under;
- 1 per 160 roving spindles when the hank roving is between $2\frac{1}{2}$ and $3\frac{1}{2}$;
- 1 per 240 roving spindles when the hank roving is between $3\frac{1}{2}$ and 4;
- 1 per 300 spindles when the hank roving is between 4 and $4\frac{1}{2}$;
- 1 per 400 spindles when the hank roving is $4\frac{1}{2}$ and over.

Wages to be paid as specified in the recent schedule for unrationalized occupations.

RING SPINNING

Efficiency scheme recommended—In our opinion, it should eventually be possible for practically all mills to introduce a system of two sides per man in the spinning department in all counts above 20s. In certain cases where spinning is exceptionally good, two sides per man is possible on counts 12s. and over. At the same time, we wish to make it clear that it is not possible for us to recommend the compulsory adoption of the two-sides system unless adequate safeguards are introduced which ensure that the spinning qualities of the yarn reach a minimum standard. The only real test of spinning quality is the breakage test. Details as to the number of breakages which take place in mills which have successfully introduced the two-sides system have been supplied to us, and after a study of these particulars, we have reached the conclusion that the introduction of the two-sides system should not ordinarily be attempted by mills unless upon introduction the number of breakages which an operative working on two sides would have to piece up does not exceed 2 per minute. Generally speaking, we consider that where a change over to the two sides system is introduced, better cotton will be necessary.

Wages—The wages to be paid where two or more sides per man are being worked, should, in our opinion, be consolidated and on a time-work basis with a minimum equivalent to $33\frac{1}{2}$ per cent, higher than the minimum

wage laid down in the recent schedule adopted by the Association for single side, that is—

	Warp		Weft	
	Wages per month on single side	Wages per month on double side	Wages per month on single side	Wages per month on double side
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Up to and including 800 spindles	20 5	27 1	21 2	28 8
801—860	21 2	28 3	21 15	29 4
861—420	21 15	29 4	22 12	30 5
Over 420 spindles	22 12	30 5	23 9	31 7

WEAVING

Efficiency scheme recommended—We have given very careful consideration to the possibility of making recommendations for the adoption of efficiency systems in weaving, but our final conclusion is that the decision to adopt a 3 or 4-loom system depending as it does on so many different factors, must be left to the discretion of individual mills. The main points to be considered are—

(a) Quality of warp yarn being supplied to the weaver.

(b) In our opinion, no matter what class of goods are being woven, it would be difficult to work an efficiency system in the weaving department unless the number of warp breakages per loom per hour is reduced to a minimum. For a 4-loom system, warp breakages should not, in our opinion, exceed two per loom per hour, and on 3-loom system, 3 per loom per hour.

(c) The next factor to be taken into consideration is the layout of the machinery in the shed. Before any system can be successfully introduced, the layout must be arranged to suit the system; for instance a 3-loom system would be difficult to operate in a shed in which looms are arranged in lines of 4. The starting handles should also be arranged in groups; for example, in a 3-loom system, the starting handle for all the three looms worked by the same man should be in close proximity.

(d) The class of work must be taken into consideration when a decision is being taken on the question of introducing a 3-loom or 4-loom system, for example, in a mill which is producing practically nothing but *dhoties*, the number of shuttle changes which have to be made per hour must be taken into consideration. If complicated headings are the rule, it would be found that in certain instances, the number of shuttle changes on a 4-loom system would be excessive, and might greatly reduce loom efficiency.

(e) A further consideration is the average count of weft being used. If the average count is low, the amount of shuttle changing involved in a 3 or 4-loom system might rule out the possibility of its adoption.

Speaking generally, we would like to lay down that wherever a 4-loom system is found possible after a scientific study by the management concerned, extra help should be given in the way of weft carriers and cloth carriers at the expense of the management.

We would also point out that the introduction of a 3 or 4-loom system is facilitated where coarse wefts are being used, by supplying re-wound weft or using longer pirns. Re-wound weft would not, however, always be necessary even in moderately coarse counts if the length of yarn on the pirn is considerably greater than the normal owing to the use of large diameter rings on the spinning frame.

Wages—Subject to the conditions provided being satisfactory for the introduction of an efficiency system in weaving we recommend that the wages paid should be on a piece-work basis with Dear Food Allowances as laid down in the Association's schedule, with additional payment to the weaver equivalent to 50 per cent. of the wages earned on the additional loom, that is to say, where a 3-loom system is worked, wages should be five-sixths of the calculated wage, and on a 4-loom system three-fourths of the calculated wage.

General Observations—We wish to make it clear that our recommendations should not be construed as the last word in standardization. In the peculiar circumstances of the industry we feel that it would hardly be possible for us to do more than prescribe minimum wages, and in any event, standardization in rationalized occupations would be somewhat inconsistent as long as there is no uniformity in the wages paid in unrationalized occupations.

No. 2225/XVIII—140

INDUSTRIES DEPARTMENT

14th April, 1938

MISCELLANEOUS

THE Bill to prohibit the employment of children and to limit hours of works in shops and to regulate leave, fines, wages and terms of service designated the U. P. Shops Bill which was introduced in the United Provinces Legislative Assembly on 5th April, 1938, is being published for the purpose of eliciting opinion thereon.

Any opinion received by the Secretary to Government, United Provinces, Industries Department, on or before 1st July, 1938, will be considered by the Provincial Government.

P. M. KHAREGAT,
Secretary to Government,
United Provinces.

A

BILL

To prohibit the employment of children and to limit hours of work in shops and to regulate leave, fines, wages and terms of service.

WHEREAS it is expedient to prohibit employment of children and to limit hours of work of employees in shops, and whereas it is expedient to regulate period of leave, fines, payment of wages and terms of service for such employees; It is hereby enacted as follows :

PRELIMINARY

1. This Act may be called the United Provinces Shops Act. Short title.
2. It extends to the whole of the United Provinces. Extent.
3. It shall come into operation in the first instance only in the cities having population of one lakh or more than one lakh, cantonments included, but the local Government may by notification direct that it shall come into operation in any other local area on such dates as may be specified by such notification.
4. In this Act unless there is anything repugnant in the subject or context : Definitions.
 - (a) "Shop" includes any premises where any wholesale or retail trade is carried on.
 - (b) "Employee" means any person wholly or mainly employed in shops.
 - (c) "Public holidays" means a holiday under the Negotiable Instruments Act.
5. No person, whose age is less than 14 years shall be employed in any shop. Restriction against employment.
6. No employee shall work in a shop for more than 48 hours a week or more than eight hours a day. Hours of employment and intervals.
7. Every Sunday shall be treated as a rest day in a week on which all shops shall remain closed; provided that in special cases and for specific types of shops and establishment any other day in the week be notified as rest day by the local authority.
8. At least one hour's interval shall be allowed to employees on every working day.
9. No employee shall work in a shop after 8 o'clock at night.



REGISTERED No. 1333

6

Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

EXTRAORDINARY

LUCKNOW, SUNDAY, JUNE 12, 1938

GOVERNMENT OF THE UNITED PROVINCES
INDUSTRIES DEPARTMENT

GOVERNMENT RESOLUTION ON THE REPORT OF THE LABOUR
ENQUIRY COMMITTEE

No. 3212/XVIII

X:9.252 CC.N386

Dated Naini Tal, June 12, 1938

38

RESOLUTION

READ:

The Report of the Cawnpore Labour Enquiry Committee, 1938

OBSERVATIONS—While publishing the Cawnpore Labour Inquiry Committee's report the Government expressed a hope that the Committee's suggestions and recommendations might lead to an amicable settlement of pending differences between employers and their workmen in Cawnpore and to a satisfactory solution of all outstanding questions. They also undertook to consider any representations received from the employers and labour or any other person interested in the matter. They regret that the mill-owners and the workmen have not been able to reach an understanding. On the other hand, the Cawnpore textile industry has been in the grip of a general strike for more than three weeks. Considering the enormous loss that is being caused by the

suspension of business to thousands of workers, the mill-owners and the public generally, they feel that they should no longer postpone an expression of their own views on the report. They have in fact been pressed by the representatives of both capital and labour to announce their decision and they are doing so in the earnest hope that it will be accepted by both parties, so that the present strife may cease and an era of abiding peace and good-will between the two parties at Cawnpore may be ushered into existence.

2. The Mazdur Sabha and workers have accepted the recommendations of the Committee. The Government have also received a representation from the Employers' Association which would not have lost any of its force had it been couched in more temperate language free from personal reflections on the members of the Committee. Government have also met the representatives of both parties and have given their best thought to all that they have said. They have further taken full note of the representations of other organizations and the comments on the report which have appeared in the press or otherwise.

3. The circumstances which led to the appointment of the Inquiry Committee are well-known and have been fully stated in their report. There had been serious dissensions between the employers and the workmen at Cawnpore for several months before the present Government assumed office in July, 1937; they were confronted with growing unrest and the possibilities of a general strike in Cawnpore. This strike actually took place in the first week of August and ultimately the parties agreed to refer all their differences to a committee of inquiry. It was in accordance with their common desire that this Committee was appointed. One of the terms of the agreement entered into between the parties on August 9, 1937 was to the effect.—“An inquiry committee consisting of one representative of the Mazdur Sabha, one representative of the employers and such number, not exceeding three, as may be nominated by Government, shall be appointed to inquire into” certain matters and “the terms of reference to the Committee of Inquiry shall be settled by the Government.” The Government after an informal consultation with the leading representatives of both sides nominated Babu Rajendra Prasad and Messrs. Gulzari Lal Nanda and Rudra to the Committee. Babu Rajendra Prasad was appointed Chairman. The Government had reasons to believe that both parties were agreeable to this arrangement. Mr. Gulzari Lal Nanda ultimately expressed his inability to find time in the midst of his multifarious duties in Bombay to join the Committee and Mr. B. Shiva Rao was appointed in his place. After some experience it was found that the presence of the representatives of the employers and of labour on the committee was not conducive to its smooth working, and on the side of the employers it was suggested that information which might be placed confidentially at the disposal of the Committee, should not be open to examination by Labour. In accordance with the views expressed by both Sir Tracy Gavin Jones and Mr. Hari Har Nath Shastri, it was decided that they should cease

to be its members; thereafter they continued to attend meetings of the Committee as representatives of the parties. At the same time, Mr. Murthy, the Government textile expert, was formally co-opted by the Committee as a technical adviser.

Of the personnel of the Committee Babu Bajendra Prasad holds a conspicuous place in public life and commands great respect for his high sense of responsibility, justice and fair play, and he has since been appointed President of the Committee of Inquiry into industrial matters by the Government of Bihar. Mr. Rudra is the head of the department of Economics in the Allahabad University. When the Committee had finished taking oral evidence Sir Tracy Gavin Jones and Mr. Hari Har Nath Shastri both expressed their great appreciation of the manner in which Mr. Rudra, who had presided over most of the sittings of the Committee, had conducted the proceedings. Mr. B. Shiva Rao has been closely associated with labour problems and has a wide knowledge thereof; he was one of the members of the Round Table Conference.

4. The Government have already expressed their appreciation of the industry, care and thoroughness with which the Committee dealt with the many difficult and delicate problems which they had to consider, and wish to place on record their sense of gratitude to the Chairman and the members for the great pains that they took in the matter; their report will be of abiding interest and value. Babu Rajendra Prasad was not able to take part in all the sittings of the Committee while evidence was being recorded, owing to his ill-health but Government are glad to know that his co-operation and advice were fully available at the formative stage of the report which embodies the mature opinion of the Chairman and his two colleagues.

The Committee examined a large number of witnesses at considerable length, and the spokesmen of the Employers' Association as well as of the Mazdur Sabha were given ample freedom to place their respective points of view before the Committee. The Committee had the benefit among others of the evidence tendered by Sir Tracy Gavin Jones, President of the Employers' Association, Mr. H. A. Wilkinson, Managing Director, Elgin Mills, Mr. J. Tinker, Managing Director, Cawnpore Cotton Mills, Mr. Padampat Singhania of the Jiggil Kamlapat Mills, Mr. H. Horsman, Managing Director, Swadeshi Cotton Mills, Mr. C. A. Watt, Managing Director, Cawnpore Woollen Mills, Mr. G. D. Price, Managing Director, Muir Mills, and Rai Bshadur Lala Bhagwan Das, Proprietor, Messrs. Bevis & Co., on behalf of the Employers' Association, and Mr. Hari Har Nath Shastri, President, Mazdur Sabha, and Mr. Sitla Prasad Saksena, Lecturer, Lucknow University, on behalf of the Mazdur Sabha, and Mr. A. L. Carnegie, Chairman of the Board of Directors, on behalf of the British India Corporation. Practically every important concern had its full say and in some cases several days were devoted to the examination of some of the representatives. Both parties were assisted throughout by advisers.

The Committee gave full time and every opportunity to the different interests concerned to ventilate their view points, and made every effort to obtain all relevant data and wrote its report after it had collected all available material. Government feel that as the Committee was appointed at the instance of and with the consent of the parties concerned, who took an active part in all that it did from beginning to end, its recommendations are entitled to special consideration at the hands of the parties and still hope that its services will be appreciated by all concerned.

5. The terms of reference were also settled with the concurrence of the representatives of the Employers' Association and the Mazdur Sabha and cover a wide ground, and so do the recommendations of the Committee. The Committee, immediately after disposing of the introductory matter, has clearly defined its general attitude and the method of approach to the various questions which came within the range of its deliberations. "The *entrepreneur* and the financier", they observe, "play an important part in the economic organization of the country. The modernization of the industrial structure of this land depends very greatly upon their initiative, capacity and energy. Much that has been achieved in India is largely due to their efforts often against heavy odds. Cawnpore itself is manifestly a monument to the courage and the enterprise of the employers, firstly British, and now British and Indian both. If it is desired that India should be rapidly industrialized, the confidence of the captains of industry and of the financier in the conduct of affairs should not be impaired. The profit motive has to be kept in mind, unless indeed it is contemplated to transform the very basis of the economic structure of the country. While we accept the importance of the profit motive as a stimulus to economic enterprise, we at the same time wish to emphasise that the position of the worker must equally be safeguarded and secured." The Government fully endorse these sentiments.

6. The recommendations of the Committee will now be dealt with in the order in which they appear in the report. The Committee has dealt first with the wage problem. After examining and discussing the question whether there had been a wage cut or not, it has expressed the view that it is unable to make a proper comparison of the present wages with those prevailing in previous years; and that on the material at its disposal, it is impossible to answer with precision the question as to what wage cuts have taken place during the years 1929 to 1937. This inability on the part of the Committee is due to the fact that the employers were unable to place at its disposal the requisite materials, from which proper deductions could have been drawn. Government do not wish to go at length into the question whether a wage cut in Cawnpore has or has not been proved; it is possible that with further materials at its disposal the Committee might have come to the conclusion that a wage cut has been proved. Government have examined the question for themselves and while they would not like it to be understood that it is impossible to arrive at any conclusion as regards the wage cut, on the basis of the material placed before the Committee

by the Employers' Association they agree with it that the case for a general increase should be examined on different grounds.

7. The Committee has, with regard to the third question referred to it (viz. "How do the present rates of wages in Cawnpore compare with those prevailing elsewhere in India, and whether taking also into consideration the profits made by the mills and the cost of living in Cawnpore, they should be increased and if so to what extent"), come to the conclusion that the industry at Cawnpore is at present in a prosperous state and can and should bear the burden of a general increase in wages; and that the present rates of wages in Cawnpore are lower than those prevailing in Bombay and Ahmedabad and the industry in Cawnpore can afford this increase.

8. Government are glad to find that there has been striking progress in recent years in the textile industry in Cawnpore. The yardage of woven goods showed an increase of about 47 per cent. for all-India between 1929 and 1937. It rose, however, by about 140 per cent. in our own province between 1928-29 and 1936-37, the vast bulk being produced in Cawnpore itself. Similarly, in spite of a small fall in the number of spindles and looms installed at Cawnpore between 1930 and 1934 this deficiency was made up by 1937 and the number of spindles actually rose by 17.7 per cent. as compared with 1929, while the rise in the number of looms was 31.9 per cent.; the corresponding rises for the rest of India as stated in the report were only 8.9 and 12.2 per cent. respectively. There was besides not only an increase of 80 per cent. in the quantity of cotton consumed between 1929 and 1937 but along with that, there has been a progressive increase in the finer varieties, which means a still higher percentage of yardage produced as a result of the finer quality of the cloth woven in the Cawnpore mills. Great strides in this direction have been made during the last two or three years, the expansion having really started in 1935. Three new mills with a total spindleage of 49,600 and a total loomage of 803 were started in 1935. Of these, two were established by way of an extension of the existing mills. All the same they were the result of fresh investments and all these features taken together give a welcome index of the healthy tone that must have prevailed in the industry since 1935.

9. Moreover, the Cawnpore mills were able to afford a decent dividend on the paid up capital even in the days of slump when generally all industries were in a state of depression. Thus during the period—1930 to 1936—when there was for the major part a gloomy depression they were able to give on an average a dividend of 6.66 per cent. on the paid up capital. It has been contended that the dividend on the paid up capital does not give a correct picture of the state of affairs; and that some of the mills have reduced their share capital and thus a part of the capital has already been lost; the original rather than the reduced capital should be taken into account. This however overlooks the fact that in some cases the capital had been unduly inflated. Moreover, even if the block account be taken into consideration Cawnpore showed better result than Bombay. It is however

difficult to correlate the profits to the block unless all relevant factors, such as depreciation, reserve, etc. are fully known. About these latter the Committee states that it had no adequate information. Government have examined the balance-sheets of some mills and find that in some cases, apart from the payment of dividends, large sums have been carried to reserve, depreciation funds, etc. For instance, in the case of one mill it was noticed that ten lakhs were raised by the issue of 7 per cent. debentures. The mill has not only been paying interest thereon regularly, but each year Rs.50,000 is being credited to the debenture sinking fund. In short even the dividends declared are not an adequate criterion of the profits actually made or of the general condition of the industry.

10. A very important factor has come into play since about a year ago. There has been a continuous fall in the price of cotton since February last year. According to the calculations made by the Committee a comparison of the average of cotton prices for the first quarter of 1938 with that of the last quarter of 1937 showed a fall of 28 per cent. The employers put the fall in price at 25½ per cent. There has been a further decline since and it has not yet been arrested. The present prices of cotton are in fact nearly half of what they were in January, 1937.

Along with this there has been during recent months a slight tendency towards an increase in the price of the cloth manufactured out of this cheap cotton. While in 1935 and 1936 the price of cotton rose and that of cloth fell, there was a reverse movement in both directions in 1937 which has continued to hold the field so far. According to the Indian Cotton Review for 1936-37 the world production of cotton had outstripped the maximum consumption and while all the cotton markets were in a depressed state the Indian cotton found itself in most unfavourable circumstances. Exports to outside countries had diminished. The parity in foreign countries was in favour of American and Egyptian as against Indian cotton and even in India itself there were chances of larger imports of foreign growth.

It has been contended that the depreciation in the value of cotton should not be taken into account as it may be only a passing phase. The Bombay Textile Enquiry Committee have discussed the matter fully and had ample material and opportunity to record a decision. After closely examining the recent events and tendencies it has arrived at the definite finding that this depreciation in the price of cotton is not short-lived but is bound to continue for an appreciable, if not a considerable, period. Similarly, there is a fair prospect of at least the present prices of cloth being maintained. Japan on account of its various entanglements, especially the outbreak of the Sino-Japanese war, would no longer be a serious competitor. Its intake of cotton as well as its off-take of cloth were bound to decline and both would undoubtedly further strengthen the indigenous textile industry.

The textile industry has recently shown unmistakable signs of sound recovery even in most depressed quarters in India and there can

be no doubt that in Cawnpore itself it has a bright outlook. The difference between the cost of the raw material and the selling price of the same measure of cloth is the fundamental basic factor which determines the financial position of the industry, and in fact before the decline started, 50 to 55 per cent. of the cost of cloth consisted of the price of cotton.

The facts stated above indubitably establish that in the present circumstances the textile industry in India generally is in a prosperous state and the net saving after defraying the cost of production and other charges is almost the maximum that it had ever attained at least since the Great War.

It may also be mentioned here that the money market is relatively easy these days. The bank rate has fallen, with the result that on the one hand factory owners can get working capital at a lower rate of interest, and on the other a lower rate of profit from industry would satisfy people who would otherwise get but small returns from their investments in banks.

11. The report has given sufficient facts to establish that the rates of wages in textile mills in Cawnpore are lower than those in several other textile centres in India. The Royal Commission on Indian Labour, on the basis of the figures for 1929, observed that "in the United Provinces where Cawnpore is the most important centre the Chief Inspector of Factories gives the rates of wages for male weavers as Rs.33 and for male spinners as Rs.25 per mensem. In the Punjab, Delhi and Bengal rates stand to rule substantially higher than in the United Provinces. In Bombay the average earnings of two loom weavers in 19 selected mills varied between Rs.1-9-1 to Rs.2-1-6 per day. This works out a monthly average on the basis of 26 working days in a month from Rs.40-12-2 to Rs.54-7 which shows that even the minimum wage at Bombay was higher by 23.5 per cent. than Cawnpore wages." The figures furnished to the Labour Commission by the Upper India Chamber of Commerce showed a great gap between the rates paid in Cawnpore and those at Bombay and Ahmedabad. The report of the Indian Tariff Board on the textile industry, 1937, gives the comparative wages for various categories of workers for different textile centres as follows:

Standard Master-April 1, 1926	Bombay	Ahmedabad	Cawnpore	Delhi	Nagpur	Madras
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.
Blow room tenters.	29 0 0	23 10 0	16 14 6	18	24 0 0	25 14 6
Card room tenters.	27 4 0	24 7 6	23 12 0	14	24 0 0	23 3 3
Frame tenters...	37 12 0	29 6 0	27 3 0	25	30 12 0	25 2 0
Ring frame side boys.	29 12 0	26 7 6	15 10 0	20	24 0 0	14 10 8
Winders	21 4 0	23 1 0	27 13 0	25	18 8 0	17 15 0
Weavers	47 12 0	47 15 9	32 7 9	35	41 0 0	34 7 0
Folders	29 0 0	23 11 3	14 6 0	20	24 0 0	26 3 5

The report quotes from the Tariff Board, 1932, showing that of the total costs of production (excluding profits, interest, depreciation and managing agents' commission) at various textile centres the percentage of labour costs in Cawnpore was 40.75 per cent. as against 53.8, 52.65, 51.60, 49.40, 42.40, and 38.60 for Ahmedabad, Baroda, Delhi, Bombay, Calcutta and Nagpur respectively. The comparative statement of wages of various selected categories of workers in Bombay and Cawnpore cotton mills given in Table XVI of the report shows the disparity in wages prevailing in Cawnpore and Bombay, even after full allowance has been made for the fact that in 1934 the Bombay mill industry was working ten hours and that the figures for Cawnpore are for 1937. According to this comparative statement the most up-to-date wages in Cawnpore are very much below those in force in Bombay even three years previously.

12. A good deal has been said in this connexion both in the report of the Committee and in the representation of the Association about the cost of living in Cawnpore and the adequacy of the wages in terms of such cost. An investigation on this point is certainly relevant; but it has to be borne in mind that when competitive prices on an all-India basis are under consideration, the amount of wages in actual cash is an important factor. If the mill-owners in Bombay pay higher wages in terms of cash to their labour as compared to those of Cawnpore the Cawnpore industry enjoys superior advantages in a common market over their competitors elsewhere to that extent. But even making allowances for the differences in the cost of living, the basic rates of wages in Bombay are much higher than those in Cawnpore. This disparity has been further widened by the recent increase of 12 per cent. in the general wage level in Bombay. It will not be out of place to mention here that the Bombay Committee recommended the increase in wages not on account of any wage cuts previously made but out of regard for the recent recovery in the textile industry.

13. The proposals of the Committee for an increase in wages will, according to it, raise the general wage level in Cawnpore by between 10 and 12 per cent. On the basis of other calculations, however, Government understand that the real burden on the industry in Cawnpore, if the Committee's proposals are accepted, will be even less than estimated by it. It must be remembered in this connexion that the disparity between the Cawnpore and Bombay rates even after this increase will remain almost the same as before. In view of what has been stated above Government are fully satisfied that the textile industry in Cawnpore under present conditions can easily stand this additional burden. Even the factor about the price of cotton alone would mean an additional benefit of about 13 per cent. on the cost of cloth manufactured in Cawnpore. Most of the stuff turned out consists of cloth, the proportion of yarn going out of the mills being comparatively small. The wages in Bombay, where they are comparatively high, form only 22.5 per cent. of the works cost in normal times. In Cawnpore the figure would be lower. Taking it even at 20 an increase of 10 per cent. in wages would raise the works cost by 2 per cent. only. Even 12 per

cent. on 22.5 would be 2.7 only. This would be about one-fifth of the minimum advantage of 13 per cent. which is lower than what the industry is in fact enjoying at present on account of the decline in the price of cotton alone.

14. It has been pointed out that a flat percentage of increase in wages is not fair to mills which already pay high rates of wages. Government feel that it would be unsafe to draw any definite conclusions from the apparent differences in wages paid in different mills at Cawnpore, because of the differences in output and in the number of workmen employed. In a mill which is run efficiently with modern plant on a rationalized basis a fewer number of men are appointed and higher wages paid, while in an inefficient mill with old plant, a larger number of men may be employed with smaller output and lower wages in consequence. The Committee has recommended a graded wage increase; the employers who pay lower wages will be called upon to increase the wages in a higher proportion than those who pay higher wages already. For example, an employer who is paying a wage of between Rs.19 and Rs.25 will be called on to raise it at the rate of two annas in the rupee, while one who is paying a wage of between Rs.32-8 and Rs.40 will have to grant an increase of only one anna in the rupee.

15. In these circumstances and having particular regard to the windfall due to the cheapness of cotton in which all textile mills share the Government have no doubt as to the capacity of the industry at present to afford the proposed increases. Even if the decline in the price of cotton were of a temporary nature there is evidently no reason why the workers should not share in this again. Wages suffer whenever there is a decline in industry and there is no reason why workmen should not benefit when prosperity starts. The mill-owners have already benefited during the last many months by the decline in the price of cotton without any benefit accruing thereby to the workmen, and they should not grudge the payment of a fraction out of that windfall to the labourers by increasing their wages now.

16. Government have considered the question of a minimum wage. The mill-owners have declared that they have no objection to the minimum wage being fixed at Rs.15, provided it is made applicable to all industries and to the whole country. We are for the present concerned however only with the question of the wages paid to factory labour in the textile industry in Cawnpore. Such labour stands on a different footing from that of other employees. A minimum wage of Rs.15 for workmen will not make an appreciable difference to the wage bill of factories in Cawnpore. Moreover, if the percentage of increase which has been suggested in the case of the lowest rates of wages be accepted there would be very few workmen left with wages at a rate lower than Rs.15 a month.

Government also agree with the Committee that instead of daily wages the monthly basis should be accepted for all time workers. This means no more than a reversion to the practice that was in vogue until 1929.

17. The Bombay mill-owners have agreed to an increase of 12 per cent. in wages although, according to the statements submitted by them to the Bombay Labour Enquiry Committee, their mills had actually been working at a loss. Mr. Birla has granted an increase of 6½ to 25 per cent. in his textile mills at Delhi and Gwalior. A similar increase in wages, with salary for periods of leave and other kinds of relief, has been granted to workmen in the Papanasam mills, Madura, as a result of a similar enquiry. Government would earnestly ask the employers in Cawnpore to declare their acceptance of the wage recommendations of the Enquiry Committee.

18. It is the earnest desire of Government that the industry should function smoothly and some machinery should be devised for adjusting from time to time the various factors to changing circumstances. They accordingly accept the proposal for the appointment of a Wage Fixation Board. They would prefer to establish it on the lines of the British Trade Boards so that wages may be adjusted without any disturbance whenever there is a substantial change in the circumstances and sufficient ground for revision. Government are willing to discuss further with the representatives of employers and workmen the question as to how the Board should be constituted and are hopeful of finding a satisfactory solution.

19. As to standardisation of wages, the principle has been accepted by the employers as well as the workmen. It is a difficult and a highly technical question. The Committee has suggested certain methods for implementing standardisation of wage rates. The Government are glad to find that the Employers' Association recognise the necessity for taking up this question and have already made a start in this connexion. Government will be prepared to render every assistance in the matter.

20. The principle of rationalization has already been introduced by some of the mill-owners. There seems to be no fundamental objection to its further extension. In fact, in these days of hard competition it has come to play a very important part in effecting economy and raising efficiency. The schemes of rationalization have certain repercussions on employment and otherwise. To this both the employers as well as the workmen seem to be alive and it should be possible for them to approach the question with the aid of the Labour Commissioner in such a manner as to promote the efficiency and standard of industry in Cawnpore and to further expand and develop it.

21. As to the question of shifts, the Committee is of the opinion that it would not be fair to discontinue night work, although it entails a heavy strain on the workmen. Government agree with this view. As to overlapping and multiple shifts, the Committee has recommended that they should be abandoned. They are in force at present only in a few mills, and it is desirable that so far as possible uniformity should be maintained. The Employers' Association while disavouring this system seem to condone it on the ground that it is permitted under the Factories Act. But section 49 of the Factories Act provides necessary

safeguards and Government will examine the question and frame necessary rules.

22. As to recruitment it is admitted on all hands that the present methods of recruitment are faulty. The Employers' Association has expressed its appreciation of a number of suggestions made by the Committee in this regard. It has also set up a Labour Bureau recently. There are still certain points of difference as to matters of detail and Government see no reason why, with goodwill on both sides, they should not be settled satisfactorily by mutual discussion. There is no objection to the display of wage rates and the employers are also willing to accept the proposal that every worker should be provided with a wage card. As to punishments too, there does not seem to be any serious conflict between the report of the Committee and the views of the Employers' Association, and the Association does not want to countenance any breaches of the law or any indirect methods of circumventing its provisions.

23. The question of dismissals has caused a great deal of heart-burning and is responsible for much of the animosity and bitterness that has been noticeable in industrial circles between the employers and the workmen of Cawnpore. The employers have repeatedly asserted that they are averse to dismissing their workers except for adequate reasons. They have similarly disowned any intention or desire to victimize any labourer for his legitimate trade union activities. It cannot however be denied that there is a very strong feeling in this matter among the workmen and they attach great importance, as is but natural, to security of tenure. The employers as a body do not desire any arbitrary or vindictive dismissals. The workmen have not disputed their right of dismissal for adequate cause. So there is common ground that wrongful dismissals should not take place.

Government think that it will ensure peace in the industry and prevent misunderstanding and bitter resentment which not unoften develops into open conflicts and outbursts if a simple and ready machinery is prescribed for dealing with such complaints of wrongful dismissal. The Committee has suggested some methods for this purpose and its recommendations seem to the Government to be reasonable and adequate to meet the needs of the situation. What is necessary in such cases is not only that there should not be anything wrong but that if a complaint is not justified it may be demonstrated as such without any loss of time. In case it is well-founded proper redress may be given as speedily as possible. Government are however willing to examine the matter further with the representatives of the parties to see if any better method can be devised to achieve this end.

24. In order to deal with these and other difficult issues that arise from day to day Government propose to appoint a senior officer as Labour Commissioner for the whole province with headquarters at Cawnpore. He will also act as a conciliation officer and try to settle differences as they arise from time to time, so as to prevent them from developing further. It is hoped that that appointment will prove of advantage to both parties.

25. With reference to the suggestions for granting leave to workmen the employers say that they are not unsympathetic in the matter of granting leave, but have put in a number of points as to the necessity for examining the matter at greater length. The Government do not consider it necessary to make any comments in this connexion at this stage. They are quite prepared to look into the matter further in consultation with the representatives of the employers and the workmen. It would not, however, be inappropriate to mention here that the Government of India had recommended to the International Labour Office the grant of leave with full pay for 15 days and the League of Nations had suggested a definite scale rising with the period of service. The Bombay Government have, as the employers state in their reply, under consideration the introduction of legislation for making leave with pay compulsory. The Madura mills have recently accepted this principle and it is already in force in several other concerns. But, as has already been stated, the Government will go into the matter thoroughly before taking any final decision.

26. The employers have expressed their general agreement with most of the recommendations as regards general working conditions and there need not be any difficulty in enforcing them. As to a few others they have pointed out certain difficulties. The Government think that these matters of detail can easily admit of settlement by mutual discussion. The Employers' Association has suggested that the maximum number of working days should be 310 instead of 305. This does not necessarily mean, as pointed out by it, that the mills will be actually worked for 310 days. This point too can be looked into and Government do not anticipate any difficulty in arriving at a satisfactory figure.

27. The report has very rightly laid great stress on the organization of labour on sound lines. It also testifies to the desire of the employers for dealing with a properly constituted representative union on behalf of labourers. The importance of such an organization cannot be over-emphasized. The report has suggested a number of measures for the reconstitution of the Mazdur Sabha. The Mazdur Sabha has already accepted them and it is understood that it is already taking steps to give effect to the proposals of the Committee.

The Employers' Association has taken note of this desire to achieve improvement by reconstitution. It has however referred to the Dalit Mazdur Sangh of the depressed class workers' organization which, according to its memorandum, claims to represent 65 per cent. of workers in the Cawnpore mills. The Government are not acquainted with this body and in fact are not aware of its existence. They consider that it is very desirable that the interests of all workmen should be represented by one organization, irrespective of caste, creed or community. The Cawnpore Mazdur Sabha is, as far as Government are aware, the sole labour organization in Cawnpore. It has not always succeeded in implementing its decisions and has not sometimes received that loyal obedience from the general body of workers to which a labour union is entitled. The Mazdur Sabha is, however, as has

been stated above, the sole registered organization of labourers and it has been recognized by Government as the accredited representative of labourers for sending a representative to the Provincial Legislative Assembly.

The Government endorse the recommendations made by the Committee for reconstituting the Sabha, so that it may be in a position to advance the interests of labourers and also to assist in promoting the cause of industry in Cawnpore. It must be able not only to bargain effectively on behalf of the workmen but also to enforce strict discipline among them both outside and inside the mills. The Sabha should be truly representative of the workers, so that its officers may carry full weight with the labourers in performing their duties. It can do a great deal for the well-being and welfare of the workers, as also for the maintenance of peace and correct standards in the industry generally.

The Government would also like to emphasize that it must be the common endeavour of the representatives of labourers as much as of those of the employers to promote efficiency in the industry and to ensure the maximum outturn in quality as well as in quantity through their working of the mills. The larger and better the production the higher should wages rise. The Government trust that the Sabha when reconstituted will succeed in preventing strikes except for very demonstrable and grave reasons. A strike is the most valued weapon in the armoury of the workers, but it is bound to lose in its potency if it is resorted to except on rare occasions and only after all other methods of persuasion and conciliation have failed. The Government will also consider if any changes in law are necessary to help this object. The Government has certain proposals under consideration for this purpose. Before taking any final steps they would like to discuss them with the interests concerned.

Government trust that the Mazdur Sabha as reorganized on the lines laid down in the report will be recognized by the employers and that an era of genuine collaboration and co-operation between the two wings of the industry with a view to ensuring abiding peace will be ushered and maintained in Cawnpore. The Government share the hope that the Sabha will have the full opportunity of working in an atmosphere of fair play and freedom and, as the employers indicate, there will be no hostility to the union but on the contrary a collaboration with it in the achievement of this purpose.

28. The Government are anxious to do all they can to improve housing conditions in Cawnpore. They have already made a small provision in the budget for the current year to help private endeavour in this direction. The conditions in which workmen live are simply miserable, and many of their houses are hardly fit for human habitation. Good houses are necessary for them as much in the interest of their health as for the efficiency of work. The Government will make necessary changes in the Improvement Trust Act and hope that the Trust will be able to make full use of the recommendations of the committee and it will soon appoint a committee of its own for dealing with this problem. The Government are anxious to take active steps

to remove this blot and to promote this object which is desirable not only in the interests of industry but also on humanitarian grounds. It will also examine the question of transport of the workmen from their residences to the mill areas.

29. The Government accept the recommendations in regard to labour welfare and trust that the factories will extend their full support and co-operation in this matter. The Government are also prepared to take necessary measures for protecting the workmen from oppressive and unscrupulous money-lenders on the lines of the Central Provinces Protection of Debtors Act as recommended by the Committee. The Committee has made suggestions about sickness and provident fund schemes. As these are matters of a general character affecting all industries they will have to be examined further before any conclusions can be reached.

30. The Government fully appreciate the necessity for maintaining correct and complete statistical data. The question is already under examination and the Government are grateful to the committee for its valuable suggestions. It intends to set up a well-equipped department of statistics which will work under the Commissioner of Labour.

31. In opening on August 29, 1937, the proceedings of the Committee the Hon'ble Premier had expressed the opinion that "there was really no genuine conflict of interests between employers and employees because the success of one depended on the prosperity of the other, that a satisfied, well-organized and strong labour force is a great asset to industry, and an intelligent, well-equipped, well-fed, well-housed and efficient labour force can increase the general efficiency of industry and promote both the quality and the quantity of goods produced". Mr. Rudra on concluding the first part of the Committee's inquiry made a statement on January 31, 1938, in the course of which he gave expression to similar sentiments. He said "we trust it will increasingly be realized that the prosperity of the industry in Cawnpore, as elsewhere will depend upon the measure of mutual goodwill, intelligence and hard work of capital and labour combined. The two are indispensable to each other. Re-orientation of outlook in this regard is fundamental. This is the key to industrial peace and prosperity. Workers as much as mill-owners stand in the need of such revision of their mental attitudes one towards the other". Government would invite the serious attention of the employers and workmen to the remarks quoted above and would like to make an earnest appeal to those engaged in the textile industry in Cawnpore to put an end to the present deadlock and to restore normal conditions. Not only those directly engaged and interested in the industry but the public in general is suffering considerable loss on account of the stoppage of all work in the Cawnpore mills. The textile industry in Cawnpore is a valued asset of our province and it should be the sacred duty of all well-wishers of the Province to bring about conditions which not only stabilize but also further promote the growth and expansion of the industry. All our hopes for the future depend on a speedy industrialization. We

have ample raw material, unlimited man power and luckily now enough of technical skill, and the money market is easy. This is an opportune moment for pooling all resources for constructive purposes. Let all suspicion and mistrust be allayed and let goodwill and confidence be re-habilitated with robust faith in the future. Let it be remembered that the textile industry has been built with the sacrifices of the general public and even today it is being maintained by the millions who make use of the products of our indigenous mills. The industry is protected by the State and there is a high import duty of 25 per cent. on all British and 50 per cent. on non-British textile imports. It is thus a national industry and almost every single individual living in this province has contributed towards its establishment, preservation and growth. In fact it would not be an exaggeration to say that the general public has paid more for the building up of the industry than those who have invested money for running it. In arriving at the decisions which Government have announced in this resolution they have been influenced primarily by the necessity for the promotion of contentment, efficiency and progress in the textile industry at Cawnpore and they earnestly trust that the implementing of those decisions will lead to the achievement of this object.

ORDER—Ordered that a copy of this resolution be forwarded to the Chairman and the members of the Committee for information.

ORDERED also that a copy of this resolution be sent to the Director of Industries, United Provinces, the Commissioner, Allahabad Division, the Collector, Cawnpore, the Director of Public Information, the Labour Officer, United Provinces, the Upper India, the United Provinces Chambers of Commerce, the Merchants' Chamber of the United Provinces, the Employers' Association of Northern India, and the Mazdoor Sabha, Cawnpore.

ORDERED also that the resolution be published in the *United Provinces Government Gazette* for general information.

By order,
P. M. KHAREGAT,
*Secretary to Government,
United Provinces.*

GOVERNMENT OF THE UNITED PROVINCES

No. 1796/III—332-1937

GENERAL ADMINISTRATION DEPARTMENT

Dated Lucknow, the 11th May, 1938

NOTIFICATION

The following report of the Anti-Corruption Committee is published for general information. Public opinion is invited on the recommendations of the Committee within a period of one month, after which Government will proceed to take the report into consideration.

By order,
PANNA LAL,
Chief Secretary.

V252, 8: (Y:45).N3t

98

Report of the Anti-Corruption Committee

Our Committee was appointed under the following resolution of Government, dated Lucknow, the 14th January, 1938 :

Terms of reference
and personnel.

RESOLUTION

“For many years the problem of corruption in the public services has received the anxious consideration of the United Provinces Government : from time to time the question has been raised in the legislature, and previous Governments have frequently issued orders on the subject. The present Government, on assuming office, made it plain that one of their cardinal principles, as it was their firm resolve, is the eradication of corruption from the public services of the province. Accordingly they appointed an officer to be on special duty at the headquarters of Government to inquire into specific cases that were referred to him and provision was made in the budget for this purpose. Towards the end of the autumn session of the legislature a resolution was moved by Pandit Bishambhar Dayal Tripathi, M.L.A., in the Assembly recommending the appointment of a committee to go into the matter. It aroused general interest in the House and many speakers stressed the importance of a full inquiry. Government accepted the resolution and agreed to appoint a committee. The following gentlemen have been invited to form the personnel of this committee :—

CHAIRMAN :

Kunwar Sir Maharaj Singh, M.A., C.I.E., BAR.-AT-LAW, M.L.A.

MEMBERS :

1. Syed Agha Haider, M.A., LL.B., BAR.-AT-LAW, M.L.C.
2. Shri R. S. Pandit, BAR.-AT-LAW, M.L.A.
3. Shaikh Saiduddin Ahmad, B.A., Advocate, M.L.A.
4. Pandit Bishambhar Dayal Tripathi, M.L.A.
5. Mr. H. G. Walford, BAR.-AT-LAW, M.L.A.
6. Mr. C. W. Gwynne, C.S.I., C.I.E., O.B.E., Chief Secretary to Government, United Provinces.

SECRETARIES :

Muhammad Suleman Ansari Sahib, M.A., LL.B., Advocate, M.L.A.

Mr. T. P. Bhalla, M.A., LL.B., I.P.

Government are anxious that the Committee should meet and submit its recommendations as early as possible. It will control its own procedure, but it is hoped that it will examine witnesses and invite written statements and general opinion.

The terms of reference to the committee are :

- (1) To enquire into the extent of corruption in the public services of the United Provinces including the Local Self-Government services, and to ascertain its causes, means, and occasions.

(2) To suggest suitable and effective remedies and to submit a report to Government."

With the concurrence of the Hon'ble Premier, the two Secretaries of the committee were treated as Members.

2. In place of Mr. Gwynne, who proceeded on leave on 1st March, 1938, on account of illness, Mr. A. A. Waugh, I.C.S., Secretary to Government in the Revenue Department, was appointed on 3rd March, 1938. He left Lucknow on leave on 13th April, 1938, and was, therefore, unable to see or sign our report. We had the advantage, however, of his assistance at a few sittings of our Committee.

Procedure

3. The Committee held eleven meetings. The first meeting was on 8th February, 1938, and the last on 20th April, 1938. Considerable difficulty was experienced in fixing dates and hours suitable for all the members at a time when the meetings of the Legislative Assembly were long and continuous. Our Committee had to meet out of Assembly and Council hours. In certain cases illness or absence from Lucknow interfered with the presence of members with the result that frequent meetings were not feasible while even in those which were held the number of members was seldom large.

On 11th February, 1938, a circular was issued to all members of the United Provinces Legislature, the Registrars of the High Court and Chief Court, Bar Associations, Commissioners of Divisions, Heads of Departments, Collectors, Deputy Commissioners, Superintendents of Police, and Chairmen, municipal and district boards in the United Provinces inviting their attention to the terms of reference of our Committee. They were asked to favour us with their written statements. It was expressly stated that it was essential that any suggestions made for the prevention as well as detection of corruption in all its forms should be practicable and effective. A copy of this letter appears as Appendix 1.

The number of replies was disappointingly small particularly from members of the legislature and Chairmen of municipal and district boards. Some interesting and useful information, however, was obtained especially in regard to the prevalence and occasions of corruption.

It soon became evident that if, as indicated in the terms of reference, witnesses had to be examined, the work and duration of the Committee would be prolonged and it would be impossible for the members to complete their report by the end of April, 1938. With the concurrence, therefore, of his colleagues, the Chairman in a letter, dated the 5th March, addressed to the Hon'ble Premier, asked whether Government considered it essential for the Committee to examine witnesses. It was pointed out that, if oral evidence had to be taken, it would not be possible for the recommendations of the Committee to reach Government at an early date. In such circumstances the Chairman thought it desirable in fairness both to Government and to his colleagues that some other person should be appointed in his place as he was sailing from India at the end of April. The Premier was also informed that the Committee were unanimously of opinion that it was not necessary to examine witnesses or, at any rate, more than a few persons. In his reply, dated the 6th March, 1938, the Hon'ble Premier wrote that Government were not particularly keen about the examination of witnesses and had no desire to insist on this. He did not agree to make any change in the present personnel of the Committee. He was anxious to take practical steps without delay and would highly appreciate an early report, which, in any case, should be submitted before the Chairman's departure for Europe.

5. On receipt of the above reply a questionnaire was issued to a selected number of officials and non-officials (*vide* Appendix 2). The persons addressed were asked to send their answers by 25th March, 1938. Replies were received from all officials and a majority of non-officials by the beginning of April. Here again though the results did not come up to our expectations, in some cases the answers have been helpful. Time was pressing and did not allow us to examine witnesses nor was this essential in view of the Premier's letter and the ample information before us.

6. It is not easy to define corruption in a few words. The sense in which it is employed in popular talk is often vague and elastic including every variety and degree of irregular and undesirable practices in the public services from flagrant extortion to the receipt of prerequisites or so-called customary payments. In general, it is applied to the use or abuse of his official powers by a public servant for his material advantage. In a more limited sense it is often used in connexion with the offences of extortion and bribery. It includes payments in cash or kind to Government servants to influence their course of action or to escape prosecution or punishment or to obtain employment or to secure official information. Extortion and bribery are obviously objectionable *per se* and can generally be distinguished from the receipt of customary payments. As, however, illegal prerequisites form an offence under section 161, Indian Penal Code, and the line of demarcation between them and the more serious exactions are not always clear or well-defined and as both forms of malpractices should in our opinion be condemned and eradicated, we have not in our report differentiated between them.

Definition of corruption.

7. The first term of reference relates to the extent of corruption, its causes and occasions. We have ample information—it is indeed common knowledge—that corruption exists in all departments of Government, none being immune though its prevalence varies with the nature and functions of each department. There are also corrupt practices in offices controlled by local bodies such as municipal and district boards. It is far less prevalent among gazetted officers than among the non-gazetted or clerical or menial staffs. This is mainly due to the superior educational qualifications of the former, their traditions of service and higher ideals and the larger emoluments which they enjoy. So far as extortion and bribery are concerned standards of integrity have greatly improved among the gazetted staff in the past 30 years though black sheep unfortunately still exist in all ranks and all departments. In particular even among gazetted officers influence through *sifarish* is not uncommon.

Extent of corruption.

8. The causes of corruption are many and varied. In the opinion of the Committee the following, though by no means exhaustive, are the main reasons. They are not necessarily placed in order of importance :

Causes of corruption.

(a) The reluctance of the bribe-giver, who has in many cases received his *quid pro quo*, to give evidence against the receiver.

(b) The comparative absence of a strong public opinion, especially against the minor forms of corruption.

(c) The attitude of *laissez-faire* adopted by not a few superior officers and a consequent lack of close supervision of their subordinates in respect of malpractices.

(d) The demoralizing effect upon his subordinates of a superior officer with a reputation for dishonesty.

(e) The demand for a high standard of proof in departmental inquiries and the difficulty of securing adequate evidence of definite charges, partly in view of (a) above and partly because of the fear that the giving of evidence may lead to untoward consequences against the witness by the official concerned and his sympathisers.

(f) The existence of a large number of poorly paid persons in the lower ranks of Government service.

(a), (b), (c), (d) and (e) need no elaboration. As regards (f), it is not, of course, true to say that an increase in the salaries of such officials will render them immune from corruption. Experience has shown that this is not the case. At the same time it is evident that a person who is in receipt of pay not amounting to a living wage is more liable to temptation than one on a higher scale of pay.

9. In view of the general prevalence of corruption it seems unnecessary to deal at great length with the opportunities presenting themselves to a corrupt Government servant especially when one of

Occasions of corruption.

our recommendations is that each head of a department as well as Chairmen of Bar Associations and local bodies should with the help of committees carefully examine the occasions on which corrupt practices are resorted to with a view to minimize them.

We give as illustrations some common occasions and forms of corruption in the departments noted below :

Revenue Department

Maintenance of revenue records, distribution of taqavi, contributions from subordinate officials, inquiries, partition proceedings, and periodical payments by certain estates to non-gazetted employees.

Police Department

Reports at thanas, investigations, and prosecutions, services of summons and warrants, registration of motor vehicles, release of prisoners on bail, hush money from gamblers and cocaine smugglers, contributions at the time of inspections and petty exactions from drivers of public vehicles.

Courts

The presentations of applications, fixation of cases, receipt of official information, inspection of documents, services of summons and warrants, execution and attachment proceedings and the record of judicial statements by subordinates.

Collectorate

Appointments and promotions, obtaining of copies and records, inspection of official documents, purchase of furniture and repair of buildings.

Jail Department

Supply of contraband and other articles to prisoners, unauthorized correspondence and interviews, purchase of stores and release of prisoners.

Medical Department

Unauthorized fees from indoor and outdoor patients, grant of medical certificates and giving of evidence in medico-legal cases.

Excise Department

Contributions from excise contractors, excise shops and smugglers.

Registration Department

A fixed percentage on the valuation of documents and unauthorized inspections.

Forest Department

Investigations and prosecutions of forest offences, grazing rights, contracts and marking of trees.

Public Works and Irrigation Department

Grant of contracts, opening of tenders, charging of illicit percentages on bills, passing of incorrect accounts and the supply and stoppage of canal water.

Agriculture Department

Purchase and distribution of seed, supply of tools and construction of irrigation wells.

Education Department

Selection of text-books and transfers and postings of teachers.

Public Health Department

Vaccinations, improper chalans and abstention from legitimate prosecutions.

Local Bodies

Contracts, auctions, building applications, purchase of supplies, appointments and transfers, works and sale of impounded cattle.

We repeat that the above list is merely by way of illustration and is by no means exhaustive.

10. It is when we come to the second and more important term of reference, viz. the suggestion of suitable and effective remedies that difficulties present themselves. It is obvious that any measures that are recommended should not only be practical but efficacious. While safeguarding the legitimate rights of honest Government servants they must be sufficiently drastic. Remedies

The attention of previous Governments has been drawn from time to time to the prevalence of corruption among public servants in this province. In 1921 a resolution was moved in the United Provinces Legislative Council, calling attention to corruption among public servants as a result of which Government issued a circular, enjoining that all cases of alleged corruption on the part of government servants should be most carefully sifted and that where offences of this nature were proved, exemplary punishments should be inflicted. It added that officers should take definite steps to discover what opportunities existed for corruption among their subordinates and endeavour to reduce them to the greatest extent.

These instructions, as admitted by Government, met with little response, there being no indication that the evil of corruption had been checked. The matter again received the attention of the Legislative Council when a resolution was passed in January, 1925, asking for the appointment of a committee to consider the extent to which corruption was prevalent among public servants in the various departments of Government and to recommend steps for its removal. In consequence Government issued more detailed instructions to Commissioners of divisions and heads of departments. As these were of a confidential nature, we are not at liberty to quote from them. In general, however, it may be stated that stress was laid on the major forms of corruption rather than on the receipt of so-called customary payments and that Government had in mind gazetted officers more than subordinates. Strict scrutiny was enjoined on the part of superior officers and annual integrity certificates were required for deputy collectors and officers of similar standing while progress reports dealing with the problem of corruption were asked for in annual administration reports of heads of departments. In 1936 further instructions were issued drawing attention to the orders of 1926 and stressing the desirability of recording progress from time to time.

11. We cannot help feeling that Government in the past in view of the complexity of the problem and the difficulties of eradicating the evil have been content in an excessive degree to rely upon the growth of public opinion for its solution. The fear that an innocent officer might be victimized, the dangers arising from false complaints, the elaborate inquiries necessary before a government servant can be dismissed the difficulties of securing adequate proof have had a depressing and discouraging effect both upon Government and their officers. As a result, action has been haphazard and not sufficiently concerted or sustained.

12. We are strongly of opinion that the problem must in future be viewed from a different angle both by Government and officers serving under them and further that half-hearted measures are altogether inadequate. It must be realized that bribery and corruption are amongst the greatest evils prevalent in public life, that they give rise to much discontent, that they press hardly on the poorer citizen and last but not least, that an officer, though personally of high integrity, cannot be absolved from his share of responsibility for the prevalence of malpractices among his subordinates. The example of Sir Grimwood Mears, when Chief Justice of the Allahabad High Court, shows what can be done by a superior officer to purify administration by personal zeal and sustained effort.

The time has come for more drastic action. Only this can secure the removal of a noxious plant which has taken deep root. It is because we feel strongly on this point that some of the measures which we have

suggested are of a stringent nature. Moreover, the varied experience which the several members of our committee have had in different spheres of life, both official and non-official, have convinced us that the wholly innocent man, though he may be falsely implicated in a particular charge, has rarely, if ever, been convicted of or punished for corruption. Nor is this a likely eventuality in the future even if all our suggestions are accepted.

Recommendations

13. We now come to our recommendations. They fall under two heads, viz. (a) the prevention and (b) the detection and punishment of corruption. Under (a) we include publicity, the lessening of opportunities for corruption, and the stoppage of practices which, though seemingly innocent in themselves, are liable to abuse by dishonest officials. Under (b) we include the establishment of machinery for dealing with corruption and more effective measures for the removal of dishonest officers.

Not all the measures recommended by us are of equal value. In some cases they are but a repetition of existing Government orders which in our opinion require special emphasis. Yet others are instances of tightening up procedure. Some are altogether new. Among the latter the more important in our view are the establishment of district anti-corruption committees, widespread propaganda, the removal of offenders on grounds of continued bad repute, the creation of committees by heads of departments and the maintenance of an anti-corruption department at headquarters.

We are fully aware of the desirability of not impairing the morale of the various Government services. Indeed, we are anxious to utilize their help to the full in attempts to eradicate corruption, for it is obvious that without their co-operation a large measure of success is not possible.

It is very probable that at least in the beginning a large number of false or frivolous complaints may be made against government servants. In regard to this we definitely recommend that no government servant should by our proposals be prevented from exercising all such rights as he at present possesses in dealing with persons who bring such accusations. Government should make this clear. We also hope that local heads of offices will learn to appreciate the co-operation of non-officials in their attempts to cope with the evil. We believe that on this point anti-corruption committees working in a spirit of helpful co-operation will be able to assist local officers in any measures taken by them.

14. Our recommendations which are not in order of importance, are as follows :

The prevention of corruption

(1) Every government servant when first appointed should furnish a full and accurate list of all immovable property belonging to him and members of his family in any way dependent on him. He should report immediately to his superior officers the acquisition of any such property both in his name or in the name of his dependents including *benami* transactions.

(2) The receipt of *dalis* by government servants of all ranks and members of their families in any way dependent on them, whether from their subordinates or from non-officials, should be absolutely prohibited. Wedding presents also should not be allowed. The decoration of the camps of government servants and the giving to them by private individuals of shooting parties and expensive entertainments should not be permitted. This prohibition does not apply to entertainments by recognized public bodies and associations for which the sanction of the higher authorities should be obtained.

(3) Prompt and full payments should be made by government servants whether on tour or otherwise for all articles bought by them. Supplies must never be purchased through subordinate officials.

(4) Government servants of all grades should not be permitted save in wholly exceptional circumstances to use or maintain conveyances belonging to private persons or subordinate officials.

(5) All free travelling by Government servants of all grades in vehicles plying for hire should be prohibited.

(6) The Government Servants' Conduct Rules should be strictly observed and in particular rules 3, 8, 9 and 16 relating respectively to public demonstrations, lending and borrowing money, buying and selling property and habitual indebtedness.

(7) *Sifarish* or a recommendation, written or oral, for a specific appointment should be prohibited. It should be impressed on applicants for posts that such recommendations render them liable to immediate disqualification.

(8) Annual integrity certificates should be given by their superior officers to all classes and grades of Government servants in receipt of a monthly pay of Rs.30 or more. The form of such certificate should be as follows :

"Certified that nothing has come to my knowledge which casts any reflection on the integrity of....."

(9) No Government servant should be allowed to cross an efficiency bar unless he has an unblemished record for integrity.

(10) Notices should be placed in prominent places in every court and public office warning both officials and non-officials against taking or giving illegal payments in any shape or form.

(11) Separate petition boxes should be placed near or in the room of each local head of an office for the receipt of complaints of corruption and should be opened daily.

(12) All appointments and promotions save those provided for by any special laws or rules should be made by heads of offices personally. Similarly, the fixation of cases and hearing of complaints should be undertaken only by the presiding officers in courts. In short, every opportunity should be taken by superior officers to curtail the occasions of corruption among their subordinates.

(13) Heads of departments at the headquarters of Government should with the help of departmental committees devise measures with the approval of Government for lessening the opportunities for corruption among Government servants subordinate to them.

(14) The salaries of poorly paid subordinates in all departments should be increased to a living wage.

(15) The co-operation of the local Bar Associations should be invited and encouraged. Such Associations should be asked to form their own committees with the object of eradicating corruption by and through the instrumentality of their clerks.

(16) Propaganda by means of lectures, broadcasting, leaflets, etc. should be undertaken by local heads of offices, anti-corruption committees and others in their districts and in particular in places where there are one or more Government offices. The Education Department should be asked to consider the inclusion of references in relevant text-books to the evils of corruption and the desirability of the instruction of their pupils by teachers in schools and colleges on the objectionable nature of dishonest practices.

The detection and punishment of corruption

(17) The character rolls of Government officers of all grades should be examined without delay and where their records are unsatisfactory in respect of corruption they should be warned and carefully watched.

(18) Instructions should be issued to all officials having subordinates under them that they should exercise strict supervision with a view to check corruption and for this purpose make surprise visits. Such officers should receive full support from their superiors.

(19) Periodical inspections by the officers mentioned above should be insisted upon and annual reports sent to their superior officers giving information regarding the nature and extent of the supervision exercised, the results of their surprise visits and the number of persons against whom action has been or is proposed to be taken by them.

(20) Annual reports should be obtained by their superior officers from all local heads of offices regarding the prevalence of corruption in such offices and the measures taken to cope with it including the number of persons detected and punished. Heads of departments should periodically report to Government in the matter.

(21) In cases where the head of a department has adequate material before him that a superior officer has been negligent in detecting corruption a note to this effect should be made in his character roll. Similarly good work in this direction should be rewarded by a suitable entry in his record.

(22) Anti-corruption committees composed of officials and non-officials should be created in every district. They should consist of the District Magistrate as President, the District Judge or the Senior Civil Judge, the Superintendent of Police, two members elected by the Bar Association, one member each elected by the District and Municipal Board and all local members of the United Provinces Legislature. The committee may co-opt members for special occasions. No member of the Legislature shall be a member of more than one anti-corruption committee. These committees should at least in the beginning meet once in two months. Their functions will be as follows :

(i) To organize publicity work in the district for educating the public and Government servants against the evils of corruption.

(ii) To review the problem of corruption in each department in the district and suggest means both for dealing with it and for lessening the opportunities for corruption.

(iii) To bring to the notice of local heads of offices any matter relating to corruption which requires their particular attention.

(iv) To see that complaints received by individual members are forwarded through the secretary of the committee to the local head of the office concerned.

(v) To see that all complaints relating to corruption received by local heads of offices on which action is not taken by them are sent without delay to the local secretary of the anti-corruption committee to be placed before the committee at their next meeting. The committee, if not satisfied, may (1) ask the local head of the office concerned to reconsider the matter, or (2) address the Anti-Corruption Department at the headquarters of Government.

(Mr. Pandit, Mr. Walford, and Mr. Bhalla disagree with this recommendation in so far as it may involve a discussion of individual compliants by anti-corruption committees.)

(23) There should be a member of the district staff in each district one of whose duties should be to act *ex officio* secretary to the anti-corruption committee.

(24) The High Court and the Chief Court should be requested to ask the courts subordinate to them to co-operate with the anti-corruption committees in eradicating corruption.

(25) Local heads of offices should seek the co-operation of the anti-corruption committees eradicating corruption and have periodical meetings with them.

(26) Malpractices in local bodies should come within the purview of the anti-corruption committees. The suggestions made in regard to Government servant should apply *mutatis mutandis* to the employees of local bodies.

(27) There should be an Anti-Corruption Department at the head quarters of Government. It should consist of one experienced officer assisted by a sufficiently large staff. Among the functions of the department should be :

(i) To co-ordinate the work of anti-corruption committees, to convey to them any useful information or suggestions for their work and to receive from them information relating to corruption in their districts.

(ii) To investigate with the approval of Government complaints regarding corruption sent by the district anti-corruption committees or heads of departments or cases in which Government themselves may direct inquiry, and to secure evidence should the results of the investigation disclose a case for departmental or judicial action.

(iii) To receive and examine complaints in regard to corruption sent by Government or private individuals and advise Government regarding the action to be taken on them.

(iv) To visit different districts and get into touch with the anti-corruption committees as well as other public-spirited citizens who may be interested in anti-corruption work.

(v) To advise and assist the district anti-corruption committees and the local heads of offices in any important anti-corruption measures that they may wish to take in their district.

(vi) To examine the periodical statements sent by various heads of departments on anti-corruption work done in their department and to submit reports to Government from time to time.

(28) An immediate inquiry should be instituted against a Government servant against whom there is strong suspicion of corruption. In such cases the official concerned should be suspended and, if necessary, transferred pending inquiry.

(29) The present procedure governing departmental inquiries against sub-inspectors and higher officers in the police is unduly complicated and should be brought into line with the procedure in other departments.

(30) The standard of evidence required in departmental inquiries against officials of all departments charged with corruption should not be so rigid as that demanded by a court of law. In cases where Government think it desirable, a judicial officer of not lower standing than a civil judge should be associated in the inquiry.

(31) Evidence of unsatisfactory general reputation in regard to corruption as recorded in his character roll or in the judgment of a court or an order of a local head of an office may be received in departmental inquiries against a Government servant charged with corrupt practices. Such documentary evidence should be freely used in cases where it is recent.

(32) Departmental inquiries should be completed with despatch and exemplary punishment given to persons found guilty of corruption.

(33) An acquittal of a Government servant charged with corruption in a court of justice should not necessarily result in his reinstatement in Government service.

(34) A Government servant whose general repute has been recorded as corrupt by not less than three different officers should be liable to removal from service without the necessity of proving any specific instance of corruption.

(35) Officers with fifteen years service or more whose record for honesty is bad should be compulsorily retired.

15. Several of the recommendations made above are self-evident and do not require further elucidation. In some cases, however, we think it desirable to add explanatory notes. At the outset,

we would remark that by heads of departments we refer to officers stationed at headquarters such as members of the Board of Revenue, Inspectors General of Police, Jails, Hospitals, etc. By a local head of an office is meant, generally speaking, the highest officer in a district of the department or office concerned. There are, of course, offices away from the district headquarters such as tahsils, thanas and the offices of sub-registrars. The heads of some of these offices can exercise certain functions referred to in our recommendations such as inspections and surprise visits. It is difficult to define a superior officer but in general in making use of this term we refer to a head of a department or to a local head of an office or department such as a Collector, Superintendent of Police, Civil Surgeon, Executive Engineer, District or Civil Judge.

Recommendation 7 relates to *sifarishes* which in our opinion are unduly prevalent and not only waste the time of officials and non-officials but are often a scandal inasmuch as they constitute an attempt to influence in a particular direction the action of the appointing authority. It is evident, however, that unless officers in general take stringent action by disqualifying an applicant, who directly or indirectly brings a *sifarish*, our recommendation will be of little avail. We do not include in *sifarish* certificates which are required under rules by the appointing authority.

We have taken Rs.30 in recommendation 8 as roughly constituting a dividing line of pay below which it may be difficult to give the requisite certificate of integrity without treating it as a matter of routine.

We attach considerable importance to recommendations 12 and 13. It is obvious that malpractices will decrease *pari passu* with the lessening of opportunities for corruption.

Recommendation 15 is important. Members of the legal profession have special means for ascertaining the prevalence of corruption in courts of law. It is hardly too much to say that if their full co-operation is forthcoming, in certain departments at least corruption and the opportunities for malpractices will be greatly reduced. The formation by Bar Associations of their own committees should help to check malpractices.

Number 22 is one of our most important recommendations. We are confident that local anti-corruption committees, if they work properly, will be of considerable assistance in checking corruption. They will enable responsible local officials and non-officials to meet and co-operate in a common task. They will afford opportunities for the appreciation of the difficulties of officials and will enable common experience to be pooled. It is possible that certain officers may feel that some encroachment is being made on their powers and functions by the formation of such committees. We do not agree. We think that with goodwill on both sides and a spirit of mutual co-operation nothing but good can result. The fact that three responsible local heads of offices will be members should help to prevent any untoward results.

Moreover, we have provided that the committees as a whole and not their individual members as such will deal directly and officially with local heads of offices. Their main functions will be to advise and to suggest. On the other hand, it is necessary that local heads of offices should supply them from time to time with information as regards action taken on complaints forwarded to them by the committee or on suggestions made by them.

As regards recommendation 26 we have ample evidence of the existence of corruption in local bodies. We are aware that the latter are semi-autonomous but we are of opinion that in many cases they will themselves welcome the assistance of district anti-corruption committees especially as two members of such committees will be elected by local bodies.

Another important recommendation is contained in 27. As regards the work and utility of the officer on special duty at headquarters and

his staff who were appointed by Government in November, 1937, to inquire under their orders into cases of corruption, Government have the necessary information. It is, however, our considered opinion that in view of the formation of local anti-corruption committees and the probability that more sustained measures and on a larger scale will be taken, it is very desirable that an anti-corruption department should be maintained at headquarters. Apart from the help which it should give to local committees and local officers it will have a heartening effect on the public as indicating that Government are in earnest in the matter of the eradication of malpractices. Opinion in our committee is divided whether the person in immediate charge of the anti-corruption department should be an official or a non-official. Mr. Agha Haider thinks that he should be a trained and experienced lawyer on a monthly pay between Rs.1,500 and Rs.2,000. Mr. Pandit agrees with Mr. Haider except that in his view the pay should not be more than Rs. 500 a month. Shaikh Saiddudin Ahmad is indifferent on this particular point but considers that, if a non-official is appointed, his pay should not exceed Rs. 500 a month in addition to any allowances that may be deemed necessary. In any case he is opposed to the selection of a police officer. The Chairman and the other members are of opinion that the head of this department should be an official of standing and experience, the policy of the department being of course directed by a member of the Government. Mr. Ansari and Shaikh Saiddudin consider that no official, once he has been appointed to the anti-corruption department, should revert to his former department.

We look upon recommendation 34 as of great importance. In fact we are of opinion that this recommendation together with nos. 17 and 35 should *per se* lead to the removal of a considerable number of corrupt Government servants against whom it may not be possible to proceed on definite charges in the absence of adequate evidence. In view of the safeguards inserted by us we do not consider that any honest official has any reason to fear victimization. While we have not recommended any modification of the general procedure governing departmental inquiries against Government servants we see no reason why the procedure against certain classes of police officers should be subjected as at present, to a restrictive and cumbersome machinery which incidentally seems to us to militate against the provisions and intentions of section 7 of the Police Act of 1861.

16. We have completed our task. We appreciate to the full the difficulties which confront Government and their officers in attempting to remove corruption. The problem is indeed complex but we do not consider that it is insoluble. With courage and determination and sustained effort on the part of superior officers of Government and with the increasing co-operation of the public we are confident that much can be done. Education is becoming more widespread, the power of the Press is growing and there is now a popular Government increasingly susceptible to public opinion. All these are hopeful signs. Our recommendations, taken individually, may not seem to be of much value, but we are confident that their cumulative effect is likely to be considerable. In any event we trust that the orders of Government will be passed without delay. In conclusion we desire to express our acknowledgments to those gentlemen and associations, official and non-official, who have favoured us with replies to our circular letter and questionnaire. We are also indebted to Mr. T. P. Bhalla, our Secretary and colleague, who has placed his experience at our disposal and has done a great deal of very useful work. Mr. Khanna, the stenographer of Mr. Bhalla, has throughout worked hard and well.

Conclusion.

MAHARAJ SINGH.
 † AGHA HAIDER.
 R. S. PANDIT.
 SAIDUDDIN AHMAD.
 H. G. WALFORD.
 MOHAMMAD SULAIMAN ANSARI.
 T. P. BHALLA.

Dated the 20th April, 1938.

APPENDIX 1

No. 75/A. C.

FROM

T. P. BHALLA, ESQ., M.A., LL.B., I.P.,
 SECRETARY, ANTI-CORRUPTION COMMITTEE,
 CIVIL SECRETARIAT,
 UNITED PROVINCES,

TO

ALL M. L. A.'S. AND M. L. C.'S., HIGH COURT, CHIEF COURT
 AND DISTRICT BAR ASSOCIATIONS, CHAMBERS OF COM-
 MERCE, LABOUR ASSOCIATIONS, COMMISSIONERS OF DIVI-
 SIONS INCLUDING COLLECTORS, IN CHARGE JHANSI AND
 KUMAUN DIVISIONS, AND HEADS OF DEPARTMENTS,
 COLLECTORS AND DEPUTY COMMISSIONERS, SUPERINTEN-
 DENTS OF POLICE, CHAIRMEN, MUNICIPAL AND DISTRICT
 BOARDS, UNITED PROVINCES.

Dated Lucknow, February 11, 1938.

SIR,

I HAVE the honour to invite your attention to Government resolution no. 4155/III—332, dated January 14, 1938, which appeared in the *Government Gazette*, dated January 15, 1938, on page 87 of Part VIII, appointing a Committee with the following terms of reference:

- (1) To inquire into the extent of corruption in the public services of the United Provinces, including the Local Self-Government services, and to ascertain its causes, means and occasions;
- (2) To suggest suitable and effective remedies and to submit a report to Government.

The Committee met on February 8, 1938, and decided to invite written statements from representative individuals and bodies, both official and non-official, as well as from the public.

I am to request you kindly to favour the Committee with ^{your} ~~your as-ociation's~~ written statements on both the above terms of reference as early as possible and not later than February 28, 1938. It will be helpful to the Committee if the case of each department with which ^{your} ~~your association~~ may be conversant is dealt with separately. The extent of corruption prevailing therein, the causes and occasions of such corruption and the measures which in ^{your} ~~your association's~~ view should be taken to deal with it should be clearly stated. As ^{you} ~~your association~~ will readily appreciate, it is essential that any suggestions made for the prevention as well as detection of corruption in all its forms, including not only extortion but also *dasturi* or customary payments, should be practicable and effective.

^{Your} ~~Your association~~ replies may kindly be sent to me.

I have the honour to be,

SIR,

Your most obedient servant,

T. B. BHALLA,

Secretary, Anti-Corruption Committee.

APPENDIX 2

QUESTIONNAIRE

1. What is the extent and nature of corruption including payment of so called *dasturi* and *haq* prevalent amongst each class of officer in your department, gazetted, non-gazetted, ministerial and menial?
2. Which particular duties of such officers offer special temptation?
3. What are the occasions and who are the recipients of tips or *bakshish*?
4. Do you think it possible to reduce opportunities for various forms of bribery, extortion and *dasturi* by making any alterations in the rules, practice and procedure in the department or departments with which you are conversant? If so, please state the alterations that you would propose.
5. Do you think officers promoted to gazetted ranks are as honest as officers directly recruited?
6. Will the extension of the system of competitive examination diminish corruption?
7. Can you make definite suggestions for more effective supervision with a view to stamp out corruption?
8. (a) Do you consider that an annual integrity certificate from his superior officer should be required for all classes and grades of officials? If this is not considered practicable then for which classes of officials?
(b) What do you consider should be the form of such certificates?
9. What are the difficulties of superior officers in the department or departments you are conversant with in detecting corruption among their subordinates and can you suggest any effective remedy?
10. Do you consider that the present departmental procedure in taking action against persons accused of corruption should be simplified? If so, in what way?
11. Do you consider it feasible and desirable to remove an officer on continued general bad reputation as noted in his character roll by several officers?
12. Do you consider it desirable that officers with say 25 years service whose record for honesty is indifferent should be compulsorily retired?
13. Do you think the anti-corruption committees consisting of non-officials and officials should be established in each district with the object of eradicating corruption and of securing in this matter the co-operation of the public?
14. What should be the composition of these anti-corruption committees and what should be their functions?
15. Do you consider it desirable that there should be more extended use of the C. I. D. in the detection of corruption?
16. Do you think that the employment of secret agents other than the C. I. D. is likely to be useful?
17. What means do you suggest should be adopted to educate the public so that they may refuse to give bribes or submit to extortion?
18. Have you any practical and effective remedies to suggest other than those indicated in the questions referred to above?

LUCKNOW :
March 10, 1938.

T. P. BHALLA,
Secretary,
Anti-Corruption Committee.

OFFICE OF THE DIRECTOR OF PUBLIC HEALTH, UNITED PROVINCES

THE following statement showing seizures and deaths from plague, cholera and smallpox reported in the United Provinces during the week ending 7th May, 1938, is published for general information :

		UNITED PROVINCES					
		Plague		Cholera		Smallpox	
		Seizures	Deaths	Seizures	Deaths	Seizures	Deaths
Agra City	..	..	..	..	..	2	..
Agra District	..	..	..	2	1	..	..
Aligarh (Koil) City	..	..	..	..	..	1	..
Aligarh District	..	..	..	7	2	6	4
Allahabad City	..	..	..	4	4	..	..
" District	..	..	..	43	18	..	..
Almora	..	..	..	36	50	6	2
Azamgarh	..	..	..	20	7	19	3
Bahraich	..	..	..	5	5	..	..
Banda	..	..	..	2	1	..	..
Bareilly City	..	..	..	3	3	..	..
Bareilly District	..	..	..	3	4	4	..
Basti	..	4	3	200	61	67	17
Benares City	..	..	..	2	2	2	..
" District	..	..	..	8	2	..	..
Bijnor	..	..	..	6	6	..	..
Brundaban City	..	..	..	1	1	10	5
Budaun District	..	..	..	13	11	9	..
Bulandshahr	..	7	6	10	5	..	..
Cawnpore City	..	..	..	..	..	..	2
Dehra Dun District	..	..	..	7	2	1	..
Farrukhabad City	..	..	..	..	..	..	1
Fatehpur District	..	..	..	130	35	6	..
Fyzabad City	..	..	..	1	7	..	..
" District	..	..	..	..	2	..	..
Garhwal	..	..	..	5	5	2	..
Gonda	..	..	..	128	47	..	..
Gorakhpur	..	4	2	..	..	4	..
Hamirpur	..	..	..	39	15	1	..
Hardoi	..	..	..	3	..	..	..
Hardwar Union City	..	..	..	2	1	..	..
Jaunpur District	..	..	..	7	2	9	..
Kheri	..	..	..	13	8	..	..
Lucknow City	..	..	..	4	..	9	..
Meerut	..	..	..	6	4	..	..
" District	..	4	6	..	..	..	..
Mirzapur City	..	4	2	..	..	..	..
" District	..	..	..	2	..	3	..
Moradabad	..	..	..	6	5	..	..
Muzaffarnagar City	..	..	..	1	1	..	..
" District	..	3	1	14	10	..	..
Naini Tal	..	..	..	34	18	..	..
Rae Bareli	..	..	..	40	10	..	..
Saharanpur	..	3	14	..	..	..	..
Sultanpur	..	..	..	81	47	..	..
Unao	..	..	..	..	..	27	..
Total	..	29	34	902	405	188	45

K. P. MATHUR, M.B.O.S., L.R.O.F., D.P.H.,

LUCKNOW :

RAJ BARADUR,

The 12th May, 1938.

Director of Public Health, United Provinces.

REGISTERED No. A388



8

Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

ALLAHABAD, SATURDAY, 21st MAY, 1938

PART VIII

X413-252. N46
G8

OFFICIAL PAPERS

GOVERNMENT OF THE UNITED PROVINCES

Chief Engineer's Office, United Provinces
PUBLIC WORKS DEPARTMENT

BUILDINGS AND ROADS BRANCH

No. 267MV/71MV—1937, dated Lucknow, 18th May, 1938

MISCELLANEOUS

THE report of the Committee appointed by the United Provinces Government in resolution no. 33MV, dated 13th January, 1938, to inquire into the working of the United Provinces Motor Vehicles Rules, 1935, is hereby published for general information.

Government wish to express their warm appreciation to the Committee for their able and exhaustive report and to Mr. W. C. Dible, Vice-chairman, for the tact, ability and thoroughness with which he conducted the proceedings of the Committee. The report will be taken into consideration by Government after one month of publication of this notification, and any representation received up to that date will be duly considered.

By order,
WAJAHAT HUSAIN,
Secretary to Government,
United Provinces.

**Report of the Committee appointed to inquire into the working of
the United Provinces Motor Vehicles Rules**

THE rules dealing with motor vehicles and their taxation were framed in 1935, and came into force from the beginning of 1936. They have been worked for two years, and experience has shown that, while many of them have been admirably drafted and have adequately served their purpose, some of them are defective and require amendment. With a view to examine the working of the rules, the Government announced the appointment of a Committee and its terms of reference in the following Resolution :

No. 33M.V., dated Lucknow, January 13, 1938.

Resolution

In 1935, Government framed rules under section 11 of the Indian Motor Vehicles Act, 1914 (no. VIII of 1914) as amended by the Indian Motor Vehicles (United Provinces Amendment) Act, 1935, in supersession of the United Provinces Motor Vehicles Rules, 1928, to regulate the use of Motor Vehicles in the United Provinces. These rules were called the United Provinces Motor Vehicles Rules, 1935, and came into force with effect from January, 1936.

2. On October 1, 1937, a resolution was moved in the United Provinces Legislative Council urging the appointment of a committee to inquire into the working of the system of motor transport in the Province, but it was withdrawn on an assurance being given by Government that they were considering the question of appointing such a committee.

3. The attention of Government has been invited from time to time to the defects in the existing rules. The Governor has, therefore, decided to appoint a committee to inquire into the working of the United Provinces Motor Vehicles Rules, 1935, and to make recommendations for their revision where considered necessary.

4. The terms of reference to the Committee are as follows :

(1) Is any alteration or amendment desirable in the constitution of the Board of Traffic and Communications?

(2) Should rule 4(3) of the United Provinces Motor Vehicles Rules be amended to ensure that the four members elected by the Legislature under rule 4(2)(viii) be members of the Legislature?

(3) Is any alteration or amendment desirable in the constitution of the Divisional Controlling authorities so as to provide for :

(a) increased representation of the interests of non-head-quarter districts, particularly those of bus-owners in those districts;

(b) election of non-official members by the members of the interests represented;

(c) amendments in the present method of nomination;

(d) increase in the number of members of Legislative Assembly on the authority?

(4) If the Controlling Authority is enlarged so as to increase district representation, should District Traffic Committees be abolished?

(5) If not, should the functions of District Traffic Committee be more clearly defined, particularly in regard to—

- (a) receipt of applications,
- (b) provision for meetings at regular intervals,
- (c) any other matter?

(6) Should steps be taken towards obtaining better co-ordination of policy among controlling authorities—

- (a) by providing for appeals from the decisions of controlling authorities to the Board of Traffic and Communications,
- (b) by providing that the proceedings of controlling authorities be subject to confirmation by the Board,
- (c) any other method?

(7) In particular what policy should be laid down in regard to the following things, namely—

- (a) Continuation or otherwise of the existing restrictions on the issue of road service permits,
- (b) Restoration or otherwise of permits cancelled by controlling authorities for breach of the rules,
- (c) Transfer or otherwise of permits to the vendee on the transfer by sale or otherwise of a public service vehicle,
- (d) Fixation of fares and time-tables by the controlling authorities,
- (e) Co-ordination of road-rail passenger traffic,
- (f) Steps to be taken to ensure a minimum mechanical efficiency in public service vehicles, with particular reference to the limit to be fixed on the life of the vehicle up to which it will be allowed to ply for hire,
- (g) Delegation of powers by the authority to any one or more of its members,
- (h) Any other matter of policy relating to the administrative control of public service vehicles?

(8) Should the licence fee payable quarterly, or annually become a fee for the renewal of registration instead of being paid separately as at present?

(9) What other steps should be taken to simplify procedure in registering a motor vehicle and paying tax?

(10) Are any other amendments desirable in the present system of registration?

(11) Is it desirable to provide for compulsory insurance against third party risks arising out of the use of motor vehicles?

(12) What principles should be followed in the classification of routes?

(13) Should the owner of a motor vehicle be required to pay the penalty and fee prescribed by rule 49(1) if he fails to comply with the provisions of that rule?

5. The constitution of the Committee will be as follows :

Chairman

The Hon'ble HAFIZ MUHAMMAD IBRAHIM, B.A., LL.B.,
Minister of Communications and Irrigation.

Vice-Chairman

MR. W. C. DIBLE, I.C.S., Commissioner, Agra Division.

Members :

(1) MR. G. D. PARKIN, I.P., Superintendent of Police,
Lucknow.

(2) MR. BHAGWAT DAYAL, Honorary Secretary, United
Provinces Automobile Association, 32 Canning Road, Allah-
abad.

(3) THAKUR HAR PRASAD SINGH SAHIB, M.L.A., Pleader,
Katra, Banda.

(4) KUNWAR ANAND SINGH SAHIB, M.L.A., village Tamkoli,
P. O. Barauli, district Aligarh.

(5) MR. IQBAL AHMAD KHAN SUHAIL, B.A., LL.B., M.L.A.,
Advocate, Azamgarh.

(6) CHAUDHRI HYDER HUSAIN SAHIB, M.A., LL.B., BAR-
AT-LAW, "Park View", Amin-ud-Daula Park, Lucknow.

(7) HAFIZ NAZIR AHMAD SAHIB, President, Lorry Owners'
Association, Meerut.

Secretary

Mr. Wajahat Hussain, I.C.S., Secretary to Government,
Public Works Department, Buildings and Roads Branch, Lucknow.

6. The headquarters of the Committee will be at Lucknow,
where it is expected to assemble from January 26, 1938. The Com-
mittee will welcome any help that is given by the public and will be
prepared to consider the views that may be submitted to it in writing
before January 26, 1938.

Before the Committee met, two more members Mr. J. C. Rose,
Chief Commercial Manager, East Indian Railway, and Mr. G. A.
Rowlerson of the Bengal and North-Western Railway, were appoint-
ed. Later, another representative of the motor interest, Mr. Laxmi
Chand Jain, President, Muttra Motor Association, was added to the
Committee.

Ever since the enforcement of the rules the Government has been
consulted on various points on which the rules have been silent or ambi-
guous. It has also received representations criticising a number of the
rules. With the help of the material at his disposal, the Secretary
prepared an agenda, and notes on each item of the agenda. They
form* Appendix A of the report. A copy of these documents was sup-
plied to each member.

The first meeting of the Committee was held on January 26, 1938.
The Hon'ble Minister for Communications attended it, but withdrew
after making an introductory speech, leaving it to Mr. W. C. Dible to
conduct the proceedings. Seven meetings were held on January 26,

*Not printed.

27 and 28, February 2 and 4, and March 3 and 4. Mr. Rose did not attend the first five meetings, at which Mr. Casement replaced him, but he was present when the report was discussed and signed. Mr. Rowler-son attended the first three meetings, and was replaced by Mr. Izat, who attended the subsequent meetings. Mr. Parkin attended 4, Thakur Har Prasad Singh 4, and Chaudhri Hyder Husain and Mr. Iqbal Ahmad Khan Suhail 2 meetings each. Mr. L. C. Jain joined the Committee at its fourth meeting. The remaining members attended all the meetings.

Before proceeding with our business we considered what procedure we should follow. Two courses were open. We could start work at once by taking up in turn for consideration each item of the agenda, or we would collect more information by hearing witnesses and inviting opinions. We concluded that the material already before us was sufficient, and decided to work according to the agenda, and to examine the memorandum prepared by the Vice-Chairman to supplement the points not included in the agenda. A departure was made in three cases. Mr. Kenney of the Yatra Transport Company, Saharanpur, appeared personally at the first meeting, and made certain statements and submitted a written memorandum. The statements related to grievances against certain orders, which were already under the consideration of the Government, and outside the purview of the Committee. In the course of his statement, Mr. Kenney made adverse references to the Gwalior Transport Company. In fairness to the latter company, we decided to hear it also. Mr. Nawal B. Bhaya appeared on its behalf. Mr. D. R. Gupta of the Motor and General Finance, Limited, appeared on the day on which we were considering the draft report, and presented a memorandum. No other witness was examined by the Committee.

Besides the agenda and the notes, the Committee was supplied with the precis of views received from 9 officials and 20 non-officials in response to the invitation contained in the Resolution issued by Government. The official views are of those who are actually working the rules, and were thus particularly helpful. The non-official views also contain a number of helpful suggestions.

Before proceeding to discuss the agenda, we wish to emphasize a few guiding principles which have emerged from our discussion. The memorandum received from the Council of the Merchants Chamber of the United Provinces points out that three main interests are concerned with the question of traffic regulation. "Firstly, the internal competition as among the vehicle owners; secondly, the protection of the public interest; and thirdly, a fair co-ordination of road rail competition. Of these, the Council of the Chamber attach the greatest importance to the first problem as calculated to affect the economic future of motor transport industry in the province." We agree with the Chamber that these three interests are the interests mainly affected by any system of control of public transport; but do not agree with it as regards the relative importance to be assigned to each. In our opinion the interest of the public must come first. The Government must ensure that in their endeavour to earn profits the owners of means of transport do not neglect the interests of the public. The public is interested in the maintenance of a form of public transport which is regular, reliable, safe and reasonable in cost. So far as its interests are concerned, no difference exists between road and rail transport; both forms of transport are to serve its

convenience; and the special interests of both are a matter of subsidiary importance. The authorities charged with the duty of regulating public transport by motor vehicles should be guided primarily by the interest of the public.

The Motor Vehicles Rules have set up regional authorities to control motor traffic. Underlying all the memoranda submitted to us on behalf of motor interests is the desire that control of this traffic should be placed in the hands of these interests. The fulfilment of such a desire offends against the main principle on which regional authorities should be constituted. While it is beyond question that adequate representation should be given on these authorities to the interests identified with motor and railway transport, the representation of these interests must not be so great as to make the influence of either preponderating. The first principle to be borne in mind is that there should always be a majority which is primarily concerned with the interest of the public. To secure this the public should be represented partly by elected non-officials and partly by officials possessing administrative experience of the regulation of road transport.

The regional authorities are administrative authorities constituted to administer the Motor Vehicles Rules. The principle enunciated above places no limit on the numerical strength of these authorities. The second principle, therefore, which should govern the constitution of these authorities is that an administrative body must not be unwieldy. The membership of these authorities should, therefore, be restricted to a number, which is not too large to hamper the discharge of their executive and administrative functions.

We have examined the criticisms of the existing rules, and have been struck by the fact that most of them have arisen owing to the absence of adequate provision for effective supervision of the regional authorities, and to a lack of provision for appeals from their orders. These defects we propose to remove by making recommendations for necessary revisional and appellate powers. We feel that if our recommendations in this connexion are accepted, the complaints against the rules should largely disappear.

We now proceed to discuss in detail the various points referred to us. Complaints have been made that the rules which provide for the inspection of motor vehicles are too elastic, and that inspections are sometimes made by non-gazetted officers. Inspection of motor vehicles is a condition precedent to their registration or to the renewal of their registration, and must be so, to ensure safety. It is not unlikely that a vehicle may become unserviceable between two regular inspections, and it is, therefore, necessary to empower the registering authority to send for vehicles for inspection at other times also. We are of opinion that rules 27 and 28 should be retained, but recommend that the duty of inspecting vehicles should be discharged by either the registering authority himself, or by a gazetted Police Officer nominated by him, or by a traffic inspector appointed by the Inspector General of Police. For this purpose, necessary amendments should be made to rule 27 and definition 3(XXXV).

Suggestions have been made to us that motor vehicles should be inspected by persons possessing technical knowledge. We recommend that, when the Inspector General of Police considers that the

volume of traffic in any area necessitates the appointment of a traffic inspector, he should appoint a person who possesses sufficient technical knowledge. To enable him to discharge his duty efficiently, the traffic inspector should be provided by Government with a motor cycle, or, if necessary, a motor car.

We find that some registering authorities have placed a limit on the serviceable life of a public service vehicle, and refused to renew its registration after a fixed number of years. In the opinion of the Committee, no such limit should be fixed. The efficiency of vehicles should be judged after inspection on the merits of each particular case. In coming to a decision as regards the mechanical efficiency of such a vehicle, the registering authority should have regard to the following points:

- (i) whether the seating accommodation provided in it is comfortable;
- (ii) whether it is mechanically efficient for safe transit, and
- (iii) whether it is capable of running to a fixed time-table.

In order to check whether the last condition is fulfilled, the registering authority should make necessary arrangements to maintain a record of the timings observed by each vehicle.

Similar considerations apply to an application for the registration of a second-hand motor vehicle which should not be declared unfit only on the ground that it has been purchased second-hand. In case such a vehicle is declared unfit by registering authority, his order should be appealable to the District Traffic Committee.

The procedure at present followed in connexion with the registration or renewal of registration of motor vehicles is cumbersome, involving attendance at two different offices, the Treasury and the Police Office. We see no reason why the licensing officer and the registering authority should not be the same person. We recommend that an executive order should issue to the District Magistrate instructing him to appoint the registering authority as the licensing officer under rule 3 of the Motor Vehicles Taxation Rules. In order further to simplify the procedure, the payment of the tax should be made in the form of non-judicial stamps, the cost of the stamps required for the purpose being met out of the Provincial Road Fund. These stamps may be surcharged "United Provinces Motors" at the Printing Press, or, if that is not feasible, the registering authority may impress each stamp with a suitable rubber stamp when an application for registration is received. If this recommendation is accepted, the question arises whether special rules need be framed for refunds under Part IV of the Taxation Rules. We have come to the conclusion that it will be adequate if refunds are made according to the existing rules under the Stamp Act.

These recommendations will lead to an increase in the volume of work in the Police offices. The establishment of these offices should, therefore, be increased adequately so as to enable registering authorities to cope with their additional work in an expeditious manner.

Attention has, from time to time, been drawn to rule 49 of the Motor Vehicles Rules, according to which a penalty is levied if an application for the renewal of registration is delayed beyond a certain date, even if the appropriate tax is paid within the proper period; and

it has been asked whether such a penalty is justified. We are of opinion that, in view of the existing procedure as regards licensing and registration, this rule is sound as an application for the renewal of registration of a public service vehicle may be delayed to escape the inspection of an unserviceable vehicle. The application of the rule will, however, cease if our recommendation for the use of non-judicial stamps is accepted, as the application for registration and the payment of tax will be simultaneous. If the recommendation is not accepted, we propose that the registering authority should be empowered to waive the penalty provided that he is satisfied that the delay was due to a reasonable cause.

Classification of routes is governed by the provisions of the Motor Vehicles Taxation Rules. Rule 6 lays down the considerations to be applied in making the classification. We consider that they are suitable, and cannot be improved upon. As regards special routes, we have adopted the following definition :

Special routes comprise generally either roads which are unusually expensive to maintain or construct, or roads on which, owing to an abnormal volume of traffic, profits are likely to be enhanced.

A suggestion has been made that permits to ply public service vehicles should be given for a particular area instead of a particular route. The suggestion does not appeal to us, as it loses sight of the fact that roads within an area may be of different kinds and standards, and that roads which are suitable for one type of motor vehicle, may be unsuitable for another type. We have examined the existing restrictions on the issue of permits, and have come to the conclusion that the provisions of rule 11 dealing with them are reasonable and require no change. We, however, observe that the procedure prescribed in rule 15 for the issue of a special permit is unduly lengthy, as the applicant for such a permit has to attend the Treasury office for the payment of tax, and the Police office to obtain the permit from the registering authority; but the procedure will be simplified if our recommendation for the use of non-judicial stamp is accepted. In any case, we note that the extra tax for a special permit is only payable if the provisos to Article VIII of the Motor Vehicles Taxation Act are not fulfilled, and are of opinion that, if the registering authority is satisfied that these provisos have been fulfilled and no tax is payable, he should issue the permit without any reference to the licensing authority.

We notice that according to rule 15(2) the maximum period for a special or temporary permit is two months, and are of opinion that the period is too long and should be reduced to one month.

The existing rules provide for the cancellation of permits by the controlling authority for breach of the rules; but there is no definition of the policy to be adopted in regard to the restoration of cancelled permits. In accordance with the recommendation we shall make later the aggrieved party will be able to apply to the Board of Traffic and Communications for relief, but such relief could only be given by the Board in respect to the order cancelling the permit. We consider, however, that it is unreasonable to debar for all time, a permit-holder, whose permit is once cancelled, from obtaining another permit. We recommend that it should be open to such person to apply for a new permit,

his application being considered on its merits. If the authority concerned decides in favour of the applicant, he should be treated as any other approved applicant, and his name placed on the waiting list in the order in which his application is received.

The transfer of permits to the vendees of public service motor vehicles has been objected to on the ground that it is liable to abuse. We feel strongly that such transfers should not be prevented. In order to safeguard against the misuse of the right, it is considered sufficient to require both the transferor and the transferee of a permit to report to the authority which issued the permit. All that is needed to carry out this recommendation is to amend rule 21 by adding the words "the transferor" before the words "the transferee".

For the convenience of passengers travelling by railway trains, the railways arrange with certain bus owners to run buses in connection with the trains. We have considered at length the desirability or otherwise of such an arrangement. The majority are opposed to railway out-agency buses being allowed to ply. The Vice-Chairman and three other members are of opinion that this arrangement results in better and more comfortable service, and that, in the interest of the public, it should be encouraged, subject to two conditions, namely, that these buses should charge the same fares as are fixed for other public motor service vehicles, and that they should start from a fixed place (near the railway station), and should not be permitted to pick up passengers elsewhere in the town or village, within which the starting place is situated. The latter condition will not, however, apply to passengers who are picked up at any other point, intermediate between the points from which the buses start and at which they terminate their journey. The railway representatives are of opinion that, provided that definite routes are fixed for the buses, no restrictions should be imposed on the picking up of passengers. All members are agreed that there is no objection to the railways making their own arrangement for the carriage of parcels and goods.

It has been brought to our notice that private service vehicles are engaging on a large scale in the carriage of goods, and it has been urged that this class of private service vehicles should be abolished. We are unable to accept the proposed remedy, as business in general is likely to be injured, but we are of opinion that private motor lorries should be stopped from carrying goods on hire since this is the function of public vehicles, and, with this end in view, recommend an addition to rule 39, directing that the registering authority should decline to register a private motor lorry unless he is satisfied that the applicant has a *bona fide* intention to use the lorry for his own private purposes, and also an amendment to rule 89, empowering the police to require the owner of a motor lorry to furnish information as regards the origin of goods carried by it.

The power conferred by the existing rules for the fixation of times at which public service vehicles are to commence and terminate their journeys, has not been exercised uniformly by the controlling authorities. We have come to the conclusion that time-tables should be framed by the district traffic committee, and that they should mention both the times at which a vehicle is to commence and the time at which it is to terminate its journey. The aim in framing time-tables should

be the convenience of the public, and they should be so framed as to provide for one form of transport or another to be available on a route within a reasonable time. It is suggested that it will be reasonable, on a route on which traffic is considerable, if a form of transport is made available at intervals of half an hour.

The detailed arrangement of settling what particular vehicle will start at what time should be left to the registering authority; but a right of appeal to the district traffic committee from his order should be provided for. In allotting the fixed timings to the individual permit holders, the registering authority should follow a system of rotation as far as practicable.

Having fixed the times at which a form of transport will be available to the public, it is necessary to fix the place where it will be available. The existing rules empower the registering authority to determine parking places, but the power has not been freely used. On the other hand, complaints have been received that a number of local bodies are charging "adda" fees from public service vehicles without actually providing proper stands for parking such vehicles. We recommend that a statutory obligation should be placed on local bodies to provide proper parking places on land owned by these bodies or acquired by them for this purpose. At the same time, the registering authorities should make larger use of the powers conferred on them under rule 93.

In considering the question of fares we have been influenced mainly by the fact that the means of transport made available to the public should be safe and reasonably cheap. Considerations of safety disallow unrestricted competition among the different forms of transport, and place a lower limit on the price charged from the public. We recommend that the controlling authority should fix standard fares for different classes of routes as at present, and that in the case of competitive routes, served by both railways and public service vehicles, the standard fares fixed should be the same as the rates charged by the former. Further, in cases where the railways allow concession rates, a public service vehicle should be allowed to charge the same rates. In order to avoid the danger of under-cutting by the railways, a duty should be imposed on the controlling authority to revise the fares for public service vehicles in the event of, and in accordance with, any revision of rates on a railway line competing with public service vehicles.

No rule exists at present making it obligatory on the part of owners of public service vehicles carrying passengers to issue tickets. We are of opinion that the provision of such a rule is necessary, and recommend that the following may be added as a sub-rule to rule 26 :

"In the case of a motor omnibus, the conductor shall give to each passenger carried in it a ticket specifying the particulars of the fare charged from him."

We have been informed that in most motor omnibus vehicles the schedule of fares is not at present usually displayed. That is an infringement of one of the provisions contained in rule 26. We recommend its strict enforcement.

The recommendations made in the last three paragraphs deal with standard fares for passengers. We recommend that standard rates for

passengers' luggage and goods should also be fixed by the controlling authority.

Our attention has been drawn to the fact that the level of motor taxation in certain Indian States is higher than that in this province, and, it has been argued, that if standard rates are fixed by the controlling authority at railway rates for a route competing with a railway line which runs into any of these States, they will be unremunerative. We have no intention of binding the controlling authority to fix fares at railway rates for the whole of a competitive route, including the portion which passes over Indian States territory.

One of the terms of reference to the Committee deals with compulsory insurance of motor vehicles against third party risks. We consider compulsory insurance desirable, but the cost of such insurance will amount to Rs.200 to Rs.250 a year per vehicle, and we are not prepared to state that the motor transport business can bear this extra burden at this stage of its development. Means should, however, be adopted to ensure greater safety from accidents caused by the use of motor vehicles. Suitable speed limits have been prescribed in rule 123, but they apply only to motor lorries. We recommend that the same limits should be made applicable to motor omnibuses also. The existing provisions dealing with the rules of the road have been examined and found to be satisfactory. It has, however, been observed that no rule at present exists regulating the traffic of bullock carts, cycles, tongas and other similar forms of transport, while most of the accidents are caused by the negligent use of the roads by them. We bring the absence in these provinces of a Highway Act to the notice of Government, and strongly recommend that such an Act should be brought on the Statute Book at the earliest opportunity.

In the interest of safety, we have recommended, in the earlier portions of the report, the organization of proper inspection and regulation of motor vehicles. To ensure it still further, we have examined the existing rules dealing with the qualifications of drivers and conductors. A suggestion has been made that a driver's licence should be given only to a person who has received education up to the tenth standard. We are of opinion that a literary qualification is not necessary for drivers, but that it is desirable to give licences only to such persons as possess sufficient knowledge of traffic rules, and with this end in view, recommend that rule 81 should be amended by adding the following:

"That the applicant possesses an adequate knowledge of the rules of the road, Traffic Signs and Road Signals."

The conductors, who will now have to issue tickets, should be literate, and the following addition to rule 137 is recommended:

"The conductor or the attendant shall be sufficiently literate to discharge his duties."

We have considered the question whether motor transport should be allowed to remain in the hands of individual small owners, or preference should be shown to syndicated enterprise. We hold the opinion that the formation of syndicates for the conduct of the motor transport business is desirable, but the time has not yet arrived to enforce it.

There is a growing tendency among owners of public service vehicles to form themselves into associations; and opinions have been

expressed that the formation of such associations should be made compulsory. We are not prepared to recommend compulsion, but we agree that such associations should be encouraged, and recommend that where they have been formed, due regard should be paid to their views and recommendations by the registering authorities, district traffic committees, and controlling authorities.

These committees and authorities have been constituted under the Motor Vehicles Rules. Their constitution and functions have been examined at great length. At the apex stands the Board of Traffic and Communications, whose jurisdiction extends over the whole of the Province. Rule 4 of the Rules governs its constitution. No change is necessary in categories (i) to (vii) of sub-rule (2) of this rule; but category (viii) needs modification in view of the fact that there are now two Chambers of the Provincial Legislature and that the number of members in the Assembly has increased. It should now read as follows:

“Six members of the two Chambers of the United Provinces Legislature, four of whom shall be elected by the Assembly, and two by the Council.”

We are of opinion that the interest of owners of public service vehicles should be represented on the Board, and recommend that the following category (xii) should be added to sub-rule (2):

“One member to represent the owners of public service vehicles, the member to be nominated by Government until a recognized provincial motor association is formed, when he shall be elected by the association.”

The members elected by the Legislature hold office for three years; and there is no provision for the demise of office on the expiry of the life of the Legislature. We propose an amendment to rule 4(3) as follows:

“4(3)(a). Every member in category (viii) of the foregoing sub-rule (2) shall hold office for three years, or such period as he continues to be a member of the Legislature, whichever is less.

(b) Every member included in the remaining categories of the foregoing sub-rule 2 shall hold office for a period of three years on the expiry of which he shall cease to be a member, provided that every member whose term of office has expired, shall be eligible for re-nomination or re-election as the case may be.”

The functions of the Board have been given in rule 5. Under rule 5(1) the Board is authorized “to co-ordinate the activities and the policy of all controlling authorities”, but it appears that the Board has been under the impression that its functions are purely advisory. It is true that the Board has been set up to advise Government, but we are of opinion that the Board can function more usefully by exercising control over the controlling authorities. In order to make this intention clear, we suggest that the words “and regulate” should be added after the word “coordinate” in rule 5(1).

To serve the purpose of co-ordination still further, a provision should be made for all proceedings of the controlling authorities to be submitted to the Board; and the following should be added as a sub-rule to rule 5:

"All proceedings of a controlling authority shall be submitted to the Board of Traffic and Communications, which may modify or rescind, on a representation made to it or on its own initiative, any order passed by a controlling authority."

We consider it unnecessary to hold up the orders of a controlling authority by providing for the confirmation of its proceedings by the Board.

Rule 6 places controlling and registering authorities under the general control and direction of Government, but permits Government to delegate its powers to the Board. Government has not yet delegated any powers to the Board. We recommend delegation of powers under the following heads :

- (1) Control of the issue, suspension and cancellation of permits,
- (2) Control of the classification of routes (rule 5 of the Taxation Rules),
- (3) Control of the fixing of fares and rates for passengers' luggage and goods,
- (4) Control of the framing of time-tables, and
- (5) Coordination of measures taken by controlling authorities in respect of routes common to the traffic area, and common to two or more, or partly by one or more controlling authorities of this province, and the traffic authority of an adjacent province or Indian State.

In view of the proposal made by us later that some of the functions enumerated above should be exercised by district traffic committees, the words "every district committee" should be inserted in rule 6.

Controlling authorities have been constituted under rule 8. No change is considered necessary in the first three categories of sub-rule (1). As regards category (iv), we observe that representation of the Legislature on the Board of Traffic and Communications, which is a superior body, has been increased from four to six, and are of the opinion that in these circumstances, the Legislature need not be represented on the controlling authorities. Further, we make proposals to increase the membership of controlling authorities. If these proposals are accepted, the addition of members of the Legislature to these authorities will make them too unwieldy for efficient discharge of business. Numerous complaints have been made that under the existing constitution the non-headquarters districts have meagre representation on the controlling authorities, and that the representation of motor interests is also low. We recommend that their representation should be increased and that category (v) should be redrafted as follows :

- (a) Three representatives of owners of public service vehicles plying within the traffic area, the members being nominated by Government,
- (b) One representative elected by each District Board situated within the traffic area,
- (c) One representative elected by the Municipal Board situated at the headquarters of the traffic area, and

(d) One representative of the railways operating within the traffic area, the member being nominated by Government in consultation with the Railway Board.

In the areas where there are both broad and meter gauge railways, the President of the Controlling Authority should be instructed to co-opt a representative of the railway system which is not represented under category (d).

In view of the introduction of the method of representation by election in certain cases, the sub-rule (4) of rule 8 should be amended as follows :

“Subject to the provision of sub-rule (3) of this rule

(a) Every member of a controlling authority nominated by Government shall hold office for a term of three years.

(b) Every member elected by a District or Municipal Board shall hold office for a term of three years or such period as he is a member of the Board, whichever is less”.

Under the existing rules the controlling authority meets at irregular intervals. We are of opinion that it should meet regularly at intervals of not more than two months.

We hold that the detailed working of the Motor Vehicles Rules should, as far as possible, be left to district traffic committees, and that controlling authorities should deal mainly with the direction of general policy. It is desirable that, on the analogy of the Board of Traffic and Communications, the controlling authority should co-ordinate the activities and policy of district traffic committees. We recommend, therefore, that proceedings of district traffic committees should be submitted to controlling authorities, and, with this end in view, propose that the following sub-rule be added to rule 9 :

“The proceedings of a district traffic committee shall be submitted to the controlling authority of the traffic area in which the district is included, and the controlling authority may modify or rescind, on representation made to it, or on its own initiative, any order passed by the committee.”

Further, it is also desirable that orders passed by a district traffic committee should be appealable to the controlling authority. For this purpose, we recommend that the following addition should be made in rule 10 :

“An appeal from an order passed by a district traffic committee shall lie to the controlling authority of the traffic area in which the district is included;

“Provided that no such appeal shall lie from the order passed by the district traffic committee in appeal from an order of the registering authority; provided also that no such appeal shall be heard at a meeting of the controlling authority at which the number of members present is less than one-third of the total number of members of the authority.”

District traffic committees have been empowered to frame time-tables, we are of opinion that the time-tables should not be published before they have been approved by the controlling authority.

In an earlier paragraph a recommendation has been made for the fixation of standard fares for passengers, and standard rates for passengers' luggage and goods generally. These fares and rates should be fixed by the controlling authority. For this purpose the

following sub-rule should be added to rule 10, which defines the functions of the controlling authority :

“(a) It shall fix standard fares for different classes of routes in the traffic area, to be charged from passengers travelling on those routes; provided that, except for routes which lie partly in Indian States, the standard fares fixed for the routes which are competitive with the railway running parallel to them, shall be the same as the fares charged for the railway, and shall be revised when the fares charged for the railway are revised.

(b) Where it considers such action necessary or desirable, it shall fix, subject to the provisions of the Carriers' Act, 1865, the rates at which goods and passengers' luggage shall be carried.”

In the end we are of opinion that no controlling authority should have power to delegate any of its functions to any other person.

Under the existing rules, district traffic committees have been relegated to a subordinate position and have no power of administration or executive action. We have been impressed by the arguments advanced for delegating executive powers to these committees. We are strongly of opinion that these committees should continue to exist, and that their constitution under rule 9 should be revised in the following manner :

Category (ii) of sub-rule (1).

After the word “Superintendent of Police” add “or a gazetted police officer nominated by him.”

Category (iii)—The Executive Engineer has already been nominated as a member of the controlling authority. This category should be amended as follows :

“An Assistant Engineer of the Buildings and Roads Branch of the Public Works Department, in charge of the district, or, where there is no such Assistant Engineer, the District Board Engineer.”

Category (iv)—This category should be replaced by the following :

“Three members of the United Provinces Legislative Assembly, representing the rural constituencies in the district, to be nominated by Government.”

Category (v)—Should be re-drafted as follows :

“Two non-official members, who shall be nominated by the President of the controlling authority of the traffic area in which the district is included and who shall be—

(a) a representative of the district board, and

(b) a representative of the municipal boards, or if there be no municipal board, of the notified and town areas, in the district.”

We recommend that two new categories should be added as follows :

“(vi) Two or three representatives of owners of public service vehicles plying within the district, according to the circumstances of each district and as determined by the President of the controlling authority concerned. The representatives shall be elected by an association of owners of public service vehicles plying within the

district, if the association is registered under one of the Acts for the registration of associations. Otherwise, the representative shall be nominated by the President of the controlling authority concerned.

(vii) A Deputy Collector nominated by the District Magistrate, to act as Secretary to the Committee."

In the case of district traffic committees also there is no rule for holding meetings at regular intervals. We recommend that these committees should meet once in every month, and suggest that the following sub-rule may be added to rule 9:

"The district traffic committee shall meet at least once every month."

We have discussed the functions of the district traffic committee, and come to the conclusion that it should be authorized to issue permits, provided that the number of permits is kept within the limits fixed for a route by the controlling authority under rule 10(1), and provided also that a waiting list is kept in which the names of approved applicants are entered, strictly in accordance with the order in which the applications are received.

No change is necessary in rules 19 and 20, as the power under these rules is given to the authority by whom the permit is issued.

We are, further, of opinion that the district traffic committee should be authorized to frame time-tables subject to the approval of the controlling authority concerned before the time-table is published.

We are of opinion that the district traffic committee should be invested with powers to hear appeals from the orders of the registering authority in the following cases:

(a) An order as regards the suspension of registration under rule 53 is appealable to the District Magistrate under rule 55. The District Magistrate should be replaced by the district traffic committee.

(b) Time-tables will be framed by the district traffic committee, but it has been left to the registering authority to settle what particular vehicle should start at what time and in what rotation. The orders of the registering authority should be appealable to the district traffic committee.

(c) The registering authority may refuse to register a second-hand bus of a public service vehicle on the ground that it is unfit. An appeal from such an order should be allowed to be made to the district traffic committee.

We are of the opinion that no appeal should be heard at a meeting of the district traffic committee, at which the number of members present is less than one-third of its total number.

As regards all appeals under these rules, whether to the controlling authority or to the district traffic committee, we are of the opinion that they should be filed within 30 days from the date of the communication of the order appealed against, after excluding the time taken in obtaining a copy of the order.

We have come to the conclusion that the Superintendent of Police is the most suitable officer for discharging the functions of the registering authority. The most important change proposed by us is that the

registering authority should be made the licensing officer also. He has also been authorized to settle, after a time-table has been framed by the district traffic committee, what particular vehicle would start at what time and in what rotation; and it has been suggested that he should make necessary arrangements to maintain a record of the timings observed by each vehicle. In connexion with parking places, we have already remarked that the registering authority should exercise the power under rule 93 more freely. The existing powers conferred on the registering authority have been examined and found to be suitable.

3-3-1938.	W. C. DIBLE.
3-3-1938.	BHAGWAT DAYAL.
3-3-1938.	G. D. PARKIN.
3-3-1938.	IQBAL AHMAD KHAN.
3-3-1938.	HAR PRASAD SINGH.
3-3-1938.	J. R. IZAT.
3-3-1938.	J. C. ROSE.
3-3-1938.	ANAND SINGH.
3-3-1938.	LAXMI CHAND JAIN.
3-3-1938.	NAZIR AHMAD.
3-3-1938.	WAJAHAT HUSAIN.
16-3-1938.	HYDER HUSAIN.

GOVERNMENT OF THE UNITED PROVINCES

No. 765/VII—127-1935

JUDICIAL (CIVIL) DEPARTMENT

Dated Lucknow, 27th April, 1938

MISCELLANEOUS

In exercise of the powers conferred by sub-section (3) of section 175 of the Government of India Act, 1935 (26 Geo., Chapter 2), the Governor of the United Provinces is pleased, in supersession of the resolution of the Government of the United Provinces in the Judicial (Civil) Department no. 955/VII—127-1935, dated July 15, 1937, to declare that the undermentioned contracts and assurances of property may be executed as follows :

1. All deeds and instruments relating to matters other than those specified in heads 2 to 50. By a Secretary to Government.
2. (a) Contracts and other instruments for sums not exceeding Rs.8,00,000 in the case of instruments executed by the Director of Industries, and Rs.20,000 in other cases except those which affect real estate. By all heads of departments.
- (b) Conveyance deeds for the purchase of land which Conservators of Forests are authorized to buy for forest purposes up to a cost of Rs.2,000. By Conservators of Forests.
3. (a) Contracts and other instruments connected with ferries, dues for grazing cattle on places other than canal banks, fisheries, *nazul* buildings, spontaneous products and minerals, execution of works not under the Public Works Department and the supply of necessaries for depots. By Collectors and Deputy Commissioners and also all other officers below the rank of heads of departments, e. g., heads of local offices who have been or may be empowered to enter into a contract.
- (b) Deeds, other than leases affecting immovable property of an estimated value not exceeding Rs.2,000. } By Collectors and Deputy Commissioners.
- (c) Contracts relating to any matter falling within their ordinary jurisdiction. }
4. Contracts and other instruments for a sum not exceeding Rs.500 and not affecting real estate. By subordinate officers appointed by heads of departments with the approval of Government.
5. Contracts and other instruments relating to house building and other advances. By the authorities granting the advances.
6. Lease of *nazul* land in Lucknow city. By the *nazul* officer,

REGISTERED No. A388



9

Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

ALLAHABAD, SATURDAY, 27TH JULY, 1939

PART VIII

Official Papers : Statement of Cotton Pressed ; Vital Statistics ; Seizures and Deaths ;
Crops and Weather Report ; Prices Current ; Notices and Advertisement, etc.

No. 3473/XVIII—923

GOVERNMENT OF THE UNITED PROVINCES

INDUSTRIES DEPARTMENT

RESOLUTION

Dated June 21, 1939

X9(F54-55)252-N46
99

READ—

The report of the Joint Power Alcohol and Molasses Enquiry Committee, Bihar and the United Provinces, 1938.

THE problem of the utilization of molasses, especially for the manufacture of power alcohol, has been engaging the attention of both Government and the public for some years. The Governments of the United Provinces and Bihar accordingly appointed a committee in January, 1938, to go into the whole question and report as to the best way of dealing with the problem. The committee consisted of—

- (1) Dr. N. R. Dhar, D.Sc., F.I.C., I.E.S., Professor, Allahabad University,
- (2) Mr. G. H. Dickson, Messrs. Begg, Sutherland & Co., Cawnpore,
- (3) Mr. Ananthasubramanyam, Mysore Sugar Co., Ltd., Bangalore,
- (4) Mr. P. S. Maker, Chief Chemist, Majhulia Sugar Factory, district Champaran,

- (5) Lala Padampat Singhania, Cawnpore,
 (6) Mr. M. P. Gandhi, Chief Commercial Manager, The
 Rohtas Industries, Ltd.,
 (7) Dr. S. S. Bhatnagar, O.B.E., D.Sc., F.INST.P., Professor
 of Punjab University, and
 (8) Dr. N. G. Chatterji, D.Sc., Harcourt Butler Techno-
 logical Institute, Cawnpore.

The report of the Committee was received in the middle of June and has been further examined by both Governments. The most important points that have to be considered in this connexion are whether the manufacture of power alcohol is a sound economic proposition and what arrangements are to be made for the disposal of the power alcohol when manufactured.

2. The total quantity of molasses produced in vacuum-pan sugar factories in the United Provinces and Bihar has been estimated at 300,000 tons a year of which, it appears, nearly 200,000 tons are mixed with factory effluent and discharged into neighbouring fields and watercourses as waste, thereby polluting the local sources of water supply, giving rise to offensive odours and causing numerous complaints from the local inhabitants. Some 3 years ago an exporting company undertook to purchase molasses at four annas a maund, but it appears that in 1936-37 they purchased some 80,000 tons at an average price of just over one anna a maund, while the quantity purchased since is much less. The value of the molasses lost at four annas a maund comes to 13½ lakhs of rupees annually.

3. If power alcohol were to be manufactured from molasses, it is estimated that the output would be 2·2 gallons of alcohol from one maund of molasses or 60 gallons from one ton. Hence the United Provinces and Bihar could between them produce 120 lakhs of gallons of power alcohol a year. The Committee have however recommended that for the present only as much power alcohol should be manufactured as can be absorbed in the United Provinces and Bihar, and the Governments of both provinces are disposed to accept this. They also agree that the minimum economic unit for manufacture should be taken to be a plant of a capacity of 2,200 gallons a day, which it is estimated will cost 2½ lakhs of rupees. A number of such plants may be put up at convenient places, the plant being duplicated where a central distillery is found to be more convenient for the purpose of distribution of power alcohol as in the case of Bihar.

4. The cost of manufacture, if a plant of this size is installed, has been estimated by the Committee at from 3 to 3½ annas per gallon of alcohol produced, excluding the cost of molasses. Since the report of the Committee was written, it has come to light that no recurring royalty will have to be paid for the use of the patent process to be adopted. Hence the cost of manufacture may be taken to be 3 annas. It has been suggested that this cost can be reduced by having one large-scale plant instead of a number of smaller ones, but this need not be considered for the present. Even allowing for the price of molasses at annas 4 a maund, and another anna 1 pies 6 as the cost of transfer thereof, the cost of the molasses in one gallon of power alcohol comes to annas 2 pies 6 and the cost of production of one gallon of alcohol to annas 5 pies 6.

5. In order to arrive at the actual selling price, it is necessary to add to this figure the amount of the excise duty, if any, and the

actual distribution and selling costs. The latter should not exceed 3½ annas a gallon and even if the excise duty is calculated at the same rate as the customs duty on petrol, the total cost comes to Re.1-3 a gallon which is appreciably lower than the price of petrol in the United Provinces and Bihar. It thus appears that it is an economic proposition to manufacture power alcohol, provided it can be used in these provinces.

6. Practically the only use for power alcohol is as a motor fuel, mixed with petrol. The Governments of the United Provinces and Bihar are satisfied that the admixture of 20 per cent. of power alcohol with petrol is unobjectionable from the point of view of the motor industry and are prepared to undertake legislation to make such admixture compulsory in the United Provinces and Bihar, unless other suitable arrangements can be made for the same. As the total quantity of petrol consumed in these provinces is in the neighbourhood of 90 lakhs of gallons a year, it is possible to replace some 18 lakhs of gallons of petrol by power alcohol. In other words some 30,000 tons of molasses can be utilized in this way.

7. The Provincial Governments realize that this will not solve the problem of surplus molasses. But a useful beginning can be made and it may be possible later to arrange to supply power alcohol to other provinces also at a price which is not appreciably higher than that of petrol, especially if the excise duty is reduced to the level of the customs duty on petrol, excluding the surcharge. For the present, however, the two Governments intend to proceed with the making of suitable arrangements for the manufacture and sale of power alcohol in these provinces.

8. In conclusion, the Governments of the United Provinces and Bihar desire to thank the members of the Committee for their arduous work and their valuable report, which will serve as a useful guide for the development of the power alcohol industry.

ORDER—Ordered that a copy of this resolution be forwarded to the members of the Committee for their information.

Ordered also that a copy of this resolution be sent to the Director of Industries, the Director of Agriculture, the Excise Commissioner, the Director of Public Health, the Inspector General of Civil Hospitals, the Inspector General of Police, the Registrar, Co-operative Societies, the Chief Engineers, Public Works Department, Buildings and Roads and Irrigation Branches, the Chief Conservator of Forests, the Director of Public Instruction and the Director of Public Information.

Ordered also that a copy be sent to all Commissioners of Divisions, all district officers, and all vacuum-pan sugar factories in the United Provinces for information.

Ordered also that a copy be sent to the Central Government and the Government of the Bihar for information.

Ordered also that a copy of this resolution be published in the *United Provinces Gazette*.

By order,
N. C. MEHTA,
Secretary to Government,
United Provinces.

**Report of the Joint Power Alcohol and Molasses Inquiry
Committee (Bihar and the United Provinces), 1938**

1. *Preliminary*—The Committee was appointed by two identically worded resolutions, one issued by the Government of Bihar, Development Department (No. 2199-D, dated the 22nd December, 1937), and the other by the Government of the United Provinces, Industries Department (No. B/247/XVIII, dated 18th January, 1938). These resolutions were as follows :

“The problems of the sugar industry were discussed at a Joint Conference of the representatives of the United Provinces and Bihar, which was held at Lucknow on the 29th and 30th September, 1937, and by a sub-committee of this Conference which met at Patna on the 19th and 20th October, 1937. One of the recommendations of this sub-committee was that the Governments of the United Provinces and Bihar should set up a joint committee to consider the question of the utilization of molasses for the manufacture of power alcohol and for other profitable purposes. In pursuance of this recommendation, the Government of Bihar, in consultation with the Government of the United Provinces, have decided to appoint a committee to devise ways and means of starting the manufacture of power alcohol out of molasses, to report on the best method of manufacture and of mixing power alcohol with petrol and to explore the possible uses for molasses and their practical application.

“2. The Committee will consist of the following members :

- (1) Dr. N. R. Dhar, D.Sc., F.I.C., I.B.S., Professor, Allahabad University.
- (2) Mr. G. H. Dickson, Messrs. Begg, Sutherland & Co., Cawnpore.
- (3) Mr. Ananthasubramanyam, Mysore Sugar Company, Ltd., Bangalore.
- (4) Mr. P. S. Maker, Chief Chemist, Majhauria Sugar Factory, District Champaran.
- (5) Lala Padampat Singhania, Cawnpore.
- (6) Mr. M. P. Gandhi, Chief Commercial Manager, The Rohtas Industries, Ltd.
- (7) Dr. S. S. Bhatnagar, O.B.E., D.Sc., F.I.N.S.T.P., Professor, Punjab University, and
- (8) Dr. N. G. Chatterji, D.Sc., Harcourt Butler Technological Institute, Cawnpore,

who will also be the Secretary of the Committee.

“The Committee will elect its own Chairman, settle its own procedure and decide whom it will examine.”

Further instructions were conveyed to the Committee through the Director of Industries, United Provinces, under the United Provinces Government Order No. 155/XVIII—1180, dated 15th February, 1938, which was as follows :

“I am directed to refer to G. O. No. 155 of 2nd January, 1938, and to say that the Provincial Government would be glad if the Committee appointed to consider the question of the utilization of molasses for the manufacture of power alcohol and for other profitable purposes, would take up the question of power alcohol first and submit its report

on that subject to the Provincial Government by 31st March, 1938, at the latest. The Committee may please be informed accordingly and requested to divide its work into two portions and take up later the question of the utilization of molasses for other profitable purposes."

2. The Committee unanimously elected Lala Padampat Singhania as its Chairman.

3. There were three sittings of the Committee, all held at Cawnpore, on the following dates, viz., on 24th and 25th January, 1938, 7th, 8th and 9th March, 1938, and 16th and 17th April, 1938.

4. In view of the fact that the question of the utilization of molasses, especially through the manufacture of power alcohol, has been widely discussed in India for some years, and has given rise to certain points of a controversial nature, the Committee found it necessary to interpret the terms of reference in a liberal manner. Further, as the public has been taking interest in the subject and as the success of the power alcohol industry would depend upon a favourable reception of the alcohol-petrol mixed fuel by the motorist within the country, the Committee considered that it would be desirable to include a general survey of the various aspects of the industry in this report.

5. Information, both written and verbal, has been obtained from a large number of sources; in some cases on condition that the details or the names of the authority would be withheld from publication. The Committee desires to take this opportunity of expressing its appreciation of the valuable assistance rendered by all those who have so willingly placed authoritative information at its disposal.

6. The report is presented in two sections. Section I deals with Power Alcohol, and Section II with Industrial Alcohol and agricultural and other uses of molasses: viz:

SECTION I—POWER ALCOHOL

- (1) Introductory.
- (2) Molasses Situation.
- (3) Manufacture and Cost.
- (4) Economic and Legal Aspects.
- (5) Conclusions.

SECTION II—OTHER USES

- (1) Introductory.
- (2) Industrial Alcohol.
- (3) Agricultural Uses.
- (4) Other Uses.
- (5) Conclusion.

SECTION I—POWER ALCOHOL

INTRODUCTORY

7. The problem of using alcohol as a source of power has been engaging the attention of the scientific world for a long time. Whatever may have been the reasons for promoting the undertaking of this problem in the pre-War days, there is no doubt that at the time of the Great War and thereafter, certain aspects of the problem were brought out in strong relief and led every country to push on energetically with the task of solving it to its

own best advantage. Though each country has some special reasons for its interests in power alcohol, a careful examination of the history and growth of this industry in the more important countries of Europe reveals the following reasons common to all of them :

(i) To minimize the heavy drainage of national wealth out of the country on account of imported petrol.

(ii) The advisability of having a national product as a substitute for petrol in view of the sad experience due to shortage of the latter in the country during the war.

(iii) The necessity of having a large supply of alcohol which is now regarded as an important munition.

(iv) To have an alternative motor fuel available within the country.

(v) The alcohol industry can be made to play a very important part (i) in the prosperity of the agricultural classes, and (ii) in the development of other industries.

The development of the automobile industry brought the question of power alcohol into prominence. During the early stages of experimentation on the running of automobiles with alcohol, it was realized that motor car engines designed and constructed for working with petrol could not be run satisfactorily on alcohol alone. Trials with mixtures of hydrocarbons (petrol or benzol) and alcohol, however, gave encouraging results and extensive experiments under technical control were undertaken by the State in France, Germany, Sweden, Czechoslovakia and Poland.

The result of these experiments was the knowledge that a mixture of petrol or benzol and alcohol in certain proportions can replace, without any disadvantage, pure petrol for automobile driving. Once this fact was established, research work was directed to find out the most suitable composition of the mixed fuel. The practical difficulty was due to the comparative instability of rectified spirit and petrol mixtures, especially in winter temperatures in Europe. It was observed, however, that the range of miscibility improved with the addition of benzol. Later on it was found that absolute alcohol and petrol have a very wide range of miscibility even at low temperatures and the mixed fuels in certain proportions are in no way inferior to pure petrol for use as fuel in motor cars.

With the success achieved in the manufacture of absolute alcohol, the problem of "motor spirit" was not only simplified, but as a matter of fact certain advantages were brought out. Henceforward most of the work in the matter of "power alcohol" was directed in finding out ways and means by suitable legislative, economic and financial measures to bring down the price of alcohol. In spite of vigorous efforts made by the State to encourage the use of "mixed fuels", success was achieved only when legislative measures were passed compelling petrol companies to buy a certain quantity of country-produced alcohol for mixing with petrol. Such compulsory mixing laws are now in force in France, Germany, Hungary, Czechoslovakia, Yugoslavia and Italy and a number of smaller States. Even in a country like America, where petrol is indigenous and very cheap, the production of alcohol for purposes of fuel has increased considerably, and it is understood that some of the States have under active consideration the introduction of legislation, making the blending of a certain amount of alcohol with petrol compulsory.

A brief account of the legislative measures and practices in other countries is given in Appendix II, paragraph 6.

8. The Committee would now refer to the problem in India.

As far back as 1918, the Indian Industrial Commission, under the chairmanship of Sir Thomas Holland, in their report made recommendations regarding power alcohol in the following words:

"It is undesirable that the fuel supply of the country should be derived from external sources . . . Petrol is chiefly used in motor cars and small engines which are only intermittently employed. As a source of industrial power it is unimportant, but the demand for it for other purposes is likely to grow, and the provision for a suitable substitute is generally recognized as desirable, if not actually imperative. On several occasions our attention was drawn to the possibility of making industrial alcohol from hitherto neglected vegetable materials, some of which appear to be sufficiently promising to justify investigation and experiment. We recommend that a more liberal policy should be followed by the Excise authorities in respect of the class of denaturant prescribed, and more regard might be paid to the likelihood rather than to the mere possibility of frauds to the revenue, when the requirements of the commercial users conflict with excise regulations." (*Paragraph 96.*)

9. In pursuance of the above recommendation, the Government of India appointed the Industrial Alcohol Committee of 1920 with the following two main terms of reference:

"(i) to consider and report to what extent and in what respect excise regulations now in force in the different provinces of India regarding the production, sale, storage and transport of industrial alcohol hamper the manufacture in India of such alcohol on a large scale; and

"(ii) to make recommendations for such modifications in those regulations as may be considered necessary, due regard being had on the one hand to the necessity of protecting the Government revenue and also the public safety and on the other hand to the desirability of encouraging the development of the manufacture of industrial alcohol in India."

It may here be pointed out that the term "industrial alcohol" in that report was used in the broader sense, including what is now denoted by the term "power alcohol".

10. One of the recommendations of the Committee was as follows:

"We therefore suggest that to impose any tax on power alcohol would cripple the industry, which is already handicapped in comparison with petrol. When power alcohol or a mixture of power alcohol and either is mixed with any motor spirit on which duty is payable, the duty should be levied on that constituent only, and not on the power alcohol or on the finished product." (*Paragraph 125.*)

11. This recommendation of the Committee was accepted by the Government of India (resolution no. 6, dated 1st October, 1927, paragraph 4) to the effect that power alcohol should not be handicapped by the imposition of any excise duty except such as should be leviable upon any fuel adjunct which is separately liable to duty.

12. It may, therefore, be concluded that the desirability of encouraging the use of power alcohol in the form of alcohol-petrol mixed fuel had been recognized by the Government of India as early as 1922, when the Industrial Alcohol Committee came to the conclusion that the production of potable spirit and tobacco manufacture easily absorb the entire production of molasses in India, and a surplus for the manufacture of power alcohol was not likely soon to be available. (Paragraph 124.)

13. With the rapid growth of the sugar industry in India, molasses became available in large quantities and the prices went down considerably, with the result that the power alcohol question became a matter of vital interest to the cane cultivator and sugar industry. The United Provinces Government, realizing the importance of the problem, deputed in 1933 an officer for the study of the power alcohol industry in the various countries of Europe. In the meantime, the Sugar Committee of the Imperial Council of Agricultural Research as also several Chambers of Commerce in India and the Indian Sugar Mills Association continued from year to year to direct the attention of the Government of India to the urgent necessity for the establishment of this industry in India.

MOLASSES SITUATION

14. Molasses is the chief by-product in the sugar industry and it is produced in India from three types of factories, namely, cane-crushing factories, gur-refineries, and *khandsaris*. The tables given below have been compiled from official statistics:

(1) Production of molasses by central factories working with cane

	1936-37	1935-36	1934-35	1933-34	1932-33
	Tons	Tons	Tons	Tons	Tons
United Provinces	207,930	182,600	125,500	110,052	64,590
Bihar	133,650	97,200	71,878	61,025	57,868
All India	414,640	337,128	233,882	190,384	130,419

(2) Production of molasses by factories working with gur.

	1937	1936	1935	1934	1933
	Tons (estd.)	Tons	Tons	Tons	Tons
United Provinces	7,200	20,056	14,166	26,717	40,508
All India	10,600	32,556	21,935	39,770	56,239

(3) Production of molasses by *khandsaris*.

	1936-37	1935-36	1934-35	1933-34	1932-33
	Tons	Tons	Tons	Tons	Tons
All India	100,000	125,000	150,000	200,000	275,000

Khandsari molasses has uses different from factory molasses and the major portion of the former is absorbed in the areas, where it is produced.

15. It would be seen from the statistics that while there has been a rapid fall in the production of *khandsari* and gur-refinery molasses, from 275,000 tons and 56,200 tons in 1932-33, to 100,000 tons and 10,600 tons

respectively in 1936-37, there has been an extraordinarily large increase in cane factory molasses, namely from 130,400 tons in 1932-33 to 414,600 tons during 1936-37.

16. While the Committee is unable to ascertain with any degree of exactness the total quantity of surplus cane factory molasses per year in the United Provinces and Bihar, it appears from an official note placed before the Sugar Committee of the Imperial Council of Agricultural Research in 1935 that the internal market for molasses in the whole of India would not be more than 160,000 tons. It is, therefore, estimated that the quantity of surplus molasses produced by the cane factories in India is at present in the neighbourhood of 265,000 tons.* But, due to the fact that about 82 per cent. of the production is in the above-mentioned two provinces, the problem of the utilization of surplus molasses is more serious there than elsewhere.

17. *Export of molasses from India*—In 1935, the sugar industry was given to understand that the Government of India had before them proposals by a firm of standing which had been long engaged in the molasses trade for the installation of the storage and transport equipment necessary for an annual export to the United Kingdom and other countries of about 200,000 tons of molasses. The firm considered that a steady and permanent market was available abroad for the whole of India's surplus molasses, and the Government of India was informed that it would take steps to complete its arrangements for taking up all surplus Indian molasses from the 1935-36 season and onwards. In consequence the Government of India decided not to initiate experiments for the production of power alcohol from molasses on a commercial scale, although advised to do so by the Sugar Committee of the Imperial Council of Agricultural Research in 1933. But they were understood to have given an assurance that they would do so, if at any time in future it should appear that the export scheme referred to above did not provide an adequate solution of the problem of molasses disposal.

18. The hope so entertained by the Government of India regarding the success of the export scheme seems to have fallen far short of the expectations. It is reported that this matter was discussed in May 1937 in the Sugar Committee of the Imperial Council of Agricultural Research, and in view of the disappointing results of the molasses export scheme, a resolution was adopted requesting the Government to issue licences for the production of power alcohol for use as motor fuel in admixture with petrol, to permit the sale of prescribed mixtures of petrol and alcohol for motor fuel, and to modify denaturants so as to permit the substitution of a denaturant suitable for use in motor engines.

19. The following table summarizes some of the information available in connection with the export of molasses in India :

Contracts made by the Molasses Exporting Company	With sugar factories situated in the United Provinces		With sugar factories situated in Bihar	
	1935-36	1936-37	1935-36	1936-37
Quantity purchased (approximate) ..	31,000 tons.	38,000 tons.	12,500 tons.	41,000 tons.
Average price paid f. o. r. factory ..	Rs. a. p. 0 1 0	Rs. a. p. 0 1 0	Rs. a. p. 0 2 1.7	Rs. a. p. 0 1 3.4
Number of factories† reporting sale of molasses	9	12	9	14

*This figure requires modification. Latest statistics for 1937-38 (*Ind. Trade Journal*, May 19, 1938) regarding the production of molasses is as follows :

United Provinces ..	215,700 tons.
Bihar ..	80,800 "
All India ..	364,000 "

†Note—It is possible that a few other sugar factories may have sold molasses to the exporting company, but this information was not available.

20. It is significant to note that though the total quantity of molasses purchased by this company during the sugar seasons 1935-36 and 1936-37 was at least 122,500 tons, the quantity actually exported out of India during the period 1st April, 1935 to 31st January, 1938, was only about 88,000 tons. In the event, therefore, of some of this molasses being sold within the country, the relief given to the *surplus* molasses situation becomes to that extent more apparent than real.

PROPERTIES, MANUFACTURE AND COST

21. *Definition*—For purposes of this report, power alcohol is defined as “Dehydrated Ethyl Alcohol of at least 99.4 per cent. by volume.” The Committee also suggests that for purposes of measurement, the strength of power alcohol should be reckoned by volume per cent. of ethyl alcohol and not on the basis of London Proof Spirit.

22. *Properties*—Among the common criticisms which have been made against alcohol-petrol fuels in general, the following two seem to have attracted a good deal of attention:

(i) Since alcohol has a calorific value lower than petrol, and since in internal combustion engines the heat energy content of the fuel is converted into power, it follows that alcohol-petrol mixtures must necessarily be less efficient than straight petrol fuels.

(ii) Since alcohol is hygroscopic in nature, there is the possibility of absorption of moisture from the atmosphere, specially in the rainy season by the alcohol-petrol mixture in the storage tanks, even to the extent of the separation of diluted alcohol from petrol into two layers.

23. The essential part of the theoretical and scientific principles regarding the relationship between calorific value of the fuel and power output from it in ordinary motor car engines has been given elsewhere (Appendix I-A). The power value of alcohol-petrol mixed fuel, which is still a subject under controversy, has however been fairly summed up in the following words of Professor A. W. Nash and Donald A. Howes (*The Principle of Motor Fuel Preparation and Application*, Vol. I, paras. 421—24):

“A point of outstanding importance is that concerning the relationship which exists between the alcohol content of a petrol-alcohol blend and the fuel consumption for a given power output. If the latent heats of petrol and alcohol were the same, this relationship would be linear for any given compression ratio, the fuel consumptions of alcohol and petrol being inversely proportional to their calorific values. However, the large difference existing between these two substances in latent heats is almost as important as the large difference in calorific value and it is the cause of very noteworthy, if somewhat unexpected results.

“The latent heat of a fuel determines, to a large extent, engine volumetric efficiency, and consequently has an effect upon power output. In the case of alcohol fuels, latent heat is of great importance, and has a noticeable effect upon the fuel consumption for a given power output. Professor Hubendick (World Power Conference, London, 1928) made an examination of a range of petrol-alcohol mixtures and showed that the fuel consumption, in terms of heat units, was not appreciably greater with a 20 per cent. ethyl-alcohol blend than with petrol alone, whereas blends containing higher amounts of alcohol gave fuel consumption in proportion to the

alcohol content. As in these tests, no changes in the engine conditions, other than an alteration in carburettor jets, were made, it follows that in blends containing up to 20 per cent. of alcohol, an increase in overall engine efficiency must be compensating for the lower calorific value. This higher overall efficiency is solely caused by the higher latent heats of the alcohol which causes the air consumption per cycle to be increased and so increased the power output.

"With regard to the behaviour of alcohol fuels in ordinary automobiles, therefore, if the alcohol content is kept below 20—25 per cent. by volume, such mixtures may be used with satisfaction without any alteration in carburettor setting and without any alteration in any way to the engine. Such blends will give approximately the same fuel consumption as ordinary petrol and will give about the same power output. Neither starting properties nor engine flexibility will be impaired to any marked degree. If, on the other hand, the alcohol concentration is increased above these limits, power output will be decreased and fuel consumption correspondingly increased, with the result that the blend will not give satisfaction as instanced by the marked unpopularity of "Carburant National" in France, which contains 50 per cent. ethyl alcohol, and the success of "Lattibentyl", containing only 25 per cent. ethyl alcohol, in Sweden."

24. The Committee has examined some of the data available on the influence of moisture on alcohol-petrol mixed fuels (Appendix I-C). It appears that the absorption of moisture which is likely to take place under ordinary atmospheric conditions in India would not cause the separation of the fuel into two layers, so that as shown by Contant and Mariller [Appendix I-C(2)], there is practically no danger of such separation ever taking place. Besides this, the Committee understands that a mixture of 65 parts of alcohol (96 per cent. by volume) and 35 parts of petrol has been found to be quite stable in Mysore even under monsoon conditions.

25. *No necessity for carburettor changes*—Another point which the Committee thought it advisable to examine in some detail was about the necessity of making any alterations in the adjustment of carburettor of a motor car, when changing over from straight petrol to alcohol-petrol mixed fuel. Opinions of two experts on this subject are as follows :

(1) "The combustion of 1 gramme of alcohol requiring less air than that of 1 gramme of petrol, it may at first sight appear that in running the engine, when pure petrol is replaced by alcohol fuel, the carburettor must necessarily be adjusted, either in increasing the inflow of the fuel or in diminishing the admission of air. Practice, however, has shown that the necessity of such adjustment does not appear. We can cite, for instance, the case of the Poznan Rally of 12th July, 1930, when all runners, having every one covered several hundred miles at high speed using alcohol fuel, stated that they had not had to make any alteration in their carburettors except the usual checkings which the driver can effect without leaving the wheel.

"This fact is explained by the favourable influence of alcohol on combustion. As pure petrol never undergoes complete combustion in the cylinder, all carburettors are usually adjusted for a mixture richer than that established by the chemical theory of combustion, and this adjustment coincides with theory when a certain amount of alcohol is present."—(Colonel Mayer's "Alcohol Fuels in Poland", published by the Polish State Alcohol Department.)

(3) Professor Hubendick writes as follows :

" It may be of interest to note that an engine can, without alteration, be operated by turns with petrol and petrol-alcohol blends, provided the alcohol percentage in the mixture does not exceed 20 per cent."

This remark is important in view of the fact that during the initial stages of the introduction of alcohol-petrol mixture, when it may not be available at all places, the motorist will not experience any trouble due to a change in fuel.

This has been amply demonstrated in Europe by motorists when travelling from countries using alcohol-petrol mixtures to those where pure petrol only is used.

26. The Committee would also record here its opinion that the following facts have been established in regard to the properties of motor fuels containing alcohol :

(1) *Alcohol has high anti-knock properties*, so that the addition of some power alcohol to petrol increases the " octane number " of the latter, converting it into a superior grade of motor fuel. This is a very important property, so much so that at present other properties remaining the same, the price of petrol is fixed on its octane number. Increasing the octane number of the fuel by the addition of power alcohol to petrol seems to be a more desirable method for adoption in this country than the addition of " dopes " or complicated blendings with petrol portions from different sources.

(2) *Alcohol has high latent heat and can bear high compression.*

(3) *The addition of alcohol to petrol generally increases the volatility of the latter*, so that engines can be started in the cold more easily with certain alcohol-petrol mixtures than with petrol alone.

(4) *Alcohol-petrol mixed fuels deposit less carbon in the combustion chamber of the engine.* The following quotation from a publication of the Polish State Alcohol Monopoly is of considerable interest :

"The Polish State Alcohol Monopoly organized in July-August, 1930, a long distance automobile test in order to investigate the influence of alcohol fuels upon the wear of the engine.

The tests, strictly controlled by the Polish Automobile Club, was run with an ordinary Chrysler " 66 " car. This car, fed with a 70/30 petrol-alcohol mixture, covered 12,548 miles at an average speed of 34.582 miles per hour. The total time of running was 359 hours 36 minutes, together with an interruption period of 29 hours 20 minutes. The engine had been kept running all the time, even when the car was standing still. The fuel consumption amounted to 3,656 litres or an average of 18.28 litres per 100 kilometres, including halts when the engine was running idle.

At the end of the trial, the main parts of the engine were taken out and examined carefully by the Commission. The following remarks were made :

(a) The carbon deposit inside the compression chamber and on the pistons was found to be much less than that usually found when using petrol.

(b) The sparking plugs remained clean; the porcelain insulator had no carbon deposit.

(c) The valves also remained clean and showed an insignificant wear. A little carbon was found on the inlet valve.

(d) No attack whatever, which could be traced to the use of power alcohol, was found on the cylinder walls."

(5) *Power alcohol-petrol fuels mixed in proper proportions do not have any more corrosive effect*, as is sometimes alleged, on the cylinder and valves of the engine than straight petrol. The following extract from the *Oil and Colour Trades Journal*, 11th August, 1933, confirms the statement:

"Dr. W. R. Ormandy writes in *The Times* saying there was ample evidence put forward at the recent World Petroleum Congress in London that the work done by the Deutsche Benzole Verband—which distributes some hundreds of millions of gallons per annum—proves that anhydrous alcohol in admixture with petrol does not constitute a source of corrosion in motor car engines. It has been further shown, he says that a mixture of anhydrous alcohol properly purified with a good petrol in proper proportions gives a fuel with a much higher octane number than the petrol alone, and gives much smoother running in the engine."

27. *Manufacture of power alcohol*—Practically the whole of the world demand for power alcohol is being met by one or other of the two processes, namely, (1) The Azeotropic process and (2) The Salt-Dehydration process.

The following table (*International Sugar Journal*, March, 1938) gives the present annual world production of absolute alcohol by these and other processes:

I.—Azeotropic Processes:

			Hectolitres
(a) D. D. S. or Melle system	..	..	5,250,000
(b) "Drawinol" system	..	..	3,000,000
		Total	8,250,000

II.—Salt-Dehydration Processes:

(a) Hiag system (Alkali acetates)	..	..	3,975,000
(b) I. G. F. system (Gypsum)	..	..	265,000
Morc k Pressure system (Lime)	..	..	120,000
		Total	4,360,000

In Appendix VIII have been given the number and capacity of power alcohol plants working on the Melle Azeotropic and Hiag Salt-Dehydration systems throughout the world.

28. *Cost of manufacture*—An accurate estimate of the probable cost of manufacture of power alcohol in India is difficult to make, mainly on account of the fact that not a single distillery in India is at present engaged in its manufacture. The Committee has, however, been able to collect from different sources a number of estimates regarding the cost of manufacture of rectified spirit of about 9¢ per cent. by volume of alcohol.

The controversy regarding the estimated cost of manufacture of power alcohol in India started with the publication of the estimate submitted by the Secretary, Imperial Council of Agricultural Research, before the Sugar Committee of the Council in a note, dated the 29th September, 1933 (see Appendix III). In this note, the estimated cost was worked out at As.10-8-7 per gallon, a figure which was strongly criticized from all quarters as too high. Since this estimate still seems to hold the field in certain quarters, the Committee thought it necessary to examine it more thoroughly along with other estimates submitted to it.

29. *Estimate no. I*—The estimated cost of production referred to above in the note of the Imperial Council of Agricultural Research, dated the 29th September, 1933, is as follows :

	Per gallon of spirit Rs. a. p.
Cost of molasses at 6 annas per maund, and freight on molasses at 4 annas 3 pies per maund	0 4 9
Works cost	0 2 9.6
Cost of denaturant	0 1 4.4
Depreciation on drums	0 0 7.7
	0 9 6.7
Cost of concentration (American figure)	0 1 3
Total	0 10 8.7

Estimate no. II—Another estimate of the cost of production by a Government Expert is given below. It has been based on the cost of production for one gallon of rectified spirit and of absolute alcohol for a distillery producing about 1,500 gallons per day, based on Indian conditions and taking the cost of molasses at As.4 per maund delivered at the distillery :

	Per gallon Rs. a. p.
(a) Cost of molasses	0 1 10
Consumption of steam	0 0 9.6
Chemical products	0 0 3
Labour and staff	0 0 6
Overhead expenses	0 0 3
Depreciation	0 0 6.4
	0 4 3
Cost per gallon of rectified spirit	0 4 3
(b) Cost of rectified spirit	0 4 3
Consumption of steam	0 0 3.12
Loss of alcohol	0 0 0.63
Loss of entraining liquid	0 0 0.28
Staff	0 0 0.26
Royalty	0 0 5.50
Depreciation	0 0 2.1
Depreciation on warehouse plant and allowance for loss of spirit by evaporation during storage	0 0 6
	0 5 8.28
Cost per gallon of absolute alcohol	0 5 8.28
If the distillery be an independent unit having no connection with the sugar factory, add depreciation on the increased capital expenditure for making the distillery independent of the factory	0 0 2.40
Total	0 5 10.68

It was further pointed out that absolute alcohol (power alcohol) can also be produced directly from fermented wash, without the intermediate stage of rectifying alcohol, by the Fourth Technique of the Melle process. The cost of obtaining a gallon of absolute alcohol by this method was estimated at As.4-6, practically the same as for rectified spirit.

Summarizing the individual items into groups, the above estimates may be put as follows :

	Per gallon Rs. a. p.
Cost of molasses	0 1 10
Cost of steam, chemical products, labour and staff	0 1 6.6
Overhead expenses	0 0 4
Depreciation (independent distillery) and loss	0 1 2.8
	0 4 11.4
Cost per gallon of rectified spirit	0 4 11.4
Cost of dehydration as in (b)	0 0 11.18
	0 4 11.4
Cost per gallon of absolute alcohol	0 5 10.68

Estimate no. III—Below are given the actual figures of the cost of manufacture of rectified spirit received from a distillery in the United Provinces, producing both "drinking" and "methylated" spirits.

	Per gallon (100 per cent. strength)	
	Rs.	a. p.
Cost of molasses at 4 annas per maund	0	1 10-50
Cost of steam, chemicals, labour and staff	0	1 8-73
Warehouse expenses, repairs and renewals to plant, works building and residential quarters, etc.	0	0 5-49
Depreciation	0	0 5-0
Management and administration	0	0 7-72
Cost per gallon of rectified spirit	0	5 1-44
Cost of dehydration (estimated)	0	0 8-68
Total	0	5 10-12

Estimate no. IV—The following are the actual audited figures for the cost of manufacture of rectified spirit of 96 per cent. by volume in a distillery in South India producing 325,000 gallons in a year. The rectified spirit is subsequently made into drinking spirit, *ark* and methylated spirit :

	Per gallon of spirit	
	Rs.	a. p.
Cost of molasses at 4 annas per maund	0	1 7
Cost of steam, chemicals, power, etc.	0	1 6
Cost of labour	0	0 6
Depreciation, including that on containers	0	1 0
Cost of management	0	0 3
Cost per gallon of rectified spirit	0	4 10

An examination of Estimate no. I reveals that the high cost of manufacture of alcohol is due to (i) the cost of molasses having been taken at As.10-3 per maund, (ii) cost of denaturant at As.1-4-4 per gallon and (iii) cost of depreciation on drums at As.0-7-7 per gallon.

30. For purposes of comparison, therefore, all the estimates have been recast on a uniform basis of cost of molasses at As.4 per maund, while the costs of denaturant and depreciation on containers have been omitted, giving figures for the cost of manufacture of power alcohol, undenatured, in the distillery.

Particulars	Estimate no. I	Estimate no. II	Estimate no. III	Estimate no. IV
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cost of molasses at 4 annas per maund.	0 1 10-3	0 1 10-0	0 1 10-5	0 1 7
Cost of steam, chemicals, power, labour and staff.	0 2 9-6	0 1 6-6	0 1 8-73	0 2 0
Warehouse charges, depreciation, etc.	..	0 1 2-8	0 0 10-49	0 1 0
Management charges ..	(Not given).	0 0 4-0	0 0 7-72	0 0 3
Cost of dehydration (estimated).	0 1 2-0	0 0 11-28	0 0 8-68	(Not given).
Total ..	0 5 9-9	0 5 10-68	0 5 10-12	..

The total costs in all these estimates received from different sources show close agreement among themselves and also agree almost exactly with the figure of As.5-11 per gallon estimated by the Director, Imperial Institute of Sugar Technology, and given in reply to a question put in the Central Legislative Assembly in March, 1938. The high figures of the estimate

given in the note, dated the 29th September, 1933, by the Secretary, Imperial Council of Agricultural Research (Estimate no. I), were therefore more apparent than real.

31. It would be seen that the cost of molasses is the vital factor in the estimated cost of manufacture of power alcohol. At present the distilleries estimate it at As.4 per maund delivered at the distillery which leaves some margin to themselves. Indeed, one of the distilleries in the United Provinces favourably situated in the sugar factories area, is understood to have contracted at only As.2 per maund, distillery delivery basis. Under the present market conditions, the average price for molasses accepted by the sugar factories from the Molasses Exporting Company is about As.1-2 per maund, so that contracts at As.2 per maund may be considered as quite normal. However, in view of the fact that some distilleries may be situated at a distance from the sugar factory areas, the general practice is to estimate on an average figure of As.4 per maund for molasses. While agreeing that this figure is quite reasonable and there would be no difficulty for the distilleries to get their requirements of molasses at this price, the Committee would like to allow for a high margin of safety, and take for its own estimate the cost of molasses at As.6 per maund delivered at the distillery.

32. After considering the above estimates carefully, the conclusion arrived at by the Committee is that, if a modern plant of sufficiently large capacity (a) is established at a suitable place, the cost of manufacture of power alcohol per gallon would be as follows :

	Per gallon of alcohol
	Rs. a. p.
Cost of molasses at As. 6 per maund at the distillery (with yield of alcohol average of the estimates I, II and III).	0 2 9.45(b)
Cost of steam, chemicals, power, labour and staff ..	0 1 8
Warehouse charges	0 0 3
Depreciation	0 0 7
Management	0 0 2
Cost of dehydration	0 0 11.3(b)
(average of the estimated figures).	
Total	0 8 5.48

In case the price of molasses is taken at As.4 per maund, at which it is at present being estimated by the distilleries, the total cost of manufacture of power alcohol would be As.5-6.33 per gallon.

The Committee has also been advised that in a distillery, producing power alcohol directly from fermented wash by the most modern technique, the cost of manufacture of power alcohol would be reduced by about 6 pies per gallon. In other words, the cost of manufacture per gallon of power alcohol would be about (i) As.6 with molasses reckoned at As.6 per maund, and (ii) As.5 with molasses reckoned at As.4 per maund.*

Lastly, the attention of the Committee has been drawn to one of the latest publications† showing in tabular form the comparative costs of dehydration to absolute alcohol by the more extensively adopted commercial processes. The figures given in this table are stated to have been arrived at after careful consideration of all the criticism received since the publica-

(a) About 3,000 gallons per day.

(b) Revised correct average figures; originally As. 3 and A. 1 respectively.

*Messrs. Ananthasubramanyam and Maker are of opinion that it should be possible to produce absolute alcohol (power alcohol) at a price much lower than what is here estimated, when once it comes into actual working but for purposes of calculation, the price here estimated as cost of production, could be accepted.

Needless to mention, the cost of production also decreases with increase in the capacity of the plant.

†M. Kler's monograph entitled, "Fabrikation von absoluten Alkohol aus der Verwendungs- als Zusatzmittel zu Motor-Treibstoffen," published by Wilhelm Knapp, Halle, II Edition, 1933

tion of the first edition in 1936, and their verification from a large number of actual users.—(*Zeitschrift für Spiritusindustrie*, 3rd March, 1938.)

It would be seen that according to this authority the costs of dehydration calculated in rupees per gallon by the Hiag, Melle and Drawinol systems are as follows :

Starting raw material	Salt dehydra- tion Hiag system	Azeotropic Melle system	Azeotropic Drawinol system
	Per gallon Rs. a. p.	Per gallon Rs. a. p.	Per gallon Rs. a. p.
Raw spirit	0 0 9	0 0 8.3	0 0 9.2
Fermented wash .. .. .	..	0 1 0.5	0 1 5.5

33. *Preparation and distribution of alcohol-petrol mixed fuel*—The success of any scheme for the development of the power alcohol industry depends largely upon an efficient distribution arrangement at low overall cost. It appears to the Committee that this object would be achieved to some extent, if power alcohol is made available for mixing with petrol at a number of railside petrol depots in large consuming centres, the distilleries themselves being located in proximity to them in order to ensure low transportation charges. Further, the transport of power alcohol from the distillery to the petrol depot should be only under bond in tank wagons or lorries. The process of mixing power alcohol with petrol would have to be carried out under excise supervision in accordance with the rules and regulations framed for the purpose by the executive authority. The excise supervision over power alcohol would cease after the mixture has been properly made.

34. *Denaturation*—The question of a suitable denaturant for power alcohol is a matter of vital importance. The commercial success of any power alcohol scheme would depend considerably upon the choice of a denaturant cheap but effective enough to prevent any illicit use of power alcohol. A note on the denaturation of power alcohol, together with a list of denaturants used in various countries is given elsewhere (Appendix XI).

In recommending a suitable denaturant for power alcohol to be adopted in conjunction with the scheme given later, the Committee has been guided among others by the following main considerations :

(i) The denaturant is to be as far as possible an indigenous product easily available, or capable of being manufactured in India.

(ii) In view of the fact that the cost of denaturation is essentially an extra cost, not in any way indispensable in the process of manufacture, it should be kept as low as possible by the adoption of other means to gain the same object as is sought to be achieved by denaturation.

(iii) The recommendation of the Indian Industrial Commission of 1918 to the effect that "more regard might be paid to the likelihood rather than to the mere possibility of frauds to the revenue, when the requirements of the commercial users conflict with excise regulations," should be brought more into practice.

(iv) Power alcohol would be made available to the distributors, and through them to the public, only in the form in which it is to be mixed with a large volume of petrol, which is in itself a denaturant.

(v) The storage, distribution and sale of power alcohol in the form of alcohol-petrol mixed fuel would be subjected to the strict regulations and conditions of the Indian Petroleum Act. These would by themselves form an effective safeguard against any attempts at mal practices or abuses.

In case it is found that the addition of a second denaturant (other than petrol itself) is absolutely necessary, the Committee suggests that a trial be given to one of the following :

- (1) "Coal-tar Benzole"—3 parts by volume;
- (2) "Wood Naphtha"—2.5 parts by volume.

These additions are to be made per 100 volumes of power alcohol. In the opinion of the Committee alcohol-petrol mixed fuels prepared with power alcohol denatured in this way, would not require any further denaturation. It must however be emphasized that the denaturation of alcohol is essentially a preventive operation against excise offences, and any expense involved in denaturation handicaps to that extent the economic development of the power alcohol industry—a principle which is now recognized in most countries. For example, in the United Kingdom, a denaturation allowance, called "Methylation Allowance", is given to "Industrial Power Alcohol" in order to compensate for the increased cost of the latter due to the compulsory addition of the denaturants.

35. *Sale price of power alcohol*—The Committee is of opinion that power alcohol should be delivered to the petrol distributors at a number of their large storage depots at a uniform price. It is therefore desirable to give an indication of what in its opinion would be a fair price for power alcohol and on the basis of which the retail price for the standard alcohol-petrol mixed fuel may be fixed. In connection with the latter it was necessary to find out the present average cost of distribution of petrol in the United Provinces and Bihar. Unfortunately, the evidence of the representative of the petrol distributing company has not been helpful in this connection. In his oral evidence before the Committee, in answer to the question, "What are your distribution charges per gallon for petrol in the United Provinces and Bihar, which include your capital expenditure, and your interest on the stock you keep and the service you provide on the petroleum distribution in these provinces?", his reply was, "Based on all-India charges—licence, inspection, evaporation, excise and commission, it comes to anna 1 per gallon. These charges are bound to change in different provinces. The cost for the United Provinces and Bihar alone, owing to their small petrol offtake, would almost certainly be much higher." Subsequent to the evidence, the Committee was informed that the charge of anna 1 per gallon referred to the extra cost over that incurred in the main ports, and averaged throughout India, of their manifold up-country facilities—such as depots, pumps, lorries, depot and inspection staff, licence, etc. Further inquiries showed that the petrol distributing company estimated that As.6-6 per gallon, when deducted from ex-pump selling price secured for the mixture, would be the maximum price at which power alcohol should be available at the petrol depots for admixture.

The Committee finds that the excise duty is annas 10, railway freight from Calcutta to Cawnpore is annas 4, and the retailers' commission is annas 2 per gallon of petrol. The total of these three items comes to Re.1. The ex-pump price of petrol in April, 1938 at Cawnpore was Re.1-6 per gallon, while the average price for the last year was Re.1-9. The cost of

petrol together with the distribution charges to the retailers' pumps, therefore, works out at annas 6 per gallon based on the present prices, and annas 9 per gallon on the last year's average price. Taking these figures into consideration, the Committee feels that the cost of distribution as given by the above-mentioned company is very high and cannot be accepted. Dr. Bhatnagar however regrets that, owing to certain assumptions in these calculations—such as the price of the petrol at ports and whether petrol always sells at a profit, he is unable to agree to the above argument. The only way open to the Committee, in his opinion, is either to accept the price quoted by the representative or bring more convincing evidence in favour of the change. After considering the above observation of Dr. Bhatnagar, the Committee in the last meeting held on 17th April, 1938, arrived at the following conclusion :

"Assuming the Customs declaration value of imported petrol to be annas 5 per gallon (see Appendix II, para. 3), and some profit made by the petrol distributing companies, the distributing charges should work out between As. 2-6 to annas 3 per gallon based on the price of petrol during the last few years. Indeed, according to the present price of petrol ex-pump at Cawnpore (Re.1-6), the distributing charges can only be about anna 1 per gallon.

"On the above basis, and taking the normal sale price of petrol ex-pump as Re.1-9 per gallon, the estimated sale price ex-pump of power alcohol contained in the alcohol-petrol mixed fuel works out as follows :

	Per gallon
	Rs. a. p.
Cost of manufacture of power alcohol at the distillery	0 7 0
Profits to the distillery	0 1 0
Cost of denaturation	0 1 0
Transportation charges and loss by evaporation	0 1 6
Direction and administration charges	0 0 3
Excise duty	0 10 0
Price of power alcohol at the petrol mixing depot	1 4 9
<i>Add—</i>	
Distributing company's charges	0 2 9
Retailer's commission	0 2 0
Total	1 9 6

Subsequent to the meeting, however, certain facts came to light, which compelled the majority of the members to modify considerably the view expressed above. The c.i.f. price of petrol had been assumed to be annas 5 per gallon, while the Monthly Statistics for the Seaborne Trade in India gives for the period 1st April, 1937 to 31st March, 1938, the average price of petrol from Burma as As. 8-8 per gallon, and that from "Other Countries" as As. 7-9 per gallon.* These figures are considerably higher than the previously assumed figure of annas 5 per gallon, when the import was almost wholly confined to Soviet petrol, and no figures were available for petrol from Burma, as the latter then formed part of India.

The Committee now finds that in view of the Customs declaration made by the petroleum importing companies of the value of petrol at the port of

* Import of Petrol into India.

	Quantity	Value
	Gallons	Rs.
From Burma	63,395,010	3,12,58,430
From other countries	38,660,607	1,83,03,419

entry into India being at least annas 7 per gallon, and allowing for nominal profits only, the average distribution charges all over the country should work out at about annas 2 per gallon based on the price of petrol distributed by them during the last year. Indeed, according to the present price of petrol sold at Cawnpore and other up-country towns, the distribution charges per gallon must have been cut down to a very low figure.

In view of the above facts which make the item of the distributing company's charges an extremely uncertain and controversial item, the Committee thinks it advisable to estimate the sale price of power alcohol only up to the stage when it is delivered at the petrol depot for purposes of mixing with petrol. Further, in view of the fact that the profit of the petrol distributors at the current sale price of petrol appears to be small, the Committee does not feel justified to estimate the "profit to the distillery" at anna 1 per gallon, but to reduce it to pies 6. The cost of manufacture of power alcohol has also been calculated more accurately taking the average of the various estimates, while allowance has been made for the increase in volume due to the addition of the denaturing liquids.

36. The revised estimated sale price of denatured power alcohol delivered at the petrol depots is given below :

	Per gallon Rs. a. p.
Cost of power alcohol at the distillery (with molasses at 6 annas per maund).	0 6 5.5
Profits to the distillery	0 0 6.0
Cost of denaturation	0 0 11.7
Transport charges to petrol mixing depots, loss by evaporation, etc.	6 1 6.0
Direction and administration charges	0 0 3.0
Total ..	0 8 8.2
<i>Add—</i>	
Excise duty	0 10 0
Price of denatured power alcohol delivered at petrol depot.	1 3 8.2

In case, however, molasses for power alcohol is taken at annas 4 per maund, the price of power alcohol estimated in the same manner as above would be Re.1-3 per gallon.

The Committee is therefore of opinion that after paying an excise duty of annas 10 per gallon, and incurring an additional burden of the denaturation expenses of about anna 1 per gallon, it would still be possible to deliver power alcohol at the various petrol mixing depots in the two provinces at a price of—

- (i) Re.1-3-9 per gallon, after paying annas 6 per maund for molasses, or
- (ii) Re.1-3 per gallon, after paying annas 4 per maund for molasses.

37. This may be compared with the cost of imported petrol at the railside petrol depot, say in Cawnpore, calculated as below :

	Per gallon Rs. a. p.
Minimum cost of petrol at Indian port	0 7 0
Excise duty	0 10 0
Railway freight	0 4 0
Total ..	1 6 0

The Committee thus feels satisfied that it would be possible to deliver power alcohol at the large petrol depots at a lower cost than what it takes to bring imported petrol from the port towns.

38. Lastly, it may be mentioned that the Chairman of the Committee has been given assurance that there are several parties who would be quite willing to take up the distribution of the mixed fuel on an overall charge basis of annas 2 per gallon, provided they receive sufficient protection against unfair competition.

ECONOMIC ASPECTS

39. The Committee now proceeds to examine in detail the fiscal and economic aspects of the power alcohol industry which, as recommended, should be developed in the United Provinces and Bihar. Some of the points examined in this connection, and given below, were also raised in the memorandum submitted to it by the representative of the Burma Shell Oil Storage and Distributing Company of India, Ltd.

(1) Legislation for compulsory use of alcohol in motor fuels in other countries has been introduced,

(a) to assist the depressed state of agriculture in the case of a few countries; but

(b) in most of the countries that have no large petroleum resources of their own, to make themselves less dependent on imported petroleum, and with the further object of economizing in foreign exchange.

(2) In no country the manufacture of home produced substitutes for petroleum spirit and their compulsory sale (mixed with petrol) as a motor fuel, can be justified on economic grounds.

(3) In all the countries the use of power alcohol has been encouraged by State subsidy, direct or indirect. For example, in England (where there is no compulsory legislation for mixing) power alcohol is not only free from the tax of 8d. per gallon levied on petrol, but also receives a subsidy from the treasury of 8½d. per gallon in the form a methylating allowance, thus entailing a loss of about £420,000 per year. In France, the annual loss is estimated at about Rs.93,000,000.

(4) The result of using power alcohol has been the same in all the countries, namely—

(a) additional expense to the motoring public, and

(b) frequently also to the general body of tax-payers.

(5) So long as petrol in sufficient quantities remains available for consumption in the Indian market at anything like the present price, no genuine demand for alcohol as a motor fuel can arise.

(6) It has been urged that the production of power alcohol cannot be profitably developed under present conditions on any material scale without a policy of subsidization.

(7) Burma, despite separation, remains and must remain closely linked to India.

(8) India's full requirements of motor spirit can be met from indigenous and nearby sources of Burma.

(9) If power alcohol is introduced in the United Provinces and Bihar, the total offtake of molasses would be quite small—only 22,000 tons.

(10) No economic advantage can accrue to India from the replacement by a national product (the lower efficiency of which as a motor fuel entails additional running costs) by one obtainable from Burma, Assam and the Punjab at a lower cost.

40. Before proceeding to discuss the various issues raised above, the Committee considers it desirable to review the petrol industry and market in India. Table I gives the annual production of petrol in India and Burma during the last few years.

TABLE I
Production of Petrol
(In gallons)

Official year	In India proper excluding Burma	In Burma	Total for India and Burma
1932-33	Separate figures not available.		68,034,467
1933-34	Ditto		72,612,080
1934-35	17,741,427	63,817,124	81,058,551
1935-36	17,243,341	74,455,879	91,699,220
1936-37	16,736,269	74,352,561	91,088,830
1937-38 (April—December)	11,257,692	..	..

It would be seen that during the period of five years, from 1932 to 1937, the production of petrol in India and Burma has gone up by 23,054,363 gallons. Moreover, since the production in India proper has remained substantially the same for a number of years, it may be concluded that during the period under review the production of Burma petrol has increased by this amount. Since India is the sole outside market for Burma petrol, a very substantial part of this increase must have been absorbed in the India market.

41. Table II gives figures for the import of petrol into India which, when added to figures of production given in Table I, serve to give a fairly accurate idea of the consumption of petrol in India.

TABLE II
Consumption of Petrol
(In gallons)

Official year	Import into India	Production in India including Burma	Total approximate consumption in India and Burma
1932-33	5,116,733	68,034,467	73,151,200
1933-34	1,605,884	72,612,080	74,217,964
1934-35	1,483,274	81,058,551	82,541,825
1935-36	2,077,775	91,699,220	93,776,995
1936-37	9,747,465	91,088,830	100,836,295
1937-38	*102,055,617	..	..

It seems, therefore, that the consumption of petrol in India (including Burma) had of late been increasing at an average rate of about 7 million gallons per year. It also appears that during the year 1937-38, the quantity of petrol of non-Burmese origin imported into India has been about 60 per cent. of that coming from Burma.

*See foot-note on page 36

42. The total offtake of petrol in the United Provinces and Bihar was estimated for the year 1937 by a petrol distributing organization to have been 5½ million and 2½ million gallons respectively. The Committee, however, thinks that within a couple of years the total quantity for the two provinces would be about 10 million gallons. The estimated consumption of petrol in some of the large towns in the United Provinces and Bihar is given in Appendix X.

43. *Excise duty and the price of petrol at Calcutta*—Excise duty on "motor spirit" levied by the Indian Motor Spirits Duties Act of 1917 was annas 6 per gallon. In 1925, the rate was reduced to annas 4 per gallon, but was again raised to annas 6 per gallon by the Finance Act of 1929. On the recommendations of the Jayakar Road Development Committee, the Government of India Road Fund Resolution of 4th February, 1930, was passed creating a Central Road Fund from the proceeds of the increased amount of the petrol duty, namely annas 2 per gallon. Out of this fund, sums were to be distributed later *pro rata* amongst the different provinces. The Finance Act of September, 1931 increased the duty to annas 8 per gallon, upon which the Supplementary Finance Act of September, 1931 imposed further a surcharge of annas 2 per gallon, bringing up the excise duty to a total amount of annas 10 per gallon. Thus, the present excise duty of annas 10 per gallon on petrol is made up of the following different items :

	Per gallon
	Rs. a. p.
Excise duty proper	0 6 0
Duty allocated to Road Development Fund	0 2 0
Surcharge (¼th of the total duty)	0 2 0
Total	0 10 0

The prices of petrol per gallon in bulk at Calcutta, reported in the *Indian Trade Journal*, were as follows :

Period	Price including duty	Rate of duty	Price charged by distributors
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Up to February, 1931	1 1 0	0 6 0	0 11 0
From March, 1931	1 3 0	0 8 0	0 11 0
From October, 1931	1 5 0	0 10 0	0 11 0
From August, 1932	1 5 6	0 10 0	0 11 6
From 10th December, 1937	1 2 0	0 10 0	0 8 0

The above table shows that in spite of a large increase in the volume of the trade between 1931 and 1937, the consumer had not been benefited by a reduction in the price he had to pay for his petrol.

44. It has already been shown that power alcohol can be manufactured in the United Provinces and Bihar at a cost of about As.6-6 per gallon, paying annas 6 per maund for molasses. This compares favourably with the present average Customs declaration value of about As.8 per gallon for imported petrol. When the railway freight to up-country towns is also added on to it, there appears considerable advantage in costs in favour of power alcohol.

The Committee, therefore, is definitely of the opinion that without any kind of subsidy, power alcohol can be marketed in the United Provinces.

in Bihar, and also in other adjoining inland areas at substantially the same price at which petrol is now being sold.

45. The considered views of the Committee on some of the other foregoing points are as follows :

(1) Burma has been separated from India. Imports from Burma cannot therefore be considered as indigenous products of India.

(2) Petrol from indigenous Indian sources, namely—Assam and the Punjab, is hardly sufficient to meet even one-fifth of the requirements of India.

(3) The suggestion that replacing a part of petrol by power alcohol would give a fuel of lower efficiency, entailing additional running costs seems to be contrary to reliable published information on the subject.

46. *Power alcohol and excise duty*—From the Note dated the 29th September, 1933, by the Secretary, Imperial Council of Agricultural Research (Appendix II), it appears that as a result of the examination of this question with the other departments of the Government of India, the following point amongst others was brought out :

“Alcohol used for motor spirit must pay the same duty as petrol—

It is not possible for Government to agree to the loss of revenue which any other course would involve, nor would it be reasonable to protect the sugar industry indirectly at the expense of the indigenous oil industry.”

But a number of arguments had been placed before the Committee showing the reasons why power alcohol should not be taxed with the same amount of excise or customs duty as petrol. Of these the more important ones are given below :

(i) Power alcohol is essentially an agricultural product manufactured from indigenous sources. The development of this industry is the only practical and economically sound method of supplementing the meagre resources of indigenous motor fuel in this country.

(ii) The indigenous petrol industry of India is not likely to be prejudicially affected by any encouragement given to power alcohol.

(iii) At the rate of annas 6 per maund for molasses at distillery, the indirect help given to the sugar industry would be negligible, especially if the use of power alcohol were to remain confined in the United Provinces and Bihar.

(iv) Between the years 1933 and 1937, the consumption of petrol in India has increased by about 27 million gallons, so that the revenue under petrol excise and customs has increased substantially. A slightly smaller rate of duty on power alcohol would therefore mean only an insignificant loss of revenue to Government. For example, an excise duty at three-quarters the rate, on, say, 4 million gallons of power alcohol would affect the revenue to the same extent as if the increase in consumption of petrol had been by 26 million instead of 27 million gallons.

47. Be that as it may, the Committee has estimated that under certain conditions power alcohol, undenatured, can be manufactured at a cost of As.6-6 per gallon, so that power alcohol is in a position to bear the full duty in the interior markets of India of annas 10 per gallon, should the Government require to levy it at the same rate as on petrol.

LEGAL ASPECTS

48. *Power alcohol legislation in foreign countries*—A summary of this is to be found in the Note by the Secretary, Imperial Council of Agricultural Research, to which reference has been made before. The information contained therein has been supplemented further by the Committee (Appendix II-6).

49. *Legislation regarding alcohol-petrol mixed fuel*—This is one of the controversial questions on the subject, and the Committee proposes to deal with it in detail, so as to offer some explanation for the recommendations subsequently made. At the outset it may be said that the Committee considers it desirable that the distribution and sale of the alcohol-petrol mixture should be done through the petrol distributing organizations existing in the country.

The next point to decide is whether there should be some sort of binding obligation for the petrol importers and distributors to use a quantity of alcohol for mixing with petrol. The experience of other countries in this matter has served as a valuable guide to the Committee in coming to a decision.

Of all the countries, Germany struggled very hard not to enforce compulsory mixing legislation, chiefly because the indigenous benzol industry, combined with the State Alcohol Monopoly, undertook the distribution and sale of "Monopoline", the alcohol-benzol mixture. But the foreign petrol groups not only refused to co-operate in any way, but also started an active anti-propaganda against it, so that the Reichskraftverwaltung found a definite setback in the sale of "Monopolin." Therefore the obligatory laws were brought into force from August, 1930. But, as has already been stated, to avoid hardship in special cases, a certain amount of latitude had been left for the petrol importers, in that they had the option of returning the obligatory quota of purchased alcohol to the State at a reduced price; in other words, of compounding the offence of not mixing alcohol with petrol by paying a certain amount of penalty in cash. But this penalty did not act as a deterrent; on the contrary the evil continued to increase so that the privilege had ultimately to be withdrawn and the compulsory mixing had to be rigorously enforced.

In France, on the other hand, though the law of 28th February, 1923, had fixed 10 per cent. as the obligatory quantity of alcohol to be taken by the petrol importers, yet the production of alcohol in the country had been such that the petrol companies were never asked to take more than a fraction of the obligatory quantity. Even then every device was adopted to avoid taking even this small quantity of alcohol, forcing the Government to pass the law by which "Heavy petrol" could not be sold in France except in the form of an alcohol mixture in definite proportions.

The experience of France and Germany about the attitude of petrol groups which follow a uniform policy has been sufficient for other countries like Yugoslavia, Hungary, Italy and others interested in the development of power alcohol to introduce straight away compulsory mixing laws.

50. Taking into consideration various other matters peculiar to conditions in India, as also in view of the fact that almost all the Chambers of Commerce and other commercial bodies have advocated the compulsory mixing of power alcohol with petrol, the Committee is of the opinion that the development of the power alcohol industry requires, during the initial stages at any rate, the sanction of some kind of legislation for the compulsory mixing of power alcohol with petrol before it is retailed to the consumer.

51. *The form of legislation for mixing power alcohol with petrol*—There are three different types of legislation prevailing in Europe enforcing the compulsory use of power alcohol-petrol mixed fuel, namely—

(i) All petrol of a certain grade, whether produced in the country or imported from abroad, is to be marketed only after it has been mixed with alcohol in definite proportions.

(ii) No petrol can be marketed unless it has been mixed with alcohol.

(iii) The petrol companies are obliged to take a quantity of alcohol equal to a certain percentage of the quantity of petrol imported by them during the previous month, and mix it with petrol under definite conditions. Pure petrol can therefore be marketed at the same time as the mixture.

It should be mentioned here that in many European countries there are a large number of special brands of motor fuels, known as, super fuels, made of petrol, benzol and alcohol in definite proportions. About 80 per cent. of power alcohol is used in Germany for the making of these special mixtures, every petrol company having its own special brand. There is thus a considerable demand for the special qualities of mixed fuels. Even in the case of petrol, there are marketed several grades differing in specific gravity, volatility and octane number. But, in India the public is accustomed to only one fuel and it would be difficult, at least in the beginning, to get the public accustomed to the idea that an alcohol-petrol fuel is at least as good as pure petrol. It is therefore advisable to have only one kind of mixed fuel for general use.

The form of legislation that may conveniently be adopted should be of the type in which the petrol distributing companies are obliged to take a certain fixed percentage of power alcohol to be mixed with petrol in proportions regulated by executive authority from time to time, and to distribute this mixture in definite localities within which pure petrol should not be distributed.

52. *Industrial and power alcohol under the Government of India Act of 1935*—The Committee has thought it desirable to make a general survey of the legal position with regard to the Government of India Act of 1935.

There seems to be considerable doubt about the extent to which the industrial and power alcohol industry can be controlled by provincial legislation. Prior to the Act of 1935, the alcohol industry, both for human consumption and for other purposes was entirely a provincial matter, and provincial legislature had also the right to impose and appropriate to the revenues of the province any excise duty levied on alcohol used for all purposes. For example, in the United Provinces, while alcohol for drinking purposes is subjected to heavy excise duty, methylated spirit or industrial alcohol is free from excise duty. (The recent imposition of a "Sales Fee" is a different matter.)

Section 100, read with Schedule VII, item no. 45, of List I. (Federal Legislative List) and item no. 40 of List II (Provincial Legislative List) of the Government of India Act of 1935, now brings about this change that duties of excise on alcoholic liquors for human consumption and alcohol used for "medicinal and toilet preparations" only, can be levied and appropriated by the province where it is manufactured so that by implication or exclusion, duties of excise on alcohol used for other industrial (methylated spirits) and power purposes are to be levied by Federal Legislation and appropriated to the Federal revenues.

53. The Committee is of opinion that with the exception of the rights to levy any excise duty and appropriate it to the provincial revenues, the provincial legislatures and provincial Governments have full rights to control the production, manufacture and development of the alcohol industry for any purpose whatsoever.

This view seems to receive support from the answer given by the Secretary for Education, Health and Lands, Government of India, on 7th September, 1937, in the Central Legislative Assembly to the starred question no. 323, when he said that the Punjab Government had addressed the Government of India in April, 1937, regarding the installation of a plant for this purpose by a certain firm subject to certain conditions, and the answer given by the Government of India was that, in view of the conditions of manufacture mentioned by the firm, the mixture would be liable to the motor excise duty.

54. As regards the question of any provincial legislature to enforce compulsory mixing of power alcohol to petrol, the Committee finds that item no. 32 of the Federal Legislative List makes petroleum a subject of Central legislation, *but only so far as regards possession, storage and transport*. The Petroleum Act (XXX of 1934) deals with the import, transport and storage of petroleum. The tests which petroleum has to undergo under this Act are for the purpose of classification into "dangerous" and "non-dangerous" according to flash point determination. The only restrictive measures contained in the Act regarding the addition of another substance to petrol or the "blending" of petroleum are to be found in the following sections:

(i) Section 4(k), which prescribes the proportion in which any specified poisonous substance may be added to petroleum, and prohibiting the import, transport or storage of petroleum in which the proportion of any specified poisonous substance exceeds the prescribed proportion;

(ii) Section 5, which prohibits the production, refining and blending of petroleum save in accordance with the rules made under sub-section (2). These rules nos. 130 to 147, relate only to the building, plants, location of storage tanks, drainage, etc., of the refinery, where the process of distillation or blending is performed.

Power alcohol is not a poisonous substance, and as there is at present no restriction in India regarding the quality of the petrol that may be marketed, except with respect to the amount of tetraethyl lead that may be present in it, the Committee is inclined to hold the view that there is nothing either in the Petroleum Act of 1934 or in the Federal Legislative List of the Government of India Act of 1935, which is repugnant to any legislation that may be passed by the provincial Government enforcing the addition of a quantity of power alcohol to all petrol before it is retailed to the public.

55. *Power alcohol industry and Government control*—The Committee has given careful consideration to the question of the advisability of Government control over the power alcohol industry, which has been advocated in some form or other in the memoranda received from the various commercial bodies and associations. Some of the more important arguments advanced in this connexion are given below:

(a) The national importance of the industry, the reasons for which it has to be developed in these two provinces, and the diversity of

interests involved in it, demand that the organization and control of the industry be to a large extent under the supervision of the Government.

(b) The control of prices and the sanction of law for mixing power alcohol with petrol can be best administered without abuse through the agency of a Government department.

(c) The alcohol industry as a whole is so intimately connected with economic and social questions of vital importance to the country that in practically every country in the world the power and industrial alcohol industry is now either under direct State control or is administered through a semi-official organization.

The Committee fully endorses the force of these arguments and is of opinion that the power alcohol industry should be established under the control of the provincial Government with a Power Alcohol Advisory Board to advise the Government generally on all matters connected with the industry. It further holds the view that for the success of the power alcohol industry it is essential that there should be some kind of Government control not only over the manufacture of power alcohol, but also over the distribution, use and retail price of motor fuels within the province. For it is obvious that no amount of Government control over the price of power alcohol delivered at the petrol mixing depots would offer any reasonable protection to the consumer unless there is also some control over the retail price of the mixed alcohol-petrol fuel.

CONCLUSION

56. The Committee has, in the foregoing pages, dealt with the subject of power alcohol, tracing its growth in the various countries of the world, and also with reference to the importance it has now assumed so far as India is concerned. It has endeavoured to deal with the properties of power alcohol and has, with the materials available, forecasted what the cost of manufacture would be. The Committee has also suggested that it would be possible for power alcohol being produced at a price, which would enable it to bear, if necessary, an excise duty equal in amount to that on petrol without imposing any additional burden either on the tax-payer or the motor owner.

It would be seen that if the entire surplus quantity of molasses, estimated at 265,000 tons, be converted into power alcohol, about 15 million gallons of it can be produced, calculating one ton of molasses as equivalent to 57 gallons of power alcohol. The total consumption of petrol being as high as 100,000,000 gallons, the above-mentioned quantity of power alcohol can be easily utilized, particularly as there would be little difficulty in the disposal of power alcohol in the interior parts of the country, where it can be sold at the same price as petrol. Thus the replacement of 15 million gallons of imported petrol by indigenous power alcohol would mean a saving of about Rs.40 lakhs per year to the country.

The Committee would like to observe here that the case for the development of the power alcohol industry within the country has assumed particular importance with the separation of Burma from India. It appears to be in national interests to encourage the manufacture of power alcohol, and thus to get rid, to such extent as is possible, of the dependence of the country on imported petrol, the regular supply of which cannot be assured during an outbreak of hostilities, when it would be in greatest demand.

(e) The conditions in the United Provinces and Bihar are very favourable for the manufacture and use of power alcohol made from molasses.

(f) The power alcohol industry can be established without a subsidy from the Government. But, even if it were slightly more costly, the industry should be encouraged, as it would lead to the development of other industries.

(g) Power alcohol can be marketed in the United Provinces and Bihar, as also in the other adjoining inland areas at substantially the same, if not lower, price at which petrol is now being sold.

(h) The average price of petrol, *ex-pump* calculated for most of the large towns in the United Provinces during the greater part of 1937, was Re.1-9 per gallon.

(i) Power alcohol can be manufactured at such a cost that an excise duty almost equal to that on indigenous petrol can be levied on it.

(j) The manufacture of power alcohol seems to be a subject under the control of the provincial Governments.

(k) (i) The cost of manufacture, by the Azeotropic or the Salt-dehydration process, of power alcohol, starting from rectified spirit and excluding the cost of denaturation, would be about As.6-6 per gallon, when the cost of molasses is annas 6 per maund delivered at distillery. By adopting a modified process, it may be possible to bring down the cost to about annas 6 per gallon. Again, in case molasses is available at annas 4 per maund, these prices would further go down by about anna 1 per gallon respectively.

(ii) The price at which power alcohol may be delivered at the petrol mixing depots in these two provinces may not be higher than Re.1-4 per gallon, after paying annas 6 per maund for molasses, anna 1 for denaturants, and annas 10 as excise duty.

(l) The average cost of imported petrol at the railside petrol depot in the United Provinces works out at about Re.1-5 per gallon.

RECOMMENDATIONS

58. The Committee, therefore, make the following recommendations :

(a) The power alcohol industry should be established under the control of the provincial Government.

(b) A Power Alcohol Advisory Board should be established consisting of the following :

Chairman.

(1) The Hon'ble Minister in charge of Excise.

Members.

(2) The Excise Commissioner.

(3) The Director of Industries.

(4) One representative of the Provincial Legislative Assembly.

(5) One representative of the Provincial Legislative Council.

(6) One representative of the commercial community nominated by Government.

- (7) Two representatives of the Indian Sugar Mills Association.
- (8) One representative of the Indian Sugar Syndicate.
- (9) One representative of the distilleries manufacturing power alcohol, nominated by Government.
- (10) One representative of the distilleries manufacturing industrial alcohol, nominated by Government.
- (11) One representative of the motor-fuel distributors in the province, nominated by Government.
- (12) One expert nominated by Government.

(Mr. Dickson, however, is of opinion that one representative of the Upper India Chamber of Commerce, and one of the United Provinces Chamber of Commerce should be included in the Board.)

(c) The duties and functions of the Board would be to advise the Government generally on all matters connected with the industry.

(d) Necessary legislation should be enacted at an early date for the compulsory mixture of power alcohol with petrol.

(e) Petrol should not be allowed to be retailed until it has been mixed with power alcohol.

(f) The present petrol distributing organizations in these two provinces should be required to take up the distribution of the mixed fuel. Failing satisfactory arrangements being made with them, the Government should make alternative arrangement for the same.

(g) Power alcohol should be made available at all petrol depots at a uniform price contracted with the Government, inclusive of any excise duty.

(h) Petrol used for admixture with power alcohol should conform to specifications laid down by the Government.

(i) The denaturants for power alcohol may be one of the following :

(1) "Coal tar Benzole"—3 parts by volume, or

(2) Wood-spirit—2·5 parts by volume,
per 100 volumes of power alcohol.

(j) The Government should explore the possibilities of promoting the use of alcohol-mixed fuels for power purposes in agricultural operations, especially in sugarcane areas.

SECTION II

Industrial Alcohol and Agricultural and other uses of Molasses

59. *Introduction*—Having reported in Section I on all the Terms of Reference regarding Power Alcohol, the Committee would now proceed to discuss about the remaining Term of Reference, namely—to explore the other possible uses of molasses and their practical applications.

The more important uses to which molasses may be put—apart from the manufacture of power alcohol for making alcohol-petrol mixed fuels for motor cars—may be classified as follows:

- (1) The manufacture of Industrial Alcohol.
- (2) Agricultural purposes, e.g.—
 - (a) Cattle-food preparations.
 - (b) Addition to normal soils as a manure.
 - (c) Making fertilizers.
 - (d) Reclaiming *usar* soils.
- (3) Other industrial purposes, such as, for—
 - (a) Burning as a fuel,
 - (b) Making compositions and surface coat preparations for roads,
 - (c) Making plastics and artificial resins,
 - (d) Making fermentation products other than alcohol.

The Committee has made an attempt to get as much information on each of these uses as could be had within the limited time at its disposal. Its Findings and Recommendations in this Section of the report are therefore necessarily subject to this limitation.

I—INDUSTRIAL ALCOHOL

60. *Definition*—The term “Industrial Alcohol” has been used by the Committee to denote all kinds of alcohol which can be obtained by the ordinary rectification of fermented wash without the use of any special devices for bringing about more complete dehydration. It therefore includes “rectified spirit”, “methylated spirit”, “specially denatured alcohol”, in fact all spirits of which the strength is not more than 96 per cent. by volume. Wherever reference has to be made to specially dehydrated alcohol of strength higher than this, the term “absolute alcohol” has been used.

In view of the fact that “industrial alcohol” as defined above is also extensively used for the generation of power in internal combustion engines, the Committee suggests that the term “Industrial Engines Alcohol” be adopted to denote this kind of alcohol in order to distinguish it from “Power Alcohol” as defined in Section I. This distinction in name is being suggested solely from the point of view of convenience in excise administration, for it has been recommended later that this kind of alcohol should be practically free from any excise duty.

61. *Manufacture and cost*—The manufacture of industrial alcohol is at present being carried out in all distilleries in India, which are equipped with patent continuous stills. In fact, the alcohol as it comes out of these stills is what is known as “rectified spirit” and the strength varies generally from 90 per cent. to 96 per cent. by volume. The subsequent manipulation of this

spirit in warehouses by the addition of water, chemicals, or other substances, converts it into various forms of drinking spirit, "methylated spirit", or "specially denatured spirit". It may be mentioned that distilleries equipped with plant for the manufacture of power alcohol can also produce industrial alcohol, but not *vice versa*.

It is estimated, from what has been shown in Section I, para. 32, that the cost of manufacture of industrial alcohol, undenatured, would be about Re.0-5-6 per gallon, after paying for molasses at the rate of 6 annas per maund delivered at the distillery.

62. *Uses*—The various uses of industrial alcohol may be grouped under the following heads :

- (1) *As a liquid fuel*, for generating power in slow speed engines mainly for agricultural purposes.
- (2) *For household purposes*, chiefly for heating, lighting and cleaning, in the form of what is commonly known as "methylated spirit".
- (3) *As a raw material*, required in the manufacture of—
 - (a) Vinegar,
 - (b) Medicinal preparations, such as, tinctures and extracts,
 - (c) Toilet preparations and perfumed lotions,
 - (d) Transparent soap, and
 - (e) Chemicals and other solvents of the ester type;
- (4) *As a solvent by itself for*—
 - (a) Shellac and other spirit-varnish preparations,
 - (b) Extraction of oil from seeds and cakes,
 - (c) Extraction of essential oils, and
 - (d) Nitrocellulose preparations.

63. Most of the above-mentioned uses of industrial alcohol are fairly well known, with the possible exception of the use of straight alcohol as a liquid fuel for power generation in internal combustion engines, though this may become an important outlet for industrial alcohol, especially in view of the possibility of the latter becoming available in the United Provinces and Bihar at a low cost. Appendix IV gives the consumption of industrial alcohol for various purposes in some of the more important countries in Europe and America.

It is an established fact that industrial alcohol can be successfully used in internal combustion engines designed for petrol, provided minor adjustments are made and slight difficulties in "starting cold" be neglected, though in specially designed engines with high compression ratio this fuel can be used with better efficiency, and in spite of the considerably lower calorific value the excess fuel consumption per brake-horse power-hour may not be more than one-third that obtained with petrol. (*See Appendix I-A*). The only impediment to the extended use of industrial alcohol for power generation in motor trucks and small engines for agricultural purposes in most countries has been its high cost compared to petrol. But wherever the difference in price is not high, industrial alcohol has been in general use for this purpose as in Poland, Brazil, and the Philippines.

It is understood that experimental work has been undertaken by the Mysore Sugar Company, Limited, on its transport system in the use of an alcohol fuel consisting of spirit of 96 per cent. strength by volume, denatured with 2½ per cent. of petrol and ½ of pyridine and the results obtained are reported to be encouraging. There have been practically no carbon

deposits in the engine, and the high gear performance of the vehicles run on this fuel was found to be very satisfactory.

Reliable data about the cost of generating power in engines specially designed for running on alcohol are not available, but the investigations of Professor Wawrzionik given in Appendix I-A show that if industrial alcohol be used even in the ordinary low compression petrol engine, the consumption of this fuel would not be more than 0.143 gallon per brake-horse power-hour. There is no doubt that when used in specially designed high compression engines, the fuel consumption would be much better. It therefore, appears that there are great possibilities in the extended use of industrial alcohol for running trucks, agricultural machinery, water-lifting pumps, and small power-plants in isolated rural areas, specially where sugar factories are located.

64. *Household purposes of heating and lighting*—Evidence has been adduced to show that in countries like Czechoslovakia, intensive propaganda has resulted in increasing considerably the use of industrial alcohol for household purposes, such as, for heating and lighting. A certain quantity is also used for cleaning windowpanes and glass showcases. Most of the fully denatured alcohol in Europe is consumed for these purposes. The propaganda for increasing the consumption of the so-called "methylated spirit" has been in the shape of the introduction of cheap but efficient spirit stoves, burners, and lamps. In India also there seems to be considerable scope for the extended use of methylated spirit in this direction and there is no reason why a determined effort should not be made to replace a part of imported kerosene by indigenous alcohol. Modern designs of spirit stoves are in many ways superior to and safer than kerosene stoves, for firstly, they do not work under pressure, and secondly, burning alcohol fire can be easily quenched with water. It is interesting to find that during 1936-37 about 124,500 stoves were imported into India.

The gas mantle industry is getting established in India, and it should be a comparatively easy matter to introduce spirit-burning mantle-lamps. It is possible to make these lamps almost as cheap as the ordinary kerosene ones, and yet get practically as bright a light as is given by the so-called "Petromax" lamps. The price of white kerosene in Cawnpore in bulk is about Re.0-12-6 per gallon, so that it may be possible for methylated spirit to be put in the market at a price which would compare favourably with kerosene even in terms of cost per calorie. This point deserves careful consideration in the problem of street lighting in municipal areas not served by electricity.

While on this subject the attention of the Committee has been drawn to certain experiments carried out in France by the Conservatoire National des Arts et Matiers, in July 1922, with regard to the comparative lighting effect of refined kerosene and a mixture of the same containing 10 parts by volume of absolute alcohol. The results are given below :

Products	Intensity of luminosity in 'candle powers'	Consumption in grammes	Calorific power in calories
(1) Refined kerosene	49	27	11,065
(2) Refined kerosene 90 c.c. Alcohol (99.8 per cent.) 10 c.c.	49.9	25	10,600

These experiments seem to receive a certain amount of support from work carried out on the same lines at the Imperial Institute of Sugar Technology. The Committee therefore suggests that this problem may be more thoroughly investigated. If the results are confirmed, a very large field for the consumption of alcohol would get opened up in these two provinces, for the statistics show that the quantity of kerosene imported into the United Provinces during 1936-37 was over 22 million gallons.

65. *Alcohol as a raw material for other industries*—There is no doubt that one of the best and most profitable uses for molasses would be to make alcohol and supply it to the various industries that require it as a raw material. The use of alcohol in medicinal preparations and in making transparent soap is fairly well established in this country. Of the others, the manufacture of vinegar is likely to meet with immediate commercial success. Considerable quantities of alcohol are utilized in Europe for this purpose. In Germany alone, over 2 million gallons of alcohol are converted per year into vinegar. The manufacture of acetic acid and its products is closely related to that of vinegar, and there are considerable potentialities for it, in case the artificial silk industry by the "Acetate process" is established in this country. At the present time, the requirements of acetic acid in India are comparatively small. Attention must also be drawn to the fact that the manufacture of acetic acid by synthetic processes is being largely developed abroad at a price at which it would become increasingly difficult for indigenous acetic acid to compete for use in industries.

Large quantities of alcohol are now being used in the manufacture of organic solvents of the ester type, which are used for dissolving nitrocellulose and resins in the preparation of lacquers. Unfortunately, the nitrocellulose lacquer industry in this country is not yet established and the demand for these commercial solvents in the near future is not likely to be anything substantial. However, it is desirable to keep a close watch over the market for these products and laboratory investigations may be taken in hand to study the commercial possibilities of their manufacture at competitive prices. The use of alcohol as a solvent for shellac and other gums in the preparation of spirit varnish is well known and considerable quantities are being used in India for this purpose. The Committee has been advised that the use of alcohol as a solvent for the extraction of vegetable oils from seeds and cakes is being developed in some countries, while similar investigations are also in progress in the United Provinces. There is no doubt that with a cheap supply of industrial alcohol in the country there are great possibilities for its use as a solvent for extraction and refining purposes. The Committee is of opinion that every facility should be given, from the excise point of view, to encourage experimental investigations for commercial possibilities in these directions.

66. In the matter of levying excise duty on industrial alcohol, the policy adopted should be similar to that prevailing in most of the countries of Europe, namely, freedom from or only nominal duty for all kinds of industrial alcohol with the exception of that used in toilet preparations. In support of this policy, the Committee would like to refer to the purchase and sale price of alcohol for different purposes fixed by the State in Germany (*See Appendix XIII*).

II—AGRICULTURAL USES

67. (1) *Cattle food preparations*—Various attempts had been made in the past to utilize molasses for feeding cattle, but the results had not been favourable, so that the consensus of opinion now generally held by the experts on the subject in India is that in the raw form it should not be used for this purpose.

Experiments have therefore been undertaken, financed by the Imperial Council of Agricultural Research, to make composite cattle-feed from bagasse screenings, oil-cake and molasses, and to investigate carefully the results of including this composite material in the daily ration of dairy cows and other cattle. The results of these experiments, so far received, have shown that in most cases animals have after a little persuasion been induced to take to it with no marked ill-effects on account of this change in diet from the standard ration. However, there seems to be considerable doubt regarding the economics of feeding molasses to cattle in this way. All that can at present be said is that in case these experiments prove successful and the economic aspects are properly worked out, a considerable outlet for the utilization of molasses through this channel may substantiate in the near future. The results of these experiments should therefore be closely watched by the Agricultural and Veterinary Departments of the two provinces.

In this connexion the attention of the Committee has also been drawn to the proposal of making cattle food from molasses in the form of yeast. Sir John Russell in his "Report on the work of the Imperial Council of Agricultural Research in applying science to Crop Production in India", 1937 (page 13), refers to this subject in the following words:

"The possibilities of utilization fall into three groups—

- (1) Conversion into food (including yeast) for human beings or for animals;
- (2) The making of fermentation products, such as industrial alcohol, acetic acid; and
- (3) Industrial utilization as fuel, road surfacing material, fertilizer, etc.

Of these I regard the first and second as the most important and the third as the least important; it seems unfortunate to divert so much potential food to other purposes."

68. Composite cattle-feed preparations are somewhat cumbersome to manufacture, and involve comparatively heavy expenditure on account of transportation charges. Yeast, on the other hand, is proteid matter in a highly concentrated compact form, easy to transport, while a very small quantity need be given at a time to the animal in the daily ration. The advantage of making cattle-food yeast is that the latter is a by-product of the alcohol industry, and its manufacture can be easily carried on in every distillery with a slight change in the early stages of the process. The manufacture of the two products—Alcohol and Yeast—can therefore be brought under one single organization, giving a certain amount of latitude for adjustment of their prices. The manufacturing process is also so flexible that the relative quantities of the two products obtained from a fixed quantity of molasses can be regulated to a large extent in order to suit marketing conditions. It may be interesting to note that to produce the same quantity of alcohol, almost three times the quantity of molasses may be utilized, if the manufacture of yeast is also being carried on at the time. It is thus possible that by a judicious organization of the manufacture and sale of alcohol and yeast, the problem of surplus molasses so acute in the congested areas of sugar factories may be capable of a comparatively easy solution.

69. The Committee therefore suggests that in initiating any comprehensive scheme for the development of the alcohol industry in these provinces, where there is likely to be an excessive surplus of molasses, the Government should seriously consider the economic possibilities of linking up a number of small yeast-making distilleries attached to sugar factories, with larger distilleries located at more central places, rectifying the raw alcohol supplied by the former.

70. (1) *Manure and fertiliser*, and

(2) *For reclaiming usar soils*—The utilization of molasses for these two purposes seems to have been the subject of a fair amount of experimentation in different parts of India and abroad. The subject has, in recent years, been widely discussed in scientific circles, leaving no doubt about the great interest aroused in the matter. The Committee therefore tried to get the most authentic information about the results of the experiments carried out by the Agricultural Departments in the various provinces, who were also requested to give their views regarding the extent to which they were prepared to recommend the use of molasses for these purposes. Unfortunately the reports received have been of a somewhat conflicting nature and the Committee feels considerable hesitation in arriving at any conclusions in these matters. It is reported that the Government of the United Provinces are thinking of appointing a special committee to enquire into the question of the manurial value of molasses. In the opinion of one of the members of the Committee (Dr. N. R. Dhar), the use of molasses as manure with a view to increase the yield of crops has been proved beyond doubt in the case of rice and possibly also in the case of sugarcane. The economic aspects of the proposition, however, need further investigation in view of the transport difficulties. As regards the application of molasses for reclaiming *usar* soils, he considers that it has met with uniform success in various provinces, particularly in Bihar and the United Provinces as also in Mysore, from where it has been reported to him that *usar* lands, which had been treated with molasses three years before, continued to give a good crop of paddy, average yield being 1,250 lb. per acre. Thus it seems that the proposal to reclaim *usar* soils by the addition of molasses has gained a certain amount of support from some quarters, and systematic field investigations have been taken up at many places to verify the results claimed for the process in comparison with other well known processes. Further, the Committee has been given to understand that investigations on this subject are shortly to be undertaken in the United Provinces, financed by a special grant made by the Government for the purpose.

A summary of the reports received from the various Agricultural Departments in reply to the enquiry made by the Committee is given in Appendix XVIII-(A—E).

71. The Committee as a whole is not in a position to express any definite opinion in the matter, but would like to mention that the Agricultural Departments of the United Provinces and of Bihar should take interest in the subject and continue their experiments with the reclaiming of alkali soils by the use of molasses or a mixture of molasses and press-mud.

III—OTHER INDUSTRIAL USES OF MOLASSES

72. (a) *As fuel*—Attempts had been made in some factories for burning molasses under the boiler as a supplementary fuel, when it could not be disposed of in any other way. Without entering into the merits or otherwise of molasses as fuel, the general opinion on this use of molasses is well expressed in the following words: "It is a pity to throw away molasses in this way"—an opinion with which the Committee finds itself in full agreement.

(b) *Road composition and road surfacing material*—A few years ago, attempts were made in Mysore to use solutions of molasses in water in consolidating roads subjected to heavy traffic, but were subsequently given up. The attention of the Committee was invited to the investigations in this

direction being carried out at the Imperial Institute of Sugar Technology, Cawnpore, and which were reported in the *Indian Trade Journal Supplement*, dated 10th February, 1938. The Committee however is of opinion that though the possibilities in this line of investigation are great, the work is yet in the early stages of experimentation, and it is not likely that in the immediate future a substantial outlet for molasses would be found for this purpose.

(c) *Plastics and resinous material*—The subject of utilizing molasses in the making of plastics and resinous material seems to be still in the laboratory stage and no information was available to the Committee in this matter.

(d) *Fermentation products other than alcohol or yeast*—It seems that a fair amount of work has been carried out in some countries on the production of substances other than alcohol and yeast by conducting the fermentation of molasses by special methods. Lactic acid, citric acid, and glycerine are reported to be some of these products which are being made commercially by the fermentation of molasses.

73. The Committee is not in a position to make any comments, but feels sure that any commercial enterprise that takes up the manufacture of chemicals and commercial solvents from molasses is bound to extend its activities into the possibilities in this direction.

FINDINGS

74. The findings of the Committee on various important questions with regard to the uses of industrial alcohol and also of molasses for other industrial and agricultural purposes are given below :

(1) There is a large field in India for expansion in the use of alcohol for industrial purposes.

(2) The use of "methylated spirit" for purposes of heating and lighting may be considerably increased by suitable propaganda, especially when there is possibility of marketing it at a price competitive with kerosene.

(3) The "Vend-fee" of 8 annas per gallon levied on methylated spirit is very high as compared with the excise duty on kerosene.

(4) The high rate of "Vend-fee" on methylated spirit is a great handicap against its more general use.

(5) The present market in India for vinegar, acetic acid, commercial organic solvents, and such other products wherein alcohol is used as a raw material, is small, but is capable of being developed.

(6) The use of molasses as a fuel is unremunerative.

(7) The use of molasses for making road compositions is still in the early stages of experimentation.

(8) Investigations regarding the utilization of molasses for making composite cattle-feed have so far not given any discouraging result.

(9) Yeast for cattle-feed can be manufactured from molasses at the same time as alcohol, and the economic possibilities in this direction seem to be attractive.

(10) The use of molasses as manure in normal soils has not received much support from the majority of agricultural experts in India.

(11) The use of molasses for reclaiming *usar* soils has aroused considerable interest and is being tried in different parts of India. At many places encouraging results have been obtained and extended trials are being given to this process of reclamation.

RECOMMENDATIONS

75. (1) "Industrial Alcohol" for use in internal combustion engines should be (i) more heavily denatured than power alcohol; (ii) free from any kind of excise duty; and (iii) sold at almost the cost price.

(2) Research work should be undertaken by the Government on all technical matters connected with the use of industrial alcohol for power generation in stationary engines, tractors and lorries.

(3) Intensive propaganda work should be done to popularize the use of methylated spirit for household purposes, such as for heating and lighting.

(4) Facilities should be given by the Excise Department to encourage experimental investigations for the commercial use of industrial alcohol for solvent and other purposes.

(5) Investigation should be made into the commercial and practical possibilities of combining the manufacture of alcohol with that of yeast for cattle feeding.

(6) The results of the experiments now being carried out under the Imperial Council of Agricultural Research on (i) the feeding of cattle with bagasse-oilcake-molasses cakes, and (ii) road-making and surfacing compositions, should be closely watched by the Government, as these uses may form in future substantial outlets for molasses.

(7) The Agricultural Departments of the two provinces should give an exhaustive trial to the method of reclaiming *usar* soils by the application of molasses, and study carefully the economic aspects.

CONCLUDING REMARKS

76. The terms of reference to the Committee are as follows :

- (1) To advise on the manufacture of power alcohol out of molasses;
- (2) To report on the best method of manufacture;
- (3) To report on the best method of manufacturing petrol-alcohol mixture; and
- (4) To explore the possibilities of the use of molasses in other practical applications.

Under the first heading, the Committee has stated that the manufacture of power alcohol out of molasses is a feasible proposition, being an economic one, and that power alcohol could be manufactured and sold in the United Provinces and Bihar, and in other interior places, at a price which could be less than the present selling price of petrol, and which could bear, if necessary, the same excise duty as the Government of India may levy on petrol.

The Committee feels that the best method of developing this industry, which is an important one, would be by introducing legislation in the United Provinces and Bihar, and in such other provinces as would like to do so, making it compulsory for all petrol sold in these provinces, to be mixed with power alcohol in a definite proportion, say, 20 per cent. by volume of power alcohol.

The petrol-alcohol mixture should be prepared under Government supervision, which could be effectively done by the entire production and distribution being regulated by an Advisory Body referred to elsewhere.

As regards the best method of manufacture, there are two well-known processes—Azeotropic and Salt-dehydration—both of which can be tried in India.

The mixture of petrol and alcohol does not appear to present any serious difficulties. The best and the practical method of effecting this appears to be, for alcohol to be transported in bond from the various places of production, to places where there are bulk installations by the distributing agencies for effecting alcohol-petrol mixture, the actual mixing being done in a suitable manner, as may be decided upon to safeguard the interests of the Excise Department.

The Committee is of opinion that the other uses which molasses could be put to, e.g., for the surfacing of roads, for feeding cattle, and for reclaiming *usar* soils, are still in the experimental stage, and the various problems connected with them have not been sufficiently worked out.

The Committee therefore feels that from the economic point of view, the most profitable outlet for molasses—an important by-product of the sugar industry now running almost to waste—is in the manufacture of alcohol required for power generation and for other industrial purposes. It is also convinced that several other industries, such as the manufacture of commercial organic solvents, acetic acid, chemicals requiring alcohol as one of the raw materials or ingredients in their manufacture will develop in the country with the establishment of the power alcohol industry.

There can be no doubt that in modern times the production of motor fuel is a matter of vital importance to every country, and it would be desirable if India developed her resources for the production of a motor fuel which can be pressed into service, if and when necessary, for purposes of speeding up the mechanization of the army, and the development of air-craft. The early establishment of the power alcohol industry on a sound basis will enable India to become an object of strength not only to herself but also to the Empire.

77. The members of this Committee desire to place on record their high appreciation of the services rendered to the Committee by Dr. N. G. Chatterji, who combined the functions of a Secretary with those of a member. His wide knowledge, deep insight into the problems before the Committee, and his capacity for hard work have been of great use to them.

The Committee also desires to record its appreciation of the services so willingly rendered by Mr. G. D. Tripathi, the Stenographer.

The members of the Committee also desire to record their sense of gratitude to Lala Padampat Singhania, the Chairman of the Committee, for his courtesy, patience, and tact throughout its deliberations.

PADAMPAT SINGHANIA (*Chairman*).

*N. R. DHAR.

G. H. DICKSON.

R. ANANTHASUBRAMANYAM.

*P. S. MAKER

*M. P. GANDHI.

S. S. BHATNAGAR.

N. G. CHATTERJI (*Secretary*).

CAWNPORE :

Dated June 15, 1930.

N. G. CHATTERJI,
Secretary.

*Signed subject to the note attached.

Note by Dr. N. R. Dhar

Molasses as a manure—In Java attempts have been made since 1911 to utilize molasses as a manure. Applying 1,600 gallons of molasses per acre an increased yield of paddy to the extent of 43 per cent. has been obtained in that country. In Mauritius, in Antigua, and in Queensland increased yield of sugarcane has also been reported. In the Bundeberg Farm in Queensland, Dr. Kerr obtained 37.1 tons of sugarcane per acre of land with 10 tons of molasses as manure whilst without molasses the yield was 22.7 tons per acre.

An increase in the yield of 36 per cent. has been reported of sugarcane at the Shahjahanpur Government Farm on applying 10 tons of molasses per acre. Messrs. Parry and Company, Limited, Madras, have also obtained an increase of 40 per cent. Several trials at Allahabad show that molasses produces highly beneficial result in the yield of paddy. But where molasses is added to the growing crop, no beneficial result is obtained. The value of molasses as a manure is chiefly due to the presence of carbohydrates, potash, phosphate, and calcium salts. The carbohydrates when added to the soil are oxidized and cause fixation of atmospheric nitrogen in the soil. Moreover, the same substances also help in the conservation of soil nitrogen. As the sugars have to be oxidized in the soil for the increase of nitrogen, there should be an interval of about 1 month or 5 weeks between the application of molasses and sowing of the crop. The cases of failures appear to be due to the neglect of the time factor required in the fixation of atmospheric nitrogen.

I am of the opinion that molasses should be used in improving the yield of paddy and sugarcane when applied 4 to 5 weeks before the sowing at the rate of about 10 tons per acre.

Molasses in usar (kallar) land reclamation—It is estimated that the total area of *usar* land in the United Provinces alone is more than 5,000,000 acres. Dr. J. A. Voelcker, who examined the extent of alkaline land in Northern India, stated in his "Improvement of Indian Agriculture" London, 1893, page 55, as follows: "Enormous areas, especially in the plains of Northern India, are thus affected, and in the North-West Provinces alone there are between four and five thousand square miles of *usar* land." In the Punjab, in Bihar and in the South of India, there are vast tracts of such unproductive lands. Naturally, the reclamation of these lands is a problem of great importance to India. The salts, which made these lands unfit for growing crops, are the carbonate, sulphate and chloride of sodium; sodium carbonate is chiefly responsible for the unproductiveness of such lands, which are generally heavy clay soils and are very often termed *Pattier* waste lands.

As early as 1874, the Irrigation Department of North-West Provinces was trying to reclaim *usar* land and in 1877 a "Reh" Committee was appointed to investigate the problem. Subsequently, experiments were started at Awa in 1879, at Cawnpore in 1882 and at Aligarh in 1885. Unfortunately, as no qualified chemist was associated in these experiments no substantial results were obtained as is evident from the following letter of 13th November, 1935:

"*Usar* reclamation experiments were carried out by this Department at Juhi (Cawnpore) and Abbaspur (Unao) without appreciable results and the *babul* plantations at the places were transferred to the Forest Department."

The late Dr. J. W. Leather, who was the Imperial Agricultural Chemist, carried on the analysis of the scrapings from *usar* fields near Aligarh and other parts of United Provinces and also tried to reclaim *usar* by applying gypsum. His results show that no wheat grows on soils containing 0·008 per cent. to 0·083 per cent. sodium carbonate even when treated with gypsum.

Leather's conclusions (Investigation on *Usar* Land in the United Provinces, by J. W. Leather, Allahabad, 1914, page 37) are as follows :

(1) The only experiment which can claim to have really reclaimed the *usar* land is the application of gypsum. The cost of sufficient gypsum to affect this was very great—about Rs.700 to Rs.800 per acre—and is obviously prohibitive. Even if the cost of gypsum could be reduced to one-half (what was employed cost about Rs.20 per ton), it would still be too expensive if required in the quantity that this land did require it.

(2) The effect of deep and good cultivation coupled with heavy manuring has not been either what is indicated to the unaided eye nor what might have been anticipated. The surface foot of soil has been apparently reclaimed, but below this the soil is as bad as ever.

(3) Scraping off the salts is practically useless.

Defects of alkali lands—The chief defects of alkali land are—

(1) *High alkalinity*—We have examined several samples of bad *usar* lands and we find that the pH is as high as 10·8. Neither azotobacter nor nitrite-formers are observed in cultures obtained with these soils.

(2) The amount of calcium compounds is less in these soils than in normal ones.

(3) The nitrogen content is small. In several samples examined by us the total nitrogen varied from 0·008 to 0·02 per cent. (normal soils contain 0·05 to 0·1 per cent. nitrogen).

(4) The soil is highly impermeable to water.

(5) The soil particles do not settle readily when shaken with water and become sticky.

(6) The soil lacks bacterial activity and organic matter.

Molasses containing acids, carbohydrates, soluble calcium salts, phosphates, potash, etc., can readily remove all these defects of alkaline lands.

Alkaline lands have been successfully reclaimed near Cawnpore, Allahabad, and in Mysore by the application of molasses at the rate of one to ten tons per acre and good crops of paddy and barley have been grown in these reclaimed areas, where no vegetation ever grew. The amount of molasses necessary for reclamation depends on the quality of the alkali soil.

The cost involved in reclaiming *usar* land by treatment with molasses appears to be less than what it is with either gypsum or sulphur.

Statistics show that only 0·75 acre of land under cultivation is available *per capita* in India as against 2·6 acres in United States of America and 2·3 in France. It appears that very little land under cultivation is available in this country and land reclamation is of vital importance for the welfare of the masses of India. I am of opinion, therefore, that as there is a future

for the application of molasses in alkali land reclamation, the Agriculture Department of the Provincial Government should go ahead with this problem of reclaiming *usar* land by the application of molasses.

My recommendations in this connection are—

- (1) Molasses should be used as manure for the cultivation of paddy and sugarcane.
- (2) The Agriculture Department should go ahead with alkali land reclamation by the application of molasses and grow paddy and barley in the reclaimed lands.

N. R. DHAR.

APPENDIX I

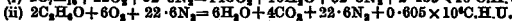
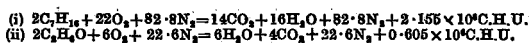
A Note on Some of the Properties of Motor Fuels containing Alcohol.

A—ALCOHOL FUELS AND POWER DEVELOPMENT

1. Heat value of combustible mixtures in the engine and power output

Pye, in his "Internal Combustion Engine," 1931 (page 54), has shown that the calculated power of an engine would be proportional to the heat generated per standard cubic foot of the mixture sucked into the cylinder, multiplied by the volume ratio on combustion, which is the ratio of the number of molecules of the various products of combustion to those of the combustible mixture. This may be regarded as potential source of increased power from an engine; the higher the ratio the greater the assessment of the value of the mixture as a working substance.

By way of illustration, we may take the case of heptane, C_7H_{16} of calorific value 10,700 C.H.U. per lb. and Ethyl alcohol, C_2H_5OH , of 6,540 C.H.U. per lb. The combustion of the correct fuel-air mixtures, together with the heat generated, is as follows:



Hence, the quantities of heat generated per mol of the fuel-air mixture are:—

$$(i) \text{ For heptane: } \frac{2.155 \times 10^6}{106.8} = 20,180 \text{ C.H.U.}$$

$$(ii) \text{ For alcohol: } \frac{0.605 \times 10^6}{30.6} = 19,750 \text{ C.H.U.}$$

Taking into consideration the volume ratio of the products of combustion to the initial gas mixtures, the total energy of the fuel-air mixture would be—

$$(i) \text{ For heptane, with a volume ratio of } \frac{112.8}{106.8} \text{ or } 1.056 :$$

$$20,180 \times 1.056 \times \frac{1,400}{359} = 83,100 \text{ ft.-lb. per standard cubic foot.}$$

$$(ii) \text{ For ethyl alcohol with a volume ratio of } \frac{32.6}{30.6} \text{ or } 1.065 :$$

$$19,750 \times 1.065 \times \frac{1,400}{359} = 82,200 \text{ ft.-lb. per standard cubic foot.}$$

It would thus be seen that even though the calorific value of a substance is considerably lower than that of another, the correct combustible fuel-air mixture may have practically equal energy content on account of a smaller proportion of air required for combustion and consequently lesser dilution with the inert nitrogen. It is rather interesting to find that in the case of all the more common liquid fuels, the energy content of a correct mixture is almost identical, as shown in the following table compiled by Ricardo.*

Substance	Specific gravity at 15°C	Lower calorific value in C.H.U.		Latent heat of evaporation C.H.U. per lb.	Ratio by weight in correct mixture	Volume ratio on combustion	Heat liberated per S.C.F. of correct mixture	Total energy per S.C.F. of correct mixture C.H.U.
		Per lb.	Per gallon					
Petrol	0.76	10,430	79,200	73	14.6	1.047	57.0	59.7
Heptane (97 per cent.)	0.69	10,700	73,900	75	15.1	1.056	56.9	60.1
Benzol	0.88	9,640	85,200	95	13.2	1.013	57.6	58.4
Ethyl Alcohol (pure)	0.79	6,540	51,800	220	8.97	1.065	56.6	60.3
Rectified spirit (95 per cent.)	0.815	6,040	48,900	246	8.4	1.065	54.5	58.0

* Pye: "Internal Combustion Engine", page 242.

2. Power Development in Motors

The development of power in motors depends a good deal upon the construction and working of the carburettor. The work of Ricardo, Hubendick and others has established the following facts and general relationships:

- (1) With most fuels, starting with low revolution speeds, the power developed at first rises quickly, reaches a maximum, and then falls down when the rate of revolution is still further increased.
- (2) The maximum power is developed when the ratio of fuel to air is higher (4—6 per cent.) than that necessary for complete combustion.
- (3) The maximum efficiency is obtained when the ratio of fuel to air is lower (about 4 per cent.) than the correct mixture.
- (4) With alcohol the increase in power is very marked—much more than with petrol—amounting to nearly 10 per cent. with very rich mixtures.
- (5) For smoothness and flexibility in running, multi-cylinder engine must be fed with mixture slightly on the over-rich side.

Comparison of the properties of petrol and alcohol-petrol mixed fuel in motor car engines

Professor Hubendick contributed a paper in the World Power Conference, London, 1928, on the Use of Ethyl Alcohol as Motor Fuel (Transactions—Vol. III, pages 724-748), based on the results of an exhaustive series of comparative experiments with petrol and petrol mixed with varying amounts of alcohol. For each mixture, the effect and the consumption of fuel per horsepower-hour for different sizes of the carburettor jet were registered graphically. The following is a summarized extract of a part of his paper.

“Series of experiments were carried out with undiluted gasoline and with gasoline mixed with 10, 15, 20, 25 per cent., etc. of alcohol, for each type of fuel tests were made with different sizes of carburettor jets. The series of graphs obtained in this manner is very instructive. It shows that, with a minimum fuel consumption, the results of the experiments with undiluted gasoline and with gasoline containing 10, 15 and 20 per cent. of alcohol very nearly coincide. In reality, the heat consumption decreases slightly within the above limits, as the percentage of alcohol in the fuel increases although the difference is very small. Hence in the case of a carburettor adjusted for use with gasoline, not more than 23 per cent. of alcohol must be present in the gasoline-alcohol mixture, if good results are to be obtained. This fact can be explained by assuming that the characteristic properties of the alcohol do not exert themselves appreciably until the proportion of the alcohol has increased to 23 per cent. If the percentage of alcohol be still further increased, the physical properties of the alcohol commence to exert their influence, and it becomes necessary to readjust the carburettor. It may be mentioned that the results given above do not refer to those obtained on one engine only, but are entirely consistent with results obtained with different types of motors, showing only slight variations in actual quantities.

“Summarizing, it has been shown that gasoline can be mixed with alcohol in such proportions that the mixture contains up to 25 per cent. of alcohol without this proving detrimental to its use as fuel for petrol engines. It is therefore possible to use such a mixture in these engines without taking special precautions, and to obtain with it results as good as those obtained

when using gasoline. To verify this statement, tests have been made in automobile engines of different makes and running under climatic conditions unfavourable for the use of alcohol mixture, that is, at a low air temperature. These experiments have shown that the engine runs as well on such a mixture as it does on gasoline alone, and that the driver has been unable to say which fuel was being used."

Experiments performed by Lichty and Phelps at the Yale University, and published in the *Industrial and Engineering Chemistry*, February, 1938, confirm in a general way these results obtained by Professor Hubendick. They write as follows:

"Applying the multi-cylinder power and fuel consumption data to motor vehicles on the highway, and using air-fuel ratios equal to or richer than maximum power for gasoline and without adjustment of air-fuel ratio on substitution of the 10 and 20 per cent. blends, a decrease in volumetric fuel consumption of about 2 and 3 per cent. for the 10 and 20 per cent. blends respectively should be obtained."

The following table gives the results of the experiments:

Brake thermal efficiencies (in per cent.) at comparable conditions

Fuel	Maximum power			Richest complete combustion		
	1,000 r.p.m.	2,000 r.p.m.	3,000 r.p.m.	1,000 r.p.m.	2,000 r.p.m.	3,000 r.p.m.
<i>Full load</i>						
Gasoline	20.3	21.4	19.6	22.8	24.0	22.0
10 per cent. blend	20.7	21.2	19.7	23.2	24.4	21.5
20 per cent. blend	21.4	22.0	20.0	24.0	24.8	22.2
<i>Two-thirds load</i>						
Gasoline	18.0	18.7	17.4	22.2	21.2	19.0
10 per cent. blend	18.8	18.8	16.9	21.6	21.2	18.8
20 per cent. blend	19.5	19.0	17.4	21.8	20.5	19.2
<i>One-third load</i>						
Gasoline	14.1	14.1	12.4	15.9	14.2	..
10 per cent. blend	14.0	13.9	12.3	16.1	13.8	..
20 per cent. blend	14.4	13.9	12.6	15.9	14.2	..

Use of Industrial Alcohol (95 per cent. Ethyl Alcohol) in internal combustion engines

1. Lichty and Ziurys (*Industrial and Engineering Chemistry*, September, 1936) from a theoretical study of the subject came to the following conclusion:

The mixture which results in the larger power output per unit volume of the correct mixture induced in the gaseous state, would have the lower specific fuel consumption on a gaseous mixture volume basis. However, alcohol is at a distinct disadvantage, since in equal volumes of correct gaseous mixtures of the two fuels, there would be 60 per cent. more alcohol by weight. On a liquid volume basis, the specific gravities indicate that 56 per cent. larger quantities of alcohol would be required.

Alcohol can be used in engines with higher compression ratios, which will reduce the fuel consumption. Theoretically, increasing the compression ratio from 5.45-1 to 8-1, should increase the indicated efficiency about

18.7 per cent. and should reduce the indicated fuel consumption by 15.7 per cent.

Compared to gasoline in a 5.45-1 compression ratio engine, the alcohol engine with a 8-1 compression ratio would theoretically require 35 per cent. more fuel by weight and 31 per cent. more fuel by liquid volume.

2. The following results were obtained by Professor Wawrzyniak* in experimenting with 96 per cent. spirit and petrol in different makes of motor car engines. The engines were of the following make:

	Power	Compression ratio	Volume of the engine cylinder
I.—Daimler, motor lorry..	35 H. P.	4.0	5.5 litres.
II.—Adler, private car ..	10/30 H. P.	4.2	2.62 "
III.—Elite, ditto ..	10/40 H. P.	5.5	3.14 "

The results are tabulated below:

Engine	Fuel	Effective power developed by—		Average consumption of fuel	
		500 r.p.m.	1,000 r.p.m.	Kg/H.P.—hr.	Litre/H.P.—hr.
I	(i) 96 per cent. spirit ..	17.4	27.1	0.517	0.630
	(ii) Petrol ..	18.5	31.25	0.331	0.440
II	(i) 96 per cent. spirit ..	10.80	24.40	0.645	0.780
	(ii) Petrol ..	11.75	28.00	0.443	0.590
III	(i) 96 per cent. spirit ..	14.2	37.60	0.512	0.626
	(ii) Petrol ..	25.0 (1160 r.p.m.)	38.05	0.347	0.461

* Mitteilungen der Technischen Hochschule, Dresden, IV Sammelband, Tables I and IV.

3. Experiments conducted at the Yale University during 1934-35 showed that in a multi-cylinder Chevrolet engine, about 50 per cent. more fuel was required, when 95 per cent. spirit was used in place of petrol.

B—PROPERTIES RELATING TO THE INFLAMMABILITY OF ALCOHOL AND PETROL

1.—Flash Points:

* Dangerous Petroleum' (India Petroleum Act)—	Below 76°F.
(a) Absolute alcohol ..	55.3°F.
(b) Rectified spirit—	
60° O. P. (91.4 per cent. by volume)	56.3°F.
50° O. P. (85.5 per cent. by volume)	59.3°F.
40° O. P. ..	64.3°F.
30° O. P. ..	66.0°F.
20° O. P. ..	70.0°F.

10° O. P. (62.8 per cent. by volume)	..	..	..	72.0°F.
Proof spirit (57.1 per cent. by volume)	..	..	..	74.0°F.
(c) Alcohol denatured with 0.5 per cent pyridine and 0.5 per cent. light caoutchoucine—				
60° O. P.	..	..	..	56.3°F.
50° O. P.	..	..	..	62.0°F.

2. *Temperatures of Spontaneous Ignition.*

(Moore—J.S.C.I.—1920)

Fuel	Sp. Gr.	In oxygen	In air
Petrol .. .. .	.710 to .729	270°C—279°C.	361°C—390°C.
Lamp oil .. .. .	.787	253°C.	367°C.
Alcohol (95 per cent.) .. .. .	.817	395°C.	518°C.
Turpentine .. .. .	..	275°C.	275°C.

3. *Limits for the Downward propagation of Flame. Air and Fuel Mixture*

	Lower limit	Upper limit
Alcohol	3.95	13.65
Petrol	2.4	4.9
Turpentine	0.73	..

This shows that explosion wave is formed with a leaner mixture in the case of petrol. Incidentally, it also shows that in an alcohol engine the strength of the mixture may be varied within wider limits without causing miss-firing.

4. *Vapour Tension—*

	10°C.	20°C.	30°C.	40°C.	50°C.
	mm	mm	mm	mm	mm
Alcohol 100 per cent. .. .. .	..	44	78	140	221
Alcohol 90 per cent. .. .. .	..	39	75	135	221
Alcohol 80 per cent. .. .. .	..	..	73	133	221
Petrol, grade I	90	133	185	265	320

5. *Loss in weight of various fuels by passing air for 5 minutes at 25°C*

Petrol (0.700) .. .. .	..	..	..	20.5 per cent.
Alcohol (95 per cent.) .. .. .	..	..	..	1.9 per cent.
Alcohol (80 per cent.) .. .. .	..	..	..	1.85 per cent.

This shows that, if air at 15°C be bubbled through alcohol, the quantity of vapour taken up is insufficient to form an explosive mixture. Air bubbled through hexane or benzene takes up so much vapour that the mixture is richer than the upper explosion limit for these substances.

6. "The miscibility of alcohol and water must obviously reduce greatly the risk of fire during storage and transport, since burning alcohol can be immediately extinguished if sufficient water be at hand to reduce it below a certain strength. This would, however, not apply to mixtures of alcohol and petrol." (Monier William's "Power Alcohol"—page 255.)

C—HYGROSCOPICITY OF ALCOHOL FUELS

It has also been established that the extent of miscibility of alcohol and petrol are regulated by the three following more important factors :

- (i) The lower the strength of the alcohol from the " Absolute " grade, the more difficult it is to form a homogeneous mixture.
- (ii) The lower the temperature to which the mixture is subjected, the greater is the tendency for the latter to separate.
- (iii) Petrols of different origin exhibit different extent of miscibility with alcohol of the same strength.

As a rule, the higher the specific gravity of petrol, the poorer is its miscibility, though this is not strictly true in every case, for the presence of aromatics in petrol seems to favour the miscibility, but that of the naphthenes has the opposite effect.

It therefore follows that a perfectly homogeneous mixture of alcohol and petrol may have a tendency to become first opalescent and finally to separate into two layers on account of one or both of the following reasons, namely, (i) lowering in the strength of the alcohol due to gradual absorption of water from the atmosphere, or (ii) a fall in temperature of the surroundings.

A study of the literature on the subject revealed that a number of careful experiments had been conducted in this direction. The results of some of the more important of these having a direct bearing on the point at issue are summarized below :

1. *Absolute alcohol is only slightly more hygroscopic than rectified spirit*

Soriette (Chémie et Industrie, May 1923) made an experiment to compare the hygroscopic properties of technical absolute alcohol and of rectified spirit under identical conditions when exposed to an atmosphere of relative humidity 80 per cent. and temperature 15°C. His results showed that in 21 days the absorption of water was 5.1 by absolute alcohol of 99.7° G.L. and 4.35 by rectified spirit of 95.5°.

2. *The hygroscopicity of an alcohol-petrol mixture is very low and of little practical consequence*

(a) Hubendick (Spiritusmotoren, page 28, Table XXI) has shown that the extent of miscibility of heavy petrol and alcohol of different strength can be judged from the following table giving the temperatures at which separation just begins to take place.

Mixture in volume per cent.		Temperature in° C of opalescence with spirit of strength				
Alcohol	Petrol	99.7	99	98	97	96
		under	under			
10	90	-30	-18.4	+15.4	+28	+30
20	80	-30	-26	+9.8	+22.5	+30
30	70	-30	-30	+2.6	+12.6	+30
40	60	-30	-30	+3	+10.5	+24.3

(b) Contant and Mariller (Bull. Assoc. Chim. Suc. et Disfill. 1933 page 298) prepared a Mixture of 15 per cent. by volume of 99.9° absolute alcohol and 85 per cent. heavy petrol. Of this mixture 170 c.c. were exposed in an open glass vessel of 450 c.c. capacity, 160 mm. high with mouth of 34 mm. diameter, in a room containing air of humidity 80 per cent. The extent of water absorption was indirectly estimated by finding the temperature at which milkiness (showing incipient separation) took place. They found that after 43 days of exposure, the mixture had to be cooled to -8°C. to produce any milkiness.

(c) Engineer Eckström (Hubendick's Spiritusmotoren, page 30) made several experiments which consisted in adding to mixtures of "Shell" petrol and absolute alcohol (99.5 per cent.) at a temperature of 17.5°C. such quantities of water as are needed to cause the mixture to become opalescent and finally to separate into two layers. The following table gives the results of his experiments :

Composition in volume per cent.		Specific gravity	Addition of water in per cent. to the mixture		Percentage of decantation	Degree of alcohol in the separated layer	Percentage of petrol in the separated layer
Alcohol	Petrol		Opalescence	Separation			
10	90	0.7350	0.26	0.33	2.3	96.3	20.0
20	80	0.7423	0.70	0.76	7.3	95.9	40.9
30	70	0.7494	1.20	1.30	32.0	95.3	56.2
50	50	0.7592	2.70	2.80	92.0	94.2	47.1

A little reflection would show that on the assumption that 0.76 per cent. of water is required to bring about separation in a 80 : 20 mixture, it would require 345 c.c. of water to get into the fuel tank of a motor car containing 10 gallons of the mixture before any separation is likely to take place. Such an accident is not likely to happen normally.

"The incidental admixtures of water which sometimes happen are in fact very insignificant. For instance, it was shown that the amount of water remaining inside a 5-litre petrol tin after it has been washed and carelessly rinsed, does not exceed 2 c.c., that is 0.05 per cent. And experiments have proved that this quantity is insufficient to bring about separation even in the case of a fuel containing only 2.5 per cent. alcohol. The danger of separation of alcohol fuels has thus been very much exaggerated.

"It seems strange that these efforts are obstinately limited to considering exclusively the consequences of a possible admixture of water to fuels containing alcohol without thinking of the trouble such an admixture may create in case of pure petrol. The least admixture of water to petrol occasions the formation of a layer of *pure* water which settles down in the pipe and stops the running of the engine. On the contrary, if the petrol contains even 5 per cent. of alcohol, the addition of even 45 c.c. of water to 10 gallons of the carburant does not bring about separation at ordinary temperatures. Separation takes place only at about 0°C., but the aqueous layer separating contains enough alcohol and petrol to keep the engine running." (Charles Schwetzer—"Power Alcohol Question in Its Present State". Niort, 1937.)

Commenting on the experimental results quoted above, Professor Hubendick said that the lower aqueous layer was mainly composed of alcohol

containing such a percentage of petrol that *the mixture, even in its separated condition, would be able to keep the engine working. Consequently, if by accident a small quantity of water gets into the fuel tank, no trouble whatever should be feared in the running of the engine.*

(d) Petrilik, before the International Congress of Industrial Chemistry, Paris, 1920, described his experience in this connection in the following words :

"We purposely added to the tank of our motor car, containing 20 litres of 80/20 petrol-alcohol mixture, 200 c.c. of water, without any the slightest effect being noticeable in the working of the engine."

APPENDIX II

Note by the Secretary, Imperial Council of Agricultural Research, dated the 29th September, 1933, on Subject No. 2: Utilization of Molasses--Power Alcohol.

At its fifth meeting held in March, 1933, the Sugar Committee considered certain representations regarding the increasing difficulties encountered by sugar factories in India in finding an outlet for their molasses. The Committee came to the conclusion that the power alcohol question was most important and recommended that the Secretariat of the Council should take up the matter unofficially with the departments of the Government of India concerned. A summary of the present position by the Agricultural Expert to the Council is attached (Annexure).

2. The question as to the next step to be taken is now for the consideration of the Sugar Committee. It is suggested that the matter might conveniently be referred to a sub-committee to meet and report during the present session of the Sugar Committee.

ANNEXURE

Our examination of this question in consultation with the other departments of the Government of India concerned has brought out the following points:

- (a) Alcohol used for motor spirit must pay the same duty as petrol. It is not possible for Government to agree to the loss of revenue which any other course would involve, nor would it be reasonable to protect the sugar industry indirectly at the expense of the indigenous oil industry.
 - (b) The question of the cost of production of power alcohol from Indian molasses is of fundamental importance and before legislation would be justified, a fuller study of the economics of the question is essential. The landed cost of petrol in bulk *ex-duty* (and before any distributing costs have been incurred) is approximately 4 annas to 5 annas per gallon. If power alcohol is more expensive than this, the price of the mixture will be higher than the present price of petrol.
 - (c) The question of distribution arrangements and costs is of great importance. The sugar factories, and thus to a considerable extent the distilleries, are remote from the ports and thus from the centres from which petrol is distributed and where mixing could best be done: they are also remote from the areas of greatest petrol consumption.
 - (d) In the event of legislation being introduced requiring a certain percentage of quantity of alcohol to be used, price control might be necessary to protect the consumer.
 - (e) The possibility of other forms of assistance than legislation for compulsory mixing should be examined.
 - (f) In view of the experience of other countries, the technical difficulties should be fully studied.
2. In regard to the cost of production, it should perhaps be emphasized that alcohol for mixing with petrol must be about 99½ per cent. absolute at least, i.e., *practically anhydrous*, otherwise difficulties due to water separation

will arise. By modern processes of re-distillation (adding Benzol and distilling off first removing the two azeotropical mixtures) alcohol of 99·7 per cent. to 99·9 per cent. purity is obtained. The following estimate of the cost of manufacture *omitting the cost of raw material* is given for a modern installation in America :

	Per American gallon
Manufacture of 95 per cent. spirit	8 cents.
Concentration to Anhydrous	2 ..
	<u>10 ..</u>

At normal exchange this is 6*d.* or Re.0-5-4 per Imperial gallon.

3. The sub-committee appointed by the Sugar Committee calculated that with molasses at 9 annas per maund, power alcohol would cost 14 annas per gallon. Working on the basis of figures supplied to the Tariff Board (which assume an output of 33,063·4 gallons of rectified spirit from 15,322 maunds of molasses) the cost of production has been calculated as follows :

	Per gallon spirit
	Rs. s. p.
Cost of molasses at 6 annas per maund, freight on molasses at Re. 0-4-3 per maund.	0 4 0
Works cost	0 2 9-6
Cost of denaturant	0 1 4-4
Depreciation on drums	0 0 7-7
Cost per gallon rectified spirit	<u>0 9 6-7</u>
Cost of concentration (American figure)	0 1 2
	<u>0 10 8-7</u>

or say 11 annas per gallon at the distillery. If no freight has to be paid on molasses, costs would be reduced to, say, 9 annas per gallon, but the above includes nothing for overhead charges or for freight on spirit to concentrating and distributing centres. The C.I.F. price of petrol at ports with which the above figure has to be compared may be taken at some 5 annas per gallon—this is exclusive of all storage and distribution costs. I understand that a similar figure has been adopted at Calcutta for the calculation of Port Trust dues. The current price of petrol at ports in Western Europe in April, 1933, was between £5 per ton (4 annas per gallon). Though this figure is low compared to the average declared value for dangerous petroleum shown in the seaborne trade returns for previous years which averaged 13 annas in 1921-32, 11½ annas in 1932-33 it compares closely with the average declared value for April to July, 1933, viz. 4½ annas per gallon (588,296 gallons value Rs.1,66,690).

Average declared values for imported petrol do not form an entirely reliable guide to the basic prices of petrol at ports in India because the imports include some special grade not used as motor fuel and in any case are a small fraction of the total consumption. The 1933 import values are probably abnormal, due to rate-cutting, but the figure of 5 annas per gallon at ports is probably not far wrong as a first cost figure. Any comparison with up-country prices should be made with caution as the storage, carriage and distribution of petrol is expensive and most of these expenses would be equally high for power alcohol. It seems obvious that admixture with power alcohol will not reduce the cost of motor fuel materially and in most localities will raise it.

4. This conclusion is borne out by the prices at which power alcohol in bulk is sold wholesale to the oil companies in various countries. It

also furnishes the reason why legislation has been found necessary. The principal figures are given below :

(Sterling prices calculated on exchange rate current in May, 1933)

	Per ton	Per gallon
	£	Rs a p.
SWEDEN—		
Cost of production (raw material practically free)..	16.15	0 12 9
YUGOSLAVIA—		
Control price (consumption tax of £ 16 to be added) ..	22.10	1 1 2
LATVIA—		
(From molasses) cost of production (monopoly selling price £ 16) ..	41	1 15 3
ITALY—		
(Control price in bulk but does not pay the petrol duty) ..	30	1 6 10
GERMANY—		
(Control price delivered to oil companies) ..	45	2 2 3
HUNGARY—		
(Control price delivered to oil companies) ..	45.10	2 2 3
CZECHOSLOVAKIA—		
Control price delivered to oil companies (includes turn-over tax) ..	40	1 14 5
FRANCE—		
.. .. .	41	1 15 3

5. These figures bring out the importance of distribution costs and railway freight. The real cost of power alcohol at the distillery under favourable circumstances is several times the cost of petrol at ports. The carriage of alcohol and petrol is expensive and distribution cost high due mainly to evaporation losses. The most recently available figures for the petrol consumption in different areas are shown in the attached table.

It will be seen that in 1931 (omitting Burma and Assam which export petrol) of 63.2 million gallons, the maritime provinces accounted for 35 million gallons. The three principle sugar-producing provinces—United Provinces, Bihar and Orissa and the Punjab—took less than 13 million gallons. If a 20/80 mixture were adopted, Upper India would only account for some 3 million gallons of alcohol whereas an outlet is desired for anything from 10 million to 20 million gallons. Making due allowance for present and future molasses production in Madras and Bombay, it is still clear that to make any real impression on the molasses problem, power alcohol would have to be used even in the ports. The railway freight in India on petrol in bulk works out approximately as follows :

Freight per tank wagon of 5,000 gallons—approximate

Distance	On E.I. Railway	On N.-W. Railway	On B.B. & C.I. Ry. from Bombay	Per gallon, annas and pies
300 miles ..	560	600	475	1-5 to 1-9
600 miles ..	640	890	805	2-5 to 2-8
1,000 miles ..	1,040	1,100	920	2-9 to 3-5
Calcutta-Delhi ..	850 to 900	..	..	2-9

6. As regards the form in which assistance might be given, the following statement shows what is being done in other countries :

(Modified by more recent information)

AUSTRALIA—A mixture of 17 per cent. alcohol 83 per cent. petrol is used on a small scale—legislation contemplated.

AUSTRIA—Compulsory mixing legislation brought into force from July, 1934. The motor fuel is to contain at least 20 and at most 40 parts by weight of power alcohol. The price of the mixed fuel is to be based on the price of power alcohol fixed by the State (about 80 Austrian shillings per 100 litres in 1935). Power alcohol is free from excise duty.

BRAZIL—The Law of April 1, 1931, makes it obligatory to mix 10 per cent. power alcohol to petrol. This has recently been brought into force when a sufficient number of power alcohol distilleries got established. Power alcohol is exempted from the payment of any kind of tax or duty.

CHILE—The Decree of September 28, 1933, fixed the quantity of power alcohol to be purchased by all importers of petrol at 6.25 per cent. of the quantity of petrol imported, the price of alcohol being fixed by the State. The percentage to be taken may be varied annually up to a maximum of 25 per cent.

ENGLAND—Specially denatured alcohol for use as motor fuel has not to pay any excise duty, and moreover enjoys a "Methylation Allowance" of 8.9d. per gallon. The Chancellor of the Exchequer has so far refused to put any duty on power alcohol in spite of repeated question in the Parliament, though it was admitted that the loss of revenue due to the exemption from tax of alcohol used as motor fuel was about £30,000 for the year 1934-35.

EQUADOR—The Decree of December 6, 1933, makes it compulsory for all petrol to be mixed with 20 per cent. its weight of power alcohol. This is for the purpose of helping the producers of sugarcane.

HUNGARY—Petrol over 735-S.G. must be mixed with 20 per cent. alcohol (unless used for agricultural purposes); about 90 per cent. of the motor fuel used is this "Motalco".

(2) The duty on light petrol (below 735-S.G.) is 4d. per gallon higher than that on "Motalco".

IRISH FREE STATE—The Government have taken up the control of the manufacture of industrial alcohol and commercial trading in the product. A number of distilleries have been erected within the last two years.

ITALY—Under the Four Years' Plan, all industrial alcohol produced from sources other than vine and fruits are under State control. All petrol must be mixed with 20 per cent. of power alcohol, the production of which was about 21.8 million gallons in 1936, and is expected to reach double the figure in 1938. Power alcohol is exempted from many of the duties levied on petrol.

LATVIA—The mixture of 25 per cent. alcohol 75 per cent. petrol is compulsory. The alcohol is a State monopoly.

PANAMA—The Decree of August 17, 1933, (i) put the duty on the mixed fuel containing 25 per cent. power alcohol at half the rate on straight petrol and (ii) fixed a maximum sale price for the mixed fuel.

PHILIPPINES—The mixed fuel is made by the sugar manufacturers and forms about one-third of the total quantity of motor fuel sold in the country. The mixed fuel is sold cheaper than petrol.

POLAND—The Law of July 2, 1932, created the State monopoly for alcohol, empowering the Government to impose compulsory mixing of power alcohol to petrol. There has so far been no necessity to impose this, as an agreement was reached by which the petroleum syndicate would buy alcohol for mixing with petrol to the extent of 9 per cent. of the quantities sold, and put the mixed fuel on sale in the country.

SWEDEN—There is no legal regulation, but power alcohol is free of all duty. The mixture used is 25-75. The quantity of alcohol used for motor fuel is about 2.5 million gallons.

YUGOSLAVIA—The Ordinance of November 22, 1933, repealed the Decree of September 27, 1932, making it compulsory to mix 20 parts of power alcohol with 80 parts of petrol. The mixed fuel is favoured by the imposition of a heavy duty on petrol, from which power alcohol is exempted.

FRANCE—At the present time, the three principal fuels used in France for motor vehicles are the following :

Touring spirit—This can be either a pure petrol, or mixtures of petrol and absolute alcohol with or without benzol. The presence of the alcohol is not obligatory. The proportion of alcohol lies between 11 and 15 per cent. of the volume of the hydrocarbons. Its octane number should not be less than 60.

Heavy spirit—This must consist of a mixture of petrol and alcohol. The proportion of alcohol is 25 per cent. of the volume of the petrol. Its octane number should not be less than 62.

Super spirits—These are used principally by the owners of modern cars with a very high compression. Their constitution depends largely on the ingenuity of the manufacturers. Actually they nearly always contain a certain proportion of absolute alcohol. Their octane number should be at least equal to 75.

7. It will be seen that whilst in several countries the use of a specified mixture has been made compulsory in others the principle has been adopted of requiring the oil companies, by law, to buy annually a quantity of power alcohol corresponding to a certain percentage of their imports and production of petrol and benzol; in some countries also of their kerosene. This method leaves the petrol distributing companies a considerable amount of latitude in distribution and in practice the mixture is sometimes sold at a lower price than pure "light" petrol despite the fact that it actually costs more. This modification is worth consideration—it would be essential that, at any rate until considerable experience has been gained, the compulsory purchase percentage should not be placed too high.

8. Another modification of the compulsory mixing method is to require all heavy petrol (i.e. all petrol), below a certain density (S.G. 735 in Hungary) to be mixed with alcohol and to make light petrol relatively expensive by a heavier duty; this is the method adopted in Hungary, the price differential being about 4d. per gallon. The applicability of this method to India is doubtful where heavier petrol is used; the petrol usually distributed is of a specific gravity of about 0.752 at 30°C (equivalent to about 0.765 at 15°C).

9. Yet another method of encouraging the use of alcohol as a motor fuel is the remission of duty as in Sweden—this method must be ruled out for financial reasons.

10. The conclusion seems inevitable that the admixture of alcohol with petrol will raise the price of the mixture above that of pure petrol. This is due to the fundamental fact that under the most favourable circumstances the cost of production of alcohol is several times the cost of production of petrol—including delivery by sea to ports in bulk. The figures given below would seem to indicate that the cost of mixture containing 20 per cent. of alcohol will be something like 7 annas per gallon at the ports made up as follows :

	Annas
0·8 gallon petrol at 5 annas	4
0·2 gallon alcohol at 11 annas	2·2
Freight on ·2 gallon of alcohol for say 600 miles at 2 annas and 8 pies per gallon.	0·6
Total	6·8

Duty and distributing costs being the same, cost of petrol would be increased by about 2 annas per gallon. At up-country centres the difference would be appreciably less if mixing stations were suitably sited, though there would naturally be an increase in distributing costs with an increase in the number of mixing stations. It is clear that the cost of production and distribution of power alcohol in India require considerably more accurate determination before legislation could be proposed.

11. *Technical considerations*—Certain difficulties have been met with in other countries but appear to have been got over. The main facts may be summarized as follows :

(1) For successful admixture with petrol, alcohol must be of at least 99½ per cent. purity; 98 per cent. spirit will not do (this is clearly shown by Brazil and Cuban experience as well as by experiment). Modern plant for the production of anhydrous alcohol can produce by this distillation a purity of 99·8 to 99·9 per cent.

(2) Mixtures of alcohol and petrol for successful commercial use must be between comparatively close limits. Mixtures containing less than about 15 per cent. alcohol are unworkable for several reasons whilst mixtures containing above 20—25 per cent. call for special engine adjustments and the fuel consumption is higher.

(3) Alcohol absorbs water readily and the addition of quite small quantities of water to an alcohol-petrol mixture results in separation and cloudiness. Fortunately these difficulties are mainly met with at low temperatures and the percentage of water required to produce separation is higher with increased alcohol content; this is illustrated by the following figures :

Composition of mixtures	Percentage of water sufficient to cause separation	
	At 0°C.	At 10°C.
Alcohol 10 per cent., petrol 90	0·25 per cent.	0·20 per cent.
Alcohol 15, petrol 85	0·50 "	0·40 "
Alcohol 20, petrol 80	0·60 "	0·48 "

Figures are also required for +10°C and for mixtures up to 25 per cent. alcohol—these determinations could easily be made.

It is clear that the degree of concentration of the alcohol used is of very great importance as the separation of a watery layer, e.g., at pumps would mean the loss of a considerable proportion of the added alcohol. For example, at 24°C with a 20/80 mixture once separation has begun, 1 per cent. of water would cause about 12 per cent. of alcohol to separate out.

(4) Information is required as to the rate at which different petrol-alcohol mixtures will absorb moisture under Indian conditions of storage, temperature and humidity. These data would be essential to the formulation of a distribution scheme.

(5) For a given power output more alcohol is necessary than petrol due to the lower calorific value of the former. In practice the addition of 15 per cent. alcohol leads to no noticeable increase in fuel consumption, an addition of 30 per cent. alcohol means an increase in consumption of about 10 per cent. This would not be a serious consideration with a 20/80 mixture since alcohol is a good "anti-knock" fuel.

12. Whatever form legislation might take, it is clear that Government might have to fix the sale price of power alcohol and possibly the price of the mixture. The cost to the consumer must be determined before legislation could be proposed. Hence the most important requirement at present is to get accurate figures for the cost of producing anhydrous alcohol in India. The type of plant required and most suitable to Indian conditions has to be settled; also the difficulties, if any, in operating it have to be ascertained. It is understood that the Mysore State contemplated experiments of this nature and it might be possible to secure their co-operation in obtaining the necessary data. If not the question of providing an experimental factory somewhere in British India will have to be taken up. The oil companies are willing to co-operate in the distribution of power alcohol if a workable scheme can be devised and doubtless their co-operation could be secured during experimental distribution at some such centre as Delhi. Power alcohol would have a freight advantage of about 3¼ annas per gallon and the cost of the mixture would be (omitting duty and distribution charges):

	Annas per gallon
0·8 gallon petrol at 8 annas	6·4
0·2 gallon alcohol at 11 annas	2·2
Total	8·6

as compared to petrol at 8 annas so that the addition to the price of petrol would be small.

The first step, therefore, is to get an experimental scheme going in some suitable area.

B. C. BURT.

The 22nd September, 1939.

*Statement showing the petrol sales in the various provinces for the years
1929, 1930 and 1931*

Province	Gallons		
	1929	1930	1931
Madras	10,331,000	11,248,000	10,696,000
Bombay	11,936,000	12,971,000	13,182,000
Bengal	9,913,000	10,976,000	10,782,000
United Provinces	3,753,000	4,476,000	4,553,000
Burma	7,623,000	7,756,000	7,137,000
Shan States	550,000	663,000	621,000
Punjab	4,602,000	5,397,000	5,560,000
Bihar and Orissa	2,537,000	2,940,000	2,736,000
Central Provinces	2,317,000	2,660,000	2,247,000
Assam	1,285,000	1,599,000	1,764,000
North-West Frontier Province	1,263,000	1,514,000	1,660,000
Rest of British India and Indian States	9,767,000	11,460,000	11,723,000
Total	65,877,000	73,660,000	72,661,000

(In round figures corrected up to the nearest thousand gallons.)

APPENDIX III

Production of Alcohol from different sources in various countries

In Hectolitres of 100° G.L. Alcohol

Country	Year	From beet	From molasses	From potato	Total from all sources (round figures)
1. Austria ..	1936-37	..	141,200	..	201,000
2. Belgium ..	1932	..	89,300	..	167,000
3. Czechoslovakia ..	1933	54,000	250,000	506,000	968,000
4. Denmark ..	1936	..	25,000	35,000	94,000
5. England ..	1932	..	500,000	..	738,000
6. France ..	1935-36	2,863,300	1,088,400	..	5,827,000
7. Germany ..	1936-37	..	127,743	2,331,000	3,634,000
8. Hungary ..	1934	..	..	..	303,000
9. Italy ..	1936	383,500	328,000	..	1,095,000
10. Philippines ..	..	..	178,000	..	179,000
11. Poland ..	1933	..	11,900	257,000	269,000
12. Yugoslavia ..	1931	..	118,000	31,900	140,300

APPENDIX IV

Consumption of Alcohol (in Hectolitres) for different purposes
in various countries(Modified from Mons. Colletot's Paper to the III International Congress
of Technical and Agricultural Chemistry, Paris, 1934)

Country	Year	For drink- ing and flavouring wine	Vinegar making	Per- fumery	Chemical industries	Heating and lighting	Motor fuel
1. Austria	1933	72,236	7,323	210	5,186	74,507	4,000
2. Belgium	1932	63,800	15,000	4,976	22,584	14,800	440
3. Czecho- slovakia.	1932	162,000	20,062	..	14,035 (1)	181,781 (2)	586,116
4. Denmark	1935	15,476	..	..	19,718	51,050	..
5. England	1933	230,000	..	10,000	..	507,000	17,800
6. France	1932-33	1,365,366	50,781	111,032	195,353	722,050	1,937,038
7. Germany	1936-37	689,379	134,134	41,376	..	565,191	1,823,686
8. Hungary	1934	23,700	15,100	..	20,800	43,900	98,900
9. U.S.A. ..	1933	Prohibition	130,000	30,000	951,000	866,000	..

Remarks—(1) Industrial spirit and (2) Denatured spirit.

(Note— 1 Hectolitre = 22 Imperial gallons.)

APPENDIX V

Consumption of power alcohol in various countries
(Ind. and Eng. Chem., News Edition, 20th July, 1936)

Country	Year	Quantity in Imperial gallons	Remarks
1. Austria	1934 ..	1,018,000	
2. Brazil	1935 ..	10,455,000	
3. Cuba	1934 ..	2,387,000	
4. Czechoslovakia	1934 ..	13,190,000	
5. France	1934-35 ..	81,524,000	
6. Germany	1936-37 ..	40,121,000	
7. Hungary	1934 ..	2,106,000	
8. Italy	1934 ..	1,402,000	Rapid increase since 1934.
9. Latvia	1934 ..	1,350,000	
10. Poland	1934 ..	1,700,000	
11. Spain	1935 ..	2,400,000	
12. Sweden	1934 ..	2,400,000	
13. United Kingdom	1935 ..	1,242,000	

APPENDIX VI

Comparative prices of power alcohol in various countries in 1936

(Tokayer, "World Petroleum," 7th June, 1936)

Country	Price of power alcohol per gallon	
	In American cents	Equivalent in Indian currency
		Rs. a. p.
1. Austria	57	1 10 3
2. Czechoslovakia	76	2 3 0
3. France	27	0 12 6
4. Germany	76	2 3 0
5. Hungary	79	2 4 4
6. Italy	88	2 8 6
7. Yugoslavia	40	1 2 5
8. Latvia	59	1 11 2
9. Poland	19	0 8 1
10. Spain	62	1 7 1
11. Sweden	31	0 14 3

APPENDIX VII

Alcohol-petrol mixed fuels in different countries

Country	Commercial name of the mixed fuel	Composition			Whether alcohol mixing is compulsory
		Petrol	Benzol	Alcohol	
1. Austria .. ..	.. ..	80	80	20—40	Yes.
2. Australia ..	Shellkol ..	85	..	15	No.
3. Brazil .. ..	.. ..	..	..	..	Yes.
4. Bulgaria .. ..	.. ..	75—70	..	25—30	Law not enforced.
5. Chile .. ..	.. ..	..	..	..	Yes.
6. Cuba	Mofuoc ..	37	3	60	No, but favourable.
7. Czechoslovakia ..	Dynalkol(1)	(i) 80	..	20	Yes.
		(ii) 70	4	26	
8. Denmark .. ..	.. ..	75	..	25	No, but State monopoly.
9. England	Cleveland Discol.	70	15	15	No, but favourable.
10. Equador .. ..	.. ..	80	..	20	Yes.
11. France .. ..	.. ..	Various proportions			Yes, State monopoly.
12. Germany	Monopoline	Ditto			Ditto.
13. Hungary	Metalko ..	80—70	..	20—30	Yes.
14. Italy .. ..	.. ..	80	..	20	Yes.
15. Lettonia	Latol	(i) 50	..	50* (1)	Yes, State monopoly.
		(ii) 67	..	33(2)	
16. Lithuania	Motorin ..	75	..	25	Yes.
17. Natal	Natalite ..	50	..	50	No, but favourable.
18. Panama .. ..	.. ..	80	..	20	Ditto.
19. Philippines ..	Gasanol ..	70	..	30	
20. Poland .. ..	.. ..	(i) 85—	..	15—30*(3)	No, State monopoly.
		70	..		
		(ii) 15—30	..	85—70(4)	
21. Sweden	Latibentyf	75	..	25	No, but favourable.
22. Yugoslavia .. ..	.. ..	80	..	20	Legislation favourable.

*(1) Summer time mixture.
 (2) Winter time mixture.
 (3) For motor cars.
 (4) For tractors.

APPENDIX VIII

Power alcohol plants installed in various countries

Country	Azeotropic process (1)		Salt-Dehydration process (2)	
	Number	Capacity per day (In hecto- litres)	Number	Capacity per day (In hecto- litres)
1. Argentine	1	300	..	..
2. Australia	1	150	..	..
3. Austria	1	220	..	..
4. Belgium	3	400	..	..
5. Bulgaria .. .. .	..	..	2	180
6. Brazil	13	2,750	3	190
7. Chile	2	120	..	..
8. Columbia .. .. .	..	..	2	60
9. Czechoslovakia	24	3,236	14	1,360
10. Denmark	1	40	..	..
11. England	3	580	..	..
12. France	45	14,535	2	1,200
13. Do. Colonies	5	430	..	..
14. Germany	10	3,000	1	300
15. Holland	1	3	..	..
16. Hungary	6	700	..	..
17. Irish Free State	5	150	..	..
18. Italy	14	3,455	1	40
19. Lettonia	2	440	..	..
20. Lithuania	1	75	..	..
21. Panama	1	40	..	..
22. Poland	3	530	..	..
23. Portugal	1	60	..	..
24. South Africa	3	360	1	60
25. Spain	1	30	4	900
26. Sweden	1	30	2	180
27. Yugoslavia	5	425	2	280
Total	153	32,959	34	4,750

(1) Information available up to the end of 1936.

(2) Information available up to 1935.

APPENDIX IX

I—Properties of petrol marketed in Europe and India

Petrols	Sp. Gr. at 80°F	Initial B. P. °C	Per cent. by vol. up to 100°C	Final B. P. °C	Octane number
<i>I—Standard Oil Company Petrols imported into European countries</i>					
1. Premium grade*	0.745—0.770	30°—35°	40—45	Below 200°	80
2. Standard grade	0.725—0.735	30°—35°	40	Below 200°	66
3. Heavy grade (Commercial).	0.740	35°	28—33	200°	64
<i>II—Petrols marketed in the United Kingdom</i>					
1. No. 1 grade*	0.732—0.743	32°—41°	38—42	185°—197°	70—72
2. No. 3 grade (Commercial).	0.737—0.749	34°—38°	32—36	196°—205°	65—66
<i>III—Petrols marketed in India</i>					
"A"	0.741 at 30°C.	38°	31	218°	64—67
"B"	0.729 at 30°C.	48°	47	194°	67—69
"C"	0.714 at 30°C.	42°	53	191°	..
"T"	0.738 at 36°C.	44°	30	183°	65—67
"S"	0.740 at 30°C.	43°	30	205°	..
<i>IV—Alcohol fuel marketed in England</i>					
	At 60°F.				
Standard grade (containing 15—20 per cent. alcohol).	0.750—0.755	38°—46°	51—56	195°	76

* Sometimes contains Tetraethyl Lead.

II.—Properties of Racing Fuels containing Alcohol

(Marketed in United Kingdom by Solvents Products, Limited)

Specific gravity at 15°/15°C	..	..	0.828	0.822
Hydrocarbons	..	..	23%	10%
Acetone	..	..	Trace	9%
98 per cent. Ethyl Alcohol	..	..	77%	79%
Initial Boiling Point	..	..	68.5°C.	64°C.
95 per cent. Distillate at	..	..	78°C.	78°C.

(Nash and Howe—"Motor Fuel." Paragraph 816)

APPENDIX X

Consumption or sale of petrol in 1937 in some district towns
(In 1,000 gallons)

UNITED PROVINCES

Lucknow..	..	..	..	..	..	601
Cawnpore	..	..	..	..	..	580
Allahabad	..	..	..	..	..	801
Agra ..	..	..	..	..	..	299
Meerut ..	..	..	..	..	..	265
Muttra	..	..	..	..	..	257
Benares ..	..	..	..	..	..	220
Bareilly ..	..	..	..	..	..	105
Aligarh ..	..	..	..	..	..	149
Jhadsi ..	..	..	..	..	..	113

BIHAR

Bankipore (Patna) ..	..	..	..	..	..	293
Jamshedpur ..	..	..	..	..	..	286
Ranchi ..	..	..	..	..	..	265
Gaya ..	..	..	..	..	..	192
Dhanbad ..	..	..	..	..	..	164
Hazaribagh ..	..	..	..	..	..	145

APPENDIX XI

Note on the denaturation of power alcohol

The denaturation of such alcohol is a matter of great importance.

The ideal denaturant should possess the following properties.

THE IDEAL DENATURANT

1. It should be a volatile, combustible liquid soluble in alcohol (and petrol), having an unpleasant taste and smell and not easily separable from the spirit by physical or chemical means so that regeneration of alcohol for drinking purposes is practically impossible.
2. It should be harmless for the industrial purposes for which the alcohol is used.
3. It should contain an "earmarking" substance so that, if potable alcohol is regenerated from the denatured alcohol, it would make it possible to identify the origin of the regenerated potable alcohol.
4. It should be relatively cheap.
5. It should be available in large quantities.
6. For India it is desirable that it should have no deleterious effect on the human system.

DENATURANTS USED IN VARIOUS COUNTRIES

The denaturants used for power spirit to be used as motor fuel in various countries are as follows :

<i>Bulgaria—</i>	<i>Per 100 litres of alcohol</i>	
Crotonaldehyde	0.2 gm.	
<i>Chile—</i>		
Petrol	5 litres	
Ethyl borate	20 c.c. (containing 0.2 gm. of boron).	
<i>Czechoslovakia—</i>		
Methyl alcohol	2 litres	per 98 litres of ethyl alcohol.
Petrol	3 "	
<i>Denmark—</i>		
Methyl spirit	2 litres	
Pyridine bases	0.5 "	
Petrol	0.25 "	
<i>England—</i>		
Ethyl alcohol	92 parts	
Wood naphtha	2½ "	
Pyridine	½ "	
Petrol or benzol	5 "	
Spirit re-III dye	½ oz. by weight per 1,000 gallons.	

This mixture is issued in the United Kingdom free of duty or restriction when mixed with 25 per cent. of petrol, benzol, denatured ether or some other substances approved by the Commissioners of Customs and Excise.

Estonia—

Benzine 25 litres.

France—

90 per cent. benzol 1 litre.

Benzine standard 0·3 litre.

Anthracene 6·0 grammes.

Ethyl borate 20 c. c.

Italy—

A mixture supplied by the State containing acetone and complex hydrocarbons.

Lettonia—

Crotonaldehyde 0·5 litre.

Complex hydrocarbons 5 litres.

Poland—

1 per cent. mixture of solvent naphtha with 15 per cent. of naphthalene, pyridine, methyl alcohol, oil of creosote and croton oil.

For aviation fuel, petrol 5 per cent.

Sweden—

Crotonaldehyde 1 per cent.

Petrol or benzol 5 per cent.

Yugoslavia—

Petrol 3 litres (density 0·730—0·740, distilling between 75—135°C.)

APPENDIX XII

**Comparative road tests with petrol and alcohol-petrol mixed fuels conducted
by Mr. J. Charlton, M.Sc., F.I.C., I.A.S., Agricultural Chemist to
Government, Burma**

(Extract from Agriculture Survey Bulletin no. 24 of 1936, Department of Agriculture, Burma)

"Absolute alcohol-petrol fuels not being available in Burma, in January, 1935, the writer prepared such mixture on the small scale in the laboratory and tested them in a 20.9 H. P. car using a special small tank, so that consumption could be accurately recorded. The carburettor had been previously adjusted for economy and was not altered in any way for the tests. A circular course of approximately eight miles was arranged to minimize wind resistance effects and as far as possible a steady speed of 25 m.p.h. was maintained. Results were as follows :

	Mile per gallon	Equiva- lent to
(1) Burma Oil Company Petrol (pump)	.. 21.13	100
(2) 15 : 85 mixture .. .. .	.. 22.50	106.5
(3) 25 : 75 mixture .. .. .	.. 22.73	107.6

Maximum speed was in all cases 57 m.p.h. and no difference could be distinguished in acceleration from 10-30 m.p.h. Speed and acceleration tests were mean results obtained by running in opposite directions. It was noticed that with the 25 : 75 mixture it was impossible to make the engine pink (detonation); the 15 : 85 mixture was almost free from tendency to pink while using petrol alone careless opening of the throttle caused severe pinking. The car had done a considerable mileage at the time of the test and was in need of decarbonization and valve grinding. The greater economy of the alcohol-petrol mixtures was beyond all doubt and driving was very much simplified since pinking disappeared."

APPENDIX XIII

Purchase and sale prices of alcohol transacted through the State monopoly
of Germany

PRICES OF SPIRIT DURING 1937-38

Purchase prices

(a) For distilleries with a regular production up to 600 hls. (both yeast factories and molasses distilleries)—	..	..	..	52.00 Rm.
For 50 per cent. of the annual production	..	..	..	40.00 "
For over 50 per cent.	..	..	..	46.00 "
(b) For distilleries over 600 hls.	..	..	..	42.00 "
For molasses distilleries	..	..	..	39.50 "
For yeast factories	..	..	..	..

Sale prices

Drinking spirit	..	..	..	400.00 Rm.
(a) Fully denatured spirit	..	..	..	45.00 "
(b) Industrial spirit (partially denatured)	..	..	..	40.00 "
Motor spirit	..	..	..	39.25 "
Acetic acid making spirit	..	..	..	85.00 "
Spirit for toilet preparations	..	..	..	240.00 "
Export spirit	..	..	..	20.00 "

N.B.—During this period the price of molasses varied between 3.00 and 3.00 Rm. per 50 Kg., equivalent to about Rs.2.6 per maund.

APPENDIX XIV

Production of molasses in cane factories during 1936-37

(Based on a statement supplied by the Director, Imperial Institute of Sugar Technology)

Province and district	Quantity (in 1,000 maunds)	Number of factories	Remarks
UNITED PROVINCES			
Dehra Dun	88	1	
Saharanpur	87	1	
Muzaffarnagar	401	4	
Bijnor	427	5	
Meerut	508	8	
Bareilly	301	3	
Etah	101	1	
Pilibhit	210	1	
Kheri	200	2	
Shahjahanpur	60	1	
Sitapur	337	3	
Bara Banki	61	1	
Lucknow	57	1	
Gonda	287*	3	*One factory did not submit its figures.
Basti	384	5	
Gorakhpur	1,734†	22	†Four factories did not submit their figures.
Jaunpur	66	1	
Allahabad	53	1	
Hardoi	112	1	
Deoria	82	1	
BIHAR			
Champaran	1,023	8	
Saran	922	10	
Muzaffarpur	315	3	
Darbhanga	605	6	
Bhagalpur	8	1	
Purnea	83	1	
Shahabad	358	4	
Patna	152	1	
Gaya	83	1	

APPENDIX XV

Distilleries in the United Provinces and Bihar

Name of distillery	Proprietor or Managing Agents	Remarks
UNITED PROVINCES		
1. Cawnpore Sugar Works, Limited.	Messrs. Begg, Sutherland & Co., Limited, Cawnpore.	Patent Stills.
2. Unao Distillery ..	The Punjab National Bank ..	Patent Still (not working at present).
3. Lucknow Distillery ..	M. Dyer Meakins Breweries, Limited.	Patent Stills.
4. Rosa Distillery ..	M. Carew & Co.	Ditto.
5. Meerut Distillery ..	The Central Distillery and Chemical Works, Limited, Meerut.	(To start shortly.)
6. Indian Distillery, Cawnpore	L. M. B. L. Singhania, Cawnpore	Patent Still.
7. Fyzabad Distillery ..	The Fyzabad Distillery Co., Limited.	Pot Stills.
8. Allahabad Distillery ..	The Allahabad Distiller's Association, Limited.	Ditto.
9. Saharanpur Distillery ..	The Co-operative Co.'s, Limited..	Ditto.
BIHAR		
1. Cawnpore Sugar Works, Limited, Marhowrah (district Saran).	Messrs. Begg, Sutherland & Co., Limited, Cawnpore.	Patent Stills.
2. Manpur Distillery (Gaya)..	K. B. Chowdhury Muhammad Baksh, Manpur.	Ditto.
3. Manikatha Distillery (district Monghyr).	M. Lakshmi Narain Ram Narain, Mankatha.	Ditto.
4. Ranchi Distillery ..	Ditto ..	Ditto.
5. Sultanganj Distillery (district Bhagalpur).	Khan Bahadur Habibur Rahman, Sultanganj.	Ditto.

APPENDIX XVI

A—Production of industrial alcohol in India in 1936-37

					Methylated spirit (Calculated in gallons of absolute alcohol)	Rectified spirit
United Provinces	..	..	..	..	270,000	24,000
Bihar	..	..	..	..	103,000	..
All-India	..	..	..	..	1,325,000	235,000

B—Import of denatured spirit into India

Year					Quantity (gallons)	Value Rs.
1934-35	..	..	..	..	413,429	5,58,224
1935-36	..	..	..	..	296,405	3,25,462
1936-37	..	..	..	..	337,426	2,75,699
1937-38	..	..	..	..	379,010	3,14,042

APPENDIX XVII

Some interesting data regarding power alcohol plants and their working
(Compiled by the Secretary)

(1) A 1,000-ton cane crushing factory produces about 4,550 tons of molasses during one season.

(2) A distillery producing 1,500 gallons of power alcohol requires about 25 tons of molasses per day.

(3) The capital cost required for a complete power alcohol distillery with building and with a rated daily capacity of 1,500 gallons is about Rs.2,60,000.

(4) The cost of supplementary plant (Melle Azeotropic system, capacity 1,500 gallons per day) for manufacturing power alcohol from rectified spirit made in a modern patent still distillery is about Rs.35,000.

(5) Working data for the plant may be taken approximately as follows :

(i) Consumption of steam

	Per gallon of power alcohol
(a) When rectification and dehydration carried separately ..	52-56 lb.
(b) When direct from fermented wash	32-36 lb.

(ii) Loss of the "entraining liquid"

Used in Azeotropic process	0.0004-0.00045 gallon.
------------------------------------	---------------------------

(iii) Consumption of cooling water

(a) Salt-dehydration process	9-12 gallons.
(b) Azeotropic process	30-34 gallons.

(6) A 1,500 gallon distillery produces enough carbon dioxide to turn out about 3.5 tons of dry ice per 24 hours.

APPENDIX XVIII-A

Report from the Agricultural Chemist in Mysore, Bangalore, forwarded under his letter no. A.C.837/37-38, dated 21st/22nd February, 1938

Question 1—Have you or your department any experience in the use of molasses as (i) manure for ordinary soils growing common crops, like rice, wheat, sugarcane, etc.?

If so, please give details of its economic aspects.

Answer—Very little—a few pot experiments and small-scale plot trials were conducted. The results were hardly encouraging. Paddy and ground-nut were the crops under test. In view of the inconclusive results obtained further experiments are under way.

Question 2—Have you any experience of the use of molasses in the reclamation of *usar* (alkaline soils) in India? If so, kindly give as far as possible details of the field and large-scale experiments conducted in this direction giving—

(a) Amount of alkali in the soils.

(b) The amount of molasses and the number of application required to get the optimum results.

(c) The period for which the land so treated may continue to be in a fit condition for agricultural purposes.

(d) Whether it results in any ultimate harmful effect (after some years) to the soil thus treated.

Answer—Yes, purely experimental and exploratory. Copy of *letter to the Director of Agriculture, United Provinces, is enclosed which covers most of the points raised in (a) and (b). As regards (c) and (d), no opinion can now be advanced as we are still experimenting.

Question 3—What are your views in general regarding the utilization of molasses in India for the above two purposes? To what extent are you prepared to advise the Committee to recommend the use of molasses for these purposes under the present agricultural and economic conditions in India based on the experimental work done so far in this country?

Answer—Molasses can be used for reclaiming *usar* soils. The only objections to this, so far as we know are—

(1) the cost of transport,

(2) the extreme discomfort to man and beast in its application to land, and

(3) the time-lag period which must elapse after application of molasses before the land is fit for cropping.

*See Annexes.

ANNEXE

Copy of the letter no. 712-3/Encl. 2, dated 2nd February, 1938, from the Bio-Chemist, Agricultural Laboratories, Bangalore, to the Director of Agriculture, United Provinces, Lucknow

I AM desired by the Director of Agriculture to acknowledge with thanks your letters no. 13098/1—544(B) of 20th December, 1937 and 14724/1—373 (A)104 of 17th December, 1937. The delay in replying is deeply regretted.

As is to be noted from my letter no. AC, no. 430/17—48 of 4th November, 1937, to Professor N. R. Dhar, D.Sc., of Allahabad, our experiments in the first instance have been purely qualitative and largely exploratory of the possible use of molasses for reclaiming alkali soils.

A bad patch of 17 acres of alkali land of the Government Farm at Mandya—Mysore—with a pH varying from 7.5 to 9.0 was selected and planned to be cropped with paddy. The land was treated with 2 to 3 tons of molasses per acre not less than 9 to 12 weeks before transplanting flooded and ploughed dry at least 3 to 4 times. A bulk crop of paddy was then taken. During the first year, a small crop of 476 lb. of paddy grain per acre was obtained and a re-treatment of the land during the following year gave a grain yield of 1,250 lb. per acre. The yield of straw was equally good. A third untreated crop of 1,250 lb. paddy grain was harvested during 1936-37 and the yields of the current year are awaited. It may be mentioned that the land in question has had no other crop grown on it and had little or no vegetation at all prior to being "molassed". Few stray blades of grasses appeared in pocket of low alkalinity and the rest of the land was distinctly bare. These qualitative experiments were so encouraging that a further 5 acres of land of high alkalinity are under treatment.

As regards trials on *ryot's* lands, the results have hardly been satisfactory as returns have not been reliable. A more organized collection of returns are in contemplation and will be taken up during the coming year.

As stated earlier all these experiments have been purely qualitative and exploratory. It was only at the beginning of this year that two sets of experiments (i) to study the optimum dose of molasses for reclamation and (ii) to study its fertilizer effect were started. These experiments have been laid out in a randomized latin square, a well recognized statistical method. A preliminary soil survey of the plots in question had been done with reference to the nature and degree of alkalinity and the initial fertility level.

For the reclamation experiments, paddy has been selected and will have a rotation of fodder *jola* (*Sorghum*) sann-hemp and paddy. Molasses varying from 0 to 4 tons per acre has been applied and a paddy crop is now standing on the plots. Results will be communicated immediately they are available. There are four treatments and four replications. The pH of these soils have been from 7.5 to 9.0.

As regards experiments on the use of molasses as a fertilizer, a few qualitative studies in the earlier years using paddy or ground-nut were inconclusive and hardly encouraging. Experiments have however been laid out during the current year on approved statistical lines with ground-nut as the test crop. The trial consists in measuring the fertilizer effect of molasses

against a standard mixture of fertilizer on the one hand and that of molasses and fertilizers on the other. The crop is yet to be harvested and the results are therefore not yet available. These also will be communicated as soon as they are ready. An unmanured cotton crop will be taken up on these plots after harvesting ground-nut and preparing the land. Fertilizer trials with paddy as a test-crop are also in contemplation and will be conducted during the coming year. It may be mentioned in passing that the pH of these plots are round about ± 7 , i.e. somewhere near neutrality. It is also necessary to add that all these experiments are being conducted in an irrigated tract; no experiment in dry lands are under way.

With reference to the economic use of the question, I regret to say that we are as yet unable to give a definite opinion. It may however interest you to know that this aspect of the question was discussed in some detail at a Symposium on "Cane Molasses" under the auspices of the Society of Biological Chemists—India, held in Bangalore early in September, 1937. It was then agreed on all sides that the use of molasses in its present form was only possible within a limited distance from source (e.g. a sugar factory) and that means should be found to minimize the time-lag that must occur before any cropping can be done after an application of molasses to the land. A summary of the papers presented at the meeting together with a brief synopsis of the discussion has been published as a bulletin of the Society. Their Headquarters Office at Hebbal—Bangalore, may be addressed with advantage for a copy of the same. I may add that Professor N. R. Dhar has recently suggested the use of a mixture of equal quantities of press-mud and molasses which is expected to diminish the discomfort involved in the use of molasses on the field. Trials on this are being arranged.

APPENDIX XVIII-B

Report from D. R. Sethi, Esq., M.A., B.Sc. (Edn.), I. A. S., Director of Agriculture, Bihar, Patna, forwarded under his letter no. 1373/V—24-38. dated 31st January, 1938.

WITH regard to the question of cattle food, it is doubtful if molasses as cattle food would be utilized to any large extent by the cultivators. In their raw form, molasses cannot be used for this purpose. They have to be turned out in some suitable manner mixed with other fodders so that they could be transported and handled easily. The economics of feeding molasses as cattle food as compared to other materials such as oil-cakes have also yet to be worked out, and until detailed experiments are carried out on this important point and definite results achieved, it would be, in my opinion, not right to make any broad recommendation on this point.

With regard to the use of molasses as a fertilizer, I should like to point out that the experimental work carried out by this Department so far indicates that while the molasses from sulphitation factories do give positive results on light soils in this province, the carbonitiation molasses definitely depress the yield. A clear distinction will, therefore, have to be made so far as Bihar is concerned that only sulphitation molasses are useful as a manure. The economics of molasses as fertilizers yet remain to be worked out. We have so far been working on the basis that molasses have no value at present and can be had for the asking. Once this material finds a widespread use as a manure, the factories would be perfectly justified in asking for a reasonable price. Whether the use of this material at a price as fertilizer would be equally as economical as other manures has yet to be investigated. The greatest difficulty in the widespread use of this material as a manure appears to me to be the extreme difficulty in transporting and handling. While it may be quite easy for a sugar factory to use this stuff on its own cane lands, the average cultivator will find it rather difficult to transport it to his fields which may be situated anything from 2 to 10 miles away from the factory. Indications are that molasses may prove of very great assistance in reclaiming alkaline soils. Here again the quantity that could possibly be used would be limited by the area that could be reclaimed and brought under cultivation.

APPENDIX XVIII-C

Report from Dr. B. K. Mukerji, Ph.D., D.Sc., Agricultural Chemist to Government, United Provinces, Cawnpore, forwarded under his letter no. 810 R.C./I.B., dated 9th February, 1938.

1. *Molasses as fertilizer*—The Department of Agriculture of the United Provinces started in the year 1932 investigations regarding the use of molasses as manure for ordinary soils. The experiments have been confined mainly to the sugarcane crop, and conducted at Shahjahanpur, Cawnpore, Gorakhpur, Bahraich and Muzaffarnagar. The investigations at Cawnpore also included a trial with wheat.

The data so far available indicate that molasses must be applied at the rate of about 10 tons per acre two months before sowing sugarcane in order to gain appreciable increase in the outturn. As regards the sucrose content, there is in the case of planted cane no significant difference between the canes obtained from the molasses-treated plots and those from the unmanured plots. With ratoon canes, molasses has given higher yield at Gorakhpur and Cawnpore, and fares favourably with fertilizers at Muzaffarnagar. This increase is statistically significant as compared to control, but the sucrose content with the molasses treatment is definitely lower than with the no-manure treatment.

With wheat our experience has been that molasses gives a lower yield than either dung or compost although it is appreciably higher than the control.

Molasses is generally supposed to promote nitrogen fixation in a normal soil, but this is not consistently realized in actual practice as is evident from the conflicting results obtained by us.

As is well known, apart from the intrinsic merits of any fertilizer, the cost at which it is available to the cultivators makes all the difference between its success and failure. In the case of molasses we have also to bear in mind the cost of transport in addition to its price per maund at source. Even if the factory price is as low as annas 2 per maund, the purchasing cost of 10 tons molasses alone would come to about Rs.34-4. Add to that the cost of transport which is approximately Rs.2 per ton for a distance of 10 miles from the factory, the total cost of 10 tons of molasses, meeting the requirements for only one acre, works out under the most economical conditions to Rs.54-4. In view of the high cost it is extremely doubtful whether the additional gain in the shape of increased outturn would be commensurate with the expenditure on account of the molasses applied to the soil.

It might be noted here that while success is recorded at Bangalore, negative results have been obtained for sugarcane at Padegaon (Bombay-Deccan) and Risalewala (Punjab). Experiments with paddy conducted at Sabour (Bihar) during the year 1934-35 failed to establish the superiority of molasses over the no-manure treatment even though the dose of molasses was equivalent to 20 lb. nitrogen or 8,000 lb. per acre.

2. *Reclamation of usar (alkaline) soils by molasses*—Small scale experiments conducted by the Agricultural Chemist to Government, United Provinces, some years ago showed that molasses had a definite ameliorative effect upon *usar* soil from the Cawnpore District. More detailed work upon this is being conducted by Professor Dhar in co-operation with the Department of Agriculture, United Provinces. These experiments have not been in progress

sufficiently long to warrant any expression of opinion on either of the points, 2(c) or (d) raised in the questionnaire, that is, whether molasses brings about a lasting improvement or if it causes by prolonged application any harmful effect on the soil.

During Professor Dhar's absence from India a field experiment on systematic lines was laid out during the last *kharif* season by the Agricultural Chemist at the Government Model Farm, Unao, to study the effect of applying molasses to *usar* land on the outturn of rice. The soil which is typically *usar* having a pH value (alkalinity) 9.3—9.6, was treated three weeks before transplantation of paddy with molasses at the rate of (i) 5 tons, (ii) 10 tons and (iii) 15 tons per acre. Two more treatments, one control and the other press-mud at the rate of 5 tons per acre, were also included. All the 5 treatments were laid out in four randomized blocks, the area of each sub-plot being 1/40th acre. The yield figures have now been statistically treated both in regard to grain and straw. The main conclusions are as follows :

(a) *Grain*—(i) Molasses at 10 tons per acre gives highest yield of grain, and

(ii) There is no significant difference among the grain yields obtained with 5 or 15 tons molasses, 5 tons press-mud and the control.

(b) *Straw*—(i) Molasses at 15 tons per acre gives the highest yield of straw and molasses at 10 tons comes next.

(ii) There is no significant difference in the straw yields between the 5 tons molasses and the 5 tons press-mud treatments; but either of these is superior to control which shows the poorest yield.

Of all the treatments in this experiment, molasses at the rate of 10 tons per acre appears on the whole to be the best. Although there are *priori* reasons to believe that it would be necessary for the satisfactory reclamation of *usar* land to apply molasses at the rate of about 10 tons per acre, yet it is too early to say anything about the number of applications which may be required to get the optimum results.

Here again, it is clear that much of the ultimate success of the method would depend on the cost involved. The total cost of 10 tons of molasses at the rate of only 2 annas a maund, ex-factory, will be as shown above at least Rs.54-4. If the price of molasses be more than 2 annas a maund or if more than one application becomes necessary, then there would obviously be a proportionate increase in the total cost of the treatment.

Excepting for the experiment referred to above, I am not aware of the detailed results obtained from any other large-scale field trial which might have been systematically undertaken in the United Provinces or elsewhere to assess the value of molasses for reclaiming alkali lands. In the Punjab the application of molasses to *kallar* (alkali) soil has failed to yield satisfactory results, whereas it is recorded that by systematic treatments with calcium salts, such as gypsum and calcium chloride, those soils have improved considerably within three years.

3. *General*—On account of the high cost as shown above, molasses does not promise to be of great value as fertilizer for ordinary crops in normal soils. It is extremely doubtful if the use of molasses as ordinary fertilizer could ever be recommended as an economic method of disposing of the large quantities of the stuff available in this country. It is obvious that as a nitrogenous manure, molasses is not likely to be of direct value. It

contains potash in somewhat large quantities, but even in this we would get more by conserving our ordinary wood ashes. The chief value of molasses as fertilizer can lie only in its ability to stimulate direct fixation of nitrogen. But so far our experience has been that the direct or indirect gains accruing out of the application of molasses to normal soil do not justify the cost of the treatment.

The use of molasses of reclaiming *usar* or alkali lands seems to be an interesting and useful proposition. But in this too, the limiting factor appears likely to be the considerable cost of obtaining, carting and applying the treatment. The method appears to require the application of large quantities and the permanence of the effect has not yet been established. It is, therefore, too early to launch out into any extensive application. As a concrete instance, it may be cited that in our Western Circle the proportion of *usar* to normal soil is highest in the Mainpuri District; but the cost of molasses near about Mainpuri, Etah and Aligarh being somewhat excessive, it has not been found possible to adopt the use of molasses on any large scale for reclamation purposes. Whatever molasses is available from open-pan sugar factories is being used with considerable success by private individuals in the middle Doab, notably Mainpuri and Etah districts.* The method consists in leaching the soil with monsoon, well or canal irrigation water combined with the application of molasses.

It is now well known that types of mild *usar* are capable of reclamation, at least for successful rice crops, by flooding and leaching combined with the application of organic manures; either green manure, or farm-yard manure, or compost. For agricultural application this is the only method which can at present be recommended. This method has been the subject of grants-in-aid from the Board of Agriculture and by the Director of Agriculture as well as of experiments on agricultural farms and demonstration plots. Thus the Unao farm and the Bara Banki model farm were located in *usar* tracts, with a considerable proportion of *usar* soil within their boundaries, for demonstration of the possibilities of such ameliorative measures; while considerable demonstration has been conducted in the Sarda area by the co-operative effort of the Agricultural and Irrigation departments. The Unao farm has shown that *usar* soil can be reclaimed for profitable growth of rice and other crops by leaching combined with organic manuring, the application of sugar factory press-mud cake, or dressing of *nala* silt. On the Cawnpore Research Farm mild *usar* has been reclaimed without heavy leaching by cultural methods including the growth of deep-rooted legumes, green manuring, or trenching with *juar* and sugarcane roots and the like, and by manuring with large doses of compost combined with good cultivation. The demonstration of the efficiency of leaching combined with green manuring on mild *usar* has been so impressive that the Irrigation Department are providing free irrigation water, up to the surplus supplies available for reclamation by this method during the first season of operation and there has already been a response from zamindars particularly in Unao District. It is expected that the coming *kharif* will show a very much greater area under reclamation in this way.

APPENDIX XVIII-D

Report from Dr. P. E. Lander, I.A.S., Agricultural Chemist to Government, Punjab, Lahore, forwarded under his letter no. 439, dated 10th February, 1938.

I.—Experiments on the use of molasses as manure for sugarcane, wheat and cotton have been carried out by the Deputy Director of Agriculture at Lyallpur and, considering conjointly the yields of the three crops raised successfully from the same plots after the application of molasses, he was in no case able to obtain increased yields. On the contrary the application of molasses in amounts from 40—150 maunds per acre exhibited a distinct tendency to depress yields. He found that even when molasses is valued at one anna and six pies per maund, financially the application of molasses has resulted in loss.

In 1936, the Agricultural Chemist in conjunction with the Deputy Director of Agriculture carried out a fresh trial with molasses as a fertilizer for sugarcane, and kept a full record of the changes that take place in the physical and chemical nature of the soil following the use of molasses, which was applied one and two months respectively before sowing sugarcane. It was also applied in two different ways, firstly by direct addition to the soil with the irrigation water and secondly after being composted with the soil during the above period. The quantity applied was 150 maunds (5.5 tons) per acre and the chemical changes in the different nitrogenous constituents of the soil were studied at monthly intervals. The results obtained may be summarized as follows:

- (1) The application of molasses resulted in a slight improvement in the texture of the soil as indicated by an increase in the water holding capacity.
- (2) There was a fall in the pH value from 8.10 to 7.85.
- (3) There was practically no increase in the amount of nitrogen fixed, although there was a great increase in the number of azotobacter in soil treated with molasses.
- (4) As the figures given below show, the quality of the cane suffered by the application of molasses.

Analysis of sugarcane: Variety—Co 285

Percentage on cane

Manure	Juice	Sucrose	Glucose	Total solids	Glucose ratio	Purity co-efficient
Control	59.8	9.36	0.49	10.6	5.2	86.7
Molasses applied one month before sowing.	60.6	8.64	0.47	10.5	5.4	81.8
Molasses applied two months before sowing.	60.7	8.52	0.53	10.4	5.6	82.8

- (5) The outturn of sugarcane, as shown below, was adversely affected by the application of molasses:

Average yields in maunds per acre

	Cane	Gur
	Mds. srs.	Mds. srs.
Control	521 0	72 30
Molasses applied one month before sowing ..	520 10	57 15
Molasses applied two months before sowing ..	513 0	56 10

It is clear from the above that under the climatic and soil conditions of Lyallpur, the use of molasses as a fertilizer for sugarcane has a negative value.

II.—A series of trials to study the effect of molasses as a reclamation agent for alkali soils (Bari) was started at Montgomery in 1936. It is too early to draw any conclusions from the one year's results so far obtained which are given below :

Yields per acre

(From average of 6 plots, each 1/23 acre in size)

	Grain	Straw
	Mds. srs. ch.	Mds. srs. ch.
Control	0 2 12	0 9 10
Molasses at 50 mds. per acre	0 23 6	1 2 10
Molasses at 100 mds. per acre	1 2 10	2 14 4

The cost of molasses at Montgomery was 12 annas per maund, and at this value, it is extremely doubtful if the reclamation of the Bari type of alkali soil will be an economic proposition.

The abovementioned soil received an additional similar dose of molasses in 1937, and wheat was again sown last October. The results of yields will be available after April.

(a) The composition of the soil is as follows :

Complete chemical and mechanical analysis of Bari soil
(Per 100 parts of soil)

	Water extract analysis
Total solids	0.5935
Sodium carbonate	0.0325
Sodium bicarbonate	0.1730
Sodium chloride	0.1490
Sodium sulphate	0.2110
Calcium	Nil.
Magnesium	Nil.
Sodium	0.1693
Potassium	0.0075
	Mechanical analysis
Clay	19.39
Silt	27.28
Fine sand	53.47
Coarse sand	0.67
Kankar	Nil.
	Available analysis (1 per cent. citric acid extraction)
Potash	0.0609
Phosphate	0.0984

	Exchangeable basis (Milli equivalents)				
Calcium (Ca)	0.65
Magnesium (Mg)	Nil.
Sodium	5.00
Potassium	0.04
Degree of alkalization	88
pH value	9.66
					(Hydrogen Electrode)
Organic matter	0.2480
Total nitrogen	0.0325
Total carbonates as (CaCO ₃)	5.14

Regarding (b), (c) and (d) of the Questionnaire, I am not in a position as yet to make any statement.

III.—On the basis of the limited experience that I have of the use of molasses, I do not feel justified in offering any definite views regarding the utilization of the material in India for the above two purposes. The results obtained so far in the Punjab are not very encouraging. Some of the other methods of reclaiming alkali soils which I have tried seem to be more promising and economic. The indications at present are that for the Punjab soils the use of molasses by itself may not be very successful.

I still consider that, as I recommended years ago, the most effective manner of disposing of molasses would be to convert it into power alcohol.

APPENDIX XVIII-E

Report from Rao Bahadur B. Viswa Nath, F.I.C., F.C.S., Director and Imperial Agricultural Chemist, Imperial Agricultural Research Institute, New Delhi, forwarded under his letter no. 220 of 1938, dated 23th February, 1938

Question 1—Yes. I have experience in the use of molasses as manures for rice and sugarcane. The experiments with rice were carried out when I was Agricultural Chemist at Coimbatore, with the following results :

Treatment	Yield per plot of 4 cents		Yield per acre	
	Grain	Straw	Grain	Straw
	lb.	lb.	lb.	lb.
(1) Control	137	134	3,417	3,350
(2) Molasses—5 tons per acre	140	139	3,492	3,475
(3) Molasses—7½ tons per acre	156	137	3,888	3,425
(4) Molasses—4 tons per acre plus 1 cwt. ammonium sulphate per acre.	151	138	3,783	3,458

The increase in the yield of grain over "no manure" was significant in the cases of (3) and (4).

The experiments with sugarcane were carried out at Pusa. The scheme of experiments is below :

- (1) 100 lb. N as mustard cake + 20 lb. K_2O and P_2O_5 .
- (2) 100 lb. N " " " + 50 lb. K_2O only.
- (3) 100 lb. N " " " + 100 lb. P_2O_5 only.
- (4) 100 lb. N " " " + 50 lb., 100 lb. K_2O and P_2O_5 .
- (5) 100 lb. N as molasses and ammonium sulphate + 50 lb. K_2O .
- (6) 100 lb. N " " " " " + 50 lb., K_2O and 100 lb. P_2O_5 .

The quantity of molasses used was 1,000 lb. to the acre and analysed 5.27 per cent. K_2O , 0.5 per cent. nitrogen and 0.23 per cent. P_2O_5 .

The final harvest results and analyses showed that the application of the manure was justified economically. Complete manuring gave 187 lb. of *sucrose* per plot of 0.25 acre, as against 104.7 lb. for the plot receiving no manure. The combination of ammonium sulphate and molasses gave as good a result as with mustard cake, potassium sulphate and super.

Question 2—I have not conducted specific field experiments on the use of molasses in the reclamation of alkaline soils, but from observational results, I have formed the opinion that they will do very well as correctives for alkaline lands which are not too alkaline, and in checking alkalinity. The use of molasses with gypsum is definitely more efficacious than gypsum alone in reclaiming very bad alkaline soils.

I have investigated the biological changes that take place in swampy soils. An enormous increase in the microbiological population and the production of organic acids occurs on the addition of molasses and these contribute to the beneficial effect on alkaline soils following the application of molasses.

Question 3—If it could be arranged I would unhesitatingly recommend the use of molasses in agriculture. The crop response as judged by immediate increases on application varies with conditions of soil and climate. While I am not prepared to say that crop increase would invariably follow the application, I am prepared to assert that the use of molasses does improve and build up the fertility of the soil. From this point of view, I consider that molasses possess a higher value as manure than as alcohol.

**Annexures to the Report of the Joint Power Alcohol and Molasses Inquiry
Committee (Bihar and the United Provinces), 1938**

Note of dissent by DR. S. S. BHATNAGAR, on paragraph 37 of the Report

Dr. Bhatnagar is of the opinion that the changed figures which take into consideration the cost of power alcohol up to the stage of bulk delivery at the petrol depot are not what the public are concerned with. It is the cost of the mixed fuel which matters to them. In any case the figures for the cost of alcohol up to the stage of bulk delivery will have to be added the cost of mixing which should include the losses in mixing and the charges on the capital outlay on mixing appliances. Thus while whole-heartedly supporting the mixed fuel as a national measure, which will lead to the development of other industries, he wishes to convey without hesitation his considered opinion that the measure will have to be adopted without any hope of great profits either to the consumer or the peasant.

Note by DR. N. R. DEAR

From time immemorial alcohol has been produced by fermentation of materials containing sugars. As molasses is rich in sugars, it is certainly a suitable starting material for the production of alcohol for power and industrial purposes. But so far no firm or private individual in India has produced in bulk dehydrated alcohol suitable for mixing petrol for running motor vehicles. Moreover the cost of dehydration, mixing with petrol and loss due to evaporation are not known accurately in this country, hence the sale price of petrol-alcohol mixture is difficult to ascertain definitely. The figures therefore in paragraph 36 and some other sections of the report are only approximate. However, from the national viewpoint, manufacture of power alcohol is of vital importance; but from the point of view of profit either to the consumer, manufacturer or the peasant, it is not very satisfactory. Naturally other channels for the utilization of molasses have to be worked out. I have discussed this problem in detail in my presidential address to The Science Academy, United Provinces, on 19th December, 1935.

Note by MR. M. P. GANDHI

In this note, I propose to deal with one or two important issues concerning the *raison d'être* of the Power Alcohol Industry in the United Provinces and Bihar.

In view of the known attitude of the petroleum interests towards the development of the Power Alcohol Industry in India, and the great influence which the oil interests exert on the Governments of various countries all over the world, I feel apprehensive that even in spite of our clear pronouncement* in favour of the commercial practicability of utilization of molasses for the manufacture of power alcohol in the United Provinces and Bihar, and our recommendation of this method of utilization of molasses as a sound proposition from the economic point of view, the Government of India may be chary on creating conditions for, and look askance upon the immediate establishment of this industry†. The development of the Power Alcohol

*The Government of India are awaiting the pronouncement of the Joint Committee appointed by the Governments of United Provinces and Bihar before deciding about giving licences permitting the manufacture of power alcohol and about making it compulsory for petrol to be mixed with power alcohol. *Vide* interpellations in the Central Legislative Assembly, nos. 973, 975, 976, 981, dated the 24th March, 1938, and no. 1163, dated the 4th April, 1938.

†For a detailed discussion of the views held by the Government of India in this connection, *vide* "The Indian Sugar Industry Annual", 1936 and 1937, by Mr. M. P. Gandhi.

Industry which incidentally, satisfies all the conditions necessary for the establishment of a new industry, viz. cheap and regular supply of raw material, adequate supply of labour and the availability of a vast home market is a question of paramount importance to the United Provinces and Bihar in view of the imperative necessity of finding a suitable and profitable outlet for molasses, an important by-product of their largest industry, in the safety and progress of which they are vitally interested, particularly, due to its effect on the ryots, to whom the cane crop is a very important cash crop, the annual value of which runs into millions of rupees and which has, therefore, a great bearing on their welfare and wellbeing.

Being far removed from the sea-ports of India, these two Provinces are denied the opportunity of developing certain industries which Provinces near the sea-board can develop, and it is, therefore, only meet that the United Provinces and Bihar Governments should evince an anxiety (and indeed, should on that account be helped by the Central Government) to utilize this opportunity that has offered itself, as a result of the marvellous development of the sugar industry in both these Provinces*, of the establishment of the Power Alcohol Industry, and of thus creating at once a new channel of employment for indigenous capital and a new avenue for harnessing the energy of a few educated and middle class people in this as well as other subsidiary industries which are bound to spring up as a consequence of the development of this industry and of thus utilizing an important by-product of great potential value which far from being a source of profit, as it should be, causes some expenditure in its disposal and what is more, threatens to be a menace to the public health in the surrounding districts on account of its disagreeable smell and pollution of water if it is allowed to run into an adjacent water course.

Power alcohol has been produced on a commercial scale from molasses in various countries of the world like Austria, France, Phillipines, Czechoslovakia, Germany, United States and England, and there seems to be no particular technical complication in the manufacture of absolute alcohol which the industrialist may have to tackle. I am convinced that under the present circumstances and conditions, the manufacture of power alcohol is one of the most profitable directions for the utilization of molasses, from the economic point of view. I have little doubt that the Indian Tariff Board (Sugar) which conducted a comprehensive inquiry in the year 1937 (whose report although submitted to the Government of India in December, 1937 is not yet published) in this subject, will also endorse this view wholeheartedly.

While the development of this industry has been commenced, and indeed, carried out in most other countries at considerable expense to the State, which has even given subsidies of large amounts for a number of years, India is in the fortunate position of being able to develop this industry without any loss whatsoever to the revenue either of the Provincial or the Central Government. Indeed, it may bring some revenue to the Provincial Governments.

I also feel that the only way of reducing the huge and increasing drain of the national wealth on account of the imports of petroleum, methylated spirit and of varnishes, lacquers, etc., lies in the development of the Power and Industrial Alcohol Industry within the country. The annual import of petrol into India is of the order of 102,000,000 gallons valued at over five

*Specially in the case of the United Provinces, where there are no coal deposits another important consideration is that power alcohol is the only indigenous fuel that may become available there, at a competitive rate with other liquid fuels.

crores, and of methylated spirit of the order of 379,000 gallons valued at over three lakhs and such imports mean a drain of a very large amount of money. The replacement of every gallon of imported petrol and methylated spirit by indigenous power alcohol and industrial alcohol will mean an indirect increase in the national wealth which is greatly needed in view of the appalling poverty of millions in India*.

I further feel that if the Government of India should choose to levy the same excise duty on power alcohol as is levied on import of petrol, viz. annas 10 per gallon, they should allocate a suitable portion of the proceeds of such duty to the United Provinces and Bihar for purposes of development, just as they do in the case of revenues from income-tax from which portions are allocated to the Provinces, in the case of the import duty on petrol from which allocations are being made to the various provinces for road development, and in the case of the excise duty on sugar from which allocations are made to the various provinces for development of cane.

The establishment of this industry would also be helpful in checking any unwarranted increase in the price of petrol which, it may be observed, is dependent not upon the cost of production, but upon many other extraneous factors difficult to gauge. The availability of power alcohol in the country, would, therefore, give us a certain amount of independence from the monopolistic position of producers of petrol, and would at the same time give us a substitute motor fuel which is vitally necessary for a nation, under modern conditions†.

I also feel, particularly, after the separation of Burma from India in April, 1937, that it is eminently desirable for India to develop an alternative source of motor fuel inside the country, to ensure supplies of petroleum in the event of there being difficulties due to sea blockage or other reasons in bringing petrol from Burma or from other countries from where imports have been steadily increasing‡.

The development of the Power Alcohol Industry is particularly to be welcomed, because, a perennial supply of cheap and excellent raw material, viz., molasses produced in sugar factories is assured. The development of this industry would also render it less necessary to exploit at once our indigenous mineral oil resources in the Punjab and Assam. These oil resources are, after all, wasting assets, and indeed, may well be preserved for the future, if possible.

I do feel that United Provinces and Bihar can supply power alcohol for use as fuel to other areas in the interior of the country like the Punjab, North-West Frontier Province, Rajputana, Central India, Northern Central Provinces, portions in Bengal adjacent to Bihar, etc. at competitive rates

*If the recommendations made in the Report are accepted at least 2.5 million gallons of Power Alcohol would be made in the two Provinces and about Rs.12 lakhs will remain in the country. To produce this quantity of power alcohol, about 7,000 tons of coal, 600 cwt. of sulphuric acid and 900 cwt. of Ammonium sulphate—all of Indian manufacture would be required.

†Past experience has shown how the petroleum interests are prepared to make an abnormal reduction of rates of petrol for temporary periods and in restricted areas to meet competition of any competitor on the field, with a view to make it impossible for him to carry on profitably for any length of time.

‡The import of petrol from Burma during the year 1937-38 was 63,395,010 gallons valued at Rs.8,42,58,430 and from "other countries" 38,660,607 gallons valued at Rs.1,68,03,419. The total import of petroleum during 1937-38 was 102,055,617 gallons valued at Rs.5,80,61,849. It is a matter of interest to note that the import of petroleum from "other countries" has increased considerably during the last 3 years. In 1935-36 it was 2,077,775 gallons, in 1936-37 9,747,486 gallons, in 1937-38, 38,660,607 gallons. The average value of imported petrol as declared before the Customs Department during the year 1937-38 works out to 8 annas 4 pies per gallon, while the average declared value of petrol imported from Burma alone works out to 8 annas 8 pies per gallon at the ports.

under present conditions, without any difficulty, if the requisite legislation for compulsory admixture of power alcohol with petrol is passed.

It is needless to say that if power alcohol is required for the whole of India for purposes of admixture with petrol as motor fuel, it will be possible to produce the entire quantity required for use in the country. The addition of a percentage of power alcohol to the petrol will improve the quality of the petrol (by increasing the Octane number) and I therefore trust that the petroleum companies will readily agree to do so.

I hope that other Provinces in India will also lend their unstinted support to this scheme for the development of this industry, and thus enable the establishment of a new industry which will be an important step leading to a further industrialization of the country, ever so necessary to reduce the pressure of population on the land.

I would like to warn the Governments of United Provinces and Bihar, however that there is a danger of the petroleum interests reducing their prices of petrol to an unduly low level for a short time with a view to hamper or check the development of this industry, to prevent the use of power alcohol as a substitute by making over a reduction (it will only be for a temporary period remembering the object for which it is needed). They may even gain the sympathy of the consumers, and indeed, the bogey of protection of consumers' interests might also in all probability, be put forward from various quarters with a view to defer action for establishment of this industry. In such an event, however, the Government should be fully ready and equipped to face this situation and take suitable and prompt action.

I hope, however, that the petroleum distributing organizations who have benefited considerably from their monopoly in this trade for several decades, will take a farsighted and businesslike view and will not let such a situation arise. In fact, their market will be taken away only to a very small extent due to the admixture of power alcohol, and the effect on them will be negligible, particularly, as the consumption of petrol is consistently and steadily increasing. On the other hand, the ungrudging co-operation of the Petroleum Distributing Organizations, with this new Power Alcohol Industry, which the Governments are anxious to develop, in the matter of marketing the mixed fuel, will be appreciated by the Governments, whose help and goodwill may be of considerable value to the Distributing Companies in the smooth running of their business.

Minority report by MR. P. S. MAKER

The Government of Bihar, in consultation with the Government of United Provinces appointed a joint Power Alcohol Committee on 18th January, 1938, with the following terms of reference :

First—(a) to devise ways and means of starting the manufacture of power alcohol out of molasses.

(b) to report on the best method of manufacture and of mixing power alcohol with petrol.

*Second—*to explore other possible uses for molasses and their practical applications.

The manufacture of power alcohol had been widely discussed in India for the past several years, and with the recent development of sugar industry making available large surplus of molasses, this question has assumed an all India importance. The fact that the alcohol-petrol mixtures are being

successfully used as motor fuels, in most of the countries abroad, it was very appropriate for the two Governments to appoint the said Committee to draw up a practical scheme for the manufacture of power alcohol out of molasses and to report on the utilization of molasses for purposes other than power alcohol.

The majority report is based on a strictly literal interpretation of the terms of reference. Though it was clear that the power alcohol when developed in United Provinces and Bihar alone, would not solve the molasses problem still my colleagues preferred to restrict the scope and method of inquiry and treated the entire subject-matter in a more general way, with the result that the majority report does not present any definite scheme for the manufacture, mixing and distributing of power alcohol. My report on the other hand treats the molasses problem on all India basis and satisfies the requirements of the terms of reference. The report is presented in three parts—*Part I* deals with the manufacture, cost and distribution of power alcohol, and *Part II* takes up the production of Industrial alcohols and converting the same into Commercial Solvents and alcohol products that have a ready market in India, and lastly *Part III* summarizes the recovery of distillery by-products such as: Dry Ice, Yeast, Potash and Ammonium Sulphate Fertilizers, etc.

PART I

POWER ALCOHOL

1. Most of the vegetable crops containing starches, such as, cereals, potatoes, etc., and those containing ready formed sugars, such as sugarcane with its residual molasses, fruits of various kinds and other things like waste wood and straw form the basic raw materials for the manufacture of power alcohol. In Great Britain, power alcohol is manufactured mainly from cereals and imported molasses. In Germany potatoes are chiefly used, while in France Alcohol is chiefly made from beet molasses and in the United States of America, maize and Cuban molasses form the basic raw materials for alcohol manufacture. India with practically little petroleum resources of her own must industrialize her agriculture for the manufacture of power alcohol so that we may increasingly be less dependent on foreign petrol and kerosene oil.

Petrol consumption in India primarily by the motor transport, is steadily increasing and for the year 1937-38, it reached 110 million gallons. Imports of kerosene oil into British India for the year 1936-37 amounted to 182 million gallons of which 120 million gallons came from Burma and 62 million gallons from other countries. Fuel oil imports average to 140 million gallons a year. In different countries, depending upon the circumstances the percentage of power alcohol in alcohol-petrol mixture varies from 10 per cent. to 50 per cent. and in certain cases like France there are two or more alcohol-petrol compulsory mixtures that are marketed for different class of motor transport.

If the laws of economics and nationalism, permit most of the western countries to mix power alcohol with petrol the same laws must equally hold good for India, especially when India has little oil supplies of her own and has 350,000 tons of surplus cane molasses to dispose off and by further developing her agriculture she can produce any amount of Power alcohol at prices unheard of in the world's markets.

2. *Petrol replacement*—In the year 1936-37, India produced 18 million gallons of petrol, imported 73 million gallons from Burma and about 10 million gallons from Iran, etc. Estimated consumption for the year 1937-38 is 110 million gallons. Of this 19 million gallons are consumed by the Indian States and about 1 million gallons for aviation purposes. The balance of 90 million gallons of petrol has to be replaced partly or totally with power alcohol. Although the percentage of light cars running is considerably higher than the heavy type of vehicles, it is estimated that the light motor vehicles consume annually 50 million gallons of petrol and the heavy type like lorries and buses consume the balance of 40 million gallons. For the light motor vehicles and taxi cabs the following fuel mixture is recommended :

Mixture A

<i>Winter four months (N. W. India)</i>		<i>Summer eight months</i>	
November, December, January, February			
Per cent.		Per cent.	
20 Power Alcohol	.. ..	25 Power Alcohol.	
5 Ethyl Ether	.. ..	75 Petrol.	
75 Petrol	.. ..	
<u>100</u>		<u>100</u>	

This will provide annual outlet for 12½ million gallons of power alcohol. For the heavy type of motor vehicles like buses, lorries and vans, etc., the following mixture is recommended :

Mixture B

<i>Winter four months (N. W. India)</i> November, December, January, February		<i>Summer eight months</i>	
Per cent.		Per cent.	
40 Power Alcohol .. ..	.. ..	50 Power Alcohol.	.. ..
10 Ethyl Ether .. ..	.. ..	50 Petrol.	.. ..
50 Petrol .. ..	.. ..	
<u>100</u>		<u>100</u>	

This will absorb another 20 million gallons of power alcohol thus leaving a balance of 57.5 million gallons of petrol to be imported every year. And it is suggested that the same be imported from Burma alone in exchange for Indian produce. Besides the above two Mixtures A and B absorbing nearly 32.5 million gallons of power alcohol a year, there should be a separate motor transport organization, on all India basis, for marketing straight power alcohol as motor fuel. This mixture C will consist of 80 per cent. power alcohol and 20 per cent. Ethyl Ether. This national fuel under State subsidy will sell at 2 annas per gallon less than Mixture B while Mixture A, which is really a luxury fuel for the rich man's car, will pay a sale tax of 2 annas per gallon. This national transport system, run exclusively on power alcohol will operate as separate economic units in each Province as Feeder to Railway Service, especially to handle inter-provincial goods traffic in Agricultural produce. Plying about 1,000 alcohol trucks and lorries throughout India yearly consumption of Mixture C will reach 5.5 million gallons, thus replacing a total of 38 million gallons of imported petrol with home made Power Alcohol and saving India nearly Rs.190 lakhs a year.

3. *Kerosene replacement*—Out of 182 million gallons of kerosene imported annually into India, it is estimated that 150 million gallons are used for illuminating or lighting purposes and the balance of 32 million gallons are used for fuel or as source of power generation, for water works, kerosene Engines and Farm Tractors.

4. Before the discovery of Petroleum and its refined products Alcohol was universally used for illuminating purposes. In the year 1860, America alone consumed over 13 million gallons of Alcohol of 95 per cent. straight for lighting purposes.

5. In the year 1900 and 1906 photometric tests were made to determine the comparative value of Alcohol and kerosene as illuminants. These tests included the French "Bovin" incandescent mantle alcohol table lamp and an ordinary flat-wick kerosene table lamp using a good quality of alcohol (95 per cent.) and kerosene.

TABLE I

Lamp	One gallon will last	Candle power	Candle power hours
	H. M.		
Alcohol	58 52	25	1,471
Kerosene	87 0	9	783
Alcohol	57 05	30-35	1,722
Kerosene	28 40	30-8	883

6. The test data conclusively prove that if we had two lamps of equal candle power and equal capacity, or one burning alcohol and the other kerosene alcohol lamp would burn nearly twice as long as the kerosene lamp or in other words a gallon of alcohol possesses about twice the illuminating value of a gallon of kerosene. Power alcohol, therefore, can compete successfully with kerosene at twice the cost per gallon. Outside of cost considerations, there are a number of other features in favour of alcohol lamp which are summarized below :

(1) The alcohol lamp is much safer than the kerosene lamp as fire started from Alcohol is readily extinguished by water which mixes with Alcohol in all proportions.

(2) The heat given off by radiation is much less in the case of Alcohol lamp.

(3) The white light furnished by the Alcohol lamp is a kind of day light in its quality and being also extremely steady and uniform it is preferable to the light of the Kerosene lamp.

(4) As the Alcohol lamp burns no wick it is from this troublesome feature. The Alcohol lamp does not smoke and is practically odourless. The fitting on of the mantle is easy and simple. The lighting of the Alcohol lamp is more easily done with Kerosene as the removal of the chimney is unnecessary.

7. The only argument that may be advanced against the use of Power Alcohol in place of Kerosene, is of the prohibitive cost of Alcohol lamp and it is stated that an ordinary table type Alcohol lamp will cost Rs.10 while a Kerosene lamp of same type and size would cost Rs.5 only. The explanation is that there being no demand for alcohol lamps, their prices must be higher than of kerosene lamps. We all know that with the increase in demand, an ordinary hurricane lantern that used to cost Rs.3 a piece, can be had now at less than Re.1 in any corner of India and as a matter of fact there are two or three Indian establishments who are now manufacturing these lanterns by employing automatic machinery. Similarly, by creating demand for the Alcohol lamps same will be manufactured in India at popular prices including the Mantles. As a matter of constructional details there is nothing complicated in an Alcohol lamp. Its chief difference lies in its design of the burner which is easily regulated. Thus the amount of light furnished, and hence of Alcohol used, can be reduced at will. It would be the duty of the State to subsidize Alcohol lamp manufacture and so regulate the Alcohol Industry that it may eventually replace 182 million gallons of Kerosene and save India nearly Rs.550 lakhs a year.

As stated above, the declared value of a gallon of Kerosene Oil is 4 annas and 10½ pies and the excise duty is 2 annas and 9½ pies per gallon. On to this may be added 1 anna and 6 pies as transport charges and 1 anna and 10 pies to cover packaging, leakage, Sale Commission and other miscellaneous charges thus making a total of 11 annas a gallon for the consumers to pay. If the Power Alcohol be saved from Excise duty of 2 annas and 9½ pies a gallon it would compete nicely with Kerosene in any part of India and may eventually drive out Kerosene entirely; otherwise the State must subsidize to the extent of 2 annas for every gallon of Power Alcohol that may go to replace Kerosene. To begin with, campaign must be started in large towns and district headquarters and at the same time making it compulsory as far as possible for all Government purposes, District Boards and Municipal Institutions, the use of Power Alcohol in place of Kerosene. A moderate programme on all India basis to replace say 10 per cent. (150 million gallons) of our present Kerosene consumption for illuminating purposes, with Power Alcohol should be undertaken.

8. The balance of 32 million gallons of Kerosene used for Power purposes will be easier to replace with Power Alcohol, because the consuming units are larger and mainly employed by Municipal Water Works, Workshops, and small industries as well as for power farming. Germany has made the best progress in the design and manufacture of Alcohol engines for various industrial and Agricultural uses. Certain types of engines can be operated with petrol; Kerosene or Alcohol, simply by reducing the clearance space in the cylinder for proper compression. The feeding or carburetting devices require very little change.

9. Alcohol Engines for land and marine service, Alcohol Tractors, Alcohol Locomotive for use in Forests, Mines, quarries and in large agricultural estates, are widely used in all countries lacking Petroleum resources. Germany as far back as 1902, consumed yearly 20 million gallons of Alcohol for Power and industrial purposes. It is estimated that according to the proposed scheme, consumption under this head will reach 7 million gallons a year. Question of fuel oil though an important item on India's import list, has to be left over till the other Power Alcohol programme, as outlined in this scheme, is well on its way to completion.

10. *Five-year plan*—Subject-matter discussed above relates to an all India problem and calls forth for the progressive development of Power Alcohol Industry that will in its fifth year of growth, reach a figure of 60 million gallons to replace imported petrol and Kerosene as summarized below :

TABLE II

Type fuel	Per cent. alcohol	Power alcohol, 1943-44
Petrol replacement—		
Mix ure A	25	12,500,000
„ B	50	20,000,000
„ C	100	5,005,000
Kerosene replacement—		
Illuminant	100	15,000,000
Motive power	100	7,000,000
Total (Power Alcohol) .. .. .	..	60,000,000

It is difficult to fix at this stage the rate of Alcohol production from year to year, but it may be taken as certain, that if the Provincial Councils pass the necessary legislation for the Alcohol Petrol Mixtures and there be no serious oppositions from the Government of India and the vested oil interests the contemplated five years plan for making available early 60 million gallons of Alcohol, would finish long before the scheduled period.

Our total Alcohol capacity of 60 millions gallons will be split up into six units each with a yearly capacity of about 10 million gallons and each consuming nearly 170,000 tons of Indian Molasses. Starting with one unit and as the scheme develops along, similar units at suitable centres will be installed throughout India.

11. *State control*—If the Power Alcohol Industry is to be developed in India, it is absolutely essential to do the same under strict State Control and protection. And the national significance of this problem can be better

judged from the letter quoted below, addressed by a French Senator to Clemenceau on 12th December, 1919 :

“ He who owns the Oil will own the World, for he will rule the sea by means of the heavy oils, the air by Petrol and the illuminating oils and in addition to this he will rule his fellow men in an economic sense by reason of the fantastic wealth he will derive from oil the wonderful substance which is more sought after and more precious today than Gold itself.”

To give an instance of an economic rate war, it may be stated that for considerable number of years, the Standard Oil Company of America used to regard India and China as its own preserve. The Company distributed at first gratis, and afterwards at half the cost price, lakhs of cheap Kerosene Oil lamps bearing the inscription “ Good Luck.” As British Dutch-Shell came on the scene she was able to sell the Chinese its oil at a price considerably below that which the Americans could afford to do, Sumatra being nearer than California. By 1911, however an agreement was made between the two Companies by which 50 per cent. of the East Asiatic market, was handed over to Royal Dutch. Recently Bombay City experienced a similar economic war in case of Petrol, Burma-Shell driving out the Russian Petrol.

Since 1911-12, oil economic fight has developed into a political fight and the struggle for oil is being fought out today, and will be carried on tomorrow, as fiercely as ever. Before the war, i.e. 1913, British Empire produced 2 per cent. of the World's total production of oil, while at present she controls at source over 20 per cent. of World's total production. This was made possible because of continued State help and protection to British oil trading interests. This business venture on the part of the British Government has proved very profitable. The original investment of £2·2 millions made by the British Parliament in 1914, has now become £60 millions. This British control over Anglo-Persian and Burma-Shell groups is no less valuable to Great Britain today than her control over the Suez Canal.

India's case is somewhat comparable to France and Germany, because the latter two countries do not possess any more natural oil resources than India. It is natural therefore that France's production of Power Alcohol should be the highest (88 million gallons) and Germany coming next with an annual production of 48 million gallons and the entire trade of Power Alcohol and Petroleum Imports in the two countries is regulated under State control and supervision.

Fortunately, circumstances at present are most favourable for India to develop the Power Alcohol Industry. There is nationwide demand for it, and the enormous quantity of waste Molasses will be put to use. Capital and Copper are available at cheap rates. The oil companies who are busy supplying the European Countries for storing enormous quantities of petrol, for defence purposes, would not mind a little shrinkage in their Indian business. And above all, Government of India, seems to be in a reasonable mood and most probably will not let down the Provinces, in trying out the economic efficiency of the new constitution. It is essential, therefore, that the bill for the compulsory mixing of Power Alcohol with Petrol be passed by the Provincial Legislators. The Honour and National responsibility however, for starting the Power Alcohol Industry will primarily rest with the United Provinces and Bihar Governments and in all respects the two Provinces are admirably suitable to shoulder the undertaking.

12. *State funds*—To make the enterprise of such a magnitude a success, an efficient organization and large funds would be necessary. Although the initial heavy capital investment and working capital would be entirely provided by the public, still the State must incur a heavy annual expenditure to fulfil her part of the obligation, which may take the form of subsidies, guarantee on the capital investment, establishing a Technical Institute and providing transport and other facilities in order to stabilize the Industry.

Considering the present state of provincial finances, it is doubtful if large funds would be available for establishing the Power Alcohol Industry. Therefore, it is proposed that in the interest of the Industry and the public at large, the State should raise the money in the following manner and earmark the same as an "All India Power Fund."

(a) *Molasses Cess*—It is proposed to levy a sale tax of one anna per maund on all factory molasses sold. The consumers and exporters, at present are paying very little for the molasses and they will certainly not grudge paying some cess so long the price of molasses does not exceed Re.1 per maund, which is the prevailing price in countries like England, America, etc. Molasses from Gur Refineries and Khandsars amounting to 144,000 tons a year should be exempted from the Cess, because on account of their better quality and taste are found excellent for tobacco curing and making Cattle Fodder. Factory Molasses amounting to 410,000 tons a year will yield an income of Rs.7 lakhs, of which the United Provinces will contribute Rs.4 lakhs, Bihar Rs.2.25 lakhs and the rest of India Rs.0.75 lakh only.

(b) *Petrol Cess*—It is proposed to levy a sale tax of annas two per gallon on all straight Petrol and Mixture sold throughout India, which according to our present rate of consumption and as stated in Section 8 above, comes to 50 million gallons, while Mixture B will carry no tax. Mixture C on the other hand shall receive State help of annas two per gallon and under the proposed scheme as outlined in Section 10 only 5.5 million gallons of Mixture C will be marketed. Similarly Power Alcohol replacing Kerosene when used as illuminant or motive power will receive a State aid of annas two per gallon. After adjusting the State subsidy on 27.5 million gallons of National Fuel (100 per cent.) Power Alcohol, the Petrol Cess will leave a favourable balance of Rs.28 lakhs a year. The State policy behind the above taxation measures shall be two-fold: first to make the new Power Alcohol Industry self-supporting from its very start and secondly to encourage the use of National Fuel at the expense of Foreign Petrol. How this large sum of Rs.35 lakhs a year be imbursement will largely depend upon the State Policy pursued and details in this connexion will have to be worked out by the proposed Alcohol Board of which a bare outline is given below.

13. *State Organization*—An Alcohol Board will be constituted on an all India basis, each province co-operating in the scheme will nominate one outstanding industrialist. These eleven members in turn will nominate four Technical Experts thus increasing the Board's strength to fifteen. The Board shall be vested with full and final authority on all matters concerning the development of Alcohol Industry and its progress and competency will be judged by its completing in time the five years plan as outlined in Section 10. The life of Board's member will be for five years but each Provincial Government will be free to recall its member and send in a substitute. All the 15 members of the Board shall be honorary but they will be paid first class travelling allowance plus Rs.100 for attending every meeting of the Board. The Secretary of the Board will be a permanent paid officer, assisted by several Under Secretaries representing various departments like

Production, Alcohol Institute; Publicity; Excise; Power Farming, etc. It is estimated that the Board's establishment alone will cost Rs.6 lakhs a year.

Alcohol Institute will be established to carry on Industrial Research Work in co-operation with the Production Units and to introduce such Alcohol bearing products as described in Part II of this scheme. The Institute will be under the control of a Director, directly responsible to the Alcohol Board. It will have three co-ordinated Sections, viz. Chemical, Biological and Engineering. As to what Chemical research can do to establish an industry may well be illustrated by citing the case of American Alcohol Industry. With the advent of prohibition most of the distilleries were closed down thus affecting the agricultural interests very badly. To overcome this difficulty and to put back into service huge dead capital both the State and the Industry requisitioned the services of Research Chemists to find new outlets for Alcohol, with the result that in a few years' time the American Alcohol Industry was raised to a place of first importance and now the total United States Production of Industrial Alcohol, in the year 1937, reached 100,000,000 wine gallons, (100 per cent.) which was entirely absorbed by the various chemical industries like Chemicals, Drugs and Pharmaceuticals, Toilet preparations and Plastics, etc. Thus it was made possible to consume annually all the molasses available and in addition one lakh tons of Corn giving considerable relief to the American Agriculturists. Following the same policy of development we should find no difficulty in raising our annual consumption of Industrial Alcohol to 20 million gallons by the end of our five-year plan. The Chemical and Biological Sections will also be concerned in problems involving the recovery of fertilizers and other by-products like CO_2 . Yeast and cheap denaturants. Till the Institute's own buildings are ready it will be accommodated in the Works Laboratories adjoining the first Central Distillery. The main Institute's buildings, staff quarters, laboratory equipment and fittings, various Pilot plants including steam and Power plant will cost nearly Rs.10 lakhs. And in order to finish the five-year plan in time and to build the Industry on strong chemical foundations and in order that the Institute's work be carried on the basis of International Co-operation involving exchange of research problems, Patents, etc., the annual recurring expenditure will amount to Rs.9 lakhs.

The Publicity and the State Aid departments working under the control of the Alcohol Board will by far play the most conspicuous rôle in shaping the success of the scheme. While it will be an easy matter to dispose off 38 million gallons of Power Alcohol as Motor Fuel with the help of Government Legislation, it would, on the other hand, require a well organized nationwide propaganda backed by a powerful sales and engineering service to market the balance of 22 million gallons of Tax-Free Power Alcohol which will be used in place of imported Kerosene for illuminating and motive power purposes. It shall be the primary duty of the Publicity Department to make the name of Power Alcohol or any other name given to this National Fuel like Qaumi Tail, a household word and make such arrangements that its availability is made as easy as that of wood, coal or kerosene. To replace 15 million gallons of imported Kerosene with Power Alcohol would mean putting into service 75,000 Alcohol Lamps a year for five years at about half the cost price and mainly manufactured in India. This is based on the assumption that a 30 candle power Alcohol lamp as supplied by the Publicity Department will burn on an average 8 hours during night time throughout the year. Same liberal policy will be adopted towards the supply of Alcohol Tractors and pumping sets run by Power Alcohol. All farm machinery ordered by the Co-operative Societies and Collective Farms throughout

India will be supplied at half the initial cost. The Engineering Section of the Institute will look after the demonstration and will render all possible service to the users of machinery run on Power Alcohol. State aided Automobile garages will render free service to trucks and buses using 100 per cent. Power Alcohol Motor Fuel. It is estimated that this department will cost approximately Rs.15 lakhs a year. The balance of Rs.5 lakhs will be taken up by the Excise Department and maintenance of other administrative machinery working under the control of the Alcohol Board.

14. *State Legislation*—The right thing would be that all the Provinces in a body approach the Government of India to pass the necessary legislation for compulsory mixing of Power Alcohol with imported or indigenous Petrol and take up the development of the Alcohol Industry on all India basis. If the concerted attempt fails in that event each Province should pass the necessary legislation and co-operate with other provinces in a manner that may set the organization going country-wide. Framing of the new Alcohol Act is a matter of details and can be drafted on uniform lines after the provinces have declared their attention of joining the scheme. As a matter of fact, the molasses problem, as well as the more important question of National Fuel will not be solved satisfactorily unless the problem is tackled on an All India basis.

As the proposed scheme will be developed in stages, it is recommended that there should be six central distilleries each with a daily capacity of 30,000 gallons of alcohol, thus bringing the annual production to 60 million gallons of Power Alcohol by the end of fifty year. Eventually each province will have one or more central distilleries most economically located to meet all their requirements of Power and Indian Alcohol. That the two Governments of the United Provinces and Bihar are seriously faced with the problems of disposing of large quantities of surplus molasses, makes it imperative on the part of the two Governments to start the first central distillery at a place conveniently located in respect of two Provinces and the most suitable place thought of from all economic considerations is "SONEPORE." What follows hereafter, therefore, shall relate to our first unit Central Distillery at Sonopore sponsored by the Governments of the United Provinces and Bihar and it is hoped that before placing order for the second unit, the All-India Organization and other State control measures will be perfected.

15. *Sonopore*—Chief factors discussed below in order of importance, that should determine the location of any Power Alcohol Central Distillery are :

- (a) Molasses supply.
- (b) Transport facilities.
- (c) Coal fuel.
- (d) Fresh Water Supply.

(a) *Molasses*—Sugar factories areas in which molasses is in most distressed state are: North Bihar and District of Gorakhpore, comprising nearly 56 sugar factories. It is from this area that the Indian Molasses Company of Great Britain purchases its supplies for export purposes. This Company has its storage installation at Sonopore and hauls the molasses in tank wagons from the neighbouring factories, situated on the B. & N. W. Railway line. The Company buys molasses at a ridiculously low price of annas 1-3 per maund and pays on the average anna 1 per maund as railway freight up to its storage installation at Sonopore. It costs another 1 anna

3 pies per maund to take the same by boat to Calcutta and the pumping charges at Calcutta come to 6 pies per maund thus bringing the cost up to 4 annas per maund before the Cargo Steamer leaves for Europe. If the ocean freight be taken at 4 annas per maund and following anna 1 per maund as Dock Charges on the other end, it costs the Indian Molasses Company a minimum of annas nine (-/9/-) per maund to land molasses in Great Britain. The overhead expenses are so high that the Company hardly makes anything by selling at 11 annas per maund. The Continental price is annas 12 per maund and the Cuban molasses today are fetching 14 annas a maund delivered in America, where the price prior to 1929 used to be Re.1-4 per maund. The Export Molasses scheme has proved a failure, as in the year 1936-37, the export amounted to 34,000 tons only, out of 350,000 tons of available surplus. Under the proposed scheme the entire molasses production will come under the control of the Excise and Prohibition Department and its marketing will be controlled by the Alcohol Board. The Alcohol Board shall fix the basic minimum price of 4 annas per maund at any Sugar Factory and after paying the Cess of 1 anna per maund and another 1 anna per maund as railway freight, it will cost the Central Distillery 6 annas per maund of molasses delivered.

As to the availability of molasses near Sonapore there are 17 factories in North Bihar that are within 200 miles of Sonapore, while 26 factories in the District of Gorakhpur, United Provinces, are situated within 200 miles of Sonapore. In all there are 60 sugar factories with a total annual production of 200,000 tons of molasses which lie within the economic distance (i.e. one anna per maund railway freight) of Sonapore. The proposed distillery, however, when working at full capacity will consume 170,000 tons of molasses a year producing 10 million gallons of Power Alcohol. Sonapore therefore occupies the best position in the whole of the United Provinces and Bihar as a molasses centre.

(b) *Transport Facilities*—We have already stated the railway facilities existing for the transport of molasses to Sonapore and the same service will be utilized for the distribution of Power Alcohol and other products in the markets of North Bihar and Eastern parts of United Provinces served by the B. & N. W. Railway and R. & K. Railway. Across the river, is the broad gauge State Railway—E. I. Railway, running from Calcutta to Delhi. The unique transport feature in favour of Sonapore is the existence of Gandsak and Ganges transport service as far as Calcutta and it is no exaggeration to state that this feature alone should make Sonapore in the near future, a highly industrialized area. Water freight rate comes only to a fraction of what it costs to transport either by rail or road. For instance railway freight on Petrol from Calcutta to Patna is 1 anna 3 pies a gallon, when carried in tank wagons of 5,000 gallons. On the other hand to cover the same distance either way by a small steam boat and trailers it will cost at the most 3 pies a gallon and if there be no transshipment, another 3 pies a gallon will carry Power Alcohol from Calcutta to any Indian port like Madras, Bombay, Karachi, etc. There are enormous commercial possibilities if the Inland Indian Waterways be properly developed and the two Governments of the United Provinces and Bihar will do well to appoint a Joint Commission to investigate further development of river transport in the two Provinces. A Central Distillery at Sonapore will be ideally situated and may be compared well to a steam Power Plant installed at the mouth of a Coal Mine Pit, supplying current to large towns by a long distance transmission system.

(c) *Coal Fuel*—The proposed Distillery will consist of several units capable of producing annually 8 million gallons of Power Alcohol and 2 million gallons of Industrial Alcohol, the latter will be used in the manufacture of solvents and other Alcohol products as described in Part II of this scheme. Taking 333 working days in a year, it will come to 30,000 gallons of Alcohol a day of 24 hours. Steam consumption will be 35 lb. per gallon of Power Alcohol made, but taking into consideration other Power requirements, the powdered coal fired steam Power Plant will be designed at normal rating, on the basis of 40 lb. steam per gallon of Alcohol made. This means a daily consumption of 1,200,000 lb. of steam. Taking the average heat value of Bihar coals as 11,000 B. T. U. per lb. of coal and assuming an over all heat efficiency of 65 per cent., we will produce 6 lb. of steam per lb. of coal burnt or a consumption of about 90 tons of coal per day of 24 hours. Another 15 tons a day will be consumed by Railways and Steamships for the transport of molasses, Power Alcohol and other products. Sonapore is within easy reach of Bihar Coal Mines and by combining the Rail and River Transport Service and entering into long term coal supply contracts the fuel bill will be cut down considerably thus making appreciable contribution towards lowering the cost of Power Alcohol. Low pressure steam is used in the distillation and evaporation processes, therefore, two non-condensing extraction Turbine sets will be installed to generate current and supply processes steam at the desired low pressure. By this arrangement we shall have a large surplus of electric current available costing only one pie per unit.

(d) *Water Supply*—Distillation processes require large quantities of fresh cooling water for the condensation of vapours, therefore Central Distilleries in general are located on sea-boards or large river heads. About 10 gallons of cooling water per gallon of Power Alcohol made is considered sufficient with a properly designed plant, but certain allowance must be made in case of tropical countries like India. In case of Sonapore, it would be safe to take 50 gallons of cooling water per gallon of Alcohol made. On this basis, the proposed unit will require 1,500,000 imperial gallons of cooling water a day. Fortunately the Gandak and the Ganges are big enough to meet requirements. With current costing one pie a unit, our pumping costs will be kept at minimum.

Not a single distillery out of existing ones now working in United Provinces, Bihar or in any other part of India can offer such decided advantages as described above pertaining to Sonapore. The existing distilleries are not only small but too obsolete units to deserve any economic consideration under the present scheme.

16. A careful survey, however, of the Sonapore area, shall have to be made before it could be decided to select a suitable site that may be free from any possibility of floods. The survey work by the prospecting company should start immediately and continue throughout the coming rainy months. The entire plant, however, will rest on a concrete pile foundation and entirely built on concrete and steel to withstand earthquake shocks and to be safe from minor sub-soil disturbances. Should any difficulty arise in finding a suitable site at Sonapore, the next best place would be across the Ganges lying between Digha-Ghat and Dinapur. The molasses, etc. could be ferried or piped across the river.

MANUFACTURE: In dehydrating Alcohol, i.e. producing a water-free Alcohol, known as Power Alcohol, such as is now required for motor

fuel, the azeotropic process which is the oldest and more economical than the salt process is generally used. For climatic conditions as prevailing at Sonepore, average Alcohol yield in an azeotropic process would be 98.5 per cent. and Benzol consumption of 0.004 gallon per gallon of Power Alcohol produced. Benzol solvent, which will be required for the manufacturing process, as well as for denaturing purposes, if not already available in India, will be recovered from the existing coke ovens, thus establishing another important industry from industrial waste.

It would cost 4 annas to manufacture a gallon of rectified spirit of 95 per cent. strength, and its summary analysis is given in Part II. We are now concerned to calculate the over all cost of a gallon of absolute alcohol of 99.97 per cent. strength, manufactured in a distillery five times the capacity, and employing azeotropic process. The molasses price is to be taken at annas 6 per maund at the distillery, yielding 2.1 imperial gallons of Power Alcohol of 57 gallons of Power Alcohol per ton of molasses. The molasses charge per gallon of Alcohol will come to 2 annas 9 pies. The total investment on the proposed distillery producing 30,000 gallons alcohol a day will amount to Rs.30 lakhs. Taking plant depreciation and insurance at 7 per cent. the annual amount comes to Rs.2.1 lakhs or a charge of 4 pies per gallon. Labour charges and staff salaries for the said Central Distillery will not exceed Rs.1 lakh annually or a charge of 2 pies per gallon. As to steam and power charges, we are taking a liberal estimate of 40 lb. steam consumed for every gallon of Power Alcohol produced, which when rendered in terms of coal means 4.5 lb. of coal, and assuming coal cost at Rs.10 per ton delivered at Sonepore, the Fuel cost per gallon of alcohol will not exceed 4 pies. Taking 0.004 gallon benzol per gallon of power alcohol produced, the daily benzol consumption will not exceed 100 gallons or Rs.100 a day. After making a liberal allowance for the consumption of other stores, chemicals and supplies, the total annual bill will not exceed Rs.1.5 lakhs a year or a charge of 3 pies per gallon of produce. Overhead and establishment charges will amount to Rs.1.5 lakhs a year or a charge of 3 pies per gallon. The excise supervision and direction will take another Rs.50,000 a year or 1 pie per gallon. Alcohol loss due to leakage and evaporation being transhipment to petrol bulk installations is taken at 1 per cent. by volume, and fire insurance at 2 per cent. on stock value of 1 million gallons, thus the combined charge per gallon will not exceed 1 pie which comes to over Rs.50,000 a year. The above items are summarised below :

TABLE III

Item	Per gallon	
	Rs. a. p.	
Molasses cost at -/6/- per maund 0 2 9
Plant Depreciation and Insurance 0 0 4
Labour charges and staff salaries 0 0 2
Steam and Power Costs 0 0 4
Benzol, Chemicals and Stores 0 0 3
Overhead and establishment 0 0 3
Excise supervision and direction 0 0 1
Evaporation loss and fire insurance 0 0 1
Total 0 4 3

Therefore, the actual cost of manufacturing Power Alcohol comes to 4 annas 3 pies per imperial gallon, including evaporation losses during transport up to mixing installations. Of this 2 annas 9 pies or 65 per cent. of total cost represents the cost of molasses and the balance 1 anna 6 pies or 35 per cent. as the manufacturing or conversion charge. In other words on one year's production, the Central Distillery shall pay Rs.11 lakhs for molasses; Rs.2.1 lakhs for coal and Rs.3.2 lakhs in the form of wages and salaries. By increasing the distillery capacity five fold, it has been made possible to reduce the manufacturing charge from 4 annas to 1 anna 6 pies per gallon. If the markets for the distillery products such as Dry Ice, Yeast, Fertilizers and surplus electric energy be properly developed, the extra profits from such sales would be more than sufficient to absorb the entire manufacturing charge of 1 anna 6 pies a gallon, thus bringing down the cost of Power Alcohol to 2 annas 9 pies a gallon barely to cover the cost of molasses only. The great strides made by the chemical and its economic success abroad is mainly due to the inter-department development of basic chemical industries in which a waste product of one industry, invariably, forms a valuable raw material for another one, thus helping each other to reduce the over all manufacturing costs.

17. *Marketing*—The proposed unit at Sonapore will produce annually in the first instance, 8 million gallons of Power Alcohol; 2 million gallons of Industrial Alcohol in the form of Alcohol bearing chemical products and Potash and Ammonium Sulphate fertilizers to the extent of 16,000 tons and these products will have an annual market value of Rs.40 lakhs, Rs.50 lakhs and Rs.20 lakhs, respectively. With the completion of the five year plan the annual production will reach 60 million gallons of Power Alcohol, 5 million gallons of Industrial Alcohol and 32,000 tons of Fertilizer and at the present prices the annual production will amount to nearly Rs.5 crores. To distribute and market these products an efficient organization independent of Petrol distributing companies would be necessary. The said company will be one of the service units of the parent company and shall look after the transport, storage and supply of Power Alcohol from Central Distilleries like Sonapore to various Petrol bulk installations. If found necessary the company shall also provide facilities for the mixing of Power Alcohol with Petrol and shall establish service station, warehouses and sales offices for the mixture C and other Alcohol products described in Part II of this scheme.

To start with, the entire production of 8 million gallons of Power Alcohol will be marketed in the five provinces: Bengal, Bihar, Orissa, United Provinces and Central Provinces with an annual Petrol consumption of 34.5 million gallons. Should any difficulty arise in case of Bengal in that event Madras or Bombay may be taken as substitute but it is very important to include one of the Port towns for marketing Power Alcohol. It is proposed to absorb 3 million gallons of Power Alcohol in the form of Mixture A containing 15 per cent. Alcohol only, another 4 million gallons of Power Alcohol in the form of Mixture B containing 30 per cent. Alcohol only and the balance of 1 million gallon of Power Alcohol will be consumed in the form of Mixture C or straight 100 per cent. Power Alcohol. No adjustment, whatsoever, either in the carburettor or in any other part of the Motor Engine would be necessary using above mixtures. With increased production of Power Alcohol either its percentage in the above mixture be increased or low Alcohol mixtures be introduced in new provinces.

In addition to the existing railway transport facilities and the proposed inter-provincial motor transport a national waterways transport company will be organized to cover the navigable portions of the rivers: Ganges, Sone, Gandak and later on extend traffic along Jumna and Gogra rivers. This will serve most of the commercial towns in United Provinces, Bihar, including Calcutta Port; further joining the Indian Coastal traffic, will serve the parts of Madras and Bombay. After working out the details and considering the economies effected by co-ordinating the three transport services, it has been possible to prepare the following table giving approximate average prices that the consumer will have to pay for a gallon of Power Alcohol at the service pump in the said five provinces :

TABLE IV

Item	Bengal	Bihar	Orissa	United Provinces	Central Provinces
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Power Alcohol cost	0 4 3	0 4 3	0 4 3	0 4 3	0 4 3
Denaturing charges	0 0 8	0 0 8	0 0 8	0 0 8	0 0 8
Profit 10 per cent.	0 0 6	0 0 6	0 0 6	0 0 6	0 0 6
Transport up to mixing department.	0 0 6	0 0 7	0 0 9	0 1 3	0 1 6
Mixing charges	0 0 2	0 0 3	0 0 4	0 0 5	0 0 6
Distribution	0 0 6	0 0 7	0 1 0	0 1 0	0 1 3
Retail commission	0 1 0	0 1 0	0 1 0	0 1 0	0 1 0
Transit loss 100 per cent. ..	0 0 3	0 0 3	0 0 3	0 0 3	0 0 3
Excise	0 10 0	0 10 0	0 10 0	0 10 0	0 10 0
Total	1 1 10	1 2 1	1 2 9	1 3 4	1 3 11
Provincial tax	0 2 0	0 2 0	0 2 0	0 2 0	0 2 0
Sale price	1 3 7	1 4 1	1 4 9	1 5 4	1 5 11
Petrol price, past 3 years' average	1 4 7	1 6 0	1 7 0	1 8 0	1 8 0

As the percentage of Power Alcohol in Mixture A is much smaller of the two, it would be necessary to leave the mixing and the subsequent distribution of the mixtures in the hands of the existing oil distributing companies. Therefore the price of Power Alcohol for all practical purposes of this scheme should be reckoned, delivered at the various mixing Depots located at Ports or in the interior. Table IV above shows that we are in a position to market Power Alcohol in the said five provinces at prices lower than Petrol, when averaged over last three years. Recently, however, due to rate war with "Caltex", Petrol prices at Calcutta has dropped to Re.1-2. a gallon and it may still go down to the level of Bombay where due to competition from Russian Petrol, its price stayed at 15 annas a gallon for about 4 years but recently it has again come up to Re.1-2 a gallon. Under the present scheme, however, we are in a position to market Power Alcohol in Madras and Bombay Presidencies at Re.1-2-6 and Re.1-3 a gallon respectively, delivered at their Port mixing depots.

Power Alcohol sold even at a little higher price for mixing purposes will not make appreciable difference in the ultimate price of mixture. This point is properly analysed in Table V below :

TABLE V

—	Petrol	Power Alcohol	10 per cent.	15 per cent.	20 per cent.	25 per cent.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I	1 0 0	1 4 0	1 0 4-8	1 0 7-2	1 0 8-6	1 1 0
	1 0 0	1 8 0	1 0 9-6	1 1 2-4	1 1 7-2	1 2 0
	1 0 0	1 12 0	1 1 2-4	1 1 9-6	1 2 4-8	1 3 0
II	1 2 0	1 4 0	1 2 2-4	1 2 3-6	1 2 4-8	1 2 6
	1 2 0	1 8 0	1 2 7-2	1 2 9	1 3 2-4	1 3 6
	1 2 0	1 12 0	2 11-5	1 3 6	1 4 0	1 4 6
III	1 4 0	1 4 0	1 4 0	1 4 0	1 4 0	1 4 0
	1 4 0	1 8 0	1 4 4-8	1 4 7-2	1 4 9-6	1 5 0
	1 4 0	1 12 0	1 4 9-6	1 5 2-4	1 5 7-2	1 6 0
IV	1 6 0	1 4 0	1 5 9-6	1 5 8-4	1 5 7-2	1 5 6
	1 6 0	1 8 0	1 6 2-4	1 6 3-6	1 6 4-8	1 6 8
	1 6 0	1 12 0	1 6 6-5	1 6 10-8	1 7 2-4	1 7 6

Again the price of Power Alcohol should not be governed by the market price of Petrol which is largely controlled by the oil companies. Its price on the other hand should be regulated by the agricultural interests affected and be left to the authority of the Government Alcohol Board who will take into consideration various economic and national factors when fixing the price of Power Alcohol. The price however, may include a charge of 2 annas a gallon as Provincial excise duty, which at the completion of five-year plan will yield an annual revenue of Rs. 75 lakhs distributed amongst different provinces in proportion to their Power Alcohol consumption. This excise duty, however, should not be mixed up with the molasses and Petrol cess stated in paragraph 12; while the former will contribute towards provincial finances, the latter on the other hand shall provide funds for the development and maintenance of the Power Alcohol Industry.

Figures contained in Table IV and Table V show that the manufacture and marketing of Power Alcohol is an economic feasibility. Given a fair chance the proposed scheme guarantees to supply to the consuming public, a national Fuel, at price, no higher than the Petrol price when averaged for the last three years. While affording substantial relief to the Sugar Industry, Power Alcohol will go a long way in stabilizing Petrol prices throughout India, thus restricting the monopolistic tendencies of the Oil Companies. All this will be made possible by a suitable legislation for compulsory mixing of Power Alcohol with Petrol and development of its trade as compatible with the national interests.

18. *Capital Investment*—The proposed central Distillery with a daily capacity of 24,000 imperial gallons of Power Alcohol, inclusive of all machinery, Power Plant, Buildings completely installed would cost

approximately Rs.30 lakhs. Taking 333 working days in a year, production will amount to 8 million gallons and allowing only half an anna a gallon as net profit the annual minimum return will amount, to Rs.2.5 lakhs or 8.3 per cent. on the capital investment. This, however, does not include any profit that will accrue from the recovery of fertilizers, dry ice, and from the disposal of yeast products. Recovery of by-products is treated separately in Part III and would yield higher returns on the investment. The business of manufacturing Power Alcohol will be organized as a Joint Stock Company and the Provincial Governments concerned shall guarantee for a period of 5 years a return of 4 per cent. on the total share capital invested.

For the marketing of Power Alcohol and other Alcohol products a separate organization to do the transport and selling would be necessary. This company will be a subsidiary concern but governed by the same Board of Directors and guided by All-India Power Alcohol Board. The company being assured of business shall not stand in need of any Government subsidy or guarantee on the capital lay-out. Most of its capital investment will be utilized in the purchase of steam boats, tankers, Alcohol trucks and in organizing the sale and distributing of straight Power Alcohol. This business would require a capital lay out of Rs.25 lakhs yielding a minimum return of 15 per cent.

19. *Summary*—My conclusions and recommendations are summarized below—

(1) In the year 1936-37 Indian production of molasses amounted to 550,000 tons of which 350,000 tons were available as surplus. Average price realized was 1 anna 6 pies a maund while the proposed scheme assures a minimum price of 4 annas a maund thus benefiting the sugar industry and the cane-grower to the extent of Rs.23 lakhs a year.

(2) In five years' time the scheme is capable of replacing 38 million gallons of Petrol and 22 million gallons of kerosene, with Power Alcohol. To start with, the Sonapore Unit will manufacture 8 million gallons of Power Alcohol consuming 140,000 tons molasses annually.

(3) A judicious mixture of Power Alcohol, up to 25 per cent. with Petrol makes a better fuel for automobiles, requiring no change in the adjustment of the Engine or Carburettor. A 50—50 mixture will burn satisfactorily in motor lorries and buses. Straight Power Alcohol can be used in certain type of engines, tractors and other agricultural and mining machinery.

(4) Power Alcohol, manufactured by this Azeotropic process, will cost 4 annas and 3 pies per Imperial Gallon. Of this 2 annas and 9 pies represents the cost of molasses at 6 annas a maund and the balance 1 anna and 6 pies as the manufacturing charge. Allowing on a gallon 6 pies as profit, 8 pies as denaturing charge and 10 annas as excise, Power Alcohol can be delivered to any mixing depot in India at an average price of Re.1-1-6 a gallon. The combined charge for mixing, distributing and transit loss will come to 2 annas 6 pies a gallon, thus bringing the average retail price, on all-India basis, to Re.1-4 against Re.1-7 of Petrol when averaged over the past three years.

(5) Power Alcohol can compete with Petrol and Kerosene without a subsidy from the Government. Necessary legislation, however, must be enacted for the compulsory mixture of Power Alcohol with Petrol. Besides paying its own establishment charges, the Industry can become a good

source for raising Provincial revenues as slight increase in Power Alcohol price will not affect appreciably the price of mixture.

(6) Alcohol Industry like many other agricultural industries such as sugar, textile, jute, vegetable oils, etc. is an important key industry especially in the chemical field and it must be developed on all India basis. The two Provinces most suitable for its establishment are United Provinces and Bihar. Sonopore locality satisfies most of the requirements of a Central Distillery.

(7) Sonopore Distillery with an annual capacity of 8 million gallons of Power Alcohol will cost Rs.30 lakhs, yielding a minimum return of 8.3 per cent. The investing public should be protected by the Provincial Government by exercising price control and guaranteeing 4 per cent. on the capital investment for five years.

(8) A subsidiary transport and distributing company shall be organized to carry Power Alcohol from the Distillery to all storage and mixing Depots which are owned by the existing Petroleum companies. A flat rate of 2 annas and 1 pie a gallon will be paid for this service. This company would require a capital layout of Rs.25 lakhs yielding a return of 15 per cent. Mixing and distributing of mixture to service pumps will be left to the existing Petrol distributing companies allowing them a fixed charge of 2 annas and 6 pies a gallon inclusive of 1 anna as retail commission.

(9) The denaturant used will be either 5 per cent. Benzol or 2½ per cent. wood Naphtha by volume, thus the denaturing charge will come to 8 pies a gallon. The use of such denaturants will result in the establishment of Benzol Recovery and Wood Distillation Plants.

(10) On the completion of five years plan, we would be consuming 60 million gallons of Power Alcohol instead of imported Petrol or Kerosene Oil, thus saving annually Rs.250 lakhs from going abroad. This will also make possible the manufacture of Industrial Alcohol Chemicals and Fertilizers as outlined in Part II and III of this minority report. The Alcohol industry will primarily benefit the Indian Agriculture, partly solve the question of National Fuel and give substantial relief to the problem of unemployment.

PARTS II and III

UTILIZATION OF MOLASSES

1. With the fast development of Indian Sugar Industry, the disposal of molasses has become a problem, and with its increased production every year and no outlet for its consumption, it is having serious repercussions on the Industry. The most popular method, which at the same time is free from technical difficulties, is to ferment molasses into Alcohol, and use the same as Motor Fuel. Most of the countries that lack petroleum resources, use Power Alcohol as a substitute. This however, is only possible under Government protection and control and there is no reason why the Government of India should not pass such a legislation, providing compulsory mixing of Alcohol with the imported Petrol.

2. Besides the Power Alcohol question, various other proposals have been advanced from different quarters, in the past five years, suggesting the use of molasses as Fertilizer, Cattle-Food, Fuel, Road Surfacing, etc., but none of these has met with any appreciable measure of success in solving the molasses problem. The proposed scheme will be a new departure in India, as far as the treatment of molasses is concerned. It calls forth immediate establishment, either in United Provinces or Bihar, of a highly technical and specialized Alcohol-Chemical Industry, on lines as it is being practised today in many countries abroad. This scheme has nothing to do with the Power Alcohol, on the other hand, after fermenting molasses into Alcohol, it destroys Alcohol converting the same into commercial products that have a ready market in India.

3. In the Western Countries, Alcohol is looked upon as an Agricultural product, as it is chiefly manufactured from potatoes, cereals, molasses, etc. In the interest of Indian Agriculture, it is essential that new uses should be found for molasses, which is an important large scale by-product of the second biggest national industry. If such uses have an economic foundation and will thereby bring an extra return to the Industrialist it is only reasonable to expect that he will pass on a part of these returns to the cane grower. Industrial Alcohol will be produced from Molasses for use in various small scale industries and in the manufacture of other Alcohol products. The by-products of an Industrial Distillery such as Carbon Dioxide Gas, Cattle Food, Potash and Ammonia Fertilizers, etc. will also be of great benefit to the Indian Agriculture.

4. As Molasses form the basic raw material of this scheme consideration of its supply is of primary importance; it is estimated that factory sugar production for the year 1936-37 exceeded 1,000,000 tons, and molasses obtained amounted to nearly 450,000 tons. Of this figure, United Provinces, is responsible to the extent of 55 per cent. and Bihar 30 per cent. This figure does not include molasses from Khandsars. Allowing 100,000 tons of Molasses for consumption by other industries, we will have about 350,000 tons left over as surplus, which means a regular supply of 1,000 tons a day for a plant operating 350 days in a year. The proposed plant, however, will have a daily capacity of mashing 100 tons of Molasses only, as it is intended to prove that such an undertaking is commercially feasible.

5. *Scheme*—This Scheme calls for the controlled fermentation of Molasses into commercial Alcohols. These Alcohols in turn will be converted

into commercial Solvents and Plasticizers which will be used in the manufacture of such Alcohol Products that have a ready market in India. Table I below gives the annual import figures of commercial products, which either contain Alcohol or use Alcohol in some form or other in their process of manufacture, or they represent as by-products of the Alcohol Industry. Table I gives average import figures taken over the past five years from 1930 to 1935 :

TABLE I

No.	Product	Value
		Rs.
1	Acetic acid	1,40,000
2	Artificial leather	4,40,000
3	Artificial silk	3,40,00,000
4	Chemical manures	55,19,000
5	Denatured spirits	8,45,000
6	Nitrocellulose lacquers	14,64,000
7	Polishes of all kinds	21,07,000
8	Wines and liquore	1,80,00,000
	Total	6,25,00,000

All the products listed in Table I above show a steady increase in their early consumption. And if the Indian Alcohol and allied chemical industries be properly developed, most of these products can be profitably manufactured from Indian raw materials in India. The present Scheme makes a moderate start in this direction and proposes to manufacture.

(1) Commercial Alcohols, (2) Commercial Solvents, (3) Spirit Varnishes, (4) Nitro Cellulose Lacquers, (5) Artificial leather, (6) Recovery of by-products like Carbon Dioxide Gas and Fertilizers. These products of Alcohol are dealt with separately both from technical and economic viewpoint.

6. *Commercial Alcohol*—In most Western countries, Industrial Ethyl Alcohol ranks first in quantity and value of production of all organic chemicals. It is the basic raw material in the chemical and process industries and finds application in a multitude of products. For instance the total available capacity in the United States of America for producing industrial Alcohol is over 200 Million Gallons, manufactured mainly from imported Molasses and costing on average Re.1 per maund of Molasses. The methods of production and the controls exercised over mechanical, chemical and biological processes are highly perfected. By our mashing 100 tons of Molasses daily, Alcohol production of 95 per cent. strength will amount to 60,000 imperial gallons. As the Fuel-oil will have to be completely recovered for solvent purposes, about half of the entire Alcohol production can be made into Rectified Spirits of finest quality.

7. The over-all cost of converting Molasses into industrial Alcohol will be annas 4 per imperial gallon of 95 per cent. strength. This includes all manufacturing charges; such as: interest, depreciation, insurance, labour, power, chemicals and overhead. The cost of denaturing, when necessary, will come to 9 pies a gallon. The cost of Molasses, in addition to the conversion costs per gallon of Alcohol, will vary the market price of Molasses.

Table II, gives the conversion cost plus the Molasses cost for producing a gallon of Alcohol, with the price of Molasses ranging from 2 annas to Re.1 per maund of 82 lb.

- TABLE III

Molasses price per maund	Alcohol cost per gallon
Rs. a. p.	Rs. a. p.
0 2 0	0 5 0
0 4 0	0 5 9
0 6 0	0 6 8
0 8 0	0 7 8
0 10 0	0 8 6
0 12 0	0 9 3
0 14 0	0 10 3
1 0 0	0 11 2

The present market price of Molasses is 1 anna per maund and allowing another anna per maund to cover the transport and storage charges, the cost per maund when delivered to the proposed Plant Site will not exceed 2 annas per maund. For our calculation purposes, however, we are taking the Molasses cost at 4 annas per maund. Figured on this bases, the overall cost of manufacturing a gallon of Alcohol of 95 per cent. strength, will come to 5 annas and 9 pies which would be the lowest price on record in the world. This is made possible, under the proposed scheme, because of cheap molasses, cheap fuel, and by installing the latest design large Distilling Apparatus, which will be most efficient in performance.

8. Reliable figures for the total consumption of Alcohol in India are not available. There are in operation five distilleries in the United Provinces, five in the Province of Bihar and two distilleries in the Central Provinces, and quite a number of small distilleries spread over other Provinces. The Excise Department, indicates a figure of 10,000 gallons of alcohol a day in the form of country liquors for British India alone. In view of the prohibition movement recently advocated by the Provincial Governments the present demand by the Excise Department must be ignored. The present scheme calls forth the diversion of Molasses-Alcohol into commercial products. It is estimated that over 15,000 gallons of industrial Alcohol a day is consumed by small industries throughout India. And this amount seems negligible when compared to 500,000 gallons consumed daily in the U. S. A. for industrial purposes alone. The imports of Methylated Spirits into India though on decline, still amount to over 100 gallons a day. In the face of these facts, our daily production of 600 gallons of industrial Alcohol could be comfortably absorbed by the Indian market, especially when our cost price amounts to 5 annas and 9 pies per gallon, against the present market price of Re.1-1 per gallon for Rectified Spirits and 10 annas per gallon for the methylated spirit. According to the present scheme, however, most of the Alcohol produced will be diverted into commercial products, which would give better returns per unit sale. And to meet trade requirements for the special quality rectified spirits or denatured spirits, it is intended to dispose of daily some 2,000 gallons of spirits at 9 annas per gallon, thus yielding a net profit of Rs.300 a day on this sale alone.

9. *Alcohol cost analysis*—Our basic raw material is Molasses, one maund of which will cost us 4 annas only and will produce 2.25 imperial gallons of 95 per cent. Alcohol. This means that every gallon of Alcohol made will consume Molasses worth 1 anna and 9 pies. The over-all conversion costs, as stated above, will not exceed 4 annas per gallon, thus bringing the total cost of Alcohol to 5 annas and 9 pies per gallon. The cost of denaturant and other denaturing charges will come to 9 pies per gallon, and this cost has to be incurred, in case the produce has to be sold in the market as denatured spirit, otherwise the net Alcohol cost when used in our own process industries for manufacturing various Alcohol products, will remain at 5 annas and 9 pies a gallon. There can be no question about the availability and cheapness of Molasses, but it may be asked, how the conversion cost of 4 annas per gallon was arrived at. A modern distillery, complete in every respect and capable of treating 100 tons of Molasses a day will cost nearly rupees ten lakhs. In figuring out the conversion costs we must take into account the charges like interest, depreciation and insurance on the capital invested, and to consider other items like labour, power, chemicals, stores and finally the overhead charges. Ordinarily no interest is charged on the paid up capital investment, plant depreciation in case of a distillery is rather small, while insurance rate is slightly higher. In our case we are allowing 6 per cent. 4 per cent. and 2 per cent. respectively on a total investment of rupees ten lakhs which amounts to Rs.1,20,000 a year on an annual production of 18 lakhs gallons of Alcohol. This charge comes to 1 anna per gallon. The daily wages bill consisting of 80 technical and skilled help, will amount to Rs.200 or Rs.75,000 a year. Thus labour charges comes to 8 pies per gallon of Alcohol made; while the overhead charge, which in other words means executive labour, will absorb another sum of Rs.200 a day, or 8 pies a gallon. Regarding power costs it may be mentioned that coal fired steam power plant will be installed, and our average steam consumption will be 25 lb. per gallon of Alcohol made. Our steam generation cost will come to Re.1, per 1,000 lb; thus making the power charge come to 5 pies per gallon of Alcohol made. Taking into consideration the power losses and consumption in other departments of the distillery, it will take another 3 pies of power for every gallon of Alcohol made, thus bringing the total power charge to 8 pies per gallon of Alcohol. Consumption of chemicals and general stores in a year's time will come to Rs.56,000, thus adding another charge of 6 pies to the gallon. Table III below summarizes the over-all cost of making a gallon of Alcohol of 95 per cent. strength, in a distillery having an annual capacity of turning out 18 lakhs gallons of such Alcohol. Molasses cost is taken at 4 annas per maund of 82 lb.

TABLE III

No.	Item	Annual charge	Charge per gallon
		Rs.	Rs. p. p.
A	Cane molasses	1,88,008	0 1 0
B	Int., dep., and Insu.	1,20,000	0 1 0
C	Labour charges	75,000	0 0 8
D	Power costs	75,000	0 0 8
E	Chemicals and stores	56,000	0 0 6
F	Overhead charges	75,000	0 0 8
G	Alcohol losses, etc. .. .. .	..	0 0 8
	Total	5,89,000	0 5 9

10. *Commercial Solvents*—In the manufacture of Nitrocellulose Lacquers, Solvents play an important part. The question of rate of drying, flow and gloss and the fine characteristics are vital to Lacquers and these properties can be incorporated by the selective use of a proper blending of solvents which are classified by the trade according to their boiling points. To start with we will be manufacturing a few of the important Alcohol and Ester type of solvents such as: Ethyl Ether: Anhydrous Ethyl Alcohol; Amyl Alcohol; Amyl Acetate; Ethyl Acetate; Butyl Alcohol, Butyl Acetate, Ethyl Lactate, Ethyl Acetoacetate; Diethyl Oxalate; Diethyl Phthalate; Dibutyl Phthalate and Diamyl Phthalate. This list covers a wide range of boiling points from below 100°C to above 300°C, and will serve most of our requirements for the manufacture of high class Nitrocellulose Lacquers, varnishes and various collodion solutions. In addition to the above active solvents and plasticizers there are the so-called diluents. The hydrocarbons Benzol, Toluol and Xylol are the most important materials in this class. They are of great value in the blending and compounding of the resin solution with those of nitrocellulose. The presence of moisture is fatal to a Lacquer, therefore the Solvents manufactured under the proposed scheme will be Anhydrous. Absolute Alcohol will be produced by employing the Azeotropic process of distillation.

11. The proposed scheme converts Alcohol into such commercial products that will prove more remunerative than selling it as industrial Alcohol. Table IV illustrates the difference between the price of Alcohol and that of the price of Solvents made therefrom. Price quotations are for the American products f.o.b. New York, reduced to per lb. basis in Indian currency. The last column gives our cost prices for the same products under the proposed scheme:

TABLE IV

No.	Solvent	N. Y. price		Our cost price	
		Rs.	s. p.	Rs.	s. p.
1	Ethyl Alcohol, 95 per cent.	0	2 0	0	0 10
2	Absolute Alcohol	0	2 9	0	1 9
3	Amyl Alcohol	0	5 3	0	4 0
4	Fusel-oil	0	7 0	0	6 0
5	Acetic acid	0	3 6	0	3 0
6	Ethyl Acetate	0	3 3	0	2 6

Foreign manufactures of Cellulose Lacquers buy their solvents and other raw materials from the outside markets, and they are paying more for their solvent requirements than it will cost us to manufacture under the present scheme, as is evident from Table IV above. On the other hand we will be paying a bit more for the important nitrocelluloses and plasticizers. Still our cost of producing a gallon of finished Lacquers will be less than the cost of any foreign manufacture. This is because Alcohol our basic raw material will cost us nearly half of what it does the foreign manufacturer. The Solvents produced will constitute our main raw materials for the manufacture of Lacquers, Varnishes, Artificial Leather, etc. which at present are entirely imported into India. Therefore, it is proposed to convert the balance of 4,000 gallons of 95 per cent. Alcohol into Commercial Solvents. As there exists good demand for the Commercial Solvents about 1,000 gallons will be sold as solvent which will be equivalent to 1,600 gallons of 95 per cent. Alcohol.

Making 4 annas on a gallon of solvent, our daily profit from the sale of solvents will amount to Rs.400. The balance of the solvents, nearly 1,500 gallons and equivalent to 2,400 gallons of 95 per cent. Alcohol, will be used in the manufacture of Lacquers, Varnishes, etc. etc.

12. NITROCELLULOSE LACQUERS—The use of Cellulose Lacquers began about the middle of last century, but only limited progress was made because of the scarcity, price and nature of available solvents. The real progress of the Lacquers Industry came with the introduction of cheap and ample supply of high boiling Ester solvents, and at the same time development and improvement in the manufacture of low viscosity nitrocelluloses. The use of Lacquers is increasing rapidly and they are gradually replacing the old type of paints and varnishes. In U. S. A. alone the Lacquers sales in the year 1936 reached fifty million gallons. The entire automobile, aeroplane, shipping and railway industries of the world are being finished today with nitrocellulose lacquers because of their quick drying, wide adaptability, attractiveness and long life of their films. Some of the commercial articles on which Nitrocellulose Lacquers and Varnishes are used as finishes are: Artificial Flowers, Artificial Limbs, Automobiles, Baskets, Bathroom Fixtures, Bobbins for spinning, Book ends, Brass goods, Brush handles, Buttons, Cameras, Celluloid articles, Clocks and dials, Dolls, Electric fans, Electric goods, Fibre articles, Fire extinguishers, Fishing lines; Fixtures, gas and electric, Floors, Furniture, Games, Gas mantles, Glass shades Hardware, all kinds, Jewellery, Lamps, Linoleum, Loud speakers, Machinery metal furniture, Metal work, all kinds, Musical instruments, Name plates, Novelties, Oil Cans, Optical instrument Pencils, Radio, Pen-holders, Pianos; Picture frames, Pumps, Radio goods and cabinets, Radio Panels, Scientific instruments, Shoe eyelets, Silverware, Steering wheels, Steam gauges, Switch plates, Thermo bottles, Toiler seats and tanks, Tools, Toys, Trunk Hardware; Type-writers, Umbrellas, Vacuum cleaners; Walls of rooms, Washing machines, Window shades, Wooden novelties, etc. etc. From the above list an idea can be formed, how the establishment of Nitrocellulose Lacquer industry in India would help development of so many other industries and to manufacture quality articles with finishes as attractive as seen on the imported articles. It would be the chief concern of the Research Department of the proposed undertaking to give all technical assistance and every facility, free of charge, to the users of our Lacquers, with a view to bring theirs products out in excellent finishes and at prices that will defy foreign competition.

13. In the manufacture of nitrocellulose lacquers, the low viscosity nitro-cotton plays the most important part, and this material has to be imported from firms that specialize in its manufacture on large scale. The finished lacquers contain on the average 11 per cent. by weight of nitrocellulose representing in value nearly 25 per cent. of the total value of the finished lacquer. In the handling and storage of nitrocellulose, the same precautions are required as are necessary for other inflammable products as Petrol, Alcohol, Celluloid and many other articles in common and daily use.

As shipped it contains 30 per cent. of denatured Alcohol and in such condition presents no greater hazard than Alcohol. Transportation by rail or steamer of wet nitrocellulose is allowed by all the foreign countries who classify the materials as an "Inflammable Liquid".

14. The Consumption figures for the Paint and Varnish products in India are not available, but considering the large number of paint manufacturing establishments, it is taken that the consumption is fairly large and on

steady increase. Besides our home production, the annual imports of lacquers, varnishes and polishes amount to over Rs.35 lakhs. The imported lacquers like Duco, Valspar, etc., which will be our chief competitors, are being sold today at the Indian Ports at Rs.18 per gallon. Our cost price for the same quality Lacquer, inclusive of all charges and packing will not exceed Rs.10 per gallon and we propose to sell the same at Rs.11 per gallon ex-factory and leaving balance of Rs.7 per gallon to take care of the marketing charges. Provision is made to manufacture 800 gallons of finished lacquers to start with, thus yielding us an income of Rs.800 a day on this account.

15. VARNISHES: Spirit Varnishes like Copal and French tye are in good demand in the Indian market, due to their comparative cheapness, easy applicability and quick drying, although the film is not lasting. The basic raw materials necessary for their manufacture are: Anhydrous Alcohol, Turpentine, Shellac, etc., which are available in India abundantly and cheaply. Therefore, quality varnishes will be manufactured both for the Indian market, as well as, for export purposes. Our cost of making a gallon of varnish will not exceed Rs.2 per gallon, against the present market price of Rs.3-8 a gallon at the Ports. On the varnish account we will be reserving annas 8 per gallon as our share of the profit, thus on the sale of 500 gallons of Varnish a day, we will have a net income of Rs.250 a day.

ARTIFICIAL LEATHER: Mixture of Anhydrous Alcohol, Ether and Ester Solvents are largely used in the manufacture of Artificial Leather. And the present scheme having full facilities of a complete lacquer manufacturing plant, it will be comparatively easier to prepare any specified collodion solution or Dopes for applying to a textile surface instead of a house wall or furniture. The required cloth will be purchased from one of the Indian Textile Mills, and by installing a suitable plant, the cloth impregnation, calendering, embossing, drying and finishing will be done simultaneously and by a continuous process. The import figures of Artificial Leather for the past two years are:

Year	Square yards	Value in Rs.
1934-35	726,265	5,39,418
1935-36	687,719	4,93,266

There are other articles like Book-binding cloth and oil-cloth for which import figures are not available, and they are all manufactured by a similar process that imports a waterproof coating to the surface. The proposed leather plant will have a capacity of turning out finished cloth at the rate of 80 linear yards per working hour, and taking on the average 20 working hours day, our daily production will approximate 1,600 yards. The present market price of average quality leather cloth is Re.1-4 per yard, while our manufacturing cost will come to annas 14 a yard only. We propose to sell our leather cloth at Re.1-2 a yard leaving us a profit of annas 4 a yard, or Rs.400 per working day.

16. CARBON DIOXIDE: For every 180 parts of sugar present in Molasses, while being fermented into alcohol, some 80 parts of Carbon Dioxide Gas are produced or a theoretical yield of 48.8 per cent. Taking fermentable sugar as 50 per cent. on the weight of Molasses and assuming Gas recovery at 70 per cent. total daily production of commercial Gas either as Liquid or as Dry Ice will amount to 17 tons a day when the

Distillery is mashing 100 tons of Molasses daily. Allowing for stoppages in the Compressor Plant and other incidental shut downs our net daily production of Carbon Dioxide Gas mostly in the form of Dry Ice will average 15 tons, under the proposed scheme. This valuable Gas is by-product of this scheme and its total cost to us will be its purification and compression charges only.

17. Carbon Dioxide Gas is extensively used in Industry and Agriculture. Its main use lies in commercial refrigeration the artificial refrigeration (Dry Ice), now taking the place of old mechanical refrigeration (Ice from water). Carbon Dioxide Gas, when compressed to about 1,000 pounds per square inch at about 60°F, liquifies. In the commercial manufacture of Dry Ice, the liquified gas is allowed to expand through a patented nozzle into large tanks, and the snow produced therein is hydraulically compressed into hard blocks before being exposed to the air, thus forming the Dry Ice. It is snowy white, weighing about 80 pounds to the cubic foot, and has a temperature of 114°F below zero, i.e. 146 degrees colder than water ice. Dry ice contains roughly twice as much refrigeration pound for pound as ordinary ice, which absorbs only 144 B. T. U. per pound at 32°F. Dry ice, as refrigerant possesses the following advantages to effect its higher cost as compared with water ice :—

- (1) Insulating effect of gas evaporated, permitting slower rate of heat absorption.
- (2) High heat absorptive value per unit of weight.
- (3) Lower temperature as a factor of safety in shipping perishable goods like fruits, vegetable and dairy products.
- (4) Evaporation to a dry gas which reduces maintenance of cars and containers, and prevents heat leakage.
- (5) Carbon Dioxide itself has a slight preservative effect on food stuffs, thus the goods keep longer with its use.
- (6) Light-weight packages of butter, cheese, eggs, ice-cream, confectionary, fruits and vegetables, etc. for shipment by mail or express to cover long distances.
- (7) Ideal refrigerant for the ships, railways and cold storage warehouse. as it will avoid the high cost of mechanical installation and its inefficient operation.
- (8) Dry Ice freezes quick, makes possible shipment and storage of frozen products, and used as local anaesthetic.
- (9) Replacing the liquid gas in the carbonated beverage industry. This will obviate the use of heavy steel cylinders. The use of Dry ice will also eliminate the danger of bursting cylinders and save the capital investment.
- (10) Dry Ice has a large field for use in aarious fire extinguishing apparatus.

18. It is not possible to over-emphasize the commercial importance of Dry Ice. India being a tropical and agricultural country, the development of Dry Ice Industry will play an important roll in the general economics of the country. For instance in the year 1925, when the writer took up this work, then U.S.A. produced only half a ton of Dry Ice per day, and the development was so fast that the average daily production for the year 1936 amounted to 350 tons. Nearly 80 per cent. of the former liquid gas has been changed over to Dry Ice. For the first time in India and in the course of last six months only four plants with an aggregate capacity of 15 ton a day are under construction. Prior to this liquid gas was manufactured in various

small plants in India employing the Coke Process and these plants will soon go out of business. Under the proposed scheme, total dry ice available for marketing will be 15 tons per working day. Two compressors of the three-stage inter-cooled type, each with a rated capacity of 1,000 lb. per hour will be installed. The gas being free and investment and other charges, per ton of Dry Ice, being the minimum, our manufacturing cost per ton of Dry Ice will come to Rs.60 per ton or 5 pies per pound, and we propose to sell the Dry Ice at Rs.85 per ton or 7 pies per pound, thus leaving us a net profit of Rs.25 per ton or Rs.375 a day. At present Dry Ice is being sold at annas 3 per pound or Rs.420 a ton. One new Dry Ice company registered in September, 1937, propose to sell at Rs.210 per ton while its manufacturing cost comes to Rs.85 per ton. It is interesting to note that our sale price per ton will be the same if not lower, than the cost price per ton of any Dry Ice establishment in India. This means that others have to wait till we are sold out. On the way industry holds goods future for the investor.

19. **BAKER'S YEAST:** The manufacture of Baker's Yeast and other yeast products constitute a major industry in most western countries, where yeast is employed in the making of daily bread. The Annual sales of one yeast company in the U. S. A. amounted to over Rs.20 crores, showing a net profit of 25 per cent. During the course of fermentation, there is considerable growth of Yeast most of which settles down at the bottom of the fermenters. Using 'A' yeast we will be producing daily some 2,000 gallons of fermenter settlings, each gallon weighing about $9\frac{1}{2}$ pounds, and having a moisture content of 75 per cent. Our daily production of dried Yeast will amount to nearly 5,000 pounds which is generally wasted by the distilleries. After secondary fermentation these yeast settlings can be filter-passed and moisture content reduced to 50 per cent. As such it is universally sold for bread baking, and also marketed in small tables wrapped in the foils for table use. It is very rich in proteins and contains on the average 4.5 per cent. Nitrogen. For the first year or so, we are not counting on any returns from this product, but we do expect that the proceeds realized from small sales made either as Baker's Yeast or Cattle Fodder, will more than compensate our recovery costs and at the same time provide funds for the experimental and publicity work for developing the yeast market in India.

20. **POTASH RECOVERY:** Another important feature of this scheme would be the recovery of Potassium Salts and Ammonium Sulphate fertilizers as by-products which in other words would mean putting back into soil, what has been taken out by the cane crop. Countries that lack natural potash resources develop their latent supplies of by-products Potash, and today the American by-product Potash amounting to 500,000 tons a year is largely supplied from the Cement, Alcohol and Iron industries. Some three industries are now well established in India and India if she chooses could become independent of her potash requirements. According to the proposed scheme the residual distillery waste, known as slop, is concentrated to 50 per cent solids. The thick slop is sprayed into a specially designed combustion chamber, where it is allowed to burn. The ash known as vegetable potash is collected, ground and made ready for use. Potash thus recovered, is a dark material of fine texture, carrying approximately 35 per cent. of K_2O in the form of water soluble potassium salts. There is also present 1.5 per cent. of available P_2O_5 and 6.36 per cent N_2 . Again the field experiments have conclusively proved their beneficial effect on the crop growth. As stated in early part of this report, the surplus amount of molasses awaiting economic disposal, approximate 3,50,000 tons annually containing on the average

3.0 per cent. potash, as K_2O , and 0.2 per cent. Nitrogen as N_2 of which 60 per cent. of each amounting to 6,000 tons of K_2O and 400 tons of N_2 can be recovered in commercial practice. When expressed in terms of fertilizer salts, these amount to 17,000 tons of potassium salts and 2,000 tons of ammonium sulphate, recoverable every year, representing an aggregate value of Rs.16 lakhs worth of fertilizers. The annual imports of chemical manures, even at this low stage of our Agricultural development amount to over Rs.55 lakhs. The recovery of fertilizers as outlined above, under the proposed scheme will be taken up as soon as the capacity of the plant will be increased to 200 tons of molasses a day, as below this it will not be economical.

21. FINAL PRODUCTS—Table V below summarizes our list of products as described above and made from 100 tons of molasses per 24 hours. The allocation is only approximate, and the plant design allows flexibility in its various units to meet market requirements. Column 2 gives the unit cost price calculated on lines as detailed in case of alcohol in paragraph 9:

TABLE V

No.	Product	Gallon/Day	Cost/Gal.	Sale/Gal.	Market price
			Rs. s. p.	Rs. s. p.	Rs. s. p.
1	Rectified spirits.. ..	2,000	0 6 6	0 9 0	1 0 0
2	Comm. solvents.. ..	1,000	0 13 0	1 2 0	2 0 0
3	Spt. varnishes	500	2 0 0	2 8 0	3 8 0
4	N. C. lacquers	800	10 0 0	11 0 0	18 0 0
5	Artificial leather, yards ..	1,600	0 14 0	1 2 0	1 8 0
6	Dry ice	1 ton	0 0 5	0 1 0	0 2 0

The total cost of making the above product amounts to Rs.11,000 a day and the same will be sold to trade, ex-our works, for Rs.13,500, thus leaving us a net profit of Rs.2,500 a day, and according to the current market prices, the above products are worth Rs.25,000—nearly 44 per cent. higher than our proposed sale prices. Such plants work three shifts of 8 hours each, and continue working throughout the year with occasional stops for repairs. Taking 300 as actual working days in a year, the annual profit would amount to Rs.7,50,000 on capital investment of Rs.25,00,000 only.

22. CAPITAL INVESTMENT—Capital distribution as given in Table VI, below is only approximate. There will be certain departmental adjustments, but the total investment in plant will not exceed Rs.20 lakhs. The amount allotted to each department covers everything like cost of machinery, plant, buildings, installation charges, etc. Besides capital investment of Rs.20 lakhs another sum of Rs.5 lakhs will be required as working capital:

TABLE VI

No.	Department					Amount
						Rs.
1	Power plant	..	..	..	..	3,50,000
2	Water service	..	..	..	..	50,000
3	Still-house	..	..	..	..	3,00,000

No.	Department	Amount
		Rs.
4	Anhydrous Alcohol Unit	1,00,000
5	Fermentor buildings	1,00,000
6	Ester building	1,50,000
7	Ether plant	50,000
8	Vinegar plant	50,000 ⁺
9	Dry ice plant	1,80,000
10	Lacquer manufacturing plant	1,25,000
11	Art leather plant	1,20,000
12	Molasses and product storage	1,25,000
13	Drums and packing department	50,000
14	Research and control laboratory	50,000
15	Mechanical Workshop	50,000
16	Lands, building, railway siding	1,50,000
	Total	20,00,000

23. FINANCE AND MANAGEMENT—Briefly, the essentials to be considered in launching a new enterprise are:

- A. The Undertaking itself.
- B. The Management.
- C. The Finance.

A. There is no question about the urgency of the undertaking for the disposal of Molasses. It has become an all-India question, and every sugar factory, especially those situated in Bihar and United Provinces, would welcome to an extreme degree any enterprise that will convert their waste Molasses into valuable commercial commodities. The present manufacturing scheme though new to India, has long been established abroad on most profitable basis and there is nothing experimental about the scheme. The proposed Plant will be employing the latest design machinery equipment and process technique and will be under the charge of an expert who has long experience of the Industry in all its aspects. The same Expert, has been manufacturing abroad similar products, in a Chemical-Distillery nearly ten times the size of the proposed Plant, and has in his possession numerous technical reports, formula, manufacturing data and drawings on which the proposed scheme is based. The expert is also in close touch with the recent development this industry is making abroad. Therefore, the enterprise, as far as, its technical side is concerned, is a sound one. Again there will not arise any question of infringement of Patent rights over any of the equipment, or process employed under the proposed scheme. Regarding its commercial side, the survey shows, that there exists a good profitable market for the products, and it will be a boon to the consumers who will be paying 44 per cent. less than the present market prices. Again the availability of cheap molasses, fuel and absence of internal or foreign competition ensure continued success and expansion of the enterprise.

B. The Management and executive authority will rest with a Board of Directors consisting of 5 to 7 Directors. These Directors need not necessarily be heavy investors, but they must be men of vision, possessing industrial experience and commanding public confidence. It is, therefore, advisable that the Directors be selected carefully, because a properly selected

Board, is one of the best important assets with which a firm can supply itself. It will not only attract the required capital, but induce men of proven merits to join the organization, thus ensuring its success. Subject to the strict control and supervision of the Board, the actual work of the organization in all its departments will be carried on by a wholetime Managing Director, who will be assisted by four departmental heads in charge of (1), Production (2), Sales, (3) Purchases and (4) Research.

C. Total capital investment will be Rs.20 lakhs. It is realized that before the desired capital will be forthcoming certain requirements in the minds of prospective investors must be satisfied and the three elements that generally influence their decisions would be: (1) Income (2) Control and (3) Risk. The Scheme on careful analysis promises a return of at least 30 per cent. on total capital investment of Rs.25 lakhs of which Rs.5 lakhs is the working capital. If out of Rs.25 lakhs total issue, Rs.10 lakhs, be issued as preference stock at 6 per cent. fixed dividend the returns on the common stock issue will come up to 46 per cent. The entire management and business policy will be controlled by the investing public through a duly elected Board of Directors. And the scheme, being assured of the necessary technical skill, raw material and ready market for the products, the risks involved are reduced to minimum.

24. EMPLOYMENT—The present scheme, even in its moderate form will be directly responsible for daily employment of nearly 200 hands as permanent staff throughout the year, and indirectly will help as many more hands who will be engaged in the transport, storage and supply of Molasses, and quite a number in the sale and distribution of our finished products. Of the permanent staff of 200, nearly 100 will be graduates recruited from Indian Science and Engineering Colleges, another 50 will be skilled workers, and the remaining 50 will consist of unskilled labour. This being a chemical and highly specialised industry, it holds out good future for the employment of technical graduates and those with aptitude for industrial research work. This scheme has a vast scope for development and will ultimately lead to the establishment of several small scale industries as discussed above under industrial Alcohol Lacquers, thus helping the employment question considerably.

25. PROSPECTUS—The proposed Scheme consuming only one-tenth of the available molasses supply is only a small beginning to satisfy part of country's requirements of Alcohol Products. With the fast development of small chemical and pharmaceutical industries, it is certain, that soon after the successful operation of the proposed Plant, not only its own capacity will be increased to enable us to recover the valuable fertilizers but another plant, in somewhat modified form will be set up to serve the distant markets of India. Another large and staple industry that could be developed in India on profitable basis, which at the same time will consume large volume of industrial Alcohol would be the establishment of an Artificial Silk Factory. In the Chardonnet process of Artificial Silk making, nitro-cotton is dissolved in Alcohol-Ether mixture, and the solution is squirted through jets; while the latest type of Cellulose Acetate Silk known in the trade as "Celanese," is prepared by heating cotton with Acetic Anhydride, Acetic Acid and a catalyst. The annual imports of Artificial Silk into British India alone amount to over Rs.35 crores. Considering the magnitude of Alcohol Industry abroad and the large imports into India of Alcohol-bearing products, it will be no exag-

generation to state that within a few years, we will be able to solve our Molasses problem. Instead of wasting over 350,000 tons of Molasses a year, we will be converting them into commercial products, valued at Rs.5 crores, and this will be no small achievement in our national economy. Mention may be made, that the success of the prohibition movement will depend upon the successful solution of the molasses problem, because molasses will ferment despite the prohibition law, and one maund of molasses will give to the Bootlegger, 15 bottles of country liquor at practically no cost.

P. S. MAKER.

CAWNPORE :

The 1st June, 1938.

REGISTERED No. A388



T9(z).252.14E.
G9

10

Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

ALLAHABAD, SATURDAY, 16TH DECEMBER, 1939

PART VIII

Official Papers : Statement of Cotton Pressed ; Vital Statistics ; Seizures and Deaths ;
Crops and Weather Report ; Prices Current ; Notices and Advertisements. etc.

GOVERNMENT OF THE UNITED PROVINCES

No. 3713/XV—93-1939

EDUCATION DEPARTMENT

Dated Lucknow, 9th December, 1939

MISCELLANEOUS

The following report of the Legal Education Reforms Committee, United Provinces, is printed for general information :
[Copies of the report are available for sale at the Government Central Press, United Provinces, Allahabad.]

By order,
N. C. MEHTA,
Secretary.

Report of the United Provinces Legal Education Reform Committee

General

This committee was constituted by a resolution of the Local Government, dated the 16th February, 1937 (no. 4501/XVIII—95), in view of the following remarks made by the Unemployment (Sapru) Committee :

"(1) (i) The subject of legal education at the universities must receive greater attention than it has hitherto done, provision being made for adequate instruction in subjects, which have hitherto not received due attention.

(ii) A Council of Legal Education should be created consisting of the representatives of—

(i) the teachers of Law and Civics ;

(ii) some eminent lawyers whose function must be to promote higher legal education ;

(iii) some Judges.

(2) The course of study for a Law degree should not be of less than three years,

(3) There must be liaison established between the Faculty of Law and the Bar Council, and the work of the teaching should be divided between the two.

(4) A large number of teachers, more adequately paid than they are at present, should be employed for legal education.

(5) Concerted action must be taken by all the universities in these provinces.

(6) If the lengthening of the course of study should effect the candidates for judicial service adversely, in respect of the age qualification, the rules should accordingly be changed."

The terms of reference to this committee are, however, more comprehensive in their scope and generally require this committee to advise the Government "as to the practicable measures of reform that can be and should be adopted and work out the cost thereof."

The late Hon'ble Sir Bisheshwar Nath Srivastava was the Chairman of this committee but unfortunately he fell ill in September, 1937. It was expected that he would soon recover to resume the work of this committee, but his illness proved to be a protracted one and he eventually resigned and the present Chairman was appointed in his place.

The questionnaire framed by the committee, which is annexed to this report as an appendix, was widely circulated. Well-known lawyers and educationists in this province were especially consulted and out of those who sent in replies to the questionnaire a few were interviewed by the committee at two sittings and the result of their *vis à voce* examination was reduced to writing. As was to be expected divergent and, on some points, conflicting views were expressed by those who sent in replies to the questionnaire. When the committee assembled last to formulate its own conclusions it was felt that there was difference of opinion on some questions to which the inquiry had been directed. It was agreed that this report should embody the opinion of the majority and any member who entertained a different view on any question should have the liberty to express it in a separate note of his own. On the circulation of this report of the majority Rai Bahadur Brijendra Swarup, Mr. A. P. Dube, Mr. A. Khaliq, Mr. R. U. Singh, Mr. L. R. Siva Subramaniam and Pandit Iqbal Narain Gurtu have added separate notes which are appended hereto as annexures.

It seems to be generally accepted that the present system of legal training has not kept pace with the growing needs of the times and that there is a demand for greater efficiency in the young lawyers who seek enrolment in the ranks of the legal profession. At the same time it must be conceded that appreciable improvement has been effected since the legal education has been made the sole concern of the universities which could, however, approach only the academic side of it, not being in a position to supplement it by practical training of any kind. Not long ago every law graduate was entitled to be enrolled as a legal practitioner and to accept briefs requiring not only a theoretical knowledge of important branches of law, but a certain amount of familiarity with the practice and procedure observed in the institution and conduct of proceedings in the courts, which they subsequently acquired not infrequently at the expense of the litigant public. This drawback in the system of recruitment to the legal profession was recognized a few years ago and every law graduate who applies for enrolment is now required to satisfy the High Court that he has had training with a senior for one year, and in some cases only for six months.

It was considered that such training would materially add to the equipment of a candidate seeking enrolment, but experience has shown that this period of probation is not treated seriously either by the candidates themselves or by the seniors who are entrusted with the task of training them. It was considered that the payment of a fee of Rs.300 to the senior would ensure, on the one hand, readiness on the part of the learner to avail himself of his association with the senior and to have his money's worth out of him, and on the other hand, make it incumbent on the senior to realize the responsibility which the payment of fee would entail. The rule, however, did not make the payment of fee essential and merely laid down a maximum to which the amount of fee payable to the senior should extend. In practice it became a sort of convention that the senior should extend his patronage to a candidate who approached him for training and that no remuneration should be paid by the latter to the former.

Some seniors who have flourishing practice at the Bar, would not consider it worth their while to undertake the training of lawyers on receipt of a fee even though they may not feel much delicacy in accepting fees as has been already referred to.

These and similar circumstances have conspired to make the so-called training, which a candidate seeking enrolment is expected to have with a senior, a purely formal affair. All that the senior at present does is to allow the novice to have access to his briefs and to see how cases are conducted by him (the senior). A young lawyer who is anxious to learn and to utilize his opportunities may even in these circumstances profit by his association with a competent senior, but experience has shown that few juniors evince any degree of keenness and they merely while away their time waiting for the expiry of the period of probation.

As regards the theoretical side of the education imparted to law graduates turned out by any of the universities in these provinces a glance at the curricula prescribed by them will show that an attempt is made to impart knowledge of such subjects as an average lawyer is in practice required to possess. While more subjects can be usefully added to the courses of study already prescribed, we think far greater efficiency would be ensured if the subjects already prescribed are taught under better conditions than those obtaining at present.

The questionnaire issued by the committee will show that it embraces not only the points to which attention was drawn by the Sapru Committee Report, but also a number of others which the committee thought were equally deserving of attention. We have not tackled the question of unemployment among lawyers and the remedy which the Sapru Committee has suggested, as we did not think it to be warranted by our terms of reference. We, however, observe that one of their recommendations is to raise the standard of legal education by adding to the subjects already taught and by increasing the period of study to three years. They seem to think, and in our opinion rightly, that the new avenues of employment suggested by them and bifurcation of the legal profession into two branches each having separate and distinct functions will not appreciably relieve unemployment unless some check, which is neither drastic nor unjust to new entrants, can be devised to reduce the evergrowing numbers of those driven to the legal profession by lack of employment elsewhere. Refusing enrolment for a few years or instituting competitive examinations for enrolment or otherwise debarring candidates properly qualified from joining the Bar are methods which should be summarily rejected. Insistence on a higher degree of efficiency attainable after a more serious study and better training than now demanded is the only means which appeals to us and which will eliminate in course of time mediocres from the ranks of the legal profession.

Pre-Legal Education.

One of the points on which there is some diversity of opinion is the standard of general education which should be considered to be the minimum for admission into law classes. It has been suggested that legal education should begin after the Intermediate stage and that a candidate should, after passing his Intermediate examination, decide whether he should pursue a course of legal study. If he chooses a career at the Bar he should join the law degree course instead of Arts, Science, Medicine or Engineering. According to this scheme 4 or even 5 years' course should be prescribed for the law degree. It is pointed out that candidates who desire to study for other professions, for example, Medicine, have to make their choice after the Intermediate stage and have to pursue a long course of study which includes practical training. A student reading for the law degree in these conditions should be made to study such cultural subjects as are allied to law before the commencement of his education in the law itself. While the advantages of such a system are recognized by the members of this committee the majority do not favour this scheme mainly for two reasons. First, it is considered to be too stringent a rule to require candidates to choose a career once and for all after passing the Intermediate examination as the lengthened course for a law degree will preclude graduates in other subjects from choosing the legal profession after taking degrees in other subjects; secondly, it is felt that if a candidate, who, after passing his Intermediate examination has pursued, for two years or more, his study in the law classes, fails, through some accident, to complete his legal education, all that he will have to fall back upon is his Intermediate class certificate. The majority of the committee, therefore, think that a middle course is the safest and more desirable as on the one hand it prolongs the period of study by one year to ensure greater efficiency and on the other hand does not preclude graduates in other subjects choosing the legal profession after taking their degrees.

While it is conceded on all hands that a high standard of general education is a necessary pre-requisite to admission to the Law Faculty there is a divergence of opinion on the question whether all graduates, to whatever Faculty they might have belonged for their degree course, should be admitted to the Faculty of Law. One school of thought would refuse to admit graduates in Science, Commerce or Agriculture to the Faculty of Law, and would admit to that Faculty only those graduates who had taken general cultural subjects such as History, Political

Science, and Economics, in addition to English. As against this it has been urged that subjects like Mathematics and Science foster the habit of accurate thinking and that even Commerce and Agriculture are not less allied to Law than Economics. A third, which makes a compromise between the two extreme views mentioned above, would throw open the law classes to all graduates provided that a candidate who has obtained a degree only in Science, Commerce or Agriculture should pass a preliminary examination in one or more of such cultural subjects as English, History, Political Science and Economics. We note, parenthetically, that according to the degree course prescribed by some universities English is not compulsory. The adoption of this view would necessitate, in many cases, the graduate in Science, Commerce or Agriculture, passing a separate examination preliminary to his admission in the Faculty of Law, which will not make it possible for him to join the law classes immediately after taking his degree.

While we recognize that much can be said in favour of the first and the third of the three views adumbrated above the majority of the committee are not in favour of placing prohibitive conditions on the admission into the Faculty of Law. They are of opinion that every graduate regardless of the subjects he took for pursuing his degree course should be entitled to admission in the Faculty of Law. The only condition that should be imposed is that he should either have taken the English literature as one of his subjects in the degree examination or should pass a separate test in that subject before his admission in the law class. Arrangement should be made by every university for teaching and examining this class of students who must possess as high a degree of proficiency in English as is possessed by those who take English literature as one of the subjects in the degree examination.

We are not unmindful of the opinion held in some authoritative circles that Hindustani should be increasingly employed as the vehicle of thought so as to replace English wherever it is in use at present. At the same time we cannot shut our eyes to the fact that within no measurable distance of time English will cease to be the language in use in legal circles in this country. The whole legal literature to which a law student is introduced is in English and if he is to attain any degree of proficiency in law he must study it in English. Under section 227 of the Government of India Act, 1935, all proceedings in the High Court must be in English. Considerations of economy and convenience will require the use of English in the Subordinate Courts as hitherto otherwise the trouble and expense involved in translation in the appeal stage will be enormous. Until Hindustani is adopted as the medium of instruction, which is impracticable at present, lawyers and presiding officers in Courts of Law will continue to think and express themselves in English. The recruitment to higher judicial appointments is expected to be increasingly made from the lawyers turned out by our universities and so long as the personnel includes both Europeans and Indians the latter should possess a high degree of proficiency in the English language if they are to hold their own in the discharge of their judicial duties. For these reasons we think that emphasis should be laid on proficiency in English as a qualification for admission to the Faculty of Law.

The period of study in law classes.

The majority of the committee think that in all three years will suffice for legal education of which the first two should be devoted to the study of law according to the University curriculum and the third year to the practical training which must be undergone before enrolment in strict conformity with the rules to be made by the Council of Legal Education which in the opinion of the committee ought to be set up.

The constitution and function of this body will be explained later in this report. The LL.B. degree conferred by a university should not be regarded as a sufficient passport to admission to the legal profession. It is only after a candidate has satisfied the Council of Legal Education after one year's training in the manner to be laid down by such Council that he should be enrolled as a legal practitioner. This examination will be a qualifying examination, but will materially differ from that conducted by the Council of Legal Education in England. It will not in any sense be an examination to test the theoretical legal knowledge of the candidate seeking enrolment. The Law degree conferred by the University will be accepted as a sufficient guarantee that he has acquired such knowledge. In England the Council of Legal Education merely exempts graduates, who took law as one of their subjects in the University, from some examinations and for the rest every candidate for the Bar examination has to pass examinations in all the important branches of law.

The Council of Legal Education in England has not prescribed any system of practical training as a pre-requisite to the enrolment as a barrister. The condi-

tions at the Bar in England are different in an essential respect from those obtaining in this country, except possibly in Presidency Towns on the original side of the High Courts. In England no advocate is called upon to handle a brief without the help of a solicitor. A young lawyer who has been merely called to the Bar can be safely relied upon for an ordinary case as he is assisted by a solicitor who is himself an experienced man and at all event well-trained in practice and procedure, and is likely to prevent such blunders as a novice in the legal profession is apt to commit. In India a legal practitioner combines in himself both capacities. He does the work of Counsel as well as of solicitor. Left to himself in the conduct of a case from the initial stage to the final, he cannot satisfactorily discharge his responsibility unless he is made familiar with the methods of day-to-day working of the legal machinery in this province.

The committee, therefore, think that legal education should have two distinct stages and that theoretical and cultural side of it should continue to be controlled by the university as hitherto, but the education imparted at the university should be supplemented by a further course of training under the supervision of an authority which is in touch with the practice and procedure of our courts. Such training should be made the concern of the Council of Legal Education whose constitution will be presently explained.

Council of Legal Education.

It has been suggested that no separate body called the Council of Legal Education need be set up and that the existing Bar Councils may be so improved and their functions so widened as to include all such duties as are to be assigned to the Council of Legal Education. The suggestion is based on the assumption that multiplicity of authorities controlling legal education and subsequent enrolment of legal practitioners is undesirable. On a careful consideration of the whole problem of legal education and the constitution of the Bar Councils we are not in agreement with this view. The Bar Councils are statutory bodies created under an all-India enactment, namely the Bar Councils Act which aims at co-ordination in the ranks of legal practitioners throughout India. The Bar Councils Act deals with the discipline of the members of the Bar in their relations with the litigant public and the court. The Bar Councils have at present no concern with the education of law graduates or their training. The enrolling authority is the High Court which, however, consults Bar Councils in making enrolments.

If the functions of the Bar Council be so extended as to associate them with the education and training of law graduates a good deal of legislation will be necessary. Periodical elections are held for membership of the Bar Councils and all legal practitioners of a certain standing are entitled to vote and be elected. In electing members for the Bar Council the constituency is guided by considerations which will be wholly inapplicable to the educational requirements of intending entrants to the legal profession. The function of the Council of Legal Education, as we conceive them to be, will not fit in with those envisaged by the Bar Councils Act for the Bar Councils. We think that the Council of Legal Education should be separate and distinct from the Bar Councils. The former should have nothing to do with the discipline and professional conduct of legal practitioners after their enrolment which should be within the province of the Bar Council as now, subject to the control of the High Court. The Council of Legal Education, on the other hand, should confine its attention to the post-graduate training of the law graduate. With the qualifying test and grant of certificate of fitness for enrolment its functions should end. According to our scheme the theoretical part of education should be in the university as at present and the practical training should be the concern of the Council of Legal Education. The control of the Bar Council should commence after enrolment. Each of the three bodies, namely the University, the Council of Legal Education and Bar Council have functions assigned to them with reference to three distinct stages in the career of a lawyer.

We now come to the more important question of the constitution of the Council of Legal Education and its function. We think that the Council should not be a large body. The membership need not exceed about 15 with the Chief Justice, or a Judge nominated by him, as its *ex officio* President. It should include one or more Judges of the High Court and leading members of the Bar and the Judicial Service. The Secretary of the Council should be a salaried officer with an office establishment. It is not necessary at this stage to deal with the method of appointment of members. If the establishment of the Council of Legal Education is decided upon the exact number of members, the method of appointment and other similar matters can be easily settled. We may, however, express the opinion that the elective system should not be intro-

duced in selecting members and that the Council of Legal Education should largely be controlled by the High Court. We may note that it is a matter of recent history that the High Court used to hold its own examinations for recruitment of Vakils, Pleaders and Mukhtars which examinations have since been abolished and the law graduates alone are now eligible.

The function of the Council of Legal Education should be to set up an organization for training the law graduates seeking enrolment as legal practitioners. Each candidate should deposit a fee of Rs.500. The Council should maintain a list of such senior legal practitioners in the province as in its opinion can be trusted to give the requisite training to the entrants to the legal profession. On an application and the deposit of fee being made the Council should make one of the senior legal practitioners on its list responsible for his training. The senior is to be paid directly by the Council to whom he should be responsible for training such candidate up to a standard to be prescribed by the Council. The Council should hold periodical examinations to test the fitness of candidates who have been trained by seniors. Any candidate who fails to pass the prescribed test should be required to continue his training with the same senior who will not be entitled to any additional fee, the understanding being that the amount offered to him represents his remuneration for training the candidate put in his charge up to the required standard. Candidates who pass the test should receive a qualifying certificate which alone will entitle him to enrolment as a legal practitioner.

The subjects in which training should be given will include drafting of pleadings, applications of various kinds such as those for execution, injunctions, appointment of a receiver, probate, etc. The candidates should be made familiar with the rules of practice of courts, important circulars under which land records are prepared, the system on which such records are maintained and important systems of account in vogue in the province. They will be expected to be familiar with all the processes that take place after any proceeding is instituted and should have a clear idea of every step which is taken by the court and its officers on the presentation of plaints, written statements and other applications and of every step which the litigant or his lawyer is to take in that connexion. They should also know the system on which the record of a pending case is prepared and how to inspect it. The candidates should be so trained as to be able to make a brief of a case to be argued in court. Part of the training which a young lawyer ought to have is to give him some insight into the art of examining a witness. It may not be difficult to give him rudimentary instructions as regards examination-in-chief of a witness, but cross-examination is essentially a matter of practice. Efforts should, however, be made to familiarize the candidate with the proper methods of examining a witness-in-chief and in cross-examination by enabling him to watch the evidence taken in court. What we have indicated above is merely illustrative of the methods of training a candidate for the legal profession. Space and occasion do not permit a detailed programme of training. The Council of Legal Education if established should issue detailed instructions to the senior legal practitioners who are put in charge of the candidates for training as to what is expected of a candidate to know and what will be the nature of the qualifying test to which at the end of the training he will be subjected. We merely indicate the lines on which the training should generally proceed.

One of the points raised in the questionnaire is whether there should be a liaison between the Bar Council and the Faculties of Law. Having regard to the scheme which we have formulated any liaison between the Bar Council and the Faculty of Law is not only unnecessary but is impracticable. The Council of Legal Education will, so to say, be sandwiched between the Faculty of Law and the Bar Council. There should be liaison between the Council of Legal Education, on the one hand, with the Faculty of Law and, on the other hand with the Bar Council. In our opinion the Secretary of the Council of Legal Education should be made an *ex officio* member of the Faculty of Law of the universities in these provinces to be in touch with the standard of education for the law degree. In their own interest the universities should maintain a standard of legal education which, in the opinion of the Council, ensures efficiency and which the Council expects in candidates seeking enrolment as legal practitioners. It should be open to the Council of Legal Education to refuse to recognize the degree of any university whose standard falls short of that expected by the Council. We may point out in this connexion that the Council of Legal Education in England does not recognize the law degree of any university as sufficient for calling to the Bar. It is an examining body itself in all the branches of law. Legal education in this country has been so far confined to the universities which have on the whole been doing tolerably

well, but they are not in a position to give such practical training as is, in our opinion, necessary before a novice can be trusted to assume the responsibility of conducting a legal proceeding. As matters now stand he learns the rudiments of his profession after his enrolment and at the expense of the litigant public. It is not necessary to make it the duty of the Council of Legal Education to impart the theoretical part of instruction in law, but it is desirable that such instruction should be imparted to its satisfaction before a qualifying certificate is issued under its authority.

The financial implications of this scheme have not been lost sight of by us. We find from the Unemployment (Sapru) Committee Report the number of law graduates passing from all the five universities in these provinces. The number has been on the increase during the six years 1930-35 for which figures are given. In 1930 the number of law graduates who passed from those universities was 601. In 1935 it was 795. We have ascertained from all the five universities in these provinces the number of those admitted in the LL.B. Previous for the 1938-39 session. The increase is alarming. The figures are as follows :

Agra	451
Aligarh	168
Allahabad	174
Benares	116
Lucknow	226
Total	1,124

If the low figure of 600 be taken to be the likely figure every year the total receipt at the rate of 500 per candidate will come to three lakhs of rupees. Making allowance for the fact that all law graduates do not seek enrolment the receipts under this head will still be sufficiently large to suffice for the salaries of the Secretary and his establishment and the fees to be paid to the senior legal practitioners who undertake the training of the candidates, and expenses incidental to the periodical examinations. Each senior can be put in charge of, say, five candidates whom he can treat as one class. Remuneration should not exceed Rs.200 per candidate. The training is to last for one year, and Rs.1,000 for the whole period is a remuneration which in these days will be acceptable to a number of seniors. It is true that leading lawyers who have a highly lucrative practice will not care for this class of work, but we believe that a sufficient number of reliable senior legal practitioners will be available for training candidates all over the province for the aforesaid remuneration. We have provisionally fixed Rs.500 in all per candidate, but we think that after a few years experience it may be possible to reduce this amount. We have not suggested a lower figure in view of the probability of Rs.500 proving as a deterrent to those who do not intend to take seriously to the legal profession but merely wish to try it and there may be a falling off in the number of those seeking enrolment. Indeed this is an objection which may be taken to this proposal and which we have carefully weighed before arriving at our conclusion. It may be urged that a fee of Rs.500, or even less will be a great handicap, in some cases absolutely prohibitive, for those who have had a brilliant career and aspire to the legal profession as their goal, but have no means to pay the initial fee of Rs.500. Such hard cases may occur now and then, but we do not think that a really brilliant boy will suffer for being debarred from entering the legal profession. Recruitment to most of the services is through competitive examinations and most of those who have had brilliant careers in the universities are absorbed by services. It is only after other avenues of employment are exhausted that our young men fall back upon the legal profession, which is so overcrowded that no one can be self-supporting even after years of practice and a large number of senior men have a precarious living. It is a matter of common knowledge that no one who is anxious to maintain a fairly clean record—leave alone notions of professional ethics—can get on for a few years without some independent means. Even if the initial fee is dispensed with the difficulty of an honest aspirant to a career at the Bar without means will remain. To say that if he is allowed to get on he will manage somehow to put a premium on malpractice, cut-throat competition and consequent degradation of the whole profession.

Of all the important professions law is perhaps the only one for which education is as cheap as that for an ordinary B. A. or M.A. degree. Medicine and Engineering cost several times more than the legal profession. This is the main reason for the legal profession to have degenerated in recent years. We apprehend that if the process which is at work now is left unchecked it will further deteriorate. A number of those now in the ranks of the legal profession repent having joined it. Many who chose it had no clear idea of the conditions at the Bar and miscalculated their chances of making a living. The repercussion of unemployment

among the educated classes has not been as great on any other walk of life as on the legal profession for the obvious reason that it is easy to qualify for it. Once a sufficient trial is given to it there is no alternative but to remain in it as it becomes too late to take to any other.

It cannot be gainsaid that the lawyer class has been the pioneer of such advancement as the country has made. In the political and intellectual life of every civilized country the contribution made by the legal profession has been great and in our opinion India can ill-afford to neglect a profession which occupies and will continue to occupy an important position in the social and political life of the country. While we have every sympathy for young men of parts but without means aspiring to a career at the Bar we cannot ignore the claims of efficiency and self-respect of one of the learned professions. We think, therefore, that a fee of Rs.500 which is to be spent on the training of the future entrants to the Bar is not unreasonable.

We may add that those who have been called to the Bar in England should not be exempt from the training. A Barrister and a law graduate of an Indian university stand now on the same footing. Both have the same privilege in the matter of enrolment as advocate and both should undergo the same training before enrolment.

We may also add that the old rule requiring two years' practice in the subordinate courts for leave to practise in the High Court should be reintroduced. We do not think that the elementary training which will be given by the Bar Councils is sufficient for practice in the High Court.

System of Instruction, Courses of Study, etc.

The majority of us favour only a two years' course at the University for the degree of law. In view of that fact we do not think that any more subjects than those already prescribed can be included in the curriculum for the LL. B. degree. Most of the universities in these provinces teach the following subjects :

- (1) Constitutional Law,
- (2) Jurisprudence,
- (3) Roman Law,
- (4) Contract and Torts,
- (5) The Law of Crimes and Criminal Procedure,
- (6) Law of Evidence,
- (7) Equity including Trust and Specific Relief,
- (8) Transfer and Easement,
- (9) Hindu Law,
- (10) Muhammadan Law,
- (11) Civil Procedure,
- (12) Limitation, and
- (13) Land Tenure.

This course of study compares favourably with that prescribed by the Inns of Court in London and we think that these subjects if properly taught should occupy most of the student's time during the two years period of his study in the University. It will be unduly taking the energies of students if more subjects are added to the long list already given. A good grounding in those subjects is in our opinion sufficient for an average practising lawyer for day-to-day business in courts of law. It is true that many other subjects can be usefully taught to those reading for the law degree, but this cannot be done within the limited period of two years. A longer period and more staff will in that case be needed which in the existing state of things we are unable to recommend. If we add, for instance, Public and Private International Law, Commercial Law and Cultural subjects allied to law, a third examination besides the previous and final examinations will be necessary as preparation of too many subjects for one examination at a stretch leads to cramming and is a great strain on the students the majority of whom are in the habit of concentrating on their studies for unusually long hours a few months before the examination begins. For all practical purposes we would retain the present syllabus for the LL. B. classes. We would add only Company, Insurance and Income-tax laws where they are not already taught. For the LL.M. degree different considerations apply and the syllabus for that degree should include besides the stereotyped subjects higher study calculated to ensure sound scholarship.

While we do not recommend further addition to subjects already taught we are strongly of opinion that teaching should be of a higher order and the methods now in vogue should be materially improved. The system of part-time instruction which now obtains is wholly inadequate. In our opinion lectures and tutorial classes for the LL. B. degree should be on the same footing and should receive the same attention as those for other degrees. Except where time-table cannot be otherwise arranged because of part-time teachers who are practising lawyers the LL. B. classes should be taken in the usual working hours.

This is now rendered impossible in those universities where students are allowed to join both M. A. and LL.B. classes. This in our opinion is an undesirable practice and should be discontinued.

We think that the staff should include both practising lawyers and whole-time teachers as some subjects can be better taught by practising lawyers and some others by non-practising lawyers.

Generally speaking, the scale of pay needs no revision and we do not recommend increase in the salary of various grades of teachers now employed. Care should, however, be taken that salaries should be such as to attract men desirous of choosing the teaching of law as a profession.

In our opinion each class should consist of between 30 to 40 students to a teacher. Both previous and final LL.B. classes should be divided into sections where the number exceeds the aforesaid limit.

Examinations.

Having regard to the two years period of study and the subjects to be taught we do not recommend the holding of terminal examinations or the system of examination obtaining in England; nor do we think that in those circumstances compartmental examinations are desirable. On the whole we think that the present system of examinations should continue. We will, however, recommend that the number of external examiners should not be less than 50 per cent.

Extra Curricular Activities.

Arrangements should be made for moot courts and lectures on professional ethics.

Higher Studies in Law.

In the opinion of the committee some, at any rate, of the universities in these provinces should have satisfactory arrangements for preparing students for higher degrees in Law. Though many of them have prescribed courses for LL.M. and Doctorate degrees there are no adequate means of accomplishing the end which they have in view. For imparting higher education in Law the universities should have very much better libraries than they have at present and the teaching staff will have to be materially strengthened. We are of opinion that the universities should spend a larger portion of their income derived from the Law department on the Faculty of Law than is done at present. It is even suggested that the entire income derived from the fees paid by the Law students should be earmarked for the Faculty of Law. We, however, think that this will have the effect of starving some useful departments of studies in our universities whose income derived from those departments is wholly inadequate for their requirements. In our opinion 60 per cent. of the income derived from the fees paid by the law students should be reserved for expenditure in the Law department.

Specialized Study.

We do not think it will be practicable or profitable to make any particular university to specialize in a particular branch of law. In the first place the universities being autonomous bodies should not be dictated to in this respect. They know their needs and resources and it should be left to their choice. It is, of course, open to any one of them to aim at specialization in any given subject. We have not so far found any inclination in any university to pay special attention to the study of any particular branch of law. On the other hand a comparison of the syllabus as prescribed by all of them will show that they teach practically the same subjects. They have in view the requirements of the average lawyer rather than erudition and advancement of learning in any given subjects. Hindu and Muhammadan laws receive no more attention in the Benares and Aligarh universities than they do in Allahabad, Lucknow and Agra.

Amanatullah—*President*.

Vikramjit Singh.

Hyder Husein.

M. Wasim.

John Jackson.

S. Ali Zaheer.

J. N. Misra.

P. C. Mogha.

Brijendra Swarup	..	Subject to the note of dissent hereto annexed	
A. P. Dube, B.O.L.	..	Ditto	ditto.
A. Khaliq	..	Ditto	ditto.
R. U. Singh	..	Ditto	ditto.
L. R. Siva Subramaniam	..	Ditto	ditto.
Iqbal Narain Gurtu	..	Ditto	ditto.

Note of dissent by Rai Bahadur Brijendra Swarup, B.A., LL.B., M.L.C.

I agree with the report subject to the following observations :

(1) While agreeing with the view of the majority that persons who want to take to profession of Law should be well qualified in English, I could not persuade myself to agree to their view that a graduate who has not taken English Literature as one of the subjects in the degree examination should pass a separate test in the subject before he can secure his admission in Law class. In my opinion, it is a very stringent condition and it would cause great hardship to a large number of students seeking admission to a Law class. I do not think it will serve any useful purpose if emphasis is laid on proficiency in English as a qualification for admission to the Faculty of Law. In my opinion, students who have not taken General English as one of the subjects in the degree examinations—(viz. B.Sc. and B.Sc. Agriculture graduates) should be required to pass a test in regard to proficiency in English before their enrolment as legal practitioners, but they should not be debarred from admission to Law classes. They may be allowed to pass the test in English while pursuing their course for the LL.B. Examination or at a later period at their choice but they must pass it before enrolment. This will save one year of their time. There is one more point in this respect which seems to have been overlooked. If this recommendation of the majority would be given effect to it would debar not only B.Sc., B.Com. and B.Sc. (Agriculture) graduates but also a large number of students who have taken B.A. degree. In the Agra University, formerly Special English which is now named as English Literature, was a compulsory subject and students had to pass it but now English Literature has been made optional and only General English is retained as a compulsory paper. So the recommendation of the majority in this respect would inevitably lead to the result that students who took up B.A. in any three optional subjects, in the Agra University other than English Literature, would be debarred from seeking admission to the Faculty of Law unless and until they pass a separate test in English Literature. Probably the same condition applies to other universities also. Thus no student who has taken up say, Politics, Economics and History as optional besides General English which is compulsory, can, according to the proposal of the committee, be admitted to Law after graduation. The present position is that every graduate has to pass in General English, and not in English Literature. So I suggest that in the case of students who had not taken English as one of the subjects in the degree examination, emphasis should be laid on their passing a separate test in General English instead of English Literature. There seems to be another misapprehension of fact that English is not compulsory for B. Com students. In Agra and Allahabad English is a compulsory subject in B. Com and probably it is so in Lucknow University. In my opinion a B. Com. student sufficiently qualified in English and he should not be required to pass any further test in English.

(2) I am also not in agreement with the view that the Law classes should not consist of more than 30 to 40 students. Such a narrow limit is useful in School classes and is not necessary in College classes. In colleges affiliated to the University of Agra the limit for the number of students in degree classes is 60 which works out fairly well. The same limit also applies to Law students. It is only in residential universities that this limit is probably exceeded. I would recommend that all the universities should adopt the rule of putting the maximum limit of Law students in a class as 60.

(3) I am not in favour of the view that the double course should be discontinued altogether. In my opinion a double course should be three years' course as at Allahabad and Agra and not a two years' course as at Lucknow. Lucknow University must come in line with the Universities of Allahabad and Agra in this respect. No university should be permitted a two years' double course.

(4) I favour the view that the Secretary of the Council of Legal Education should be the member of the Faculties of Law of various universities but I am of opinion that it would be more useful if the Faculties of Law of the various universities in the province are also represented on the Council of Legal Education. Since the Faculties represent the academic side of Law teaching just as the Council of Legal Education would represent the practical side of it, it would obviously be in the best interests of Legal Education that both the theoretical and practical side of Law teaching should be represented on the Council of Legal Education.

(5) I am of opinion that advocates and pleaders should not be governed by the same conditions. If the class of pleaders is to be retained, the conditions in their case should not be as strict as in the case of advocates, for instance in my opinion, the same standard of proficiency in English is not needed in the case of pleaders as in the case of advocates.

(6) It is true that in the present condition of legal profession emphasis should be laid on proficiency in English as it is not expected that within a measurable distance of time English will altogether cease to be a language in use in legal profession, but I hold the view that equal emphasis should also be laid on proficiency in the languages of the province. Much of the work in lower courts is done in Hindustani and lawyers also in mofussil courts do generally address the courts in Hindustani. Of course using technical expression in English as well as quoting from legal books and rulings in that language. In my opinion a person desiring to take to the profession of Law should also acquire sufficient proficiency in Hindustani, before he is allowed to be enrolled as a legal practitioner. It is said in the Report that considerations of economy and convenience require the use of English in subordinate courts, otherwise the trouble and expense involved in translation would be enormous. I am not fully in agreement with this view. I think that if it is made a condition for the appointment of High Court and District Judges that they should be able to read and write with ease and facility the language of the province in which they are posted, much of the trouble and expenses involved in translation will be saved. At present to save a part of the expenses incurred in translation, the system of keeping a single record of the statements of witnesses in English has been introduced, but my personal view is that this system of single record has not proved successful and there seems to be an increasing demand to revert to the old system of the double record.

In the end I would suggest that it would be better if the recommendations of the committee which are scattered throughout the whole report, be summarised in the concluding paragraph.

BRIJENDRA SWARUP, M. L. C.

Note of dissent by Mr. A. P. Dube, B. C. L.

It is a fundamental principle of social action that the needs of society should have gone farther than the rules prescribed to provide for those needs, before a change in the rules to meet the new needs should be thought of. Taking the instruction in law as imparted at the University of Allahabad I am not aware of any facts, nor do I think any have been brought forward with all respect to justify the remark of the Unemployment Committee that "the subject of legal education . . . must receive greater attention than it has hitherto done" nor, can I think, that in view of the subjects actually taught, there is a necessity for "provision being made for adequate instruction in subjects, which have hitherto not received due attention". Most of the important subjects have been taken up and the Professors and Readers would not be worth their salt if they did not pay "due attention" to them.

It must not be forgotten that there are comparatively few legal principles which underlie the infinite variety of legal phenomena. If a student is made to grasp these legal fundamental principles of law as a science, his progress through the countless details will be intelligent and easy. All the subjects cannot be taught. Much must be left for self-study and research in the ocean of learning like law.

If you include more subjects, the more diluted will be the learning and the greater the production of jacks of all trades but masters of none. A perfunctory learning of Roman Law with Hadley as the text-book, is almost useless because the student will forget everything within 6 months of the examination. Fewer subjects with deeper and intensive study appears to be more desirable.

I do not agree to the lengthening of the course at the University to three years. Two years are quite sufficient. The suggestion of three years' course is based upon the wrong assumption that the learning of the previous year has not been forgotten but has been retained as a solid acquisition to which the third years' reading adds a fresh stock. Actual experience shows that this is not a fact. Even in the second year much of the first year's learning shall have gone out of mind. The lengthening of the University course is, therefore, unthink able.

Will the third years' course in "practical training" under the proposed Council of Legal Education be much good?

In England the Inns of Court call to the Bar after an examination by the Council of Legal Education. In India the call to the Bar takes place after an examination by the University. Both calls are after an examination.

In England a man who wants to see the actual working of the courts reads in the chambers and pays a hundred guineas for a year's reading. After he is called to the Bar he works as a "devil" to a senior. In fact the acquisition of the knowledge of the actual working of the courts is left to himself.

We are anxious to impart to our students "practical training" by making it compulsory. The majority opinion of the Legal Reform Education Committee puts the ground on which this is sought to be done thus "Not long ago every law graduate was entitled to be enrolled as a legal practitioner and to accept briefs requiring not only a theoretical knowledge of important branches of law but a certain amount of familiarity with the practice and procedure observed in the institution and conduct of proceedings in the courts, which they subsequently acquired (not infrequently the expense of the litigant public)".

The underlining is mine. The engagement of an advocate by a client is now in India a pure contract. If there should be perfect freedom of contract, a client may go to whom he likes. If he entrusts a case to a junior which a senior alone could handle, he must thank himself. No law has gone so far as to protect a grown up normal man against himself. If it is said that care must be taken that a qualified man alone should be enrolled, - and a year's work, in the atmosphere of the courts will make him better fitted, then a question arises how much better fitted? Can it be said that nothing more would be left, which he could learn "at the expense of the litigant public"? Will such a junior be competent at the end of this year to deal with all cases without harm to the public? If he would be slightly more competent, is not the gain negligible as compared with the expense, trouble and the delay caused to the young man himself in standing on his own legs.

Those who have read in the chambers know that in the course of the year very few topics pass under the review of such a young man. A legal practitioner who is burning with work will not take pupils as a King's Counsel does not take them in England. A busy junior worth studying with, only allows a student to see what he does. If there is a case in which "advice on evidence" is asked for, or "interrogatories" have to be administered, or "particulars" have to be asked for, or a "plaint" or "defence" or "counterclaim" has to be framed, the pupil is given the brief and he having written out his draft puts it in the brief and leaves it at the table of the person with whom he reads. When that gentleman takes up the work, if he finds the effort of the junior any good to him he calls him otherwise he writes out his own "advice" or "interrogatories" etc. and lets it,

to be taken to the junior who compares his own draft with that of the senior. That is all!

In India is it to be different? The senior will "teach" the junior. If he is lawyer practising on the criminal side, he cannot "teach" civil law of pleading and *vice versa*. If he gets cases on Hindu Law, the Muhammadan Law must remain "untaught".

Much confusion can be caused in clear thinking, by not carefully analysing the terms used in the argument. I do not think that there is so much substance in the talk of "practical training" as to require a year's training before "call" and a separate examination. Civil Procedure clearly says what a plaintiff must contain and gives number of forms of pleading. Criminal Procedure Code gives all sorts of forms. These pleadings and forms would be better models than those drafted by pleaders, most of whose pleadings and forms are drafted by their clerks. These a young man can see, study and compare after he has been enrolled much to his profit. As matters stand he can engage a clerk who would do that for him. To hold him in the leading strings; to put him to the ordeal of examination under the guise of practical training is not advisable. Let a man freely enter the water if he is to learn swimming. Let him attach himself as a "devil" to a senior. A year's training as now done is a failure. It will be a failure under the new scheme. *Plus ca change plus ce est la meme chose*. All law is practical. A contract set out in a ruling is nonetheless a practical example of a contract not less than one found in the brief of a case. The practical way in which rules of pleading are set out in Dr. Odgers book on pleading and which we teach at the University are miles more enlightening than the practical models written by the clerks of district practitioners. To class university training as theoretical is a mistake because in any teaching of the law of procedure facts must be stated from decided cases or assumed. Anyhow after a year's rehearsal, when the young man has to deal with a case of his own, it is more likely than not that the new case it is not like the rehearsals. In such cases he will have to go to a friend and ask his help, which he can do without a year's training under the Council of Legal Education.

The majority opinion of this committee thinks that a fee of Rs.500 will bring 3 lakhs of rupees a year. Rs.500 or any fee in hundreds will tell heavily on a student who has passed the LL. B. The profession is over-crowded and the public has begun to know and appreciate the fact. The Law of demand and supply has begun to work. Fewer students are coming to the University. If an additional fee of Rs.500 or Rs.300 even is imposed, there would be a great falling off, and as the students of the University will have to clear this last hurdle of the Council of Legal Education before enrolment there would be falling off at the University also. I doubt very much if the expenses of the Council of Legal Education will be adequately met after the lapse of a certain period of time from this source.

But if such a Council is established it seems to me that the majority opinion wants to make the Chief Justice or a Judge nominated by him *ex officio* President and contemplates inclusion of more High Court Judges and even members of the Judicial Service in a body of 15 members. This will make the body too official. I dissent. Chief Justice should be there as a visitor. Judicial service men should be excluded.

If I may use a colloquial expression, Bar is a seniority ridden profession. It gives the senior the right to take the lead in Court. In normal times and with above-board methods, seniors get or ought to get the bulk of the practice. The normal expectation and rate of progress for a junior is and should be according to the words *festina lente*. If a junior by fair means or foul attracts better class cases to himself and mismanages them, the fault is that of those who entrusted the case to him. High Court or the Council of Legal Education cannot convert themselves into charity institutions with "help the junior" as their motto. Let the senior section help the junior section. Let there be an *esprit de corps*. Let the seniors be kind and let the juniors deserve kindness. If a junior from the day he commences practice begins "the grab and take policy" and fails to come up to the standard, the remedy is to let him take a warning that he has fallen because he has left before he came to the stile. This problem will remain even after a year's training under the Council of Legal Education is done if the temptation of getting hold of a case by dirty methods is not entirely removed from the reach of the junior. Wise men will apply their remedies to vices and not to names. The present equipment of a junior is not at fault in my opinion. His want of means and consequent inability to wait, his impatience in not working with a senior long enough before he conducts his own case, that is at fault. The apprenticeship should be undergone as a member of the Bar and not as a student of the Council of Legal Education. This apprenticeship is *ex necessitate rei* fairly long one and in my opinion does not come within the legitimate sphere of inquiry of "non-employment" question. To force legal work to go to a junior is to

reverse the natural order of things which will upset all balance. Freedom of contract will have to be interfered with. A grown-up man will need protection against himself.

All law is practical, no law is theoretical or academic because all laws treat of the concrete facts of life. All law is learnt by reference to concrete facts. To call an experience of the working of the law courts, as a knowledge of practical side of law is a misnomer. That working can be learnt by going into court on one's own and not by another examination.

If a man is told that a simple bond, a mortgage, a promissory note are all manifestations of the simple underlying idea of agreement between two persons, is not a practising lawyer better off for this knowledge. With all respect, in India, there is much of what Tennyson calls the "wilderness of single instances" without a thorough grounding in principles. A comparison between an English judgment and an Indian judgment will make my meaning clear. The reports of the speeches of English judges show how learned they are in the science of law. Great effort is necessary to institute higher studies in law at the universities.

At a meeting of the Legal Education Committee of the Bar Council held on the 26th of June, 1938, it was resolved and recommended to the Bar Council, that it had become notorious that the fee of Rs.300 fixed by the Bar Council was neither charged by the senior nor paid by the junior with the result that no agreement with any obligatory force came into existence. In the result there was no earnestness on either side.

It was, therefore, recommended that the fee of Rs.300 should be deposited with the Bar Council and the junior should submit the name or names of persons with whom he proposes to read and the Bar Council unless it sees reason to differ will then give its sanction. That no senior will be entitled to take more than two juniors. In England three is the utmost limit. I myself could not get into the chambers of a good lawyer because three men had already got in. I, therefore, dissent from the number four proposed by the majority. It is true that in the recommendation the Bar Council reserves its right to allow more than two students to be taken at a time. The young man is to keep a diary from which it should appear that he has had sufficient training both on the civil as on the criminal side. For this purpose a junior may attach himself to two seniors when the fee would be equally divided between the two. The fee for division would be Rs.250 because the Bar Council will retain Rs.50 for supervision charges.

It would be noted that these proposals work after the enrolment and not before. If a deterrent effect is wanted then the fee may be raised to Rs.500. Elections to the Bar Council have not worked well. The reason seems to be that the members of Bar are not sufficiently in touch with each other, and the idea of common needs and common means to achieve them have not spread. An annual meeting of the Bar is a necessity. Members of the Bar will know each other. They will know to whom the lead must be entrusted. The discussions will strengthen the resolve to act up to high standards of professional life. Elections will give better results.

Legislation will be necessary for creating the Council of Legal Education. Legislation may put through to stop the abuses which result in getting the wrong men elected under the Bar Council Act. Reform of an existing body which has some money should be preferable to creating a new body, which will require additional expense to be borne. Even lectures and a lot of other things, such as teaching may be done by the Bar Council under section 15, clauses (c) and (d) of the Bar Council Act. Things professional should remain in the hands of the profession until it becomes clear, after good efforts made, that the functions which the Bar Council may discharge should be transferred to another body.

I dissent from the opinion of the majority when they lay too much stress on the English continuing the language of the courts. The Government of India Act of 1935 does make English the language of the courts; repeal of the section must be sought for. Every civilized nation conducts its teaching in its own language. The whole proceedings in the lower courts are in the vernacular. Splendid arguments are made before juries and assessors in Hindustani. Good arguments are made in the vernacular on the civil side before subordinate judges. Necessity is the mother of invention. Vernacular words will come for English words. In the meantime English words may be interposed. All judges of the High Court will be able to get on somehow except the English members of the English Bar. The same argument will apply to medicine, etc. Lawyers will point to the difficulties of medicine men, and medicine men will point to the difficulties of lawyers, and in the confession of mutual weaknesses all progress will be retarded for ever. Public opinion will certainly demand that section 227 of the Government of India Act should be repealed.

A. P. DUBE, B.C.L.

Dated the 10th September, 1938.

Note of dissent by Mr. A. Khaliq, B.A., LL.B.

I had the advantage of reading the draft of the majority report of the Committee. I much regret that I am unable to share the views of the majority of the members of the Committee on some important points.

Under the heading "Period of study in Law Classes" the scheme propounded by the majority report is, that legal education in the universities should remain, as at present, for two years and that a further period for practical study be fixed for one year under the control of the Council of Legal Education. I agree with the first proposal, but I am definitely opposed to the second part of the scheme.

There are at least three objections to the proposal. The first objection relates to the costly nature of the scheme. It is proposed that every candidate should pay Rs.500 for practical training. This sum is itself a big amount. Over and above this one will have to spend on his maintenance and other incidental charges during the period he is under training. He will also have to pay charges for his enrolment. Thus it will become a costly affair. The economic condition of the province should not be ignored. Many deserving candidates will not be able to afford such a large sum of money initially. The second objection is that the so-called senior, in my opinion, will get a good sum of money for nothing. The present system of training of juniors by seniors has proved a failure and this is frankly admitted by the majority report. Seniors (by this term, I believe, the majority report means practitioners who have put in several years of practice) may be divided into two categories; firstly, those who have good practice, and secondly, those who are briefless. The busy seniors will hardly have time to give any substantial training to juniors attached to them. The suggestion is that five juniors be placed under the training of one senior. I must say that with a senior having good practice, this group of five juniors will have no chance of acquiring any knowledge through the agency of that senior. Those who are in practice know that in India generally legal profession is a hard task master. Here the duties of a solicitor and an advocate are combined in the same person, and if a practitioner has a good practice he hardly gets any substantial time for doing any other work. To give instructions and good training to five juniors will really be asking too much of a senior who has to do his professional work. In my opinion this system is sure to prove as much a failure as the present one. Training with briefless seniors does not at least appeal to me. In my opinion these seniors will not at all be in a position to give any training worth the name. The third objection is that the phrase "practical training" in its relation to Legal Education is unfortunate. The recommendation of the majority report is that the subjects in which practical training should be given will include the drafting of pleadings, applications of various kinds, such as those for execution, injunctions, appointment of a receiver, probate, etc., that the candidates while under training should be made familiar with the rules of practice of courts, important circulars under which land records are prepared, the system on which such records are maintained, and important systems of account in vogue in the province; that the candidates during their training will be expected to become familiar with all the process that take place after the institution of proceedings, and should have clear idea of steps which are taken by the court and its officers on the presentation of plaints, written statements and applications and other steps which a litigant or his lawyer is to take in that connexion. If we study the matter carefully we will find that ordinarily the junior commencing his practice does not get cases all at once, and he has to wait for some considerable time before he is able to get a case of a nature where lack of so-called practical knowledge may prove an obstacle to his successfully conducting his case. It is also a fact that practical experience can only be gathered from personally conducting the cases actually. Some of the practical knowledge suggested by the majority report can very well be, and is generally, acquired by juniors during the period they are waiting for cases. It cannot be expected that seniors will hand over their cases to their juniors for actually conducting them. If that is so, one fails to see how these juniors will acquire practical knowledge by watching the proceedings of cases conducted by their seniors. The nature of work suggested by the majority report is such that the practical side of it is insignificant. In drafting a plaint, for instance, the most important point is the theoretical knowledge of substantive law. The shape or the frame of a plaint may, perhaps, be said to have reference to practical knowledge. Even that, more or less, depends upon the theoretical knowledge of orders 6 and 7 of the Civil Procedure Code. At the most the seniors may give cases to their juniors and direct them to draft the plaints, written statements, etc. and go through these drafts and correct them. In the first place, it is doubtful whether a busy senior will have time to

do all this with five juniors at a time. In the second place, this work can very well be done efficiently in law classes by means of what may be termed "practical tutorials".

According to the recommendations of the majority report the staff in the universities to teach law is to consist of whole-time as well as part-time teachers. Part-time teachers can, with great advantage, be utilized for practical tutorials. Even without part-time staff, these practical tutorials are possible as the whole staff is generally from the rank of profession. I, therefore, suggest that instead of imposing a period of one year for practical training with seniors, it would be far better if the universities are advised to start classes for "practical tutorials" in which the drafting of pleadings, various applications, and deeds may be taken up with the students. Thus side by side with theoretical knowledge, the students will be able to pick up important practical knowledge within the course of two years. The routine of courts can very easily be acquired by juniors after their enrolment and during the time they are waiting for briefs.

Under the heading "Council of Legal Education" it is suggested by the majority report that the Council of Legal Education be authorized to refuse to recognize the LL.B. degree of any university whose standard falls short of that expected by the Council. This is rather too much. Universities are bodies corporate under various Acts, and the standard of legal education is under the control of experts and educationists. Therefore, as remarked by the majority report itself, the university degree should be a guarantee of sufficient legal knowledge to entitle the person to enter the legal profession. If, however, the recommendation of the majority report is to be accepted, I would suggest that in the constitution of the "Council of Legal Education" the representatives of universities should also be added to safeguard the interest of the University education.

Under the heading "System of Instruction, Courses of Study, etc." it has been recommended by the majority report that students should not be allowed to join both M.A. and LL.B., classes. With all respect, I would say that this would reduce the efficiency of law students. We find that those who have taken both Law and M.A., are generally more efficient lawyers than those who have not taken M.A. The majority report has stressed the point, and rightly, that general education with cultural subjects is important to give efficiency to law students. I would submit that the whole trouble regarding the alleged inefficiency of the legal profession has arisen out of the defective and insufficient general education. The knowledge of language and general information which an average graduate possesses is very disappointing. There is not so much defect in the imparting of legal education as that in the case of general education. Therefore, according to my submission, what is more important is to improve the general knowledge and education of those who take up the LL.B. degree, and I am sure that legal education, with a little more attention on the part of universities will greatly improve. The taking up of the double course, i.e. Law and M. A., at the same time will certainly improve the efficiency of the candidates. I, therefore, recommend that due facilities should be provided by the universities to LL.B., students to take up M. A., along with their law course.

For reasons stated above I respectfully dissent from the views taken by my earned colleagues of the committee. I regret very much that I am not in a position to subscribe to their views. Subject to this note of dissent, I sign the report.

A. KHALIQ, B.A., LL.B.

Note of dissent by Dr. R. U. Singh, LL.D., M.L.C.

I regret that I do not find myself in agreement with the majority of my colleagues on some of the recommendations made in this report. It is desirable that I state my conclusions as well as the reasons therefor wherever necessary.

The Law Course and Pre-legal Education.

I am definitely of opinion that the period of education of a student at the law school should be extended from two to three years.

The extension of the law course by one year will render possible the addition of a few useful subjects or fields of study to the legal curriculum and the introduction in the curriculum of the elective system. But I recommend an increase in the length of the law course more on the ground of the insufficiency of the period of two years than on any other ground. A glance at the legal curriculum of the universities in the United Provinces will show that a student is required in each year to take examination after nine months' study in at least seven important subjects of law. No one can contend with any seriousness or force that effective education can be imparted in seven or more legal subjects to a student in a period of nine months and the conclusion of the Sapru Committee on unemployment that "the legal education which is imparted to our graduates at present falls very short of the necessary standard" is unquestionable. The student listens to the lectures, takes down notes or purchases them from the market and commits them to memory to be able to pass the examination. The truth is that there is hardly any time at his disposal for mental digestion as distinguished from unprofitable cramming and this in the face of the fact that if there is any branch of study which requires independent thinking on the part of the student it is law. Some improvement in legal education can no doubt be effected by improvement in methods of teaching but a good training in law is not possible in two years. The universities of Calcutta, Delhi and Punjab have already discarded the two-year law course in favour of a three-year one. Adequate time to accomplish results is a pre-requisite of effective education. The necessity of a three-year law course is recognized in all the leading countries of the world, the course of legal studies in France, Germany, England and the United States of America, generally covering a period of three years. In recent years a tendency towards increasing the course to four years has appeared and in Italy the law course already extends over four years.

The disadvantages involved in the proposed extension of the law course from two to three years, namely the desirability of getting men to start practice early and the added expense to the law student, will disappear if we do not insist on a Bachelor's degree as a condition of admission to the course of law studies.

I am not unaware of the importance of requiring a student to have a good general education before he begins the study of law but a student does not have time enough to secure all the general education and also all the technical law training that would be good for him. Therefore, if the law course must be lengthened to three years, as in my opinion is very necessary, and if the total time of six years, which candidates for the first degree in law devote to their education after the high school, is not to be increased, the only way to do it is to reduce the period of general education by a year. And this, it appears to me, can be done without detriment to the cause of effective legal education.

The reasons generally advanced in favour of the retention of the present entrance requirement, namely the ability of a graduate to use the English language correctly and the desirability of persons entering the legal profession having a mature understanding of the problems of life were examined by a committee appointed under the Chairmanship of Sir Aladi Krishnaswami for opening a Law Faculty in the Andhra University. The observations of the Committee in this regard deserve to be quoted in full :

"Without controverting the reasons adverted to above, the Committee do not feel impressed that the present rules of entrance . . . are calculated to serve either of the two objects. A pass course in B.Sc. or an Honours course in subjects other than History and allied subjects is not likely to afford special facilities in the way of equipping a student for the legal profession or give the student the requisite command of English language and Literature. In dealing with this matter, the Committee are, however, prepared to proceed on the assumption that the Intermediate course as at present obtaining in the several

universities is incomplete and defective and that it may not be in the larger interests of the profession of law and of legal studies that the student should forthwith, on passing the Intermediate examination, be permitted to begin his law course. But granting the above premises, the Committee are inclined to think that a preliminary course of one year in general literature, outlines of European History, and Politics (theory and practice), after a student passes the Intermediate examination, is likely to be of greater practical value to the student pursuing his legal studies than degree in Arts, in B.Sc. or in Honours."

A teacher of law aware of the inadequacies in the preparation, in fields of basic importance, of most students now entering law schools must be in full agreement with these observations. In England and the United States of America every law school that does not insist on the possession of a University degree as a pre-requisite of legal studies affords many instances of irregularly educated students who make brilliant records in their law-work.

Moreover, the entrance requirement of a University degree, the symbol of a good general education, as a condition of admission to the law course will have to be given up and students permitted to join law after two years of college work in the near future when the course for the Bachelor's degree in Arts and Science is extended to three years unless there is no objection to getting men into practice at an unreasonably old age. Is it not time that we cease to link up our entrance requirements with a University degree? If the ground for admitting graduates is to ensure competency to do the work, a preliminary course of a year, after Intermediate, as recommended by Sir Aladi Krishnaswami Committee, in basic disciplines, e.g. English, History and Political Science will constitute a better preparation for law students than a Bachelor's degree. This preliminary course is to precede the three-year legal curriculum.

My colleagues have rejected this view on two grounds: "first, it is considered to be too stringent a rule to require candidates to chose a career once and for all after passing the Intermediate examination as the lengthened course for a law degree will preclude graduates in other subjects from choosing the legal profession after taking the degree in other subjects; secondly, it is felt that if a candidate, who, after passing his Intermediate examination has pursued, for two years or more, his study in the law classes, fails through some accident, to complete his legal education, all that he will have to fall back upon is his Intermediate class certificate." The age of 18 or 19 years which is the average age of candidates passing the Intermediate examination is not early for choice of a profession. In fact such choice should be, and is generally, made at that age if not earlier. And then as regards "graduates in other subjects" they may be permitted to join the three years' law course without going through the preliminary course, thus suffering a loss of one year at the most. The second objection of my colleagues can easily be met by awarding the B. A. degree in law at the end of the second or third year of his study, after the Intermediate, including the year devoted to the preliminary course.

I have an alternative suggestion to make. If possession by a student of Bachelor's degree must continue to be a pre-requisite for admission to law studies the regular entrance requirements may be supplemented by provisions permitting exceptions to be made especially in the case of mature applicants whose fitness can be tested by an examination.

I am in favour of the extension of the law course from two to three years irrespective of the question of admission requirements.

Council of Legal Education.

I am in agreement with my colleagues in their aim to substitute an organized efficient practical training of the future members of the bar for the present perfunctory apprenticeship and thereby to control to a certain extent admission to the overcrowded legal profession. But I am not able to see eye to eye with them on some parts of their recommendations in this regard.

It appears to me that the superimposition upon the law degree of the requirement of practical training for one year for a fee of Rs.500, is more than is justified in the circumstances of the case. This will render the legal profession a luxury of the well-to-do. In my opinion the cost of practical training should not be more than Rs.250, and a candidate seeking admission to the legal profession should be allowed to take the qualifying examination after a practical training of six months.

Keeping the fee at Rs.500, will have the effect of excluding from legal practice a large number of poor and bright young men much to the disadvantage of the individual and the society. Even my colleagues admit that "most", not all, of "those who have had brilliant careers in the University are absorbed by services". Assuming that this view is correct it will be most unfortunate for

the nation if the conditions of admission to the legal profession should be made such as to dissuade bright young men from entering the profession. For, is it not a fact that our highest judicial officers have to be selected from amongst the members of the bar and a legal career is generally a stepping-stone in a political career?

I recommend a reduction in the proposed period of practical training on the ground that extension by six months of the age at which young men enter the legal profession—which is inadvisable—will not bring with it any corresponding advantages. In the period of apprenticeship, extending over a year, even under ideal conditions—for which there is no reason to be optimistic—the future member of the bar cannot become a skilled craftsman; it is only in actual practice, when he had to deal with his clients' cases that he can become so. Why then should his beginning practice be delayed by another six months? In six months—the period of training proposed by me—he can learn the rudiments of his craft which is all that is possible. In my opinion the programme of work proposed by my colleagues for the period of training can be covered in six months. My suggestion will enable candidates for admission to the bar to take their qualifying examination after six months' training if they feel confident to do so. Any one who does not pass the qualifying examination will, of course, undergo further training.

System of Instruction and Courses of Study, etc.

In showing the need for a three years' law course I have already pointed out how the overcrowded legal curriculum conduces to cramming and prevents a good grasp of legal principles. If the law course is not extended to three years, the present importance of subjects like Roman Law and Jurisprudence has to be reduced or courses in Procedure, pleading and conveyancing cut off from the legal curriculum and added to the programme of work fixed for practical training in which case the period of practical training must necessarily extend over one year. It is not possible to give a sound legal education in all important subjects in two years.

My colleagues have rightly emphasized the importance of tutorial classes. But if tutorial system is introduced, I do not think the number of not more than forty recommended by my colleagues for a lecture class need be adhered to. A lecture class may consist of double the number prescribed by my colleagues if teaching by lectures is supplemented by effective tutorial instruction.

The present scales of pay for Readers and Professors may need no revision but I am strongly of opinion that the pay fixed for lecturers in the Faculties of Arts and Science is inadequate for a lecturer in law. I recommend that the salary of lecturers in law should be fixed at Rs. 250—10—350.

Advanced Legal Studies.

While my colleagues emphasize the value of higher studies they have recommended that it will be enough if 60 per cent. of the income derived from fees of law students is earmarked for the Faculty of Law. In view of our very poor Law Libraries and the gradual fall in number of admissions to the Faculty of Law I am of opinion that at least 75 per cent., if not the whole, of the income from fees of law students, should be earmarked for the Law Faculty.

Examinations.

Our examination standards need to be raised. I am in favour of terminal examinations and maintenance of tutorial records so that the results of the terminal examinations and the tutorial records might be available for the Committee which brings out the University results. This will make the students work throughout the year.

R. U. SINGH.

Note of dissent by Mr. L. R. Siva Subramaniam, B.A., M.L.

While I am substantially in agreement with the views and recommendations made by the majority of this Committee in their report, which I have signed, there are some points on which I regret I am unable to see eye to eye with them, the chief point of difference relating to the Council of Legal Education. These differences and my reasons therefor are set forth in this separate note.

The idea of instituting a Council of Legal Education in these provinces originated in the Sapru Committee Report, which, apart from indicating what its personnel should be, did not outline its function. The majority of this committee recommend the institution of such a Council and state the need therefor, and the constitution and function of such a Council. With all respect to them I beg to take a different view regarding the creation of such a body.

The need for instituting such a body is expressed to be that the Bar Councils functioning at present under the Indian Bar Council's Act, 1926, are, by their scope and constitution, unfitted for the task of giving practical training to Law Graduates. The Bar Council's Act is described as dealing "with the discipline of the members of the Bar in their relation with the litigant public and the Court" (*vide* page 4 of the report). It is added "The Bar Councils have at present no concern with the education of Law Graduates and their training". In neither the preamble nor the body of the enactment can I find any such limitation in their function. Indeed the Act was passed to "provide for the institution and incorporation of Bar Councils—, to confer powers and impose duties on such Bar Councils", and section 9, clause 2, sub-clause (a) read with section 15, clause (c) gives the Bar Councils powers for the very purpose for which the new Council is sought to be set up. It is stated that the Bar Council's Act is an All-India Enactment and that if the functions of the Bar Councils are to be extended a good deal of legislation will be necessary (*vide* page 4 of the report)—how I have been, with great respect, unable to appreciate.

I am really afraid that the creation of this new Council will very seriously complicate the issue. The Bar Council is a statutory body. The proposed Council will not be such. If at any time the former comes into a conflict with the latter the position of the latter will become extremely delicate and difficult, lacking as it does a legal sanction, and the only source of harmony will be the High Court.

As it is, there appears to be a Legal Education Committee of the Allahabad Bar Council (*vide* page 5, *Leader*, dated the 22nd September, 1938). Much of the recommendations of the majority, it would appear, are already proposed by this committee; only the committee of the Bar Council proposes a fee of Rs.300 for training instead of Rs.500 as under this report.

The main reason for recommending the establishment of the new Council seems to be the objection inherent in a system of election by which the Bar Councils are mostly constituted. That is why the majority opine that the elective principle should not be adopted in constituting the Council of Legal Education (*vide* page 5 of the report). I am afraid, in a democratic age as ours, it will really be an anachronism to seek to get round a body merely because it is constituted by election. Every Parliamentary Government will be open to the same objection, why—indeed—many of the supreme governing bodies of modern universities are constituted by election. It is not the Bar Council which will teach directly and train, but men chosen by it or its committee and I think the Bar Councils or their committees can be trusted to see that proper men are appointed and sound training imparted.

Holding a strong view on this initial ground, I have no desire to examine the suggested constitution of this Council, which is indicated only in a very vague manner. Apart from the mention of a secretary (who is to be an "*ex officio* member of the Faculty of Law of the University in these provinces") having a paid establishment, and that the number of the Council should be fifteen, nothing more is indicated on which it is possible to take a definite view.

The function of the proposed Council will be, it is said, the imparting of practical training in Law. It is doubtful whether the Sapru Committee itself had this in view: and it is extremely likely it had not. Clause (3) of the recommendations of the Sapru Committee relating to Legal Education speaks of the Faculty of Law and the *Bar Council* dividing the work and of a liaison between the two. What the Sapru Committee probably thought of was a co-ordinating body between the several universities of these provinces. On what a body of a different description can achieve in this useful and necessary direction I have ventured to say something later in this note.

There is one other point in the report of the majority, in this connexion, which is somewhat puzzling. It says, "We may also add that the rule requiring

two years' practice in the subordinate Court for leave to practice in the High Court should be reintroduced. We do not think that the elementary education and training which will be given by the Bar Councils is sufficient" (*vide* page 7 of the report). It is not clear whether the majority contemplate a two years' training after the one year training under the proposed Council of Legal Education or whether this two years' practice is to be substituted if the other recommendation fails.

I would add a few words about the payment of the sum of Rs.500 for training. This is Rs.200 more than that prescribed by the Bar Council. This imposition will, I am afraid, work as a great hardship. Law is a "Public Profession". It is not to be confined to any class. The danger of its falling into the hands of an exclusive class is well pointed out by many American writers¹.

I am really unable to appreciate the need for making this payment compulsory. After all, training in an office depends on the good-will of both the senior and the apprentice-at-Law under him, the sincerity and the desire of the former to instruct and to impart, and the readiness and the eagerness of the latter to learn. The proposed condition that in case the apprentice fails to qualify within the period, the senior should have him on his hands for a further period—in fact till the training is said to have been satisfactorily received—may work as a hardship both on the senior and the junior. The former may complain that the latter is lazy and incompetent and the latter that the former lacks and interest sympathy in him. More insistence should be made on the sufficiency of the test rather than on payment. The desire to turn the new entrant into the profession into an expert and skilful lawyer, as a person would be after many years of standing and lucrative practice, must ever remain a dream.

While I have said so much against constituting a Council of Legal Education, I should not be regarded as being opposed to the training needed by a raw Law Graduate before he could be permitted to practise.² That such a training is needed will be admitted on all hands: but this training should be, in my opinion given, by the Bar Council. In fact I am of the view that the proposed Council of Legal Education will be usurping the functions of the Bar Council and that, therefore, it will not merely be unnecessary but undesirable to have this new body instituted.

While dealing with this question, some observations of the committee regarding the Council of Legal Education in England call for examination. Legal Education in England and "call to the Bar" are matters of history as the whole of English Law and English Constitution is. The Council of Legal Education in England was inaugurated in 1852 as a federal body consisting of delegates appointed by the Benchers of the four Inns of Court³—in fact it is an agency of four "august principals"⁴ to conduct examinations on their behalf which, though not originally, laterly (since 1872) became compulsory.⁵ What was originally contemplated by the Inns of Court was training by residence and discussion and moots with the assistance of senior apprentices and Benchers⁶ "the sergeant left the Inn of Court immediately on taking his degree"..... "and teaching developed on the apprentice"⁷. Till the establishment of the Vinerian Professorship in Oxford (1758) and the Downing Chair in Cambridge (1800) little attention was paid by the Universities in England to teach English Law—the Regius Professorships were for teaching Civil (Roman) Law and Western Canonical Law (the latter being discarded in the religious reformation of the 16th Century).⁸ Naturally a law degree of a University did not entitle a person to practice, and legal training to this end fell into the hands of the Inns of Court. The conditions in India have been quite different and not much lesson can be drawn from the English Legal Education tradition.

The majority of the committee seem to think that the Council of Legal Education in England does not provide for practical training because there is not much need therefor, since there are the solicitors to assist all barristers. But the real reason is different. As pointed out before, the Inns of Court themselves were regarded as giving the training⁹, though much of this in later days was only in name,—the Universities taught law as a science and the Inns were a sort of "Legal Clinics".

¹ "It is essential to a democratic community as it is to any other that its lawyers should be competent; but it is also essential that in the pursuit of competency steps should not be taken which would make the privilege of practicing Law virtually the monopoly of a favoured economic group" p. 19, *Progress of Legal Education, 1922*, published by the Carnegie Foundation for the Advancement of Teaching.

² Dr. Hazel suggests for English Barristers also, as in the case of solicitors, a practical training, *vide* *Law Teaching and Law Practice* 47 L. Q. R. at p. 508.

³ *vide* Dr. Jenks: *Legal Education in England*, p. 162 of Vol. 51, L. Q. R.

⁴ Dr. Hazel at p. 514, L. Q. R., Vol. 47.

⁵ Dr. Jenks 51 L. Q. R., p. 162.

⁶ *vide* *ibid*: also Plucknett in 48 L. Q. R., "Legal Profession in History."

⁷ Plucknett 48 L. Q. R., p. 335.

⁸ Dr. Jenks 51 L. Q. R., p. 163.

⁹ "The Inns were probably guilds of practitioners in the King's Court at Westminster which on some date acquired the valuable monopoly of calling to the Bar" Jenks, 51 L. Q. R., p. 163.

Incidentally the majority report says, "It should be open to the Council of Legal Education to refuse to recognize the degree of any University whose standard falls short of that expected by the Council." This appears to be contradictory to what it has said elsewhere. According to its own scheme the majority report wishes the Universities to be responsible for the theoretical and the Council for the practical training.¹ If the Council is set up only to give practical training, how does it arise that it has jurisdiction to decide about the recognition of University degrees awarded for the theoretical knowledge? All the Universities are statutory bodies—some are created by Central Acts. Their Rules and Regulations and Courses of Studies have to be passed by expert bodies and approved by the Government. Their Acts expressly provide for the recognition of their degrees.² I am afraid, therefore, that it cannot be within the competence of the Council to withdraw recognition. A Council proposed as a supervising body over autonomous Universities will be resented by the latter, and I think, every thing considered, the proposal of instituting such a Council should be dropped.

Instead of having such a body it will be useful in this country to have unofficial bodies of the description of Public Law Teachers' Society in England and the Association of American Law Schools in the United States of America. Unfortunately little appears to be known about the constitution and working of these bodies here. The former was strongly represented on the Atkin Committee and the latter rendered considerable help to the American Bar Association. Both have endeavoured to promote interest in legal reform and research. I would suggest we have a society corresponding to the English one and an Association of the Law Faculties, in the first instance, of the Universities of these provinces. The advantages of such bodies will be great. They will tend to co-ordination of work, mutual co-operation between the Universities, the raising of standards, the stability and the dignity of law teaching profession, organization of higher study and research, the facility to students of combining courses in two Universities on an accepted credit system, etc. etc.

On the subject of the duration of the course I am constrained by the circumstances in our country at present to take the same view as the majority, but I may, in view of my expressed opinion elsewhere, state the reasons for my assent. Almost all the world over legal Education covers a period of three years, excluding the period of practical training. This has been the tendency in America for several years³ and the period is the same now in Germany⁴, Netherlands⁵, and South Africa⁶. But it should be noted that in many places it is not provided that a person should be a graduate before admission to a law course, though in many cases he has to take an Arts Degree before being awarded the Law Degree. In many foreign countries law is taken with other subjects and the combined course covers five or six years. But in India in all the Universities (excepting that of Bombay which has recently changed its rules) entrants to the law course are required to be graduates, and all Universities (excepting those of Calcutta, Delhi and the Punjab—the latter two are trying the experiment recently,—and in all the three now the course covers three years) have only a two years' course. Indeed, Bombay has taken the extraordinary step of having only a two years' course even for entrants who are only Intermediates. The scheme propounded by the committee set up by the Andhra University (over which Sir Alladi Krishnaswami Iyer, Advocate-General, Madras, presided) recommended only a two years' course with a proviso that the entrants who may be intermediates should undergo a compulsory preliminary training.⁷

In view of the present state of affairs, if the period of studies increased, there will be an unhealthy exodus of students from one University to another. It is necessary that concerted action should be taken by all the Universities in India. Till then the maintenance of the *status quo* appears to be the best course to adopt.

¹ Cf. p. 20 of typed draft report. cf. also, p. 15 (end) and p. 16 "The Law Degree conferred by the University will be accepted as a sufficient guarantee that he has acquired such (theoretical) knowledge."

² As already pointed out the analogy drawn from the relation between the Council of Legal Education in England and the English Universities will be inapplicable in India. I would invite attention to the suggestion made by Dr. Hazel at p. 514 L. Q. R., Vol. 47.

³ Publication of Carnegie Foundation: Annual Review of Legal Education, 1931.

⁴ Recent Reform of Legal Education in Germany, p. 34 Public Law Teachers, Society's Journal 1936.

⁵ *Vide* p. 59 Legal Studies in Netherlands Public Law Teachers' Journal, 1935.

⁶ Legal Education in South Africa: Journal of Society of Public Law Teachers, 1934.

⁷ Having read of a suggested pre-legal curriculum (not merely of a pre-legal general Education) in the University of Illinois Calendar for 1919-20, page 203 *et seq.* I suggested a course to a member of the committee in the Andhra University and he told me that the preliminary course devised by them was on that analogy. Such a preliminary course will obviate the disadvantages experienced on account of the difference in the standards of knowledge useful for legal studies found among different kinds of graduates admitted to a law class.

As regards the courses of studies I think the present curriculum to be very heavy, and the suggested additions will smack of the evil contemplated by the majority report. In Allahabad, Lucknow and Benares, Company Law is taught. It may not be taught in Agra and Aligarh, but it may be left to these Universities to decide whether to include the subject. I am not in favour of introducing Insurance or Income-tax Law. If any were to be added, I would rather it is legal history¹, and if practical needs demand, the Indian Succession Act. But having regard to the duration of the course any addition seems inadvisable. It is more necessary that a lawyer should know fundamental legal concepts than that he should have his head crammed with a number of sections; more necessary that he should be able to perceive legal distinctions than that he should be a walking manual; more desirable that he should know where to find the law than to be a human digest. Legislative output is so great in these days of parliamentary activities that all law, to use the words of a famous judge, will be reduced to a beggarly knowledge of indices. As Langdell said, let it be remembered that fundamental legal concepts though appearing in many guises are few². It is more necessary to have a scientific grounding, to study the case law in its proper development than to have covered a crowded course.

Professor Lee is reported to have said³:

- (1) You may train a man in the practice of law.
- (2) You may train him in the law in which he is to practise.
- (3) You may train him in law.

The true aim of a law school will be to afford an education so as to cover all the three above but by its very nature it can and must lay emphasis on the last. "The law school cannot satisfy itself with turning out a number of journey-man legal mechanics as the Bar will absorb."⁴ The object of a University law school is not to make men smart but to make them wise—to start them on the road which will lead them to the abode of the masters⁵.

Dealing with the curriculum and instruction it may be pardonable to make a passing reference to the case-method of teaching law now in vogue in many leading American Law Schools. This inductive method applied to legal science, originally tried with success by Langdell at Harvard, was followed by many American Schools. At the instance of the Carnegie Foundation for the Advancement of Teaching a study of this system was made by Professor Josef Redlich, the well known jurist and author, and the results were published as Bulletin no. 8. Professor Redlich has high praise for this system which I have, within the limits possible here, tried with advantage.

Of this Case-method Professor Redlich remarked. "The observations I have made have left no doubt in my mind that the development of the case-method in American Law Schools has produced a far reaching change in the general conceptions of the nature and purpose of Legal Education: a phenomenon which transcends the boundaries of Anglo-American Legal Life and demands the attention of all modern lawyers.⁶ The introduction of this method should, however, be left for the consideration of the Faculties themselves."

The Committee make no recommendation about the proportion of full-time to part-time teachers. I am distinctly of the opinion that apart from those entrusted with the teaching of the Procedural laws, law teaching should be confined to those who make teaching their main profession. This is so all the world over. This does not mean such teachers should not have "chambers," nor that men without any practical experience should be allowed to teach any subject, practical or theoretical.⁷

The Committee says that each class should not exceed 40 at the most. This, I am afraid, is too low a figure. I would suggest that a lecture class should not have more than 80 and a tutorial class more than 12; that tutorial work should be insisted upon, that the student should be made to study and learn the law himself under guidance, unlike as at present where he is most often spoonfed.

¹ It is strange that in spite of the works by eminent men like Thayer, Bigelow, Pollock, Maitland, Holdsworth and others, and in spite of the fact that the Common Law requires to be taught in the historical method, this subject has received little attention at the hands of our Universities.

² Vide passage cited at p. 11 in Redlich's Case-method from the Introduction to a selection of cases on the Law of Contracts by Langdell.

³ Vide page 507 L. Q. R., Vol. 47.

⁴ Professor S. P. Simpson in 49 Har. L. R.

⁵ Holmes cited by Professor Simpson 49-H. L. R. p. 1073.

⁶ P. 25 case—method by Redlich.

⁷ Dr. Hazel recommends that Law teachers should have had some practical training. P. 505, L. Q. R., Vol. 47. Similarly Redlich at p. 11 Case-method.

The student should be allowed scope to think and appreciate and to assimilate what he has read. The number of lectures are to be cut down and tutorial work increased. The lectures should be meant only to present a line of investigation and thought and to set the student thinking on the topic they have read and to read other topics on similar or analogous lines.

The majority recommend that at least 50 per cent. of the Examiners should be external. This is the rule at present in Benares, and I hope in other Universities of these Provinces. But the question arises whether in teaching and residential Universities the internal men, who are in touch with the students, should not be associated in larger measure as in Oxford and Cambridge. The suggestion is born, it appears, of a desire to keep free the University examinations from a suspicion which may be cast upon its standards if internal men are utilized to a larger extent. But I am sure that University teachers worth their salt will conduct themselves as examiners in such a manner that not the least reproach can attach to them, and I think, if my hope is correctly based, the caution suggested is needless.

The Committee opine that among extra curricular activities lectures on Professional Ethics should be delivered¹. While holding the same view I would add that this should be done by a series of lectures arranged for the purpose for men under practical training. The legal Profession should be grateful to the late Justice P. R. Sundara Iyyar who delivered such a course of lectures to the apprentices-at-law at Madras several years ago which lectures are now published in book form.

I also agree that provision should be made for higher legal studies and research.² "Like all other education it (legal education) fails in its task unless it stimulates a select few of its devotees to carry the task of learning into new lands and to light the way before their followers."³ The Universities will be failing in their duties if they did not soon enough grapple with this task. But there are practical difficulties. Even in England efforts are being made only since recently for organized Legal Research.⁴ Nevertheless, with the growth of opinion and the desire of young men for higher academic training, together with the need consequent on the expansion, in many spheres, of human activities for the growth, systematization and reform of law—the Universities, it is hoped, will meet the demands for higher legal studies and researches as in the case of other sciences, pure and applied.

It is at once a pleasure and a duty to acknowledge my indebtedness to the Chairman of this Committee for his uniform courtesy and kindness but for which this note would never have been published.

L. R. SIVA SUBRAMANIAM.

Dated the 28th September, 1938.

¹ The American Bar Association has also a similar recommendation, p. 41: Annual Review, 1931 (Publication of Carnegie Foundation).

² On the methods of Legal Research Mr. B. A. Wortly has an interesting article in the Journal of the Public Law Teachers' Society, 1935.

³ Jenks 51, L. Q. R., p. 175.

⁴ Cf. The recommendation of the Atkin Committee for founding an Institute of Legal Research.

Note of dissent by Pandit Iqbal Narain Gurtu, M.A., LL.B.

1. While I would prefer that admission to the Law Faculty of Universities be allowed after passing the Intermediate Examination as is done in the case of Medicine and Engineering; and the course of study for a Law Degree should be four years and general and cultural education in English and subjects like History, Political Science and other complementary subjects, a knowledge of which is likely to be useful for a lawyer, should be included in the syllabus of legal studies. I am prepared to support the recommendations of the Committee that admission to the Law classes may for the present be allowed only to graduates in any Faculty of the University provided that the total period of study for the LL.B. Degree does not exceed two years.

2. I am in favour of throwing open the Law classes to all graduates. In my opinion it is not necessary that a candidate for admission to the Law classes should be required to possess a knowledge of English "Literature" laid down for the Degree Examination. At most he should be expected to possess a knowledge of General English. In the Allahabad University a candidate for the Commerce Degree has to take General English as a compulsory subject in the second year of his study, and the B.Sc. (Pass and Honours) candidates can at their option take General English as an extra subject. If admission to the Law classes is confined only to such science graduates as have taken general English as an optional subject the necessity of having a separate test in English as recommended by the Committee would disappear.

3. While I am not in favour of graduates being permitted to sit for the M.A. and LL. B. Final Examinations simultaneously within two years I would not disallow their joining both M. A. and LL. B. classes. There is every likelihood of the Universities laying down a three years' course of study for graduation in the near future instead of the present two years' course. If the practice of joining both the M. A. and LL. B. classes is discontinued as recommended by the Committee it will take a young man a much longer time before he can take the M. A. and LL. B. Degrees. It will also result in discouraging many a competent young man from specializing in other subjects besides law for which every University in the interest of Higher Education has to make ample provision. Here, again, the middle course followed by four out of five Universities in the Province is the safest, namely that a graduate wishing to do both post-graduate studies and Law should put in three years instead of only two before he can obtain both the M. A. and LL. B. Degrees.

4. In my opinion it would be desirable to lay down a minimum provision of the staff required to teach the two years' course of study in Law at every University or College. Perhaps a staff of three whole-time and three part-time teachers will be the minimum required to give proper teaching in the various subjects prescribed. A salary of Rs.350 per month for the senior teacher who will be the Principal of the College or the Head of the Law Department and of Rs.250 per month for the other two whole-time teachers with a provision for annual increments and a salary of Rs.200 per month in the case of part-time teachers should be the minimum. Law books being often costly, a minimum of Rs.1,000 per year should also be fixed for the Law Library.

5. I entirely agree with the view of the Committee that courses in Law in the Universities should aim at giving a sound liberal and cultural education in Law, but any practical training intended for the exercise of the profession should be the concern of a separate body which it would be desirable to constitute for this purpose. I would, however, raise the membership of the proposed Council of Legal Education from 15 to 25. I would also suggest the representation of the Board of Revenue on this Council and of each of the five Universities in these provinces. Instead of the Council nominating its Secretary, who will be a salaried official to be an *ex officio* member of the Faculties of Law of all the five Universities, I would suggest the inclusion in the Faculty of Law of each of these Universities of a member nominated by the Council of Legal Education who is not already a member of the Faculty of any University.

6. As regards the organization of training to be given through senior members of the Bar I venture to make the following suggestions. The present practice of leaving the choice of a senior practitioner of a certain standing in any district to new entrants to the profession has in many respects proved a complete failure. In my opinion the Council of Legal Education should select a few districts in the province where such training in its opinion could best be given. In the selection of the districts due regard will have to be paid to their geographical position in every division and to their importance from an industrial, commercial and other points of view, also to the variety in the nature of cases instituted and the general

efficiency of the local Bar. Taking an average of about 400 new entrants in the profession every year arrangements for practical training could be conveniently made in about 20 selected districts in the province. After consulting the local authorities the Council of Legal Education may appoint half a dozen senior men in such districts who may be willing to undertake this work of training and their services may be engaged under a contract by the Council for two or three years at a time. Such senior lawyers will act as "recognized teachers" on behalf of the Council for a term of years on payment and will be required to give training on the lines laid down by the Council. They may be asked to submit to the Council every three or four months a Progress Report of the individual pupils under their training and a statement of the kind of work done by them during that period. If the Progress Report of a candidate are found satisfactory he may be permitted to sit for an examination to be conducted by the Council at the end of the year provided he has paid in full the requisite amount of fees. I think a fee of Rs.500 suggested by the Committee is much too high. A fee not exceeding Rs.240 to be paid in twelve monthly instalments of Rs.20 in the local treasury will be quite sufficient. Out of this the Council may pay Rs.200 per pupil to such "recognized teachers" either by instalments on receipt of the Progress Report for each term or the whole amount may be paid at the end every year as may be found convenient. The balance of Rs.40 for candidate should be quite sufficient to meet the expenditure over establishment salaries, remuneration to examiners, printing, stationery and other contingent expenses.

7. In my opinion the number of young lawyers allotted to each such senior lawyer by the Council for training should in no case exceed four at a time as with his professional occupations the lawyer may find it difficult to pay adequate attention to the needs of a large number of pupils and to keep them properly engaged with the quantum of work passing through his hands.

8. The question of the training of young lawyers aspiring to practise in the High Court or Chief Court is also important and it is necessary to provide some simple and satisfactory procedure for their admission. In my opinion it is not enough to revive the old rule recommended by the Committee, viz. that he should have practised for two years in the Subordinate Courts. It is much too short a time for a new man to gain any adequate experience of original work in the district regard being had to the paucity of work which a junior has likely to face at the beginning of his career in a growingly overcrowded profession. In my opinion he should be required to put in at least four years' practice in the Subordinate Courts. Before he is granted leave to practise in the High Court he should be required to satisfy the High Court that he has been making a serious study of case law—both Indian and English and of legal principles and also of the procedure followed in the High Court. An examination conducted by the Council of Legal Education for this purpose would be the most convenient method and would conduce to a serious study of law among the young lawyers aspiring to practice in the High Court. They will thus be led to make good use of their time in the early period of their career as a lawyer and a period of four years will give them sufficient time to attend to their practice as also to a serious private study without causing any heavy strain. Lawyers of 7 years' standing in a district who apply for admission to the High Court are to be exempted from the qualifying examination suggested above. They may be required to deposit only a fee of Rs.300 in place of Rs.500 which they have to do at present. Out of this amount Rs.50 should suffice to meet the expense of the Council of Legal Education.

IQBAL NARAIN GURTU.

Dated the 9th September, 1938.

APPENDIX -

Questionnaire of the U. P. Legal Education Reform Committee.

The following questionnaire is being issued by order of the President of the Committee on Legal Education appointed by the Government of the United Provinces.

The Committee will welcome answers to the questionnaire from persons interested in the Reform of Legal Education and copies of the questionnaire can be obtained from the Secretary. The questionnaire need not be regarded as exhaustive and those answering it would be welcome to supply information and suggestions relevant to the subject. It is not necessary to answer all the questions in the questionnaire.

The replies to the questionnaire are to be sent to the Secretary by 7th September, 1937, and if the persons sending replies are desirous of giving evidence before the Committee they should inform the Secretary of their intention when they send their replies.

Most of the sittings of the Committee will be held at Lucknow. If it is considered necessary meetings may be held at some other towns in these provinces also.

(Sd.) D. PADMA NABHAN, I.C.S.,

Secretary,

Dated the 11th August, 1937.

U. P. Legal Education Reform Committee.

QUESTIONNAIRE.

Expenditure on Legal Education.

1. It is said that the Universities derive a large income from the Law Departments but the provision which they make for the expenditure on legal education is quite inadequate. Is this so?

2. If so, would you approve of the Universities being required to earmark the whole or a portion of their income from the Law Department for expenditure on that department or would you suggest any other measure for ensuring adequate provision for legal education?

System of instruction, course of study, etc.

3. What is your opinion about the present system of—

- (a) part-time instruction in law?
- (b) combining of the study of law with other subjects?

4. What do you think of the present courses of studies in law prescribed by the Universities in these provinces?

5. Do you consider it desirable that better provision should be made for instruction in—

- (1) Conveyancing, drafting and pleading.
- (2) International Law (Public and Private).
- (3) Constitutional Law.
- (4) Commercial Law.
- (5) Legal History.

Would you suggest any other subject which should be included in the curriculum or to which greater attention should be paid than at present?

6. What is your opinion about the making of day classes and tutorial work compulsory like what obtains in other Faculties?

7. Do you agree that the system of legal education in all the Universities of these provinces should be made uniform and that they should be required to take concerted action in the matter?

8. Do you consider it necessary to limit the number of students who should be admitted to one class? If so, what should be the maximum number?

Period of Study.

9. (A) Do you approve of the suggestion that the course of study for a Law Degree might be four or five years instead of two provided that

- (1) admission to the Law Faculty of the Universities is allowed immediately after passing the Intermediate Examination as is done in the case of Medicine and Engineering, and
- (2) general and cultural education in English and subjects like History, Political Science, Economics and other allied subjects a knowledge of which is likely to be useful for a lawyer may also be included in the syllabus of legal studies in order to make the course self-sufficient and both cultural and practical in its character.

(B) In case you approve of the above suggestion, to what extent will you reduce and readjust such a course of study in the case of students seeking admission to the Law Faculty after taking a Degree in some other Faculty?

(C) If a shorter period of study is to be allowed in the case of Graduates will you confine it only to graduates who may have taken subjects like History, Political Science or Economics, etc. or will you allow similar concessions to students who may have taken their Degrees in other Faculties like Science, Commerce or Agriculture?

(D) How far would the adoption of the above scheme necessitate an additional staff in the Law Department of the various Colleges and Universities and what will be its financial implications?

10. Would you suggest the extension of the period from 2 to 3 years. If so, would you include in it the period spent with a senior before the person is qualified to practise or would you still have an additional period of training with a senior?

11. In case the period of the course for the LL.B. Degree is extended beyond two years would you make a corresponding increase in the number of examinations?

Council of Legal Education.

12. Is it desirable that in order to improve legal education a council of legal education should be created? If so, what should be the constitution and function of such a council?

Liaison between Bar Council and Faculties of Law.

13. Is it necessary to establish a liaison between the Faculty of Law and the Bar Council. If so, what method would you suggest for the purpose?

Qualifying Examination.

14. Do you think it desirable to have a separate examination qualifying for practice as distinct from a University Law Degree, somewhat on the lines prevailing in England?

15. If so, (a) what body should hold such a qualifying examination and what should be the qualification for entrance to such examination?

(b) What should be the course of study for such qualifying examination?

(c) Should the candidate for this qualifying examination go through a course of lectures or training or both and if so, how and by whom and for how long should this teaching or training be conducted?

(d) Should the course for the University Law Examination be a post-graduate or a graduate course?

16. Do you think it desirable that the University Law Degree should be recognized as an adequate qualification in respect of the subjects taught at the University and the qualifying examination should only include additional subjects in law, both substantive and procedural? If so, would you insist that such University Law Degree must have been obtained by a course of instruction received at particular colleges and institutions only?

Pre-legal Curriculum.

17. Whether you would allow any graduate in Science, Arts, or Commerce irrespective of the subjects he has studied in the Intermediate and the degree course to be admitted to the law course or would you prefer to have a pre-legal curriculum which the students must be required to cover before joining the law course?

Examinations.

18. Should the Universities be required to hold terminal examinations and should the record of the terminal examinations and of the tutorial classes be taken into consideration in judging the results of the final examination?

19. Do you think the present system of examination satisfactory? If not, would you favour the introduction of one of the following or would you suggest any other improvement in the present system of examination?

(a) the system of examination as in the case of Bar Examinations in England,

(b) the system of compartmental examinations which enables students who are unsuccessful at one examination to sit at the next only for the subject in which they have failed, or

(c) the system of making certain subjects compulsory and certain optional.

Specialized Study.

20. Would it be proper to make some arrangement for specialized study of certain subjects and, if so, would it be advisable that each University should specialize in a particular subject so as to avoid duplication?

Higher Studies in Law.

21. Should some provision be made for teaching for higher degrees such as for the degrees of Master of Laws and Doctorate in Law? If so, what measure would you suggest for the purpose?

Teachers of Law.

22. Are you satisfied with the number of teachers at present employed for legal education in the Colleges and Universities of these provinces and with the scale of salaries paid to them? If not, what should be the proportion in the number of teachers and the students and what minimum scale of pay would you prescribe in order to attract suitable teachers?

23. Should the teaching staff consist

(a) exclusively of whole-time teachers?

(b) exclusively of part-time teachers?

or

(c) partly of both?

Law Libraries.

24. Are the Universities in the provinces and colleges imparting legal education provided with adequate law libraries? If not, would you insist on their being so provided and lay down some standard for such libraries?

Extra Curricular Activities.

25. Would you suggest any extra curricular activities such as holding of moot courts, lectures on professional ethics, etc.?

REGISTERED No. A388



11

Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

ALLAHABAD, SATURDAY, 13TH JANUARY, 1940

PART VIII

Official Papers : Statement of Cotton Pressed ; Vital Statistics ; Seizures and Deaths ;
Crop and Weather Reports ; Prices Current ; Notices and Advertisements, etc.

GOVERNMENT OF THE UNITED PROVINCES

No. 3825/XV—821-1939

EDUCATION DEPARTMENT

Dated Lucknow, the 21st December, 1939

THE following report of the Special Committee to advise on Practical Training for Engineering students and ex-students is printed for general information.

(Copies of the report are available for sale at the Government Central Press, United Provinces, Allahabad.)

By order,
N. C. MEHTA,
Secretary to Government,
United Provinces.

INTRODUCTION

IN its report to Government, the United Provinces Unemployment (Sapru) Committee recommended *inter alia* that some well-thought out system for imparting practical training to civil, mechanical and electrical engineers should be provided. It was recognized that the preparation of such a system or plan for imparting training should be left to experts and that its completion would necessitate consultation with and co-operation on the part of certain departments of the Government, factories and big industries not only in these provinces but also possibly outside. It was also recognized by the Sapru Committee that steps should be taken to prepare a scheme by which the practical side of the education of mechanical and electrical engineers could be completed, so that they should be fit for immediate employment by Government and industrial concerns. It would appear from the recommendations of the Sapru Committee that the Committee had in mind two types of practical training, the first type of training which would form an integral part of a course of instruction leading up to the grant of a degree or diploma, and the second type, practical training which should be imparted to an ex-student in order that he should be enabled to secure immediate employment.

2. The United Provinces Government having reviewed the existing means by which students and ex-students were afforded opportunities of training in electrical, mechanical and civil engineering, was of the opinion that the existing arrangements left room both for expansion and improvement. Accordingly, agreeing with the recommendations of the Unemployment Committee, they appointed in January, 1937, a special committee composed as follows :

Chairman

(1) Sir William Stampe, C.I.E., I.S.E., Chief Engineer, Public Works Department, Irrigation Branch.

Members

(2) Chief Engineer, Public Works Department, Building and Roads.

(3) Superintending Engineer of the United Provinces Electric Supply Co., Ltd.

(4) Director of Industries, United Provinces.

(5) Superintendent of the East Indian Railway Loco Workshops, Lucknow.

(6) Superintendent of the B. N.-W. Railway Workshops, Gorakhpur.

(7) Principal, Thomason Civil Engineering College, Roorkee.

(8) Raja Jwala Prasad Sahib, Pro-Vice-Chancellor, Benares Hindu University.

(9) Principal of the Technical Institute, Dayalbagh.

(10) Khan Bahadur Hafiz Ghazanfarullah, M.L.A.

(11) Mr. E. M. Souter, C.I.E., of Messrs. Ford and MacDonald, Ltd., Cawnpore.

(12) Mr. Padampat Singhania of Messrs. Juggilal Kamlat, Cawnpore.

(13) Mr. Ranjit Singh, Managing Director, R. G. Cotton Mills, Lucknow.

(14) The Electric Inspector to Government, United Provinces.

(15) Khan Bahadur Haji Munshi Nisarullah, M.L.C., Gorakhpur.

Secretary

(16) Mr. Gerald Lacey, I.S.E., Superintending Engineer, Headquarters.

With the retirement of Sir William Stampe on 31st October, 1937, Mr. M. R. Richardson, C.I.E., I.S.E., was appointed as Chairman of the Committee. Mr. F. D. Tunnicliffe, Superintending Engineer, Public Health Department, was co-opted a member by the Committee at its first meeting in July, 1937.

3. The terms of reference of the Committee were to "advise Government as to the measures that can and should be adopted with a view to provide facilities for effective practical training, with or without payment of wages or remuneration, for students and ex-students of colleges and schools, both Government and recognized, of civil, mechanical and electrical engineering in the United Provinces."

4. Owing to the introduction of Provincial Autonomy and the pre-occupation of Sir William Stampe, the Chairman of the Committee, with the very heavy development work then in progress, it was not possible to convene a meeting of the Committee until 27th and 28th July, 1937. Prior to this date, however, a large number of enquiries had been addressed to institutions and engineering firms, both in India and abroad, to which a reference will be made in due course. At the first meeting of the Committee held at Lucknow, the existing arrangements were reviewed and the most suitable type of practical training for each class of engineering student affected briefly discussed. The final meeting of the Practical Engineering Training Committee was held on 7th March, 1938, at Lucknow. The evidence recorded to date was reviewed. The type of practical training necessary for each class of engineer student was finally discussed and agreed, and it was resolved that the final report, based on the decision arrived at, should be drafted by a sub-committee. This report has been subsequently circulated and approved by all members of the Committee except Khan Bahadur Hafiz Ghazanfarullah and Khan Bahadur Haji Munshi Nisarullah, whose replies have not yet been received. Separate notes of minor dissent by two members are appended to the report.

Report of the Special Committee to advise on Practical Training for Engineering students and ex-students**CHAPTER I****PRACTICAL TRAINING CIVIL ENGINEER CLASS STUDENTS**

THE great majority of civil engineers practising in the United Provinces have been educated at the Thomason Civil Engineering College, Roorkee. The course for the degree of B.Sc. (Engineering) at the Benares Hindu University is a combined course in mechanical and electrical engineering, it also includes a number of subjects common to civil engineering, but students normally adopt mechanical or electrical engineering as their profession.

2. At one time the Thomason Civil Engineering College was enabled to give practical training to a large number of its ex-students. A certain number of posts were guaranteed by Government, and for every guaranteed post, two ex-students were given a year's practical training, during which they received a stipend of Rs.150 per mensem. Thus in any year, if there were six permanent vacancies, twelve ex-students were afforded a year's practical training, and of these six were eventually selected for permanent employment and of the remainder many were retained in temporary service. From 1930, however, the payment to civil engineer class students of stipend was stopped in accordance with Government orders.

3. Passed civil engineer class students of the Roorkee College are still taken for a year's practical training, but unpaid, on the following terms :—

(a) That they will receive no travelling allowance for joining the stations to which they are posted for training ;

(b) That they will receive travelling allowance at second class rates for journeys performed in connexion with their training ;

(c) That they will receive no subsistence allowance or stipend during their period of training ;

(d) That they will have no claim to any vacancy in the Provincial Engineering Service upon the completion of their year of training as no promise of any employment under Government can be held out to them.

A number of students have thus been afforded practical training.*

4. Until approximately 25 years ago, the curriculum at Roorkee College included a large amount of project work and the training imparted was designed somewhat too exclusively to secure a product of immediate practical utility. The present policy, in common with that of institutions in the West, is more that of concentration on fundamental principles.

5. In a recent discussion at the Institution of Civil Engineers, London, attention was drawn to the fact that in civil engineering in the past many men had to obtain their practical training as assistants, and whatever their employers might state to the contrary they were expected to undertake posts of some responsibility on such employment. The same remark applies to ex-students in India, and there has been a tendency to demand too much of them during their period of training.

6. The advance in technical knowledge and the growth of specialization have made it essential for universities and colleges to concentrate on fundamental principles, and it is now all the more necessary that arrangements should be made for a student to obtain, when he goes on works, not merely experience but also a carefully planned course of practical training. In civil engineering this training can usually be obtained by placing the ex-student under a sympathetic and experienced officer.

7. It was suggested at the discussion of the Institution, to which reference has been made, that possibly big contractors, large structural engineering firms, and municipal and county engineering offices might be able to assist in such civil engineering training. These views expressed as late as November, 1937, in England concurred with those which were placed on record at the first meeting of the practical Engineering Training Committee in July, 1937.

* Vide Appendix A.

8. It will be observed that with a diminution in the number of government posts opened to ex-students of civil engineering, there has been no countervailing increase in the sources of employment elsewhere. This Committee is not concerned with employment, but with affording civil engineering students opportunity of practical training that will permit of their immediate employment, should opportunities occur.

9. From what has been said on the subject of the course of instruction at modern colleges, it is evident that the employer has also responsibilities and that a demand for immediate utility is not consistent with obtaining employees of the greatest ultimate value.

10. It is the opinion of the Committee that if ex-students can secure practical training, and such training presents no great difficulties, that the supply of such trained students will positively stimulate a demand. Thus, the standard of building construction in large cities, such as Lucknow and Cawnpore, is at present uneven and sometimes very low, and there is an obvious necessity for building contractors employing on their staff engineers with experience of construction and a knowledge of the principles involved. In addition to work of this character, much of which is carried out by barely qualified incompetent contractors, high class structural engineering contractors would be ready and willing to employ ex-engineer students, and also to train them, provided the necessary machinery were set up to secure more co-operation between the employers and educational institutions. Such students, after their training, would either secure employment with the firms concerned, or be competent to undertake responsible building work independently and thus raise the general standard of constructional engineering throughout the cities of the province.

11. The position in respect of practical training facilities afforded by the Public Health Engineering Department and Municipalities is far from satisfactory. In the Public Health Engineering Department the appointments available are few and far between and are of a temporary character, and there is difficulty in getting candidates with sufficient practical training. A proposal has recently been made and awaits the sanction of Government, that two paid apprentices with Roorkee qualifications should serve under agreements for two years, but no decision has as yet been made. Some assistants in the Public Health Engineering Department have, at their own expense, proceeded to the United Kingdom to obtain more specialized experience. It will be seen therefore that there is no question of the department's being ready and willing to employ ex-students, if only they possessed the necessary practical qualifications and training; the position on the contrary is that appointments are made so rarely that the department must manage with whatever materials is offered. There appear no reasons why ex-students of the Roorkee College should not be afforded opportunities for training in the Public Health Engineering Department on the same lines as are offered by the Irrigation and Buildings and Roads Branches.

12. The posts of Municipal Engineers and Assistant Municipal Engineers are governed by section 68 of the Municipalities Act, 1916, and by rules under section 296.* In Class I, there are 6 municipalities, in Class II, 15 and in Class III, 9, in addition to other municipalities of less importance that manage as best they can with overseers, mostly untrained.

13. The number of fully qualified engineers with adequate practical experience, employed by the 30 municipalities in Classes I, II and III, can, in the opinion of the Superintending Engineer, Public Health Engineering Department, be counted on the fingers of one hand. Municipal service is unpopular, the salaries offered are low, prospects practically nil, and there is insecurity of tenure. It is of little value to discuss means and methods by which civil engineers can be given practical training in municipal civil engineering until the conditions of employment are improved. No system exists in this province for providing practical training for municipal engineers, and until such time as a Service of Municipal Engineers has been created, as has been done in Madras, the better type of qualified men, whether possessed of practical experience or not, will not seek employment in municipalities.

*Vide Appendix B.

14. The Superintending Engineer, Public Health Department, reports that there is also the greatest difficulty in obtaining qualified waterworks engineers possessing the necessary practical experience for employment in the three different classes of municipal waterworks. He assigns the reasons for this difficulty to the same causes that govern other municipal posts. Candidates with the required academic qualifications are found woefully deficient in practical experience. There is no hope of getting a better type of man, or of giving suitable practical training, until a Service of Municipal Waterworks Engineers is created on similar lines to those for municipal engineers.

15. It is recognized in respect of the practical training in civil engineering, as opposed to practical training in mechanical and electrical engineering, that students should obtain academic qualifications in the first instance, and that the practical training should immediately follow the grant of a diploma, or degree.

16. The situation in respect of practical engineering training for civil engineers may thus be summarized :—

(a) Practical training should not form part of the college course, but should immediately follow the grant of a diploma or a degree.

(b) The Irrigation and Buildings and Roads Branches of the Public Works Department afford a training ground for a large number of ex-students in civil engineering and there should be no difficulty in affording opportunities for practical training to students who are keen and willing to undergo a certain amount of hardship.

(c) In building construction and large structural engineering, there are sources of practical training in the Province, unexploited. If ex-students are willing to undergo training of this character, and such training should not be impossible to arrange, there are many openings available for qualified engineering contractors in the Province.

(d) Opportunities for affording practical training of an elementary character in municipal and water works engineering can be afforded by Government, but the conditions of service in municipal and waterworks engineering are at present such that they are not likely to attract the best qualified civil engineering, trained students, when other sources of employment are available.

(e) The Committee are of the opinion that of all branches of engineering that associated with public health is in the least healthy condition, and that the creation of municipal engineering services is an essential preliminary before engineers can be practically trained for the vast amount of work which yet remains to be done in this field.

CHAPTER II

PRACTICAL TRAINING, CIVIL ENGINEERING OVERSEER CLASS

THE Thomason Civil Engineering College, Roorkee, was for many years the sole source of qualified overseers in the United Provinces. Of recent years however two civil engineering schools have been recognized by Government. The Hewett Engineering School, Lucknow, was first started on a small scale in 1904, and in 1934 was officially recognized by Government. Passed overseer students have obtained employment on the Railways, Public Works Department, District Boards and Municipalities. The aim of the school is to provide a maximum of practical and theoretical instruction during the limited course of two years. The essential theory is included in the curriculum, but emphasis is always on the practical rather than on the theoretical side. At the completion of their two year course, students sit for the Overseer Certificate Examination conducted by the Director of Public Instruction, United Provinces. Of the 9 and 18 students who passed the Overseer Certificate Examination in the years 1936 and 1937, respectively, 4 and 7, respectively were domiciled in the United Provinces. All these 11 students are employed in various offices. A considerable number of ex-students of the Hewett Engineering School have been

employed temporarily by the Irrigation and Buildings and Roads Branches, and a number of them have secured private employment.

2. The Civil Engineering School, Lucknow, also recently recognized by Government, trains Matriculates for the Overseer Certificate Examination conducted by the United Provinces Government. Ex-students of this school, occupied a high place in the list of final examinations of the years 1936 and 1937.

3. From the nature of the work that an overseer is called upon to perform, it will be realized that an ex-student of the overseers class is of more immediate utility than a student of the civil engineer class, whose course at the college has been devoted to a greater degree to fundamental principles, with the object of fitting him ultimately for the highest posts.

4. The present terms on which passed overseer class students of the Thomason Civil Engineering College are taken for training are :—

Paid training

- (i) Travelling allowance at rates admissible to 3rd class officers from Roorkee to place of joining.
- (ii) Stipend of Rs.40 a month.
- (iii) Travelling allowance at rates admissible to 3rd class officers for journeys performed in connexion with their training.
- (iv) House rent allowance actually paid and certified by the Executive Engineer up to Rs.7-8, a month.
- (v) Cycle allowance at Rs.2 per mensem, if necessary.

Unpaid training

On practically the same terms as the civil engineer class students and without any travelling allowance.

No guarantee of appointment for either after completion of their training.

5. During his period of practical training the apprentice overseer is placed under an overseer of the Public Works Department, who receives an allowance as instructor of Re.1 per diem. The apprentice maintains a diary and note book, and enters in the latter notes of the works upon which he is being engaged. The diary and the note book are submitted by the apprentice overseer monthly to the Principal of the Thomason College through his instructor and the Executive Engineer of the division in which he is being trained, both these officers recording their comments. The diaries and note books are examined by the Principal and carefully recorded after he has formed his opinion of the student's work. On completion of the year's training the Principal submits to the Chief Engineer concerned details of his reports, and the trained overseers are eventually selected for appointment by the Public Service Commission.

6. Passed overseer class students receive their certificates upon completion of their College course, and it is not required that they should wait till the successful completion of a year's training, as this training cannot be made available to all students. The practical training of overseer students cannot therefore be considered as an integral part of the College course. The expenditure incurred in respect of house rent allowance, pay of instructors, pay of apprentices and travelling allowance, is debited to the Education budget. The recommendations of the Committee in respect of the stipend, if any, which should be paid to civil engineer students, or overseer students, will be found in Chapter VI, in which this general question is discussed.

7. It has long been recognized by Government that the bulk of the practical training of overseers devolves on the employer, and the more fully this responsibility is realized, the more possible will it be for overseers to obtain a sound grounding in elementary theory and a working knowledge of simple engineering principles. When it is considered how many overseer class students find their way eventually into the employ of district boards and small municipalities, which cannot afford the stipend of more fully qualified engineers, it will be realized how important it is that the overseers class students should receive sufficient instruction in elementary basic theory, imparted in a thoroughly practical manner, at College, and that the bulk of their

practical training should be obtained after leaving College, rather than run the risk of sacrificing ultimate to immediate utility. As has been said above overseers can ordinarily make themselves useful immediately after leaving College, and that asset arises as much from the manner in which they receive their instruction as from its substance.

CHAPTER III

PRACTICAL ENGINEERING TRAINING, MECHANICAL AND ELECTRICAL ENGINEERING (DEGREE) STUDENTS

The course of instruction in civil engineering at the Thomason College, Roorkee, includes instruction in mechanical and electrical engineering subjects. It is, however, unusual for ex-students of the Thomason College to adopt mechanical or electrical engineering as a profession.

2. The Benares Hindu University is the main source from which mechanical and electrical engineers are drawn. The course for the degree of B.Sc. (Engineering) is a combined course in mechanical and electrical engineering. Students are however given a wide training in general engineering, as it is considered that the requirements of the country do not necessitate the production of specialists, but of young engineers who can turn their knowledge to use in any branch in which they may find themselves. The number of Degree students leaving the College each year is about 100 of whom 10 per cent. are domiciled in the United Provinces.

3. It is fully realized that in an industrialized country students become familiar with engineering structures and machines from their infancy, and to compensate for the lack of opportunities of this character in many parts of India, the Benares Engineering College course is given a practical basis. During the first and second years, in addition to theoretical training, part of the student's time is spent in the Carpentry and Pattern-making Shops, the Foundry, Smithy, and the Machine and Fitting Shops, and in the Mechanical and Electrical Laboratories. The student has also a period of about six months' practical training between the third and fourth year of the College course. Students are encouraged to obtain this practical training outside the College in an industrial undertaking, but should this prove impossible, the students remains in the College Workshops for the period and makes some machine, such as an electric ceiling fan, from the raw materials to the finished article. This training is designed primarily to make the student use his hands and become familiar with engineering structures and machines.

4. After the fourth year course in theory, supplemented with the elementary practical training which has been described, the student is required to serve a year on some approved practical engineering work prior to the grant of his degree. It will thus be seen that the course of training, as given at the Benares Hindu University, is designed not only to give students theoretical knowledge, but also to make good the lack of familiarity with machines, which results from living in a country industrially undeveloped, and finally enables students to obtain a whole year of practical training which should fit him for employment as a mechanical and electrical engineer.

5. In addition to the practical training which is an essential part of the College course, the College offers facilities, when desired by ex-students, for training in the workshops and laboratories during vacation and term time, and a number of ex-students have worked as Mechanical or Electrical Demonstrators within the college. In Appendices C and D are given the names of some of the engineering firms and other organizations which give facilities for the practical training of students of the Benares Hindu University. Appendix C is a list of workshops and firms which have afforded extramural practical training to students between their 3rd and 4th year courses. Appendix D is a list of firms and other organizations who have employed students of the engineering college after their fourth year examination. A study of this list will show that the means adopted by the Engineering College of the Benares Hindu University for securing the practical training of mechanical and electrical engineering students is thorough, well-organized and on a sound basis.

CHAPTER IV

PRACTICAL ENGINEERING TRAINING, MECHANICAL AND ELECTRICAL ENGINEERING STUDENTS OTHER THAN DEGREE CLASS

OF the Government Technical and Industrial Institutions in the United Provinces, the Technical Schools at Lucknow and Gorakhpur give instruction in mechanical and electrical engineering, the Technical School at Jhansi has a course confined mainly to mechanical engineering, and the Technical College at Dayalbagh, Agra, has a four year course in which mechanical, electrical and automobile engineering are taught.

2. At the Government Technical School, Lucknow, the engineering mechanics course has recently been separated from the electrical mechanics course. The duration of each course is three years followed by two years' practical training in a railway or other workshop. Admission to these classes is made by a competitive examination open only to those who have passed the high school or an equivalent examination. The number of students turned out is approximately 20 per annum, 10 from Electrical Mechanics class and 10 from Engineering Mechanics class, of these all are domiciled in the United Provinces.

3. The East Indian Railway has given a guarantee to train 25 Government nominees every year in their Workshop and Power House at Lucknow. Of these 6 are admitted to the Power House and 17 are admitted to the Loco Workshop. So far as the training of Electrical Mechanics is concerned, the offer of accommodation in the Railway Power House has been utilized to the full, and some difficulty has been experienced in providing for those students who could not be so accommodated. Students of the Electrical Mechanics class have in certain cases had to wait before being enabled to take their training.

4. The offer of accommodation in the Loco Workshop has not been entirely utilized, first because the number of students turned out has been less than the number for whom training is guaranteed, and secondly, because students are attracted to mills and factories which offer the prospect of immediate employment after completion of the three years' theoretical training. Recruitment to posts in the East Indian Railway service is made ordinarily from students who have been trained at Jamalpur and students of the Lucknow school have little chance of obtaining employment in the Railway, even after completion of their course at the Railway Workshop.

5. It will be seen that the position is somewhat unsatisfactory in as much as those students who have fitted themselves for employment by completing the five years' course have no security of employment and that on the other hand those students who are attracted by the prospect of immediate employment and proceed to mills or factories, may eventually find themselves without employment and with practical training of a very narrow type.

6. During their training all students of the Lucknow Technical School draw a stipend to a maximum value of Rs.8 per mensem, so regulated that together with the wages or salary earned by the apprentice the total amount does not exceed Rs.30 per mensem. The East Indian Railway gives its apprentices Rs.17 per mensem in the first year and Rs.20 per mensem in the second year. It will be seen that adequate arrangements are already in existence for affording students a subsistence allowance during the period of their training, that the practical training of the students is adequate, and that the difficulty of the students is mainly that of securing employment.

7. At the Government Technical School, Gorakhpur, there is a combined course in mechanical and electrical engineering. Admissions are made by means of a competitive examination, amongst candidates who have already passed the Junior Cambridge or an equivalent examination. No fees are charged from *bona fide* residents of the United Provinces, and ordinarily there is no room for outsiders. The school course lasts for 3 years and is followed by practical training in a recognized workshop or factory for two years. No diploma is granted until the course in practical training has been passed to the satisfaction of the Principal. The average number of students turned out by the school is approximately 20 per annum. Of 64 students

turned out during the years 1934 to 1936 inclusive, 15 obtained their training at the Bengal and North-Western Railway Workshop at Gorakhpur, 6 at the East Indian Railway Workshop at Lucknow, 5 on the Hydro-electric grid, United Provinces, 8 at various electric power houses, 20 at sugar mills, and the remaining 10 secured training at other mills and factories.

8. The Bengal and North-Western Railway agreed in 1923 to admit 15 students of this school every year for practical training in their workshop at Gorakhpur. Full advantage has however not been taken of this offer. The reason for this is that students preferred to go to mills and factories where they had a chance of being absorbed after the completion of their training. The phenomenal increase in the number of sugar factories in and about Gorakhpur during recent years has also created a demand for trained students, of the school on attractive salaries, with the result that few like to go to the Railway Workshop. It is doubtful whether in the long run students who secure immediate employment of this character without completing a thorough practical engineering training, will profit by the transaction. During the practical training the first ten students in order of merit get a leaving stipend from Government, of which the maximum value is Rs.8 per mensem, and which is regulated in the same manner as stipends from the Government Technical School, Lucknow.

9. The Government Technical School, Jhansi, performs a different function from the Technical Schools at Lucknow and Gorakhpur. In the two latter schools students are afforded an opportunity of obtaining practical training, but there is no certainty of securing ultimate employment. Students of the Government Technical School, Jhansi, are on the other hand admitted to the school apprentices selected for the various workshops of the G. I. P. Railway. Students draw a subsistence allowance during the period of their training. They are not employed in or against substantive vacancies and there is no guarantee of appointment after their training; the recruitment is however so regulated that practically all the trained students are accommodated in the G. I. P. Railway services. It follows, therefore, in respect of this particular school that this Committee can have little to recommend on the subject of practical training, since students are already afforded immediate employment on the basis of the thorough practical training which they receive.

10. Admissions are made once a year, the minimum qualification being the High School Certificate. Forty applicants are chosen by the G. I. P. Railway authorities and twenty by the Principal of the Government Technical School, Jhansi. These sixty applicants have to appear in an entrance examination conducted by the Industries Department, United Provinces. Of the successful candidates 20 are selected for appointment in various workshops as below :—

Locomotive shops, Parel	..	..	8
Carrriage and Wagon shops, Matunge	..	..	6
Carrriage and Wagon shops, Jhansi	..	..	4
Electrical Branch	..	..	2
		Total	20

The first five candidates are chosen on the basis of merit. Ten of the remaining vacancies are reserved for railway nominees and the remaining 5 for United Provinces nominees. The United Provinces students have chances of being recruited as apprentices not only as United Provinces nominees but as railway nominees and can also be chosen on the basis of merit.

11. The selected apprentices are classified into grades A and B. A candidate who gets a minimum of 50 % in Mathematics and an all-round average of 60 % or over is treated as an "A" grade apprentice. A candidate who gets a minimum of 40 % in Mathematics and an all-round average of between 50 and 60 % is placed in "B" grade. The emoluments of these apprentices which are paid by the G. I. P. Railway are as follows :

"A" Grade—Ra. 50—55—60—65—70 per mensem
(while in Bombay)
Rs. 40—45—50—55—60 per mensem
(while in Jhansi)
"B" Grade—Ra. 40—45—50—55—60 per mensem
(while in Bombay)
Rs. 30—35—40—45—50 per mensem
(while in Jhansi)

12. The apprentices attend the school at Jhansi for 3 months in each of the first four years. The rest of the time and the whole of the fifth year is devoted to practical training in the Railway Workshops at Parel, Matunga or Jhansi. The theoretical training of the school is of the same standard as given at the Government Technical School, Gorakhpur, and the final examinations are common to these two schools. It will be noted that the entire course is intensely practical. The total period of training is five years, the same period as allotted by the Engineering College of the Benares Hindu University to degree students, an essential difference being the very different proportion of the time spent in actual workshop training, having regard to the type of work that the students will ultimately perform.

13. The Technical College, Dayalbagh, Agra, imparts both theoretical and practical instruction in mechanical and electrical engineering, and is recognized by the Industries Department of the United Provinces Government. The course of studies extends to four years, and it is expected by the College authorities that students having completed their course will be capable of shouldering all the responsibilities of their profession. With this object in view, the College syllabus has been arranged in such a way that students may acquire simultaneously proficiency in both the theory and practice of their subjects.

14. For the first two years the students of the mechanical and electrical departments have a common course, for the last two years they specialize either in mechanical or electrical engineering. In the mechanical engineering class the instruction includes the complete making of machines or engine parts, that is to say, pattern making, foundry and machine shop practice, and in the electrical engineering class instruction includes laboratory experiments, and fitting, overhauling and tests of electrical machines and apparatus.

15. The entire college course lasts for four years, and, as stated, was designed to fit a student for a responsible post immediately on completing his course. The Committee however consider that so far as may prove possible a fifth year of extramural practical training should be obtained for all passed students of the Dayalbagh College, thus bringing the total period spent on professional training to the same figure as that for the degree course of the Benares Hindu University and the technical schools in the Province.

16. As to the precise manner in which practical and theoretical training should be combined in a full five-year course, and the sequence which practical and theoretical portions of the course should follow, there is room for considerable difference of opinion, and the decision is best left to the authorities in charge of the different institutions. Of the necessity for a full five year course, the Committee is unanimous, and this involves in every case at last one full year of extramural practical training.

CHAPTER V

GENERAL FACILITIES FOR TRAINING IN INDIA AND ABROAD

In Chapter III reference has been made to the large number of firms and institutions which have afforded practical training to engineer students of the Benares Hindu University in the past. In Chapter IV the part played by the East Indian Railway, the Bengal and North-Western Railway, and the Great Indian Peninsula Railway, in training mechanical and electrical apprentices has also been set forth. In Chapters I and II the manner in which Government affords engineering students and overseer students of the Roorkee College opportunities in training has been explained. In this chapter it is proposed to review other sources of training. In Appendix E will be found a list of officers in charge of workshops, and mechanical and electrical firms, who have kindly replied to enquiries on the subject of training.

2. An enquiry was addressed to the Senior Mechanical Engineer of the Moghalpura Workshops, North-Western Railway, Punjab, as to the extent to which this workshop could afford facilities in practical training of engineering students of this province. In reply the Committee were informed that the training of students in the North-Western Railway workshops was clearly reserved for students belonging to the Punjab, and it was regretted that students of the United Provinces could not be accepted for training until the training facilities in this province have been exhausted. This reply is only a natural

one that could be expected in the circumstances, and the United Provinces can hardly expect to secure training of this character for students otherwise than on a reciprocal basis.

3. The Committee would draw attention to the fact that the Indian State Railways send home every year a selected number of apprentices to England for special training, the number so sent depending on the number of vacancies in the superior grade of the various State Railways, which are likely to offer at the end of the period of training in England. Complete regulations in respect of selection and training of special class apprentices in Indian State Railways were published in the *Gazette of India* for 1st October, 1936. A note on the selection and training of such apprentices is given as Appendix F.

4. Messrs. Jessop & Co. of Calcutta take many students from all parts of India for practical training in their workshops, and are prepared to take one or two recommended unpaid students annually as improvers. In the experience of this firm, the majority of students have a very general kind of theoretical training, and the firm consider that it would be of advantage if the training of students was confined to a definite and more limited branch. It has been found that although many students profess an advanced theoretical knowledge, in knowledge of simple practical design they are often markedly deficient. Attention is also drawn by this firm to the disinclination on the part of some students to take of their coats and to do real "bench-work" of the kind demanded of workmen. Provided that students are keen and not afraid of putting their hands to "bench-work," they may rely on receiving every encouragement from the staff.

5. Messrs. Burn & Co. of Calcutta also state that they are willing to afford opportunities for practical training to selected students of the United Provinces, and that at present they have one such student in their works. They desire however to draw attention to the limited facilities for affording training, and emphasize that as there is a big demand for facilities from Bengal and neighbouring provinces, only a limited number of vacancies are available and the firm cannot see its way to undertake to take a specified number of United Provinces students annually. They are however always willing to consider applications and to deal with them in accordance with the circumstances existing when they are received.

6. The East Indian Railway, Calcutta, does not afford any facilities for training in electrical engineering other than those given to students of their own technical school at Jamalpur, and those technical colleges in the United Provinces which have special arrangements made through the Industries Department.

7. Messrs. Martin & Co., who are agents for a number of licensee electrical companies in this province, train students both of the subordinate and the graduate class. As a rule, Messrs. Martin employ only men who have been trained by themselves, and this ensures that the students under training take interest in their work, and also that they receive proper attention. The subordinate class of student who has probably passed the eighth standard, and is considered suitable for training for a position as Switchboard attendant, is trained for three years, and receives Rs.5 per mensem in the second year and Rs.10 in the third. Messrs. Martin also train 4 graduate students every year. These students are paid Rs.15 per mensem as improvers and remain under training for two or three years. These graduates after training are suitable as shift engineers, and eventually as resident engineers of small stations, but are not fit for the highest grades in the engineering profession without further special training.

8. Mr. Bennett of the Bengal and North-Western Railway and Mr. Browne of the East Indian Railway are both of the opinion that so far full advantage has not been taken of the opportunity afforded by their workshops to graduates to secure training.

9. Mills and factories show no great inclination to afford facilities for training. They naturally demand men of immediate utility, and are not ordinarily disposed to train their own men, and pay them a subsistence allowance. There is a general consensus of opinion that mills and factories could afford more facilities for training and should be prepared to pay a subsistence allowance to men so trained.

10. From what has been said it is clear that a limited number of students can secure training in mechanical and electrical engineering works, mainly outside the province, and that the United Provinces, owing to lack of industries, affords few opportunities for training. There is no doubt, however, that if mills and factories would recognize their responsibilities, and engineering firms come forward in the spirit of co-operation, much can be done to increase training facilities.

11. Where the training is of a very specialized character as in certain mills and factories, there is a case for such mills and factories training their own men for their own special purpose and paying a subsistence allowance. Where on the other hand, a firm affords opportunities for practical training of a general character, which will fit an ex-student for employment in all the branches which he has studied, it appears reasonable to treat such practical training and the payment of subsistence allowance as an integral part of the student's education and that such fees should be met from the Education budget. Thus, if a student from a technical school enters a mill and receives special training to fit him for employment in that mill, the employer has an interest in the student concerned. If, on the other hand, the student, who has completed four years, enters in a fifth year of general practical training with an engineering firm or a workshop, such training should be regarded as an integral part of his education, prior to which he is not awarded his diploma, and therefore the cost of such training, so far as is possible, should be borne by the educational authorities.

12. The Hydro-electric grid of the United Provinces since its inception has afforded a considerable number of students an opportunity of securing practical training. During the construction period students have been attached to power houses under construction, and at the present time, two or three students are attached to every power house, and learning the general methods of operation of hydro-electric installations. Students are also attached to the oil stand by stations and to the recently completed Chandausi steam electric station. These students thus obtain experience which will fit them immediately for the post of shift engineer, and eventually for that of resident engineer in small power stations. If however, students are to rise to the highest grades of their profession in electrical engineering, it would appear that they must proceed abroad and obtain experience with some of the many firms who are responsible for the design and manufacture of the electrical plant now installed in India. Such opportunities of training are necessarily few. The number of students annually under training on the Hydro-electric grid in the United Provinces is approximately twenty. It has been found that it is not possible to train more than three students at any one power house.

13. Large firms, such as Messrs. Associated Electrical Industries, Asea Electric, Limited, Escherwys Engineering Works, and Boving & Co., employ trained apprentices from all over the world, the number that can be admitted from India is few, and from the United Provinces as one unit very few indeed. It is not possible for the average student to afford the expense of special training of this character. The training can, however, be obtained for a limited number of students, and the Committee would suggest that in the best interest of mechanical and hydro-electrical development, Government should allot three or four scholarships per annum, the students being first selected from those who show exceptional promise, and the final selection being made by means of a competitive examination.

14. An objection to a system of training which is dependent on Government placing ex-students with private firms, is that the taking of such students places Government under a certain obligation to do business with such firms. This obligation is removed, if Government regards such training as an integral part of engineering education, and itself pays students a sufficient subsistence allowance. It is possible however to make it a condition before placing large orders for electric machinery, that the successful tenderer should undertake the training of students during the period of manufacture. Government has already adopted the principle that electric licensees must be prepared to take certain apprentices for training, and there is no objection to making either the grant of a licence or accepting a tender contingent on affording practical training facilities of this character.

15. In the Electricity Department of Madras, the training of students in electrical engineering has received special attention. For the last four years, a regular and systematic course for selected graduates extending over 12 months, which now includes workshop practice, has been instituted. Each student receives individual attention and a report is received of his work in each section. Arrangements have also been made with the Madras Electric Supply Corporation for a systematic one year apprenticeship course. Apprentices are unpaid but get free accommodation, and it is from the ranks of these apprentices that most of the Junior Engineers are obtained. It is hoped also in Madras that Government will encourage certain engineers to go abroad for adequate training and on their return they would start on a higher grade than the locally trained men. It is evident that if any large electrical concern is training a considerable number of students per annum, the actual cost of the firm involved on such training must be considerable.

16. Mr. Thomas, Chief Engineer, Hydro-electric Department, Punjab, has drawn attention to the time taken by senior and junior officers, and foremen in explaining the why and wherefore of the various procedures in electrical engineering, and he is of the opinion that it is hardly reasonable to expect a commercial concern to undertake, without remuneration, the training and instruction of a large number of apprentices. This objection is valid when the number of students trained is great but would not apply to the same extent when only a few are under training.

CHAPTER VI

REVIEW OF THE GENERAL PROBLEM OF PRACTICAL TRAINING AS IT AFFECTS EMPLOYMENT AND FINAL RECOMMENDATIONS

In this final chapter, it is proposed briefly to review the existing situation in respect of facilities for practical training to engineering, and to make recommendations. It would appear from the report of the Sapru Committee that the unemployment of engineers, who had secured theoretical training, was attributed in some cases not to the fact that no posts were available, but to their practical training not being of such a character as to fit them for immediate employment. From what has been said in the previous chapters of this report on the subject of training of civil, mechanical and electrical engineers, it is evident that there are few grounds for this assumption. It is a matter of common knowledge that employers, whether Government or private, are apt to expect too much of young engineers on first appointment. As engineering science advances, it is the more necessary that students should have a knowledge of fundamentals, and this increases the responsibility of employers for providing practical training. Young engineers in the United Provinces are as a fact given a very reasonable practical knowledge in a general sense, but it is unreasonable to demand of any such student that he should be of immediate practical utility. All that can be demanded is that this training has been of such a character that he will rapidly assimilate the practical engineering principles of the branch in which he finds himself employed.

2. It was stated at the Institution of Civil Engineers in London, as recently as November, 1937, that, whatever their employers might state to the contrary, civil engineering assistants on first appointment were often somewhat unreasonably, expected to fill posts of some responsibility. This remark applies also to all branches of engineering in the United Provinces, and to employers whether Government or private. It applies in particular to specialized industries, such as sugar or cotton mills, and it is somewhat anomalous that factories dealing with large quantities of raw materials should on occasion fight shy of raw materials in the form of students without specialized practical knowledge. In England it is now recognized that the time has arrived for industry to come forward and help the universities to concentrate on their real work of providing fundamental training, by undertaking the responsibility of training the finished product of the universities and engineering schools. It will be sufficient in these Provinces for the present, if employers recognize their responsibilities and accept the raw material which they are offered. To

those in England who put forward the argument that it is unfair to expect any employer to train a young man and at the same time to pay him, it has been pointed out that it pays a firm well to train its staff, and that although there is no compulsion for a young man to stay at the end of his training, it is the business of the firm to make it worth his while to do so, if the firm desired him to stay.

3. It is to be hoped that the United Provinces will in the near future embark on organized industrial expansion, and if this is so, the responsibility of giving practical training to the men fit to occupy "key" and other posts must rest largely with the industrial organizations yet to be developed, rather than with Government itself. In England the part that big contractors, large structural engineering firms, and municipal and county engineering offices can play in training engineers has lately been emphasized. In the United Provinces, in so far as municipal and district engineering is concerned, the real difficulty is the low standard of those engineering branches, and the lack of attraction that such a type of employment affords.

4. It can be said in general of the United Provinces that facilities for the effective practical training of engineers already exist, that unemployment can hardly be said to be aggravated by any lack of such practical training, and that it will suffice to draw attention to the facilities which already exist, outline other fields of practical training, which yet remain untapped, and make recommendations to secure that all these sources of training are co-ordinated and given publicity.

5. The following are the final recommendations of the Committee in respect of the different types and grades of engineering.

Civil Engineering—Engineer Class

6. (a) Under existing arrangements, the Buildings and Roads and Irrigation Branches of the Public Works Department undertake to train a certain number of students every year. No stipend is paid, and no stipend is recommended, but travelling allowance and halting allowance should be granted as in the past.

(b) The Public Health Department does not appear as yet to recognize its full responsibilities in respect of training engineers in sanitary and water engineering. The Superintending Engineer, Public Health Department, strongly recommends that two students per annum from the Roorkee Civil Engineering College should be afforded opportunities for training in the Public Health Department, and the Committee endorses this recommendation.

(c) The Committee is of the opinion that with the large amount of building construction in progress in every big city in the United Provinces, there is a useful source of employment for civil engineers as yet untapped, either as civil engineering assistants with large contractors of repute, or as reputable engineering contractors of the type found in the West, who are willing not merely to undertake the construction of buildings, but also the design. It is recommended that the Principal of the Thomason Civil Engineering College should get in touch with, and maintain a list of, all engineering contracting firms of this character, who are willing to afford training, and that students should be placed with such firms whenever possible. Attention is drawn to the very complete organization of the Benares Hindu University in respect of securing practical training for students in mechanical and electrical engineering. It is true that in the case of the Benares Hindu University, such training forms an integral part of the course, and must therefore of necessity be supplied. The fact that in the past the Roorkee College has been able to secure without great difficulty employment for the majority of its graduates, should not obscure the necessity of providing in future a broader field of employment. In making this recommendation the Committee has in view the raising of the general standard of building construction in the Provinces, and with the expansion of high grade building construction, an increase in employment.

Civil Engineering—Overseer Class

7. (a) The Buildings and Roads and Irrigation Branches both provide facilities for the training of overseers. Under existing arrangements, overseers are paid a stipend, travelling allowance, and other

allowances as given in Chapter II. It has recently been suggested that the stipend of these overseers should be withdrawn. The Committee strongly deprecates any such action. The overseer comes from a class less able to afford his education than the civil engineer. His training at Roorkee is to him relatively expensive, and he is during his first year of practical training undeniably of some assistance to his employer. He is expected to make himself useful, and to deny him a stipend would be inadvisable and inequitable.

(b) The Superintending Engineer, Public Health Department, considers that two overseers can be usefully trained in sanitary or water engineering per annum. The Committee recommends that two such students should be accepted in future, and that the pay and allowances should be the same as those of overseer students under training with the Irrigation Branch or the Buildings and Roads Branch.

(c) Overseer students of the Hewett Engineering School, and of the Civil Engineering School, Lucknow, who have been successful in passing the examination for the Overseer Certificate, to which a reference has been made in Chapter II, find training and employment mainly under municipal boards and improvement trusts. So long as such students can secure paid employment, it appears unnecessary to make special recommendations for securing practical training of the type afforded to ex-overseer students of the Roorkee Thomason College. Both these Engineering Schools are however recognized by Government, and it would be some recognition of the service which they perform in training overseers, if training under stipend were offered annually to the student standing highest in the examination from each School.

(d) The Committee considers that opportunity should be taken of placing overseer students also under training with constructional engineering firms of repute, and that a list of firms willing to accept such students for training, or willing to offer opportunities of employment, should be maintained by the Principals of those colleges training such students.

With the formation of municipal and water engineering services, there should be an increased field for employment for all students of the overseer class.

Electrical Engineering

8. (a) Electrical development in these Provinces is in its infancy, and the Committee is of the opinion that under existing conditions insufficient provision has been made for those men who in the next generation should occupy what are known as key posts. In order that students should be fitted eventually to hold such posts, it is almost imperative that they should have secured practical training on large electrical installations, or with large firms, in the West. It is considered that such students, who demand in their own ultimate interest so high a standard of education, should ordinarily be prepared to face the cost themselves as an investment and to proceed to Europe at their own expense. There is however the case of the exceptionally brilliant student who is unable, for lack of means, to secure such training. The Committee feels that such expenditure should be met by a system of scholarships, not necessarily Governmental. In the West, the great majority of scholarships are met from private munificence and endowment. If the industrial development of the provinces at an early date is desired, the provinces must look to the generosity of such public benefactors as Lord Nuffield. Money in the past has always been forthcoming for the general purposes of Indian universities, and once the need is made known, money should be forthcoming for specialized purposes of the type which the Committee has envisaged.

(b) Once a high grade electrical engineer is in employ, whether Government or private, the question of his specialized training is placed on a different footing. It is considered by the Committee that it is the duty of the employer, and also in his own interest, to train his own employees. In the case of Government servants, the situation can be met by the grant of generous study leave, and possibly in a very exceptional case by contribution to the engineer's expenses. The private employer also, if he desires to retain in his employ an electrical engineer competent to rise to the highest grade of the profession, must be prepared to pay for the commodity.

Electrical Engineering, Graduates and Subordinate Class

9. (a) The Committee is of the opinion that the existing facilities are adequate to secure the training of these two classes of electrical engineer. It has been suggested that firms, which have secured contracts in the past, should be encouraged by Government to accept students for training. It is felt that any arrangement of this character would create an anomalous position, and tie the hands of Government when contracts are subsequently placed. It is now made one of the conditions of issuing an electric licence that certain number of students, whether graduate or subordinate, should be afforded opportunity for training. There is no objection to the extension of this principle, and it should be made a condition when tenders are invited that a certain number of students should be afforded opportunities for training by the successful tenderer during the period that the electrical machinery and apparatus was under manufacture and dispatch.

(b) The attention of the Committee has been drawn to the big field for employment of men of the mistri class in the wiring of private installations. The Committee considers that sufficient opportunities for such training already exist, but very strongly recommends that students who have passed through the Technical Schools and have a theoretical and somewhat practical knowledge of wiring, should *continue* to be put to the searching test of an outside examination of the type now conducted by the Electric Inspector to Government.

Mechanical Engineering, Graduate Class

10. The existing opportunities of affording practical training are adequate.

Mechanical Engineering, Subordinate Class

11. Owing to the desire of students to secure immediate employment, full advantage is not at present taken of the existing facilities for training. In the best interest of factories and mills employing the mechanical engineer of the subordinate class, it is desirable that such employers should recognize their responsibilities, take a broad view, and treat the expenses incurred in their specialized training as a lucrative investment.

Municipal Engineering Service

12. The Committee would finally recommend as a primary necessity, if the public health of the Provinces is to be served, that Municipal Engineering Services be formed without delay. Apart from the improved quality in the work of such employees when the standard of education and training is enhanced, the improved status of such services will secure a flow of recruits, and the general increase in work of such a character will provide sources of practical training that would be of great value. "Civic" engineering is the most neglected of all types of engineering in the Provinces, and it is impossible to over-estimate the advantages that will accrue if this neglected branch of engineering is assigned the position which it occupies in the West, and which the public health demands.

13. In conclusion, the Committee desires to express its thanks to all those officers who have been mentioned by name, to all those engineering firms who have undertaken to afford opportunities for practical training, and to those who have favoured the Committee with their opinions.

M. R. RICHARDSON, *Chairman*.
 W. DEH. HAIG.
 J. H. BOLAM.
 J. N. NIGAM.
 G. W. BROWNE.
 N. S. BENNETT.
 H. J. AMOORE.*
 JWALA PRASAD.
 C. L. GUPTA.
 E. M. SUTTER.
 PADMAPAT SINGHANIA.*
 RANJIT SINGH.
 A. G. WARREN.
 F. D. TUNNICLIFFE.

GERALD LACEY,
Secretary.

*Subject to a Note of Dissent.

**Note by Mr. H. J. Amore, I.S.E., Principal, Thomason College,
Roorkee, on the Report of Practical Engineering Training Committee**

I am not in agreement with the opinion expressed in paragraphs 6 and 7(a) of Chapter VI, viz. that a civil engineer during this apprenticeship should receive no stipend and that an overseer should. There are as many parents and guardians of both, who are as able to afford a year's unpaid training as there are, who are unable to do so. An apprentice engineer can be made as much use of as an overseer during his apprenticeship period.

**Note by Mr. Padmapat Singhania, M.L.A., on the report of the
Practical Engineering Training Committee**

Having direct concern with more than a dozen of mills and factories, I claim to have a fair knowledge of the Engineering profession. On general grounds, I agree with the result of enquiry of the Committee. But, there are certain factors on which more emphasis need be laid. My experience is that the supply of raw-engineers, i.e. university products or workshop trained men in the line are enough for the demand and it has now ceased to be an olive branch of employment. Naturally, the market value of trained engineers has deteriorated. But, so far as really experts in the line are concerned there is a great dearth of them and it is no gainsaying the fact that for them there is a great demand, their market value being at a premium. A trained engineer is nothing. He has passed through the workshop, but acquaints himself with the machines, not with the particular industry for which his services are needed. Take for instance—Electrical Engineers. They are no good to a concern which wants to manufacture Electrical implements. This ignorance of the various lines to which engineers are needed is a great drawback to the country and its industry. But, for Civil Engineers, thanks to Public Works Department operations, in no other sphere, experienced men are obtainable and to produce experts, mere apprenticeship training would not do. I myself do consider it to be an intricate problem of obtaining experienced men but some solid scheme will have to be devised in this respect.

Inter-linked with it, and perhaps not less important is the problem of "Designers." We can even get experts, but not the "Designers"—which are the backbone of the rise and development of an Industrial Country. They play a great part. They design—and design on, replace and replace on—and think on what is good, better and best and thus bring perfection. I do think that the art of designing, planning and conceiving is suffering due to the same. This should also receive the prompt attention of the Government.

For the assimilation of the Engineers, raw or apprentice, it is essential for the state to increase its state-building and industrial activities and give ample impetus to the private industries. Much of public money is wasted through "Unskilled" contractors and engineers. There should be an experience-limit for their admission to the job.

But, I must make it clear here that Engineering is a profession of taste and talent and it has no place for those who enter it for the mere sake of getting a free line of employment. Such men injure the line more than only their rawness. Engineering institutions should safeguard themselves against such entrants. There are persons, who are born engineers and it is a pity that they have often to lose the line due to the standard of education required from them. I am not in favour of "Matriculation" limit. A test examination of an engineering institution should be enough for the purpose. In place of a matriculation standard, the number of years for engineering training be raised, which will be doubly beneficial—it will reduce the rawness of the student provided the course of training is modified according to the need of the time.

Ours is a poor country. The struggle for existence is bitter here. An average student, loses more time in only arranging for his studies. Parents are unable to provide facilities for the same when necessary. Therefore, it takes more time to complete the studies, hence the age

limit for apprenticeship in certain concerns, particularly Railways, where it is only 19 years, should be raised. Many promising careers are ruined by such regulations.

Certain private institutions on Engineering, like Prem Maha Vidyalaya of Brindaban imparted very good education in Engineering, Civic and Mechanical. Government should approach them and voluntarily offer them some help for the re-organization of their curricula fitted to modern times and adapted to present necessities. That will help the Government in solving the problem. It would also be quite beneficial to the Province, if apart from Roorkee, Gorakhpur, etc. one or two more schools are opened in our Provinces on the lines of Tirhut Technical Institute, Muzaffarnagar and Government Technical Institute, Sylhet.

PADMAPAT SINGHANIA.

29-10-1938.

APPENDIX A

Statement showing the number of passed civil engineer class students of the Thomason Civil Engineering College, Roorkee, who have been afforded practical training in the Irrigation Branch, United Provinces.

Year	No. of students taken for training			No. of students permitted continue for a second year			No. of students who continued training for more than two years	Total no. of students on 31st December each year
	Paid	Unpaid	Total	As works charged and temporary engineers	Paid stipend of Rs. 60 per mensem	Total		
1930	2	..	2	6	..	..	6	8
1931	3	2	5	..	..	..	..	5
1932	..	16	16	3	..	..	3	19
1933	..	9	9	1	3	8	12	21
1934	1	12	13	4	3	..	7	24
1935	..	15	15	3	5	2	10	34
1936	1	8	9	5	3	3	11	25
1937	..	8	8	2	2	4	8	27

Statement showing the number of passed civil engineer class students of the Thomason Civil Engineering College, Roorkee, who have been afforded practical training in the Buildings and Roads Branch, United Provinces.

Year	No. of students taken for training			No. of students kept on for a second year as works-charged establishment	
	Paid	Unpaid	Total	Number	Stipend
1930	2	..	2	..	..
1931
1932	..	9	9	..	..
1933	..	1	1	..	..
1934
1935
1936	..	4	4	3	Rs. 100, per mensem.
1937	..	5	5	..	..

Statement showing the number of passed overseer class students of the Thomason Civil Engineering College, Roorkee, who have been afforded practical training in the Public Works Department, United Provinces, Irrigation and Buildings and Roads Branches.

	Paid	Number of students taken for training				
		Irrigation Branch		Buildings and Roads Branch		
		Unpaid	Total	Paid	Unpaid	Total
1930	3	...	3	3	..	3
1931	6	..	6	2	..	2
1932	4	..	4	2	..	2
1933	4	9	13	3	..	3
1934	4	3	7	2	..	2
1935	6	9	15	2	1	3
1936	15	..	15	2	2	4
1937	15	2	17	3	2	5

APPENDIX B

Section 68 of the Municipalities Act, 1916

68. Appointment of engineers, water-works engineer, water-works superintendent, electrical superintendent, Secretary or sub-overseer.

(1) Any board by special resolution may, and if so required by the Local Government shall, appoint an engineer, an assistant engineer, a water-works engineer, a water-works superintendent, an electrical superintendent, a secretary or a qualified overseer or sub-overseer.

(2) Each such appointment, and the salary and other conditions attached thereto shall be subject to the approval of the Local Government.

Note (1) As to the provincial service of health officers, see pages 317 to 323 of this Manual.

Note (2) Correspondence connected with the appointment of an engineer or a water-works engineer or superintendent should be forwarded through the Superintending Engineer, Public Health Department to the Government in the Municipal Department (G.O. no. 2393/XI—955E, dated the 19th October, 1927, as modified by G. O. no. 180/XI—955E, dated the 16th January, 1931).

GOVERNMENT, UNITED PROVINCES

MUNICIPAL DEPARTMENT

30th August, 1934

No. 2501/XI—373-1933.—In continuation of notification no. 1520/XI—373, dated the 29th June, 1934, it is hereby notified that the Local Government, in exercise of the powers conferred by section 296 of the United Provinces Municipalities Act, 1916, has made the following rules prescribing the qualifications required of water-works superintendent or water-works engineer :—

Rules prescribing the qualifications required of water-works superintendent or water-works engineer

1. For the purpose of these rules municipalities shall be grouped in classes, A, B and C as shown in the appendix.

2. No municipality in class A shall appoint a person as water-works superintendent or water-works engineer unless he possesses a degree or diploma in mechanical or electrical engineering recognized as exempting the possessor from parts A and B of the Associate Membership Examination of the Institution of Mechanical Engineers, England, or of the Institution of Engineers, India.

Note—In exceptional cases the possession of a recognized degree, certificate or diploma may be waived with the approval of Government in the case of a candidate who has had considerable practical experience in the management of a large water-works under taking or as a mechanical or electrical engineer.

3. No municipality in class A shall appoint a person to be water-works superintendent or water-works engineer unless in addition to possessing one of the degrees, certificates or diplomas mentioned in rule 2, he has served an apprenticeship for at least two years in a large factory or workshop and in addition has had not less than five years' practical experience, of which at least two years should have been as superintendent or chief assistant mechanical engineer on a large water-works, or alternatively has had suitable practical experience as a mechanical or electrical engineer for a similar period excluding apprenticeship.

4. No municipality in class B shall appoint a person as water-works superintendent or water-works engineer unless he has matriculated or obtained a school leaving certificate and has a diploma in mechanical engineering from a recognized technical school in the United Provinces or some equivalent qualification with in addition not less than five years' practical experience comprising at least two years in a workshop or factory and in addition either three years as an assistant engineer or shift engineer on a large water-works or equivalent experience in some private undertaking.

5. No municipality in class C shall appoint a person as water-works superintendent or water-works engineer unless he has matriculated or obtained a school leaving certificate and has a diploma in mechanical engineering from a recognized technical school in the United Provinces or some equivalent qualification with in addition not less than three years' practical experience in a workshop or factory or on an important water-works undertaking as a shift engineer or senior driver.

APPENDIX

Class A

Agra .. ..	..	..	Lucknow.
Allahabad ..	..	..	Meerut.
Benares .. ..	..	..	Mussoorie.
Cawnpore .. ..	..	..	Naini Tal.

Class B

Aligarh .. ..	..	..	Jhansi.
Fyzabad .. ..	..	..	Mirzapur.
Hardwar .. ..	..	..	Muttra.
Hathras (under construction).			

Class C

Almora .. ..	..	..	Jaunpur (under construction).
Bahraich .. ..	..	..	Koshi (Notified Area).
Dehra Dun .. ..	..	..	Moradabad.
Fatehpur Sikri (Notified Area) ..	..	..	Unao.
Haldwani (Notified Area).			

P. MASON,

Secretary.

Rules for the appointment of Municipal Engineers

CHAPTER VI

PUBLIC WORKS

Notification no. 2059/XI—747E, dated the 13th September, 1927.

Rules under section 296, Municipalities Act, 1916

1. For the purposes of these rules municipalities shall be grouped in classes I, II and III as shown in the appendix.

2. No board belonging to class I shall appoint a person to be municipal engineer unless he possesses one of the degrees, certificates or diplomas stated below :

(a) Degree—

(i) Oxford B.A. with Honours in the Engineering Science, Final Honours School.

- (ii) Cambridge B.A. with Honours in the Mechanical tripos.
- (iii) St. Andrews B.Sc. in Engineering.
- (iv) Glasgow B.Sc. in Engineering.
- (v) Edinburgh B.Sc. in Engineering.
- (vi) Dublin B.A. I (Ordinary or with Honours in Engineering).
- (vii) Durham B.Sc. in Civil Mechanical or Electrical Engineering (Honours or ordinary degree).
- (viii) London B.Sc. in Engineering (internal or external), Honours or ordinary degree.
- (ix) Victoria University (Manchester) B. Sc. with Honours in Engineering, B.Sc. Technical in Mechanical or Electrical Engineering (Honours division in the Final Examination).
- (x) Birmingham B.Sc. in Civil Mechanical or Electrical Engineering (Honours or ordinary degree).
- (xi) Liverpool B.Eng. in Civil Mechanical or Electrical Engineering (Honours or ordinary degree).
- (xii) Leeds B.Sc. in Civil, Mechanical or Electrical Engineering (Honours or ordinary degree).
- (xiii) Sheffield B.Eng. in Civil, Mechanical or Electrical Engineering (Honours or ordinary degree with a first class in the final examination).
- (xiv) Bristol B.Sc. in Civil or Mechanical Engineering (Honours or ordinary degree).
- (xv) University of Wales B.Sc. in Civil, Mechanical or Electrical Engineering.
- (xvi) National University of Ireland, B.E.

Note—The above degrees will be accepted only if taken after three years' study and the passing of the regular examination in the several universities.

(b) Certificates or diplomas of having passed :

- (i) Sections A and B of the A. M. Inst. C.E. examination.
- (ii) The examination of the Institution of Municipal and County Engineers.
- (iii) Civil Engineering class, Thomason Civil Engineering College, Roorkee.
- (iv) Civil Engineering class, Sibpur Engineering College, Bengal.
- (v) Civil Engineering class, Engineering College, Poona.
- (vi) Civil Engineering class, Civil Engineering College, Madras.
- (vii) The examination for corporate membership of the Institution of Engineers (India).

3. No board belonging to class I shall appoint a person to be municipal engineer unless, in addition to possessing one of the degrees, certificates or diplomas mentioned in rule 2 he has had seven years' experience in responsible charge of an important civil engineering work.

An engineer is in responsible charge of a work when he exercises the same functions with respect to that work as an executive engineer exercises in his division, i.e. the engineer must have been in direct control of the work and in a position of such authority as to issue orders regarding its execution to all other persons employed on the work and to let contracts, and to pass measurements, bills and payments for the work.

4. No board belonging to class II shall appoint a person to be municipal engineer unless in addition to possessing one of the degrees, certificates or diplomas mentioned in rule 2 he has had five years' experience in a charge not less responsible than that of an Assistant Engineer in the Public Works Department in charge of a sub-division.

Provided that in the case of a diplomate in Civil Engineering from the Thomason College, the Government may waive the requisite experience qualification if they are satisfied that he has undergone not less than a years' practical training on works and has obtained a satisfactory certificate for the period of training from a Chief Engineer in the United Provinces.

5. The board of a municipality belonging to class III shall not appoint a person to the office of municipal engineer unless he, in addition to possessing one of the certificates mentioned below has had five years' experience of civil engineering works under an engineer possessing qualifications not lower than those prescribed for the municipal engineer of a first class municipality :—

(i) Upper Subordinate or Overseer class, Thomason Civil Engineering College, Roorkee.

(ii) Upper Subordinate or Overseer class, Sibpur Engineering College, Bengal.

(iii) Upper Subordinate or Overseer class, Civil Engineering College, Poona.

(iv) Upper Subordinate or Overseer class, Civil Engineering College, Madras.

APPENDIX

Class I

Agra .. .. .	.. .. .	Cawnpore.
Allahabad .. .. .	.. .. .	Lucknow.
Benares .. .. .	.. .. .	Naini Tal.

Class II

Dehra Dun .. .. .	.. .. .	Muttra.
Mussoorie .. .. .	.. .. .	Moradabad.
Saharanpur .. .. .	.. .. .	Shahjahanpur.
Meerut .. .. .	.. .. .	Jhansi.
Hardwar Union .. .. .	.. .. .	Mirzapur.
Bareilly .. .. .	.. .. .	Gorakhpur.
Koil (Aligarh) .. .. .	.. .. .	Fyzabad.

Farrukhabad-cum-Fatehgarh

Class III

Budaun .. .. .	.. .. .	Jaunpur.
Chandausi .. .. .	.. .. .	Pilibhit.
Etawah .. .. .	.. .. .	Sitapur.
Hathras .. .. .	.. .. .	Hapur.

Bahraich.

APPENDIX C

List of workshops and firms which have afforded extramural practical training to students of the Engineering College of the Benares Hindu University, between their third and fourth year courses

- (1) The British India Electric Construction Co., Calcutta.
- (2) The Government Telegraph Workshops, Alipore, Calcutta.
- (3) The Dishergarh Power Supply, Co., Ltd., Burdwan.
- (4) The Corporation of Calcutta.
- (5) Messrs. Burn & Co., Howrah.
- (6) The Tata Iron & Steel Co. Ltd., Jamshedpur.
- (7) The Tata Hydro-Electric Power Supply Co., Bombay.
- (8) The Bombay Electric Supply and Tramways Co., Ltd.
- (9) The Royal Indian Naval Dockyard, Bombay.
- (10) G.I.P. Railway, Workshops, Bombay.
- (11) The Electrical Department of Mysore, Bangalore.
- (12) The Electrical Department, Government of Madras.
- (13) The N.-W. Railway Workshops, Lahore.
- (14) The Hydro-Electric Scheme, Jammu and Kashmir.
- (15) The E.I. Railway Workshops, Lucknow.
- (16) B.B. & C.I. Railway Workshops, Ajmer.
- (17) R.K. Railway Workshops, Izatnagar.
- (18) The Ahmedabad Electric Supply Co., Ltd.
- (19) Electrical Department, Government of Travancore, Trivandrum.
- (20) Junagad Power House.
- (21) The Andra Paper Mills Co., Ltd, Rajamundri.
- (22) The U.P. Paper Mills, Co., Ltd., Lucknow.
- (23) The Devarkhand Cement Company, Ranchi.
- (24) The Electrical Department, Simla Municipality.

- (25) The Cambay Electric Supply & Industrial Co., Cambay.
- (26) The S.K.G. Sugar Mills, Ltd., Mirganj.
- (27) The Cochin State Power and Light Corporation.
- (28) The Burma Railways Signal Workshops.
- (29) The Ganges Canal Hydro-Electric Department, United Provinces.
- (30) The Power House, Baroda.
- (31) The Poona Electric Supply Co., Ltd., Poona.
- (32) The Kolhapur Cinetone Co., Ltd.
- (33) The Municipal Power House, Bezwada.
- (34) The Birla Cotton Mills, Delhi.
- (35) B.O.C. Company, Yenang Yang.
- (36) The Vizagapatam Harbour.
- (37) The Punjab Portland Cement Co., Ltd., Wah.
- (38) The Gondia Power Stations.
- (39) The Simla Hydro-Electric Department.
- (40) The Electric Supply Corporation, East Tanjere.
- (41) The Erection Works, Jamshedpur.
- (42) The U.I.S. Sugar Mills, Mansurpur.
- (43) The Water Works, Benares.
- (44) The Engineering College Workshops, Benares Hindu University.
- (45) The Calcutta Tramways, Co., Ltd.
- (46) Messrs. Jessop & Co., Ltd.
- (47) S.I. Railway Workshops.
- (48) M. & S. M. Railway Workshops.
- (49) B.N.-W. Railway Workshops, Gorakhpur.
- (50) Naini Tal Electric Supply Company.
- (51) Hydro-Electric Department, United Provinces.
- (52) Gun and Carriage Factory, Jubbulpore.

APPENDIX D

List of firms and other organizations who have employed students of the Engineering College of the Benares Hindu University after their fourth year examination

- (1) Pykara Hydro-Electric Works, Glen Morgan.
- (2) Ahmedabad Electricity Company, Ahmedabad.
- (3) Modi Sugar Mills, Ltd., Begamabad (Meerut).
- (4) Delhi Cloth & General Mills Co., Ltd., Delhi.
- (5) Coral Engineering Works, Calcutta.
- (6) Ganesh Sugar Mills, Ltd., Pharenda (Gorakhpur).
- (7) Electrical Department and Water Works, Kotah (Rajputana).
- (8) Rai Bahadur Narain Singh Sugar Mills Co., Ltd. (Meerut).
- (9) The Upper Jumna Swadeshi Sugar Mills Co., Ltd. (Muzaffarnagar).
- (10) The United Provinces Co-operative Sugar Factory, Ltd., Sitapur.
- (11) Agra Municipality, Agra.
- (12) The Indian Cement Co., Ltd., Porbandar.
- (13) The West Coast Electric Supply Corporation, Ltd., Calicut
- (14) The Surat Electricity Co., Ltd., Surat.
- (15) The Tata Hydro-Electric Power Supply Co., Bombay.
- (16) Bezwada Municipality.
- (17) The Standard Electric Company, Bombay.
- (18) R.I.M. Dockyard, Bombay.
- (19) Jasarup Baijnath Bahety & Sons, Khandwa.
- (20) Maya Engineering Works, Behala.
- (21) Bankura Power Station.
- (22) British Insulated Cables, Ltd., Calcutta.
- (23) Rewa Electric Supply Co., Rewa (Rewa State).
- (24) Power House, New Delhi Municipality.
- (25) The Tata Iron & Steel Co., Ltd., Jamshedpur.
- (26) Engineering College Workshops, Benares Hindu University.
- (27) Massey Ganz. Hackethal (India), Ltd.
- (28) Electricity Department, Chepak, Madras.
- (29) The General Engineering Works, Calcutta.
- (30) Electrical Laboratory, Engineering College.
- (31) Associated Electrical Industries (India) Ltd., India.
- (32) Callenders Cable's & Construction Co., Ltd.
- (33) The Britannia Engineering Co., Ltd., McLeod House, Calcutta.
- (34) Guest, Keen, Williams Shalima, Andul Road, Salimar.

- (35) Bridge & Roof Co. (India), Ltd., Howrah.
- (36) The Central Provinces Cement Co., Ltd., Kymoor.
- (37) Electrical Department, Government of Mysore (Mysore State).
- (38) The Nutan Mills, Ltd., Ahmedabad.
- (39) Electrical Department, Government of Travancore.
- (40) Guntur Municipality, Guntur.
- (41) B.R. Herman & Mohatta, Ltd., Ambala Cantonment.
- (42) M.E.S. Power House, Peshawar.
- (43) Transmission Division, P.W.D., Peshawar.
- (44) The Bombay Electric Supply & Tramways Co., Ltd., Bombay.
- (45) Imperial College of Science and Technology, South Kensington, London, S.W. 7.
- (46) Imperial Airways, Ltd., Croydon.
- (47) The Indian Steel & Wire Products, Tatanagar.
- (48) Electric Traction, S.I. Railway, Tambaram.
- (49) Mechanical Department, G.I.P. Railway, Parel.
- (50) The Hindustan Sugar Mills, Ltd., Golagokaran Nath.
- (51) Construction Work of Andhra University Electrification Scheme.
- (52) Chongalvaraya Naickor's Technical & Industrial Institute, Madras.
- (53) Masulipatam Municipality, Madras Presidency.
- (54) Pykara Hyrdo-Electric Scheme, Coimbatore.
- (55) Upper India Engineering Corporation, New Delhi.
- (56) The Alembic Chemical Works, Co., Ltd., Barods.
- (57) The Ahmedabad New Cotton Mills, Co., Ltd., Ahmedabad.
- (58) The Gwalior Engineering Works, Gwalior.
- (59) G.L. Railway, Ujjain-Agra Branch.
- (60) The Civil Engineering School, Lucknow.
- (61) The Steel Power House, Kotah.
- (62) The New India Sugar Mills, Ltd., Darbhanga.
- (63) The Popular Sugar Co., Ltd., Basti.
- (64) Kaycee & Co., Ltd., Lahore, Calcutta, Bombay and Madras.
- (65) Electrical Department, Baroda State.
- (66) The Ratlam Dyeing & Bleaching Works Co., Ltd., Ratlam.
- (67) F. & O. Osler, Ltd., Bombay.
- (68) The Tennevally-Tuticorin Electric Supply Co., Ltd., Tuticorin.
- (69) The Poona Electric Supply Co., Poona.
- (70) The Satara Electric Supply Co., Satara.
- (71) The East Tanjore Electric Supply Corporation, Trichnopoly.
- (72) Electrical Department Pallivasal, Travancore.
- (73) The Crompton Engineering Company (Madras), Ltd., Madras.
- (74) Gondal Power House, Gondal State.
- (75) Messrs. Siemens Schuckertwerke Aktiengesellschaft, Berlin, Germany.
- (76) Electrical Department, Cocanada.
- (77) The Rajahmundry Electric Supply Corporation, Ltd., Rajahmundry.
- (78) Hydro-Electric Division, Roorkee.
- (79) College of Engineering, Poona.
- (80) Volkart Brothers, Bombay.
- (81) The Ratna Sugar Mills Co., Ltd., Shahgunj, Jaunpur.
- (82) Aira Sugar Factory, Aira State, Kheri.
- (83) Acme & Co., Madras.
- (84) M. & S. M. Railway, Peramber.
- (85) B.-N. Railway, Kharagpur.
- (86) Aska Sugar Works & Distillery, Aska.
- (87) Seth Shiv Prasad Banarsi Dass Sugar Mills, Bijnor.
- (88) The Shankar Sugar Mills, Ltd., Captainganj.
- (89) Messrs. Jessop & Co., Ltd., Calcutta.
- (90) Bellary Municipality, Bellary.
- (91) Hospet Electrification Scheme, Hospet.

APPENDIX E

List of correspondents who have replied to enquiries on the subject of training

- (1) Principal, Hewett Engineering School, Lucknow.
- (2) Principal, Civil Engineering School, Lucknow.
- (3) Raja Jwala Prasad Sahib, Pro-Vice-Chancellor, Benares Hindu University.

- (4) H. J. Amoores, Esq., I.S.E., Principal, Thomason College, Roorkee.
- (5) Chief Electrical Engineer, East Indian Railway, Calcutta.
- (6) Senior Mechanical Engineer, Moghalpura Workshops, N.W.R., (Punjab).
- (7) Messrs. Jessop & Co., Calcutta.
- (8) Messrs. Burn & Co., Calcutta.
- (9) E. V. Small, Esq., Manager for India of Messrs. Associated Electrical Industries, Calcutta.
- (10) H. V. Pointon, Esq., of Messrs. Asea Electric, Ltd., Bombay.
- (11) E.F. Baer, Esq., of Messrs. Esherways Engineering Works, Ltd., Calcutta.
- (12) Messrs. Boving & Co., Ltd., Vulcan House, Nicol Road, Bombay.
- (13) Secretary, Dayalbagh Technical Institute, Agra.
- (14) Principal, Engineering College, Benares Hindu University.
- (15) Director of Industries, United Provinces.
- (16) Superintending Engineer, Public Health Engineering Department, United Provinces.
- (17) S. G. Forbes, Esq., Chief Engineer, Mysore Hydro-Electric, Bangalore.
- (18) Major H. G. Howard, M.C., C.I.E., Chief Engineer, Electricity, Chepauk, Madras.
- (19) H. P. Thomas, Esq., C.I.E., Chief Engineer, Electricity, Punjab.

APPENDIX F

Note on the selection and training of special class apprentices in Indian State Railways.

Complete regulations in respect of the above were published in the *Gazette of India*, dated the 31st October, 1936.

"A candidate must be under 19 years of age on the first day of August, immediately preceding the selection and must have passed the Intermediate Examination in Arts, Science, Agriculture or Engineering of a University or Board approved by the Governor General in Council or have obtained the Cambridge School 'A' Certificate or the Higher Diploma of the Mayo College, Ajmer.

"A candidate must have elementary knowledge of Mathematics up to quadratic equations and of elementary Trigonometry. A written test of his knowledge in these subjects will be held by the Public Service Commission at such time and place as the Commission may direct.

"The apprentices undergo a practical and theoretical training in the Mechanical Department of the Railway for the first three years of their apprenticeship, the boys for the electrical department receiving special classes in electrical engineering.

"If successful at the examination at the close of the third year of apprenticeship, well reported on during the period of three years' training in the Workshops and otherwise found suitable apprentices for the Mechanical Department are given, in their fourth year, six months' Running Shed experience, the remaining six months being spent in the workshops.

Apprentices for the electrical Department spend the first six months of their fourth year in the Electrical Power House and Workshops.

"Apprentices finally selected are sent to the United Kingdom to undergo a further period of training for two years (Mechanical Department) and 2½ years (Electrical Department)."

The period of training in India takes place in the Locomotive Workshops on the East Indian Railway at Jamalpur and in the Technical School, Jamalpur. During this period they are housed in an up-to-date hostel and also paid a small monthly salary. The apprentices selected for training in the United Kingdom are provided with 2nd class passages out and Home and are paid £ 250 a year during this period. At the conclusion of their training period both in India and England, these apprentices are expected to have become student members of one of the recognized engineering institutions either Civil, Mechanical or Electrical, or to have taken an external degree in engineering which is approximately the same qualification.

The number of apprentices sent to England for training depends on the number of vacancies in the superior grades of the various State Railways which are likely to offer at the end of their period of training in England.

Form D—United Provinces

STATEMENT OF COTTON PRESSED IN THE UNITED PROVINCES FOR THE WEEK ENDING 5TH JANUARY, 1940

[Section 5(2) of the Cotton Ginning and Pressing Factories Act, 1925]

1 Name of division or block	2 Number of bales pressed		3 Number of bales pressed	
	During the week	During the corresponding week last year	Since 1st September, 1939	During the corresponding period last year
1. Upper Doab(a)	1,566	3,801	45,493(1)	50.02
2. Middle Doab(b)	3,171	2,432	30,852(2)	33.84
3. Lower Doab and Bundelkhand(c)	830	226	4,879	4.75
4. Rohilkhand(d)	382	200	7,13	4.39
5. Rest of the Province(e)	..	..	..	..
Total	5,949	6,659	89,163	93.01

Districts included in the block—

- (a) Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh, Muzaffarnagar.
 (b) Muttra, Farrukhabad, Etah, Agra, Mainpuri, Etawah.
 (c) Cawnpore, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur, Banda.
 (d) Hardoi, Shahjahanpur, Bareilly, Moradabad, Budaun, Bijnor, Pilibhit, Naini Tal, Almorah, Garhwal.
 (e) Mirzapur, Benares, Jaunpur, Ghazipur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rae Bareilly, Sultanpur, Fyzabad, Partabgarh.
- (1) Includes 114 bales of 29th December, 1939 }
 (2) Includes 181 bales of 22nd December, 1939 } Not reported before.
 Includes 132 bales of 29th December, 1939 }

427

VISHNU SAHAY, I.C.S.

Director of Agriculture, United Provinces.

MONTHLY AGRICULTURAL REPORT FOR DECEMBER, 1939

figures furnished by the Director of Veterinary Services, United Provinces :

November, 1939 December, 1939

I—Season

There was no rain during the month of December, 1939. Rain is generally needed specially in unirrigated tracts.

II—Agricultural operations

Agricultural operations are up to date. The irrigation of *rabi* crops and poppy and the pressing of sugarcane are in progress.

III—Standing crops and

IV—Prospects of the harvest

The standing crops are doing well and prospects are generally favourable, but much will depend on future rains. The average outturn of sugarcane is estimated at 14 annas.

V—Damage to crops

No serious damage to crops is reported.

VI—Agricultural stock

The condition of agricultural stock is satisfactory. There is a marked increase in the cattle diseases as is indicated by the following

	Seizures	Deaths	Seizures	Deaths
Rinderpest	1,094	651	3,298	2,04
Foot and mouth	3,621	15	7,439	4
Haemorrhagic Septicæmia	167	140	235	17

VII—Pasturage and Fodder

Fodder and water are sufficient everywhere.

VIII—Trade and prices

Prices of all chief food grains have slight fallen as will be seen from the following figure comparing the average retail prices in rupee per maund at the end of the month with the of the preceding month :

	End of Nov- 1939	End of Dec- 1939
Wheat	3-064	3-06
Barley	3-066	3-04
Gram	3-859	3-88
Rice	4-484	4-39
Arhar Dal	5-131	5-04

IX—Health and Labour in Rural Areas

Ample employment is available for the labouring and agricultural population. Public health continues satisfactory although smallpox is still reported from certain districts.

VISHNU SAHAY,
 Director of Agriculture,
 United Provinces

GOVERNMENT, UNITED PROVINCES

APPOINTMENT DEPARTMENT
PRESS COMMUNIQUE

Dated Naini Tal, the 12th June, 1940

THE following is the constitution of the Selection Committee constituted to select candidates for admission to the Indian Police Examination to be held in September, 1940:

- | | |
|--|-----------|
| 1. Mr. H. A. Inglis, I. P. | Chairman. |
| 2. Rai Bahadur P. L. Dhawan, C.I.E., M.A., M.I.E. (Ind.),
Member, Federal Public Service Commission | Members. |
| 3. Dr. N. R. Dhar, D.Sc., F.I.C., I.E.S., Deputy Director of
Public Instruction, United Provinces | |
| 4. Sir Syed Raza Ali, C.B.E., M.L.A. (Central), Moradabad | |
| 5. Raja Bisheshwar Dayal Seth of Kotra, Rai Bahadur, B.Sc.,
F.C.S., M.L.C., Lucknow | |
| 2. The Selection Committee will meet at Lucknow from 11th to 17th July,
1940. | |

X9(MJ452):9.25261.N46

Hs

By order,
R. F. MUDIE,
Chief Secretary to Government,
United Provinces.

No. 1610/XVIII—53(L)-40

INDUSTRIES DEPARTMENT

19th June, 1940

MISCELLANEOUS

THE following *communiqué*, issued by the Government, together with the Labour Commissioner's report, on the Saharanpur Cigarette Factory Strike, is herewith published for general information.

COMMUNIQUE

1. There has been a strike in the Cigarette Factory at Saharanpur since the 15th of February. Various attempts have been made to settle the differences. Representatives of both sides were summoned by the Government, but as no satisfactory solution could be arrived at, Government deputed the Labour Commissioner to look into the matter and report at an early date.

2. Government have now received the report of the Labour Commissioner, which is herewith published for general information. He has made a very fair examination of the case of the two parties, and Government consider that his proposals and recommendations are reasonable. In particular, they believe that it should be possible for the Factory to arrange its work and wages so as to ensure that the average monthly earnings of a worker do not fall below the modest figure of about Rs.14 or Rs.15, which is equivalent to about 26 days' wages at the existing rates.

3. Government trust that both the employers and the workers will accept the Labour Commissioner's findings, so that this unfortunate dispute which has lasted four months may now come to an end. They are sure that both the parties realize that in the present times it is necessary that industrial concerns should work harmoniously and to their full capacity.

By order,
N. C. MEHTA,
Secretary to Government,
United Provinces.

LABOUR COMMISSIONER'S REPORT

The strike at the Cigarette Factory, Saharanpur, has been going on from the 15th February last. It is perhaps one of the longest strikes in the history of these provinces if not of India. I had the occasion to visit Saharanpur and to study the conditions first and twice during the pendency of the strike. I must admit that I was struck by two features of this strike, namely, that the entire labour force had been solidly behind this strike and that all along the attitude of the strikers has been very reasonable. They tried their level best to avoid any untoward incident. The happenings at Saharanpur in connexion with this strike speak well of the workers' organization and of the persons at the helm of affairs. It is, therefore not unreasonable to expect that at the termination of this strike the factory

will not allow any victimization to be done as that is bound to leave unfortunate after effects. I would like to urge this point strongly before the factory management as I consider that it will be only playing the game if no victimization was done by the factory.

The factory at Saharanpur is a growing concern. It is equipped with an up-to-date machinery for making cigarettes. The hygienic and sanitary conditions obtainable at the factory leave nothing to be desired. The factory management has done its best to provide the factory with the most favourable conditions of work possible under the circumstances. But when all is said and done the fact remains that the factory is engaged in manufacturing cigarettes which means handling of tobacco at every stage. A certain level of humidity and a certain degree of temperature for the proper manufacture of cigarettes are required. The atmosphere is necessarily, therefore, not quite the normal, besides being surcharged with tobacco dust and tobacco smell. This is inherent in the nature of things and cannot be avoided. It means harder conditions of work and necessarily more strain on the health of the operatives working in the factory.

The factory employs a very microscopic percentage of its actual operatives on monthly rates. Only 108 persons out of the total strength of 962 employed by the factory in December, 1939, were on monthly rates. This figure includes 64 clerks who are working in the General office and for all practical purposes cannot be regarded as workers. That means that of the actual workers only 44 were on the monthly pay roll. Rest of them were employed either on the daily rates or on piece rates.

The factory pays 8 annas 6 pies per day as the minimum wage to its employees. Increments are allowed to workers at the discretion of the management. As an operative gains experience, and provided that he behaves well, his wages may rise even to 12 annas per day for unskilled work. The rates at which skilled and semi-skilled workers are paid are necessarily higher than these.

So far as the rates of daily wages are concerned they are on the whole fair; but the figures of daily rates do not represent the true state of affairs. Making allowances for unpaid holidays, etc. the factory works only 22 to 23 days in a month. The average monthly earning of the worker employed on the lowest rate, therefore, do not come to more than about Rs.12 a month.

For workers drawing higher rates of wages, the same thing holds good, viz. that the daily rates of payment are fair, but the monthly average earnings are lower than what should be the case.

Even in Saharanpur there are concerns in which the rates of monthly payments are higher than those allowed by the Cigarette Factory. In these concerns the minimum wage allowed is Rs.15 per mensem.

The Cigarette Factory by not working for 26 days in a month which is the standard accepted by the Employers' Association in Cawnpore, Ahmedabad and Bombay, has reduced the monthly average earnings of its workers below the fair level, although its rates of daily payment remain satisfactory. It will be a matter for the factory's consideration whether they will not do better by working the factory for 26 days in a month, and thereby increasing the earnings of the workers as well as that of the Company. If this suggestion is accepted, the grievance about the increment in wages will be largely redressed. The demand for the minimum wage of Rs.15 a month will also be satisfied in the case of a majority of workers of the factory. There will then remain only 74 operatives who will not be getting Rs.15 per mensem and if their wages are further brought to the level of Rs.15 per mensem the total cost thereby to the factory will be in the neighbourhood of Rs.80 a month.

It is not possible to say how far the factory will be able to bear this burden of increase in expenditure. The Annual Report of the factory or that of the Company owning it or a copy of the audited balance-sheet was not supplied by the factory. Even figures about the paid-up value of the Company's shares and its present market value were not supplied. It, however, stands to reason that a factory which pays about 3½ lakhs per month in tax on ¼th of the total material handled by it, which pays about twenty thousand rupees in wages and which according to the management itself has been a growing concern all along cannot reasonably grudge the extra expenditure involved by adopting the above suggestions. The additional cost will not mean any strain on the Company's resources at all. It is true that by increasing the number of working days, the wage bill of the factory will go up by about 1/6th of its present level but for that the return will be a proportionate increase in production and may it be said in profits.

The factory has allowed dear food allowance to its workers at rates varying from 12½ per cent. to 6¼ per cent. on income up to Rs.50 per mensem. The rates are based on the block system according to

which every worker gets allowance at the fixed rates on various parts of his income. These rates compare well with allowances given at Cawnpore, Bombay and Ahmedabad.

The Company paid bonuses to its employees at rates varying from one month to 15 days' wages this year. It is hoped that such payments will continue in future also.

In a year six holidays with pay are allowed by the Company. The workers demand three more holidays. This is a matter which might be considered by the Company.

The factory allows 15 days' leave with full pay to monthly rated employees if taken consecutively, otherwise only 12 days are allowed. Daily paid workers are allowed only nine days. If the factory adopts the system of working 26 days a month, it might favourably consider the demand of the workers for 15 days' leave. Privilege leave is not given as a rule at Cawnpore or other industrial centres.

In the case of industrial concerns medical leave is generally granted at the discretion of the management and is not governed by definite rules. As individual cases of illness arise, the management will no doubt consider them sympathetically.

The Company instituted a scheme of Provident Fund for the workers in the year 1939. The rates of worker's contribution to the Provident Fund are 8 pies per rupee of wages earned. An equal amount is to be contributed by the Company. The rates of contribution in some other concerns at Saharanpur are 15 pies per rupee and 18 pies per rupee. The Company may consider the question of increasing the rate to 12 pies per rupee. The adoption of such a scheme will not mean more than 2 per cent. addition to the wage bill.

The question of employing all labour except casual and seasonal, on monthly basis instead of daily rates will greatly reduce the chances of friction. Even in the case of contract workers it may be possible to introduce monthly rates on the basis of the previous year's earnings with the proviso that the workers will be allowed efficiency money or suffer deductions, according as their production is higher or lower than the standard. The change need not mean any additional burden to the factory in wages, if the standard of 26 working days in a month is adopted and emoluments calculated on that basis. This is a matter for Company's consideration.

The demand of the workers for the security of their tenure appears very reasonable. The Company issued an order on 16th May, 1939, that all the employees who have been in the Company for 12 consecutive months may be brought on the permanent roll. It is hoped that the declaration will be implemented.

The provision of proper employment letters, wage cards and printed service rules to its workers is only to be expected from an advanced factory of this type. A service book given to each worker on the model of the Martin Company will meet the needs of the situation and will mean practically next to nothing in cost.

The factory has recently joined the Employers' Association of Northern India and the question of dismissals, discharges, etc. of the workers will now be referable to the Labour Commissioner for conciliation according to the procedure evolved at Cawnpore.

The hours of work adopted by the factory are fair and reasonable and no change is called for.

The maintenance on a waiting list will help the management in recruiting new labour. The factory might consider this question.

The question of providing houses for the labourers may be further examined.

The individual unions of the four tobacco factories in India owned by the same firm owning the factory at Saharanpur have formed a Central Council. It will be a matter for Company's consideration whether the recognition of this Council will not provide facilities in dealing with questions of general applicability to all factories.

The arrangement made by the factory for medical aid to its workers seems to be adequate.

Provision of education facilities by the factory for the children of its employees does not seem to be urgently called for.

The rest shed provided by the factory is not very attractive. With the provision of a few benches, tables and other conveniences, it can be converted into a decent hall sufficiently attractive for the labourers to utilize it. The cost of these improvements will be next to nothing.

Other welfare and recreation facilities can easily be provided. The cost involved will be little. All that will be required will be a sympathetic consideration of such questions by the local management. Such an attitude has not been lacking in the past and it is expected will be forthcoming in the future.

S. S. HASAN, I.C.S.,
Labour Commissioner,
United Provinces.

BOARD OF REVENUE, UNITED PROVINCES

SETTLEMENT DEPARTMENT

Notification no. 3571/Sett.-618-D-21

Dated Lucknow, the 7th June, 1940.

IN accordance with rule 22 of the Settlement Manual, Part II, the Board are pleased to publish the following schedule of rent-rates proposed by the Settlement Officer for tahsil Moth, district Jhansi, together with the rent-rate report.

Objections may be filed before the Settlement Officer, Jhansi, (and no one else) within a period of one month from the date of publication of this notification in the *Gazette*.

The Settlement Officer will consider such objections and forward them with his remarks through the Settlement Commissioner for the orders of the Board.

By order,
B. B. SINGH,
Secretary.

APPENDIX VI

List of alluvial mahals in Parganas Patia, Khairigarh and Nighas

Serial number	Name of village	Name of mahal	Circle	Name of Taluqa to which the mahal belongs	Term of settlement
1	Ambari		III	Jhandi	Unconditional long term.
2	Dhundela		III	Bijwa	Do.
3	Mundia Mahadeo	Khas	III	Do.	Do.
4	Bukaria		IV	Do.	Do.
5	Paharapur		III	Majhgain	Do.
6	Kuchalha		III	Oel	Do.
7	Chauri		II	Khairigarh	Do.
8	Anupnagar		VIII	Do.	Do.
9	Kharehtiya		VIII	Do.	Do.
10	Manjhra Purab		VIII	Do.	Do.
11	Ramnagar Senkalpa		VIII	Khairigarh but is half sub-settled.	Octennial.
12	Khamaria		I	Non-talqdari	Do.
13	Kharehha		I	Do.	Do.
14	Lagdahan	Jaganath Prasad	I	Do.	Do.
15		Chandika Prasad	I	Do.	Do.
16	Newadia		I	Do.	Do.
17	Newasi		I	Do.	Do.
18	Niranjanpur		I	Do.	Do.
19	Srinagar		I	Do.	Do.
20	Murgeha	Alhuvial Rang Safed, Kartar Krishna	II	Do.	Do.
21	Jungle no. 12	Rang Zard, Sheo Ratan Lal	III	Do.	Do.
22			III	Do.	Do.
23	Lauki		III	Do.	Do.
24	Mundia Mahadeo	Chak Mundia Mahadeo	III	Do.	Do.
25	Tegnahia		II	Do.	Do.

13

typed

P152.252, 4M2):1.N4t

H1

GOVERNMENT, UNITED PROVINCES

No. A-542/A-XV-467-38

EDUCATION (A) DEPARTMENT

28th February, 1941

THE following report of the Hindustani Academy Enquiry Committee, United Provinces, appointed by the Government of the United Provinces, under Government Communiqué no. 1964G/XV-467-1938, dated the 9th September, 1938, to examine the administration and working of the Academy and to suggest ways and means for its improvements is published for general information. Any comments or suggestions in this connexion may be forwarded to the Secretary to Government in the Education Department Lucknow, by the end of March, 1941.

By order,

N. C. MEHTA,

Secretary to Government,
United Provinces.Report of the Hindustani Academy Enquiry Committee,
United Provinces

CHAPTER I

HISTORY OF THE ACADEMY

The Hindustani Academy was founded on 29th March, 1927. The inauguration took place at the hands of His Excellency Sir William Marris. The objects of the Academy as mentioned in Resolution no. 81-G Education Department, dated the 20th January, 1927, were to preserve, foster and develop Urdu and Hindi literature by—

- (1) the award of prizes (through a system of competition) for the production of the best books on particular subjects;
- (2) the translation of books into Urdu and Hindi by paid translators and the publication of the translations by the Academy;
- (3) the encouragement of the production of original works or translations in Hindi and Urdu whether by grants to Universities and literary associations or otherwise;
- (4) the election of eminent writers to fellowship of the Academy.

2. These objects were later amplified by the Society after it was duly established, as below:

- (a) Awarding prizes for the production of approved books on different subjects;
- (b) arranging for the translation in Urdu and Hindi of works in other languages by payment or otherwise and to publish the same;
- (c) encouraging the production of original works or translations in Hindi or Urdu whether by grants to Universities and literary associations or otherwise;
- (d) electing eminent writers and scholars to Fellowship of the Academy;
- (e) electing the benefactors of the Academy as Honorary Fellows;
- (f) establishing and maintaining a library;
- (g) inviting eminent scholars to deliver addresses and lectures; and
- (h) doing all other acts and taking all other steps to advance the objects specified above.

3. The Academy was registered as a Society under Act XXI of 1890. Its constitution comprised: (1) a Council and (2) an Executive Committee. Fellows were also to be appointed later on but this step was not taken.

4. The Council was to have a President, six *ex officio* members and 30 members (including a General Secretary) nominated by Government. The Council was also to have power to co-opt six additional members. It was to meet ordinarily twice a year at times and places to be fixed by the President. Its authority was confined to general questions of policy.

5. The Executive Committee was to consist of a Chairman, a Secretary and Treasurer and seven other members to be nominated by Government. Its duties were to give effect to the decisions of the Council on matters of policy and otherwise to arrange for carrying on the work of the Academy. The Executive Committee was to meet as often as, and where, the Chairman might direct. It could form sub-committees for the different branches of work. Only those persons, other than the members could be co-opted.

6. Government gave a grant of Rs.25,000 in the first in subsequent years the following grants were given:

	Rs.
1928-29..	50,000
1929-30..	50,000
1930-31..	70,000
1931-32..	50,000
1932-33..	25,000
1933-34..	25,000
1934-35..	25,000
1935-36..	25,000
1936-37..	25,000
1937-38..	25,000
1938-39..	25,000
1939-40*	12,500
Total	4,12,500

*Rs.25,000 has been included in the budget of 1941 in which Rs.12,500 has been paid to the Academy.

CHAPTER II

APPOINTMENT OF ENQUIRY COMMITTEE

Government appointed on 1st September, 1938, the Enquiry Committee of Enquiry consisting of the following members to examine the administration and working of the Academy to suggest ways and means for its improvement:

- (1) Karan Singh Kane, Esq., B.A., I.C.B.A., M.L.A., Parliamentary Secretary to the Hon'ble the Minister Education, United Provinces. *Chairman*
- (2) Khan Bahadur Abu Muhammad, M.A., Member, Public Service Commission, United Provinces, Allahabad. *Members*
- (3) Pandit Govind Malaviya, M.A., M.L.A.
- (4) Nehpal Singh, Esq., B.A. (Oxon), I.C.S., Assistant Director of Public Instruction, United Provinces, Allahabad. *Secretary*

2. The terms of reference of the Committee were—

- (a) To examine the working, organization, memora and rules and other connected affairs of the Hind Academy and to make recommendations to Government for its reorganization.
- (b) To make proposals regarding the financial and administration of the Hindustani Academy Executive Committee.
- (c) To submit proposals in connection with the required for the Hindustani Academy.
- (d) To consider what measures should be adopted order that the Academy might make necessary progress in its main work of preserving, fostering, and developing Urdu and Hindi literature.
- (e) To make proposals as to how best the Academy could be adapted to modern requirements and developments of the Hindustani language.

3. The Committee held its sittings at Allahabad on November, 1938, 3rd February, 1939, 20th November, and 1st December, 1939. The report was adopted by citation.

4. This enquiry into the working of all Hindustani Academies was necessitated by misgivings which arose from time to time to the way in which the objects in view were being fulfilled. Finances were also not thought to be well-managed. Doubt about the proper working of the Academy in fact, had arisen as far back as 1930 when the Hon'ble Raja Kunal Pal, Minister of Education, observed as follows:

(a) The translations of the dramas undertaken by the Academy were contrary to Sir William's view that they should be original and essentially Indian and provincial in thought.

(b) The books on Astronomy, Electricity, etc., were in the course of preparation would be mere vulgar renderings of English works. Work of that was not in conformity with Sir William Marris' expressed by him in his speech at the opening of the Academy, that the production of original works should be stimulated.

(c) The Urdu and Hindi languages used were Sanskritized Urdu or Sanskritized Hindi which tended to make the two vernaculars diverge from each other.

5. The Academy to his mind was wasting public money in producing such books. It should have aimed at bringing Hindi and Urdu nearer by developing the Hindustani language which would ultimately draw together the two great communities of these Provinces.

6. The Education Department were also not entirely satisfied with the work of the Academy and its control of funds and Mr. E. S. Weir, then Deputy Director of Public Instruction, in 1935, visited the Academy with the Assistant Director of Public Instruction and found that the system of its accounts was such as left scope for defalcations. The strict

staff of the Academy was also reported to be in excess requirements. The slackness in the progress made by the Academy in its work of preparing and selling the publications also felt.

CHAPTER III

PROCEDURE OF WORK OF THE ENQUIRY COMMITTEE

The Enquiry Committee began work by issuing a number of questionnaires as given in Appendix A. This questionnaire was sent to the Press and was also sent to distinguished persons connected with the teaching of the Hindi and Urdu languages.

The Secretary of the Committee visited important centres in Hindi and Urdu scholarship. He availed of his presence at these centres to discuss the various aspects of Hindi and Urdu development with gentlemen whose life work has been devoted to these languages. The individual members also held private consultations and discussions with men whose opinion counts in the sphere of literature.

CHAPTER IV

WORK DONE BY THE HINDUSTANI ACADEMY

The Hindustani Academy has published 79 books up to 1939. Of these 49 are in Hindi and 33 in Urdu. The books are distributed as below:

(1) Literary Biographies	5
(2) Literary Translation (Dramas)	9
(3) Languages	3
(4) Cultural and Political Histories	14
(5) Historical Biographies	6
(6) Science	6
(7) Applied Sciences	3
(8) Philosophy and Mental Sciences	6
(9) Social Sciences	8
(10) Folklore	2
(11) Art and Aesthetics	2
(12) Bibliography	2
(13) Literary Editions	10
(14) Literary Criticism	3

NOTE—The names of books and authors, along with the prices, will be found in Appendix "B". Some of the translations are cross translations.

Magazine

A quarterly journal "Hindustani" is issued by the Academy in both Hindi and Urdu. It was started in 1931. The price of the journal originally fixed at Rs.8 per annum, was reduced to Rs.6 per annum in 1932 and Rs.4 per annum in 1933. The circulation of each number was printed in the beginning at 1000 but the number was later reduced to 500 and is now 250. The accounts will show that the circulation of the magazine has remained negligible.

Lectures

Until 1933 scholars were invited to deliver addresses and lectures but since then the practice has been discontinued for financial reasons.

There were 2 series of lectures in 1928, 4 in 1929, 2 in 1930, 1 in 1931, 2 in 1932, and 1 in 1933. Out of these 6 lectures were in Hindi and the same number in Urdu.

NOTE—A list of lectures delivered will be found in Appendix "C".

Essays

Eighteen prizes have so far been awarded to authors for original books and eight to students for encouraging students' compositions. A list of awards to authors will be found in Appendix "D".

Library

The Academy founded its own library. For some time in the first few years the library was allowed to be used by the public, but this facility was subsequently withdrawn. Presently the library is used for reference by the scholars of the Academy only. The present stock consists of 7,569 books, 2,932 in the Urdu section and 4,088 in the Hindi section; the remainder for part of the general reference section.

Conferences

Six conferences were held under the auspices of the Hindustani Academy. The first conference was held in 1929 and the last in 1938. Scholars of high standing read papers and took part in the discussions of these conferences.

CHAPTER V

OBSERVATIONS ON SOME ASPECTS OF WORK

In our opinion the ideals which the Academy placed before itself have been fulfilled only partially. Urdu and Hindi literature, no doubt have been enriched by the creation of some notable books; but most of the works do not rise above the level of mediocrity. Original writings have been very few, while the compilations and translations are of a very ordinary calibre. The translations are particularly devoid of individuality. In several cases the translators have failed to change the bone and flesh of the original diction, and the body of the European language and thought stands intact under the thin cloak of Urdu or Hindi words.

Therefore, the publications of the Academy have won little appreciation from the public and their sale has been far from satisfactory. The contention that such works need not sell rapidly and are not intended for ordinary readers is not convincing. The reading and studying public contains discriminating people among its ranks and it is hardly correct that the books have not been appreciated because they are of a standard too high for the average reader. Moreover all the publications are not of a purely literary character and the ones which deal with subjects of common interest ought to have met with a better reception if they had supplied a real demand. Either, therefore, the material was unattractive or the method of presenting it to the readers defective. In the Committee's opinion both the shortcomings were present. It seems necessary here to make mention of the publication of the Urdu Anthology at a cost of several thousand rupees. The worth of this publication can be judged from the fact that not more than a few dozen copies could be sold. The work took six years to compile and started on its career in 1933 with an editorial note damning the whole venture with faint praise.

As was observed in the speech of Sir William Marris, and later stressed by the Hon'ble Raja Kusal Pal Singh, one aspect of the work of the Hindustani Academy was to create and strengthen the Hindustani form of Urdu and Hindi. In this object also the Academy has not been quite successful in only a very few of its publications has any conscious effort been made to use the Hindustani idiom. The language has remained current Hindi in which Sanskritized words and forms predominate. At long distances some laboured effort may be visible in the direction of using the Hindustani form; but a greater part of the language used is highly Sanskritized; in the Urdu works even this feeble, and laboured effort is absent. The normal Persianized Urdu has been employed throughout.

The lectures and essays published were for the most part of a high order and they form the more valuable part of the Academy's contribution to literature.

The journal has maintained a fairly high level of efficiency, at least in its Hindi version, but unfortunately its circulation has remained extremely limited. The Urdu version of the Journal has suffered in common with the Urdu works, from another disadvantage; the type used is of the Arabic pattern and this makes reading a strenuous and unpleasant task.

Library

A large library, which remained open for use by the public for some time, has been collected by the Academy. But the selection of books has not been made with an eye to utility. Many of the books are such as cannot be connected with the activity of the Academy.

CHAPTER VI

ACCOUNTS

The accounts of the Hindustani Academy were audited recently by two assistants of the Director of Public Instructions office.

NOTE—A copy of the audit report will be found in Appendix "E".

The Committee went through the previous audit reports of the Examiner, Local Fund Accounts, and also the audit notes of the assistants of the Director of Public Instruction's office who were deputed on the recommendation of the Committee.

On estimating the cost of unsold books the Committee arrived at the conclusion that, through carelessness, the Academy brought about a loss of approximately Rs.90,000 on this score.

The various Audit Notes reveal a confused state of affairs and the Committee is of opinion that the finances have been grossly mismanaged. There has been no check on the accounts and proper attention has not been paid to the financial side of the Academy. As will be seen from Appendix F even the most elementary canons of accounting were ignored in the keeping of the accounts.

The irregularities discovered are in reality too numerous for mention here and even the audit notes given in Appendix F do not give a full list. Detailed audit could be undertaken only for one year, viz., 1938-39, while the rest of the accounts

exercise all the powers of the President during the latter's absence.

7. *Casual Vacancies*—This paragraph should be retained.

8. *Meetings of the Council*—The Committee recommends that this paragraph should read:

(a) The Council shall meet at least once every year at the headquarters of the Academy (unless the Executive Committee decide on a different place for a particular meeting) on such dates and at such time as may be fixed by the Executive Committee, provided that the Executive Committee may call any further meeting for reasons to be recorded by it.

(b) *Quorum*—The Committee recommends that eighteen (instead of nine) should constitute a quorum.

(c) No meeting of the Council should be held unless a notice of at least one month is given to the members.

9. *Resolutions*—The Committee recommends that this paragraph should read as follows:

It should be open to a member of the Council to give notice of a resolution which he may desire to move at a meeting of the Council, provided that such notice is given at least 10 days before the date of the meeting of the Council.

10. *Records*—This paragraph should be retained.

11. *Decision*—This paragraph should be retained.

Executive Committee

12. (a) *Executive Committee*—The Committee recommends that this paragraph should read as follows:

The Executive Committee shall consist of a President, a Vice-President, the Treasurer, the Secretary, and the Joint Secretaries *ex officio* and nine other members to be elected by the Council.

The Committee is of opinion that the same person should not be the Secretary and Treasurer. The Treasurer should be a separate person who can exercise a check on the Drawing officer. He should see that the money is properly utilized and drawn. If the Treasurer detects any irregularity, he should enter this remark in the bill and should bring the matter to the notice of the Executive Committee.

12. (b) This should be retained.

13. (a) *Function*—The committee recommends that this should be read as follows:

The Executive Committee shall give effect to the decisions of the Council and arrange for carrying on the work of the Academy.

(b) *President, Vice-President and Secretary*—The Committee recommends that this paragraph should be altered to read as follows:

The President and the Vice-President of the Council shall be *ex officio*, the President and the Vice-President respectively, of the Executive Committee. The Secretary shall be *ex officio* the Secretary of the Executive Committee.

14. *Meetings and quorum*—This paragraph should be retained.

15. *Proceedings*—This paragraph should be retained.

16. *Decision*—This paragraph should be retained.

President and Secretary

17. *Vacancy*—The Committee recommends that this paragraph should be altered to read as follows:

Whenever there is a vacancy in the office of the President or Secretary or Treasurer such vacancy shall be filled by appointment by Government.

18. *Chairman*—This paragraph should be retained.

19. (a) *Secretary*—The Committee has decided to recommend that the Executive Secretary of the Academy should be a whole time paid Secretary and that he should be helped by two Joint Secretaries, one each for the Hindi and the Urdu Sections and that both should be whole time paid workers of the Academy.

(b) *Remuneration to the Secretary*—The Committee recommends that the Secretary, as a whole time paid officer of the Academy, shall draw such salary as may be fixed by Government but which shall not exceed Rs.300 per mensem.

20. *Appointment of Staff and Joint Secretaries*—The Committee recommends that the two Joint Secretaries should also be whole time paid officers of the Academy on such salary as may be fixed by Government but which shall not exceed Rs.150 per mensem each.

The Committee has also decided to recommend that the Treasurer should be an honorary officer of the Academy, and that he should be appointed by Government.

The Committee, after a careful consideration of the question of the staff needed for the Academy, makes the following recommendations:

(a) The staff should consist of—

- (i) An Accountant.
- (ii) A stenographer-clerk.
- (iii) Two peons.

(b) The two Joint Secretaries should be responsible for the up-keep of the library in addition to their other duties.

21. *Power of Management*—This paragraph should be retained.

(i) *Leave*—This paragraph should be retained.

(ii) *Dismissal*—This paragraph should be retained.

(iii) *Appointment*—This paragraph should be retained.

(iv) *Other things*—This paragraph should be retained.

22. *Secretary's responsibilities*—This paragraph should be retained.

23. *Budget*—This paragraph should be retained.

Audit

24. *Audit*—This paragraph should be retained.

The Committee recommends that the accounts should be under the control of the Honorary Treasurer.

25. *Travelling Allowances*—This paragraph should be retained.

Property and contract

26 and 27. These paragraphs should be retained.

Election of fellows

28. The whole of the section should be retained.

Associate members

29. (a) This paragraph should be retained.

(b) The Committee recommends that this paragraph should be altered to read as follows:

An associate member shall pay an annual subscription of Rs.3 and he may compound the subscription by paying Rs.60 in a lump sum.

(c) This paragraph should be retained.

(d) This paragraph should be retained.

Honorary Fellows

30. This paragraph should be retained.

Judges

The Committee decides that the following recommendation should go into the Regulations:

The Council will decide from time to time on the subjects on which it would invite books (not manuscripts) from scholars with a view to awarding prizes, according to the rules framed in that behalf, for the best among them. At the end of the period fixed for the submission of such books on a subject the Council will appoint a Committee of Judges consisting of seven experts from the country to judge the books and pronounce their opinions on their standard and suitability for the award of the prize or prizes announced, giving reasons for their opinions. On the report of these judges the Council shall decide whether any of the author merits a prize or prizes.

31. *Committee of Judges*—The Committee recommends that this paragraph should be altered to read as follows:

The Council shall appoint annually Committees of Judges consisting of not less than three of the experts mentioned above as members to judge of any work that may be submitted to them by the Executive Committee.

The Judges shall record their opinion and submit to the Executive Committee which shall then decide whether it approves the work of an author on which the Judges' Committee has reported and also whether in its opinion the author of the approved work should receive any pecuniary remuneration.

32. *Remuneration to authors*—The Committee recommends that this paragraph should be altered to read as follows:

No authors shall be entitled to any remuneration except when his work, in its completed form, has been approved by (1) the Judge's Committee, and (2) the Executive Committee.

33. *Agreement with Authors*—The Committee recommends the deletion of this paragraph.

34. *Prizes*—This paragraph should be retained.

35. *Power of the Executive Committee*—This paragraph should be retained.

The Committee wishes to record here its opinion that the Council of the Academy has not taken as much interest in the Academy as it should have done. The entire burden was placed on the shoulders of the part-time Secretary who with his numerous pre-occupations left things to be managed by his office. This is a matter for regret.

Finally, with regard to the representation of scholars in the proposed triennial Conference, in the Council, in the Executive Committee, in the list of Fellows, and elsewhere, the Committee wishes to emphasize that there should be a proper balance as between Urdu and Hindi, not necessarily, however, on communal lines.

GENERAL OBSERVATION

The above changes proposed by the Hindustani Academy Enquiry Committee, are in line with the opinion of the majority of gentlemen who responded to the Committee's questionnaire. The consensus of opinion in the replies received favours the retention of the Hindustani Academy, but proposes certain modifications and improvements with a view to greater efficiency and effectiveness in the working of the Academy.

The Committee holds that the Hindi and the Urdu literatures should be allowed to develop on their own lines without any super-imposed efforts that may have the effect merely of hampering their growth.

The Committee is convinced that the deliberate and artificial effort to evolve Hindustani and to instal it in the place of Urdu and Hindi is likely to be fruitless.

The Committee has formed the opinion that the Academy has failed to achieve even a modest measure of success in the ideal it has kept before itself, that is establishing Hindustani as a new idiom. The language of almost all its publications has remained orthodox Hindi or Urdu. No notice.

exercise all the powers of the President during the latter's absence.

7. *Casual Vacancies*—This paragraph should be retained.

8. *Meetings of the Council*—The Committee recommends that this paragraph should read:

(a) The Council shall meet at least once every year at the headquarters of the Academy (unless the Executive Committee decide on a different place for a particular meeting) on such dates and at such time as may be fixed by the Executive Committee, provided that the Executive Committee may call any further meeting for reasons to be recorded by it.

(b) *Quorum*—The Committee recommends that eighteen (instead of nine) should constitute a quorum.

(c) No meeting of the Council should be held unless a notice of at least one month is given to the members.

9. *Resolutions*—The Committee recommends that this paragraph should read as follows:

It should be open to a member of the Council to give notice of a resolution which he may desire to move at a meeting of the Council, provided that such notice is given at least 10 days before the date of the meeting of the Council.

10. *Records*—This paragraph should be retained.

11. *Decision*—This paragraph should be retained.

Executive Committee

12. (a) *Executive Committee*—The Committee recommends that this paragraph should read as follows:

The Executive Committee shall consist of a President, a Vice-President, the Treasurer, the Secretary, and the Joint Secretaries *ex officio* and nine other members to be elected by the Council.

The Committee is of opinion that the same person should not be the Secretary and Treasurer. The Treasurer should be a separate person who can exercise a check on the Drawing officer. He should see that the money is properly utilized and drawn. If the Treasurer detects any irregularity, he should enter this remark in the bill and should bring the matter to the notice of the Executive Committee.

12. (b) This should be retained.

13. (a) *Function*—The committee recommends that this should be read as follows:

The Executive Committee shall give effect to the decisions of the Council and arrange for carrying on the work of the Academy.

(b) *President, Vice-President and Secretary*—The Committee recommends that this paragraph should be altered to read as follows:

The President and the Vice-President of the Council shall be *ex officio*, the President and the Vice-President respectively, of the Executive Committee. The Secretary shall be *ex officio* the Secretary of the Executive Committee.

14. *Meetings and quorum*—This paragraph should be retained.

15. *Proceedings*—This paragraph should be retained.

16. *Decision*—This paragraph should be retained.

President and Secretary

17. *Vacancy*—The Committee recommends that this paragraph should be altered to read as follows:

Whenever there is a vacancy in the office of the President or Secretary or Treasurer such vacancy shall be filled by appointment by Government.

18. *Chairman*—This paragraph should be retained.

19. (a) *Secretary*—The Committee has decided to recommend that the Executive Officer of the Academy should be a whole time paid Secretary and that he should be helped by two Joint Secretaries, one each for the Hindi and the Urdu Sections and that both should be whole time paid workers of the Academy.

(b) *Remuneration to the Secretary*—The Committee recommends that the Secretary, as a whole time paid officer of the Academy, shall draw such salary as may be fixed by Government but which shall not exceed Rs.300 per mensem.

20. *Appointments of Staff and Joint Secretaries*—The Committee recommends that the two Joint Secretaries should also be whole time paid officers of the Academy on such salary as may be fixed by Government but which shall not exceed Rs.150 per mensem each.

The Committee has also decided to recommend that the Treasurer should be an honorary officer of the Academy, and that he should be appointed by Government.

The Committee, after a careful consideration of the question of the staff needed for the Academy, makes the following recommendations:

(a) The staff should consist of—

- (i) An Accountant
- (ii) A stenographer-clerk.
- (iii) Two peons.

(b) The two Joint Secretaries should be responsible for the up-keep of the library in addition to their other duties.

21. *Power of Management*—This paragraph should be retained.

(i) *Leave*—This paragraph should be retained.

(ii) *Dismissal*—This paragraph should be retained.

(iii) *Appointment*—This paragraph should be retained.

(iv) *Other things*—This paragraph should be retained.

22. *Secretary's responsibilities*—This paragraph should be retained.

23. *Budget*—This paragraph should be retained.

Audit

24. *Audit*—This paragraph should be retained.

The Committee recommends that the accounts should be under the control of the Honorary Treasurer.

25. *Travelling Allowances*—This paragraph should be retained.

Property and contract

26 and 27. These paragraphs should be retained.

Election of fellows

28. The whole of the section should be retained.

Associate members

29. (a) This paragraph should be retained.

(b) The Committee recommends that this paragraph should be altered to be read as follows:

An associate member shall pay an annual subscription of Rs.3 and he may compound the subscription by paying Rs.60 in a lump sum.

(c) This paragraph should be retained.

(d) This paragraph should be retained.

Honorary Fellows

30. This paragraph should be retained.

Judges

The Committee decides that the following recommendation should go into the Regulations:

The Council will decide from time to time on the subjects on which it would invite books (not manuscripts) from scholars with a view to awarding prizes, according to the rules framed in that behalf, for the best among them. At the end of the period fixed for the submission of such books on a subject the Council will appoint a Committee of Judges consisting of seven experts from the country to judge the books and pronounce their opinions on their standard and suitability for the award of the prize or prizes announced, giving reasons for their opinions. On the report of these judges the Council shall decide whether any of the author merits a prize or prizes.

31. *Committee of Judges*—The Committee recommends that this paragraph should be altered to read as follows:

The Council shall appoint annually Committees of Judges consisting of not less than three of the experts mentioned above as members to judge of any work that may be submitted to them by the Executive Committee.

The Judges shall record their opinion and submit to the Executive Committee which shall then decide whether it approves the work of an author on which the Judges' Committee has reported and also whether in its opinion the author of the approved work should receive any pecuniary remuneration.

32. *Remuneration to authors*—The Committee recommends that this paragraph should be altered to read as follows:

No authors shall be entitled to any remuneration except when his work, in its completed form, has been approved by (1) the Judge's Committee, and (2) the Executive Committee.

33. *Agreement with Authors*—The Committee recommends the deletion of this paragraph.

34. *Prizes*—This paragraph should be retained.

35. *Power of the Executive Committee*—This paragraph should be retained.

The Committee wishes to record here its opinion that the Council of the Academy has not taken as much interest in the Academy as it should have done. The entire burden was placed on the shoulders of the part-time Secretary who with his numerous pre-occupations left things to be managed by his office. This is a matter for regret.

Finally, with regard to the representation of scholars in the proposed triennial Conference, in the Council, in the Executive Committee, in the list of Fellows, and elsewhere, the Committee wishes to emphasize that there should be a proper balance as between Urdu and Hindi, not necessarily, however, on communal lines.

GENERAL OBSERVATION

The above changes proposed by the Hindustani Academy Enquiry Committee, are in line with the opinion of the majority of gentlemen who responded to the Committee's questionnaire. The consensus of opinion in the replies received favours the retention of the Hindustani Academy, but proposes certain modifications and improvements with a view to greater efficiency and effectiveness in the working of the Academy.

The Committee holds that the Hindi and the Urdu literatures should be allowed to develop on their own lines without any super-imposed efforts that may have the effect merely of hampering their growth.

The Committee is convinced that the deliberate and artificial effort to evolve Hindustani and to instal it in the place of Urdu and Hindi is likely to be fruitless.

The Committee has formed the opinion that the Academy has failed to achieve even a modest measure of success in the ideal it has kept before itself, that is (establishing Hindustani as a new idiom. The language of almost all its publications has remained orthodox Hindi or Urdu. No notice.

able departure from the established forms has been effected and this has been the case in spite of the clear guidance given by Sir William Marris and Raja Kushal Pal Singh.

The effort should now be abandoned and Hindi and Urdu should be left free for the present to develop on their own lines. The Committee believes that Hindustani is not yet capable of replacing either Hindi, with its catchment area of Sanskrit and Prakrit, or Urdu, drawing its saps from Persian and Arabic.

The Committee desires to record its appreciation of the extremely valuable services rendered by the Secretary, Thakur Nihal Singh Sahib, being one of the hardest worked officers of the Education Department, it was very creditable for him to be able to devote so much time and labour to this enquiry and to help the Committee with his intimate personal knowledge of the affairs of the Academy.

NOTE.—Extract from Sir William Marris' speech is given in Appendix I (b).

KARAN SINGH KANE,	ABU MUHAMMAD,
Chairman.	Member.
NEHPAL SINGH,	GOVIND MALAVIYA,
Secretary.	Member.

APPENDIX A

HINDUSTANI ACADEMY ENQUIRY COMMITTEE, UNITED PROVINCES

Questionnaire

1. Is it advisable and feasible for the United Provinces Government to have a central state managed body for the preservation and development of Hindi and Urdu and the Hindustani languages?
2. Whether the central body should undertake the work of publication?
3. What should be the form of State help to authors and publishers, to the latter if some of the works are given to private publishers?
4. Is it desirable and possible to foster and develop the Hindustani idiom so that it may take the place of the conventional Urdu and Hindi of the present time?
5. If it is possible, will this Hindustani language be capable of serving as a vehicle for the literary, political and scientific thought of a full grown nation?
6. Do you think it practicable to develop Hindustani* as well, if you advocate the retention of the prize or current forms of Urdu and Hindi?
7. Should the central body set itself the task of creating deliberately, and propagating a standard style of Hindustani, Urdu and Hindi or of Hindustani alone if not of Hindi and Urdu?
8. If Government decide to retain the Hindustani Academy, on what lines would you recommend its retention? Alternatively, if the Hindustani Academy is abolished, what scheme would you suggest to foster the growth of Urdu and Hindi literatures in the Province on correct lines so as to encourage the production of the right sort of books?

*By Hindustani is meant a style which carefully avoids classical vocabulary or a type which is not used by the educated Delhi or Lucknow men.

APPENDIX B

LIST OF HINDI AND URDU BOOKS PUBLISHED BY THE HINDUSTANI ACADEMY

1. Vals Krishna Rukmani RI. (Hindi). By Prithvi Raj Rashore. Edited with introduction, exhaustive notes and glossary by Thakur Ram Singh, B.A., Bikaner and Sjt. Surya Karan Pareek, M.A., Vice-Principal, Birla College, Pilani (Jaipur). Royal Octavo : 926 pages : Cloth, Re. 6 : 1931.
2. Satkai Saptak (Hindi). (Collection of satases of Tulsi-dasa, Bihari, Matiram, Resanidih, Rama, Virnda and Vikrama). Edited with introduction and notes by Rai Bahadur Babu Shyam Sunder Das, B.A., Royal Octavo : 650 pages : Cloth, Rs. 6 : 1931.
3. Prem Dipika (Hindi) By Mahatma Akebar Ananya. Edited with introduction by the late Rai Bahadur Lala Sita Ram, B.A. Double Crown 16 mo : 64 pages : Paper, As. 8 : 1936

4. Dewan-i-Bedar. (Urdu). (Collection of works of Mir Muhammadi Bedar of Dilli). Edited with introduction and notes by M. Jali Ahmad Qidwai, M.A., Lecturer in Urdu, Muslim University, Aligarh, Royal Octavo : 142 pages : Cloth, Rs. 2, Paper, Re. 1-8 : 1937.

5. Hindika Kavitar Kavya, Part I. (Hindi). (Anthology of Bardic Hindi Poetry). Compiled by Pandit Ganesh Prasad Dvivedi, M.A., LL.B., Hindi Scholar, Hindustani Academy. Royal Octavo : 528 pages : Cloth, Rs. 5 : Paper Rs. 4-8 9 : 1937.

6. Hindi ke Kavi aur Kavya, Part II (Hindi.) (Anthology of Hindi Sant Poetry). Compiled by Pandit Ganesh Prasad Dvivedi, M.A., LL.B., Hindi Scholar, Hindustani Academy. Royal Octavo : 300 pages : Cloth, Rs. 4 : Paper, Rs. 3-8 : 1938.

7. Hindi ke Kavi aur Kavya, Part III. (Hindi). (Anthology of Hindi Sufi Poetry). Compiled by Pandit Ganesh Prasad Dvivedi, M.A., LL.B., Hindi Scholar, Hindustani Academy. Royal Octavo : In the press.

8. Jawahir-i-Sakhun, Part I. (Urdu). (Anthology of Urdu Poetry). Edited by Maulvi Muhammad Mobin Kaifi, Urdu Scholar, Hindustani Academy. Royal Octavo : 442 pages : Cloth, Rs. 5 : Paper, Rs. 4-8 : 1933.

9. Jawahir-i-Sakhun, Part II. (Urdu). (Anthology of Urdu Poetry). Edited by Maulvi Muhammad Mobin Kaifi, Urdu Scholar, Hindustani Academy. Royal Octavo : 680 pages : Cloth, Rs. 8-8 ; Paper, Rs. 8 : 1935.

10. Jawahir-i-Sakhun, Part III (Urdu). (Anthology of Urdu Poetry). Edited by Maulvi Muhammad Mobin Kaifi, Urdu Scholar, Hindustani Academy. Royal Octavo : 734 pages : Cloth, Rs. 6-8 ; Paper, Rs. 6 : 1937.

Literary criticism

11. Hindi Shairi. (Urdu). (Hindi Poetry.) By Dr. Azam Kurevi. Royal Octavo : 208 pages : Cloth, Rs. 2 : 1931.

12. Kavi Rahasya. (Hindi). (Poetic). By Mahamahopadhyaya Dr. Ganganatha Jha, M.A., D. Litt., LL.D., Ex-Vice-Chancellor, Allahabad University. Royal Octavo : 122 pages : Cloth Re. 1-4 : 1929.

13. Tanziat aur Mazahkat. (Urdu). (History of Satire in Urdu). By M. Rashid Ahmad Siddiqi, M.A., Muslim University, Aligarh, Royal Octavo : 368 pages : Cloth, Rs. 3-8 : Paper Rs. 3 : 1934.

Literary Biography

14. Goswami Tulsi-dasa. (Hindi). (Life of Tulsi-dasa.) By Rai Bahadur Babu Shyam Sunder Das, B.A., and Dr. Pitambar Datt Barthwal, M.A., D. Litt., Hindu University, Benares, Royal Octavo : 234 pages : Illustrated : Cloth Re. 3 : 1931.

15. Bhartendu Harishchandra. (Hindi). (Life of Harishchandra.) By Babu Braj Ratna Das, B.A., LL.B., Benares Royal Octavo : 342 pages ; Illustrated : Cloth Rs. 5-8 : Paper Rs. 5 : 1935.

16. Vidyapati Thakur. (Hindi). Life and critical estimate of Vidyapati. By Dr. Umesh Mishra, M.A., D. Litt. (Allahabad), Lecturer in Sanskrit, Allahabad University. Royal Octavo : 122 pages : Illustrated : Paper, Re. 1-4 : 1937.

17. Sant Tukarama. (Hindi). (Life of Tukarama.) By Dr. Hari Ram Chandra Divekar, M.A., D. Litt., (Paris), Victoria College, Gwalior. Royal Octavo : 164 pages : Cloth Rs. 2-8 ; Paper Re. 1-8 : 1937.

18. Kabir Sahab. (Urdu). (Life and critical estimate of Kabir.) By Pandit Manohar Lal Zutshi. Royal Octavo : 158 pages : Cloth, Re. 2 : 1930.

Literary translations

19. Natan. (Urdu). Translation of Lessing's German drama Natan der weise. By M. Muhammad Naimur Rehman, M.A., M.B.A.S., Lecturer in Arabic and Persian, Allahabad University. Double Crown 16mo : 498 pages : Cloth, Re. 2-4 : 1930.

20. Nyaya. (Hindi). (Translation of John Galsworthy's English drama Justice.) By the late Munshi Prem Chand. Double Crown 16mo : 264 pages : Cloth, Rs. 2-4 : 1930.

21. Insaf. (Urdu). (Translation of John Galsworthy's English drama Justice.) By Munshi Daya Naram Nigam, B.A., Editor, of the Zamana, Cawnpore. Double Crown 16mo : In the press.

22. Natan. (Hindi). Translation of Lessing's German drama Natan der weise. By Mirza Abul Fazal. Double Crown 16mo. : 342 pages : Paper, Re. 1-4 : 1932.

23. Chandni ki Dibia. (Hindi). (Translation of John Galsworthy's English drama Silver Box.) By the late Munshi Prem Chand. Double Crown 16mo : 238 pages : Cloth, Re. 1-8 : 1930.

24. Fareb-i-amal. (Urdu). (Translation of John Galsworthy's English drama Skin Game.) By Jagan Mohan Lal Rawan. Double Crown 16mo : 306 pages : Cloth, Rs. 2 : 1930.

25. Dhokha-Dhari. (Hindi). (Translation of John Galsworthy's English drama Skin Game.) By Sjt. Lalita Prasad Shukla, M.A., Lecturer in Hindi, Calcutta University. Double Crown 16mo : 364 pages : Cloth, Re. 1-8 : 1931.

26. *Mina*. (Hindi.) (Translation of Lessing's German drama *Mina Von Barnhelm*.) By Dr. Mangal Deo Shastri, M.A., D.Phil. (Oxon), Registrar, Sanskrit Examinations, Benares. Double Crown 16mo : 214 pages : Paper, Rs.1 : 1937.

27. *Hartal*. (Hindi.) (Translation of John Galsworthy's English drama *Strife*.) By the late Munshi Prem Chand. Double Crown 16mo : 376 pages : Cloth, Rs.2 : 1930.

Languages

28. *Hindi Bhasha ka Itihas*. (Hindi.) (History of the Hindi Language.) By Dr. Dharendra Varma, M.A., D.Litt. (Paris), Head of the Hindi Department, University of Allahabad. Royal Octavo : 375 pages : Cloth, Rs.3-8 : 1938.

29. *Hindi Urdu ya Hindustani*. (Hindi.) (Comparative Languages.) By the late Pandit Padma Singh Sharma. Royal Octavo : 184 pages : Cloth, Re.1-12 ; Paper Re.1-4 : 1932.

30. *Hindi Bhasha aur Lipi*. (Hindi.) (The Hindi Language and Script.) By Dr. Dharendra Varma, M.A., D.Litt. (Paris), Head of the Hindi Department, University of Allahabad. Double Crown 16mo ; 58 pages : Paper, Rs. 8 : Map and plates : 2nd Edition : 1938.

Cultural and Political History

31. *Hindustani ki Purani Sabhyata*. (Hindi.) (Ancient Indian Culture.) By Prof. Dr. Beni Prasad, M.A., Ph.D., D.Sc. (London) Politics Department, University of Allahabad, Royal Octavo : 614 pages : Cloth, Rs.6 : 1931.

32. *Madhyakalin Bhartiya Sanskriti*. (Hindi.) (Medieval Indian Culture.) By Mahamahopadhyaya Rai Bahadur Pandit: Gauri Shankar Hira Chand Ojha, Curator, Government Museum, Ajmer. Royal Octavo : 230 pages : 24 Plates Cloth, Rs. 3 : 1928.

33. *Qurun wasta men Hindustani Tahzib*. (Urdu.) (Indian Civilization during the Middle Ages.) By Rai Bahadur Mahamahopadhyaya Pandit Gauri Shankar Hira Chand Ojha. Translated by the late Munshi Prem Chand. Royal Octavo : 80 pages : Cloth, Rs.4 : 24 half-tone plates : 1931.

34. *Madhyakalin Bharat ki Samajik aur Arthik Avastha*. (Hindi.) (Social and Economic condition of India during the Middle Ages.) By Mr. Abdulla Yusuf Ali, M.A., LL.M. (Lond.), B.A., Royal Octavo : 100 pages : Cloth, Re.1-4 : 1929.

35. *Armane wasta men Masahrati aur Iqtisadi Halat-Urdu*. (Social and Economic Conditions in India during the Middle Ages.) By Mr. Abdulla Yusuf Ali, M.A., LL.M. (Lond.), B.A., Demy Octavo : 142 pages : Cloth, Re.1-4 : 1928.

36-37. *Bhartiya Itihas ki Ruprekha*. (Hindi.) (Outlines of Ancient Indian History.) By Sjt. Jai Chandra Vidyalkar. Royal Octavo : 1150 pages : 2 volumes : Cloth, Rs.11 : Paper, Rs.10 : 1933.

38. *Angrezi shah men tamaddun ki tarikh*. (Urdu.) (Culture during the British Rule in India.) By Mr. Abdulla Yusuf Ali, M.A., LL.M. (London), C.B.E. Royal Octavo : 142 pages : Cloth, Rs. 4 : Paper, Rs.3-8 : 1936.

39. *Arab va Hind ke taluqat*. (Urdu.) (Relations between Arabs and Indians.) By Maulana Syed Sulaiman Nadvi, Shibli Academy, Azamgarh, United Provinces. Royal Octavo : 446 pages : Cloth, Rs.4 : 1930.

40. *Arab aur Bharat ke Sambandh*. (Hindi.) (Relations between Arabs and Indians.) By Maulana Syed Sulaiman Nadvi, Shibli Academy, Azamgarh, United Provinces. Translated by Babu Rama Chandra Varma, Benares. Royal Octavo : 350 pages : Cloth, Rs. 4 : 1930.

41. *Inqilab Roos*. (Urdu.) (History of the Russian Revolution.) By Pandit Krishna Prasad Kaul, Member, Servants of India Society, Lucknow. Royal Octavo : 270 pages : Cloth Rs.3 ; papers, Rs.2-8 : 1936.

42. *Ayodha ka Itihas* (Hindi.) (History of Ayodhya.) By the late Rai Bahadur Lala Sita Ram, B.A. Royal Octavo : 100 pages : 2 maps and 9 half-tone plates : Cloth, Rs. 3 : 1933.

43. *Prayag Pradip*. (Hindi.) (History and Gazetteer of District Allahabad.) By Babu Shalig Ram Srivastava, Allahabad. Royal Octavo : 336 pages : Illustrated : Cloth, Rs.4 : Paper Rs.3-8 : 1937.

44. *Praehin Bharat ki Arthik Vyastha* (Hindi.) (Economic Organization in Ancient India.) By Dr. Prem Nath Vidyalkar, Ph.D. (Vienna), D.Sc., (London), Hindu University, Benares. In the press.

Historical Biographies

45. *Chandragupta Vikramaditya*, (Hindi.) (Life and times of Chandragupta II.) By Sjt. Gange Prasad Mehta, M.A. Hindu University, Benares. Royal Octavo : 224 pages ; 3 half-tone plates : Cloth, Rs. 3 : Papers, Rs.2-8 : 1932.

46. *Bhojaraja*. (Hindi.) (Life and times of King Bhoja of Malwa.) By Sjt. Biseshwar Nath Rau, Archaeological Department, Jodhpur. Royal Octavo : 410 pages : Cloth, Rs.3-8 : Paper, Rs.3 : 1932.

47. *Sultan-ul-Hind Muhammad Shah Bin Tughluk*. (Urdu.) (Life of Muhammad Tughlak.) By Prof. Agha Mehdi Husain, M.A., Ph.D., D.Litt., History Department, Agra College, Agra. Royal Octavo : 262 pages : 2 maps and 2 plates : Cloth, Rs.3 : Paper, Rs. 2-8 : 1937.

48. *Maharaja Ranjit Singh*. (Urdu.) By Prof. Sita Ram Kohli, M.A., Government College, Lahore. Royal Octavo : 388 pages : 1 map and 2 plates : Cloth, Rs.4-8 ; paper Rs.4 : 1933.

49. *Harshavardhan*. (Hindi.) (Life of Sri Harsha of Kanauj.) By Sjt. Gauri Shankar Chatterji, M.A., Lecturer in Politics, Allahabad University. Royal Octavo : 290 pages : Cloth Rs.3 ; Paper Rs.2-8 : 1938.

50. *Ranjit Singh*. (Hindi.) By Prof. Sita Ram Kohli, M.A., Government College, Lahore. Translated by Sjt. Ram Chandra Tandon, M.A., LL.B., Editor, "Hindustani". Double Crown 16mo ; In the press.

Science

51. *Sanz Parivar*. (Hindi.) (Astronomy.) By Dr. Gorakh Prasad, M.A., D.Sc., F.R.A.S., Department of Mathematics, Allahabad University. Translated by Mr. Seikh Jaggu, M.A., George Islamia College, Gorakhpur. Royal Octavo : Numerous colour and half-tone illustrations : Cloth, Rs.12 : 1931.

52. *Nizam-i-Shamshi*. (Urdu.) (Astronomy.) By Dr. Gorakh Prasad, M.A., D.Sc., F.R.A.S., Department of Mathematics, Allahabad University. Translated by Mr. Seikh Jaggu, M.A., George Islamia College, Gorakhpur. Royal Octavo : Numerous colour and half-tone illustrations. In the press.

53. *Vijnana Hastamalak*. (Hindi.) (Outlines of Science.) By the late Prof. Ram Das Gaur, M.A., Benares, Royal Octavo : 472 pages : 8 colour plates and 180 half-tone illustrations : Cloth, Rs.6-8 : Paper, Rs.6 : 1936.

54. *Jantu Jagat*. (Hindi.) (The Animal World.) By Sjt. Brajesh Bahadur, B.A., LL.B. Royal Octavo : 502 pages : 6 colour plates and 133 half-tone illustrations : Cloth, Rs.6-8 : 1930.

55. *Alam-e-Haivani*. (Urdu.) (The Animal World.) By Sjt. Brajesh Bahadur, B.A., LL.B. Royal Octavo : 628 pages : 6 colour and 46 half-tone plates : Cloth, Rs.6-8 : 1932.

56. *Vidyut Vijnana*. (Hindi.) (Electricity.) By Dr. Nihal Karan Seth, M.A., D.Sc., Professor of Physics, Agra College, Agra. Royal Octavo : In the press.

Applied Sciences

57. *Charma Banane ke siddhaht*. (Hindi.) (A Handbook on Tanning.) By Sjt. Devi Datt Arora, B.Sc., Diplomat-holder in Leather Technology. Royal Octavo : 296 pages : Cloth, Rs.3 : 1930.

58. *Ham-i-Baghbani*. (Urdu.) (Horticulture.) By Mr. Wasiullah Khan, L.A.G., M.B.A.S., Lecturer, Agriculture College, Cawnpore. Royal Octavo : 462 pages : 138 illustrations : Cloth, Rs.6-8 : Paper, Rs.6 : 1934.

59. *Tarraqqi Zarat*. (Urdu.) (The Improvement of Agriculture.) By Khan Sahib Maulvi Mohammad Qayum Khan, Deputy Director of Agriculture, United Provinces. Royal Octavo : 354 pages : 52 plates : Cloth Rs.4 : 1932.

Philosophy and Mental Science

60. *Filsafa-e-nafs*. (Urdu.) (Philosophy of the Self.) By Zarnin Husain Naqvi. Royal Octavo : 126 pages Cloth, Re.1-8 : Paper, Re. 1 : 1932.

61. *Jiva-Vritti Vijnana*. (Hindi.) (Psychology.) By Sjt. Mahjot Sahai, M.A., Mahendra College, Patiala. Double Crown, 16mo. : Paper, Re 1. In the press.

62. *Usul-i-talim*. (Urdu.) (Principles of Teaching.) By Khwaja Ghulam-us-Sayyadain, B.A., M. Ed., Principal, Training College, Muslim University, Aligarh. Royal Octavo : 562 pages : Cloth, Rs.6-8 : Paper, Rs. 6 : 1936.

63. *Darshan ka Prayojana*. (Hindi.) (The Aim of Philosophy.) By Dr. Bhagwan Das, M.A., D.Litt., Benares. Royal Octavo. In the press.

64-65. *Nafsiyat-i-Fasida*. (Urdu.) (Translation of Prof. W. McDougall's *Abnormal Psychology*, to which is appended translation of five lectures of Prof. Sigmund Freud.) By M. W. Rehman, M.A., Professor of Philosophy, Osmania University, Hyderabad, (Deccan.) Royal Octavo : 2 Volumes : 1,200 pages : Cloth, Rs. 8-8 : Paper, Rs.- 8 : 1937.

66. *Tarikh-i-Filsafa-Siyasiyat*. (Urdu.) (History of Political Philosophy.) By Prof. Mohammad Mujeeb, B.A. (Oxon), Jamia Millia Islamia, Delhi. Royal Octavo : 496 pages : Cloth, Rs.4-8 : Paper, Rs.4 : 1936.

Social Sciences

67. *Europa ki Sarkarem*. (Hindi.) (Constitutions of Governments of Europe.) By Sjt. Chandra Bhal Jauhari. Royal Octavo : 340 pages : Cloth, Rs.3-8 ; Paper, Rs.3 : 1938.

68. *Gramiya Arthashastra*. (Hindi.) (Rural Economics) By Mr. Brij Gopal Bhatnagar, M.A., Reader in Economics, Allahabad University. Royal Octavo : 368 pages ; Illustrated : Cloth, Rs.4-8 : Paper Rs.4 : 1933.

69. *Rajaswa.* (Hindi.) (Public Finance.) By Sjt. Bhagwan Das Kela, Brindabad. Double Crown : 16mo : 162 pages : Paper, Re.1 : 1937.

70. *Duniya ki Maujuda Kasad Bazari ke Asbab.* (Urdu.) (Causes of the Present-Day Economic Depression.) By Prof. Mohammad Habibur Rehman, M.A., Muslim University, Aligarh. Royal Octavo : 58 pages : Paper, As. 8 : 1934.

71. *Maashiat : (Maqsad aur Minhaj).* (Urdu.) (The Aims and Methods of Economics.) By Dr. Zakir Hussain, F.R.D., Principal, Jamia Millia Islamia, Delhi. Royal Octavo : 118 pages : Cloth, Re.1-8 : Paper, Re. 1 : 1932.

72. *Audyogika Tatha Vyaparika Bhugol.* (Hindi.) Commercial and Industrial Geography.) By Prof. Shankar Sahai Saksena, Bareilly College, Bareilly. Royal Octavo : 564 pages : 8 maps : Cloth, Rs.5-8 : Paper, Rs.5 : 1932.

73. *Hindustan ka Naya Dastur Hukumat.* (Urdu.) (The New Constitution of India.) By Pandit Krishna Prasad Kaul, Member, Servants of India Society, Lucknow. Double Crown : 168 pages : Paper, Re.1 : 1937.

Folklore

74. *Ghagh aur Bhaddari.* (Hindi.) (Collection of Sayings of Ghagh and Bhaddari.) With Introduction and annotations by Pandit Ram Naresh Tripathi, Allahabad. Royal Octavo : 280 pages : Cloth Rs.3 : 1931.

75. *Chand Deccani Pahelian.* (Urdu.) (Some Deccanese Riddles.) Compiled by M. Mohammad Naimur Rahman, M.A., Lecturer in Persian and Arabic, Allahabad University. Royal Octavo : 164 pages : Paper, Rs.1-4 : 1936.

Art and Aesthetic

76. *Bharatiya Chitrakala.* (Hindi.) (Indian Painting.) By Mr. N. C. Mehta, I.C.S., Royal Octavo : 114 pages : 12 colour plates and 30 half-tone plates : Cloth, Rs.6-8 : Paper, Rs.6 : 1934.

77. *Filsafa-e-Jamal.* (Urdu.) (The Philosophy of Beauty.) By Mr. Reazul Hasan, M.A., Editor, the *Musaiman*, Calcutta. Royal Octavo : 90 pages : Paper, Re.1 : 1935.

Bibliography

78. *Hindi Survey Committee ki Report.* (Hindi.) (Report of the Hindi Survey Committee. Edited by the late Rai Bahadur Lala Sita Ram, B.A., Royal Octavo : 160 pages : Paper, Re.1-8 : 1930.

79. *Urdu Zaban aur Adab.* (Urdu.) (Report of the Urdu Survey Committee.) Edited by Maulvi Syed Zamin Ali, M.A., Head of the Urdu Department, Allahabad University. Demy Octavo : 154 pages : Paper, Re.1 : 1927.

The following is the list of manuscripts awaiting publication.

1. *Hindi Sabhyata par Musalmanon ka Prabhava.* (Hindi.) (Contribution of the Muslims to Hindu Culture.)

2. *Sultan Mahmud Ghaznavi.* (Urdu.) By Professo Muhammad Habeeb, B.A., (Oxon.), Muslim University, Aligarh translated by Syed Jamil Husain, M.A., Hyderabad (Deccan).

3. *Telephone.* (Hindi.) (A Handbook on Telephony.) By Pandit Jagannath Prasad Pandey, Gwalior.

4. *Mamoon-ul-Rashid Abbasi.* (Urdu.) By Maulvi Muhammad Abdul Razzaq, Cawnpore.

5. *Ali-Nama.* (Urdu.) (Being Tarikh-i-Adil Shahi : Hindustani verse, composed about 1000 A.H.)

6. *Yusuf-Zuleikha.* (Hindi.) By Nisar. Edited from a old manuscript by Sjt. Satya Jiwan Varma, M.A.

7. *Chamra Taiyar Karne ke Usul.* (Urdu.) (Handbook on Tanning.) By Sjt. Devi Dutt Arora, B.Sc., translated by M. Niaz Ahmad Khan.

8. *Manava Vijnana.* (Hindi.) (Translation of Marett Anthropology.) By Pandit Ganesh Prasad Dvivedi, M.A. LL.B.

9. *Devi Joan.* (Hindi.) (Translation of George Bernard Shaw's English drama "St. Joan.") By B. Ramachandran Varma, Benares.

10. *Muqaddas Joan.* (Urdu.) (Translation of George Bernard Shaw's English drama "St. Joan.") By Dr. Syed Abi Husain, Jamia Millia Islamia, Delhi.

11. *Badli.* (Hindi.) (Translation of John Masefield English drama "The Faithful") By Sjt. Vikramaditya Singh M.A., LL.B., Allahabad.

12. *Wafa Parast.* (Urdu.) (Translation of John Masefield English drama "The Faithful") By M. Abdul Shakoor, M.

13. *Islami Tamaddun par Hindudun ka Asar.* (Urdu.) (Contribution of the Hindus to Muslim Culture.) By M. Mohammad Amin Abbasi, Calcutta.

14. *Ruqqat-i-Ghalib.* (Urdu.) (Letters of Ghalib.) Compiled and edited by Maulvi Mahesh Prasad, Benares.

15. *Anwari-i-Nazar.* (Urdu.) By M. Naubat Rai Nazar

16. *Tulasidasa.* (Urdu.) By Rai Bahadur Babu Shyam Sunder Das and Dr. P. D. Barthwal, M.A., D.Litt., translated by M. Iqbal Varma, Sehar, Fatehgarh.

17. *Raja Raja Chola.* (Hindi and Urdu.) By Dewa Bahadur Dr. S. Krishnaswami Aiyangar, M.A., F.R.D., Madras.

APPENDIX C

List of lectures delivered by prominent persons

Serial number	Name of the lecturer	Subject	Remuneration	Date of lecture	Date of payment
1	A. Yusuf Ali, Esq.	Social Economic condition in India during the Middle Age.	1,000	2nd, 3rd and 4th March, 1928.	20th March, 1928.
2	M. M. Pandit Gauri Shanker Chand Ojha. H.	Social and Economic condition in India during the Rajput period.	1,000	13th and 14th September, 1928.	14th September, 1928
3	M. M. Dr. Ganga Nath Jha	Kavi Rahasya	1,000	3rd March, 1929	21st March, 1929.
4	M. Syed Sulaiman Nadvi	The Relations of the Hindu with the Arabs before Mughal conquest.	1,000	22nd and 23rd March, 1929.	25th March, 1929.
5	M. Muhammad Amin Abbasi	Contribution of Muslims to Hindu Culture.	1,000	15th and 16th March, 1929.	21st March, 1929.
6	Dr. Tara Chand	Contribution of Hindus to the Muslim Culture.	1,000	30th and 31st March, 1929.	31st March, 1929.
7	Dr. Bhagwan Das	The Frone of Philosophy	1,000	10th and 11th January, 1930.	No payment yet.
8	Dr. Zakir Husain	Economic	1,000	5th and 6th March, 1932.	8th March, 1932.
9	Pandit Padma Singh Sharma	Hindi, Urdu or Hindustani	1,000	6th and 7th March, 1932.	9th March, 1932.
10	Mr. N. C. Mehta	Development of Mughal Rajput painting.	1,000	18th and 19th March, 1933.	27th March, 1933.
11	M. Abdul Haq	Development of Urdu in Deccan	1,000	12th and 13th January, 1930.	No payment yet.
12	Dr. A. S. Siddiqi	Lessaninat	1,000	6th and 6th April, 1931.	Ditto.

APPENDIX D

AWARDS AND PRIZES

Table A—Awards to authors

Years	Serial number	Subject of award	Language	Titles of books awarded	Names of authors awarded
1928-29	1	Prose	Hindi ..	Rangbhumi ..	Frem Chand.
	2	Poetry	Do. ..	Gangavateran ..	Babu Jagannath Das Ratnakar.
	3	Prose	Urdu ..	Vaqare Hayat ..	M. Muhammad Akram Ullah Khan Nadvi.
1929-30	4	Poetry	Do. ..	Tanzimul Hayat ..	M. Syed Ali Naqi Safi.
	5	Mental and Moral Science	Hindi ..	Tarak Shahstra ..	Babu Gulab Rai.
	6	Natural Science	Do. ..	Manava Sharir Rahasya	Dr. Mukund Swarup Varma.
	7	Poetry	Do. ..	Swapna ..	Pandit Ram Naresh Tripathi.
	8	General Literature	Do. ..	Skandagupta ..	Babu Jai Shanker Prasad.
	9	Mental and Moral Science	Urdu ..	Nafsiat-i-Tarhib ..	Syed Wahaj Uddin Ahmad.
	10	Natural Science	Do. ..	Sadai Barq ..	M. Aftab Umar.
	11	Poetry	Do. ..	Miraj-i-Sakhun ..	Syed Khurshed Husain.
	12	General Literature	Do. ..	Almohin ..	M. Muhammad Sulaiman Ashraf.
1930-31	13	Literary Criticism	Hindi ..	Hindi Sahitya ka Itihās	Pandit Ram Chandra Shukla.
1931-32	14	Novel and short stories	Do. ..	Parakh ..	Sjt. Jainendra Kumar.
1932-33	15	Ditto	Urdu ..	Raaj-i-Tanhai ..	Syed Ali Abbas Husain.
	16	Poetry	Hindi ..	Saket ..	Babu Maithili Sharan Gupta.
1935-36	17	Prose	Urdu ..	Khayyam ..	Maulana Syed Sulaiman Nadvi.
1936-37	18	Do.	Hindi ..	Tulsi ke Char Dal ..	Pandit Sadgur Saran Avasthi.

Table B—Awards to student

Year	Serial number	Subject of award	Language	Titles of composition awarded	Names of authors awarded
1930-31	1	Essay	Hindi ..	Vinayapatrika ka Swarup Narupans.	Sjt. Mata Prasad Gupta, Allahabad University.
	2	Narrative Poem	Do. ..	Arjun ki Ugra Sadhna ..	Sjt. Uma Shankar Bajpai, Lucknow University.
	3	Short Story	Do. ..	Kartavya ..	Sjt. Tulsi Ram Sharma, Allahabad University.
	4	Essay	Urdu ..	Iqbal ka Filisafai Maui	M. Muhammad Azimul Haq, Christ Church College, Cawnpore.
	5	One Act Drama	Do. ..	Shahid-i-Maghrib ..	M. Muhammad Maqbool Husain Khan, Allahabad University.
1932-33	6	Essay	Hindi ..	Ram Charita Manasa ka Kathabhog.	Pandit Ram Kishore Malaviya, Allahabad University.
	7	Short Story	Do. ..	Kahani ..	Sjt. Ganpat Prasad Varma, S. D. College, Cawnpore.
	8	Essay	Urdu ..	Shamshul-ulama Maulvi Nazir Ahmad Dehlavi.	Mr. Ovais Ahmad, Allahabad University.

APPENDIX F

AN AUDIT AND INSPECTION NOTE ON THE ACCOUNTS OF THE HINDUSTANI ACADEMY, UNITED PROVINCES, ALLAHABAD

The last audit which was conducted by the Examiner, Local and Accounts, United Provinces, was for the year 1937-38. A present audit which was desired by the Inquiry Committee pointed by Government to inquire into the affairs of the academy and to suggest improvements was a detailed audit for the year 1938-39 and general scrutiny of accounts and stock in the year 1937-38.

2. Preliminary—The Academy which was registered under Act XXI of 1890, was founded in 1927 in order to preserve, foster and develop Urdu and Hindi literature by:

(a) awarding prizes for the production of approved books on different subjects;

(b) arranging for the translation in Urdu and Hindi of works in other languages by payment or otherwise and to publish the same;

(c) encouraging the production of original works or translations in Hindi or Urdu whether by grants to Universities and Literary Associations or otherwise;

(d) electing eminent writers and scholars to Fellowship of the Academy;

(e) electing the benefactors of the Academy as Honorary Fellows;

(f) establishing and maintaining a Library;

(g) inviting eminent scholars to deliver addresses and lectures, and

(h) doing all other acts and taking all other steps to advance the object specified above.

The Academy consists of (1) a Council, (2) an Executive Committee, and (3) Fellows elected by the Council.

3. Finance—The Academy is mainly financed by Government except a small income from the sale of books and journals. There is no subscription or donation from the public or persons appointed as members of the Council or Executive Committee, the financial position of the Academy during the year under

audit (1938-39) as indicated by the account-books maintained was as shown below :

Income		Rs.	a.	p.
1.	Balance on 1st April, 1938	8,674	11	11
2.	Government grant	25,000	0	0
3.	Income from books	5,135	5	10
4.	Income from journals	157	5	6
5.	Miscellaneous	28	9	0
6.	Security deposit from agents	450	0	0
Total		39,446	0	3
Expenditure		Rs.	a.	p.
1.	Pay of staff	10,619	9	7
2.	Pay of menials	786	0	0
3.	Provident Fund	541	4	0
4.	Office Contingencies	2,724	1	6
5.	Library	207	0	6
6.	Travelling allowance	157	10	0
7.	Expenditure on publications and journals	8,706	15	7
Total		23,742	9	2
Closing balance on 31st March, 1939		15,703	7	1
Total		39,446	0	3

4. *Cash-book*—It has been noticed that cash-book is not posted daily, as in some cases which were pointed out at the spot the amounts received by the Academy were entered in the cash-book before the actual date of receipt. This is a serious irregularity and should not be repeated in future.

The payments of the following bills of the Academy for the amounts noted against each have not so far been received :

(i) No. 648, dated the 10th October, 1938, for Rs.26-3.

(ii) No. 709, dated the 6th December, 1939, for Rs.1

Reminders demanding the money due to the Acad should have been issued long ago. Early steps should be taken to realize the amount in question and in future the Acad should be prompt in issuing reminders in such cases.

Bill no. 721, dated the 21st December, 1938, was for Rs.39 Against this bill a payment of Rs.24-13-6 was received by Academy on the said date and the balance, it appears, is due to the Academy. The circumstances under which a part of this bill still remains unpaid could not be explained as was stated that an inquiry would be made to find out if Agent returned some books worth Rs.15. This reply is satisfactory. The Academy should have been in possession proper accounts to show the details of Rs.39-13.

Full payment of bill no. 736, dated the 19th January, 1939, was received by the Academy on the same date, but in a book it was entered on 23rd January, 1939. It was stated when inquired into, that the entry was delayed due to Accountant being on leave. Effort should be made to post the cash-book daily.

In some cases* it has been noticed that the payments account of parcels of publications sent by the Academy V. P. were not received for 4 to 6 months. In such cases reminders should always be issued to the postal authorities enquire into the cause of delay if the payment is not received within three weeks.

Serial number	*V. P. sent on	Money received on	Amount
			Rs.
1	26th July, 1932	23rd January, 1933	86
2	18th April, 1932	27th November, 1932	5
3	5th December, 1931	29th March, 1932	7
4	5th December, 1931	16th March, 1932	5
5	17th December, 1931	14th March, 1932	2

No payees receipts for the following amounts paid by the Academy during 1938-39 available were and hence they could not be produced in audit :

Serial number	Payee's name	Amount	Date
		Rs. a. p.	
1	K. G. Saidain Royalty	51 9 6	1st May, 1938.
2	Belvedere Printing Works	43 3 0	19th May, 1938.
3	Hindi Mandir Press	464 12 0	5th July, 1938.
4	City Press, Allahabad	188 14 0	13th July, 1938.
5	Hakim Syed Shamsullah	100 0 0	15th July, 1938.
6	City Press, Printing	161 0 0	30th August, 1938.
7	Office Superintendent for tour expenditure.	59 0 0	6th October, 1938.
8	Lakshmi Photo Co., Allahabad	50 12 6	10th November, 1938.
9	Sahitya Bahavan, Allahabad	55 0 0	14th November, 1938.
10	Hindi Mandir Press	45 0 0	17th November, 1938.
11	Industrial and Commercial Institute, Allahabad.	278 0 0	22nd November, 1938.
12	Khaddar Bhandar	26 4 0	8th December, 1938.
13	City Press, Printing	193 9 0	24th January, 1939.
14	Lakshmi Photo Co.	45 13 0	2nd February, 1939.
15	City Press Printing	96 4 0	9th February, 1939.
16	Ditto	241 0 0	24th February, 1939.
17	Ditto	70 0 0	30th March, 1939.
18	Dr. Dhivendra Verma	88 1 6	Ditto.
19	Rai Bahadur Shyam Sundar Das	17 11 0	31st March, 1939.
20	K. G. Saidain, Aligarh	21 0 0	Ditto.

The receipts should be obtained and shown at the time of the next audit.

The vouchers were not cancelled after making payments. In order to avoid any chance of their being used for the second time it is necessary that they should be cancelled under the signature of a responsible officer as soon as the payment is made.

The receipt and the cash memo. books do not bear printed book and serial numbers and as such there can be no check if any page is removed from them. At present the system is that an assistant clerk realizes the sale proceeds of the Academy publications after preparing a receipt or cash memo. therefor and makes over the amount to the Accountant during the course of the day or on the following day. In order to ensure that the sale proceed is duly accounted for in the account registers it is suggested that such receipt and cash memo. books should have printed book and serial numbers. Also the account of issue and receipt of these books should be maintained. In

case any wrong entry happens to have been made on any page of these books, the page should not be removed but should be cancelled under the signature of some responsible officer of Academy. The following remarks made in paragraph 15 of last audit report still hold good :

"The cash-book was not properly kept inasmuch as the case of remittance was not noted therein. The receipt money received by money order was not noted under the initials of Office Superintendent. It was not placed monthly before President for his review. It should be properly maintained in future."

5. *Classified abstract register of income and expenditure* It is maintained properly. The figures shown therein tally with the figures of cash-book. Corrections and overwrites should be avoided. The register has not been signed by responsible officer since November, 1938. It should be signed by the General Secretary at the end of each month.

6. *Acquittance roll*—It was well maintained.
7. *Provident fund*—The fund was started from April, 1930. separate register was maintained for the purpose and it was order. The total contribution by the Academy towards the count of the subscribers during 1938-39 was Rs.541-4.
8. *Stock register of furniture*—No furniture was purchased the Academy during the year under audit. It is, however, suggested that the register should be checked at least once a year by a responsible officer, and a note to this effect recorded therein. From the stock register it was noticed that some of the articles were declared by the General Secretary as unseizable but it could not be explained as to how these articles were disposed of. Although the articles in question if sold by auction could not have fetched much amount to the Academy, all unseizable articles should always be disposed of by public auction and the sale-proceeds credited to the maintenance funds of the Academy.
9. *Catalogue of library books*—Separate registers for Hindi and Urdu library books are maintained. The books purchased during 1938-39 were entered in the general catalogue. The expenditure under the head "Library" during the year under audit was Rs.207-0-6. In the hall is the library—mostly of Hindustani books, including a few English books. For some time in previous year the library was allowed to be used by the public but this has now been abandoned. At present the library which the Academy has incurred an expenditure of about Rs.19,500 since its inception is used by its "scholars" only for references. It is desirable that library books should be checked once a year by a responsible officer and its result recorded in the catalogue concerned.
10. *Stamp account*—The expenditure under head "Postage" during the year 1938-39 was Rs.407-7. It was noticed that postage stamps were purchased by the despatch clerk as the necessity arose and the only check for their consumption was the despatch register where there were several overwritings in the column "Amount of postage affixed to the cover." In order to have proper supervision over the consumption of postage stamp it is suggested that entries in the despatch register should always be checked every month and any alterations made therein should be initiated by a responsible officer of the Academy.
11. *Publication of Hindustani Journal*—A quarterly journal "Hindustani" is issued by the Academy both in Hindi and Urdu. It was started in 1931. The price of the journal was originally fixed as Rs.8 per annum which was reduced to Rs.5 per annum in 1932, and to Rs.4 per annum in 1938. Two hundred and fifty copies of the journal each of Hindi and Urdu were published during the year under audit and the total cost for the maintenance of the same in 1938-39 was Rs.4,638-8-6 excluding the cost of paper, as detailed below:

	Rs.	a.	p.
1. Editorial staff (Rs.175-75),	3,000	0	0
12. Printing	1,432	8	6
3. Remuneration to contributors	206	0	0
Total	4,638	8	6

The subscription lists from 1st January to 31st December, of each year. The register of the subscribers of the Hindi and Urdu journals was incomplete and the stockbook was not properly maintained. However as far as possible it was ascertained that the maximum number of subscribers for 1938-39 was 52 for Hindi and 51 for Urdu. The actual income from this enterprise during 1938-39 was Rs.157-5-6 against the actual of

Rs.4,638-8-6, which does not include the cost of paper and a proportionate cost of clerical staff to the work and the office contingencies, etc. In view of this the main point for consideration is as to how far the cost of journal publication was justified to the funds of the Academy.

12. *Publications*—Total expenditure under this head was Rs.10,640 in round figures. This does not include the proportionate cost of the total expenditure of Rs.8,250 (round) spent on Secretary's allowance, office staff, menial staff and office contingencies, etc. Against this, actual income during 1938-39 was Rs.5,135. No proper accounts of the publications were maintained. Copies were supplied free of cost to the members as well as to certain persons and presses. No resolution in this connexion was produced in audit, but it was stated that the copies were supplied under the orders of the General Secretary.

13. *Stock register of publications*—It was in a hopeless condition and was not at all reliable. There were several cuttings, over-writings and erasers. The balances worked out were freely altered. Slips were pasted over the cuttings and new figures were inserted. No responsible officer has ever checked this register. It is stated that a fresh stock register will now be prepared and the figures as have been adjusted during the course of audit will be entered therein. Some of the discrepancies noticed in the counterfoils of the bills and in the stock register were of the following nature:

(1) Bill no. 33, dated the 29th July, 1936, was entered twice in the stock register in respect of "Hindi Bhasha aur Lipi."

(2) Bill no. 52, dated the 24th August, 1936, shows that four copies of "Inqilab Roos" were sold but from the stock register it appears that these copies were distributed free. Similar is the case in respect of bills nos. 95, 110, 122, 184, 102 and 321.

(3) Bill no. 278, dated the 3rd September, 1937, was entered in the stock register before bill no. 64, dated the 9th September, 1936.

(4) Bill no. 152, dated the 9th March, 1937, showed that a sum of Rs.1-4 was received on account of subscription to "Hindi Hindustani," but from the stock register it appeared that one copy of the book "Hindi Urdu or Hindustani" was sold.

(5) One copy of "Gowami Tulsi Das" was sold through bill no. 214, dated the 6th June, 1937, but it was not entered in the stock register.

(6) On 27th August, 1937, 10 copies of "Muhammad Tuglaq" were sold but in the stock register only one copy was shown, vide bill no. 275.

(7) Stock register showed that 8 copies of "Janm Jagat" at Rs.6-8 each were sold, vide bills nos. 244, 245 and 247, but in the said bills the sale of these copies was not mentioned.

(8) Bill no. 304, dated the 24th September, 1937, showed that two copies of the book "Sant Tukar Ram" at Rs.2 per copy were sold but Rs.2 only were realized for these copies instead of Rs.4.

(9) The price of the book "Ghag and Bhadri" is Rs.3 but Rs.2-8 only were charged for one copy, vide bill no. 343, dated the 20th November, 1937.

(10) It appeared from the stock register that certain books named in bills nos. 278, 302 and 303 were sold, but in the said bills the names of these books were not traced.

(11) The books mentioned in the following bills were sold but they were not entered in the stock register:

Name of book	Bill no.	Amount involved		Date
		Rs.	a. p.	
1. Chitra Kala	24	8	0 0	2nd May, 1936.
2. Rup Rekha, I and II	20	10	0 0	24th June, 1936.
3. Hindi Bhasha ka Itihas	127	3	8 0	27th January, 1937.
4. Tulsi Das	153	3	0 0	6th March, 1937.
5. Hindi Bhasha ka Itihas	302	3	8 0	23rd September, 1937.
6. Ditto	308	3	8 0	Ditto.
7. Harishchandra	324	5	0 0	23rd October, 1937.
8. All books	341	30	7 0	22nd November, 1937.
9. Some of the books	342	3	0 0	24th November, 1937.
10. Ditto	351	24	0 0	8th December, 1937.
1. Ditto	353	5	0 0	Ditto.
2. Ditto	354	5	0 0	Ditto.
3. Ditto	356	16	0 0	14th December, 1937.
4. Ditto	367	1	8 0	Ditto.
5. Ditto	371	4	8 0	6th January, 1938.
6. Ditto	371	7	8 0	14th/16th January, 1938.
	and			
	372			

Name of book		Bill no.	Amount involved	Date
			Rs. a. s.	
17.	Some of the books	375	21 8 0	18th January, 1938.
18.	Ditto	398	3 0 0	8th February, 1938.
19.	Ditto	397	1 0 0	9th February, 1938.
20.	Chandi ki Dibiya	488	1 8 0	25th April, 1938.
21.	Hindustan ki Sahyata	425	6 0 0	3rd March, 1938.
22.	Some of the books	448	38 4 0	28th March, 1938.
23.	Ditto	449	0 8 0	Ditto.
24.	Prem Dipika and Bhartiya Sanskriti	519	6 8 0	8th July, 1938.
25.	Kabir Sahib	500	2 0 0	21st June, 1938.
26.	Tamaddun ki Tarika	513	3 8 0	2nd July, 1938.
27.	Jawahar Sakshun III	522	18 0 0	9th July, 1938.
28.	Masahrati Halat	543	1 4 0	21st July, 1938.
29.	Lipi	577	3 8 0	15th August, 1938.
30.	Do.	579	2 8 0	Ditto.
31.	Harsh Vardhan	579	5 0 0	Ditto.
32.	Lipi	631	0 8 0	21st September, 1938.
33.	Kavi Rahasya	676	1 4 0	
34.	Purani Sahyata	677	6 0 0	
35.	Ghagh and Bhadri	697	3 0 0	21st November, 1938.
36.	Rup Rokha	729	5 0 0	13th January, 1939.
37.	Kavi Rahasya	730	1 4 0	Ditto.
38.	Sanskriti	737	3 0 0	24th January, 1939.
39.	Gramiya Artha Shastra	737	4 0 0	
40.	Kavi Rasaya and Purani Sahyata	761	10 4 0	20th February, 1939.
41.	Tarasqi Zarat	766	8 0 0	23rd February, 1939.
42.	Sanskriti	785	9 0 0	14th/15th March, 1939.
		and		
		787		
43.	Purani Sahyata	790	6 0 0	22nd March, 1939.
44.	Sanskriti	791	3 0 0	23rd March, 1939.
45.	Purani Sahyata	792	9 0 0	Ditto.
46.	Ditto	794	6 0 0	24th March, 1939.
Total ..			320 11 0	

(12) Price of [three copies of the book "Hindi Bhasha ka Itihas" was Re.10-8 whereas Re.9 only were charged, vide bill no. 486, dated the 1st June, 1938.

(13) Bill no. 523, dated the 11th July, 1938, showed that two copies of the bill "Vidyapati Thakur" were sold but the amount realized was for one copy only.

(14) The price of "Jantu Jagat" is Re.6-8 but bill no. 468, dated the 25th April, 1938, showed that only Re.5 were realized. Similar was the case with bill no. 542, dated the 20th July, 1938.

(15) The stock register showed that one copy of "Prayag Pradip" was sold on 8th July, 1938, but there was no bill for this item.

(16) From the stock register it appeared that five copies of "Gramiya Artha Shastra" were sold in August, 1938, but there was no bill in support of the entry.

(17) Two copies of the book entitled "Vidyapati Thakur" were sold at Re.1-4 each, vide bill no. 620, dated the 12th September, 1938, but only Re.1-4 were realized from the purchaser.

(18) From the stock register it appeared that two copies of "Harsh Vardhan" were sold on 13th August, 1938, but no mention of the same was made in the bill no. 574, dated the 13th August, 1938. Similar is the case with the book, vide bill no. 631, dated the 21st September, 1938.

(19) One copy of the book "Natan" was sold, vide bill no. 639, dated the 5th October, 1938, but in the stock register two copies were shown. Similarly three copies of "Inqilab Room" should have been shown in the stock register.

(20) Five copies of the "Lipi" were sold, vide bill no. 645, but in the stock register four copies were entered.

(21) Bill no. 766, dated the 23rd February, 1939, showed that only one copy of the book "Bagh Bani" was sold but in the stock register two copies were entered.

(22) On 8th February, 1939, two copies of the book "Mashiat" were sold but in the stock register only one copy was entered.

(23) Stock register showed that one copy of "Samajik Avastha" was sold on 24th January, 1939, but in voucher no. 737, dated the 24th January, 1939, no mention of this book was made.

(24) The price of "Hindi Bhasha aur Lipi" is 8 annas only but in bill no. 753, dated the 13th February, 1939, the price of two copies were shown as Re.9.

(25) Copies of books sold after 1st April, 1939, were not entered in the stock register.

14. *Stock register of journals*—No regular account of jour was maintained. It was noticed that 1,000 copies of the jour used to be printed in the beginning, which was later on redu to 500 copies and now to 250 copies. Out of these only a ; copies were sold and the rest, excluding those distributed f were stocked in godown. During the course of audit the coj of journals for different years were not arranged, but they w not checked in detail as the copies being of old issues are little use and they seem to be only a dead weight to the ra. It is suggested that the Academy may consider the quest of disposing these copies in the best way it can.

15. *General review of the Academy's accounts since its ception*—Statements marked "A" and "B" will show income and expenditure of the Academy for the years 1927 to 1938-39. From these statements it will be seen that the Government grant paid towards the maintenance of the Acade during the course of these years was Re.3,80,000; whereas Academy income from other sources was Re.27,976-12-3. The income of Re.27,976-12-3 was chiefly derived from the sale books and journals which was Re.22,884-15-5. The total exp diture in publications and journals during these years includ the cost of salary of the literary staff and other items connec therewith was Re.2,30,243-12-2, as detailed below:

	Rs. a. p.
(1) Literary staff	71,589 7
(2) Publications and journals	1,45,712 13
(3) Copyright and Royalty	1,919 12
(4) Lectures and Conference	10,824 10
(5) Advertisement	3,732 6
(6) Proof readers and copyholders	6,455 10
Total	2,30,243 12

This shows an excess expenditure of Re.2,07,359 on pu cations and journals over the income which accrued from items during these years. If all the copies of various publ tions available in the Academy godown are sold outright, anticipated income from them after allowing a discount of per cent, which is ordinarily given by the Academy to its t omers, would be Re.85,627 only. The total expenditure publications and journals shown above does not include amount spent on (1) Secretary's allowance, (2) office staff, menial staff, (4) provident fund, (5) office contingencies, e etc.

16. *Lectures*—Statement marked "C" will give detail various lectures delivered by prominent scholars selected by Academy from time to time and the remuneration paid to th In March, 1929, a sum of Re.2,000 was paid to (i) Maulvi Muhi mad Amin Abbasi, and (ii) Dr. Tara Chand at Re.1,000 each

ctures on (a) Islami Tamaddun par Hinduon ka Asar (contributions of the Hindus to Muslim culture) in Urdu and (b) Hindu abhyata par Musalmanon ka Prabhava (contributions of the Muslims to Hindu culture) in Hindi. But these lectures have not yet been published by the Academy.

17. Stock—The stock of publications was in a hopeless condition and in order to ascertain the valuation of the publications available in the godown it was essential to have the stock ranged and brought in order. Therefore the statement marked "D" was prepared with great difficulties and after consulting the Academy's old records and papers detailed below:

(i) Statement showing the receipt and disposal of stock by the Academy office till the same was handed over to the Indian Press on sole agency terms.

(ii) Statement showing the sale of stock by the Indian Press till the same was returned to the Academy on the expiry of the terms of sole agency.

(iii) Statement showing the sale of stock by the Kitabistan till the expiry of their term of agency.

(iv) Statement showing the sale of stock by the Academy office since 1936 (when it was received back from the Indian Press till 31st March, 1939).

(v) Statement showing the sale of stock by the Academy various selling agents till 31st March, 1939.

(vi) Statement showing the balance of stock in Academy godown and with agents.

This Statement "D" was given to the Academy to reconcile variations in figures shown in columns 10, 11 and 12 of the same. But they have prepared another statement and explained the variations on the basis of that. Accepting even this statement which contains only minor variations from the one prepared in audit, it will be seen that the total estimated cost of publications, after allowing 33 per cent. discount, comes to Rs.85,000 round. This statement will also show what number of copies of a particular book were printed and how many of them have so far been sold. Position about some of them is explained below:

Publication and price	Year when printed	Number of copies printed	Cost excluding cost of paper	Number of copies so far sold and sale price	Sale price after 33 per cent. discount
1	2	3	4	5	6
			Rs. a. p.		Rs. a. p.
1. Madhya Kalin Bhartiya Sanskriti, Rs.3	1928	998	2,089 8 9	464	932 0 0
2. Madhya Kalin Bharat ki Samajik Avastha, Rs.1-4	1929	999	723 14 0	274	232 8 0
3. Jantu Jagat Rs.6-8	1930	997	2,285 10 9	163	709 8 0
4. Charam Banane ke Sidhanta, Rs.3	1930	1,093	966 8 9	98	197 0 0
5. Saur Parivar, Rs.12	1931	1,094	6,860 15 0	135	1,085 0 0
6. Satsat Saptak, Rs.6	1931	1,000	1,993 8 0	163	615 0 0
7. Alama Haivani, Rs.8	1932	1,100	1,548 0 0	84	148 0 0
8. Ayodhyagik Tache Vyaparik Bhugol, Rs.5	1932	1,098	966 14 3	56	189 0 0
9. Maharaaj Ranjit Singh Urdu, Rs.4	1933	500	813 0 0	56	150 0 0
10. Ayodhya ka Itihaas, Rs.3	1933	1,008	914 4 3	132	265 0 0
11. IIm Baghbani, Rs.6	1934	500	418 8 0	51	205 0 0
12. Tanziat aur Mazahquat, Rs.3	1934	485	316 0 0	59	119 0 0
13. Filsafe Jamal, Re.1	1935	500	60 11 0	54	36 0 0
14. Usul Talim, Rs.6	1935	500	637 15 0	230	949 0 0
15. Jawahar Sakhun, Part II Rs.6	1936	500	1,060 0 0	21	113 0 0
16. Hindustan ke Tamaddun ki Tarikh, Rs.3-8	1936	500	691 9 0	27	63 8 0
17. Jawahar Sakhun, Part III Rs.6	1937	500	739 0 0	12	48 0 0
18. Nafsiat Fasida, Rs.8	1937	500	1,179 0 0	13	70 0 0
19. Europe ki Sarkareen, Rs.3	1938	494	428 0 0	31	62 0 0
20. Harsh Vardhan, Rs.2-8	1938	494	314 12 0	46	77 0 0
Total			24,768 11 0		6,264 8 0

From the above it will be seen that the sale of these publications was not satisfactory and the balance on which the Academy had to incur a great expenditure is lying in its stock as a dead weight to the racks. The sale price of the balance copies of these publications, after allowing discount of 33 per cent. would be Rs.38,309.

Somewhere it was also noticed that the number of copies distributed free was larger than the number of copies sold. The following statement will explain the position about some of them:

Publication and price	Number of copies sold, and their cost after allowing discount of 33 per cent.	Number of copies distributed free and their cost	Cost of these copies
	Rs. a. p.		Rs. a. p.
1. Alama Haivani, Rs.6-8	34	148 0 0	62
2. Maharaaja Ranjit Singh, Rs.4	50	150 0 0	78
3. IIm Baghbani, Rs.6	51	205 0 0	56
4. Jawahar Sakhun, Part II, Rs.8	21	113 0 0	43
5. Hindustani ke Tamaddun ki Tarikh, Rs.3-8	27	63 8 0	63
6. Jawahar Sakhun, Part III, Rs.6	12	48 0 0	40
7. Prayag Pradip, Rs.3-8	32	75 0 0	60
8. Hindi ke Kavi aur Kaviya, Part I, Rs.4-8	52	157 0 0	54
9. Harsh Vardhan, Rs.2-8	46	77 0 0	75
Total		1,096 8 0	2,500 0 0

No resolution in connexion with free distribution of Academy publications was produced in audit and in was stated that the copies were supplied free of cost to certain persons and presses, in addition to the numbers, under the orders of the General Secretary of the Academy.

18. Conclusion—From the remarks contained in the aforesaid paragraphs it would be observed that the accounts, especially the stock accounts, were not maintained properly and greater supervision by the General Secretary may bring about an improvement. The total amount of Government grant paid to the Academy so far is Rs.3,80,000 against which the Academy has at present a stock of the value of about Rs.85,000 only.

The Superintendent and the Accountant rendered every facility in audit which is acknowledged.

A—Expenditure of the Hindustani Academy, United Provinces

Heads	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. General Secretary's pay	1,800 0 0	1,200 0 0	1,188 13 0	1,200 0 0	1,190 0 0	1,080 0 0	1,135 0 0	1,140 0 0	1,195 0 0	1,200 0 0	1,200 0 0	1,200 0 0
2. Office staff	371 10 2	1,715 0 0	3,312 10 8	3,659 1 0	3,890 4 6	3,768 6 9	3,484 7 0	3,164 4 1	3,217 7 9	3,347 0 0	3,458 15 6	3,001 9 7
3. Literary staff	1,473 3 10	2,950 0 0	4,347 3 1	5,396 3 4	7,638 0 0	7,380 0 0	7,267 0 0	7,267 4 0	8,074 9 8	7,842 0 0	5,905 0 0	6,418 0 0
4. Menial staff	424 7 1	812 7 4	816 8 7	884 13 0	776 15 5	774 0 0	772 15 0	774 0 0	773 13 0	774 0 0	785 0 0	786 0 0
5. Provident fund	..	..	..	429 15 0	462 11 0	494 8 0	459 0 0	446 15 0	686 6 0	718 13 6	587 15 0	541 4 0
6. Income-tax	..	..	..	..	..	182 11 9	187 15 0	169 8 0	..	..	..	..
7. Office contingencies	1,770 2 5	2,867 5 1	3,483 1 2	4,229 0 0	4,507 13 3	2,911 5 3	2,457 12 9	2,522 3 9	2,433 5 3	2,761 0 3	2,932 3 6	2,715 13 6
8. Library	82 8 0	..	..	..	..	..	..	..	..	..	..	..
9. Furniture	4,424 2 9	4,229 7 11	3,596 14 10	2,908 1 9	2,088 3 9	805 2 6	357 8 0	268 2 0	275 1 9	158 10 3	180 13 6	207 0 6
10. Travelling allowance	2,513 5 3	1,099 10 0	1,604 0 0	935 8 3	903 13 0	33 0 0	..	..	48 10 0	256 0 0	5 0 0	..
11. Prizes	2,259 3 0	3,299 10 0	2,848 4 0	2,037 8 0	1,990 1 0	916 10 0	531 7 0	795 12 0	492 8 0	763 2 0	646 8 0	157 10 0
12. Publication	..	2,000 0 0	..	2,500 0 0	2,500 0 0	1,000 0 0	300 0 0	500 0 0	..	500 0 0	500 0 0	..
13. Journals	..	3,884 12 6	21,293 14 11	20,996 5 2	22,693 5 9	16,086 13 8	11,303 9 6	7,888 8 0	6,435 1 0	7,161 3 4	8,678 1 11	6,399 1 10
14. Cheap series	..	..	..	1,623 1 0	3,935 0 6	1,999 8 6	..	1,288 7 0	..	1,187 8 0	1,420 14 6	1,638 8 6
15. Copyright and Royalty	..	..	113 7 0	42 12 0	..	169 11 9	169 15 6	229 14 5	..	66 6 6	169 12 11	331 13 9
16. Conference	..	..	51 0 9	196 0 0	1,034 9 0	79 8 0	..	..	585 14 7	..	..	..
17. Advertisement	..	..	1,087 14 0	1,753 5 3	..	..	..	210 0 0	..	188 15 0	63 10 0	1 0 0
18. Lectures	1,000 0 0	5,000 0 0	..	..	2,000 0 0	1,000 0 0	..	..	..	237 9 0	317 3 3	336 7 6
19. Proof Readers	..	..	..	..	..	..	..	..	..	..	..	..
20. Assistant Proof Readers	..	..	..	..	2,220 0 0	2,143 2 0	1,957 8 0	135 0 0	..	..	..	..
21. Copyholders	..	..	..	..	..	..	..	..	..	..	..	..
Total	15,609 10 6	28,698 4 10 cash book.	43,743 12 0	51,011 9 6	56,753 15 2	40,638 14 2	28,547 9 9	26,457 14 3	24,197 13 0	27,163 2 10	26,863 2 1	23,742 9 2

B—Income of the Hindustani Academy, United Provinces

Heads	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Balance on 1st April	..	10,389 15 7	31,774 8 9	18,687 5 9	39,776 3 6	*308 1 1	765 2 1	1,348 0 3	1,589 8 1	4,714 6 2	6,202 7 5	8,674 11 11
2. Government grant	25,000 0 0	50,000 0 0	30,000 0 0	50,000 0 0	30,000 0 0	25,000 0 0	25,000 0 0	25,000 0 0	25,000 0 0	25,000 0 0	25,000 0 0	25,000 0 0
3. Income from books	..	28 8 0	549 3 0	1,465 7 3	1,289 6 9	877 7 6	1,949 3 8	1,578 0 9	2,068 13 0	3,225 15 7	3,489 4 9	5,135 5 10
4. Miscellaneous	1,000 0 0	..	107 6 0	635 0 0	523 2 0	148 8 8	2,181 4 3	121 6 2	253 13 3	49 4 6	43 7 0	28 5 0
5. Income from journals	..	..	..	..	473 4 0	69 15 0	..	..	..	75 0 0	527 10 10	167 5 6
6. Savings from salary	..	..	..	..	..	..	..	..	..	75 0 0	..	..
7. earmarked funds	..	..	..	..	..	15,000 0 0	..	..	..	..	..	..
8. Security deposit from agents	..	..	..	..	..	..	..	..	..	300 0 0	350 0 0	450 0 0
Total	26,000 0 0	60,418 7 7	63,431 1 9	90,787 13 0	72,067 0 3	41,404 0 3	29,895 10 0	28,047 7 2	28,912 3 2	33,364 10 3	35,612 14 0	39,446 0 3

*Out of the opening balance on 1st April, 1932, a sum of Rs.15,000 was earmarked for expenditure on specified purpose. The amount has been shown against item 7 of the statement.

C—Statement showing Lectures delivered by scholars of the Academy

Serial number	Name of scholar by whom lectures delivered	Subject of lecture	Year when lecture delivered	Remuneration	When lecture published
				Rs.	
1	Mr. Abdulla Yuuf Ali, M.A.	As mane wast a men Hindustan ke Mashrafi aur Iqtisadi Halat (Social and Economic condition of India during the middle age (Urdu).	1928	1,000 on 20th March, 1928	1928.
2	Rai Bahadur Pandit Gauri Shanker Hira Chand Ojha, Curator, Government Museum, Ajmer.	Madhya Kalin Bhartiya Sanskriti (Hindi) (Indian culture during the middle age).	1928	1,000 On 10th September 1928.	1928.
3	Maulana Syed Sulaiman Naqvi, Shibli Academy, Azamgarh.	Arab wa Hind ke Taluqat (Relation of the Arabs and the Hindus (Urdu).	1929	1,000 on 25th March, 1929.	1930.
4	Dr. Ganga Nath Jha, ex-Vice-Chancellor, Allahabad University.	Kavi Rahasya (Hindi) (Poetics).	1929	1,000 on 21st March, 1929	1929.
5	Maulvi Muhammad Amir Abbasi.	Islami Tammaddun par Hindoon ka asar (contributions of the Hindus to Muslim culture) (Urdu).	1929	1,000 ditto	Awaiting publication
6	Dr. Tara Chand	Hindi Sabhyata par Musalmanon ke Prabhava (contribution of the Muslims to Hindu culture) (Hindi).	1929	1,000 on 31st March, 1929.	Ditto.
7	Dr. Bhagwan Das, Kashi Vidyapeeth.	Darshan ka Prayojan (The purpose of Philosophy) (Hindi).	1930	Not paid	In the press.
8	Maulana Abdul Haq, Osmania University, Hyderabad.	Dakan men Urdu ki Ibtida aur Tarraqi (The origin and development of Urdu in Deccan).	1930	Ditto	Manuscripts not yet received.
9	Dr. Abdus Sattar Siddiqi, Allahabad University.	Lissanat (Philology)	1931	Ditto	Ditto.
10	Dr. Zakir Hussain, Delhi.	Maashiat (Urdu) (Economics)	1931	1,000 on 8th March, 1932	1932.
11	Pandit Padma Singh Sharma, Bijnor.	Hindi Urdu ya Hindustani (Hindi).	1932	1,000 on 9th March, 1932	1932.
12	Mr. N. C. Mehta, r.c.s.	Bhartiya Chitra Kala (Hindi) (Indian Painting).	1932	1,000 on 27th March, 1933	1934.

D—Statement showing account of Hindustani Academy publications since its inception

Serial no.	Name of publication	No. of copies printed	Year in which printed	Price per copy	Disposal				Stock			Remarks
					Sold	Given free	Damaged	Total cols. 6, 7 and 8	Balance cols. 3 minus 9	In hand	With agents	
1	2	3	4	5	6	7	8	9	10	11	12	13
				Rs. a.								
1	Natan ..	1,100	1930	2 8	187	80	58	205	795	7+755+40	39	Short received from the Press.
2	Zaban aur Adab ..	250	1927	1 0	147	80	6	233	17		19	
3	Hartal ..	1,100	1930	2 0	158	65	66	288	812	6+755+37	24+25	3.
4	Fareb Amal ..	1,100	1930	2 0	172	87	42	281	819	7+808+18	5	
5	Nyaya ..	1,100	1930	2 4	174	61	18	253	847	5+789+3	51	
6	Chandi ki Dibiya ..	1,100	1930	1 8	163	69	167	399	701	3+583+55	35+11	
7	Charan Banane ke Sidhanat.	1,100	1930	3 9	100	53	194	347	753	4+724+163	32-5	7
8	Hindi Survey Committee ki Report.	250	1930	1 8	137	64	4	205	45	1	33+5	
9	Kabir Sahib ..	1,100	1930	2 0	200	73	79	352	748	7+425+242	106	
10	Natan (H) ..	1,100	1932	1 4	79	78	25	182	918	6+869+1	34	3
11	Dhokha Dhari ..	1,100	1931	1 12	132	64	81	267	838	4+820+73	36	
12	Saur Pariwar ..	1,100	1931	12 0	135	84	9	228	872	2+758+10	65	6
13	Hindustan ki Purani Sabhyata.	1,000	1931	6 0	186	78	18	292	808	*700+1	37	*Stitched 690, bound 10.
14	Satsai Saptak ..	1,100	1931	6 0	153	123	30	306	694	+618+17	46	†Stitched 587, bound 21.

D—Statement showing account of Hindustani Academy publication since its inception—(concluded)

Serial number	Name of publication	No. of copies printed	Year in which printed	Price per copy	Disposal			Total cols. 6, 7 and 8	Balance cols. 3, minus 9	Stock		Remarks
					Sold	Given free	Damaged			In hand	With agents	
1	2	3	4	5	6	7	8	9	10	11	12	13
				Rs. a.								
15	Goswami Tulsi Das	1,000	1931	3 0	284	129	47	460	540	*4+492+1	105	*Stitched 447, bound 21.
16	Ghagh aur Bhaddrai	1,100	1931	3 0	356	65	112	533	567	†6+491+19	48	†Stitched bound 44.
17	Jantu Jagat	1,000	1930	6 8	163	86	19	268	732	2+680+3	45	3
18	Hindi Shairi	1,100	1931	2 0	354	66	46	466	634	†9+556	81	8
19	Veli Krishna Rukmin.	1,100	1931	6 0	97	90	28	215	885	*2+874+6	21	†Stitched 490, bound 76.
20	Taraqqi Ziraat	1,100	1932	4 0	145	53	27	225	875	8+830+33	26	§Stitched 840, bound 84.
21	Alam-e-Haivani	1,100	1932	6 8	34	52	36	122	978	§3+990	13	§Stitched - 935, bound 55.
22	Ayodhya ka Itihas	1,100	1933	3 0	132	76	20	228	872	§3+857+17	35	§Stitched 900, bound 57.
23	Filsafai Nafs	500	1932	1 0	202	114	51	367	133	8+193	5	
24	Chandra Gupta	1,100	1932	2 8	97	76	20	193	907	4+751+93	57	
25	Bhoj Raj (H)	1,100	1932	3 8	109	34	6	149	951	§5+803+26	70	§Stitched 722, bound 81.
26	Hind ke Mashrafi Halat.	1,000	1928	1 0	88	92	27	909	101	7+844+13	127	
27	Madhya Kalin Bharat.	1,000	1929	1 4	274	61	23	358	642	3+682	58	1
28	Bhartiya Sanskriti	1,000	1928	3 0	464	100	22	586	414	3+310+19	72	2
29	Qurun Waeta	1,000	1931	4 0	188	59	34	225	775	6+810+42	41	
30	Kavi Rahasya	1,100	1929	1 4	340	81	51	472	628	+562+1	59	
31	Arab aur Hind (U)	1,100	1930	4 0	337	74	95	506	594	6+526+67	51	8
32	Arab aur Bharat (H)	1,100	1930	4 0	128	69	40	237	663	2+700+141	25	
33	Mashiat	500	1932	1 0	304	66	21	391	109	6+41	29	
34	Adyogitatha Vya-park Bhugol.	1,100	1932	5 0	66	16	15	87	1,013	3+963	43+1	4
35	Hindi Bhasa ka Itihas.	500	1933	3 8	334	21	13	368	132	+1	78	7
36	Hindi Bhasa aur Lipi.	500	1938	0 8	1,338	18	7	1,363	..	67+1900	112	4
37	Gramiya Artha Shastra.	500	1933	0 4	178	76	13	267	233	7+160+1	48	6
38	Hindi Urdu aur Hindustani.	500	1932	1 4	206	88	10	254	246	5+123+1	47+13	
39	Jawahar Sakhun, Part I.	500	1933	4 8	81	81	8	170	330	12+310	3	
40	Ranjit Singh	500	1933	4 0	56	79	3	138	362	§5+326	25	§Stitched bound 297.
41	Bhartia Itihas ke Rup Rekha I.	500	1933	5 0	267	81	5	343	167	1+41	109+9	
42	Bhartia Itihas ke Rup Rekha II.	..	1933	5 0	248	81	5	334	166	1+13	11+0	
43	Kasad Bazari	500	1934	0 8	200	27	3	230	270	6+230	15	
44	Ilm Baghban	500	1934	6 0	61	56	1	108	392	6+340	15	
45	Bhartendu Harishchandra.	500	1935	5 0	64	63	3	130	370	3+272+28	54	
46	Usule Talim	500	1935	6 0	236	58	3	295	205	10+96	102	
47	Tanziat	500	1934	3 0	59	57	1	117	333	9+240+50	64	15
48	Filsafai Jamal	500	1935	1 0	64	30	1	85	415	5+291	8	
49	Bhartiya Chittrakala	500	1934	6 0	74	104	..	178	322	3+279+1	25	
50	Prem Dipika	500	1936	0 8	28	75	..	103	397	3+343+1	61+1	
51	Inqalab Rus	500	1936	2 8	34	56	..	90	410	3+320	75	2
52	Jawahar Sakhun II	500	1936	0 8	21	25	..	46	454	5+418	13	
53	Diwani Bedar	500	1937	1 8	13	19	..	31	469	12+420	3	
54	Dakhini Pahelian	500	1936	..	22	19	..	41	..	6+442+1	6	
55	Angrezi Ahad, etc.	500	1936	3 8	27	63	..	90	410	6+387	27	
56	Vidyapati, Thakur	500	1937	1 4	110	36	..	146	354	5+264+1	39	
57	Filsafai Siyasiat	500	1936	4 0	44	64	..	504	446	10+372	21	
58	Muhammad Tughlaq	500	1937	2 8	61	14	..	723	425	6+415	13	
59	Tuka Ram	500	1937	1 8	64	33+2	..	99	401	3+346+1	40	
60	Jawahar Sakhun II	500	1937	6 0	12	37+3	..	52	448	10+438	4	
61	Vigyan Hastamalak	1,000	1936	6 8	127	87	..	214	786	3+587+142	39	
62	Nasiat Faisla	500	1937	8 0	13	17+3	..	33	467	8+450	11	
63	Prayag Pradip	1,000	1937	3 8	32	60	..	92	908	3+681+1	221	
64	Rajaswa	1,000	1937	3 0	40	58	..	98	902	2+846+1	45	
65	Hindustan ka Naya Dastur Hukumat.	1,000	1937	..	273	46	..	319	681	39+600	25	
66	Jawahar Sakhun, Part IV.	500	1939	2 0	..	..	..	..	500	6+494	..	
67	Insaf	1,000	1939	1 0	29	..	..	29	971	28+440	..	
68	Europe ki Sarkare	500	1938	..	31	64	..	95	405	14+380	10	
69	Mina	500	1937	1 0	31	43	..	74	426	14+350+7	35	
70	Haraha Vardhan	500	1939	2 8	46	75	..	121	379	10+355+12	13	
71	Hindi ke Kavi aur Kavya I.	500	1937	4 8	52	54	..	106	394	3+324	30	
72	Hindi ke Kavi aur Kavya II.	..	1938	..	..	..	..	6	..	..	..

F.—Statement showing the receipt and disposal of the publications of the Hindustani Academy since 1927 to 31st May, 1933

Serial number	Name of the books	Number of copies printed	Year in which printed	Price per copy	Disposal						Balance on hand minus 9	Stock					Total	Copies to be accounted	Remarks
					Sold	Free copy	Damage	Total vols. 6, 7 and 8	C. B.	P. C.		Sitch	Damage	With agents					
															10	11				12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
				Rs. a.													Rs. a.		
1	Natan (Urdu), Minerva Press.	1,100	1930	2 8	187	80	58	305	795	762			40	39	841	+40	2,002 8		
2	Urdu Zabon aur Adab, Indian Press.	250	1927	1 0	147	80	6	233	17				17	17			17 0		
3	Hartal, Hindi Sahitya Press.	1,097	1930	2 0	159	65	65	288	809	761			37	37	865	+36	1,596 0		
4	Fareb Amal, Minerva Press.	1,100	1930	2 0	173	67	42	281	819	815			18	5	838	+19	1,640 0		
5	Nayaya, Hindi Sahitya Press.	1,100	1930	2 4	174	61	18	253	847	789+5			3	55	848	+1	1,901 4		
6	Chandi ki Dibiya, Hindustan Press.	1,100	1930	1 8	163	69	167	399	701	583+8			116	46	748	+27	948 0		
7	Charan Banane ke Si-dhanta, Ganga Fine Art Press, Lucknow.	1,093	1930	3 0	98	53	177	328	746	724+4			163	27	919	+172	2,285 0		
8	Hindi Survey Committee ki Report, Hindustan Press.	2,500	1930	1 8	137	64	4	205	45	1			27+	36	33		54 0		
9	Kabir Sahab, Minerva Press.	1,160	1930	2 0	200	73	79	352	784	425+7			239	108	777	+36	1,076 0		
10	Natan (Hindi), Hindi Sahitya Press.	1,097	1932	1 4	81	78	125	184	918	1584+6			1	34	910	+3	1,138 4		
11	Dholka Dhari, Hindustan Press.	1,100	1931	1 12	123	64	81	267	833	820+4			12	36	872	+39	1,506 0		
12	Saur Parivar, Indian Press.	1,094	1931	12 0	135	84	9	228	866	30+2		744	101	66	860	+4	10,200 0		
13	Hindustan ki Purani Sahitya, Hindustan Press.	1,100	1931	6 0	197	78	18	293	808	35+1		692	1	37	766	+41	4,590 0		
14	Satsai Saptak, Indian Press, Banaras Branch.	1,000	1931	6 0	153	123	30	306	694	31		899	18	46	994		4,058 0		
15	Gowami Tulsidas, Indian Press, Banaras Branch.	1,100	1931	3 0	284	129	47	460	640	21+4		475	1	105	605	+34	1,915 0		
16	Ghagh aur Bhaddari, K. P. Press.	1,095	1931	3 0	358	165	110	631	564	50+25		447	19	43	584	+20	1,095 0		
17	Jantu Jagat, Indian Press.	997	1930	6 8	163	86	19	268	729	680+2			3	45	790	+41	4,725 8		
18	Hindi Shairi, Ganga Fine Arts Press, Lucknow.	1,092	1931	2 0	354	66	48	468	626	76+9		480	31	64	849	+26	1,292 0		
19	Wali Krishna Rukmani Ri (Indian Press).	1,100	1931	6 0	97	90	28	215	882	34+2		828	16	21	891	+46	4,110 0		
20	Tasaqi Zarait, Hindustan Press.	1,100	1932	4 0	145	53	27	225	875	830+8			38	26	897	+23	3,458 0		
21	Alame Hattari, Minerva Press.	1,100	1932	6 8	184	62	36	132	968	554+3		635	12	12	1,005	+37	6,588 8		
22	Ayodhya ka Itihaas, K. P. Press.	1,098	1928	3 0	182	76	20	228	870	57+3		800	17	34	911	+41	2,988 0		
23	Filasa Nafa, City Press.	500	1932	1 0	208	114	51	367	333	103+6		33	5	269	473		308 0		
24	Chandra Gupta Vikramaditya, New Journal Press.	1,100	1932	2 8	97	76	20	193	907	12+4		739	33	57	805	+2	2,030 0		
25	Bhoj Raj, K. P. Press.	1,161	1932	3 0	109	84	6	149	922	36-5		45	32	28	700	+51	2,934 0		
26	Hind ka Mashhori Halat, Indian Press, City Press, 2nd Edition.	2,000	1928	1 0	880	82	27	999	1,001	36+7		808	13	120	984	+17	973 0		
27	Madhyakalin Bharat ki Samajik Avastha, Indian Press.	999	1929	1 4	274	61	23	368	641	582+8			68	64	649	+97	819 0		
28	Madhyakalin Bhartiya Sanskrit, Indian Press, Banaras Branch.	998	1928	3 0	464	100	31	595	413	310+3			719	37	399	+74	1,140 0		
29	Qurun Waste, Hindustan Press.	1,100	1931	4 0	132	59	34	225	875	310+6			42	35	893	+18	3,404 0		
30	Kavi Rahasya, Indian Press.	1,100	1929	1 4	340	81	51	472	628	562+4			1	59	625	+42	781 4		
31	Arab O Hind ka Taluqat, Hindustan Press.	1,092	1930	4 0	337	74	95	506	588	826+6			67	51	650	+64	2,332 0		
32	Arab aur Bharat ke Sambandh, Hindi Sahitya Press.	1,100	1930	4 0	128	69	40	237	863	700+2			141	25	603	+45	2,888 0		
33	Mashiat, City Press.	500	1932	1 0	304	66	21	391	109	41+6			29	76	391	+76	76 0		
34	Ayodhyagiri Baha Vya-parik Bhugol (Hindi Mandir Press).	1,096	1932	5 0	56	16	15	87	1,009	9+3		993	1	44	1,080	+13	5,095 0		
35	Hindi Bhasa ka Itihaas, Law Journal Press.	493	1933	3 8	334	21	13	368	125				1	78	79	-46	273 0		
36	Hindi Bhasa aur Lipi, Law Journal Press.	1,000	1933	0 8	1,000	18	7	1,864	2,132			1,900		112	2,079	-63	1,039 8		
		2,000	1939																

F—Statement showing the receipt and disposal of the publications of the Hindustani Academy since 1927 to 31st May, 1930—(concluded)

Serial no.	Name of the books	Number of copies printed	Year in which printed	Price per copy	Disposal					Balance col. 6, 7 and 8	Balance col. 9	Stock					Total	Copies to be accounted	Rema
					Sold	Free	Damage	Total col. 6, 7 and 8	C. E.			F. C.	Stitch	Damage	With agents				
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
				Rs. a.															Rs.
37	Gramiya Arthashastra, Krishna Press.	500	1934	4 0	178	76	13	287	233	10+7	150	..	1	48	216	-17	860		
38	Hindi Urdu ya Hindustani, K. P. Press.	499	1932	1 4	206	37	10	253	246	..	123+5	..	1	60	189	-87	235		
39	Jawahar Sakhun, Part I, K. P. Press.	500	1933	4 8	81	81	8	170	330	130+1	80+12	..	..	3	325	-5	14,62
40	Maharaja Ranjit Singh (Urdu), Minerva Press.	500	1933	4 0	56	79	3	138	382	297+5	29	..	..	25	366	-6	1,424
41	Bhartiya Itihas ki Rup Rakha, Parts I and II, K. P. Press.	500	1933	5 0	257	82	5	344	156	9+1	32	..	1	118	161	+5	800		
42	Ditto	500	1933	5 0	250	82	5	337	163	6+1	7	..	1	120	185	-28	770		
43	Duniya ke Maujuda Kasad Bazari ke Asbab, City Press.	500	1934	0 8	200	27	3	230	270	..	239+9	..	..	13	260	-10	130
44	Im Beghiani, City Press	500	1934	6 0	61	56	1	108	392	..	340+6	..	..	15	361	-31	2,166
45	Bhartendu Hariachand, K. P. Press.	500	1935	5 0	64	63	3	130	370	..	272+3	..	28	54	367	-13	1,646		
46	Usul Talim, City Press	500	1935	6 0	236	56	3	295	205	..	96+10	..	..	101	207	+2	1,242
47	Tanziat aur Mazahqat, K. P. Press.	485	1934	3 0	59	57	1	117	368	..	240+9	..	50	64	663	-5	958		
48	Filsefe Jamal, City Press	500	1935	1 0	54	30	..	84	416	..	391+5	..	..	8	404	-12	404
49	Bhartiya Chittrakala, Indian Press and Law Journal.	500	1936	6 0	84	104	..	188	312	..	279+3	..	1	26	309	-3	1,844		
50	From Dipika (Raj Pali Press).	500	1936	0 8	28	75	..	103	397	..	343+3	..	1	62	409	+12	204		
51	Inqilab Ross, City Press	498	1936	2 8	34	56	..	90	408	..	320+3	..	..	75	398	-10	995
52	Jawahar Sakhun, Part II, K. P. Press.	500	1936	8 0	21	43	..	64	436	..	418+5	..	..	13	436	..	3,481
53	Dewan Bedar (City Press)	500	1937	1 8	13	18	..	31	469	..	420+12	..	..	3	435	-34	651
54	Chand Daccani Pahalian, City Press.	500	1936	1 4	22	19	..	41	459	..	444+6	..	1	5	456	-3	561		
55	Hindustan ke Tammadun ki Tarikh, City Press.	500	1936	3 8	27	63	..	90	410	..	387+6	..	..	14	407	-3	1,421
56	Vidyapati Thakur, Law Journal Press, Allahabad.	500	1937	1 4	110	36	..	146	354	..	264+5	..	1	39	312	-45	381		
57	Filsefe Siasiat, City Press	500	1936	4 0	44	10	..	54	446	..	372+10	..	..	21	403	-43	1,611
58	Muhammad Tughlaq, City Press.	500	1937	2 8	61	14	..	75	425	..	415+6	..	..	8	427	+2	1,067
59	Sant Tukaram, Hindi Mandir Press.	500	1937	1 8	64	35	..	99	401	..	346+3	..	1	40	360	-11	581		
60	Jawahar Sakhun, Part III, City Press.	500	1937	6 0	12	40	..	52	448	..	436+10	..	..	3	439	+1	2,691
61	Vijnana Hastamlak, K. P. Press.	1,000	1936	6 0	127	87	..	214	..	..	587+3	..	142	89	771	-15	3,771
62	Nafsiat Fasika, City Press	500	1937	8 0	18	20	..	33	467	..	450+8	..	..	9	467	..	3,731
63	Prayag Pradip, K. P. Press.	997	1937	8 8	32	60	..	92	905	..	681+3	..	1	221	906	+1	3,161		
64	Rejaswa, Narain Press..	997	1937	1 0	40	58	..	98	899	..	846+2	..	1	45	894	-5	89		
65	Hindustan ka Naya Dastoor Hukumat, City Press.	997	1937	1 0	273	46	..	319	678	..	600+39	..	..	25	664	-14	66
66	Jawahar Sakhun, Part IV, City Press.	500	1939	2 0	..	..	..	500	500	..	494+6	..	..	..	500	..	1,000
67	Insaaf, City Press	500	1939	1 0	29	..	..	471	468	..	440+28	..	..	..	468	-3	46
68	Europe ki Sarkaran, Hindi Mandir Press.	494	1938	3 0	31	64	..	95	399	..	380+14	..	..	10	404	+5	1,211
69	Mina, K. P. Press	500	1937	1 0	31	43	..	74	426	..	350+14	..	7	35	406	-20	391		
70	Harsh Vardhan, Hindi Mandir Press.	494	1938	2 8	46	75	..	121	373	..	355+10	..	..	13	378	+5	94
71	Hindi ke Kavi aur Kavya Part I, K. P. Press.	497	1937	4 8	52	54	..	106	391	..	324+3	12	30	369	-22	1,601	
72	Hindi ke Kavi aur Kavya Part II, K. P. Press.	7	1938	..	..	..	..	7	..	..	..	..	..	1	..	..	..
																	1,22,442.35		
																	86.04		

NOTES WITH REFERENCE TO STATEMENT F

a variations in the balance is reconciled as noted below :

- (1) Netan (Urdu), plus 46. One copy received from Kitabistan on 25th May, 1936. The surplus 45 belongs to the damaged stock.
- (2) Urdu Zaban aur Adab, plus 2. The surplus is due to plus balance in their statement.
- (3) Hartal, plus 26. The surplus belongs to the damaged stock.
- (4) Fareb Amal, plus 19. The surplus belongs to the damaged stock.
- (5) Nayaya, plus 1. The surplus belongs to the damaged stock.
- (6) Chand ki Dibiya, plus 47. The surplus belongs to the damaged stock.
- (7) Charm Banane ke Siddhanta, plus 153. The actual balance is plus 153 not 172. The difference of 19 copies are counted thus : 2 copies out of sold by Indian Press should be deducted. They sold 21 and not 23 copies as shown. 13 copies sold by Indian Press as damaged are not damaged. 4 copies out of damaged (sent by us) were reclaimed by Indian Press. 19 copies. The surplus 153 copies belongs to the damaged stock.
- (8) Hindi Survey Committee ke Report, minus 9. The shortage is only of four copies which should be written off as unaccounted for. Five copies are accounted as below :
Three copies sent to the Director of Public Instruction on 31st October, 1938. 2 copies to Agent, Gwalior, on 31st January, 1939. 5 copies.
- (9) Kabir Sahab, plus 29. The surplus belongs to the damaged stock.
- (10) Netan (Hindi), minus 5, 3 copies sold as per V no. 131, dated the 1st February, 1937. 1 copy sold as per V no. 405, dated the 18th February, 1938. 1 copy sold as per V no. 431, dated the 8th March, 1938. 1 copy sold as per V no. 585, dated the 16th August, 1938. 6 copies. The above copies sold are not noted. One copy was received back from Leader Press on 4th January, 1938. Thus the balance is accounted for.
- (11) Dhoka Dhari, plus 39. The surplus belongs to the damaged stock.
- (12) Saur Parivar, minus 6. The shortage should be written off as unaccounted for.
- (13) Hindustan ki Purani Sahyate, minus 41. 24 copies are mixed up in the stitched stock of Alame Haivani. Now a balance is minus 7, which should be written off as unaccounted for.
- (14) Satasai Saptak. The balance is all right.
- (15) Goswami Tulidas, minus 34. 24 copies were mixed up in the stitched stock of Ayodhya ka Itihas. The shortage of 10 copies should be written off as unaccounted for.
- (16) Ghagh aur Bhaddari, plus 23. The actual surplus is 20. Copies were reclaimed by Indian Press out of damaged sent by us. The following sold copies were left out in the statement :
3 copies sold, as per V no. 167, dated the 25th March, 1937.
3 copies sold only one noted in the statement—1 copy sold as per V no. 210, dated the 23rd June, 1937. 1 copy sold as per V no. 19, dated the 18th September, 1939. 2 copies sold as per V no. 316, dated the 8th October, 1937. 1 copy sold as per V no. 405, dated the 18th February, 1938. 7 copies. The surplus 10 copies belongs to the damaged stock.
- (17) Jantu Jagat, plus 1. One copy sold on 7th October, 1938, as per V no. 84, was not noted.
- (18) Hindi Shairi, plus 20. The surplus belongs to the damaged stock.
- (19) Veli Krishna Rukmani Ki, plus 6. The surplus belongs to the damaged stock.
- (20) Taraqqi Zarai, plus 22. The surplus belongs to the damaged stock.
- (21) Alame Haivani, plus 37. The surplus was due to 34 copies of Hindustan ki Purani Sahyate (no. 18) being mixed up in the stitched copies. The actual number so stitched when counted was 89 bundles of 10 each plus 9 = 899. There were copies of Ghagh aur Bhaddari in the stitched copies. Thus the surplus is less by 36 copies. The balance, plus 1, was received from Kitabistan on the 25th May, 1936.
- (22) Ayodhya ka Itihas, plus 41. 1 copy sold as per V no. 16, dated the 3rd February, 1938. (Two copies sold, only one noted in the statement.) 24 copies out of the stitched stock belong to Goswami Tulidas, 25 copies. The surplus 16 copies belongs to the damaged stock.
- (23) Filsafe Nafa, plus 73. One copy returned to us by Kitabistan on 25th May, 1936. 49 copies extra shown as sold by Kitabistan. 50 copies. Balance plus 23. It appears that 49 pieces shown by Kitabistan as issued free were in fact supplied the Kitabistan and out of 43 copies shown by Indian Press damaged 23 copies were returned to us. The surplus is thus accounted for.
- (24) Chandra Gupta Vikramaditya, minus 2. One copy of same shown as sold should be deducted as not sold. Thus the balance is minus 3, which is due to the copies retained by printing press. In fact the office was supplied 1,097 copies.
- (25) Bhoj Raj, minus 51. Actually received from press 1,098 not 1,101 as shown. 50 copies were sent to us by the Indian

Press in 1933 out of which 47 copies were distributed to members, etc. free on 1st September, 1933. The remaining returned to the Indian Press. Now the balance is minus 1 only, which should be written off as unaccounted for.

- (26) Hind ke Mashrafi Halat, minus 17. It would appear that two editions of the book were published. 17 copies should be written off as issued free to press, etc. and not accounted for.
- (27) Madhyakalin Bharat ki Samajik Avastha, plus 7. One copy sold as per V no. 398, dated the 12th February, 1938. The surplus belongs to the damaged stock.
- (28) Madhyakalin Bhartiya Sanskriti, minus 14. The shortage is due to the copies issued free and not accounted for. It should be written off.
- (29) Qurun Vasta men Hindustani Tahzib, plus 18. The surplus belongs to the damaged stock.
- (30) Kavi Rahasya, minus 2. The shortage should be written off as issued free and unaccounted for.
- (31) Arab O Hind ke Taluqat, plus 64. The surplus belongs to the damaged stock.
- (32) Arab aur Bharat ke Sambandh, plus 5. The surplus belongs to the damaged stock.
- (33) Mashiat Maqсад aur Minhaj, minus 33. These copies appear to have been issued free and not accounted for.
- (34) Audhyogik Tatha Vyaparik Bhugol, plus 11. 1 copy sold as per V no. 405, dated the 18th February, 1938. 1 copy sent to Dr. Dharendra Varma, free. 2 copies. The surplus belongs to the damaged stock.
- (35) Hindi Bhasa ke Itihas, minus 48. 22 copies were received from the Indian Press which were distributed free to members on the 1st October, 1938. 1 copy sent to Allahabad Law Journal Press for reprinting. 1 copy sold as per V no. 457, dated the 13th April, 1938. 2 copies sold as per V no. 558, dated the 30th July, 1938. 26 copies. It will appear from the statement that only 21 copies were shown as free, whereas the number in other cases is much more. The free copies include those presented to author, editors for review, members of the Academy, Director of Public Instruction's office submitted to the Universities and other bodies preparing courses of study and issued to complimentary. It is thus clear that 21 copies cannot cover them all. The shortage of 20 copies is due to the copies issued free and not accounted for.
- (36) Hindi Bhasa aur Lipi, minus 59. 3 copies sold as per V no. 492, dated the 11th June, 1938. It would appear that three editions of total (3,500) copies printed during the term of accounting. The copies shown under free is only 18. It is clear that the shortage is due to the causes referred to (under item 35) above. It should be written off.
- (37) Gramiya Arthashastra, minus 17. 1 copy sold as per V no. 135, dated the 12th February, 1937. 1 copy sold as per V no. 136, dated the 13th February, 1937. 2 copies. 1 copy sold on the 13th September, 1937, as shown in the statement was not sold. 16 copies should be written off as issued, free and not accounted for.
- (38) Hindi Urdu Aur Hindustani, minus 57. 47 copies were received back from Indian Press and distributed free on the 1st September, 1933 (50, minus 47 = 3 returned to the Indian Press). The shortage of 10 copies, which should be written off as issued free and not accounted for.
- (39) Jawahar Sakhun, Part I, minus 5. 2 copies for review as per D. no. 3421-22, dated the 5th November, 1936. 1 copy to K. F. Press as per D. no. 1248/188-37. 1 copy for review as per V no. 55, dated the 26th April, 1937. 1 copy for review as per V no. 72, dated the 30th June, 1937. 5 copies. The balance is all right.
- (40) Maharaja Ranjit Singh, minus 6. Copies sent to author was not accounted for.
- (41) Bhartiya Itihas ki Rup Rekha, Part I, plus 5.
- (42) Bhartiya Itihas ki Rup Rekha, Part II, minus 28. The shortage should be written off as unaccounted for.
- (43) Duniya ki Maujudat Kaed Bazari ke Asbab, minus 10. 1 copy sold as per V no. 775, dated the 9th March, 1939. Only 27 copies are shown as free. Obviously these 9 copies were issued free as presentation. It should be written off.
- (44) Iim Baghban, minus 31. 3 copies issued free to members and not accounted for. This should be written off.
- (45) Bhartendu Harish Chandra, minus 13. 2 copies sold as per V no. 111, dated the 19th December, 1936. 1 copy sold as per V no. 405, dated the 18th February, 1938. 1 copy sold as per V no. 431, dated the 8th March, 1938. 1 copy sold as per V no. 817, dated the 18th April, 1939. 8 copies. Shortage of 8 copies should be written off as unaccounted for.
- (46) Usul Talim, plus 2. (plus 4), plus 2. 2 copies sold as per V no. 111, dated the 19th February, 1938, as shown in the statement was not sold. 2 copies sold as per V no. 41, dated the 30th July, 1936, as shown in the statement was not sold. The surplus belongs to the damaged stock.
- (47) Tanzias aur Mazahab, minus 5. 1 copy sent to Magistrate on the 16th July, 1936. 1 copy sold as per V no. 416, dated the 21st February, 1938. 2 copies. Shortage of 3 copies to be written off as issued free and not accounted for.
- (48) Filsafe Jamal, minus 12. Only 30 copies are shown free issued. 12 copies were issued free and not accounted for.
- (49) Bhartiya Chatrakala, minus 3. 1 copy sold as per V no. 4, dated the 2nd May, 1936. 1 copy sold as per V no. 202, dated the 15th June, 1937. 1 copy sold as per V no. 415, dated the 29th February, 1938. 3 copies. The balance is all right.

(59) Premi Dibika, plus 12. 1 copy sold as per V. no. 405, dated the 18th February, 1938. 2 copies sent to Agent, Lahore, on the 5th November, 1938.

(61) Inqilab Roes, minus 10. 10 copies sent for review as per D. no. 633-42, dated the 8th June, 1938. The balance is all right.

(62) Jawahare Sakhun, Part II. The balance is all right.

(63) Dewan Bedar, minus 34. 3 copies for review as per D. no. 4789-91, dated the 13th February, 1937. 18 copies for review as per D. no. 653-70, dated the 26th May, 1937. 1 copy for review as per D. no. 683, dated the 26th June, 1937. 6 copies traced in office stock. 28 copies. The balance minus 6 copies should be written off as issued free and unaccounted for.

(64) Chand Dacoani Pahelian, minus 3. Only 19 copies are shown free. 3 copies to be written off as issued free and not accounted for.

(65) Angrezi Ahad Men Hindustan ke Tamaddun ki Tarikh, minus 3. 3 copies sent for review as D. no. 4585, dated the 8th January, 1937.

(66) Vidyaapati Thakur, minus 45. 2 copies sold as per V. no. 405, dated the 18th February, 1938. 1 copy free to author on 3rd April, 1937. 1 copy for review to N. P. Sabha, on 4th May, 1937. 5 copies free as per D. no. 653-57, dated the 26th May, 1937. 1 copy free on 28th May, 1937. 12 copies free to members, D. no. 671-82, dated the 14th July, 1937. 12 copies for review as per D. no. 965-76, dated the 14th July, 1937. 1 copy sold as per V. no. 286, dated the 7th August, 1937. 1 copy sold as per V. no. 431, dated the 8th March, 1938. 36 copies. Balance is short by 9 copies only. Obviously the shortage is due to copies sent free and not accounted for. It should be written off.

(67) Filsafae Siasiat, minus 43. Only 10 copies are shown as free issued. Obviously the shortage is due to copies supplied to members and not accounted for. It should be written off.

(68) Muhammad Shah Tuglaq, plus 2. Actually the surplus was 11 copies received back excess from Kitabistan out of which 5 copies were issued free to author on 30th June, 1937, the remaining 4 copies to members. The surplus 2 copies is retained in stock.

(69) Sant Tuka Ram, minus 11. 1 copy sold as per V. no. 431, dated the 8th March, 1938. 1 copy sold as per V. no. 131, dated the 26th June, 1937. 2 copies. The shortage of 9 copies to be written off as supplied free and not accounted for.

(70) Jawahare Sakhun, Part III, plus 1. 1 copy received back from Kitabistan.

(61) Vijnana Hastamlak, minus 15. 2 copies sold as per V. no. 84, dated the 7th October, 1938. Copies should be taken as free supplied and not accounted for. It should be written off.

(62) Nafsiat Fasida. The balance is all right.

(63) Prayag Pradip, plus 1. 1 copy more received from press. Now the balance is all right.

(64) Rajaawa, minus 5. To be written off as issued free and not accounted for.

(65) Hindustan ka Naya Dastur Hukumat, minus 14. 12 copies sent free to member on 19th September, 1938. 1 copy as sample to Kitabistan. 13 copies. 1 copy should be written off as issued free and unaccounted for.

(66) Jawahare Sakhun, Part III. Balance all right.

(67) Insaaf, minus 3. 3 copies were retained by press for submission according to Press Act. Balance is all right.

(68) Europe ki Sarkareen, plus 5. 5 copies received from press. Total receipt 499 not 494 as shown.

(69) Mina, minus 20. 11 copies for review as per D. no. 3672-3682, dated the 21st December, 1937. 3 copies for review on 10th December, 1937 (Local). 1 copy sold as per V. no. 503, dated the 23rd June, 1938. 15 copies. 5 copies to be written off as issued free and not accounted for.

(70) Hareh Vardhan, plus 5. 5 copies sold as per V. no. 518, dated the 8th July, 1938, should be noted. 5 copies more received from press. Total received 499 not 494 as shown. Balance all right.

(71) Hindi ke Kavi aur Kavya, Part I, minus 22. 11 copies for review as per D. no. 3672-82, dated the 21st December, 1937. 1 copy sold as per V. no. 405, dated the 18th February, 1938. 1 copy sold as per V. no. 457, dated the 13th April, 1938. 6 copies for review as per D. no. 4922-28, dated the 3rd March, 1938. 1 copy free as per V. no. 209, dated the 24th September, 1938. 20 copies. 2 copies to be written off as issued free and not accounted for.

APPENDIX G

ANALYSIS OF REPLIES RECEIVED FROM THE GENTLEMEN ON QUESTIONNAIRE

The following is the analysis of replies received from gentlemen on the questionnaire:

Question no.	Yes	No.	Undec.
1	27	17	12
2	0	22	4
3	41	8	7
4	9	13	34
5	17	32	7
6	19	25	12
7	26	23	7
8	28	9	19

The above analysis reveals—

- (i) that the majority of persons were of the opinion the Hindustani Academy should be retained but such modification and improvements as may enable it work more effectively and in a better manner;
- (ii) that the Hindi and Urdu literatures should be allowed to develop on their own lines without any imposed efforts to hamper their growth;
- (iii) that no effort should be made, as such to develop create Hindustani by artificial means.

APPENDIX H

MEMORANDUM AND RULES OF THE HINDUSTANI ACADEMY UNITED PROVINCES, AS AMENDED BY THE HINDUSTANI ACADEMY ENQUIRY COMMITTEE, UNITED PROVINCES

A—Memorandum

1. *Name*—The name of the society shall be the *Hindu Academy*.
2. *Object*—The object of the Hindustani Academy shall be to preserve, foster, and develop Urdu and Hindi literature.
 - (a) *Prize and Award*—Awarding prizes for the production of approved books on different subjects.
 - (b) *Election of Fellows*—Electing eminent writers scholars to Fellowship of the Academy.
 - (c) *Benefactors*—Electing the benefactors of the Academy as Honorary Fellows.
 - (d) *Library*—Establishing and maintaining a library.
 - (e) *Lectures and addresses*—Holding of a Conference of eminent scholars every three years.
 - (f) *Other things*—Doing all other acts and taking other steps to advance the object specified above.
3. *Council*—The Council shall have the power, with concurrence of the Local Government to extend or abridge the purpose of the Academy in the manner provided by section 1 of the Societies Registration Act (XXI of 1909) and with sanction of the local Government to make such alterations additions in the rules as it may deem necessary.
4. The names, addresses and occupations of the members of the Council and the Executive Committee and its officers shall be given.

B—Rules

1. *Headquarters*—The headquarters of the Academy shall be at Allahabad but may be removed to any other place in these provinces, with the permission of the local Government provided that not less than three-fourth of the members of Council make a recommendation to the effect.
2. *Constitution of the Academy*—The Hindustani Academy shall consist of (1) a Council and (2) an Executive Committee and of (3) Fellows to be elected by the Council at such time in such manner and subject to such conditions as may be prescribed in that behalf by the rules of the Academy.
3. *Council*—The first members of the Council of the Academy shall be those whose names are described in the Schedule to be annexed to the Memorandum of the Association.
4. *Powers*—The Council shall be supreme general body of the Academy and shall have the power to determine the objects and decide on all other questions consistent with the rules and objects of the Academy.
5. *Constitution of the Council*—The Council shall consist of:
 - A President, a Secretary, a Treasurer, to be nominated by Government—
 - The Minister of Education, United Provinces
 - The Director of Public Instruction, United Provinces
 - Two representatives from each University in the United Provinces
 - Heads of Departments of Hindi and Urdu in the five University of the provinces

Two members each from—	
(a) The Nagri Pracharini Sabha, Benares.	
(b) The Hindi Sahitya Sammelan, Allahabad.	
(c) The Sindh Academy, Amargarh.	
(d) The Jamia Millia Islamia, Delhi.	
(e) The Hindustani Talimi Sangh, Sewagram, Wardha, Central Provinces.	10
Ten members to be nominated by United Provinces Government.	10
Ten members co-opted by the above members.	10
A Vice-President.	1
Total	56

16. (a) *Meetings of the Council*—The Council shall meet at least once every year at the headquarters of the Academy unless the Executive Committee decide on a different place for particular meeting on such dates and at such time as may be decided by the Executive Committee, provided that the Executive Committee may call any further meeting for reasons to be recorded by it.

(b) *Quorum*—Eighteen shall constitute a quorum.

(c) No meeting of the Council shall be held unless a notice of at least one month is given to the members.

17. *Resolutions*—It shall be open to a member of the Council to give notice of a resolution which he may desire to move at a meeting of the Council, provided that such notice is given at least 10 days before the date of the meeting of the Council.

18. *Records*—A record of the proceedings of the Council shall be kept.

19. *Decision*—The decision of the majority of the members of the Council present at a meeting shall be treated as the decision of the Council.

The Executive Committee.

20. (a) *Executive Committee*—The Executive Committee shall consist of a President, a Vice-President, the Treasurer, the Secretary and the Joint Secretaries *ex-officio* and nine other members to be elected by the Council.

(b) The term of office of the members of the Executive Committee shall be three years.

21. (a) *Function*—The Executive Committee shall give effect to the decisions of the Council and arrange for carrying out the work of the Academy.

(b) *President, Vice-President, and Secretary*—The President and the Vice-President of the Council shall be *ex-officio*, the President and the Vice-President respectively of the Executive Committee. The Secretary shall be *ex-officio*, the Secretary of the Executive Committee.

22. *Meetings and Quorum*—The Executive Committee of the Academy shall meet at least once every three months and at least 10 days' notice for every such meeting shall be given and three shall form a quorum.

23. *Proceedings*—A record of the proceedings of the meetings of the Executive Committee shall be kept, and shall be circulated among the members of the Council.

24. *Decision*—The decision of the majority of members present at a meeting of the Executive Committee shall be the decision of the Executive Committee.

President and Secretary

25. *Vacancy*—Whenever there is a vacancy in the office of the President or Secretary or Treasurer such vacancy shall be filled by appointment by Government.

26. *Chairman*—In the absence of the President, the Vice-President shall preside over the meetings of the Council or the Executive Committee as the case may be. In the absence of both any other member may be elected to act as Chairman at that meeting of the Council or the Executive Committee as the case may be.

27. *Secretary*—The Executive Officer of the Academy shall be a whole-time paid Secretary.

The Secretary shall be helped by two Joint Secretaries, one each for the Hindi and the Urdu sections; and both shall be whole-time paid workers of the Academy.

28. *Remuneration to the Secretary*—The Secretary shall draw such salary as may be fixed by Government but which shall not exceed Rs.300 per mensem.

29. (a) *Appointment of staff and Joint Secretaries*—The two Joint Secretaries shall be whole-time paid officers of the Academy on such salary as may be fixed by Government but which shall not exceed Rs.150 per mensem each.

(b) The Treasurer shall be an honorary officer of the Academy and he shall be appointed by Government.

(c) *Staff of the Academy*—The staff shall consist of—
 (i) An Accountant.
 (ii) A stenographer-clerk.
 (iii) Two peons.

(d) The two Joint Secretaries shall be responsible for the keeping of the Library, in addition to their other duties.

30. *Power of Management*—The general power of management and of administration of funds shall vest in the Executive Committee, who may by a resolution delegate powers to the President or the Secretary or both:

(i) *Leave*—To grant leave to any members of the staff.

(ii) *Dismissal*—To dispense with the services of any member of the staff for reasons to be recorded and to be reported to the Executive Committee.

(iii) *Appointment*—To appoint any member of the staff in place of one whose services have been dispensed with or to appoint a person to any appointment on the staff that may be created.

(iv) *Other things*—To do all other things necessary for the due performance by the staff of their duties and for the administration of its affairs.

31. *Secretary's responsibilities*—The Secretary shall be responsible for:

(i) The organization of the Office of the Academy and the keeping of the books and registers.

(ii) The preparation of the agenda for meetings of the Council and the Committee.

(iii) All correspondence.

(iv) Making payment, the cheques to be signed by the Secretary.

(v) Preparation of Annual Report.

32. *Budget*—A budget shall be annually prepared by the Secretary and laid before the Executive Committee not later than 1st July for the year preceding that to which the budget relates and the Executive Committee shall submit it to the Local Government for approval.

33. (a) *Accounts and Audit*—The accounts of the Academy shall be controlled by an honorary treasurer.

(b) *Audit*—The accounts of the Academy shall be audited by an auditor to be appointed by the local Government and the Secretary shall produce all the documents before the auditor and give such assistance as he may require for auditing the accounts.

34. *Travelling allowances*—Members of the Council and the Executive Committee shall be entitled to such allowances for attending meetings of the Council and the Committee as may be prescribed by the local Government.

Property and Contract

35. *Property and contract*—The property, movable and immovable of the Academy shall be vested in the Council of the Academy.

36. *Legal representation*—The Academy can sue or be sued in the name of the Secretary and shall enter into all arrangements and contracts on its behalf and shall have power to execute all documents including deeds of transfer of property, movable or immovable, by or to the Academy.

Election of Fellows

37. (a) *Election of Fellows*—The Council may elect as a Fellow of the Academy any person who has achieved distinction as author in Urdu or Hindi or who by reason of his position as scholar is considered by it to be a fit and proper person for election, provided that no one shall be deemed to be elected a Fellow unless he receives the votes of three-fourths of the members of the Council.

(b) *Voting*—The following procedure shall be followed for elections:

(1) Any member of the Council may send a proposal to the Secretary in writing seconded by another member of the Council together with the consent of the nominee to be placed before the Executive Committee for consideration.

(2) The Executive Committee shall appoint a Sub-Committee of the members of the Council to consider the proposal.

(3) The Executive Committee shall consider the recommendation of the Sub-Committee and in case the Executive Committee is in agreement with the recommendation of the Sub-Committee the Secretary shall issue voting papers to the members of the Council for the recording of their votes.

(4) The members of the Council shall send the voting papers in sealed covers to the Secretary who shall open them in the presence of two members of the Council.

(5) The person who secures three-fourths of the votes of the members of the Council shall be declared elected.

(6) In case the person proposed fails to secure the necessary number of votes his name shall not be proposed again during the term of the Council.

(c) *Number*—The number of such Fellows shall not exceed thirty. Not more than six fellows shall be elected until otherwise resolved by the Council.

(d) *Privileges*—The following privileges shall be extended to the Fellows of the Academy.

(1) To attend the meetings of the Council and address the Council.

(2) To receive the publications of the Academy on the same terms as the members of the Council.

Associated Members

38. (a) *Associated Members*—The name of the person for enrolment as an associate member shall be proposed by a member of the Council and seconded by another member. The proposal form shall be sent to the Secretary who shall place it before the Executive Committee for necessary action.

(b) An associate member shall pay an annual subscription of Rs.5 and he may compound the subscription by paying Rs.60 in a lump sum.

(c) An Associate member shall be entitled to receive a copy of the "Hindustani" the Journal of the Academy (either the Urdu or the Hindi edition) free of cost and the publication of the Academy on discount rates determined by the Executive Committee.

(d) An associate member shall be entitled to be present at the meetings of the Council, but he shall not have the right to vote or address the meetings.

Honorary Fellows

29. The Executive Committee may nominate any Benefactor of the Academy or any scholar of eminence who has achieved distinction in any language or branch of knowledge as an Honorary Fellow and the Council may confirm such nominations.

Judge

30. *Committees of Judges*—The Council shall appoint annually Committees of Judges consisting of not less than three members, to judge of any work that may be submitted to them by the Executive Committee. The Judges shall record their opinion and submit it to the Executive Committee which shall then decide whether it approves the work of an author on which the Judge's Committee has reported and also whether in its opinion the author of the approved work should receive any pecuniary remuneration.

31. (a) *Remuneration to authors*—No author shall be entitled to any remuneration except when his work has been approved (1) by the Judge's Committee, and (2) the Executive Committee.

(b) No work shall be entitled to the consideration of the Judges unless submitted in its completed form.

32. *Prizes*—The Executive Committee may fix such prizes and rewards for literary works as it may deem fit.

33. *Power of the Executive Committee*—The Executive Committee may frame and pass such rules as it think fit, consistently with the object of the Academy for the conduct of its business.

APPENDIX I(a)

EXTRACT FROM THE SPEECH OF HIS EXCELLENCY SIR WILLIAM MARRIS, K.C.S.I., K.C.I.E., INAUGURATING THE HINDUSTANI ACADEMY

"To come to my main point, however, it seems to me that the outstanding need of the moment is to stimulate the production of *good original books*. I devoutly hope that the Academy will not tend to become mainly a factory of works for the consideration of text-book committees. I realized that some people regard the Academy as affording a great opportunity for making the vernacular the medium for communicating western knowledge to the people. With all possible respect to their opinion that is not my idea of its special function. It may be true that, in spite of the fact that English is the language of higher study, our students in middle schools need more translations from foreign languages of the best books on such subjects as history, literature and science, specially in its application to practical matters like agriculture industries and public health. *None the less, I hope that the production of translations will never be more than a secondary activity—a by-product of the Academy.* I hope that it will concentrate upon the production of original books, books which are essentially Indian and indeed primarily provincial, in thought. Its function, as I see it, is not so much to attend to the forms of language or to convey technical knowledge as to foster a literature. And if that literature is to be a living, beneficial thing it must be no parasite, but an independent growth. *There is already too much that is derivative about our Hindi and Urdu books.*

On the subject of translations I have already touched with some reserve. They may be a utilitarian necessity; *but never let us mistake them for really creative activity.* I incline to believe that in so far as you encourage translation you may positively impede higher work. The vital thing surely is not to find your words for other people's ideas, but to find your own ideas as well your own words in which to put them."

APPENDIX I(b)

EXTRACT FROM THE SPEECH OF HIS EXCELLENCY SIR WILLIAM MARRIS, K.C.S.I., K.C.I.E., INAUGURATING THE HINDUSTANI ACADEMY

"*If Hindi and Urdu are to yield their best, they must each enjoy a natural freedom of growth.*"

GOVERNMENT OF THE UNITED PROVINCES

No. A-1397/XV—505-1938

EDUCATION DEPARTMENT

Dated Lucknow, the 23rd May 1941

THE following report of the Government Sanskrit College Syllabus Revision Committee, United Provinces, appointed by the Government of the United Provinces under Government *Communiqué* no. 1374-G/KV—505-1938, dated the 6th July, 1938, to advise Government as to the changes that should be introduced in the syllabus of studies for the various examinations conducted by the Government Sanskrit College, Benares, as well as the scheme of examinations with a view to economise time and modernise the curriculum without in any way lowering the standard of knowledge of the scholars specialising in the various branches of Sanskrit study, is published for general information. Any comments or suggestions in this connexion may be forwarded to the Secretary to Government in the Education Department, Lucknow, by the end of July, 1941, when they will be taken into consideration by Government along with all criticisms appearing in the papers as signed articles. Anonymous contributions will not be taken into consideration.

By order,

N. C. MEHTA,

Secretary to Government,

United Provinces.

T4(P15):84.252.N46
41

REPORT OF THE SANSKRIT COLLEGE SYLLABUS REVISION COMMITTEE, UNITED PROVINCES

CHAPTER I
INTRODUCTION

THE history of the courses prescribed for the Government Sanskrit College Examinations begins from the year 1791 when the College was founded. The scheme of the courses of studies, originally proposed by Mr. Jonathan Duncan, at whose instance the institution was started, was based on the all-comprehensive scheme of the 18 Vidyas or branches of knowledge, including the four Vedas and the four Upavedas (i.e. Atharvaveda, Dhanurveda, Gandharvaveda and Ayurveda). In actual practice, however, the courses, as taught in the College, was based, from the very beginning, on the curriculum then in vogue among the Pandits of Benares.

2. That curriculum, as is well known, had been for several centuries drifting towards the study of second-rate works, of comparatively recent growth, of the type of commentaries and sub-commentaries. Throughout that period, the study of ancient original Sanskrit works—the source books or Akara Granthas—of every subject, had been receding into the back-ground. This drift has continued even during the history of the College. Attempts were made, during that period, to revive the study of ancient works like the Vedas, but they ended in failure. Thus, regeneration of the ancient Sanskrit literature, one of the main ideals of the College, has mostly remained unachieved as yet.

3. Another tendency, similarly of recent growth, of the curriculum, followed by the Pandits of Benares generally, has been to disregard the actual life of the people and the changed conditions of the world. That spirit has also continued to permeate the studies in the College. Whatever attempts have been made to improve the state of affairs in this direction, have been very partial, and have therefore achieved no tangible results.

4. From 1791 to about 1880 no serious attempt seems to have been made to systematize the courses of the College. In 1880, for the first time, the title examinations were instituted, on the model of the University degree examinations, "to stimulate the students of the Sanskrit College to a deeper, more extensive, and methodical study of Sanskrit literature." The same examinations, with certain important modifications in their nature introduced in 1887, as we shall see later on, have continued up to the present time, with some further changes in the number and the names, made in 1923.

5. From 1887 up to 1918 no important change was introduced in the courses; but the period from 1918 up to the present time is marked by a series of changes in the courses of studies. It was during this period that the Government in their G. O. no. 1264/XV, dated the 22nd April,

1922, appointed a Committee "for the revision and the re-arrangement of the course of Uttama examination". Throughout the period from 1887 up to the present time it is the only Committee that was appointed to revise the courses. But that Committee, whose report was published in the *United Provinces Gazette*, dated July 1, 1922, met only on 2 or 3 days, and naturally had no time to go deep into the question. The fundamental shortcomings of the courses practically remained as before. Still, as we shall see later on, the Committee introduced some important changes in the courses.

6. In 1923, with a view to provide a machinery for the control, conduct, and supervision of the Sanskrit College Examinations, the Government felt it necessary to create the Board of Sanskrit Studies, United Provinces. The creation of the Board was an important event. Through it, a new progressive spirit entered the Sanskrit College Examinations, and the old idea of sacrosanctity about the courses of studies began to disappear. It is owing to this that, though slowly, yet steadily, some important changes have been introduced in the courses since 1924.

7. The one indirect, but still very important, result of these changes has been to bring about a new awakening among the Sanskrit-knowing public, who have begun to think for themselves, and are no longer satisfied with the scholastic medieval order of things. A widespread dissatisfaction with the present courses of study has begun to manifest itself. For some years an agitation has been growing, especially marked in the student community, in favour of introducing reforms in the courses, so as to make them suitable for the present needs of the Sanskrit public and capable of infusing a new life in Sanskrit studies.

APPOINTMENT OF THE NEW COMMITTEE

8. It was under these circumstances that by *communiqué* no. 1374G/XV—505-1938, dated July 6, 1938, the Government of the United Provinces appointed the Sanskrit College Syllabus Revision Committee.

PERSONNEL

- (1) Dr. Bhagavan Das, M.A., D.LITT., (*Chairman*).
 - (2) MM. Pandit Pramathanath Tarakabhushan, Principal, College of Oriental Learning, Benares Hindu University (Director of Sanskrit Studies, Benares Hindu University).
 - (3) Pandit A. Chinna Swami Shastri, Mimansa Keshari, Vedavisharad, Vice-Principal, College of Theology, Benares Hindu University.
 - (4) Pandit Gopal Shastri, Darshana-Keshari, Professor of Sanskrit, Kashi Vidyapitha, Benares.
 - (5) Pandit Daya Shankar Pathak, Muttra.
 - (6) Dr. Mangal Deva Shastri, M.A., D.PHIL., Principal, Government Sanskrit College, Benares.
 - (7) Pandit Kashi Ram Saraswat, M.A., Retired Inspector of Sanskrit Pathshalas, Benares.
 - (8) Professor Babu Lal Tripathi, M.A., M.Sc., Benares Hindu University.
 - (9) One representative of the Gurukul, Hardwar (Pandit Vagishwar Vidyalkara).
 - (10) Pandit Sabhapati Upadhyaya, Principal, Birla Pathashala, Benares.
 - (11) Pandit Bhagavan Din Mishra, Vaidya, M.L.A., Brahmnpura, Bahraich.
- The Inspector of Sanskrit Pathshalas to act as Secretary of the Committee.

TERMS OF REFERENCE

"To advise Government as to the changes that should be introduced in the syllabus of studies for the various examinations conducted by the Government Sanskrit College, Benares, as well as the scheme of examinations, with a view to economize time and modernize the curriculum without in any way lowering the standard of knowledge of the scholars specializing in the various branches of Sanskrit study."

9. Under G. O. no. 2373-G/XV—505-38, dated November, 5, 1938, the Government appointed Dr. Mangal Deva Shastri, M.A., D.PHIL., Principal, Government Sanskrit College, Benares, to work as Secretary of the Sanskrit College Syllabus Revision Committee instead of the Inspector of Sanskrit Pathshalas, United Provinces.

10. The first meeting of the Committee was held on August 21, 1938 and was inaugurated by the Hon'ble Shri Sampurnanand, Minister of Education, United Provinces. The speech of the Hon'ble Minister forms Appendix I* of this Report.

11. Further meetings of the Committee were held on August 22, 23, 24, 27, 28 and 31, 1938; December 10, 11, 12, and 13, 1938; and finally on August 24, 25, 26, and 28, 1939 to consider and adopt this report.

12. At an early sitting the Committee decided to issue a questionnaire (Appendix VIII) to the Sanskrit Pathashalas, and to scholars interested in Sanskrit study. Answers were received from 270 persons and institutions. A tabulated abstract of these answers is given in Appendix X*, and important extracts from select answers in Appendix IX*.

13. At its meeting on August 31, the Committee appointed a sub-committee of the members named below, to draw up detailed courses of study for each of the examinations in accordance with the general principles agreed upon at the previous meetings, after taking into due consideration the answers received in reply to the questionnaire.

- (1) MM. Pandit Pramathanath, Tarakabhushan.
- (2) Pandit A. Chinna Swami Shastri.
- (3) Pandit Sabhapati Upadhyaya.
- (4) Pandit Gopal Shastri, Darshana Keshari.
- (5) Pandit Kashi Ram, M.A.
- (6) Pandit Babu Lal Tripathi, M.A.
- (7) Pandit Tribhuvan Prasad Upadhyaya, M.A., Vyakarana-charya.
- (8) Dr. Mangal Deva Shastri, M.A., D. PHIL., Convener.

The members were requested to consult experienced specialists of the several Shastras as necessary.

14. The meetings of the sub-committee for preparing the draft courses were held on September 13, 1938 and December 3 and 4, 1938. In accordance with the instructions of the main Committee, as well as the decision of the sub-committee, the convener of the sub-committee arranged several meetings of experts in the different Shastras, to discuss with them the changes to be introduced in the courses of studies. These meetings, some of which were kindly attended by many of the foremost Pandits of Benares, were held on September 21, October 19, November 23, 26, and 30, 1938.

Among the learned Pandits of Benares who attended these meetings and took part in the discussions regarding the new courses in the different subjects, the following names may be especially mentioned :

- (1) MM. Pandit Hari Har Kripalu, Principal, Goenka Sanskrit Maha-Vidyalya, Benares.
- (2) MM. Pandit Balkrishna Mishra, Principal, College of Oriental Learning, Benares Hindu University.
- (3) Pandit Sabhapati Upadhyaya, Principal, Birla Sanskrit Vidyalya, Benares.
- (4) Pandit Narayan Shastri Khiste, Librarian, Saraswati Bhavana Library (Manuscript section), Benares.
- (5) Pandit Shiva Datta Mishra, Government Sanskrit College, Benares.
- (6) Pandit Surya Narayana Shukla, Government Sanskrit College, Benares.
- (7) Pandit Ganapati Shastri Mokate, Government Sanskrit College, Benares.
- (8) Pandit Radha Kanta Jha, Nyayacharya, Goenka Sanskrit Mahavidyalaya, Benares.
- (9) Pandit Purnachandracharya, Benares.
- (10) Pandit Padma Prasad Bhatnair, Nyayacharya, Marwari Sanskrit College, Benares.
- (11) Pandit A. Chinna Swami Shastri, Mimansakeshari, Benares Hindu University.
- (12) Pandit Gopal Shastri, Darshan Keshari, Kashi Vidyapitha, Benares.

*Not printed.

- (13) Pandit Mahadeva Pandeya, Sahitya-Vyakaranacharya, Benares Hindu University.
- (14) Pandit Ananta Shastri Phadke, Sanskrit College, Benares.
- (15) Pandit Narasinha Acharya, Sanskrit College, Benares.
- (16) Pandit Dhundi Raj Shastri, Nityanand Veda Vidyalaya, Benares.
- (17) Pandit Bhagavat Prasad Mishra, Government Sanskrit College, Benares.
- (18) Pandit Ganga Dhar Shastri, Bhardwaj, Sanskrit College, Benares.
- (19) Pandit Gopal Shastri Nene, Sanskrit College, Benares.
- (20) Pandit Ramananda Mishra, Jyautishacharya.
- (21) Pandit Sita Ram Jha, Jyautishacharya.
- (22) Pandit Babu Lal Tripathi, M.A., M.S., Benares Hindu University.
- (23) Pandit Chandra Shekhar Jha, Jyautishacharya, Goenka Sanskrit Mahavidyalaya, Benares.
- (24) Pandit Baldeva Pathak, Jyautishacharya, Benares Hindu University.
- (25) Pandit Padmakar Dvivedi, Sanskrit College, Benares.
- (26) Pandit Raghunath Sharma, Jyautishacharya.
- (27) Pandit Madhukanta Jha, Jyautishacharya, Shyama Sanskrit Vidyalaya, Benares.
- (28) Pandit Ram Nihor Dvivedi, Jyautishacharya, Marwadi Sanskrit College, Benares.
- (29) Pandit Gena Lal Chowdhari, Jyautishacharya.
- (30) Pandit Ram Vyas Pandeya, Jyautishacharya, Benares Hindu University.
- (31) Pandit Raj Narayana Pandeya, Vyakaranacharya, Benares Hindu University.
- (32) Pandit Shiva Nath Jharkhandi, M.A., M.Sc., Librarian, Sanskrit College Library, Benares.
- (33) Pandit Narayan Datta Tripathi, Vyakaranacharya, Shri Chandra Mahavidyalaya, Benares.
- (34) Pandit Hari Nath Shastri Goenka Mahavidyalaya, Benares.
- (35) Pandit Raghunath Shastri, Vyakaranacharya, Marwari Sanskrit College, Benares.
- (36) Pandit Vama Charana Bhattacharya, Nyacharya, Rajasthan Sanskrit College, Benares.
- (37) Pandit Madan Mohan Shastri, Principal, Marwari Sanskrit College, Benares.
- (38) Pandit Ambika Prasad Upadhyaya, Benares Hindu University.
- (39) Pandit Ganpati Deva Shastri, Sanskrit College, Benares.
- (40) Pandit Pavabari Sharan, Jyautishacharya, Sanskrit College, Benares.
- (41) Pandit Chandra Shekhar Jha, Sarat Kumari Vidyalaya, Benares.
- (42) Pandit Mahadeva Shastri, Sanskrit College, Benares.

The suggestions of Pandit Vidyadhar Mishra, Principal, College of Theology, Benares Hindu University, Pandit Bhala Chandra Shastri and Pandit Hrishikesh Upadhyaya, both of the Government Sanskrit College, were also available for the courses in Veda, Sahitya and Jyautisha respectively.

In preparing the courses in Raja Shastra ("The Science of Government, or Political Science"), advantage has been taken of the valuable suggestions and recommendations of Acharya Narendra Deva, Professor Mukut Bihari Lal of the Benares Hindu University, and Dr. Beni Prasad Sahib, M.A., D.LITT., of the Allahabad University.

The courses dealing with history have been prepared mainly in consultation with Professor Jaichandra Vidyalanakara.

The courses on Sarva Nyaya and Baudha Darshana are mainly based on the suggestions of Pandit Rahul Sankrityana, as those on Jaina Darshana are based on the suggestions of Pandit Sukha Lal Shastri of Benares Hindu University, and Pandit Mahendra Kumar Shastri and Pandit Kailash Chandra Shastri of the Syadwad Vidyalaya, Benares.

15. The report may appear rather lengthy. It is due to the fact that a good portion of the second chapter has been devoted to tracing the history of the courses of studies. In our opinion, such tracing was necessary, not only to remove many misapprehensions, but also to enlighten the Sanskrit public on many points connected with the history of the Sanskrit College courses.

16. We have endeavoured to perform the task entrusted to us by the United Provinces Government, to the best of our ability, bearing in mind the valuable principle of following the middle course between conservatist inertia and radicalist excessive changefulness, and have suggested only fairly easy and readily manageable changes to begin with. As the collective mind of the people turns more and more in the new (which is fundamentally the very old) direction, the millennia—old and very deep roots of Sanskrit learning and literature will also inevitably put forth new branches and leaves, which will replace the dried up and drying limbs, and will give to the people of India an abundant yield of fresh and very wholesome fruit.

In order that this may be, it is necessary that the persons who will have most to do with the work of making the scheme successful, should be of one mind and heart, thoroughly desirous of the good of the people, not taken up with little personal considerations and prejudices, but, instead genuinely devoted to the principles and ideals on which the scheme is based. The offices of Principal and Registrar, which are even now theoretically separated, but actually are held by the same person at present, will have to be separated, if the duty of each is to be discharged properly. We trust that the Government will appoint such a person as Registrar as will loyally help to make the scheme a success for that officer is a very important factor in the working of the scheme.

CHAPTER II

HISTORY OF THE SANSKRIT COLLEGE AND DEVELOPMENT OF THE COURSES OF STUDIES PRESCRIBED FOR THE SANSKRIT COLLEGE EXAMINATIONS.

As the Committee is primarily concerned with the revision of the courses of studies prescribed for the Sanskrit College Examinations, it is but necessary, in order to understand the nature and development of the present courses, that we should know not only the history of the growth and expansion of the Sanskrit College Examinations but also the history of the Sanskrit College itself. It is only by knowing that history that we shall be able to properly appreciate the nature of the present courses of studies and in the light of that appreciation to suggest the line of further development of the same.

As the Sanskrit College Examinations have developed out of the Sanskrit College, we must first trace the history of the Sanskrit College itself. The history of the Sanskrit College, broadly speaking, can be divided into four main periods. The first period begins from 1791 and ends with 1844. The second period extends from 1844 to 1880. The third period covers the years from 1881 to 1918. The fourth period which is still running may be said to have begun from 1918.

It is unfortunate that owing to the scarcity of old College records we have not enough material to properly trace the history of the College in all its periods. The only source of our information, for the first period, is the "Sketch of the rise and progress of the Benares Pathashala or Sanskrit College" by G. Nicholls, published at the Government Press, Allahabad in 1907. The original manuscript by G. Nicholls ended only with 1848. At the time of its publication a supplement, giving a bare outline of the history of the College from 1848 to 1906, was also added. From 1844 onward we shall try to give some more information which can be gathered from whatever is extant of the College records.

ESTABLISHMENT OF THE COLLEGE AND ITS PROPOSED OBJECTS

The Benares Pathashala or Hindu College or what later on came to be designated, at different periods, either as Benares College or as Sanskrit College, Benares, was started at the instance of Mr. Jonathan Duncan, the Resident of Benares, in 1791, by the Government of Lord Cornwallis for the preservation, cultivation and improvement of the Sanskrit Literature.

PROPOSED ADVANCES OF THE INSTITUTION

As regards the advantages derivable from the establishment of the College, Mr. Duncan writes: "Two principal advantages seem derivable from such an establishment: the first to the British name and nation, in its tendency towards endearing our Government to the native Hindus, by our exceeding in our attention towards them and their system the care ever shown by their own native princes; for although learning has ever been cultivated at Benares in numerous private seminaries, yet no private institution of the kind here proposed ever appears to have existed, to which may in a considerable degree be attributed the great difficulty of our now collecting complete treatises (although such are well known to have existed) on the Hindu religion, laws, arts and sciences—a defect and loss which the permanency of a college at Benares must be peculiarly well adapted to correct and recover; by a gradual collection and corrections of the books still to be met with (although in a dispersed and imperfect state) so as with care and attention and by the assistance and exertions of the professors and students to accumulate at only a small comparative expense to Government a precious library of the most ancient and valuable general learning and tradition now perhaps existing in any part of the globe.

"The second principal advantage that may be derived from this institution will be felt in its effects, more immediately by the natives, though not without being participated in by the British subjects, who are to rule over them, by preserving and disseminating a knowledge of the Hindu Law, and proving a nursery of the future doctors and expounders thereof to assist European Judges in the due, regular and uniform administration of its genuine letter and spirit to the body of the people."

The above passage clearly shows that according to the ideas of Mr. Duncan the college was intended to be, from the very beginning, not only a seat of learning or a place for the diffusion of Sanskrit knowledge, but also a place for the collection, preservation and regeneration of the ancient Sanskrit literature. How far these expectations have already been fulfilled, we shall examine in due course.

THE PROPOSED SCHEME OF THE COURSES OF STUDIES

With a view to lay down the courses to be taught in the institution, the Resident communicated to the Government the following analysis of Hindu Literature, pointing out to the professors "the several branches of learning it would be their object to cultivate, and perhaps in time to improve."

The analysis taken from the Agani-Purana was: (1) The four Vedas, (2) four Upavedas (Ayurveda, Gandharvaveda, Dharmurveda and Arthaveda), (3) six Vedangas (Shiksha, Vyakarana, Chhandas, Nirukta, Kalpa and Jyautisha), (4) Darshana (e.g. Mimansa and Nyaya), (5) Smriti (Dharmashastra), and (6) Purana.

This analysis is apparently based on the scheme of the Eighteen Vidyas or branches of knowledge and shows at a glance the all-comprehensive scheme of studies that was placed as the ideal before the Sanskrit College even at the time of its foundation. Though the ideal by the very nature of its comprehensiveness has not yet been realized in its entirety, it can still guide us in our suggestions as regards the further extension of the activities of the College.

THE FIRST ESTABLISHMENT OF THE COLLEGE

At the outset it was considered proper to appoint only nine professors, including the Rector or head Pandit, who were to teach Veda, Vyakarana, Vedanta, Nyaya, Mimansa, Purana (and Kavva), Jyautisha, Ayurveda and Dharmashastra.

The proposed rules for the College, among other things laid down :

- (1) The Governor in Council to be visitor and the Resident his Deputy.
- (2) The nine scholars (or eighteen if so many can be supported) to be taught gratis, but no other except a certain number of such poor boys whose parents or kinsmen cannot pay for instruction; all other scholars should pay their respective teachers as usual.
- (3) The scholars to be examined four times a year.
- (4) Each professor to compose annually a lecture for the use of his students in his respective science and copies of such lectures to be delivered to the Resident.
- (5) The plan of a course of studies in each science to be prepared by the several professors.

Nine students were accordingly assigned to the nine teachers with various allowances. They were obviously the foundation students. There is no information available as to the number of non-foundation students at this time. The proportion of these two kinds of students as well as their total number always varied from time to time and depended on the satisfactory or the otherwise condition of the institution. The table given as Appendix II* and taken from the Sketch will give a clear idea on the point.

The same is the case with the number of teachers and their classes, which also varied from time to time, not only according to the subjects taught in the College, but also according to the number of teachers required to teach any particular subject in consonance with the importance attached to it. Thus in 1800 we find a list of 12 teachers including a teacher for each of the four Vedas. In 1813 again we find that "A vacancy having occurred in the Rig Veda and the study of Dharma Shastra being considered of more importance than the Vedas, the Professorship of the latter was abolished, and a (second) chair of Law established in its room." In 1836 again we find four professors of Grammar with 74 pupils; Appendix II* will also show the number of teachers as it existed from year to year during the first period of the College.

THE ADMINISTRATION OF THE COLLEGE

Under the first rules of the College the general supervision was vested in the Resident, but the internal management and discipline of the College was left to the Rector or head Pandit. This arrangement continued at least for 7 years (1791 to 1798). It appears that during this period abuses had taken place in the management of the College affairs by the Rector; for in 1798 Government issued orders for the formation of a Committee to inquire into the dispute existing in the College and other circumstances connected with it." The inquiry brought to light all sorts of malpractices of the Rector and some other members of the teaching staff, with the result that the Rector and some other Pandits were dismissed and new appointments were made in their place, and all the powers hitherto vested in the Resident were transferred to the Committee.

This Committee in course of time became a permanent institution for supervising the College affairs and came to be designated, later on, as "the Committee of the Benares College", or "the Committee of Superintendence for the Hindu College, Benares", or "Local Committee of Public Instruction."

At first the general Superintendence of the College affairs was vested in the Committee, while the Secretary attended to routine matters only. It was, however, soon realized that the proper superintendence and control of the College could only be carried on effectively by a whole-time European officer as its head. From 1820 therefore the Government decided that the Secretary, under the authority of the Committee, was to act also as the Superintendent of the College. He was made responsible for the internal discipline of the College as well as the courses of studies to be pursued therein. This arrangement continued till the end of the first period of College history, i.e., 1844, when, for the first time, the post of the Principal was created.

*Not printed.

THE SUBJECT TAUGHT IN THE COLLEGE

We have already referred to the all-comprehensive scheme of the courses of studies based on the eighteen Vidyas, the cultivation and in course of time even the improvement of which, Mr. Duncan contemplated, would be the object of the professors of the College. In due course we shall thoroughly discuss the question as to how far this ideal of Mr. Duncan has been so far realized. Here we would confine ourselves to the various subjects which were taught in the College in its first period. The first establishment of the Pandits, we have seen, was appointed to teach Veda, Vyakarana, Vedanta, Nyaya, Mimansa, Purana (and Kavya), Jyautisha, Ayurveda and Dharmashastra. Of these subjects, Vyakarana, Vedanta, Nyaya, Jyautisha and Dharmashastra have always, without any interruption, been taught in the College. Though there has been variation in the degree of importance or popularity attained to any of these subjects, the question never arose regarding the discontinuance of their teaching in the College. But similar has not been the case with certain other subjects, as detailed below.

DHARMASHASTRA

In consonance with the views of Mr. Duncan, that one of the principal advantages to be derived from the establishment of the College would be the training of the doctors and expounders of Hindu Law to assist European Judges in its administration in the British Courts, a great deal of importance, during the early years of the College, was attached to the teaching of Dharmashastra. The College at the time used to supply Law Pandits to the then British Courts. It was in view of this importance that a second Dharmashastra chair, as referred to already, was established in the College in 1813. "The introduction", says the Sketch, "of the study of Hindu Law, by the establishment of the Dharmashastra professorships, was highly commendable, and certainly beneficial to the College, both in a literary and utilitarian point of view; for the Vewastus (Vyavasthas) of the College Pandits have always been considered valuable, in all disputed points of law, not only by the courts, but by private individuals." But as the practice of referring questions of Law to the Pandits of the College was, by the order of the Sadar Dewani Adalat, considered irregular and was discontinued from about 1837, and also because the Government from about 1830, in the nomination of Government Vakils in the Indian Courts, began to attach more and more importance to the knowledge of English, the importance of Dharmashastra gradually declined. The second Dharmashastra chair was also abolished in course of time.

THE PERSIAN CLASS

In 1813 it was considered of much importance that the Law Pandits attached to the Courts should be acquainted with Persian, so that they might be able to translate the various law questions submitted to them in Persian. A Persian class with a Munshi was therefore started in 1813 "for the purpose of teaching the Persian language to those students of the Hindu Law, who may wish to be appointed Pandits in the Courts, or to any other students who might wish to acquire a knowledge of Persian". As regards this class the writer of the Sketch says (page 19): "The establishment of a professorship for instruction of Law Pandits in Persian was correct in theory, but an utter failure in practice; for I believe it to be a fact that not a single Pandit ever availed himself of the facility offered for acquiring a knowledge of Persian."

This Persian class, in which it seems Arabic also used to be taught, was abolished in 1838, for, to quote the Sketch (page 78) again, "The Persian and Arabic class having been diverted from its original design, inasmuch as none of the Pandits had studied Persian, with a view to qualify themselves for Law officers, nor any Persian scholar studied Sanskrit; the General Committee after consulting with the Local Committee abolished the class."

In 1841 the Persian and Arabic class was again established under the orders of the Governor-General, not necessarily with a view to teach the languages to the Sanskrit students, but as a general class open to all those who wished to study them. About 1844 the Persian class, hitherto attached to the Sanskrit College, was removed to the English College.

THE VEDAS

It was intended from the very beginning that the Vedas should form an important subject of study in the College. We have seen that there was provision for it in the first establishment of the Pandits. In 1800, we learn from the Sketch (page 7), the College establishment included four Veda Pandits, i.e., one for each Veda. But it would seem that, later on this all-important subject, due to various reasons, could not hold its own, and, in spite of their wishes to the contrary, the authorities of the College were led to the total abolition of the Veda professorships about 1828.

In view of the great importance of the subject, it would not be out of place to quote a few rather significant extracts from the Sketch on this point.

In 1820 the Local Committee, while proposing to the Government the abolition of the Veda classes, wrote: "It appears from the report of the examination of the pupils that the course of study does not introduce the students to any sort of acquaintance with subject of their studies, and that all that the professors themselves are able to communicate is the mechanical repetition of unintelligible sounds" (Sketch, pages 32 and 33).

In 1828 the remarks of the General Committee of Instruction (at Calcutta) upon the proposition for the abolition of the Veda classes were as follows: "The Local Committee has concurred in the recommendation of Captain Thoresby, to abolish the Veda classes and, constituted as they have hitherto been, we see no objection; the sole object of tuition having been the recitation of such parts of the ritual, as are still in use, agreeably to fixed cadences and intonations, without any attempt to explain the sense of the original passage. As observed by Captain Thoresby the only end of this institution was to enable indigent and ignorant Brahmans to gain a livelihood, as underling priests. Although, however, we concur in the arrangements adopted by the Local Committee we should regret to see the study of the Vedas altogether excluded from the Government Colleges as it would be by its abolition at Benares, there being no Veda class in the Sanskrit College at Calcutta. The Act itself might be misconstrued into a design to obliterate that which is the basis of the original Hindu system, and it would certainly contribute to the total loss of works, which are valuable for the light they throw upon the history of the Hindu religion, and Sanskrit Language. The Vedas exercise but little influence upon the present practices of the Hindus, and much of their language is obsolete; if wholly neglected therefore they will soon become unintelligible. Without therefore attaching undue importance to the study, we should wish it to be cultivated to a sufficient extent to provide a few Pandits able to explain the ancient text. We should accordingly propose to keep one class for the perusal of the Vedas, with the commentaries attached to them, not with the same object as heretofore, but for the purpose of understanding their purport, and interpreting their language (Sketch, pages 64 and 65)".

Again the Sketch says (page 19): "Considering the high antiquity of this branch of learning; the fact that it has been so much neglected by the Pandits of Benares, that it is a matter of dispute if any Pandits, now living, are acquainted with the sacred books, so as to explain them; it is a pity that in a college, established by Government for the express purpose of not only cultivating, but preserving Hindu Literature, studies of the highest antiquarian value should have been discouraged by the abolition of the Veda professorships".

All these extracts tell the sad tale of how and why the professorships of Veda were abolished from the College during the first period of its history. The subject was, however again introduced in the College in 1922 by the creation of a chair of the Shukla-yajurveda.

SANKHYA AND SAHITYA

In 1820, with the permission of the Government, the Local Committee created two new professorships, one for Sankhya (+ Yoga), "hitherto unaccountably omitted", and the other for Sahitya (or Kavya and Alankara) or "Polite Literature". Both these subjects, though introduced rather late, have ever since continued to be taught in the College.

MIMANSA

We have seen that in the first establishment of the College professors there was a provision for the teaching of Mimansa. But in 1834 "The Secretary proposed the abolition of the Mimansa class on the grounds of the unpopular nature of the study causing a disinclination on the part of the students to pursue it". Under the orders of the Government the Mimansa class was therefore abolished in 1835. We shall see later on that about 1880, when the new Sanskrit College Examinations were started, the subject of Mimansa was included among the courses of studies for the Acharya Examination. But it seems that the subject was not regularly taught nor there was any special chair for it in the College. In the words of the writer of the Sketch the abolition of a metaphysical chair in a College established to promote and to preserve Hindu Literature was rather startling.

PURANA

Though there was a provision for the teaching of Purana in the first establishment of the College, it seems, the study of the subject was never placed on a realistic footing in the College. The subject continued, almost from the very beginning, to be assigned to one of the professors specifically appointed for other subjects. It therefore always occupied a very inferior position in the College and the students also do not seem to have evinced any real interest in the subject. It was for such reasons that under the orders of the Government the Purana class was abolished in 1835, and the Purana Pandit "was directed to attend the College and assist the other Pandits". Through the munificence of Seth Gauri Shankar Goenka, a gentleman highly interested in the revival of Sanskrit Studies, a chair for the subject has however again been established in the College since 1930.

AYURVEDA

Ayurveda or Medicine, we have seen, was made a subject of study in the College from the very beginning. But as it does not seem to have gained much popularity with the students it gradually came to be neglected and since 1823, when the teacher of the Medical class was appointed professor of the Puranas in addition to his own duties, it seems, the subject came to lose all interest, and with the dismissal of the Pandit in 1826 even the nominal chair of Medicine became extinct.

In 1833, however, there was again a proposal to start a Medical class on a better scale and with higher aims than before. But for some unexplained reasons the class was never established. It would be of some interest to give here an extract from the Sketch (page 74): "In August 1833 the General Committee suggested the expediency of establishing a Medical class in connection with the Sanskrit College, and requested the Local Committee would take the subject into its early consideration. It was proposed that the class should be similarly constituted to the one attached to the Sanskrit College in Calcutta, in which instruction both on the Indian and European systems was imparted, theoretic instruction being confirmed by clinical observations in a small hospital, the patients in which were attended by the pupils of the class, the English language being made the medium of instruction in the European system."

"The Local Committee in reply stated there could be no objection to the proposed Medical class, and it appeared probable the measure would be attended with success, and that eventually it would prove highly useful. None of the students in the Sanskrit College having manifested any inclination for the study of English, some time must elapse before any of them could be fitted to attend Medical lectures in English; it was proposed to engage a native Medical professor in the first instance, and that when the class was sufficiently forward, an arrangement, it was thought, might be made with the Civil Surgeon to give lectures and hospital instruction to the class."

"The General Committee, replying to the Local Committee upon the proposal for a Medical class, remarks with satisfaction that it is expected that some of the pupils of the Hindu College will attend the class, and it infers that the prejudice which has so long kept Bengali Brahmans from joining the Medical class does not prevail among the classes of Brahman pupils of Benares."

THE COURSES OF STUDIES

The Sketch, we have seen, is very helpful in giving us an idea of the history of the different subjects taught in the College during the first period. But unfortunately it is not so when we come to examine as to what courses of study were prescribed for, or at least were taught in, each of the subjects. We have already referred to the fact that one of the proposed rules for the College laid down that the plan of a course of studies in each science was to be prepared by the several professors; but what was the course or whether it was actually prepared in the first years of the College we do not know definitely. Nor do we know whether at the time any attempt was made to classify pupils of the different sciences according to their different degrees of proficiency.

For the first time we find that in 1815 the Local Committee ordered that "All supernumerary students attending college, with a view of being ultimately admitted on the foundation, were to be admitted into the Vyakarana class and no other. Those students, who had obtained a knowledge of Vyakarana, were to be promoted from time to time as opportunity offered to the higher classes in the college".

In 1820 Dr. H. H. Wilson and Captain Edward Fell, who were appointed to examine and report on the state of the Sanskrit College, in course of their report wrote: "We have also to observe in this class (Vyakarana), as well as in all the rest, the utter absence of classification, properly so termed, and the want of those instructions, as honourable as useful, by which pupils are in all Seminaries discriminated, and arranged according to their different degrees of proficiency, and the different subjects of their more or less advanced studies." (Sketch page 25); again "A student it seems is permitted to enter into any class at will and with or without any previous requisitions, and the Tyro who can scarcely decipher the character, and who has no idea of any such a distinction as a noun or verb, plunges confidently into the mysteries of Law or Physic, Logic or Divinity; the consequence is such as might be ...expected, and a most unprofitable waste of time and labour ensues; there is another evil attached to it, the disgust and indifference of the professors who are thus compelled to teach letters and words, when they ought to be employed in communicating thoughts and things." (Sketch, page 26).

The same year the Local Committee made, *inter alia*, the following proposals to the Government:

"Upon entering the College at the usual age, the student shall be expected to undergo an examination in the Rudiments of Grammar, as explained in the various elementary treatises which are ordinarily read by the Hindus, at an early period of life, and without some acquaintance with which nobody shall be admitted; he shall then enter the first Grammar class, studying the Sidhanta Kaumudi and the Sutras of Panini, and shall be engaged two years in this department of study alone.

"At the end of two years or three years, we conceive that the student should associate his grammatical studies in a higher class, that of Polite Literature, including Prosody and Rhetoric, in which, and in the higher classes of Grammar, he may be allowed to continue for three years more; he should also, during some portion of this time, acquire the elementary rules of Arithmetic as far at least as the end of Division, and he must then, at the expiration of the five years if he has exercised any diligence, or is possessed of any ability, be fully qualified to enter upon more important and more abstruse studies, in the selection of which, for the remaining seven years of his stay, he may be safely left to his own discretion" (Sketch, pages 34 and 35).

This seems to be the first attempt to somewhat systematize instruction in the College. According to these proposals a student, before he was admitted to the College, was expected to have studied rudiments of Sanskrit Grammar roughly up to the standard of the Laghukaumudi. Then he was to study for two years in the first Grammar class. This was followed by a three years' study of higher Grammar coupled with Prosody and Rhetoric and Elementary rules of Arithmetic. This was to be followed by a seven years' still higher study of a more important and abstruse nature in any of the different subjects taught in the College. The subsequent history of the College shows that the scheme was not strictly followed, still the proposals mark an important forward step in the history of development of the College, which in a way foreshadowed the beginning of the later Prathama, Madhyama and Acharya Examinations.

The Government while approving of these proposals also intimated that the books to be studied in the College shall be determined for each class by the Pandit of each class, with the consent of the Superintendent.

For the first and last time, in connection with the first report of the quarterly examination, dated 1820, we come across, in the Sketch, a list of books taught in the various subjects in the College. The list does not show any high level of study in most of the subjects (for the list of the books, analyzed subjectwise, see Appendix III). According to the list the study of Grammar did not go beyond the Siddhanta Kaumudi, while the study of poetry was confined only to the Raghuvansha, Magha and Bhatti. Nor does the list show any systematic basis of study of books regarding any particular subject. The two Grammar classes, for instance, referred to in the list, were not based on any gradation of study, and practically the same books were taught in both the classes.

Another similar and at the same time much bigger list of books studied in the College is also fortunately available to us from an extant College record dealing with the period 1842 to about 1848. The list is probably meant for the year 1842 and reflects the progress the College had made during interval since 1820. The list shows, besides other interesting points, that Arithmetic was taught from a book called Shikshamala and that Rekha Ganita also was being studied. But here also we see the same want of regular gradation of books or courses (for the list of the books, see Appendix IV).

It would seem that, with the possible exception of the partial attempt of the Local Committee in 1820, referred to already, no serious attempt was ever made, throughout the first period, either to introduce or even to evolve any graded or definite course of study in any of the subjects taught in the College. Probably it was left to the fancy of the students or at best to the fancy of the teacher concerned as to which books were to be studied in any particular class of the College.

THE TERM OF STUDY

It appears that in the first year of the College no limit was fixed as to the total period allowed for study. This non-limitation of time for continuance of stay in the College naturally led to a lax system of instruction pursued by the preceptors. The College Committee therefore resolved for the first time in 1813 "That the term of study should be limited to 12 years, during which period students should draw allowances according to a specified scale; but that no student, who continued in the College after the above period, should draw any allowance". The proposition was at first objected to by the Government, as it exceeded the period allowed in the Madrisa of Calcutta. But the Committee insisting on the advisability of fixing the term of study at 12 years, the Government agreed to the proposition subject to limitation in particular cases.

This was the beginning of the future tradition of 12 years' study in the College for proficiency in any particular subject, which has continued to influence the courses of study of the College, even under changing conditions, up to the present time.

EXAMINATIONS

In spite of the fact that one of the first proposed rules for the College provided that the scholars were to be examined four times a year in the presence of the Resident, due to the unsatisfactory condition of the College, no examinations whatsoever seem to have taken place in the College in its early years. In 1811 for the first time, the Government, while anxious to reform the state of the College, *inter alia*, proposed:

"That public disputations be held annually before the Committee and in the presence of all other persons who may be desirous of attending, and that prizes, rewards, and literary honours be conferred on such students as shall have manifested the greatest proficiency."

"One of the most remarkable features" or adds the Sketch, "in the Government proposition was the value of prizes to be bestowed at the annual exhibitions which were as follows:

	Rs.
The best scholar and successful disputant	800
The next	400
The third	200
The fourth	100

For other good scholars an honorary dress, to each, consisting of a cloth of little (? small) value, for this Rs.200 were to be allowed" (page 15 of the Sketch).

The Committee, however, considered that a more signal and durable mark of merit at the public examination might be found in the distribution of medals, in lieu of honorary dresses, and therefore in 1813 recommended to Government the substitution of medals in the place of the latter marks of honour. The proposition of bestowing medals, instead of honorary dresses, was agreed to, but was never carried out.

In 1820, the Local Committee, while formulating a scheme of courses of study (already referred to on page 13) and classes also proposed. "On removing from one class to another, certificates of proficiency in the one quitted should be given to the student signed by the Pandit under the approbation and with the confirmatory countersignature of the Superintendent, and on the student's finally leaving the College a certificate of his proficiency in any class or classes signed by the Superintendent and countersigned by the members of the Committee may be granted him, a testimony which will be advantageous as well as creditable to the holder, and which might perhaps be hereafter required as the qualification of those Pandits who may become candidates for employment, in any line, under the members of the Honourable Company's service" (Sketch, pages 35 and 36).

The Government while approving of this proposal also remarked that "Fixed periods should be fixed for the public examination of the students and that considerable advantage will probably result from the attendance, not only of the gentlemen of the Committee, but also of any other British or native gentlemen who can be induced to attend".

The writer of the Sketch remarks (page 45) in this connection: "Although it was repeatedly resolved and ordered that annual examinations and disputations should take place, at which rewards, medals, literary distinctions, etc., should be given to deserving pupils, nothing appears upon record bearing upon these points till 1st January, 1821, when a meeting of the Committee was held, at which it was resolved that prizes, in gold mohurs, to the amount of nine hundred and sixty rupees, should be distributed to the students reported as having made most proficiency". Thus the public disputation and the annual examination, probably for the first time, were held in the College in 1821.

Once started, these annual examinations and public disputations became a regular annual function of the College and continued to exert a stimulating influence both on the students and the staff probably till about the end of the first period of the College history. About the first public disputation it is recorded that the ceremony was "fully attended by the gentlemen of the station both civil and military, and likewise by a numerous party of the most distinguished natives residing at and near Benares". Similarly the report about the second public disputation says that it was attended by the Raja of Benares who presented Rs.1,000 to the institution, and that many of the higher class of Indians evinced their opinion of the institution by donations, amounting in the whole to Rs.4,378. These public disputations (or Shastrarthas), which served the purpose of Annual Convocations, gradually seem to have lost their importance and were discontinued. The annual examinations, however, continued to be held in the College, as we shall see later on, long even after the introduction of the present Sanskrit College Examinations.

As to the nature of the certificate of proficiency granted during this period to students, leaving the College after successful termination of their studies, we have fortunately copies of two or three of such certificates on record. As they are sure to be of interest we quote two of them in the following (1) "Certified that Ambika Datt attended the Government Benares Sanskrit College for 12 years during which period he passed several creditable Examinations. He studied Vedant under Umá Rám Pandit for 10 years, Nyáya under Krishn Chandr Bhattácharj, and read Shankh (=Sāṅkhya) Jog, Vákarná (=Yoga, Vyākaraṇa) and Law within this period."

BENARES : OFFICE OF LOCAL
COMMITTEE OF PUBLIC.

INSTRUCTION:
15th August, 1843.

(Sd.) D. BUTLER,
Secretary, Local Committee of Public
Instruction.

The Sanskrit copy of the same is as follows :

स्वस्तिश्रीमद्रसाशुनासीरवीरवीरजितजितसापत्नवीरसार्वाभीमकम्पनीप्रभूनिव्योजित
काशीराजधानीस्थसंस्कृतपाठशालायां वेदान्तपाठनाधिकार्युमारावपंडितसमीपे दश समा-
न्यायपाठनाधिकारिश्रीतर्कभूषणश्रीकृष्णचन्द्रमट्टाचार्यपास्वे द्वे सभे इत्येवं द्वादश समा-
निगनावसिति विद्याप्रस्थाने त्रययोगपातञ्जलकार्पिलसन्दर्भकाणादगौतमनिबन्धापूर्वपूर्वमीमांसा ग्रन्थ
वादवैतसदानेदवदनवर्मशास्त्रादिष्वचीतिताधिगतसद्दीतिताकतया वैदुशीपरिमंडितोजनि
पंडितोयमन्त्रिकादत्तशर्मनिखिलपाण्डितीकृतिसमह्रापि प्रतिवर्षदत्तसम्यक्परिक्षी धर्मशास्त्र
व्यवस्थालेखपूर्वमित्येतदर्थपरिवोधकमिदं पत्रमस्या भतिसुष्टं सकलपंडितमंडलीप्रधानसाहचैरिति
शिवम् ।

(sic)

(Sd.) D. BUTLER,

Secretary, Local Committee of Public
Instruction.

(2) "Mahanand was for 12 years a student in the Government Sanskrit College at Benares and studied during that time Grammar as far as the Mahabhasya, the Nyaya and the Vedant and gave some attention to the Sarikhya to poetry and Hindu Law. He appears to be a very fair Sanskrit scholar; and has obtained to (? two) prizes.

(Sd.) J. MUIR,

Principal and Secretary, Local Committee of
Public Instruction.

(This is followed by the signatures of the president and members of the Local Committee.)

The Sanskrit copy of the same is as follows :

स्वस्ति० भूमंडलार्जुनकम्पनीशप्रवृत्ताधीतित्तिगृहिकामि । समा दश द्वे अपठत् परीक्षा
पूर्वं महानन्दबुधो विदेशी ॥१॥ तर्थाह प्रथमसोपानस्यव्याकरणव्यापकपण्डितश्री विठ्ठल
शास्त्रिणो मनोस्मादिमहाभाष्यास्तं व्याकरणं यावत्सद्द्वर्षं समाप्य तदनन्तरमावर्षं चतुष्टय
यज्ञयाशास्त्रपण्डितेभ्यः श्रीकृष्णचरणतर्कभूषणेभ्यो मुक्तावलीभारभ्य गादाधरीं स्वयंभित्ता-
रान्ताभ्यः किंवा वेदान्तशास्त्रीभ्योपकश्रीमदुमारावपण्डितात् चदशीभारभ्य शारीरकभाष्या-
वसानं वर्षद्वयेपे पठित्वा मध्ये मध्ये समीचीनपरीक्षादानेन सन्तुष्टचेतोभ्यः प्रभूम्यो लब्धदक्षिणः
स्वोपयुक्तसंक्षेपं श्रीहीरानन्दपण्डितादनीत्य साहित्यधर्मशास्त्राणि पाठशालास्थपण्डितेभ्योऽनीत्य
पण्डित्यगतः कार्याधिकाराहंनैत्यर्थसंसुचकपत्रमेताद्वितीर्णमस्मै विबुधप्रधानंस्तदव्यापकः
शुभम् ।

संवत् १९०१ श्रावणकृष्णतृतीयादिष्टद्वयेऽयं सलेखस्समजनि सन् १८४४ माह जुलाई
तारीख ३ ।

सममान्ययमर्थसुकुलोपाह नोमारावशर्मपण्डितः
चतुर्वेदीरानन्दशर्मपण्डितसमतम्
सम्मतोयमर्थः श्रीकृष्णचरणशर्मणः
सम्मतितरेतदर्थे नारायणशास्त्रिणाम्
साक्ष्यत्र काशीनाथशास्त्री
श्रीगुलजारशर्मपण्डितः

RESUME OF THE FIRST PERIOD

As already stated, the first period in the history of the College comes to an end with the year 1844, when for the first time the post of the Principal was created. Before we enter the second period it is better to give here a *résumé* of the first period.

The importance of this period primarily lies in the fact that it was during this time that those broad lines were laid down on which the future development of the College was to follow. From this point of view this may be called the Formative Period in the history of the College. From any other point of view it cannot be said that the College was a success during this period. We have already referred to the high ideals with which the College was founded. We also find that the authorities wanted to make the College "a seminary of the very first order", or "the most respectable seminary of Hindu learning in India" so that it might become "a material cause in the revival of Sanskrit literature". It cannot be claimed that during the first period the College in any way fulfilled these expectations or even attained the proud position of being a seminary of the very first order. This want of any marked success of the institution can be attributed to various causes.

In the first place, the College in its early period was left without any proper supervision and control. It is recorded about that time that

"the College instead of being looked up to by natives with respect and veneration, is an object of their ridicule; instead of an assemblage of learned Hindus, it resembles a band of pensioners supported by the charity of Government". It also appears that throughout the first period, the authorities with one or two exceptions, did not succeed in securing the services of the best Pandits of Benares. Even as late as 1841 a report on the College, while emphasizing the desirability of examining into the qualifications of the teachers, recorded that it was singular but at the same time perfectly true "that this College since its first institution in 1792 (1791?) has not produced one eminent Sanskrit scholar".

Really speaking, in spite of their good intentions and high aims, the authorities, during the first period, found themselves unable to properly direct and control the institution. No proper care was taken even to formulate any definite courses of study. Probably they did not even know their own mind. This explains the want of any definite and well-considered policy on their part towards the College. While at one time they wanted to make the College the most important Sanskrit seminary in India and with this view showed every liberality towards the creation of chairs of different subjects and the increase of stipends and scholarships, at another time we hear not only of the abolition of different chairs or reduction of stipends but also of proposals to close the institution itself or to redirect it to some other aims.

It was due to these and similar cause that during the first period the College could not acquire any real popularity among the Sanskrit public. Whatever popularity it enjoyed always depended on the number of scholarships, prizes and rewards available in the College and the number of students varied according to the amount of facility thus available.

THE COLLEGE BETWEEN 1844 AND 1880

On the 20th April, 1844 J. Muir, Esq., I.C.S., a talented Sanskrit scholar, assumed charge of the College as its first Principal. Henceforth both the English College, which had been started in 1830 under the title of the Benares Anglo-Indian Seminary—later on called the Benares English Seminary or the Benares Government School—and the Sanskrit College were united and placed under the charge of the same Principal. Both the Colleges thus united became known as the "Benares College".

Mr. J. Muir seems to have brought about a great deal of improvement in the details of internal administration as well as courses of studies of the College. He was in favour of the introduction of such Sanskrit works in the courses of studies of the College as would impart knowledge of practical utility instead of confining the studies of the scholars to the abstruse systems of Hindu philosophy, as had hitherto been the practice. With the above view he drew up a new scheme of instruction to be pursued in the College, in which an emphasis was laid on the study of a vernacular (Hindi) also. According to the scheme every student of the Sanskrit College, or rather the Sanskrit Department, instead of confining himself, from the very beginning, to the exclusive study of one or at the most two subjects was required to devote himself also to the study of poetry and arithmetic in the first two classes; and in the third class, besides Vyakarana, poetry, and arithmetic, had to study also Nyaya or Smriti. From the fourth class or stage the students were free to pursue the study of any subject according to their choice. The order of the Principal to this effect, dated 25th April, 1844, in its original is as follows:

विद्यालयं वर्तमानं पाठनक्रमात् लोकनाच्छात्राणां मनोयोगः प्रायशः एकस्यां विद्यायां किं वा विद्याद्वयं भवति । अत्रेतेषु क्रमेणच्छात्राणामं यद्येत्सितो ज्ञानोदयो न जायते इति प्रतीयते । अतः सर्वे स्वात्मब्रह्मविद्याभिर्व्याकरणभ्यासानन्तरं गणितं काव्यं चित्तं अपि अभ्यस्ये इति शोधवध्यक्षाय रोचते । तदनन्तरं चतुर्थे किं वा पञ्चमेन्द्रे प्रोक्तविद्यात्रयाभ्यासादूर्ध्वं स्मृतेः किं वा न्यायस्याभ्यासः करिष्यते । अथे च व्याकरणादी यद्येष्टं प्रवेक्षे जाते तं त्यक्त्वा कस्यापि विद्यान्तरस्याभ्यासः कर्तव्यः ।

क्रमस्वार्थं वक्ष्यते । तथाहि—अल्पवयसां प्रथमद्वितीयवर्गार्थं (भ्यां) व्याकरणं १ गणितं २ क्रमिकानि ३ अभ्येयानि । तृतीये वर्गेण व्याकरणगणितं काव्यादन्तरं स्मृतेः किं वा न्यायस्य वा अभ्यासः कर्तव्यः । चतुर्थवर्गेण वेदान्तसांख्यादीनामभ्यासः कर्तुं शक्यते ।

पूर्वोक्ता ज्ञप्ति सफलीकरणार्थं श्रीमत्पण्डितमिलितंस्वपायप्रयोगोऽविलम्बेन कर्तव्यः अपरं चाधुनारभ्य व्याकरणसंबन्धिविद्यार्थिनो गणितकाव्याभ्यासार्थं तत्तच्छालयोरमुक्त समये निरुद्धते प्रेषयितव्या इति प्रवक्तो गनिधि उपोटी शब्द वाच्यपण्डितेभ्यं रीतिरनुसारीया पाठालये । ता० २५ माह् अपरं सन् १८४४ ई०, संवत् १९०१ वैशाख शुक्ल ७ ।

Mr. Muir also seems to have formulated a graded courses with regard to each and every subject studied in the College and to have classified pupils of each subject according to their different degrees of proficiency, assigning each class to a particular professor. His scheme of instruction for Grammar, for instance, was as follows :

A beginner was required to read, besides other subjects, the Laghukaumudi and Sanskrit-Mala for a year and a half with one teacher. Then he was to study, the Siddhanta-Kaumudi in two years in a higher class with another teacher. Finally he could study higher works on Grammar, from the Manorama up to the Mahabhasya, with a third teacher. The Grammar teachers were especially asked to see that the Grammar students were able to acquire also the power of making use of the knowledge of Grammar they possessed. The order, dated the 7th May, 1844, in so far as it relates to the teaching of Grammar, is as follows :

ता० ७ माह् मई सन् १८४४ ई० श्रीमदध्यक्षजानम्पुर साहब पण्डित पाकशासनस्याज्ञापन-मिदम् : श्रीः अक्षरस्य विद्यालयेऽयं वक्ष्यमाणः क्रमः पालनीयः ।

ये ये नायवेति प्रसिद्धः पण्डितास्ते ते स्वस्व प्रवक्तव्यपण्डितानामाज्ञावीना भवितुमर्हन्ति ॥१॥ विद्यालये च प्रविश्य विद्यार्थिनः प्रथमं नायवानां निकटे अवीत्य तदनन्तरं प्रवक्तव्य पण्डितस्य समीपे पठिष्यन्ति ॥२॥ व्याकरणे चायं क्रमः । प्रथमं छात्रा दुर्गदित पण्डितस्य निकटे लघुकौमुदी संस्कृतमालां च साद्वैतवर्षाविधिमभिव्याष्य पठिष्यन्ति ॥३॥ तदनन्तरं देव-दत्तपण्डितस्य समीपं गत्वा वर्षद्वयपर्यन्तं सिद्धान्तकौमुदीमध्यष्यन्ते ॥४॥ शेषे च नारायणशास्त्रि-णस्तत्रिवाणे भनोरमादि महाभाष्यपर्यन्तानामध्ययनं करिष्यन्ति ॥५॥ काशीनाथ शास्त्रिणश्च समीपेऽपि महाभाष्याध्ययनेच्छन्ते महाभाष्यं पठितुं शक्नुवन्ति ॥६॥ वैयाकरणैः पण्डितैर्व्यासवे छात्रा अर्थबोधने श्रीधरमधिकारिणो जायंरंस्तथा मतिव्यम् ॥

The course of study which he drew up for the candidates for the junior and senior scholarships is very interesting and shows his anxiety for introducing new studies among the Sanskrit students. The prescribed course for the junior candidates was as follows :

- (1) Grammar with lexicography.
- (2) Kumarasambhava, Ragnuvansha, Mrichchhakatika and Chandraloka.
- (3) Padarthaviydsara (on natural philosophy), Nutnodantodots* (description of England), Ithasatamomani (Sketch of India's History).
- (4) Printed lectures of the Principal on ancient history and Manasadharma (Mental and Moral philosophy).
- (5) Translation—Hindi to Sanskrit and *vice versa*.
- (6) Arithmetic and the first chapter of Euclid.

The course for the senior candidates was as follows :

- (1) Grammar and lexicography.
- (2) Magha, Naishadha, Mudrarakshasa, Malatimadhva and Kunalayananda.
- (3) Nyaya and either Vedanta, or Sankhya, or Smriti.
- (4) and (5) The same course as for the junior candidates.
- (6) Translation—Hindi to Sanskrit and *vice versa*.
- (7) Algebra, Euclid—first 6 chapters, Trigonometry. Essay in Sanskrit on some general topic.

As to the amount of success which attended the introduction of these new schemes in the College, it would be better if we confine ourselves to the remarks of Mr. Muir himself which he has fortunately left regarding this experiment. The remarks are as follows :

" This experiment for the improvement of the Sanskrit College has it must be confessed, been attended with but indifferent success as far as regards the number of students subjected to the influences of the new system. Notwithstanding the increase in the number of scholarships granted from Rs.6 to Rs.14, the number of students has declined since my arrival from 78 to 42.

" To this falling off various causes have doubtless contributed: 1st the removal of the College from a house near the centre of the city to one on the outskirts; 2nd, the prohibition of judicial astrology (?), which no doubt attracted several students; 3rd, the new studies introduced, and even more, I am informed, the multiplicity of studies I have enforced, which is at variance with the popular mode of reading; 4th, the number of private Pandits with whom Benares abounds and at whose houses the students can attend whenever and for whatever numbers of hours they please and for instruction in whatever single study they desire. The enforced attendance of six hours at the Government College has always, I understood, been a bar to the attendance

† उदन् (Water) उत्स (a spring, fountain).

of many poor students who have to earn the means of subsistence by daily begging; 5th, the Pandits are less likely to exert themselves to bring students to the College when they have not the exclusive credit of the improvement of their pupils.

" In regard to those students who remain in the College my success, though small perhaps has been as great as was to be expected, I have found no objection on the part of the Pandits to the new studies, and the lectures on Mental Philosophy seem even to have interested some of them as according with their natural turn for abstruse speculation; but few of the pupils have evinced much taste for the new departments which in fact have no tendency to bring them emolument or reputation among their countrymen. The place which has been assigned to these departments in the examination for scholarships will, however, if maintained in future, enforce some attention to those subjects" (Sketch, pages 96 and 97).

Mr. Muir resigned the office of the Principal on the 10th of January, 1845. While leaving the College, he, under the instructions of the Government, drew up, for the guidance of his successor, a "Memorandum on the future studies of the Sanskrit College." As the memorandum is both interesting and instructive we think it worth while to give it here in the following:

" It has hitherto been the rule that every student in the Sanskrit College should read in three classes; many of them, however, complain of this as more than they can attend to, and some have left the College in consequence.

In future therefore the students should be required to read in only two of the regular departments.

I.—Thus the younger boys should read, either Grammar and Arithmetic or Poetry and Arithmetic or Grammar and Poetry.

(i) In the Poetry class the boys should read in Hindi once a week, either Pandit Rutneshure's journey रत्नेश्वर पंडित यात्रा or Miss Bird's Geography or any suitable book Bapu Deo might suggest.

(ii) In the Arithmetic class they should read the Jyotish Chandrika ज्योतिष चंद्रिका or Padartha-Vidyasar in Hindi.

(iii) The younger Boys should read with Nandram, the Naib-Pandit, unless they are too numerous, in which case some should be transferred to Bapu Deo or Lujja Shankar.

II.—The more advanced students, such for instance as the younger junior scholars, or those proposing to compete for junior scholarships, should read in any two of the above classes only under the senior Pandits. In the Poetry class besides their ordinary studies they should read once a week the Itihasa-Tamomani (Sketch of Indian History) or the Nutmodantodotsa नूतनो दंतो दोत्स (description of England) and in the Arithmetic classes they should read once a week the Padartha-Vidyasar (in Sanskrit) or the Yotisha (= Jyotisha) Chandrika, all these students should besides their two ordinary classes attend one of the Pandits to have my printed lectures (Manasa Dharmu-Manasadharmu) explained to them once a week for an hour or as long as may be necessary for going through the whole during the year.

III.—The senior students who are reading Law (Dharmashastra) or Vedanta or Nyaya (or) Sankhya besides one or more of these should be made to read in one of the Mathematical classes, in which like the students of the 2nd or middle grade, they should read the Padartha-Vidyasar, or the Yotish (= Jyotisha) Chandrika or any other book

conveying European knowledge. This class should also like the middle grade study my lectures (Manaus Dharmu-Manasadharmas) with one of the Pandits.

" Besides this the students of 2nd and 3rd grades should be obliged to write essays in Hindi and Sanskrit, alternate weeks; or if they are unequal to original composition, they should translate parts of Miss Bird's Geography from Hindi into Sanskrit and the Hitopadesh (Sanskrit) into Hindi, alternate weeks. The Poetry Pandit Hira Nand is the best person to correct these essays and translations; subjects for the essays should be supplied by the Principal and might be any topics suitable to call forth the students' power of thinking without alarming their prejudices. After the holidays the Principal in concert with the Assistant Secretary should draw up a statement showing the classes in which each student is to read, the hour at which he is to attend in each class, and separate lists should be written as at present and suspended in each class room of the students who attend the Pandit there and of the hours at which they attend him.

" The scheme of study required of candidates for senior and junior scholars (? scholarships) I propose should remain as during the past year. Though no student will be required to attend more than two ordinary classes, as above laid down, yet attention to all the departments in the scheme will be enforced by the necessity of passing an examination in all." (Sketch, pages 97 and 98).

The Revd. Mr. Wallis succeeded to the Principalship in February 1845. Not being himself a Sanskritist he naturally did not pay any serious attention to the condition of study in the Sanskrit Department and devoted a very large portion of his time to the English Department of the College. He was, however, soon succeeded in his office of Principalship by Dr. J. R. Ballantyne who took charge of his duties in January, 1846.

Dr. Ballantyne's term of office, which lasted from 1846 to about 1861, was marked by a steady progress of the College in more than one direction. In his very first year he was struck with the unfamiliarity of the Pandits with Hindi which formed their mother-tongue and proposed certain measures for the development of the language. In this connection the following extracts taken from his report for the year 1846 on the Sanskrit Department of the College, will be found very interesting and full of meaning even at the present time :

" Finding in the College records reiterated complaints of the bad style of Hindi written by the students of the Sanskrit College, and also various indications of a desire on the part of Government that some improvement should be made if possible in this department, I early set myself to consider what might be best to be done. The exercises which I directed to be written in Hindi were wretchedly executed, and when I complained of this, the writer acquiesced in the justice of the complaint, without however admitting that the question was worthy of having three words wasted upon it. I next proposed to direct that the junior students should attend the Hindi Pandit for a single hour each week, but such an infinity of obstacles to this were quietly and respectfully insisted upon by all concerned that I did not issue the order. I directed instead that the students should write as their next exercise a reply to the question: Why do you despise the culture of the language which you speak every day of your lives, of the only language which your mothers and sisters understand? To this they replied by an address requesting to know what led me to assume that they despised their vernacular. I replied that I should be very glad to find my mistake, and I appealed to one of the most intelligent of the party to state his real opinion on the subject. His answer was to the following effect: We do not clearly understand what you Europeans mean by the term Hindi, for there are hundreds of dialects all in our opinion equally entitled to the name and there is here no standard as there is in Sanskrit. If the purity of Hindi is to consist in its exclusion of Musalman words, we shall require to study Persian and Arabic in order to ascertain which of the words we are in the habit of using every day, is Arabic or Persian and which is Hindi. With our present knowledge we can tell that a word is Sanskrit or not Sanskrit, but if not Sanskrit it may be English or Portuguese instead of Hindi for anything that we can tell. English words are becoming as completely naturalized in the villages as Arabic and Persian words

and what you call the Hindi will eventually merge in some future modification of the Urdu: nor do we see any great cause of regret in this prospect.

"In reply to this I urged that it was not the duty of himself and his brother Pandits to leave the task of forming the national language in the hands of the villages, but to endeavour to get rid of the unprofitable diversity of provincial dialects by creating a standard literature in which one uniform system of Grammar and orthography should be followed; the Pandits of Benares, if they valued the fame of their city, ought to strive to make the dialect of the holy city the standard for all India by writing books which should attract the attention, and form the style of all their countrymen". Again "I pressed upon their attention the fact that they know no language besides Sanskrit and their mother-tongue; that they could write correctly no language but Sanskrit and that therefore unless they chose to learn English so as to become able to propose in Sanskrit such a work as Bapu Deo's Algebra they could hope to make themselves useful public writers only by qualifying themselves to translate out of Sanskrit and not into it; at present each man could write only the *patois* of his native village, spelling it after his own fancy" (Sketch, pages 99 and 100).

With a view to encourage Sanskrit students in the direction he proposed that some of the seniormost students who under the existing regulations were about to terminate their studies in the College should be assigned some books for translating them into Hindi and thus allowed to continue their connection with the College. In connection with this proposal the report runs "If the Government think proper to encourage this employment of those students, who have gone with the most marked success through the whole curriculum of academical study, then it may be not unreasonably anticipated that attention to the Hindi will be stimulated among all grades of the students by the prospect of being thus employed, that those works in the Sanskrit which are most worthy of the perusal of the native public will be gradually rendered into good Hindi (strict precaution being taken to secure the value of the version, by making the Pandit to whose department the work belongs answerable by the guarantee of his signature for the correctness of the rendering, and some other competent judge answerable for the purity of the diction) and further that the employment of Brahmans in rendering the stores of the Sanskrit accessible to the general public, may have the moral effect of keeping more constantly emphatically impressed upon the minds of the frequenters of the Sanskrit College, the fact that the Government of Great Britain in India recognizes no hereditary distinction in the realm of intellect, but wishes that all knowledge that is valuable should be placed within the reach of every man in the country who has a mind capable of appreciating its value."

He thought that if the Government wished to evince its regard not only for the ancient language of the country now known only to comparatively few, but also for the living language of its millions of subjects in these Provinces, the study of the capabilities of the Hindi language with a view to its improvement and its fixation should be required on the part of the highest class of scholarship-holders of the Sanskrit Department. The above extracts would at once show not only the best intentions of Dr. Ballantyne, both with regard to the development of Hindi and augmenting the utility of Sanskrit Pandits to the country, but also his keen insight into one of the real needs of the country. It was, however, unfortunate that his excellent proposals in this direction, prompted with the best of motives, did not meet with the approval of the Lieutenant-Governor of the Province, who did not consider the proposition of any importance as compared with the direct and active encouragement of Urdu.

Dr. Ballantyne at the same time proposed that with a view "to furnish to the most promising and most advanced pupils the means of applying their educated faculties to the consideration of those works which constitute the glory of the 'British' nation, every student, without being compelled, should have the opportunity of learning the English language. The observations of the Principal on the importance of leading the best Sanskrit scholars to study English met with the Lieutenant-Governor's entire concurrence.

THE ANGLO-SANSKRIT DEPARTMENT

As a result of the latter proposal of Dr. Ballantyne the study of English was introduced into the Sanskrit College in 1847-48. At first it was, in Dr. Ballantyne's words, an "interesting experiment", but subsequently the experiment became crystallized into the Anglo-Sanskrit Department. Though the meaning and scope of this "experiment" of Dr. Ballantyne's was at first little realized, its importance began to increase very soon, so much so that it was considered about 1906 that "its existence has coloured the whole history of the Pathashala (Sanskrit College) subsequent to its introduction, and in fact the history of the Pathashala after 1848 is the history of the Anglo-Sanskrit Department." The importance of the department can be judged from the fact that the post of the Anglo-Sanskrit Professor then connected with the department was considered second only to that of the Principal, and some of its distinguished incumbents, like Mr. Griffith and Dr. Thibaut, succeeded to the Principalship in due course.

This Anglo-Sanskrit Department played a very important part in the history of the College. Both the genesis and success of the "Pandit" of which we shall speak later on, were due to this department. As a result of certain correspondence that arose in 1866 between Government and the officials of the Department of Public Instruction it was further strengthened and as a consequence the salary of the Anglo-Sanskrit Professor was increased from Rs.300 to Rs.500—100—700 in 1868.

The department was rightly regarded, at the time, as the modern and progressive side of the Sanskrit College, Mr. Gough (the Anglo-Sanskrit Professor) in the course of a memorandum to the Government in 1877 pointed out that this department was the modern and progressive side of the Sanskrit College; that it had reasonable success, and a liberalizing tendency on the rest of Indian scholars at Benares; that Western philosophy, notably that of Mill, Bain, and Hamilton, was being used as a supplement, and a silent corrective of Indian philosophy; that the department had not been altogether inactive in the development of Hindi, and of knowledge generally, for works of both Berkeley and Locke had been translated into Sanskrit, and there was a monthly publication issued called the "Pandit." If it had failed to further enrich Indian literature with European matter in Sanskrit form, it was because failure was inevitable. "A work of nature can hardly be given out to be done by such and such individuals in an intellectual workshop".

Again in the words of Dr. Thibaut "The task of the old Anglo-Sanskrit Department was to give to young men, who had been brought up in the Benares Sanskrit College and had there become competent Sanskrit scholars, as much of a liberal English or European education as they, considering their time of life and previous training, were able to assimilate. The branches of European literature and science to whose study the members of the department devoted themselves varied considerably at different times according to the bias of their professors. Under Dr. Ballantyne a good deal of attention was given to natural science. While Mr. Gough was professor, European, metaphysics and psychology were the chief subjects of study. But the leading idea remained at all times essentially the same, viz. to superimpose on a liberal Sanskrit education a liberal European education. The results obtained under this system were certainly very satisfactory, and the department could point to more than one of its former pupils of whom it had just reason to be proud."

The department aimed at training up a class of men combining Eastern wisdom with Western enlightenment, and in the words of B. Pramada Dasa Mitra, Assistant Professor and for some time Officiating Professor in the department "the department could point to men like the late Pandit Vethal Shastri, who combined a profound knowledge of Sanskrit philosophy with such considerable attainments in European thought as enabled him to translate and publish in Sanskrit the 1st book of Bacon's *Novum Organum*. He died before he could complete the second book."

This is enough to show the importance of the Anglo-Sanskrit Department. But unfortunately this very useful department of the College was abolished in 1877. That was the time of financial pressure

and the expenditure on education had to be diminished. Consequently the department was chosen as the victim of economy. It was considered that though the institution was desirable, its results were poor and scanty, and "cannot be considered sufficient to justify the continuance of the large expenditure incurred."

In 1884, through the efforts of Mr. Griffith who occupied the position of the Director of Public Instruction at the time, it was re-established with somewhat modified aims. But in its revived form it never attained its former glory or usefulness. The higher objects of the old Anglo-Sanskrit Department were all gone. In its attenuated form, with only two English teachers, giving lessons only in English, hardly up to the middle standard, it is continuing its miserable existence up to the present time.

About the same year (1884), while the proposal for re-establishing the Anglo-Sanskrit Department was already before the Government, an interesting controversy with regard to the basis on which the department should be re-established arose between Dr. Thibaut and B. Pramada Dasa Mitra. Though ultimately nothing came out of this controversy, as the ideas expressed by any of the two scholars never materialised, it is still important as embodying "the opinions of two experts on the question of the development of Sanskrit study in the East along the lines of Western thought, and the best means of combining the two so as to produce action and re-action between them." We think it therefore desirable to refer here to the controversy in brief.

Dr. Thibaut looked on the matter from the standpoint of an European orientalist; and wished to convert the Pandit into an accomplished Sanskrit scholar of the Western type, and to reinforce his knowledge, "deep, extensive, accurate and technical", with the critical, historical, philological knowledge of the West. His aim was to make it "fertile", in the direction of independent research. To attain the object, English must be studied as a means to understanding Western Sanskrit scholarship. By fusing Western and Eastern thought, he hoped to produce a scholar capable of using both for the general advancement of Sanskrit learning. And the danger of his scheme, as Mr. Mitra pointed out, was that fusion would lead to confusion, and the difficulty of it was the absence of a medium in which the "new" Pandit might express his researches.

Mr. Mitra looked on the matter from the standpoint of the Oriental scholar who appreciated Western learning, and wished the Pandit to study English with the object of first understanding English and Western thought, and then comparing it with Eastern thought to the better understanding of both. By superimposing English on Sanskrit learning, he hoped to produce a scholar capable of appreciating both, to the moral and mental advancement of himself and his fellows; and the danger of his scheme, as Dr. Thibaut pointed out, was that the superimposition would result in the discovery of irreconcilable contradiction, and end in contempt for one branch of learning or the other.

The views of the Government on this controversy were however expressed as follows:

"While the Anglo-Sanskrit Department is meant generally to promote the study of Sanskrit literature, it is intended not to replace Oriental by Western learning, or even to superadd an English to a Sanskrit education, but to co-ordinate, if possible, the two branches of study. But both the objects desired (by Dr. Thibaut and Mr. Mitra) are later and contingent results that may be expected from the reunion of the two lines of study. The first point to be secured is such an acquaintance with English as may enable Hindu students of Sanskrit to read and understand the works of English writers. This gained, their course of reading can be directed towards those branches of learning which bear upon Sanskrit literature."

The old Anglo-Sanskrit Department (1847—1877) as founded by Dr. Ballantyne, was however, a great success. It contributed a great deal towards the prestige and usefulness of the College. Dr. Ballantyne was a great scholar of Sanskrit. He himself translated, not only some important Sanskrit works into English, but also important English works into Sanskrit. His Synopsis of Science in Sanskrit as well as in English was a unique contribution for the benefit of Sanskrit Pandits. The numerous selections and entire works which he published, with

occasional adaptations and annotations, from the writings of such standard English authors as Berkeley, Stewart, Bacon, Whateley, Mill and scientific men, in the name of "Reprints for the Pandits", for their special instruction, are also equally important. He was also instrumental in bringing out the first edition of the most important work on Sanskrit Grammar—the Mahabhashya of Patanjali. In fact he was the first of the series of future Principals who gave a new impetus to the modern and progressive side of the Sanskrit College.

PRINCIPAL R. T. H. GRIFFITH, 1861-1878

The records of the College are almost totally wanting for the period that followed Dr. Ballantyne, i.e. from 1861 to about 1880. Whatever information is given in the following is gathered either from scattered documents or from literary sources. During the period, it seems, Mr. R. T. H. Griffith was Principal from 1861 to 1878 and Mr. J. C. Nesfield from 1878 to 1879. Of the two Mr. Griffith was a well-known Sanskrit scholar and he has produced works of lasting scholarly merit. His translations of important works like the Vedas are well known. Like his predecessor Dr. Ballantyne he exercised a "great stimulating influence, in the direction of literary work, on the teaching staff of the College. It was an evidence of the same influence that the 'Pandit'—a monthly journal of the Benares College devoted to Sanskrit literature—was started in 1866. Its main object was to publish rare Sanskrit works as well as to give their English translation. The journal continued to be published under the auspices of the College till about 1917. Many important and rare Sanskrit works were either published or translated in it by the teaching staff of the College.

THE IMPORTANCE OF THE SECOND PERIOD

Before we pass on to the next period it is worth while to pause here and to try to properly evaluate the importance of the second period. Throughout the history of the College the second period has got its own unique importance. It was during this period that the College, after many years of uncertainty of the first period, acquired stability, high prestige and popularity. This was the period when great efforts were made, not only to systematize Sanskrit study but also to introduce new studies among the Sanskrit Pandits and to create an atmosphere of literary work of high merit. Owing to the paucity of the College records it is difficult to say as to how long the study of the new subjects introduced by Mr. Muir continued in the College. Probably the experiment was not a success as far as the majority of the Sanskrit students were concerned, though it continued for long to exercise some influence on the courses of Sanskrit studies even after the expiry of the second period. The inclusion of Arithmetic, Itihasa (history) and Hindi (for translation), in one form or another, in the courses of studies, even long after the introduction of the new Sanskrit College Examinations, was certainly due to the same influence. There is no doubt that it was the reforms introduced by Mr. Muir that ultimately led to the establishment of the old Anglo-Sanskrit Department under whose auspices the staff of the College through the "Pandit" and otherwise was able to do such a lot of literary work. It is due to the tradition based on the same department that the College has so far maintained in one form or another a modern and progressive side of its literary activities; and the Saraswati Bhawana Library, with its Manuscript and Printed sections and the "Saraswati Bhawana (1)" "Studies" as well as (2) "Series" is a continuation of the same tradition.

An old register, containing copies of certificates issued to the College students on the completion of their studies from the year 1878, is the only document which directly throws some light on the condition of Sanskrit studies in the College during the second period. A careful study of these certificates clearly shows, not only the high standard of study in the different subjects, but also the most important fact that specialization in any one particular subject was based on a sound general study of other useful subjects. With the possible exception of Jyautisba we find that, whatever their special subjects, the students were required as a rule to study, along with their own special subject, also Vyakarana, Sahitya, Nyaya, Dharmashastra and such other subjects—a future which has unfortunately been lost sight of, as we shall see later on, since the introduction of the new system of the Sanskrit College Examinations. It was due to this feature that during the second period the Sanskrit College was able to produce very sound and efficient scholars like M.M. Gangadhar Shastri, Damodar Shastri,

The study of the same old copies of certificates (for a copy of some important certificates, see Appendix V)*, shows that during the second period the College was able to secure the services, as professors, of the best Sanskrit scholars of the day, like MM. Shiva Kumara Shastri, Kailasha Chandra Shiromani, Bala Shastri, Gangadhar Shastri, Ram Mishra Shastri. It also attracted students from far off places like Nepal, Bengal, Bihar and Kutch.

The high prestige and popularity, the College acquired during this period, was also due, in no small measure, to the well-staffed Anglo-Sanskrit Department and the Sanskrit journal *Pandit*, which for the first time brought to light many important Sanskrit works.

THE COLLEGE FROM 1880 TO 1918.

Dr. G. Thibaut, was appointed Principal of the College in 1879 and occupied the post till 1888. Like Mr. Griffith he also was a great scholar of Sanskrit. His important literary contributions are well known. By this example he was able to infuse an enthusiasm for literary work into the teaching staff which then consisted of such eminent Pandits as Gangadhar Shastri, Damodar Shastri, Ram Mishra Shastri, Bapu Deo Shastri, Kailasha Chandra Shiromani and Sudhakar Dvivedi.

From one point of view his term of office may be said to be the most important throughout the history of the College. It was during his time that the present system of Sanskrit Examinations was introduced for the first time about 1880. It is recorded that the "examinations were instituted after the model of the University degree examinations to stimulate the students of the Sanskrit College to a deeper, more extensive, and methodical study of Sanskrit literature". It was with these aims that in place of the old "Annual Examinations" (वार्षिक परीक्षा) the new "Title Examinations" (पदवी परीक्षा) were

introduced. It seems that for several years, in spite of the efforts of the authorities to the contrary, side by side with these new examinations the old Annual Examinations continued to be held in the College. It was quite natural during the transitional period. The new examinations called Prathama, Madhyama and Utama (with the title of Acharya or Upadhyaya respectively according to the 1st or 2nd division of the candidate) used to be held in their first years in the Sanskrit College itself. Of their further growth and expansion we shall speak later on.

The courses of study as adopted for these examinations in 1880 seem to have been based mostly on the then current method of study in the College. The important features of these courses may be summarized as follows:

(1) Arithmetic, Itihasa (based on the Ramayana and Mahabharata), and Translation (from Hindi into Sanskrit and *vice versa*) were prescribed both for Prathama and Madhyama.

(2) There was only one Madhyama examination with one and the same compulsory course for all the candidates (with a slight concession in the case of Jyautisha candidates as noted below) which every student was required to pass before he was allowed to go in for the Uttama (Acharya) examination in any subject.

(3) The subjects prescribed for the Madhyama examination consisted of (1) Vyakarana, (2) Dharmashastra, (3) Nyaya, (4) Sankhya, (5) Mimansa, (6) Yoga, (7) Vedanta, (8) Sahitya, (9) Kavya, (10) Itihasa, (11) Ganita, (12) Translation and (13) Essay. All these subjects were compulsory for all the candidates with the only exception of the Jyautisha candidates who could be exempted from the subjects numbered 3 to 8.

(4) A noteworthy feature about these courses was that in Madhyama, the Siddhanta-Kaumudi was assigned only one paper, which accords very well with the old tradition of the College according to which it used to be completed within two years.

(5) For the first time after 1828 when the Veda professorships were abolished in the Sanskrit College, we find that Veda also was included among the subjects prescribed for the Uttama (Acharya) examination (though no provision was made for its teaching in the College), the other subjects of course being Vyakarana, Sahitya, Nyaya, Sankhya, Mimansa, Vedanta, Dharmashastra, and Jyautisha.

(6) The scheme of the courses prescribed for the Uttama (Acharya) examination was especially based on the ideal of a comprehensive study of the subject concerned as far as possible.

*Not printed.

It would be worth while to give here in full the courses of study prescribed for the Prathama and Madhyama examinations in 1880 :

प्रथमापरीक्षाग्रन्थाः

- १—प्रथमदिने व्याकरणे क ख ग घे ति चिह्नितानामेकतमोऽग्रन्थः परीक्षोपयोगी ।
(क) समासचक्रम्, धातुरूपावली, सुबन्तरूपावली च ।
(ख) लघुकौमुदी ।
(ग) सारस्वतचन्द्रिका ।
(घ) मृग्यबोधः ।
- २—द्वितीयदिने, न्याये गणिते च ।
तर्कसंग्रहो भाषापरिच्छेदो वा ।
संकलनव्यवकलन गणन भाजनानि ।
- ३—तृतीयदिने, काव्येतिहासयोः ।
रघुवंशस्य सर्गचतुष्टयम् । २—५
वाल्मीकिरामायणे प्रथमसर्गः ।
महाभारतस्य शीलनिरूपणाध्यायः ।
- ४—चतुर्थदिने, अनुवादे ।
सरल संस्कृतवाक्यानां भाषासु देशभाषीय वाक्यानां संस्कृतेऽवतारश्च ।

मध्यमपरीक्षाग्रन्थाः

- १—प्रथमदिवसे, व्याकरणे धर्मशास्त्रे च ।
शिद्धान्त कौमुदी कुदन्तान्ता ।
तियिनिर्णयो नन्दपण्डितकृता तत्वमुक्तावली वा ।
- २—द्वितीयदिवसे, न्याये सांख्ये च ।
शिद्धान्तमुक्तावली संपूर्ण ।
सांख्यचन्द्रिका ।
- ३—तृतीयदिवसे, मीमांसायां योगे वेदान्ते साहित्ये च ।
लौगाक्षिभास्करः मीमांसापरिभाषा वा ।
योगचन्द्रिका ।
वेदान्तसारः श्रीमद्भगवद्गीता श्रीधरस्वामिकृत टीका सहिता वा ।
चन्द्रालोकः ।
- ४—चतुर्थदिवसे, काव्येतिहासयोः ।
किराताजुनीयं सर्गत्रयम् १—३ माघस्य सर्गद्वयम् १—२ । शाकुन्तल
नाटकम् ।
वाल्मीकि रामायणस्य सुन्दरकाण्डं तस्य स्थाने शाश्वतधर्म दीपिका गंगावर
शास्त्रि संकलिता वा ।
- ५—पञ्चमदिवसे, अनुवादे, गणिते च ।
संस्कृतस्य भाषासु भाषीयवाक्यानां च संस्कृतेऽवतारः ।
संस्कृतेन यथावत् शास्त्रीयस्य व्यावहारिकस्य च ।
स्वाभिप्रायस्य प्रकाशनम् ।
लालावत्याः परिकर्माष्टकम् ।

As far as the courses of the Uttama examination are concerned, it would be enough to give here, for the sake of illustration, only the courses of study prescribed for the Veda and Vyakarana Uttama examinations respectively. They are as follows :

वेदाचार्यपरीक्षायां परीक्षणीया ग्रन्थाः ।

- १—प्रथमदिवसे ।
संहिता । ऋग्वेदादीनामेकतमशास्त्रीया भाष्यसंहिता संपूर्णा ।
- २—द्वितीयदिवसे ।
ब्राह्मणम् । स्वपरिग्रहीतशास्त्रीयं सव्याख्यं संपूर्णम् ।
- ३—तृतीयदिवसे ।
आरण्यकम् । स्वपरिग्रहीतशास्त्रीयं सव्याख्यं संपूर्णम् ।
श्रौतसूत्रम् । तथा
स्मार्तसूत्रम् । तथा
- ४—चतुर्थदिवसे ।
प्रातिशाख्यम् ।
पाणिनिव्याकरणम् । स्वरवैदिक्योः कौमुदी च ।

- ५—पञ्चम दिवसे ।
 निघण्टुः सभाष्यः ।
 शिक्षा सभाष्या ।
 पिङ्गलच्छन्दो भाष्यसहितम् ।
 निरुक्तं तथा

व्याकरणाचार्यपरीक्षायां परीक्षणीया इमे ग्रन्थाः

- १—प्रथमदिवसे ।
 सिद्धान्तकौमुदी । संपूर्णा ।
 परिभाषेन्दुसंस्कारः । तथा
- २—द्वितीयदिवसे ।
 मनोरमा बभ्ययीभाषान्ता ।
 शब्दरत्नं तथा
- ३—तृतीयदिवसे ।
 लघुशब्देन्दुसंस्कारः । संपूर्णः ।
- ४—चतुर्थदिवसे ।
 भूषणम् । तथा
 भञ्जुषा । तथा
- ५—पञ्चम दिवसे
 महदभाष्यम् । नवाह्निकभगवतिशकारश्च ।
 भाष्यप्रदीपः । तथा
 विवरणम् । तथा

It is obvious that these courses of study prescribed in 1880 were fully in keeping with the aims, already referred to, with which the new examinations were started. They obviously involved "a deeper, more extensive, and methodical study of Sanskrit literature" than hitherto had been the case. They were fully in accord with the old idea that specialization in any subject should be based on a general study of other useful subjects. Had the Sanskrit College Examinations continued to be held on the same lines, the results would have been quite different from what we see today and the continuity of that type of scholars like M.M. Gangadhar Shastri and Damodar Shastri who were the products of the second period could not have broken. But unfortunately the courses of studies were again revised in 1887 in a way which has proved very detrimental to Sanskrit scholarship of the old type.

THE COURSES OF STUDIES INTRODUCED IN 1887.

The new courses of studies as introduced in 1887 were very much different from the old ones and were based on altogether different ideas. Once introduced they have continued, without any alteration in their fundamental principles, up to the present time, and practically no change was introduced in them up to 1918 (or even 1923).

The important features of these new courses may be summarized as follows:

- (1) The nature of the old Madhyama examination was completely changed. It was split up into Vyakarana, Nyaya and Jyautisha Madhyamas and lost all its character of being a common examination for candidates of all the subjects. Thus the old idea that specialization in any one particular subject should be preceded by a general study of other useful and necessary subjects was almost totally given up.
- (2) The study of the Siddhanta-Kaumudi, in the Vyakarana Madhyama, was very much emphasized, so much so that instead of one paper, as had been the case before, there were now 6 papers assigned to this work alone, of course at the sacrifice of other useful subjects even including Sahitya.
- (3) Ganita was removed from both Prathama and Madhyama and Itihasa from Madhyama.
- (4) The extent of works prescribed for the Uttama (Acharya) examination was narrowed down, e.g., in place of the whole of the Shabdendushekhara which was prescribed for the Vyakarana Uttama examination in 1880 we find here only a portion of it, i.e., only up to the end of the chapter on the Avyayibhava Samasa.
- (5) Veda was altogether excluded from the subjects for the Uttama examination.

Dr. A. Venis succeeded Dr. Thibaut as Principal in 1888 and continued to occupy this position, in one way or another, till his death in 1918.

He was a profound Sanskrit scholar and left his indelible impression on the Sanskrit College in more than one way. It was through his influence that the Hon'ble late Munshi Madho Lal created an endowment of Rs.45,000 for Sanskrit scholarships in connection with the College in about 1905. The fine Saraswati Bhavana building in which the Sanskrit College Library—containing the valuable big collection of Sanskrit manuscripts as well as rare printed works on Indology is situated, also owes its origin to the influence of Dr. Venis. The famous Vizianagaram Sanskrit Series which was published under the superintendence of Dr. Venis was also started through the same influence in 1890. It was also due to his initiative that a new post of Librarianship was created in 1914.

It can be stated without any exaggeration that during the period of his Principalship the College was in a most glorious condition. It was the time when the College had on its staff some very eminent Pandits who, though they had joined the College during the term of office of Dr. Thibaut or even earlier had reached the pinnacle of their glory during the days of Dr. Venis. Some of them, under the scholarly guidance of Dr. Venis were able to do distinguished literary work and edited or wrote many important works for the *Pandit* and the *Vizianagaram Sanskrit Series*.

It was during his term of office that the importance and the popularity of the Sanskrit College Examinations began to increase, so much so, that it became necessary to create the new office of Registrar, Sanskrit College Examinations in 1909. But as far as the courses of study prescribed in 1887 are concerned, they practically remained the same and no important change was introduced in them, as already pointed out, during the whole time of Dr. Venis.

It may be stated that the Sanskrit College which was united with the English College under the same Principalship in 1844 was again finally separated in 1914, and Dr. Venis though retired from the combined Principalship of both the Colleges was allowed to hold charge of the duties of the Principal, Sanskrit College, as already stated, till his death in 1918.

THE COLLEGE FROM 1918 TO THE PRESENT TIME

Unlike the period from 1887 to 1918, the period from 1918 up to the present time is marked by a series of changes in the courses of studies. The popularity of the Sanskrit College Examinations, which began during the term of Principalship of Dr. Venis, has been continuously increasing throughout this period, as will be shown below in connexion with the history of the growth and expansion of the Sanskrit College Examinations. In fact since 1909, when the new office of the Registrar, Sanskrit College Examinations, was created, whatever changes have been introduced in the course of studies should be dealt with in connection with the expansion of the examinations, but as the examinations represent only a phase of the Sanskrit College, it is better to continue the treatment of the courses in connection with the history of the College itself.

During this period Dr. Gangapath Jha was the Principal of the College from 1918 to 1923. His term of office is marked by important changes in the courses and other reforms introduced in connection with the College as well as the Examinations, as detailed below:

(1) Six Post-Acharya Scholarships of the value of Rs.20 per mensem each, tenable for a period of three years at the Sanskrit College, were instituted in 1920. The scholarships, to be awarded only to deserving Acharyas, were started to encourage an intensive and specialized study of Sanskrit on the lines of old Pandits.

(2) A chair for the Shukla-Yajurveda was, for the first time since 1828, created in the College in 1922, and in consequence the subject has been introduced for the Sanskrit College Examinations since 1924.

(3) The "Sarasvati Bhavana Texts Series" as well as the "Sarasvati Bhavana Studies" were started in the College in 1920. A large number of unpublished Sanskrit texts have been so far published in the Series. Some important original papers have

similarly appeared in the Studies. Both the publications, as already stated, represent the modern and progressive side of the activities of the College.

(4) It is also worth noting that it was during the time of Dr. Jha that the Government, owing to great expansion of the Sanskrit College Examinations and with a view to provide a machinery for the control, conduct and supervision of the same, felt it necessary to create the Board of Sanskrit Studies, United Provinces. As to further details regarding the Board, we shall describe them later on.

(5) As regards the changes in the courses, it is necessary to go into the question rather in detail. As a result of some agitation of Benares Pandits, who had organized a Sanskrit Examination Reforms Committee (परिष्कार समिति) in 1920, and the correspondence that ensued the Government ordered in G. O. no. 618/ΔV—273-1921, dated the 25th February, 1922, to the following effect:

(a) That the Upadhyaya degree, which up to the time used to be conferred on those successful Uttama candidates who could not secure the minimum marks (i.e. 350 out of 600) required for the Acharya degree, be abolished.

(b) That a new examination should be instituted to be held after the completion of the first three years of the Uttama course and a degree to be called the "Shastri" degree should be conferred on the successful candidates.

(c) That the entire course of the Uttama Examination should be revised and rearranged so that the students who appear for the "Shastri" degree on completing the three years' course should have reached a well defined stage of scholarship, after which it will be open to them to study for another three years to proceed to the higher degree of Acharya.

(d) That a Committee should be appointed at as early a date as possible to draw up and re-cast the Uttama courses on the lines suggested above.

In consequence the Government in their G. O. no. 1264/XV, dated Allahabad, the 22nd April, 1922, appointed a Committee for the revision and the re-arrangement of the course of Uttama Examination with the following members:

- (1) The Principal, Sanskrit College, Benares (*Convener*).
- (2) MM. Pandit Ram Shastri Tailang, Professor, Sanskrit College, Benares.
- (3) MM. Pandit Murlī Dhar Jha, Professor, Sanskrit College, Benares.
- (4) Pandit Kashi Ram, M.A., Inspector of Sanskrit Pathshalas, United Provinces.
- (5) MM. Pandit Nitya Nand Pant, Benares.
- (6) MM. Pandit Jayadeva Misra, Professor, Hindu University, College of Oriental Learning, Benares.
- (7) Pandit Gopinath Kaviraj, M.A., Librarian, Government Sanskrit Library, Benares.
- (8) Dr. P. K. Acharya, Professor, Muir Central College, Allahabad.

Pandit Achyutanand Tripathi, Professor, Benares Hindu University, was appointed an additional member of the Committee on a later date.

The report of the Committee was published in the *United Provinces Gazette*, Part VIII, dated 1st July, 1922, for general information and for inviting criticisms as well as suggestions thereon. The scheme formulated by the Committee was finally approved by the Government in G. O. no. 1136/ΔV—273-1921, dated the 27th March, 1923. But owing to financial considerations it was held in abeyance for some time and was brought into force only with effect from the examinations of 1925.

According to the scheme candidates of both Shastri and Acharya were required to take their Khanda (Part) Examinations in their consecutive order and not at random, as had hitherto been the case. They were also required to take only one Khanda in one and the same year.

As regards the courses, the subject of Veda (Shukla-Yajurveda), as already pointed out, was introduced for the Shastri and Acharya Examinations. The Committee also revised and systematized the courses already prescribed for the different subjects in the Uttama Examination. Though the report of the Committee does not say anything as to the principle or principles on which the revision was based, still a careful analysis of the revised courses would show that the recommendations of the Committee were based on some such considerations as the following :

The Committee seem to have noticed that the courses they were asked to revise ignored many important older works in most of the subjects. It was obviously with a view to remove this defect and to encourage and popularize the study of those older works, so sadly neglected, that they for the first time prescribed such works as the Vakyapadiya in Vyakarana, Kiranavali in Nyaya, Tantra-varttika, Vidhiviveka, Tattvabindu and Bhavana-viveka in Mimansa, Dharma-sutras and Grihya-sutras in Dharmashastra, and so on.

The Committee also seem to have realized the spirit of over-specialization and one-sidedness of the courses. It was obviously with a view to remove this defect as well as to encourage a more thorough and deeper study of the different subjects that they in several subjects prescribed also works on allied subjects or included many new works in the different courses. The inclusion of the Vyutpatti-vada in Vyakarana, or Muhurtachintamani and Brihajataka in Jyautisha and the revised course of Sankhya are clearly based on the above considerations.

It would thus appear that the importance of the term of office of Dr. Jha primarily lies in the fact that, for the first time since 1887, the courses were revised during his time and important changes were introduced in them. It must also be stated that the creation of the Board of Sanskrit Studies was also an important event. Through the creation of the Board a new progressive spirit entered the Sanskrit College Examinations and the old idea of sacrosanctity about the courses of studies began to disappear. It is owing to this that though slowly but steadily some important changes have been introduced in the examinations since 1924.

It may also be stated that the fee of the Sampurna Madhyama Examination was raised from Rs.4 to Rs.10 about 1920.

Dr. Jha was succeeded in the post of Principalship by Pandit Gopinath Kaviraj who occupied the position till March, 1937. His term of office, like that of his predecessor, is also marked by important changes both with regard to the College as well as the examinations, including the courses of studies.

Two privately endowed chairs for Purana and Madhya Vedanta were created in the College during this period in 1930 and 1933 respectively.

As regards the changes in the courses, it must be remembered that henceforward whatever changes have been introduced they have been due to the progressive spirit of the Board of Sanskrit Studies, of which we have already spoken, and have been brought about after due deliberations of that body.

As the courses for the Uttama examination had already been lately revised by the Committee appointed by Government in 1922, the Board's first attention was naturally drawn towards the necessity of overhauling the courses for the Prathama and Madhyama examinations and the rules governing the Sanskrit College Examinations in general. The main changes in the courses which came into force only with effect from the examinations of 1931 are as follows :

- (1) A fresh paper on elementary Arithmetic was introduced in the Prathama examination.
- (2) A Hindi text-book was also prescribed, for the first time, for the Prathama Examination, "In response to a public agitation in press and on platform carried on to the effect for several years."
- (3) In order to give the students a better grounding in Hindi and Sanskrit composition, a Translation paper from Hindi to Sanskrit and *vice versa* was introduced in each of the first three Khandas of the Madhyama examination.
- (4) With a view to encourage taste for Sanskrit prose and to give a better grounding in Sanskrit composition, portions of Panchatantra were also prescribed in each of the first three Khandas of the Madhyama Examination.

(5) The alternative course with Bhatti in Vyakarana Madhyama was abolished and a Sahitya Madhyama with a pure literature course was introduced in its place.

(6) The title of the Nyaya Madhyama was changed to Darshana Madhyama with a greater variety in the courses enabling the students to go up for any of the six branches of Indian philosophy in Shastri and Acharya.

The other important changes introduced the same year were as follows :

(1) The subject of Krishnayajurveda was recognized for the Sanskrit College Examinations, though no provision was made for teaching the subject in the Sanskrit College. This was a new departure in the history of the College. Henceforth the Sanskrit Examinations entered a new phase, in so far as new subjects not represented in the College began to be prescribed for these examinations, thus pointing to a line of development of the examinations independent of the College.

(2) The subject of Jyautisha already prescribed for the Shastri and Acharya Examinations was sub-divided into two groups of Phalita (Astrological) and Ganita (Astronomical).

(3) Another important change was the introduction of Prachina Nyaya, besides Navya Nyaya, for the Shastri and Acharya Examinations.

In 1932 the subject of Ramanuja Vedanta was recognized for the Shastri and Acharya Examinations. This was necessitated by the fact that while before 1931 Ramanuja and other non-Shankara systems of Vedanta found a place, as alternative groups, in some of the papers of Vedanta Shastri, they were altogether excluded from the examinations for 1931.

The same year the subject of Purana, a chair for which had already been created in the Sanskrit College, as already pointed out, was recognized as a subject of examination from Madhyama onward.

The year 1932 was also marked by an important change in connection with the examinations. The post of the Registrar, Sanskrit College Examinations, which had been so far combined with that of the Principal, was separated and a new officer in the person of Dr. Mangal Deva Shastri was appointed to the post. This arrangement led to a better systematization of all the activities connected with the examinations, and in course of this systematization far greater attention has been paid to the courses of studies than at any time before.

Towards the end of 1932 a circular was issued by the Registrar to a large number of distinguished Sanskrit scholars connected with Sanskrit Pathshala, not only in Benares but throughout the Province, soliciting their expert opinions with regard to the necessary changes in the courses of studies prescribed for the Sanskrit College Examinations. As a result of that circular, probably the first of its kind in the history of the College, a mass of material in the form of suggestions for revising the courses was collected. It was placed before a sub-committee appointed by the Board of Sanskrit Studies especially for the purpose of revising the courses.

As a result of full deliberations of that sub-committee, carried on in the light of suggestions received from the various scholars, the courses for Prathama, Madhyama, Shastri and Acharya Examinations were carefully revised and brought into force from the examinations of 1934. The revision mostly consisted of re-grouping or re-arranging of books already included in the courses with a view to make them more systematically graded in point of difficulty of style or subject-matter. This sort of systematization was especially called for by the fact that though the old traditional rule according to which students could appear at random in any part or Khanda Examination of Shastri and Acharya was changed in 1922, no special care was taken to frame a graded course for all the khandas.

A very important change, the full bearing of which would be evident in the subsequent pages, consisted in the introduction of an alternative course of Prachina Vyakarana in the Shastri and Acharya Examinations. This innovation was made to meet the longfelt need of giving encouragement and stimulus to the study of the well-known Paninian system of

Vyakarana from both the new and old standpoints. The course of Purana as previously framed was also thoroughly revised and was made more in keeping with the requirements of the Puranic studies.

Some of the changes which, though suggested by different scholars at the time, could not be introduced for the examinations of 1934 were later on gradually introduced in subsequent years. The subject of Jain philosophy was thus for the first time recognized for the Shastri and Acharya Examinations from 1936. This was an important innovation from the point of view of orthodox Sanskrit Pandita who look askance at the subject as it represents from their point of view a system of heretical philosophy. It may be pointed out that the subject is not yet represented in the College.

In 1937 a new subject of Sadharana Darshana (or general philosophy) was similarly recognized for the first time for the Shastri and Acharya Examinations with a view to encourage and develop, among Sanskrit students, a spirit of comparative study of different systems of Indian philosophy.

This brings us to the end of the history of the Sanskrit College up to the present time together with a general survey of development of the courses of studies both as taught in the College and as prescribed for the Sanskrit College Examinations.

CHAPTER III

GROWTH AND EXPANSION OF THE SANSKRIT COLLEGE EXAMINATIONS

In course of our survey of the history of the Sanskrit College we have already pointed out as to how and when the present Sanskrit College Examinations have developed out of the old "Annual Examinations" of the College and also how they have retained the old tradition of the College regarding the term of study of 12 years. We have also referred (e.g. on pages 13-14) to occasional attempts to systematize instruction in the College on the basis of three main classes or stages requiring study for 2, 3 and 7 years respectively, which must have given rise to the idea of originally dividing these examinations into the three stages of Prathama, Madhyama and Uttama. We have also pointed out that it was during the time of Dr. Thibaut that the present system of the Sanskrit College Examinations was first introduced in 1880, which, with certain important modifications in their fundamental nature in 1887, has been in vogue up to the present time. Once established, the rise and growth of these examinations have been phenomenal, as would be evident from the following details.

In 1880, 12 and 7 candidates sat for the first time in the Acharya Examination in Vyakarana and Sahitya respectively, of whom only 2 in Vyakarana and 1 in Sahitya succeeded in obtaining the title. In 1881, the first batch of candidates enrolled themselves for the Prathama and Madhyama Examinations and of these 25 and 11 respectively were successful in passing the test. Appendix VI* gives the number of candidates who were successful at the various examinations each year during the first period of 1880—87. Appendix VII* gives the number of enrolled candidates for each year during the period of half a century following 1887, which clearly shows the steady expansion as well as the ever-increasing popularity of the Sanskrit College examinations.

As already pointed out, all the examinations were originally held in the Sanskrit College itself. Other Pathashalas were allowed to send up candidates, but the latter had to come over to the College centre for being tested.

In 1888 a circular was issued which made it obligatory upon all aided Pathashalas to subordinate their courses of study to the Sanskrit College Examinations.

About 1889, it seems, candidates of Prathama and the first three parts of Madhyama were allowed to be examined in other centres also besides the Sanskrit College. A circular, dated the 25th April, 1891, says:

(1) Students may present themselves for the Prathama Pariksha either at the Benares College or at one of the centres of the English Middle Examination. The centre will be fixed for each Sanskrit School by the Director of Public Instruction.

*Not printed.

(2) For the fourth year examination of the Madhyama Pariksha, students must present themselves at the Benares College.

This restriction as regards the fourth year of Madhyama was due to the fact that oral examination was an essential feature of the same for which arrangements used to be made only at the Sanskrit College. This oral examination was discontinued from 1918 when the whole of the Madhyama Examination was allowed to be held at other centres also.

But the students who after having passed the Madhyama Examination wished to continue their studies with a view to passing the Acharya Examination were still required to join the Benares Sanskrit College, as none but students of the College were admitted to the Acharya Examination. This rule restricting the study for Acharya Examination to the Sanskrit College itself seems to have been abolished about 1911, when other Pathshalas were allowed to coach students for that examination. But the examination for the Acharya degree, and also for the Shastri degree since its institution in 1925, has continued to be conducted at the Sanskrit College itself, although the very large increase in the number of candidates has now made it imperative to consider whether the time has not come to throw open other centres for at least the Shastri Examination.

The high popularity of the Sanskrit College Examinations will be evident not only from the steady increase in the number of candidates (for which see Appendix VII*) appearing at the various examinations, but also from the increase in the number of centres, as well as the number of Pathshalas recognized for the examinations in the United Provinces as well as outside, as would appear from the following table:

Year	No. of centres	No. of recognized Pathshalas in the United Provinces	No. of recognized Pathshalas outside the United Provinces	Total number of recognized Pathshalas
1918	25	398	120	518
1922	39	1048	202	1250
1923	40	1278	228	1506

We have already referred to the fact that due to the increase in the popularity and importance of these examinations, it became necessary to create the new office of Registrar, Sanskrit College Examinations, in 1909. But the post still remained combined with that of the Principal who ever since 1880 had hitherto been responsible for the work connected with the examinations. The post of the Registrar was however separated, as already pointed out, from that of the Principal in 1932.

We have also referred to the creation of the Board of Sanskrit Studies, United Provinces, in 1923. The Board was reconstituted in 1927 when the Government also sanctioned the constitution of an examination committee of the same Board. The present constitution of both the bodies is as follows:

BOARD OF SANSKRIT STUDIES, U.P.

The Board consists of 12 members noted below:

- (1) The Principal, Sanskrit College, Benares, Chairman, *ex officio*.
 - (2) The Registrar, Sanskrit College Examinations, Secretary, *ex officio*.
 - (3) The first Professor, Sanskrit College, Benares, *ex officio*.
 - (4) The Inspector, Sanskrit Pathshalas, United Provinces, *ex officio*.
 - (5) A representative of the Pandits not engaged in preparing candidates for the examinations.
 - (6) A representative of the public of Benares.
 - (7) One representative of the teachers in pathshalas preparing candidates for the Sanskrit College Examinations.
 - (8) One representative of the managing bodies of Pathshalas preparing candidates for the Sanskrit College Examinations.
 - (9) Four Sanskrit scholars of standing.
- [(5) to (12) to be nominated by Government]

The functions of the Board are :

- (a) To advise regarding the courses of study prescribed for various examinations.
- (b) To decide questions regarding the recognition of Pathashalas for the various examinations.
- (c) To decide what disciplinary action should be taken against candidates, when the need for such action arises.
- (d) To advise on any other matters which may be referred to it.

THE EXAMINATIONS COMMITTEE

The Examinations Committee consists of five members as follows :

- (1) The Principal, Sanskrit College, Benares, Convener and Chairman, *ex officio*.
- (2) The Registrar, Sanskrit College Examinations, *ex officio*.
- (3) The Inspector, Sanskrit Pathashalas, United Provinces, *ex officio*.

[(4) and (5) to be nominated by Government from the Board]

The functions of the Examinations Committee are—

- (a) To appoint examiners for the Sanskrit College Examinations and to moderate question papers.
- (b) To appoint tabulators.
- (c) To bring out the results of the examinations.

CHAPTER IV

NATURE AND GENERAL CRITICISM OF THE PRESENT COURSES AND METHOD OF STUDY

We have already traced the history of the present courses of study prescribed for the Government Sanskrit College Examinations. Before we proceed to make our own suggestions with regard to their improvement, it is but proper that we should try to understand and examine their nature. There is no doubt that the present Sanskrit College Examinations enjoy an unrivalled prestige and popularity. It is through these examinations that the activities of the Benares Sanskrit College, with its affiliated institutions, now extend to the whole of India. From this point of view the College has become an affiliating and examining University, without formally claiming to be one. It sets the standard for Sanskrit for the greater part of India. Most of the other Sanskrit examinations, e.g., of Bihar, Benares Hindu University and Jaipur, are modelled on, or are at least influenced by, those of the Sanskrit College. The degrees of the Sanskrit College are recognized all over India. This high prestige and popularity of the Sanskrit College Examinations is no doubt due to their having continued, to a degree not equalled by any other examinations, the old tradition of intensive and deep study of Sanskrit and high standard of scholarship especially associated with the name of Kashi.

In spite of all this, a widespread dissatisfaction with the present Sanskrit College courses has begun to manifest itself. For some years an agitation has been growing up in favour of introducing reforms in the courses so as to make them suitable for the present needs of the Sanskrit public and for infusing a new life in Sanskrit studies. That the agitation is genuine and represents the opinion of a vast majority of Sanskrit Pandits is evident from the answers received in reply to the questionnaire issued by this Committee (for the questionnaire as well as the important extracts from select answers, see Appendices VIII and IX*).

The general criticism against the present courses of studies can be analysed mainly into the following points :

(1) OVER SPECIALIZATION

There is a general feeling that in spite of the great popularity of the Sanskrit College Examinations and the yearly increase in the number of candidates appearing in the examinations, the old standard of Sanskrit scholarship is deteriorating year after year. One of the main reasons

*Not printed.

of this deterioration is the tendency of over-specialization on which the present courses are based. We have already seen (page 46) that this tendency has crept into these examinations only since 1887. This tendency of over-specialization in any particular subject, at the sacrifice of even allied subjects and of subjects of general importance, can be illustrated by a reference to the courses of such subjects as Navya Nyaya, Navya Vyakarana, Vedanta, Mimansa, etc.

Let us take the instance of Navya Vyakarana. In spite of the fact that in recent years, as we have already seen, much has been done to widen the scope of general subjects in the Prathama and Madhyama examinations, the defects associated with over-specialization still remain there to a great extent. A Vyakaranacharya, even after having spent about 12 years in the study of his own subject, is proverbially very deficient in expressing himself in correct Sanskrit. His knowledge of general Sanskrit literature is very limited and poor. He generally has no idea even of such allied subjects as Nyaya, Mimansa, Nirukta and Vedic language. The spirit of over-specialization has adversely affected, strangely enough, even the study of Vyakarana itself. A Vaiyakarana who is supposed to be a specialist in Vyakarana is generally devoid of any comprehensive outlook as regards his own subject. At the best he knows only a portion of Vyakarana, and however expert in a few Parishkaras or the art of a dialectician, he is mostly lacking in the knowledge of the real Vyakarana and, as a general rule, does not possess an insight into the nature of language and its development. It would be recognized on all hands that most of the Vaiyakaranas are unable to explain the meaning of many a word occurring in the Sutras, Ganas and the examples of Sutras. Such important and interesting portions of Vyakarana as Taddhita, Unadi, Svaravaidiki are either neglected or studied only with indifference. Thus over-specialization in Vyakarana has practically ruined the study of Vyakarana itself. Here it would not be inopportune to point out that this present phase of the study of Vyakarana with an over-emphasis on the Parishkaras is not even as old as the College itself. At the most it is about 100 years old. There is a tradition that it originated from Pandits like Kashi Nath Shastri (a Professor in the College about 1844) and was later on developed by Pandits like Raja Rama Shastri, Bala Shastri, Damodar Shastri, etc. Through the influence of these Pandits this tendency swamped the study of not only other subjects but also of the real Vyakarana. A reference to Appendix VII* will give us an idea of the extent of this swamping. It is a problem how to bring to decent limits this excessive and undue taste for this sort of study of Vyakarana and to bring back the old days even in the history of the College, when due emphasis was laid on the study of Vyakarana as such, without the sacrifice of the study of other useful and necessary subjects.

(2) PARTIAL VIEW OF SANSKRIT LITERATURE

Another important objection against the present courses of study is that they are based on a partial view of Sanskrit literature. Sanskrit literature in India is the result of thousands of years of development and contains treasures, in the form of the Vedic Sanhitas, Brahmanas, Sutras, Upanishads, Ramayana and Mahabharata, etc., which are the most precious heritage of Indian civilization and of which every Indian justly ought to feel proud. An acquaintance with these different phases of Sanskrit literature is necessary for having a comprehensive idea as regards Sanskrit literature and also for their cultural value. But this idea is altogether neglected in the present courses. In the circumstances the narrow outlook of Pandits, though specialists in their own subjects, towards Sanskrit literature as a whole, is quite natural.

The same tendency of oneness and partial view of Sanskrit literature is discernible in the spheres of special subjects also. It is an undeniable fact that the present day Sanskrit learning, even in any particular subject, is mostly confined to the study of those works which are the product of only the last four or five centuries. It was certainly the period of decadence and darkness in Indian history. It was the period when we had lost that vigorous and high thinking which is a characteristic of the earlier periods of Indian history. Like every other country which has seen better days, ancient India in the days of her freedom and glory had her own creative period as regards literature, philosophy, art and religion. Unfortunately the study of those ancient works, like

*Not printed.

the Mahabhashya, Nirukta, Darshana-Sutras and their ancient commentaries, ancient Jain and Buddha works, which are the product of that creative period, is either very much neglected or does not find a proper place in the courses of even those special subjects. There is no doubt that in recent years efforts have been made to revive and popularize the study of such ancient works. The inclusion of the courses in Prachina Vyakarana, Prachina Nyaya and Sarva Darshana, etc., was directed towards the same aim. But the old tendency of indifference towards these works, due to either incapability or prejudice of teachers, is still there. Greater and more systematic efforts are therefore needed to revive an interest in the ancient works.

(3) EMPHASIS ON FORM RATHER THAN ON SUBSTANCE

Another tendency which is sapping the vitality of the present day Sanskrit learning consists in the emphasis on form rather than on substance. This tendency really speaking is not only of recent growth. It began to manifest itself in the different branches of Sanskrit literature many centuries before. Many causes must have contributed to the growth of this tendency; but mainly it was due to the decay of the power of originality which itself must have been the result of the political degradation in India. Unhealthy sectarian rivalry must also have contributed a great deal to the growth of the tendency.

This tendency consists in attaching more importance to outward embellishment, verbal jugglery and the art of disputation for its own sake or for gaining cheap victory over one's own rival, than to the inner beauty of ideas, depth of knowledge and investigation for truth. It is well-known that the development of later Sanskrit poetry, attaching more importance to play on words or Shabdalanakaras than to the real beauty of ideas or Arthalankara, of Navya Nyaya with its over-emphasis on only a few topics of Anumana, hair-splitting, and the neglect of the real problems of knowledge (the Prameyansha) and of Karma-Kanda, consisting more in the recitation of formulae than in understanding their meaning and the significance of sacrifice, is the manifestation of the same tendency.

This tendency has however been carried to inordinate lengths in recent times. It is due to this that the spirit of Navya Nyaya has infected even such subjects as Vyakarana, Dharma-Shastra and Mimamsa and in consequence has adversely affected the study of the subjects. The spirit of too much cramming without trying to understand even the meaning of many a word occurring as examples in Vyakarana, or the nature of objects described in poetry is all due to the same tendency. Every effort should be made to eradicate this evil if we are really anxious to put Sanskrit study again on sound basis.

(4) LIMITED RANGE OF THE COURSES OF STUDY

We have already referred to the all-comprehensive scheme of studies based on the ancient scheme of eighteen Vidyas, which was placed as the ideal before the Sanskrit College at the time of its foundation. That scheme, like any other scheme of Sanskrit studies put forth at different periods of Indian history, aimed at, not only an all-round education of an individual, but also an education which would secure every purpose of a civilized society. As contrasted with that all-comprehensive scheme, the scheme of the present day course of Sanskrit studies aims only at producing a class of teachers who at best can impart their own knowledge mostly based on the literal interpretation of the texts already studied, to their students, but who have no appreciation either of the conditions of life all-round them or of the needs of modern society. It cannot produce men capable of pursuing any other line of career. This is of course due to the limited range of the courses of Sanskrit studies. Some of the subjects, like *Rajashastra* (or Dandaniti or Politics), *Arthashastra* (or Varta or Economics), which are represented in Sanskrit literature and a study of which can widen the field of utility of Sanskrit Pandits, have been long neglected and do not find a place in the present courses. The study of the Puranas, not only from the point of view of Philosophy or religion, but also from their original point of view which is that of history, is also bound to increase the field of their utility. There is also no reason why the range of study of Sanskrit Philosophy should not include the study of Buddha and Jaina Systems of Philosophy, which have played an important part in the development of Indian Philosophy and Culture. The inclusion of such subjects in Sanskrit curriculum will also help in popularizing the study of Sanskrit among a wider circle of people of different tastes and inclined towards different lines of career.

(5) ABSENCE OF CRITICAL OUTLOOK AND INDIFFERENCE TOWARDS
ADVANCEMENT OF KNOWLEDGE

It is generally complained that the present method of Sanskrit study as prevalent in Sanskrit Pathshalas is not conducive to the growth of critical judgment. The old Pandit, generally speaking, does not understand the rationale of the problems he has studied. He is completely ignorant of any historical and comparative outlook. He would scorn the so-called modern critical scholarship. There is no doubt that that scholarship without the depth of Pandits is not of much consequence. But it does not mean that there is any inherent contradiction between Sanskrit learning of the old type and the so-called modern critical method. It is not necessary for us here to point to the great contribution of modern scholarship in the field of oriental learning, in epigraphy, palaeography, philology, mythology, ancient history, etc. The discovery of many long-forgotten ancient works and their critical editions are due to modern scholarship. As far as the question of, at least, editing the old Sanskrit texts is concerned, there is the first necessity of combining both the traditional training and the modern critical scholarship. In the works of Pandits like Mahamahopadhyayas Ganapati Shastri, Durga Prasad Dvivedi, Bapu Deva Shastri and Sudhakar Dvivedi, we find admirable results of that sort of combination.

All advancement of knowledge is due to the spirit of research and investigation, and no less to the power of assimilation of new ideas. That spirit of research and investigation or inquiry into the truth is a fundamental tenet of our own Shastras. Passages like यथातो ब्रह्मिज्ञानसा (Vedanta-sutra), यथातो ब्रह्मिज्ञानसा (Mimamsa-sutra), देवकवतु सवते सधर्मे वेदं नेतरं (Manu, XII, 106), अतुष्यात्, वा, कर्त्तव्यम्, इत्यत्र, इव, कां नन्त्राचर्मे विष्यतोति । तेषां यतो तर्के मुचि प्रायश्चन (Nirukta, XIII, 12) point to the same spirit. Any research, in the proper sense of the term, depends on critical methods and cannot be properly advanced without the development of the historical and comparative outlook, which is an indispensable condition for understanding the development, in a critical way, of any ideas or institutions.

Unfortunately the present tendency of over-specialization in Sanskrit studies, without the basis of any general knowledge, has the effect of killing the natural thirst for knowledge and inquisitiveness. It stultifies the growth of mind and hardens it against receiving new ideas. It is due to this that our Pandits, generally speaking, would not care to read any other book outside their own limited range. The discovery of any important work, long-forgotten, like the Arthashastra of Kautilya or the works of Bhasa would not excite any curiosity in their mind. How sad it is when we contrast this attitude of mind with the spirit found in the scholars of the West which is exhibited in their enthusiasm for understanding the ideas of other people as well as in their desire for keeping themselves abreast of the progress in their own special studies all over the world. As a matter of fact the average Pandit of today, with his indifference towards everything modern, still lives and breathes in the atmosphere of the middle ages and completely lacks the equipment for understanding or appreciating the modern progress in the different fields of knowledge. But this spirit of over-conservatism is only of modern growth in India. There was a time when our Pandits had in abundance the power of assimilating new ideas. This can be amply illustrated by a reference to the history of development of the science of Jyotishika in India.

We have already referred to the old Anglo-Sanskrit Department, its aims, its achievement, and also to the contribution it made towards increasing the prestige of the College. We may here also refer to the Conference of Oriental Scholars held at Simla in 1911 under the presidency of Sir Harcourt Butler. One of the declared aims of the conference was to attract, in course of time, Pandits and Mayavis, of eminence to the proposed central Oriental Institute so as to promote an interchange of the higher scholarship of both the old and the new school of orientologists throughout India. The conference at the same time was rightly for strongly maintaining and promoting the ancient and indigenous system of instruction in India. It must be therefore our aim to inculcate among the Pandits the spirit of research and to encourage enthusiasm for advancement of knowledge in so far as it is consistent with maintaining the high standard of scholarship of the old type. Obviously it cannot be achieved all at once, but it should be one of our ultimate aims and the reformed courses must take into consideration this ideal also as far as practicable.

(6) NEGLECT OF GENERAL KNOWLEDGE

One general complaint against the present courses of Sanskrit studies is that they practically do not lay any importance on the acquirement of general knowledge, not only in the field of Sanskrit itself, but also as regards other useful subjects like Arithmetic, History, Geography, the language of the people, Civics, Politics, etc. which should form a necessary feature of any educational curriculum. The study of such subjects is indispensable, not only for the proper development of one's own mind, not only for properly understanding the current social, economical and political problem of the life of the people at large and for taking one's own due share in the solution of those problems, but also for widening the range of opportunities of one's own life. It is the lack of general knowledge and of proficiency into the language of the people that has always been a reason of the wide gulf between the Pandits and the progressive life of the country and has restricted the field of their activity within very narrow limits. No doubt a start has already been in this direction by the introduction of Hindi and Arithmetic in the Prathama Examination. But that is not enough.

The prejudice of the old Pandits against the study of these general subjects is well known. We have already referred (on page) to their indifference even towards the language of the people. But it is a happy sign that the student community at large and a majority of the Pandits also are now advocating the introduction of such subjects in the courses of Sanskrit studies. The fact that hundreds, if not thousands, of Sanskrit students now every year appear in the Departmental Advanced Language Examination in Hindi and a large number of them also try to pass the English examination also points in the same direction. The defect therefore has to be removed, not only in the interest of the general life of the country, but also in the interest of the Pandits themselves.

(7) INDIFFERENT ATTITUDE TOWARDS ANCIENT INDIAN IDEALS OF SADACHARA OR "GOOD MANNERS AND GOOD CONDUCT"

The present courses of Sanskrit study aim only at a sort of literary education. They do not take any account of the necessity of impressing on the tender minds of students the importance of good conduct or of making them familiar with the ancient Indian ideals of Sadachara, "good manners and good morals". Education should aim at the training of both the mind and the heart. Cultivation of high character, self-respect, sense of discipline and civic responsibility must be the chief ideal of any proper education, and the courses of studies in any scheme of education must never lose sight of this aspect of the training of the individual. But the present courses based on the idea of over-specialization and one-sidedness have sadly neglected this aspect. It is therefore very desirable that the disposition to good conduct should be encouraged and cultivated on non-sectarian lines, among Sanskrit students. This can be secured to a great extent by preparing and prescribing for the different examinations selections based on the Vedas, Brahmanas, Upanishads, Ramayana, Mahabharata, Gita, Dhammapada, etc.

(8) UNSUITABILITY OF COURSES FOR WOMEN CANDIDATES

The present courses of Sanskrit study, based as they are on the tradition of those days when there was no talk of female education, cannot be expected to suit the needs of girls' education. But it is a matter of regret that, though happily the number of girl candidates appearing in the Sanskrit College Examinations is increasing year after year, up to this time, no steps have been taken to frame a course of Sanskrit studies with a view to their special needs and aptitudes. It must be therefore one of the duties of this Committee to remove this crying defect and to prepare a special course for girls which may be helpful in popularizing Sanskrit study among them.

CHAPTER V

GENERAL SCHEME OF THE NEW COURSES

Before we take up the question of the new courses of studies to be recommended by us, it is but proper that we should make ourselves clear as to the main principle which in our opinion should govern Sanskrit education and then in the light of that principle formulate the general scheme on which the new courses of studies are to be based.

We are of opinion that the main principle, Siddhanta, which should govern Sanskrit education is that it should help the realization of the *chatur-varga*, undisputedly recognized throughout all Sanskrit literature as the end of human life, viz. Dharma, Artha, Kama, Moksha :

शास्ति यत्प्राधान्यं चतुर्वर्गस्य निश्चितम् ।

तथा तद्प्राधान्यापयमेवा शास्त्रस्य शास्त्रता ॥

अर्थकरी च विद्या, i. e., चतुर्बुद्ध्याश्चकरी ।

In other words, education should help the attainment of happiness here and hereafter, by first subserving the institutions of Duty (Law and Religion), (Law-regulated) Property, and the Family life, and then the final goal of Salvation.

As to the general scheme on which the various Sanskrit College Examinations and their new courses of studies should be based, the Committee agrees :

PRATHAMA EXAMINATION

(1) That according to the injunction of Manu (II, 69.)

उपनीय गुरुः शिष्यं शिक्षयच्छीघ्रमादितः ।

आचारमग्निकार्यं च सन्ध्योपासनमेव च ॥

every student should be given instruction in (1) the Elementary principles of bodily and mental purity and hygiene (शौचम्), (2) good manners and morals, (अस्वार्थः); (3) fire-duties (अग्निकार्यम्), (4) daily prayers (सन्ध्योपासनम्) Brahmacharyam (ब्रह्मचर्यम्) or continence being the foundation of all these, all further education, and the special duties of the student; that the teacher should be required to certify on the application form of the student for the (प्रथमा) examination that he has received instruction in these matters, and has followed them in practice to a fair extent; and that by "Fire Duties" (अग्निकार्यम्) and "daily prayers" (सन्ध्योपासनम्) daily worship and observances according to the student's religious traditions are intended.

(2) That students should also be given instruction in scouting, the rules of health and sanitation (स्वस्थवृत्तम्, दिनरात्रिचतुष्टयम्) and either in spinning (for Yajnopavita, etc.), or cow-tending (गोपेक्षा) or elementary gardening, to be certified by the teacher as before; and that a new book on hygiene should be prepared on the basis of Ayurveda and Dharmashastra, as necessary.

(3) That the curriculum of the Prathama Examination, keeping in view the traditional scheme of Vedangas (विज्ञाना, छन्दः, व्याकरणं, निरुक्तं, ज्योतिषकल्पः) should comprise the following subjects :

COMPULSORY SUBJECTS

I.—*Vyakarana*—Laghukaumudi, or Saraswata, or Chandrika, or Kalapa, or Mugdhabodha.

II.—*Kosha*—The first Khanda of Amarkosha (questions to be confined to the synonyms and meanings of words).

III.—*Sanskrit Prose and Verse (Gadya and Padya)*—Mainly based on Hitopadesha, Panchatantra, Ramayana and Mahabharata (a new book to be prepared which should contain also a selection of Suktis, to be committed to memory, from ancient literature).

IV.—*Translation*—Sanskrit into Hindi and Hindi into Sanskrit.

V.—*Metre*—(छन्दः प्रवेश) with examples from the Vedic Literature as well as the epic literature (Ramayana and Mahabharata). कव्चीकृत examples being avoided, and वीर अद्भुत, कल्प and शान्त sentiments to be preferred.

VI.—*Hindi*—With essay and letter-writing (essay to be only either descriptive or narrative) and general knowledge of Hindi Grammar such as to enable the students to write correct Hindi and distinguish the differences of Sanskrit and Hindi grammatic usages.

VII.—*Arithmetic*—(Both written and mental) as already prescribed in Prathama Examination, with the additional proviso that in future only simple problems may be asked in the examination.

VIII.—*History and Geography*—(Itihasa-Purana and Bhugol of India, with map-drawing of India).

IX.—*Science*—(Vijnana), Popular or everyday Science (a new book, including general information regarding agriculture, to be prepared, as necessary).

OPTIONAL SUBJECT

X.—A European Language—English, or German, or French, (up to the standard of 6th class or lower middle).

(4) That the above mentioned subjects should be distributed in six compulsory papers and one optional paper as follows:

- I.—Paper—I.—Vyakarana.
- II.—Sanskrit Prose and Verse and Metre.
- III.—Translation and Kosha.
- IV.—Arithmetic.
- V.—Hindi with popular Science, and Hygiene.
- VI.—History and Geography.

OPTIONAL

VII.—A European Language.

(5) That in every paper 10 marks should be reserved for good and clear handwriting.

MADHYAMA EXAMINATION

(1) (a) That the *Madhyama Examination* may be completed in three years instead of four years as at present. (Those alone who have passed the Prathama Examination of the Government Sanskrit College Examinations, Benares, should be entitled to appear in the *Khandas Examinations* of the *Madhyama* taking only one *Khandas* in one year.

(b) A candidate after having passed the Prathama Examination may be allowed to appear in the entire *Madhyama* (taking all the three *Khandas* in one year) but not before the 3rd year after passing the Prathama Examination.

(c) As a special case a candidate of advanced age may also be allowed to appear either in *Khandas*, *Madhyama* or entire *Madhyama*, even without having passed the Prathama examination of the Sanskrit College Examinations, Benares, provided he produces a certificate from some other recognized examining body showing that the candidate has acquired knowledge equivalent to that of the Prathama Examination of the Sanskrit College Examinations, Benares.

(2) That students should study one of the several subjects named below as special subject, and a number of other subjects, named below, as common to all the courses:

The common subjects should comprise the following:

I.—*Sahitya*—(Vaidika and Laukika, with good and sound knowledge of the Sanskrit language).

II.—*Vyakarana*—(General knowledge of Grammar, of a higher standard than that of Prathama; Translation and composition):

साधारण कारक, समास, लकाराश्च
आत्मनेपद, परस्मैपद, अव्ययार्थे

III.—*Arithmetic* with Elementary Astrology (*Jyautisha*).

IV.—*History and Geography*—(Purana-Itihasa).

V.—*Dharma Shashtra*—(Politics, Sociology, and Karma-kanda).

VI.—*Hygiene* and other subjects such as elementary knowledge of agriculture and every day science etc., through the medium of Hindi.

VII.—*Logic*.

OPTIONAL SUBJECT

VIII.—One of the following European Languages—English,

French or German up to the Matric standard.

The special subjects should comprise the following:

I.—*Veda*—(a) According to the Yajnika School (with committal knowledge to memory of Veda-texts, and knowledge of Karma-kanda ritual; also some knowledge of the meaning of the texts).

This may include the alternative courses on (1) the Shukla Yajurveda Madhyandina Shakha, or (2) the Krishna Yajurveda Taittiriya Shakha, or (3) the Rigveda Samhita, or (4) the Samaveda,

or (5) the Atharvaveda.

(b) According to the Nairukta School of Interpretation of the Vedas (with more emphasis on knowledge of the meaning of Veda-texts and the Vedangas and less on 'committal' to memory; some knowledge of the ritualistic side of karma-kanda).

III—*Vyakarana*—(a) According to the school of Siddhanta Kaumudi (with simple explanation of the panktis). The students will be required to show familiarity with the sequence of Sutras according to the Ashtadhyayi.

(b) According to the school of Kashika (the students will be required to show familiarity with the Grammatic Prakriya of word-formation, i.e., सपुत्र-सिद्धि).

III—*Jyautisha*—(including both Ganita and Phalita; also modern mathematics).

IV—*Darshana*—(a) General knowledge of the principal systems of philosophy with some emphasis on Gautama's system of logic with additional examples from Western books on logic.

(b) Based on Gautamiya, Bauddha and Jain systems of logic with additional examples from Western books on logic.

V—*History and Geography*—(Itihasa, Purana, together with the history of the Indian people and their culture).

VI—*Raja-Shastra and Samaja Shastra*—(Politics, Economics, and Sociology in accordance with the Itihasa-Purana, studied in the light of modern literature on the subjects).

VII—*Sahitya*—(with a knowledge of Paninian grammar of the standard of the Madhyakaumudi).

(3) That a text-book on the different system of Indian philosophy, emphasizing the common points and their underlying unity, may be prepared and should be prescribed either in Darshana Madhyama or in the higher stages of the different Darshana examinations.

SHASTRI EXAMINATION

(1) That the period of study for the Shastri Examination should remain three years as at present.

(2) That ordinarily a candidate should be required to appear in the Khanda Examinations separately, but a candidate of advanced age may be allowed to appear for all the parts of the Shastri Examination simultaneously, provided that he produces a certificate from a recognized examining body to the effect that he has knowledge of both the common subjects as well as his special subject as prescribed for the Prathama and the Madhyama Examinations and for the 1st two parts of the Shastri Examination of the Sanskrit College Examinations, Benares.

(3) That for the Shastri Examinations too there should be one common and one special course, as for the Madhyama.

The common subjects should be as follows.

I—*Sahitya*—(Selections from Vaidika and Laukika literature together with the general history of Sanskrit literature).

II—*Hindi Sahitya and Essay*—(as far as possible in relation with the history of the Indian people and their culture).

III—*Itihasa-Purana*—(An outline of world history, for example, H. G. Wells' Outline of History, in Hindi).

IV—*Dharma Shastra*—with Raja Shastra and Samaja Shastra (Politics, Economics, and Sociology).

V—*Translation and Essay writing*—(Translation Sanskrit into Hindi; Essay writing in Sanskrit).

OPTIONAL SUBJECT

VI—One of the following European languages, viz. English, French, or German up to the Intermediate standard.

The special subjects should be the following

I—*Veda*—(a) According to the Yajnika school, to be confined to the Krishna Yajurveda, Taittiriya Sakha and the Shukla Yajurveda Madhyandina Shakha only for the time being.

(b) According to the Nairukta school.

II—*Vyakarana*—(a) *Navya-Vyakarana* Shiksha (Phonetics),
(b) *Prachina Vyakarana* Nirukta (Etymology),
and Bhasha (Vijana)
Elements of Comparative Philology, to be studied with both.

III—*Jyautisha*—

- (a) Mainly Ganita.
 (b) Mainly Phalita.
 (c) Mainly Siddhanta. } Some modern Mathematics.

N.B.—The students should be expected to have observational knowledge of the (Grahās) planets, and (Nakshatras) constellations or asterisms.

IV—Darshana (Philosophy)—

(a) Sarva Darshana—general principles of all the chief schools of philosophy.

(b-1) Nyaya-Vaisheshika—(either Prachina, or Navya, or Sarva Nyaya) old or new or that based on Gautamiya, Bauddha, and Jaina systems of logic.

(b-2) Sankhya-Yoga with general knowledge of Western psychology.

(b-3) Purva-Mimansa.

(b-4) Vedanta; Prasthan-traya mainly, with an option between Shankara and Ramanuja etc., in some papers.

(b-5) Jaina Darshana.

(b-6) Bauddha Darshana.

[A special book in simple Sanskrit, dealing with the main doctrines of all the systems of Indian philosophy (including Advaita, Dvaita, Vishisht-Dvaita, Jaina, Bauddha, etc. systems) may be prepared and prescribed as common for all the special groups of philosophy.]

V—*Dharma-Shastra*—including Smriti, Sutra, Mimansa, Veda, and some Karma kanda or paurohitya.

VI—*Purana-Itihasa*—with emphasis on Shrimad Bhagvata, and Indian History, both ancient and modern, with some knowledge of inscriptions.

VII—*Sahitya*—(Including some chapters of the Shrimad Bhagvata).

N.B.—The candidate should be expected to know the history of the development of his special subject.

VIII.—*Raja-Shastra, Artha-Shastra and Samaja-Shastra*—(Politics, Civics, Economics, and Sociology).

ACHARYA EXAMINATION

(1) That the period of study for the Acharya Examination should be two years instead of three as at present.

(2) That there should be only special subjects for the Acharya Examinations.

The following should be the special subjects:

I—*Veda*—(a) According to the Yajnika School (as in Shastri).

(b) According to the Nairukta School (with general knowledge of comparative mythology).

II—*Vyakarana*—(a) Prachina.

(b) Navya.

III—*Jyautisha*—(a) Ganita.

(b) Phalita.

(c) Siddhanta.

with modern Mathematics.

IV—*Darshana*—(a) Sarva Darshana.

(b-1) Prachina Nyaya-Vaisheshika (with general knowledge of Western logic).

(b-2) Navya Nyaya (with general knowledge of Western logic).

(b-3) Sarva Nyaya (with general knowledge of Western logic).

(b-4) Sankhya-Yoga (with knowledge of Western Psychology).

(b-5) Purva-Mimansa (with general knowledge of Western Ethics).

(b-6) Vedanta, Shankara (with general knowledge of Western Metaphysics).

(b-7) Vedanta Ramanuja (with general knowledge of Western Metaphysics).

(b-8) Vedanta, Madhva (with general knowledge of Western Metaphysics).

(b-9) Vedanta, Nimbarka (with general knowledge of Western Metaphysics).

(b-10) Vedanta, Vallabha (with general knowledge of Western Metaphysics).

(b-11) Jaina Darshana.

(b-12) Bauddha Darshana.

A general knowledge of history of Eastern and Western Philosophy should be expected from all candidates of all the Darshana courses.

V—*Dharma-Shastra*—(with general knowledge of modern Jurisprudence and Ethics). —

VI.—*Sahitya*.

VII—*Purana-Itihasa*—(with general knowledge of comparative mythology and Religion).

VIII—*Raja-Shastra, Artha-Shastra and Samaja Shastra*—(with general knowledge of Western ideas on these subjects).

A general knowledge of the history of the development of his special subject should be expected from each candidate, in connection with the essay paper.

There should be two *aichchhika* (optional) subjects. The candidates may take up one, or both, or none.

(1) Hindi up to the standard of B.A., with knowledge of current politics.

(2) Any one of the three following European languages of the standard of B.A.:

(a) English, (b) French, (c) German.

EXAMINATIONS FOR WOMEN STUDENTS

(1) The courses of studies for women students should be framed according to their special needs and aptitudes and should be different from those for men students.

(2) Three special examinations called respectively, Jnana-Prabha, Jnana-Shree and Bharati should be instituted for them—each of the latter two having two part examinations, each of one year's course.

JNANA-PRABHA

(3) The curriculum of the Jnana-Prabha examination should comprise the following subjects:

(a) Vyakarana, based on Laghukaumudi.

(b) Sanskrit Prose and Verse.

(c) (i) Translation and (ii) Hindi.

(d) Arithmetic.

(e) Domestic Science with Hygiene and popular Science.

JNANA-SHREE

(4) The curriculum of the Jnana-Shree examination should comprise the following subjects:

(a) Vyakarana; based on Laghukaumudi and the chapter on Karaka of the Siddhanta Kaumudi.

(b) Sanskrit Prose and Verse with drama, the Gita and Metre.

(c) Translation, Sanskrit essay and stories from the Puranas throwing light on the Indian ideals of womanhood.

(d) Arithmetic with elementary Astrology.

(e) History and Geography.

(f) Hindi.

BHARATI EXAMINATION

(5) The curriculum of the Bharati examination should comprise the following subjects distributed into common and special subjects:

Common subjects

(a) Sanskrit Prose and Verse with Bhagavatagita, Sapta-shati, and Prakrita Grammar.

(b) Sanskrit essay.

(c) Elements of Civics, Economics and Politics.

(d) Hygiene with elements of Physiology and lessons on First-Aid.

- (e) Indian History with an outline of world history.
 (f) General knowledge of—
 (i) Dravya-Guna (Properties of drugs of common use).
 (ii) Shishupalana (rearing of children).
 (iii) Rogi-Paricharya (Nursing).

Special subjects:

Rhetorics,
 or
 Darshana,
 or
 Purāna, and Dharma Shastra,
 or
 Veda and Upanishads.

CHAPTER VI

NEW FEATURES OF THE REVISED COURSES

INTRODUCTORY REMARKS

For the detailed courses of studies as revised and recommended by us see Appendix XI. In the following we propose to point out the new features of the revised courses only in their outline. At the outset, however, it is necessary to say a few words as regards the general principles we have followed in revising the present courses. While always keeping in view the criticism made before, of the present courses and method of study, we have been anxious to maintain a continuity of the same with the past and also to preserve their best features. The further growth and progress of the Sanskrit College, with its wide-spread and ever-expanding examination system and long history, like those of any other living institution, are bound to be influenced and determined, to a great extent, by its past. While anxious to infuse among the Sanskrit Pandits the spirit of research and an enthusiasm for advancement of knowledge and to make them better adapted and more alive to the needs of modern life, our first aim has been, not only to maintain the standard of Sanskrit scholarship of the old type, but also to raise it still higher. In fact the other changes have been recommended only in so far as consistent with this ideal. We had also to take into consideration the important fact that there are more than a thousand Sanskrit Pathashālas, both in the United Provinces and outside, affiliated to the Sanskrit College Examinations. Thousands of candidates from these Pathashālas appear, every year, in the said examinations. The financial condition of these Pathashālas is far from satisfactory and there are no immediate prospects of its improvement. In making our recommendations, therefore, as regards the courses, we have never lost sight of the idea of their practicability with regard to the vast number of Pathashālas affiliated to the Sanskrit College Examinations. We are confident that, if used with a little caution and foresight, the scheme of the new courses can easily be put into operation. Taking into consideration the opinions expressed in the answers received in reply to our questionnaire, we have no doubt that the scheme will be well received by the vast majority of the Sanskrit public.

SPECIAL SUBJECTS

We have recommended the introduction of a number of special subjects for the first time for the Madhyama, Shastri and Acharya examinations. Those subjects, and the special reasons in their favour, are as follows:

(1) *Veda (Nairukta Prakriya)*—This subject has been recommended for Madhyama, Shastri, and Acharya Examinations with a view to encourage the study of the Vedas on sounder lines, according to the old ideal that Vedic study should be preceded by the study of the six Vedāngas, and to emphasize the importance of understanding the meaning of Vedic texts more than merely their sacrificial application or textual recitation, and also to acquaint the Vedic Pandits with the trend of modern critical studies in the Vedic literature.

(2) *Rigveda, Samaveda, and Atharvaveda (Yajnika Prakriya)*.—We have recommended courses in these three Vedas only for the Madhyama examination in order to complete the scheme of the study of the four Vedas according to the Yajnika School, which is necessary in the interest of maintaining the traditional method of Vedic studies. At present such courses are prescribed only in the two branches of the Yajurveda. The courses in these new Vedic subjects can be extended up to the Acharya examination whenever there is a demand for it in future.

(3) *Prachina Vyakarana*—This subject, already prescribed for Shastri and Acharya Examinations, has also been recommended for Madhyama with a view to reviving the study of Vyakarana as such on old lines and to discourage too much emphasis on the Parishkara side of Navya Vyakarana.

(4) *Sarva Nyaya (based on Gautamiya, Bauddha and Jaina system of Logic)*—The study of this special subject has been recommended for Madhyama, Shastri and Acharya Examinations with a view to encourage comparative study of the different Nyaya systems and to help in acquiring a clear idea of the development of Nyaya in India.

(5) *Raja Shastra with Samaja Shastra and Arthashastra (Politics, Economics and Sociology)*—The study of this new subject has been recommended with the idea of not only reviving the study of this long-neglected subject in Sanskrit and to bring that study in touch with the modern theories on the subject and the modern political, economical and sociological conditions of the world, but also to widen the field of utility of the Pandits and bring Sanskrit learning into living touch with the realities of the people's life.

(6) *Bauddha Darshana (in Shastri and Acharya)*—The study of Bauddha philosophy, which has played an important part in the development of Indian philosophy and religion and history, is necessary both for understanding that development and also for its own sake. There is no reason for excluding the study of this important system from the courses of Sanskrit Examinations which include those on other important systems of Indian philosophy together with Jainism.

(7) *Ganita (in Shastri and Acharya)*—Ganita or Mathematics has been so far studied as a part of Jyautisha and the courses on the subject have not taken into account the great development of the science in modern times. The study of Ganita as an independent subject is intended to stimulate interest in the science and also to put Sanskrit Pandits in touch with its modern development.

(8) *Nimbarka and Vallabha Vedanta (in Shastri and Acharya)*—These subjects have been recommended with the idea of making the scheme of study of the Vedanta systems more comprehensive, and also to meet the persistent demand of the followers of these two systems to include these subjects in the courses for the Sanskrit College Examinations, as has already been done in the case of the Ramanuja and Madhya Vedanta systems.

B—OTHER SUBJECTS

(1) *Subjects of General Importance in Sanskrit*—We have made an attempt, as far as practicable, to remove the defects of over-specialization, by adding to the special subjects courses on subjects of general importance in Sanskrit right up to the Shastri examination. For example, in place of the nominal or meagre courses on general Sahitya, at present prescribed only up to the Madhyama Examination, we have now extended the study of general Sanskrit Sahitya as a compulsory subject up to the Shastri Examination. The courses in this subject will now cover not only classical Sanskrit poetry, but also the more ancient Sanskrit literature, including Vedas, Brahmanas, Upanishads, Ramayana, Mahabharata, etc. A paper on this has been added from Prathama up to Shastri, practically in every examination. The same paper will include texts from ancient Sanskrit literature aiming at giving a moral education, and promoting among the students an attitude of respect towards the Indian traditions of etiquette and good conduct. The same paper is also intended for giving Sanskrit student a comprehensive idea of Sanskrit literature as a whole. A series of special text-books will have to be prepared for this purpose.

(2) *Essay writing and translation*—We have paid special attention to the object of developing, among the students, the capacity of correctly and fluently expressing themselves in Sanskrit. With this view a paper on essay writing and Sanskrit translation has been added, for the first time, for the Shastri Examination, and similarly an essay paper for the Acharya Examination.

(3) *Allied or Cognate Subjects*—We have also endeavoured to extend the scope of the study of every special subject by prescribing works on allied or cognate subjects. For example, in the Vyakarana Shastri Examination, the study of Nirukta and philology has been prescribed, and the Nyaya Siddhanta Muktavali has been added to the courses of Acharya in Navya Vyakarana.

(4) *Taste for Critical Methods and Research*—With a view to encourage taste for critical methods and research as well as to develop a historical and comparative outlook, we have also tried to give to the students, through the courses, specially of the Acharya Examination, some general idea of the modern side of the different subjects. With the same view provision has been made for the first time, either through the paper on general Sanskrit literature or otherwise, for the study of the history of Sanskrit literature in general, as well as of the special subjects in the Shastri and Acharya Examinations.

(5) *Useful Subjects of General Importance*—Realizing the great deficiency of general knowledge among Sanskrit Pandits as well as their incapacity for appreciating the conditions of the modern world, we have laid due emphasis on the study of such useful subjects of general importance as Hindi, Arithmetic, popular Science, History and Geography, in Prathama, Madhyama, and Shastri Examinations. An optional paper for the special study of Hindi has also been added to the Acharya Examination. A study of Civics and Politics as a compulsory subject, either through the Hindi text books or independently, has also been provided for, up to the Shastri Examination.

(6) *Courses of Study in English, German and French*—Realizing the importance of the study of at least one of the three most important foreign languages, not only from the stand-point of its being a help in securing better prospects of employment of various sorts but also from the point of view of expanding the mental horizon, and acquiring that wide outlook and liberal education, which is at present possible only through it, we have, from the Prathama up to the Acharya Examination, recommended, as an optional subject, alternative courses of study in English, German, or French. The utility of the knowledge of any of these languages for research also cannot be gainsaid. There may be an element of impracticability with regard to our recommendations on the courses in these languages on parallel lines. But it seems desirable that, while giving due importance to the study of English, some provision should also be made for the study of the other two languages, especially for those who have already acquired sufficient knowledge of English and are anxious to have an acquaintance also with German and French. The linguistic equipment of a research scholar should as a fact include such languages as German and French in which much of modern research finds expression. It is, of course, understood that provision for English will have to be made first of all, as the most easily manageable, and also the most useful for the practical purpose of life, for the present.

(7) *Research Degree of Vachaspati*—To encourage real advance of knowledge and critical research we have also recommended the institution of the research degree of "Vachaspati". It is necessary both for infusing a new life in Sanskrit studies and for bringing the same in living touch with modern development of knowledge.

(8) *Preparatory Course*—In view of the complaint that the studies in the Pathashalas are not conducted on proper and systematic lines, we have also recommended a preparatory course which should precede the Prathama course in the Pathashalas. This course is intended only to serve as a general guide to the Pathashalas which will conduct their own examinations in the course. There will be no public examination in it, though the Inspector of Sanskrit Pathashalas will try to see that the course in its general outline is followed in the Pathashalas.

(9) *Special Course for Women*—We have also recommended a special course for women candidates, taking into consideration both their special needs and aptitudes. It is expected that the course will greatly help in popularizing Sanskrit study among girls.

CHAPTER VII

THE SCHEME OF EXAMINATIONS

In keeping with the terms of reference of our Committee, we have carefully gone into the question of the scheme of the Sanskrit College Examinations, with a view to economize time and to make the examination system as efficient as possible. While doing so we have also taken into consideration the general opinion of the Sanskrit public as expressed in the answers to our questionnaire. Our recommendations with regard to the scheme of examinations are as follows :

(1) THE PERIOD OF STUDY

Under the present scheme the total period of study after the Prathama Examination covers 10 years, i.e., 4 years for the Madhyama examination, 3 years for Shastri and 3 for Acharya. In our opinion this period can be easily reduced by 2 years, without in any way lowering the standard of the examinations, by introducing a three years' course for the Madhyama Examination and a two years' for the Acharya Examination. It is needless to say that almost all the answers with the exception of only a few are in favour of this saving in time.

(2) THE RULES REGARDING PASS MARKS

Rules 3, 9, 20 and 26 of the present rules of the Sanskrit College Examinations seem to us rather too hard. Rules 3 and 9, over and above certain minimum pass marks (33 marks out of 100 in Prathama, and 17 out of 50 in Madhyama) in each paper, also demand a special total in the aggregate, i.e. 220 marks for six papers in the Prathama Examination and 260 marks for 14 papers in the Madhyama. In our opinion this condition regarding the special total is not necessary in these lower examinations and should be removed. The unfairness of this rule regarding the Sampurna Madhyama Examination which at present consists of 14 papers, becomes clear when we consider that there is no such condition as regards the Khanda Madhyama Examinations which consist only of 3 or 4 papers each.

Rules 20 and 26 respectively require, as the minimum, 20 marks out of 50 in each of the two papers and a total of 45 marks in the Shastri Khanda Examinations, and 25 marks out of 50 in each of the two papers and 55 as the total in the Acharya Khanda Examinations. In our opinion it would be quite reasonable if we fix 17 pass marks as the minimum in each of the 4 papers and 80 marks as the total for the new Shastri Khanda Examinations, and similarly 20 pass marks as the minimum in each of the papers and the total on the basis of 25 marks in each paper of the new Acharya Khanda Examinations.

(3) THE RULES REGARDING THE DIVISIONS

Rules 4, 10, 21 and 27 of the present rules of the Sanskrit College Examinations require at least 60 per cent. marks for securing the first division in the Prathama, Madhyama and Shastri Examinations; while 70 per cent. marks are required in the Acharya Examinations for the same purpose. In our opinion only 65 per cent. marks should be the minimum for securing the first division in the Acharya Examinations.

(4) ELIGIBILITY OF CANDIDATES FOR DIFFERENT EXAMINATIONS

(a) Rule 8 of the present rules defines subjectwise the eligibility of the Madhyama-passed candidates for the Shastri Examination. Under the new scheme this rule should be changed as follows:

(1) A candidate who has passed the Madhyama Examination in Shukla Yajurveda can be allowed to appear in the first year Shastri Examination in any subject excepting Krishna Yajur-Veda, Vyakarana, Navya Nyaya, Sarva-Nyaya, Raja Shastra, Jyautisha and Ganita.

(2) A candidate who has passed the Madhyama Examination in Krishna Yajurveda can be allowed to appear in the first year Shastri Examination in any subject excepting Shukla-Yajurveda, Vyakarana, Navya Nyaya, Sarva-Nyaya, Raja-Shastra, Jyautisha and Ganita.

(3) A candidate who has passed the Madhyama Examination either in Rigveda or Samaveda or Atharvaveda can be allowed to appear in the first year Shastri Examination in any subject excepting Krishna Yajurveda, Shukla Yajurveda, Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(4) A candidate who has passed the Madhyama Examination in Veda (Nairukta School) can be allowed to appear in the first year Shastri Examination in any subject excepting Navya Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(5) A candidate who has passed the Madhyama Examination in Prachina or Navya Vyakarana can be allowed to appear in the first year Shastri Examination in any subject excepting Veda (Shukla Yajurveda and Krishna Yajurveda), Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(6) A candidate who has passed the Madhyama Examination in Sahitya can be allowed to appear in the first year Shastri Examination in any subject excepting Veda (Shukla-Yajurveda and Krishna-Yajurveda), Vyakarana (Prachina and Navya), Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(7) A candidate who has passed the Madhyama Examination in Sarva Nyaya can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Navya Nyaya, Raja Shastra, Jyautisha and Ganita.

(8) A candidate who has passed the Madhyama Examination in Darshana can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(9) A candidate who has passed the Madhyama Examination in Purana-Itihasa can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Navya Nyaya, Sarva Nyaya, Jyautisha and Ganita.

(10) A candidate who has passed the Madhyama Examination in Raja Shastra can be allowed to appear in the first year Shastri Examination either in Raja Shastra or Dharma Shastra or Purana-Itihasa.

(11) A candidate who has passed the Madhyama Examination in Jyautisha can be allowed to appear in the first year Shastri Examination either in Jyautisha (Siddhanta or Phalita) or Ganita or Dharma Shastra.

(b) Rule 19, paragraph 2 lays down certain conditions under which candidates who have passed any Sanskrit title examination from the Benares Hindu University, the Sanskrit College, Jaipur, and the Punjab University can be exempted from the Madhyama Examination of the Sanskrit College and can be allowed to appear for the first year Shastri Examination. Under the new scheme this concession will have to be withdrawn. The question of recognition of the Sanskrit Examinations of the above-mentioned as well as other examining bodies can be considered only after those examining bodies have remodelled their courses on our lines.

But in our opinion the following should be added to rule 19 :

(1) A candidate who has passed the Acharya Examination of the Sanskrit College in one subject can be allowed to directly appear in the Shastri Examination, partly or wholly, in any other subject and he will be exempted from the general papers provided that he has already studied those subjects in his Shastri Examination already passed under the new scheme. The Acharya Examination however, in that subject will have to be taken always by parts.

(2) A candidate who has passed the Shastri Examination of the Sanskrit College in one subject can be allowed to appear in the first year Shastri Examination in any other subject without passing the Madhyama Examination in that subject and can be exempted from the general papers provided that he has already passed his complete Shastri under the new scheme.

(3) M. A.s in Sanskrit of any recognized University can be allowed directly to appear in any Shastri Examination by parts, but those who have passed their M. A. in Sanskrit in first division can be allowed to appear in the complete Shastri Examination also. In both the cases they will be exempted from the non-Sanskritic general papers provided they produce a certificate to the effect that they have already studied those subjects for any of their English examinations.

(c) Paragraph 2 of rule 25 should be replaced by the following :

(1) A candidate who has passed his Shastri Examination in Navya or Prachina Vyakarana can be allowed to appear in the Acharya Examination in any of the two subjects.

(2) A candidate who has passed his Shastri Examination in Navya Nyaya can be allowed to appear in the Acharya Examination either in Navya Nyaya or Prachina Nyaya.

(3) A candidate who has passed his Vedanta Shastri Examination can be allowed to appear in any group of the Vedanta Acharya Examination.

(4) As a rule a candidate after taking up any special subject in his first year Acharya Examination will have to confine himself to that subject in the 2nd year Acharya Examination.

(5) RE-EXAMINATION OF ANSWER-BOOKS OF FAILED CANDIDATES

The present rules do not provide for re-examination of answer-books of failed candidates. Rule 44 provides only for scrutiny of marks of such candidates, which practically means nothing but retotalling of marks. It does not allow any revaluation of answers. But there is a possibility of there being a grievance regarding unfairness on the part of an examiner. The present rules do not provide any remedy for such cases. In our opinion that remedy can be found in authorizing the Chairman of the Examination Committee or the Examination Committee itself to appoint a Board of Examiners consisting of the Chairman and two specialists other than the original examiner, for each subject to re-examine the answer-books in such cases of failed candidates and to see whether a real injustice has been done to the candidates; this re-examination being allowed if the candidate fails in not more than one paper. The re-examination fee should be at least Rs.8 and each examiner should be paid Rs.2 per candidate. The decision of this Board will be final in the matter. We believe that the mere presence of this provision among the rules will exercise a great restraining influence on the examiners and will go a great length in inspiring confidence among the candidates.

(6) INCREMENT IN THE RATES OF REMUNERATION TO SETTERS AND EXAMINERS

Under the new scheme, modern subjects like Civics, Politics, Economics, Modern Mathematics, Western Philosophy, Psychology, Comparative Philology, Comparative Religion, Mythology, History, Geography, Hindi, etc. have been prescribed, either as special or as general subjects, in all the examinations from Prathama up to Acharya. It will be very difficult to secure the services of suitable setters and examiners for these subjects on the present meagre remunerations; i.e. Rs.7 for Prathama; Rs.10 for Madhyama and Rs.20 for Shastri and Acharya as setting fee for each question paper; and annas 3 for Prathama, annas 4 for Madhyama and annas 6 for Shastri and Acharya as the examination fee per answer-book. The present rates are inadequate even for Sanskrit examiners and do not compare favourably with the rates of remunerations of other examining bodies, such as the Benares Hindu University and the Punjab University, etc. as shown below:

Scale of Remuneration to Examiners

Benares Hindu University:

Name of examination	For setting a paper	For examining a paper
	Rs.	Rs. a.
Praveshika	15	0 8
Madhyama	20	0 8
Shastri	30	0 12
Acharya	40	1 8

Punjab University:

Prajna	25	0 6
Visharada	35	0 8
Shastri	45	0 12

The rates therefore must be revised and brought to a decent level. In our opinion the minimum rates should be as follows:

Setting fee per question paper—Prathama Rs.15, Madhyama Rs.20, Shastri Rs.30 and Acharya Rs.40.

Examining fee per answer book—Prathama annas 4, Madhyama annas 6, Shastri annas 8 and Acharya annas 12.

Fee for head-examinership per assistant examiner—Prathama Rs.15, Madhyama Rs.20 and Shastri Rs.30.

As regards the three special examinations for girls, newly to be started, the rates should be respectively the same as those for the Prathama, Madhyama and Shastri Examinations.

(7) INCREMENT IN THE RATES OF REMUNERATION FOR TABULATING AND CHECKING THE RESULTS

Under the new scheme the present number of question papers will be almost doubled in the Madhyama, Shastri and Acharya Examinations. There will be five question papers instead of three or four in each of the Madhyama Khanda Examinations, four instead of two in each of the Khandas (Parts) of the Shastri Examination, and three or four instead of two in each of the Khandas of the Acharya Examination. It means a considerable increase in the number of entries in the marks registers of almost all the examinations. The present rates (i.e. Rs.8 for tabulation, per hundred candidates and Rs.4 for checking the tabulated results per hundred candidates) of remuneration for tabulation of marks and the checking of tabulated results should therefore also be suitably increased. In our opinion, in the interest of efficiency of the work and also in keeping with the high prestige attached to these examinations—higher than that attached to any other Sanskrit Examinations in India—the rates in future should be as follows :

Remuneration for tabulation per hundred candidates—Prathama Rs.12, Madhyama Rs.12, Shastri Rs.16, Acharya Rs.16.

Remuneration for checking per hundred candidates—Prathama Rs.6 Madhyama Rs.6, Shastri Rs.8, Acharya Rs.8.

It may be noted that in tabulating the results of the Shastri and Acharya Examinations the special total of each candidate, apart from the marks of each paper, will also have to be taken into account, which would mean an additional labour.

As regards the three special examinations for girls, newly to be started, the rates of remuneration for tabulating and checking the results should be respectively the same as those for the Prathama, Madhyama and Shastri Examinations.

(8) ADDITIONAL HANDS IN THE REGISTRAR'S OFFICE

Due to the introduction of several new subjects in the Madhyama, Shastri and Acharya Examinations and the addition of several general or optional papers in all the examinations, the total number of question papers under the new scheme will be 436 as against 286, the present total, as detailed below :

The current scheme		The new scheme	
Prathama	10 papers.	Prathama	10 papers.
Madhyama	56 "	Madhyama	80 "
Shastri	111 "	Shastri	139 "
Acharya	109 "	Acharya	175 "
		Optional Hindi in	
		Acharya	2 "
		Girls' examinations ..	30 "
Total	286 papers.	Total	436 papers.

It shows that the new scheme will entail much additional heavy responsibility on the Registrar, Sanskrit College Examinations, and in consequence the work of his office will increase tremendously as compared with the present work. We understand that the present staff of that office is already very much inadequate for the office work which has much increased in recent years and that representation has already been made to the Government for two additional hands in the staff. We are convinced that even after the increase of these two hands the office will be in urgent need of several additional hands to cope with the increased amount of work due to the introduction of the new scheme. We recommend that in the interest of making the scheme a success the question may be sympathetically further enquired into by the Government and early steps may be taken to suitably increase the strength of the office.

In case the Government is prepared to adequately increase the hands to the Registrar's office we will recommend that there should be an arrangement for holding Compartmental examinations on similar lines as followed by some other public examining bodies such as the Board of High School and Intermediate Education. The detailed rules for the Compartmental examinations can be prepared by the Board of Sanskrit Studies when necessary.

(9) MODERATION OF QUESTION PAPERS

Under the present arrangement, we understand, the work of moderation of question papers mostly rests with the Registrar himself. Of

course when very necessary he takes the help of local scholars, experts in different subjects. Under the new scheme when a variety of new subjects is going to be introduced in the Sanskrit examinations and the number of question papers will increase very much, the present arrangement will not do and the co-operation of a large number of scholars not only local but also from outside Benares will become necessary. This arrangement will entail new expenses and it will become necessary to constitute each year a regular committee of moderation.

(10) RAISING THE EXAMINATION FEES

From what has already been stated it is clear that the new scheme will entail new additional expenses on the Government. In the circumstances we feel constrained to recommend the raising of the present examination fees from Madhyama up to Acharya. Rules 14, 17, 22, 27, and 40 prescribing fees for the said examinations should therefore be amended. In our opinion the fees should now be fixed as follows:

(The present fee of Rs.2 for Prathama may not be changed.)

Madhyama, each part—Rs.3 (present fee Rs.2).

Sampurna Madhyama—Rs.12 (present fee Rs.10).

Shastri—

Each of the first two parts—Rs.5 (present fee Rs.5).

Final part—Rs.5 (present fee Rs.5).

Acharya—

Part I—Rs.6 (present fee Rs.5).

Part II—Rs.8 (present fee Rs.5 + Rs.2 for optional Hindi).

As regards the three special examinations for girls, newly to be started, the fees should be fixed as follows:

Jnana-Prabha—Rs.1.

Jnana-Shri, each part Rs.2.

Bharti, each part Rs.4.

(11) MEDIUM OF EXAMINATION

Under the new scheme a large number of books in Hindi on modern subjects like History, Politics, Civics, Geography, etc. have been prescribed for the different examinations. In our opinion it would be in the fitness of things if in such cases Hindi is made the medium of examination. While on the one hand this would exercise a check on the practice of senseless cramming, on the other it will have a stimulating effect on intelligent mode of study and independent thinking.

(12) A HIGHER RESEARCH DEGREE

As already stated, the Committee is in favour of instituting, after Acharya, a research degree to be called "Vachaspati" of the subject concerned. For the degree, a candidate will have to write an original thesis based on independent research. The efficiency of the candidate in the particular branch of knowledge and in the other cognate and allied subjects and consequently his suitability for the degree will also be tested by an oral examination as well as a written paper. An Acharya passed candidate will be allowed to submit the thesis for the degree only after the lapse of five years from the year in which the Acharya degree was taken. The Board of Examiners should consist of eminent scholars of Sanskrit of both the ancient and modern type. Other details may be settled by the Board of Sanskrit Studies. The fee should be at least Rs.50 (or 100). We would recommend that every successful candidate should be awarded a suitable dress as well as a cash prize worth at least Rs.1,000. This proposal, if accepted, will go a long way in giving a new stimulus to Sanskrit studies on original lines and would infuse a new life in Sanskrit learning.

(13) OPTIONAL PAPERS ON WESTERN LANGUAGES

We have recommended study of English or German or French, as an optional subject, in all the examinations. The standard of these optional languages for the Prathama, Madhyama, Shastri and Acharya examinations is prescribed up to the standard of the 6th class or lower middle, the Matric standard, the Intermediate standard and the B. A. standard respectively. However desirable this recommendation may be, we realize the difficulty of making a suitable arrangement firstly for the study of these languages up to the prescribed standard in the Sanskrit Pathashalas at large or even in the Sanskrit College and secondly for properly conducting examinations in them along with the Sanskrit College Examinations. It is obvious that no proper arrangement, even

for the study of English can be made in most of the Sanskrit Pathshalas. In the circumstances a start can be made only with English by making a suitable arrangement for its study in the Sanskrit College itself. It is also worth considering whether it would not be proper to leave the examination in the English language to such bodies as the Intermediate Board and the Universities, and the Anglo-Sanskrit Department of the College in its re-organized form may simply prepare Sanskrit candidates in English for the examinations in English by the said bodies only.

(14) INTERIM ARRANGEMENTS

As some important changes both with regard to the courses and the total period covered have been introduced under the new scheme in the Madhyama and Acharya Examinations, it is desirable, with a view to avoid any great inconvenience to the students, that the new scheme of the said examinations should be introduced gradually in a number of years, so that during the transitional period the old part examinations may be substituted by the new ones at the rate of one part a year progressively and at the same time there should be no duplication of the same examination in the old and new courses. To put it more clearly—

(1) In the Madhyama and Acharya the old part examinations should be substituted by new ones progressively one after another in a number of years.

(2) During the transitional period there should be no duplication of the same examination in the old and new courses.

Keeping in view the above principles the scheme of the examinations during the transitional period should be as follows:

(It may be noted that the following scheme is based on the fact that the new courses almost on the lines of the Committee recommendations have been already adopted by the Board of Sanskrit Studies for the Prathama, Madhyama, Part I, Shastri, Parts I and II and Acharya, Part I examinations of 1940.)

Year	Examination (new scheme)	Examination (old scheme)
1940	Prathama .. ..	.. ..
1940	Madhyama, Part I, Khanda ..	Madhyama, Parts II—IV.
1940	Shastri, Parts I and II ..	Shastri, Part III.
1940	Acharya, Part I	Acharya, Parts II and III.
1941	Prathama .. ..	.. ..
1941	Madhyama, Parts I and II ..	Madhyama, Parts III and IV.
1941	Shastri, Parts I—III .. ..	.. ..
1941	Acharya Parts, I and II ..	Acharya, Part III.
1942	Prathama .. ..	.. ..
1942	Madhyama Parts I—III ..	Madhyama, Part IV.
1942	Shastri Parts I—III .. ..	.. ..
1942	Acharya Parts I and II ..	.. ..
1943	All examinations according to the new scheme.	.. ..

It means that during the transitional period a candidate failing in a particular part examination, will have to appear next year in the same part examination according to the new or old scheme as the case may be. One failing in the final examination of the old scheme will have to appear in and pass the final examination of the new scheme before he is declared as successful in the particular examination (Madhyama or Acharya) as a whole.

Those candidates also who have already passed any old part examination (of Madhyama or Acharya) will have to pass the next part examination according to the old or new scheme, as the case may be, and if that part examination happens to be the final examination of that year will be declared as passed in that examination as a whole. But a candidate who has passed third Khanda (part) examination of the old Madhyama or the second part of the old Acharya will have to appear in the final Madhyama or Acharya Examinations according to the old or new scheme as the case may be, before he is declared as successful in that examination as a whole.

CHAPTER VIII

MISCELLANEOUS TOPICS: NECESSARY STEPS TO MAKE
THE SCHEME A SUCCESS

(1) THE PATHASHALAS TO BE BROUGHT UNDER A SYSTEM

The new scheme of courses cannot succeed unless the present highly unsatisfactory condition of the Pathashalas is improved, and they are brought under a proper system. The present total number of Sanskrit Pathashalas in the United Provinces, which send up candidates for the various Government Sanskrit College Examinations, is about 1,000. It was 990 at the examinations of 1939; out of these 234 are recognized either for the Shastri Examination alone or for both the Shastri and Acharya Examinations. The rest send up their candidates for the Prathama and Madhyama Examinations. Out of the same total for the province, only 103 Pathashalas receive grant-in-aid from the Government.

We understand that at present there are no definite rules for recognition of Sanskrit Pathashalas. They are recognized even up to the highest standard without any reference to their necessity, utility or financial stability. In most of the Pathashalas, recognized for the Shastri or Acharya Examinations, the studies of the Prathama and Madhyama classes are neglected. This state of things cannot improve until the rules for recognition of the Pathashalas are based on a definite scheme and the different Pathashalas are classified into different grades under some strict rules. Without this sort of reorganization of the Pathashalas the new courses, which cover a much larger ground than before, will be found unmanageable and the students will be the worst sufferers. We hope that this question will be considered in detail by the Sanskrit College Organization Committee appointed by the United Provinces Government.

(2) REORGANIZATION OF THE BOARD OF SANSKRIT STUDIES, UNITED PROVINCES AND ITS COMMITTEES

In Chapter 3, we have already described the constitutions and functions of the Board of Sanskrit Studies, United Provinces, as well as its Examination Committee. We have also pointed out that it was in 1923 that, with a view to provide a machinery for the control, conduct and supervision of the Sanskrit College Examinations, the Government felt it necessary to create the Board of Sanskrit Studies. In recent years an agitation has been carried on among the Sanskrit public against the present constitution of the Board mainly on the ground that it consisted mostly of Benares Pandits and that practically there is no representation on it of the outside public interested in Sanskrit studies. A reference to the personnel of the present Board, in which no name of any Pandit from outside Benares will be found, at once shows the reasonableness of the said agitation. In view of this demand and also the fact that under the new scheme several modern subjects like History, Civics, Politics, etc., have been introduced in the courses of studies, which are not yet represented on the Board, there is a real necessity for revising the present constitution of the Board. Taking into consideration these points, and the fact that the Board will be the instrument of the Government for duly working the new scheme we are proposing, if the Government accepts it, we recommend the following constitution of the Board for the future:

The Board should consist of 15 members as follows.

(1) The Principal, Sanskrit College, Benares, Chairman, *ex officio*.

(2) The Registrar, Sanskrit College Examinations, Secretary, *ex officio*.

(3) The first Professor, Sanskrit College Benares *ex officio*.

(4) The Inspector, Sanskrit Pathashalas, United Provinces, *ex officio*.

(5-6) Two Pandits, representing teachers in Sanskrit Pathashalas of Benares, preparing candidates for the Sanskrit College Examinations.

(7-8) Two Pandits, representing teachers in Sanskrit Pathashalas of the United Provinces, but outside Benares, preparing candidates for the Sanskrit College Examinations.

- (9) One representative of the managing bodies of Pathashalas preparing candidates for the Sanskrit College Examinations.
 (10—12) Three Sanskrit scholars of standing having knowledge of the modern methods of research.
 (13-14) Two distinguished Pandits.
 (15) One representative of the Provincial Legislature, preferably one who knows Sanskrit.

(Nos. 5 to 15 to be nominated by Government)

It is desirable that the Pandits under nos. 5 to 8 and 13 to 14 and the Sanskrit Scholars under nos. 10 to 12 should represent different subjects.

The Examination Committee

As regards the constitution of the Examination Committee we recommend that it should consist of five members as follows:

- (1) The Principal, Sanskrit College, Benares, Convener, *ex officio*.
 (2) The Registrar, Sanskrit College Examinations, Benares, *ex officio*.

(3—5) Three members to be nominated by Government from amongst the members of the Board of Sanskrit studies.

As regards the functions of this Committee, already shown in Chapter 3, the words "to moderate question papers" should be changed to "to arrange for moderation of question papers."

The Grants-in-aid Committee

We are of opinion that the Board of Sanskrit Studies should also have a Grants-in-aid Committee which should consist of five members as follows:

- (1) The Principal, Sanskrit College, Benares, Chairman, *ex officio*.
 (2) The Inspector, Sanskrit Pathashalas, United Provinces, Secretary, *ex officio*.
 (3—5) Three members to be nominated by the Government from the Board.

The function of the Committee should be to consider applications for grants-in-aid together with the report of the Inspector of Sanskrit Pathashalas and to recommend the same to the Director of Public Instruction for approval.

In our opinion, this Committee will be useful for bringing about co-relation between the question of giving grants-in-aid to Sanskrit Pathashalas and the question of their recognition for the Sanskrit College Examinations. It seems reasonable that the Board which grants recognition to Pathashalas should also have a voice, through this Committee, in giving them grants-in-aid.

The Committee has paid special attention to the Board's constitution; because the success of the new courses will largely depend upon the Board, one of the functions of which is "to advise regarding the courses of study prescribed for various examinations."

We, therefore, hope that the Government will give special attention to the formation of the next Board and will nominate, as its members, such persons as are fully aware of the acquirements of the new times, possess progressive ideas, and zeal for making the new scheme a success, and are capable of sympathetically and wisely handling the problems that may arise in course of the operation of the scheme.

(3) THE SUPERINTENDENT OF SANSKRIT STUDIES

Regarding the duties of the Inspector of Sanskrit Pathashalas paragraph 51 of the United Provinces Educational Code reads as follows:

"The Inspector of Sanskrit Pathashalas will act under the direction of the Superintendent of Sanskrit Studies. He will periodically visit Pathashalas forwarding immediate reports to the Superintendent in the form prescribed, and he will submit a brief annual report to the Director through the Superintendent, calling attention to any special features in the work of Pathashalas during the period under review," etc.

In our opinion this arrangement is necessary not only for supervising the activity of the Inspector, but also for securing co-ordination between

the activities of the Examination Department and of the Inspection Department, both of which are intimately concerned with the Sanskrit education of the Province. There are certain matters in the Registrar's Department (for instance, the cases of recognition of Pathashalas), which cannot be settled properly without such co-ordination; and this co-ordination is possible only through the Superintendent of Sanskrit Studies. The Superintendent, in his capacity of Chairman of the Board of Sanskrit Studies, and also of Principal of the Sanskrit College, is always in close touch with the Registrar's Department. It is, therefore, necessary that, for co-ordination of the work of the two departments, the Superintendent should have the opportunity of guiding the work of the Inspector, as necessary; such opportunity as the above-quoted paragraph 51 of the Educational Code clearly implies.

Further to enable the Superintendent to discharge his duties properly in relation to the Inspector and also as Chairman of the Board of Sanskrit Studies, it is, in our opinion, necessary that the Superintendent should be given the opportunity to see, now and then, the working of the Sanskrit Pathashalas of the Province, here and there, for himself. Without having first-hand knowledge of the conditions of the Pathashalas, he will not be in a position to give any useful guidance to the Inspector.

Besides, the Superintendent is also sometimes required to advise the Government in matters of Sanskrit education in general; this requires a wide knowledge of the conditions of Sanskrit studies in the Province. This duty also will be better performed by him if he is allowed to sometimes see the Pathashalas for himself.

We therefore recommend that he should be given the opportunity to visit the Pathashalas of the Province according to need and convenience.

We attach importance to the retention of the post of the Superintendent of Sanskrit Studies (which is merely another designation of the Principal, Sanskrit College, without any extra remuneration, because we are anxious to secure all possible co-ordination and concord between the various activities concerned with the Sanskrit education of the Province. Our labours over the framing of the new scheme will be fruitful and produce tangible good results only if the whole activity of Sanskrit education of the Province is motivated by one policy, is permeated by one spirit of single-minded and sincere devotion to the ideals which govern the new scheme.

(4) NEW STAFF IN THE PATHASHALAS AND THE SANSKRIT COLLEGE

The new scheme is characterized by the introduction, for the first time, in the Sanskrit College Examinations of several new subjects, both special and general. Up to this time there is no provision for teaching most of these subjects in any of the Sanskrit institutions, including the Government Sanskrit College itself. It is obvious that unless this arrangement is made the scheme will be a complete failure. We would recommend that the Government may give special grants-in-aid to Pathashalas to enable them to make arrangements for these subjects. But the Government Sanskrit College, Benares, which is the nucleus of all Sanskrit institutions connected with the Sanskrit College Examinations, should be especially re-organized and be made a model institution in the proper sense by adding new posts at least for the following subjects:

Sanskrit Department

- (1) A Professor of Civics and Politics with knowledge of Economics.
- (2) A Professor of Indian History and Culture.
- (3) A Professor of Hindi.
- (4) A Professor of Mathematics (for Shastri and Acharya).

We should recommend that distinguished M.A.'s in the different subjects, preferably those who have passed some high Sanskrit examination also, may be appointed to these posts in the Upper Subordinate Educational Service Grade.

The creation of professorships in such special subjects as Jaina and Buddha Philosophy may be deferred, unless endowments are made by private donors.

Anglo-Sanskrit Department

It will also be necessary to re-organize and develop the existing Anglo-Sanskrit Department of the College up to the B. A. standard for teaching the optional English language up to the Acharya class. At least one Professor of English, an M. A., with two assistants should be the minimum staff of this department. Some provision for teaching German and French may also be made, if possible.

(5) A REFRESHER COURSE TO BE STARTED IN THE COLLEGE

The one great difficulty in making the new scheme a success lies in the fact that the financial condition of most of the Sanskrit Pathashalas affiliated to the Sanskrit College Examinations is not satisfactory. Owing to this reason many of them will find it difficult to secure even the minimum new staff required for teaching such general subjects as History, Hindi, Geography, compulsorily prescribed for the examinations. The Sanskrit staff also of the Sanskrit Pathashalas is not efficient and is ignorant of the scientific methods of teaching. These people will find the present courses too heavy and unmanageable. Remedy for all these short-comings can be found in starting a refresher course in the Benares Sanskrit College with four sessions of three months each. All recognized Sanskrit Pathashalas should be required to send, by turn, at least one teacher apiece to attend the refresher course for at least three months. The course should aim at imparting a general acquaintance with the general subjects and also some lessons in the theory and practice of the art of teaching, besides the study of the allied subjects prescribed in the different examinations, if necessary. A staff of three additional Professors, M. A's, B. T's, (or L. T's) in history with knowledge of Hindi and Sanskrit, specially appointed for the purpose, with the assistance of some of the existing staff should be able to manage this refresher course, which should be attended at least by 90 pupil-teachers at a time. With the assistance of these "trained" teachers it is hoped that the Pathashalas will be able to manage their studies without any additional staff. These classes may be continued for at least two years and if found advantageous may be thereafter converted into a regular training class for Sanskrit Pandits.

(6) OBSERVATIONAL KNOWLEDGE OF JYAUTISHA

At the present day the study of the science of Jyautisha among the Pandits is mostly devoid of any observational knowledge of the planets or constellations. Under the new scheme we have taken pains to suggest means to remove this defect. Our suggestions on this point cannot be carried out unless the Sanskrit College at least is supplied with the minimum number of instruments for observational purposes.

A list of the requirements of the College in this connexion together with an estimate of their cost is given below :

	Approximately Ra.
1. Equatorial with Photographic arrangements for direct observation and recordings	10,000
2. Transit instrument with electrically lighted field of view for observing transits	2,000
3. The sextant for measuring altitudes, time, latitude, etc.	200
4. Celestial Globe	50
5. Some instruments as described in oriental astronomy will have to be made, though most of them can very well be exemplified by the above. Approximate cost	500
6. An observatory with a movable dome of asbestos, so that it may not be affected by rain and heat	6,000
Total	17,750

(7) A SANSKRIT JOURNAL TO BE STARTED

The present atmosphere of the Sanskrit Pathashalas is not conducive to the spread of critical knowledge and modern methods of research. We cannot think of any better remedy for this defect than to start a Sanskrit journal from the Sanskrit College for the benefit of the Sanskrit-knowing public. While tracing the history of the Sanskrit College we have referred (page) to the beneficial results of the Sanskrit journal *Pandit*. Another Sanskrit monthly called *Amara Bharti* used to be issued up to recently under the auspices of the Sanskrit College, but unfortunately that has stopped now. We recommend a similar enterprise again. If properly conducted it is bound to be successful from every point of view and will be heartily welcomed

by the Sanskrit public. Through the agency of this journal many of the ideas underlying this new scheme can be propagated among the Sanskrit public.

(8) NEW SCHOLARSHIP:

In order to give proper stimulus and encouragement to Sanskrit studies it is necessary to institute a number of scholarships, open to those only who attain high positions in each of the Sanskrit College Examinations from Prathama up to Shastri. Candidates from all over the province belonging to any Pathashala should be entitled to get the scholarships; which should be tenable for one year only. At least ten scholarships from each of the Prathama, Madhyama 3rd year 4th year till 1942 and Shastri 3rd year examinations, respectively of the value of Rs.7, Rs.10, and Rs.15, should be instituted. For the purposes of the award of these scholarships in the case of those candidates who appear in the complete Madhyama and Shastri examinations, marks obtained by them only in the 3rd year (4th year in the case of complete Madhyama till 1942). Papers will be taken into account.

(9) SPECIAL CONCESSIONS TO THOSE WHO QUALIFY IN ENGLISH

We are strongly of opinion that Sanskrit students who qualify in the optional language (English) course (either through the Sanskrit College Examinations or through the Intermediate Board and a University) should be accorded status as detailed below for the purposes of Government services. Madhyama with English should be regarded as equal to High School, Shastri with English equal to Intermediate, and Acharya with English equal to B. A. But in the case of posts of Sanskrit teachers or Professors, Madhyama with English should be regarded as equal to Intermediate, Shastri with English equal to B. A. and Acharya with English equal to M. A.

This is important as well as reasonable, specially when we have introduced general subjects in all the examinations up to Shastri. In the Punjab University where the standard of Sanskrit courses in the Oriental Faculty is below our standard, and where so far there is no provision for the study of general subjects, such students are accorded the same rights and status as enjoyed by those who qualify through the regular University course. It is expected that the Universities of this Province will accord the same concession to our students and the Government will take the necessary initiative in the matter.

(10) BOGUS SANSKRIT EXAMINING BODIES

Of late years a large number of bogus institutions under the names of Sanskrit Universities have been started by many people, not out of public spirit, but with the view of profiteering and serving personal ends. These bodies entrap many Sanskrit Pandits by bestowing upon them high sounding titles and thus after advertising themselves attract the ignorant Sanskrit public by their cheap degrees, in many cases similar to those of the recognized Sanskrit examining bodies. Public opinion is not strong enough to put down these institutions; but there cannot be two opinions as to the harmful effect these bodies exercise on the growth of knowledge. We hope that Government will take necessary steps to stop the mischief arising out of these bogus institutions.

(11) SANSKRIT COLLEGE CONVOCATION

It is rather strange that in spite of the high prestige, great popularity, and all-India status of the Benares Sanskrit College Examinations, the diplomas of these examinations each year are sent to the candidates in the most unceremonious way. Excepting of course the first period of the College history, about a century before, when some special annual functions were held, as we have seen, in connexion with the annual examinations of the College, no attention seems to have ever been given to this question. We recommend a revival of these old annual functions with added dignity and solemnity, as demanded by the present high status of these examinations. In our opinion a regular annual convocation should be held at the Benares Sanskrit College for conferring the degrees on the successful candidates and a small sum of money should be set apart for this purpose every year. The holding of such convocations will still further raise the status of the Sanskrit examinations in the public eye and invest the knowledge of Sanskrit with self-respect and public respect.

(12) PHYSICAL EXERCISES AND GAMES

At present no attention is paid in most of the Sanskrit Pathashalas to any kinds of games or physical exercises, and Sanskrit students are proverbially backward from this point of view. We suggest that the Sanskrit College Organization Committee, recently appointed by the Government, (or the Board of Sanskrit Studies), while considering the problem of re-organizing and systematizing the working of the Pathashalas may pay due attention to this question also.

(13) NEW BOOKS TO BE PREPARED

In the courses of the revised syllabus for the Sanskrit College Examinations, appended hereto, we have in many places drawn special attention to the fact that the proper text-books, as required for our purposes, are not yet available and that they will have to be especially prepared. The necessary special features of each of those books have also been pointed out there. Until all those books have been prepared and included in the courses, our new scheme will remain incomplete and as such will not yield to the full the desired benefit. We therefore strongly recommended that the Government may take all necessary steps for the preparation of those books (especially those meant for the Prathama, Madhyama and Shastri examinations) as early as possible.

CHAPTER IX

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

I.—NATURE AND GENERAL CRITICISM OF THE PRESENT COURSES
AND METHOD OF STUDY

1. The high prestige and popularity that the Sanskrit College Examinations still enjoy in the country is no doubt due to their having continued, to a degree not equalled by any other examinations, the old tradition of intensive and deep study of Sanskrit and high standard of scholarships especially associated with the name of Kashi. In spite of all this, for some years an agitation has been growing up in favour of introducing reforms in the courses so as to make them suitable for the present needs of the Sanskrit public and for infusing a new life in Sanskrit studies.

2. The general criticism against the present courses of studies can be analysed mainly into the following points:

(i) *Over-specialization*—There is a general feeling that in spite of the great popularity of the Sanskrit College Examinations and the yearly increase in the number of candidates appearing in the examinations, the old standard of Sanskrit scholarship is deteriorating year after year. One of the main reasons of this deterioration is the tendency of over-specialization on which the present courses are based. This tendency of over-specialization, at the sacrifice of even allied subjects and of subjects of general importance, can be illustrated by a reference to the courses of such subjects as Navya Nyaya, Nyaya Vyakarana, etc.

(ii) *Partial view of Sanskrit literature*—Another important objection against the present courses of study is that they are based on a partial view of Sanskrit literature. Sanskrit literature in India is the result of thousands of years of development and contains treasures in the form of Vedic Sanhitas, Brahmanas, Sutras, Upanishadas, etc. which are the most important heritage of Indian civilization. An acquaintance with these different phases of Sanskrit literature is necessary for having a comprehensive idea as regards Sanskrit literature and also for their cultural value. This idea is altogether neglected in the present courses. In the circumstances the narrow outlook of Pandits, though specialists in their own subjects, towards Sanskrit literature as a whole, is quite natural.

The same tendency of one-sidedness and partial view of Sanskrit literature is discernible in the spheres of special subjects also. It is an undeniable fact that the present-day Sanskrit learning, even in any particular subject, is mostly confined to the study of those works which are the product of only the last four or five centuries.

(iii) *Emphasis on form rather than on substance*—Another tendency which is sapping the vitality of the present-day Sanskrit learning consists in the emphasis on form rather than on substance. This tendency consists in attaching more importance to outward embellishment, verbal jugglery and the art of disputation for its own sake or for

gaining cheap victory over one's own rival, than to the inner beauty of ideas, depth of knowledge and investigation for truth. This tendency which began to manifest itself in Indian literature, many centuries before, has been carried on to inordinate lengths in recent times.

(iv) *Limited range of the courses of study*—The scheme of the present-day courses of Sanskrit study aims only at producing a class of teachers who at best can impart their own knowledge, mostly based on literal interpretation of the texts already studied, to their students, but who have no appreciation either of the conditions of life all around them or of the needs of modern society. It cannot produce men capable of pursuing any other line of careers. This is of course due to the limited range of the courses of studies. It is due to the same reason that the study of such important subjects as Raja, Shastra, Artha Shastra, Bauddha and Jain Philosophy has been neglected so far.

(v) *Absence of critical outlook and indifference towards advancement of knowledge*—It is generally complained that the present method of study as prevalent in Sanskrit Pathashalas is not conducive to the growth of critical judgment. The old Pandit is completely ignorant of any historical and comparative outlook.

All advancement of knowledge is due to the spirit of research and investigation, and no less to the power of assimilation of new ideas. But the present tendency of over-specialization in Sanskrit studies, without the basis of any general knowledge, has the effect of killing the natural thirst for knowledge and inquisitiveness. It stultifies the growth of mind and hardens it against receiving new ideas.

(vi) *Neglect of general knowledge*—The present courses of studies do not lay any importance on the acquirement of general knowledge, not only in the field of Sanskrit itself, but also as regards other useful subjects like Arithmetic, History, Geography, Hindi, Civics, Politics, etc. which should form a necessary feature of any educational curriculum. The study of such subjects is indispensable, not only for the proper development of one's own mind, not only for properly understanding the current social, economical, and political problems of the life of the people at large and for taking one's own due share in the solution of these problems, but also for widening the range of opportunities of one's own life.

(vii) *Indifferent attitude towards ancient Indian ideals of "Sadachara" or "good manners and good conduct"*—The present courses of Sanskrit study aim at a sort of literary education. They do not take any account of the necessity of impressing on the tender minds of students the importance of good conduct or of making them familiar with the ancient Indian ideals of Sadachara. But education should aim at the training of both the mind and the heart.

(viii) *Unsuitability of courses for women candidates*—The present courses of Sanskrit study, based as they are, on the tradition of those days when there was no talk of female education, are not suited to the needs of girls' education, and are not framed with a view to their special needs and aptitudes, though the number of girl candidates appearing in the Sanskrit College Examinations is increasing year after year.

II—GENERAL SCHEME OF THE NEW COURSES

3. The main principle which should govern Sanskrit Education is that it should keep the realization of the *Chatur-varga*, undisputedly recognized throughout all Sanskrit literature as the ends of human life, viz. Dharma (Duty or Law and Religion), Artha (Law-regulated property), Kama (the family life), and Moksha (the final goal, salvation).

4. The Committee is of opinion that according to the injunction of Manu (II, 69):

उपनीय गृहः शिक्ष्यं शिक्षयेच्छीत्रमादितः ।

आचारमनिकार्यं च संन्योपासनमेव च ॥

every student, before he is allowed to appear in the Sanskrit College Examinations, should be given instruction in (1) the Elementary principles of bodily and mental purity and hygiene (शौचम्) (2) good manners and morals (आचारः) (3) fire-duties (अनिकार्यम्) (4) daily prayers (संन्योपासनम्); Brahmacharya (ब्रह्मचर्यम्) or continence being the

foundation of all these, all further education, and the special duties of the students; that the teacher should be required to certify on the application form of the student for the Prathama Examination that he has received instruction in these matters, and has followed them in practice to a fair extent; and that by "Fire-duties" (अग्निकार्यम्) and "daily prayers" (संध्योपासनम्) daily worship and observances according to the student's religious traditions are intended.

That students should also be given instruction in scouting, the rules of health and sanitation (स्वस्थवृत्तम्, दिनरात्रितुचयम्) and either in spinning (for Jainopavita etc.) or cow-tending (गोसेवा) or elementary gardening to be certified by the teacher as before, and that a new book on hygiene should be prepared on the basis of Ayurveda and Dharmashastra, as necessary.

Prathama Examination

5. The curriculum of the Prathama Examination, keeping in view the traditional scheme of Vedangas (शिक्षा, वृत्तः, व्याकरणम्, निरुक्तः, यौतिषम्, कल्पः) should comprise the following subjects:

Compulsory subjects

- (1) Vyakarana, based on any one of the following:
 - (a) Laghukaumudi.
 - (b) Saraswat.
 - (c) Chandrika.
 - (d) Kalapa.
 - (e) Mugdhabodha.
- (2) Kosha.
- (3) Sanskrit Prose and Verse (Gadya and Padya).
- (4) Translation.
- (5) Metre.
- (6) Hindi—with essay and letter-writing and general knowledge of Hindi grammar.
- (7) Arithmetic (both written and mental).
- (8) History and Geography with map drawing of India.
- (9) Every-day science including general information regarding agriculture.

Optional subject

(10) A European language—English or German or French (upto the standard of class VI or lower middle).

6. The above-mentioned subjects should be distributed in six compulsory papers and one optional paper as follows:

Papers

- I—Vyakarana.
- II—Sanskrit Prose and Verse and Metre.
- III—Translation and Kosha.
- IV—Arithmetic.
- V—Hindi and popular Science and Hygiene.
- VI—History and Geography.

Optional

VII—A European language.

Madhyama Examination

7. The Madhyama Examination should be completed in three years instead of four years as at present.

8. Students should study one of the several subjects named below as the special subjects and a number of other subjects named below as common to all the courses.

The common subjects should comprise the following:

- (1) Sahitya (Vaidika and Laukika).
- (2) Vyakarana.
- (3) Arithmetic with elementary Astrology.
- (4) History and Geography.
- (5) Dharma Shastra (Politics, Sociology and Karma Kanda).
- (6) Hygiene with popular Science and elementary knowledge of Agriculture.
- (7) Logic.

Optional subject

(6) A European language—English or German or French (upto the Matric standard).

The special subjects should comprise the following :

(1) Veda (a) According to the Yajnika school, this may include the alternative courses on :

- (i) the Shukla Yajurveda Madhyandina Shakha, or
- (ii) the Krishna Yajurveda Taittiriya Shakha, or
- (iii) the Rigveda Samhita, or
- (iv) the Samveda, or
- (v) the Atharvaveda.

(b) According to the Nairukta school (with more emphasis on knowledge of the meaning of Veda texts).

(2) Vyakarana—(a) According to the school of Siddhanta Kaumudi.

(b) According to the school of Kashika.

(3) Jyautisha (Ganita, Phalita and modern Mathematics).

(4) Darshana—(a) With some emphasis on Gautama's system of Logic.

(b) Based on Gautamiya, Bauddha and Jain systems of Logic.

(5) History and Geography (Purana-Itihasa).

(6) Raja Shastra and Samaja Shastra.

(7) Sahitya.

Shastri Examination

9. The period of study for the Shastri Examination should remain three years as at present and there should be one common and one special course as for the Madhyama.

The common subjects should be as follows :

- (1) Sahitya (Laukika and Vaidika).
- (2) Hindi literature and essay (in relation with the History of the Indian people and their culture).
- (3) Itihasa-Purana (with an outline of world history).
- (4) Dharma Shastra with Raja Shastra and Samaja Shastra (Politics, Economics and Sociology).
- (5) Translation and Sanskrit Essay writing.

Optional subject

(6) A European language—

English, or German, or French (up to the Intermediate standard).

The special subjects should be the following :

- (1) Veda ... (a) According to the Yajnika school,
... (b) According to the Nairukta school.
- (2) Vyakarana ... (a) Navya Vyakarana.
... (b) Prachina Vyakarana.
Both with the Nairukta and the elements of comparative philology.
- (3) Jyautisha ... (a) Mainly Ganita.
... (b) Mainly Phalita.
... (c) Mainly Siddhanta.
All with some modern Mathematics.

N.B.—The students should be expected to have observational knowledge of the Planets and Constellations.

(4) Darshana ... (Philosophy)—

- (a) Sarva-Darshana—general principles of all the chief schools of philosophy.
- (b-1) Nyaya-Vaisheshika—(either Prachina or Navya, or Sarva Nyaya) old or new or that based on Gautamiya, Bauddha, and Jaina systems of logic.
- (b-2) Sankhya-yoga with general knowledge of Western Psychology.
- (b-3) Purva Mimansa.

- (b-4) Vedanta, Prasthan-traya mainly with an option between Shankara and Ramanuja, etc. in some papers.
 (b-5) Jaina Darshana.
 (b-6) Bauddha Darshana.
- (5) Dharmashastra.
 (6) Purana-Itihasa with Indian history, both ancient and modern, and some knowledge of inscriptions.
 (7) Sahitya.
 (8) Raja Shastra (with Artha Shastra and Samaja Shastra).
- Acharya Examination*
10. The period of study for the Acharya Examination should be two years instead of three as at present.
 11. There should be only special subjects for the Acharya Examination.

The following should be the special subjects:

- (1) Veda ... (a) According to the Yajnika school (as in Shastri).
 (b) According to the Nairukta school (with general knowledge of comparative mythology).
- (2) Vyakarana ... (a) Prachina.
 (b) Navya.
- (3) Jyautisha ... (a) Ganita.
 (b) Phalita.
 (c) Siddhanta
 with modern mathematics.
- (4) Darshana ... (a) Sarva Darshana.
 (b-1) Prachina Nyaya-Vaisheshika (with general knowledge of Western Logic).
 (b-2) Navya Nyaya (with general knowledge of Western Logic).
 (b-3) Sarva Nyaya (with general knowledge of Western Logic).
 (b-4) Sankhya-yoga (with general knowledge of Western Psychology).
 (b-5) Purva-Mimansa (with general knowledge of Western Ethics).
 (b-6) Vedanta, Shankara (with general knowledge of Western Metaphysics).
 (b-7) Vedanta, Ramanuja (with general knowledge of Western Metaphysics).
 (b-8) Vedanta, Madhva (with general knowledge of Western Metaphysics).
 (b-9) Vedanta, Nimbarka (with general knowledge of Western Metaphysics).
 (b-10) Vedanta, Vallabha (with general knowledge of Western Metaphysics).
 (b-11) Jaina Darshana.
 (b-12) Bauddha Darshana.

A general knowledge of history of Eastern and Western Philosophy should be expected from all candidates of all the Darshana courses.

- (5) Dharma Shastra (with general knowledge of modern Jurisprudence and Ethics).
 (6) Sahitya.
 (7) Purana-Itihasa (with general knowledge of comparative mythology and religion).
 (8) Raja Shastra, Artha Shastra and Samaja Shastra (with general knowledge of Western ideas on these subjects).

A general knowledge of the history of the development of his special subject should be expected from each candidate, in connexion with the essay paper.

There should be two *aichqhhika* (optional) subjects.

The candidates may take up one, or both, or none.

(1) Hindi up to the standard of B. A. with knowledge of current politics.

(2) Any one of the three following European languages of the standard of B. A.—

- (a) English.
- (b) German.
- (c) French.

III—EXAMINATIONS FOR WOMEN STUDENTS

12. The courses of studies for women students should be framed according to their special needs and aptitudes and should be different from those for men students.

13. Three special examinations called respectively, *Jnana-Prabha*, *Jnana-Shree* and *Bharati* should be instituted for them—each of the latter two having two part examinations, each of one year's course.

Jnana-Prabha

14. The curriculum of the *Jnana-Prabha* Examination should comprise the following subjects :

- (1) Vyakarana, based on *Laghukaumudi*.
- (2) Sanskrit Prose and Verse.
- (3) (a) Translation and (b) Hindi.
- (4) Arithmetic.
- (5) Domestic Science with Hygiene and popular Science.

Jnana-Shree

15. The curriculum of the *Jnana-Shree* Examination should comprise the following subjects :

- (1) Vyakarana, based on *Laghukaumudi* and the chapter on *Karaka of the Siddhanta Kaumudi*.
- (2) Sanskrit Prose and Verse with drama, the Gita and Metre.
- (3) Translation, Sanskrit essay and stories from the Puranas throwing light on the Indian ideals of womanhood.
- (4) Arithmetic with elementary Astrology.
- (5) History and Geography.
- (6) Hindi.

Bharati Examination

16. The curriculum of the *Bharati* Examination should comprise the following subjects distributed into common and special subjects :

Common subjects

- (1) Sanskrit Prose and Verse with *Bhagavatagita*, *Sapta-shati*, and *Prakrita Grammar*.
- (2) Sanskrit essay.
- (3) Elements of Civics, Economics and Politics.
- (4) Hygiene with elements of Physiology and lessons on First-Aid.
- (5) Indian History with an outline of world history.
- (6) General knowledge of—
 - (a) *Dravya-Guna* (Properties of drugs of common use).
 - (b) *Shishupalan* (Rearing of children).
 - (c) *Rogi-Paricharya* (Nursing).

Special subjects

Rhetorics,
or
Darshana,
or
Purana, and Dharma Shastra,
or
Veda and Upanishads.

IV—NEW FEATURES OF THE REVISED COURSES

17. In revising the present courses, we have been anxious to maintain a continuity of the same with the past and also to preserve their best features. While anxious to infuse among the Sanskrit Pandits the spirit of research and the enthusiasm for advancement of knowledge and to make them better adapted and more alive to the needs of modern life, our first aim has been, not only to maintain the standard of Sanskrit scholarship of the old type, but also to raise it still higher. In fact the other changes have been recommended only in so far as consistent with this ideal.

Moreover, in making our recommendations as regards the courses we have never lost sight of the idea of their practicability with regard to the vast number of Pathshalas which are affiliated to the Sanskrit College Examinations and whose financial condition is far from satisfactory.

These are the two general principles which have been followed by us in revising the present courses.

A—Special subjects

18. We have recommended the introduction of a number of special subjects, for the first time, for the Madhyama, Shastri and Acharya Examinations. Those subjects, with a brief statement of the reasons in their favour, are shown below :

(1) *Veda (Nairukta Prakriya)*—This subject has been recommended for Madhyama and Shastri and Acharya examinations with a view to encourage the study of the Vedas on sounder lines and also to acquaint the Vedic Pandits with the trend of modern critical studies in the Vedic literature.

(2) *Rigveda, Samaveda and Atharvaveda (Yajnika Prakriya)*—Courses in these three Vedas are recommended only for the Madhyama Examination in the interest of maintaining the traditional method of Vedic studies in all the four Vedas; the Yajurveda being already prescribed in the courses.

(3) *Prachina Vyakarana*—This subject has been recommended for Madhyama with a view to reviving the study of Vyakarana as such and to discourage too much emphasis on the Parishkaras.

(4) *Sarva-Nyaya (based on Gautamiya, Bauddha and Jaina systems of logic)* has been recommended for Madhyama, Shastri and Acharya with a view to encourage comparative study of the different Nyaya systems in India.

(5) *Raja Shastra with Samaja Shastra and Artha Shastra (Politics, Economics and Sociology)* has been recommended with the idea of not only reviving the study of this long-neglected subject in Sanskrit but also to bring Sanskrit learning into living touch with the realities of the peoples' life.

(6) *Bauddha Darshana (in Shastri and Acharya)*—The study of Bauddha philosophy is necessary both for understanding the development of Indian Philosophy, religion and History and also for its own sake.

(7) *Ganita (in Shastri and Acharya)*—The study of Ganita as an independent subject is intended to stimulate interest in the Science and also to put Sanskrit Pandits in touch with its modern development.

(8) *Nimbarka and Vallabha Vedanta (in Shastri and Acharya)*—These subjects have been recommended with the idea of making the scheme of study of the Vedanta systems as comprehensive as possible.

B—Other subjects

19. The other new features of the revised courses are as follows :

(1) *Subjects of general importance in Sanskrit*—With a view to remove the defects of over-specialization, we have added, to the special subjects, courses on subjects of general importance in Sanskrit right up to the Shastri Examination. For example a paper on general Sahitya based on classical Sanskrit poetry as well as the more ancient Sanskrit literature has been added from Prathama up to Shastri. The same paper is also intended for giving Sanskrit students a comprehensive idea of Sanskrit literature as a whole.

(2) *Essay writing and Translation*—We have paid special attention to this subject with a view to developing among the students the capacity of correctly and fluently expressing themselves in Sanskrit.

(3) *Allied or cognate subjects*—We have endeavoured to extend the scope of the study of every special subject by prescribing works on allied or cognate subjects also.

(4) *Taste for critical methods and research*—We have taken special steps to develop this taste among the Sanskrit students, specially of the Acharya Examination. The study of the history of Sanskrit literature in general, as well as of the special subjects is included in the Shastri and Acharya Examinations with the same object.

(5) *Useful subjects of general importance*—Realizing the great deficiency of general knowledge among Sanskrit Pandits, we have laid due emphasis on the study of such useful subjects of general importance as Hindi, Arithmetic, popular Science, History, Geography, Civics and Politics in the different examinations.

(6) *Courses of study of English, German and French*—Realizing the importance of the study of at least one of these three most important foreign languages, we have, from the Prathama up to the Acharya Examinations, recommended, as an optional subject alternative courses of study in English, German, or French.

(7) *Research degree of Vachaspati*—With a view to encourage real advance of knowledge and critical research, we have recommended the institution of the research degree of Vachaspati.

(8) *Preparatory course*—In view of the complaint that the studies in the Pathashalas are not conducted on proper and systematic lines, we have recommended a preparatory course, which should precede the Prathama course in the Pathashalas. This course is intended only to serve as a general guide to the Pathashalas, which will conduct their own examinations in the course.

(9) *Special course for women*—A special course for women candidates consisting of three examinations has also been recommended. While framing it we have taken into consideration both their special needs and aptitudes.

V—THE SCHEME OF EXAMINATIONS

20. In keeping with its terms of reference the Committee has carefully gone into the question of the scheme of the Sanskrit College Examinations, with a view to economize time and to make the examination system as efficient as possible. The recommendations of the Committee with regard to the scheme of examinations are given below.

The period of study

21. The Committee is of opinion that the present total period of study which after the Prathama Examination covers ten years can be easily reduced by two years by introducing a three years' course, instead of four years', for the Madhyama Examination and a two years' course, instead of three years', for the Acharya Examination.

The rules regarding pass marks

22. (i) Rules 3 and 9 of the present rules for the Sanskrit College Examinations, over and above certain minimum pass marks in each paper of Prathama and Madhyama Examinations, also demand a special total in aggregate. In the opinion of the Committee this condition regarding the special total is not necessary in these lower examinations and should be removed.

(ii) Rules 20 and 26 respectively require, as the minimum, 20 marks out of 50 in each of the two papers and a total of 45 marks in the Shastri Khanda Examinations, and 25 marks out of 50 in each of the two papers and 55 as the total in the Acharya Khanda Examinations. The Committee recommends 17 pass marks as the minimum in each of the four papers, and 80 marks as the total for the new Shastri Khanda Examinations, and similarly 20 pass marks as the minimum in each paper of the new Acharya Khanda Examinations.

The rules regarding the divisions

23. The Committee recommends that only 65 per cent. marks instead of 70 per cent. marks should be the minimum for securing the first division in the Acharya Examinations.

Eligibility of candidates for different examinations

24. (i) Rule 8 of the present rules should be changed as follows :

(1) A candidate who has passed the Madhyama Examination in Shukla Yajurveda can be allowed to appear in the first year Shastri Examination in any subject excepting Krishna Yajurveda, Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(2) A candidate who has passed the Madhyama Examination in Krishna Yajurveda can be allowed to appear in the first year Shastri Examination in any subject excepting Shukla Yajurveda, Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(3) A candidate who has passed the Madhyama Examination either in Rigveda or Samaveda or Atharvaveda can be allowed to appear in the first year Shastri Examination in any subject excepting Krishna Yajurveda, Shukla Yajurveda, Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(4) A candidate who has passed the Madhyama Examination in Veda (Nairukta school) can be allowed to appear in the first year Shastri Examination in any subject excepting Navya Vyakarana, Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(5) A candidate who has passed the Madhyama Examination in Prachina or Navya Vyakarana can be allowed to appear in the first year Shastri Examination in any subject excepting Veda (Shukla Yajurveda and Krishna Yajurveda), Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(6) A candidate who has passed the Madhyama Examination in Sahitya can be allowed to appear in the first year Shastri Examination in any subject excepting Veda (Shukla Yajurveda and Krishna Yajurveda), Vyakarana (Prachina and Navya), Navya Nyaya, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(7) A candidate who has passed the Madhyama Examination in Sarva Nyaya can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Navya Nyaya, Raja Shastra, Jyautisha and Ganita.

(8) A candidate who has passed the Madhyama Examination in Darshana can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Sarva Nyaya, Raja Shastra, Jyautisha and Ganita.

(9) A candidate who has passed the Madhyama Examination in Purana-Itihasa can be allowed to appear in the first year Shastri Examination in any subject excepting Veda, Vyakarana, Navya Nyaya, Sarva Nyaya, Jyautisha and Ganita.

(10) A candidate who has passed the Madhyama Examination in Raja Shastra can be allowed to appear in the first year Shastri Examination either in Raja Shastra or Dharma Shastra or Purana-Itihasa.

(11) A candidate who has passed the Madhyama Examination in Jyautisha can be allowed to appear in the first year Shastri Examination either in Jyautisha (Siddhanta or Phalita) or Ganita or Dharma Shastra.

(ii) Under the new scheme rule 19, paragraph 2, which lays down certain conditions regarding the exemption, from the Madhyama Examination of the Sanskrit College, of candidates who have passed Sanskrit title examinations of certain other institutions, will have to be withdrawn. The question of recognition of the other Sanskrit examinations can be considered only after their courses have been remodelled on the new courses of the Sanskrit College Examinations.

(iii) In the opinion of the Committee the following should be added to rule 19 :

(1) A candidate who has passed the Acharya Examination of the Sanskrit College in one subject can be allowed to directly appear in the Shastri Examination, partly or wholly, in any other

subject and he will be exempted from the general papers provided that he has already studied those subjects in his Shastri Examination already passed under the new scheme. The Acharya Examination however in that subject will have to be taken always by parts.

(2) A candidate who has passed the Shastri Examination of the Sanskrit College in one subject can be allowed to appear in the first year Shastri Examination in any other subject without passing the Madhyama Examination in that subject and can be exempted from the general papers provided that he has already passed his complete Shastri under the new scheme.

(3) M. As in Sanskrit of any recognized University can be allowed directly to appear in any Shastri Examination by parts, but those who have passed their M.A. in Sanskrit in first division can be allowed to appear in the complete Shastri Examination also. In both the cases they will be exempted from the non-Sanskritic general papers provided they produce a certificate to the effect that they have already studied those subjects for any of their English examinations.

(iv) Paragraph 2 of rule 25 should be replaced by the following :

(1) A candidate who has passed his Shastri Examination in Navya or Prachina Vyakarana can be allowed to appear in the Acharya Examination in any of the two subjects.

(2) A candidate who has passed his Shastri Examination in Navya Nyaya can be allowed to appear in the Acharya Examination either in Navya Nyaya or Prachina Nyaya.

(3) A candidate who has passed his Vedanta Shastri Examination can be allowed to appear in any group of the Vedanta Acharya Examination.

(4) As a rule a candidate after taking up any special subject in his first year Acharya Examination will have to confine himself to that subject in the second year Acharya Examination.

Re-examination of answer-books of failed candidates

25. The present rules do not provide for re-examination of answer-books of failed candidates. In the opinion of the Committee there might be genuine cases for re-examination. For such cases the Chairman of the Examination Committee or the Examination Committee itself should be authorized to appoint a Board of Examiners consisting of the Chairman and two specialists, other than the original examiner, for each subject to re-examine the answer books and to see whether a real injustice has been done to the candidate; this re-examination being allowed if the candidate fails in not more than one paper. The re-examination fee should be at least Rs.8 and each examiner should be paid Rs.2 per candidate.

Increments in the rates of remuneration to setters and examiners

26. Under the new scheme modern subjects like Civics, Politics, Philology, Mythology, etc. have been prescribed in all the examinations from Prathama up to Acharya. It will be very difficult to secure the services of suitable setters and examiners for these subjects on the present meagre remunerations.

The present rates are inadequate even for Sanskrit examiners and do not compare favourably with the rates of remunerations of other examining bodies. The Committee therefore recommends that the present rates should be revised as follows :

Setting fee per question paper : Prathama Rs.15, Madhyama Rs.20, Shastri Rs.30 and Acharya Rs.40.

Examining fee per answer book : Prathama As. 4, Madhyama As. 6, Shastri As. 8 and Acharya As. 12.

Fee for head-examinership per assistant examiner : Prathama Rs.15, Madhyama Rs.20 and Shastri Rs.30.

As regards the three special examinations for girls, newly to be started, the rates should be respectively the same as those for the Prathama, Madhyama and Shastri examinations.

Increment in the rates of remuneration for tabulating and checking the results

27. Under the new scheme the present number of question papers will be almost doubled in the Madhyama, Shastri and Acharya Examinations. It means a considerable increase in the number of entries in the marks registers of almost all the examinations. The present rates (i.e. Rs.8 for tabulation, and Rs.4 for checking the tabulated results per 100 candidates) of remuneration for tabulation and checking should also be suitably increased. The Committee recommends the following rates for future:

Remuneration for tabulation per hundred candidates: Prathama Rs.12, Madhyama Rs.12, Shastri Rs.16, Acharya Rs.16.

Remuneration for checking per hundred candidates: Prathama Rs.6, Madhyama Rs.6, Shastri Rs.8, Acharya Rs.8.

As regards the three special examinations for girls, newly to be started, the rates of remuneration for tabulating and checking the results should be respectively the same as those for the Prathama, Madhyama and Shastri examinations.

Additional Hands in the Registrar's office

28. Due to the introduction of several new subjects in the Madhyama, Shastri and Acharya Examinations and the addition of several general or optional papers in all the examinations, the total number of question papers under the new scheme will be 436 as against 286, the present total. It shows that under the new scheme, the work of the office of the Registrar, Sanskrit College Examinations, will increase tremendously as compared with the present work. To cope with the increased amount of work, the hands in the Registrar's office, which we understand are even now inadequate will have to be increased. We recommend, therefore, that the question may be sympathetically enquired into by the Government and early steps may be taken to suitably increase the strength of the office of the Registrar.

Moderation of question papers

29. Under the present arrangement, we understand, the work of moderation of question papers mostly rests with the Registrar himself. Under the new scheme when a variety of new subjects is going to be introduced and the number of question papers will increase very much, the present arrangement will not do and the co-operation of a large number of scholars, not only local but also from outside Benares, will become necessary. A regular Committee of Moderation will have to be appointed which will entail new expenses.

Raising the examination fees

30. We have seen that the new scheme will entail new additional expenses. In the circumstances, the Committee feels constrained to recommend the raising of the present examination fees from Madhyama up to Acharya, as follows:

Examination	Present fee	Proposed
	Rs.	Rs.
(The present fee of Rs.2 for Prathama may not be charged)—		
Madhyama (each part)	2	3
Complete Madhyama	10	12
Shastri (each of the first two parts)	5	5
Shastri, Final part	5	6
Acharya, Part I	5	6
Acharya, Part II	5	8
		plus Rs.2 for optional Hindi

The fee for the three special examinations for girls should be as follows:

	Rs.
Jnana-Prabhs	1
Jnana-Shri, each part	2
Bharati, each part	4

Medium of examination

31. Under the new scheme a large number of books in Hindi on modern subjects like History, Politics, etc. have been prescribed for the different examinations. In the opinion of the Committee, it would be proper if in such cases, instead of Sanskrit, Hindi is made the medium of examination.

A higher research degree

32. The Committee is in favour of instituting, after Acharya, a research degree to be called "Vachaspati" of the subject concerned. For the degree, a candidate will have to write an original thesis based on independent research. An Acharya-passed candidate will be allowed to submit the thesis for the degree only after the lapse of five years from the year in which the Acharya degree was taken. The Committee recommends that every successful candidate should be awarded a suitable dress as well as a cash prize worth at least Rs.1,000.

Optional papers on Western Languages

33. The Committee has recommended study of English or German or French, as an optional subject, up to the standard of B.A., in all the examinations. The Committee, however, realizes the difficulty of making a suitable arrangement firstly for the study of these languages up to the prescribed standard in the Sanskrit Pathashalas at large or even in the Sanskrit College and secondly for properly conducting examinations in them along with the Sanskrit College Examinations. In the circumstances, a start can be made only with English by making a suitable arrangement for its study in the Sanskrit College itself. The other alternative is to leave the examination in the English language to such bodies as the Intermediate Board and the Universities and the Anglo-Sanskrit Department of the College may simply prepare Sanskrit candidates in English for the examinations in English by the said bodies only.

Interim Arrangements

34. With a view to avoid great inconvenience to the students, the Committee is of opinion that the new scheme of the examinations should be introduced gradually in a number of years, so that during the transitional period the old part examinations may be substituted by the new ones at the rate of one part a year progressively, and, at the same time, there should be no duplication of the same examination in the old and new courses. Keeping in view the above principles the scheme of the examinations during the transitional period should be as follows:

(The following scheme is based on the fact that the new courses almost on the lines of the Committee's recommendations have already been adopted by the Board of Sanskrit Studies for the Prathama, Madhyama, Part I, Shastri, Parts I and II, and Acharya, Part I examinations of 1940.)

Year	Examination (new scheme)	Examination (old scheme)
1940	Prathama	
1940	Madhyama, Part I	Madhyama, Parts II—IV.
1940	Shastri, Parts I and II	Shastri, Part III.
1940	Acharya, Part I	Acharya, Parts II and III.
1941	Prathama	
1941	Madhyama, Parts I and II	Madhyama, Parts III and IV.
1941	Shastri, Parts I—III	
1941	Acharya, Parts I and II	Acharya, Part III.
1942	Prathama	
1942	Madhyama, Parts I—III	Madhyama, Part IV.
1942	Shastri, Parts I—III	
1942	Acharya, Parts I and II	
1943	All examinations according to the new scheme.	

It means that during the transitional period a candidate failing in a particular part examination will have to appear next year in the same part examination according to the new or old schemes as the case may be. One failing in the final examination of the old scheme will have to appear in and pass the final examination of the new scheme before he is declared as successful in the particular examination (Madhyama or Acharya) as a whole.

Those candidates also who have already passed any old part examination (of Madhyama or Acharya) will have to pass the next part examination according to the old or new scheme, as the case may be, and if that part examination happens to be the final examination of that year will be declared as passed in that examination as a whole. But a candidate who has passed third Khanda (Part) examination of the old Madhyama or the second part of the old Acharya will have to appear in the final Madhyama or Acharya Examination according to the old or new scheme, as the case may be, before he is declared successful in that examination as a whole.

VI—MISCELLANEOUS TOPICS: NECESSARY STEPS TO MAKE THE SCHEME A SUCCESS

The Pathshalas to be brought under a system

35. The Committee is of opinion that the new scheme of courses cannot succeed unless the present highly unsatisfactory condition of the Pathshalas is improved and they are brought under a proper system. At present there are no definite rules for recognition of Sanskrit Pathshalas. In most of the Pathshalas, recognized for the Shastri and Acharya Examinations, the studies of the Prathama and Madhyama classes are neglected. This state of things cannot improve until the rules for recognition of the Pathshalas are based on a definite scheme and the different Pathshalas are classified into different grades under some strict rules. The Committee hopes that the question will be considered in detail by the Sanskrit College Organization Committee, appointed by the Government.

Reorganization of the Board of Sanskrit Studies, United Provinces, and its Committees

36. It was in 1923 that, with a view to provide a machinery for the control, conduct and supervision of the Sanskrit College Examinations, the Government felt it necessary to create the Board of Sanskrit Studies. With a view to meet the public demand that there should be a better representation on the Board of the Pathshalas of the Province outside Benares as well as to provide representation for the several modern subjects like History, Civics, Politics, introduced under the new scheme, the Committee feels that there is a real necessity for revising the present constitution of the Board. The Committee recommends the following constitution of the Board for the future:

The Board should consist of 15 members as follows:

- (1) The Principal, Sanskrit College, Benares, Chairman, *ex officio*.
- (2) The Registrar, Sanskrit College Examinations, Secretary, *ex officio*.
- (3) The first Professor, Sanskrit College, Benares, *ex officio*.
- (4) The Inspector, Sanskrit Pathshalas, United Provinces, *ex officio*.
- (5-6) Two Pandits, representing teachers in Sanskrit Pathshalas of Benares, preparing candidates for the Sanskrit College Examinations.
- (7-8) Two Pandits, representing teachers in Sanskrit Pathshalas of the United Provinces, but outside Benares, preparing candidates for the Sanskrit College Examinations.
- (9) One representative of the managing bodies of Pathshalas preparing candidates for the Sanskrit College Examinations.
- (10-12) Three Sanskrit scholars of standing having knowledge of the modern methods of research.
- (13-14) Two distinguished Pandits.
- (15) One representative of the Provincial Legislature, preferably one who knows Sanskrit.

(Nos. 5 to 15 nominated by Government)

It is desirable that the Pandits under nos. 5 to 8 and 13 to 14 and the Sanskrit scholars under nos. 10 to 12 should represent different subjects.

The Examination Committee

As regards the constitution of the Examination Committee we recommend that it should consist of five members as follows :

(1) The Principal, Sanskrit College, Benares, Convener,
ex officio.

(2) The Registrar, Sanskrit College Examinations, Benares,
ex officio.

(3—5) Three members to be nominated by Government from amongst the members of the Board of Sanskrit Studies.

As regards the functions of this Committee, already shown in Chapter 3, the words "to moderate question papers" should be changed to "to arrange for moderation of question papers."

The Grants-in-aid Committee

We are of opinion that the Board of Sanskrit Studies should have a Grants-in-aid Committee which should consist of five members as follows :

(1) The Principal, Sanskrit College, Benares, Chairman,
ex officio.

(2) The Inspector, Sanskrit Pathashalas, United Provinces,
ex officio.

(3—5) Three members to be nominated by the Government from the Board.

The function of this Committee should be to consider applications for grants-in-aid together with the report of the Inspector of Sanskrit Pathashalas and to recommend the same to the Director of Public Instruction for approval.

This Committee will be useful for bringing about co-relation between the question of giving grants-in-aid to Pathashalas and the question of their recognition for the Sanskrit College Examinations.

The Committee has paid special attention to the Board's constitution, because the success of the new courses will largely depend upon the Board, one of the functions of which is "to advise regarding the courses of study prescribed for various examinations."

The Superintendent of Sanskrit Studies

37. Under paragraph 51 of the United Provinces Educational Code, the Inspector of Sanskrit Pathashalas is required to act under the direction of the Superintendent of Sanskrit Studies. The Committee is of opinion that this arrangement is necessary, not only for supervising the activity of the Inspector, but also for securing co-ordination between the activities of the Examination Department and of the Inspection Department, both of which are intimately concerned with the Sanskrit education of the Province. The Superintendent of Sanskrit Studies (which is merely another designation of the Principal, Sanskrit College, without any extra remuneration) in his capacity of Chairman of the Board of Sanskrit Studies is always in close touch with the Registrar's Department. It is, therefore, necessary that, for co-ordination of the work of the two departments, the Superintendent should have the opportunity of guiding the work of the Inspector also.

The Committee also recommends that the Superintendent, in order to discharge his duties properly, in relation to the Inspector and also as Chairman of the Board, should be given the opportunity to see, now and then, the working of the Sanskrit Pathashalas of the Province, for himself, according to need and convenience.

New Staff in the Pathashalas and the Sanskrit College

38. Under the new scheme, several modern subjects have been introduced in the Sanskrit College Examinations for the first time. But up to this time there is no provision for teaching most of these subjects in the Pathashalas or even in the Sanskrit College, Benares. The Committee recommends that the Government may give special grants-in-aid to Pathashalas to enable them to make arrangements for these subjects;

but the Government Sanskrit College should be specially re-organized by adding new posts at least for the following subjects :

Sanskrit Department

- (1) Civics, Politics, and Economics.
- (2) Indian History and Culture.
- (3) Hindi.
- (4) Mathematics (for Shastri and Acharya).

The Committee recommends that distinguished M.As. in the different subjects may be appointed for these subjects in the Upper Subordinate Educational Service Grade.

Anglo-Sanskrit Department

The existing Anglo-Sanskrit Department of the College should be re-organized and developed up to the B.A. standard for teaching the optional English language up to the Acharya class. One Professor of English, an M.A., with two assistants should be the minimum staff of this department.

A Refresher Course to be started in the College

39. The Committee recommends that a refresher course, with four sessions of three months each, should be started in the Benares Sanskrit College. All recognized Sanskrit Pathshalas should be required to send, by turn, at least one teacher apiece to attend the refresher course. The course should aim at imparting a general acquaintance with the subjects (like History, Geography and Hindi) and also some lessons in the theory and practice in the art of teaching. A staff of three additional Professors, M.A., B.T.S. in History with knowledge of Hindi and Sanskrit, should be able to manage this refresher course, which should be attended at least by 90 pupil-teachers at a time.

With the assistance of these 'trained' teachers, the Pathshalas will be able to manage their studies without any additional staff which they cannot engage in view of their difficult financial condition.

Observational knowledge of Jyautisha

40. At the present day, the study of the science of Jyautisha among the Pandits is mostly devoid of any observational knowledge of the planets and constellations. This defect cannot be removed unless the Sanskrit College at least is supplied with the minimum number of instruments for observational purposes. A list of the requirements of the College in this connection is already given in Chapter VIII, page 80.

A Sanskrit Journal to be started

41. The Committee recommends for starting a Sanskrit journal from the Sanskrit College for the benefit of the Sanskrit-knowing public. It is hoped that through the agency of this journal, many of the ideas underlying the new scheme will become popular among the Sanskrit public.

New Scholarships

42. With a view to give encouragement to Sanskrit studies, the Committee recommends that a number of Sanskrit scholarships open to those only who attain high positions in each of the Sanskrit College Examinations from Prathama up to Shastri, should be instituted. The scholarships should be tenable for one year and should be open to candidates from all over the Province. Ten scholarships for each of the Prathama, Madhyama, and Shastri Examinations, respectively of the value of Rs.7, Rs.10, and Rs.15, should be instituted.

Special concessions to those who qualify in English

43. The Committee is of opinion that Sanskrit Students who qualify in optional English course should be accorded status as detailed below for the purposes of Government services :

Madhyama with English should be regarded as equal to High School, Shastri with English equal to Intermediate, and Acharya with English equal to B.A. But in case of posts of Sanskrit teachers or Professors, Madhyama with English should be regarded as equal to Intermediate, Shastri with English equal to B.A., and Acharya with English equal to M.A.

Bogus Sanskrit Examining Bodies

44. Of late years, a large number of bogus institutions under the names of Sanskrit Universities have been started by many people, not out of public spirit, but with the view of profiteering and serving personal ends. These bodies bestow high-sounding titles and grant cheap degrees, in many cases similar to those of the recognized Sanskrit

Examining bodies. There cannot be two opinions as to the harmful effect these bodies exercise on the growth of knowledge. The Committee hopes that the Government will take necessary steps to stop the chief arising out of these bogus institutions.

Sanskrit College Convocation
45. The Committee recommends that a regular annual convocation should be held at the Benares Sanskrit College for conferring the degrees on the successful candidates.

Physical exercises and games
46. At present no attention is paid in most of the Sanskrit Pathshalas to any kinds of games or physical exercises. The Committee suggests that the Sanskrit College Organization Committee, recently appointed by the Government, may pay due attention to this question.

New books to be prepared
47. In the courses of the revised syllabus special attention has been drawn in many places to the fact that the proper text-books are not yet available and that they will have to be specially prepared. The Committee strongly recommends that the Government may take early necessary steps for the preparation of those books.

- BHAGAVAN DAS
- BHAGWAN DIN MISRA
- ABHIMA SWAMI SASTRI
- DAYA SHANKAR PATHAK
- VAGISHWAR VIDYALANKAR
- PRAMATHA NATH TURKA
- BHUSHAN
- TRIPATHI
- SHRI GOPAL SHASTRI
- KASHI RAMA

MANGAL DEVA SHASTRI, समापति उपाध्याय
Member and Secretary of the Board

DATED BENARES **August 23, 1939**

A note of Dissent by Pandit Kashi Rama
I am very sorry to be unable to agree to the proposal of reviving the post of the Superintendent of Sanskrit Studies and of the Principal inspecting the Pathshalas in that capacity. Dr. Thibaut was the first Superintendent who never thought of inspecting the Sanskrit Pathshalas. His supplied information to the Government when asked for on Sanskrit matters and on the Government Sanskrit College, Benares. This post was transferred to Dr. Venis in 1914 when he was put in charge of the Saraswati Bhavan, and when Pandit Thakur Prasad Vyakaranacharya was appointed as the Inspector of Sanskrit Pathshalas. The Pandit being innocent of English submitted his report in Hindi to Superintendent who took the necessary matter from the same and forwarded it in English to the Director of Public Instruction. Those days the Inspector had no office of his own.

In 1918 the Pandit was succeeded by myself and Dr. Venis by Dr. Ganganath Jha. Dr. Ganganath Jha never inspected any Pathshalas. In fact he never spared any time from his duties of the Principal and the Registrar, nor did he feel the necessity of inspecting the Pathshalas. If any Pathshala was in need of recognition or aid, it applied to the Inspector who after inspecting reported with his recommendation the suitability or otherwise of the institution to the Superintendent. Soon after a Board of Sanskrit Studies was created and the cases of recognition were sent to the Board for decision and those for aid to the Department. The Inspector submitted his annual report to the Superintendent who passed the same on to the Director of Public Instruction with his own criticism. In one or two cases there was a disagreement between the Superintendent and the Inspector and unnecessary friction was created between the two officers with the result that the Director of Public Instruction thought it wise to make the Inspector independent of

Superintendent's control. The only relation left was that the Inspector sent to the Superintendent his tour programme to be considered and his annual report to be forwarded to the Director of Public Instruction with his own opinion.

In the meantime the work of the Registrar increased and first an Assistant Registrar and then a separate Registrar were appointed. The Principal being relieved of other duties was left in sole charge of the College and its allied institutions.

Now that the curriculum of the College is being overhauled and so many additional subjects being added it is absolutely necessary that the Principal should wholly devote his attention to the management of the College and its allied institutions. There is the Library work that he has to supervise, there are the Post-Acharya scholars that he has to look after, there is the Anglo-Sanskrit Department that he has to manage, there is the Board of Sanskrit Studies that he has to convene. With such heavy duties it is impossible that he should spare time for inspection of the Pathshalas. If the extorts time from the above-mentioned duties and spends it for purposes of inspection, all the work would suffer from inefficiency.

I am therefore of opinion that the present Inspector who is an M.A. and an Acharya and who has got an experience of ten years at his back should be left alone. If that is not done I fear friction between the two officers would be the result.

As usual let the Inspector submit his cases of recognition to the Board with his own recommendation and the superfluous post of the Superintendent be abolished.

Further I beg leave to point out that on consulting the points of reference I do not find any item to justify us to take up this question.

KASHI RAMA.

Note of Dissent by Pandit Babu Lal Tripathi, M.A., B.Sc.

In presenting this dissenting note of mine as against the proposal of reserving the post of the Superintendent of the Sanskrit Studies for the Principal only, and thereby requiring the Principal to inspect the Pathshalas in that capacity, I cannot but firstly refer to the anomalous state of affairs that exists today. The post of the Registrar and that of the Principal are combined in one and the same individual, who is also recommended by our committee to hold the office of the Superintendent. Now, it is ordinarily apparent that the examining and the sending bodies of any educational institution have to be quite distinct and separate. And then it is almost as important for an institution like the Government Sanskrit College which is nothing less than a University at present and which requires being given the shape also of a University very soon that there ought to be a Superintendent like the कुलपति or Vice-Chancellor of a modern University not only to co-ordinate the duties of a Registrar and those of a Principal but also to glorify the institution itself. In this manner the Principal will be left free to look to the co-ordination of the various departments of studies and to guide the research work and thus raising the standard of his own College.

B. L. TRIPATHI.

A note of Explanation by Dr. Bhagwan Das

One note of dissent was presented by Pandit Kashi Ramji, to the Committee, at its last sitting, on the 28th August, 1939. He added further comments orally. The other note of dissent, by Pandit Babu Lal Tripathi, was sent to the Secretary on the 31st August, 1939. Both are concerned with the post and the work of the Superintendent of Sanskrit Studies. The Committee did not have the opportunity to discuss the points raised by Pandit Babu Lalji, nor some of the points stressed by Pandit Kashi Ramji. It is not possible to call another meeting of the Committee to discuss these points. It therefore seems desirable that I should add, over my single signature, a supplementary note explaining my views on these points, which I believe (from the trends of their expressions of views, during the sessions of the Committee) to be the views of the other members also.

At the end of his note Pandit Kashi Rámji says that this Committee is not justified in taking up this question, under the terms of reference. It seems to me that the matter is intimately subsidiary to, and closely connected with the proper working of the scheme suggested by the Committee; and it may therefore well be regarded as covered by the language of the terms of reference. Also, such a mere technicality, which may have use in a Law-court where legal consequences are involved, need not tie rigidly a Committee like this which is an advisory body, and may rightly make sub-servient as well as principal recommendations, for the Government to accept or not as it thinks fit.

Pandit Kashi Rámji lays special stress on the possibility of friction between the Inspector and the Superintendent, instances his own case, desires that the Inspector should be directly subordinate to the Director of Public Instruction, says that Pathashalas were never inspected by any previous Superintendent in the past, and suggests that the post of the Superintendent should be abolished altogether as superfluous.

The possibility of friction is clearly not good or sufficient reason. Such possibility is always present, between any two public servants, two co-ordinates, or one subordinate and one super-ordinate, where one is, or both are, actuated by personal motives rather than devotion to duty and sense of justice and fair play. But because of this possibility, the principle of all organization, viz., super-, sub-, and co-ordination, cannot be thrown away, and any subordinate official, who so wishes, be made independent of his super-ordinate. If the Inspector is made directly subordinate to the Director of Public Instruction, as Pandit Kashi Rámji wishes, there will be the possibility of friction between those two officers. What will be done then?

Ordinarily, when such personal troubles arise, some officer super-ordinate to both the officers in friction should (1) endeavour to compose the differences in the way 'domestic differences' are composed, by patiently listening to both, by sympathetic expostulations, and by pointing out to the party, whom he finds to be more to blame, that he must make amends and behave properly in the future; and (2) if that party proves incorrigible, then take official action against him, transfer, fine, demote, suspend, or dismiss him, according to the gravity of his fault.

Such is the principle and policy of executive organization and conduct of work. And it cannot well be ignored in the present case.

The fact that, in the past, Principals, in their capacity of Superintendent, never visited any Pathashala, is clearly no reason, why they should not do so in the future. Conditions were different in the past. Great improvement on them is greatly needed.

The questions, arising out of the two dissentient notes that really deserve serious consideration in this connection are:

(1) Is a Superintendent of Sanskrit Studies really needed, besides the Inspector of Sanskrit Pathashalas? And should he be super-ordinate to the Inspector?

(2) If yes, then should the Principal of the Government Sanskrit College, Benares, hold this office also?

Regarding (1), it has been pointed out clearly in the Report, (a) that some agency is indispensable, to co-ordinate the work of the Board of Sanskrit Studies, the Inspector, and the Registrar, which work now extends over the whole of the United Provinces; and (b) that, at present, there is no better agency than the Superintendent, in his capacity of Principal, of Chairman of the Board of Sanskrit Studies, and of Super-ordinate of the Registrar. It should be noted that the present incumbent gets no extra allowance, beyond his salary as Principal, for any of the other offices which he is holding.

If the Director of Public Instruction or Assistant Director of Public Instruction feels able to do the work of such co-ordinating agency efficiently, in addition to his present duties, well and good; the present arrangement may be discontinued. Or if the Government find themselves able to make a complete re-organization of the whole department, such as Pandit Babu Lalji adumbrates in his note, provide very much heavier expenditure, and create a new post, super-ordinate to that of the Principal as well as the Inspector, who would perform the functions of the present Superintendent, of the Chairman of the Board and of Super-ordinate of the Registrar, and provide elaborate and numerous office staff,

then too, of course, the present arrangement need not continue; though the possibility of friction between the holder of that new post and the Inspector or any other subordinate will continue.

Regarding (2), there can be no doubt that the proper discharge, for any long period, of all the fourfold duties, with which the present Principal is burdened, is really impossible for one person, however industrious, however capable and talented; the duties, viz. (1) of Principal of Government Sanskrit College, Benares, (2) of Superintendent of Sanskrit Studies of the United Provinces, (3) of Chairman of the Board of Sanskrit Studies; and (4) of Registrar of Sanskrit Examinations. It should be noted in passing that he had about 300 question papers, and some 16,000 candidates and four times as many answer papers to deal with, during the last examinations, i.e. of 1939. I am astonished that he has been able to do the work of Secretary of two special Committees appointed by the Government, viz., this, and the Sanskrit College Organization Committee, during the last twelve months, in addition to all his other very heavy work.

But, it is well understood that the present arrangement is only temporary; that the posts of Principal and Registrar are distinct and separate; that normally two persons have held, in the past, and should hold again in the future, these two posts, and that the Registrar should generally be subordinate to the Principal. And, accordingly, the Committee has, in the Report, expressed its expectation that a new whole-time person, with suitable qualifications, will, before long, be appointed to the post of Registrar. When that is done, the rest of the work, i.e. of the three offices of Principal, Superintendent and Chairman, will be easily possible to perform, for one person.

It is well known that the Education Department enjoys the largest number of holidays of all the Departments of State. The Principal, as Superintendent, could very easily make arrangements to visit a few of the larger Pathashalas of the Province now and then and so get into direct personal touch with, and secure first-hand information about, the work going on. A right-minded Inspector should welcome such visits by the Superintendent, instead of being annoyed by them. There are, at least nominally, on the registers of the Inspector 990 Pathashalas at present. I am informed that he has not been able to "inspect" more than 60 on an average, every year, for some years now. If the Superintendent also does some inspections, and pays surprise visits, it will only help the Inspector's work, and will make it more likely that the money given in grants-in-aid is rightly and properly spent; and the prescribed courses of study are rightly followed. All sorts of rumours of mismanagement and waste in the Pathashalas have come to my ears during the twelve months that I have been Chairman of this Committee; though there has probably been exaggeration, yet also they cannot all have been wholly groundless, for some statements were made by reliable persons with first-hand knowledge. If then, the Superintendent and the Inspector co-operate duly, with devotion to the ideal of public good and suppression of personal likes and dislikes, the result to Sanskrit studies will be only beneficial.

BHAGWAN DAS.

T4.252:N46

HI

REGISTERED No. A338



Government Gazette

of the United Provinces

PUBLISHED BY AUTHORITY

ALLAHABAD, SATURDAY, 19TH JULY, 1941

PART VIII

Official Papers ; Statement of Cotton Pressed ; Vital Statistics ; Seizures and Deaths ;
Crop and Weather Reports ; Prices Current ; Notices and Advertisements, etc.

No. A-1889/XV—460-1938

EDUCATION DEPARTMENT

2nd July, 1941

MISCELLANEOUS

The following recommendations contained in Chapters VIII and XXVII of the Report of the Universities Committee, appointed by the Government of the United Provinces, under Government *communiqué* no. 925-G/XV—460-1938, dated the 6th May 1938, to examine the working of the Provincial Universities, including their constitution, rules and regulations, with a view to suggest such changes as may appear to be necessary for their expansion, better control and administration, are published for general information. Any comments or suggestions in this connexion may be forwarded to the Secretary to Government in the Education Department, Lucknow, by the end of September, 1941, when they will be taken into consideration by Government along with all criticisms appearing in the papers as signed articles. Anonymous contributions will not be taken into consideration.

By order,
N. C. MEHTA,
Secretary to Government,
United Provinces.

CHAPTER VIII
SUMMARY OF RECOMMENDATIONS

PART I

Recommendations applicable to all three Universities

[Figures in the margin indicate the number of the resolution of the plenary session of the Committee in which the recommendation is embodied.]

I—Admission to Courses of Study and Degree

- 1 1. Students should not be eligible for admission to a course of study for a degree unless they have passed the final examination of the Provincial Board of Education or an examination equivalent thereto and have passed such additional tests (if any) as may be prescribed by the Universities.
- 2 2. The Universities should consider the feasibility of a scheme under which—
- 21 (1) post-graduate and research students of one University may attend lectures and carry on work at another University and be entitled to count such attendance and work as qualifications for admission to examinations and degrees ;
- 22 (2) teachers on the staff of one University may be permitted to deliver at another University, lectures attendance at which should count as a qualification for admission to examinations and degrees.
- 24 3. No private candidate should be allowed to appear in any examination of the Allahabad and Lucknow Universities. The existing facilities for the LL.M. and doctorate degrees may, however, continue.
- 231 and
248
(S.C. I) 4. There should be no restriction on enrolment in Teaching Universities. The Committee is however conscious of the danger of Unitary Universities reaching unwieldy proportions.

II—Affiliating and Teaching Universities

- 91 5. In the interest of higher education in these Provinces the affiliating as well as the unitary and teaching type of University are equally needed as each of these two types serves a definite purpose. During the short period of their existence the Unitary Universities have done useful work in raising the standards of teaching and have shown great potentialities for the development of research and advancement of learning. Their formative influence upon character has perhaps not been marked. The Committee hopes that with a more carefully considered scheme which would lay stress on better supervision and guidance of the activities of their resident and non-resident students and on closer contact between teachers and students the Unitary Universities will be able to render a still better account of themselves by imparting education on sound lines which includes the development of character as much as the training of the mind. The colleges affiliated to the Agra University have the advantage of being comparatively more compact bodies and can, where they so choose, more easily organize the social life of their students. Their financial resources being small they cannot be expected to contribute towards advancement of higher learning and research to the same extent as the Unitary and Teaching Universities. The latter are no doubt more expensive but the advantages which the community is now deriving and is likely to derive in a much greater measure from them in future clearly point to the need of their continuance and development. At the same time regard being had to the provision of higher education in these Provinces there is, in the Committee's opinion, a need for a University of the affiliating type.
- 19 6. It is not desirable for a Teaching University to function as an affiliating university outside its territorial limits except in respect of a technical, agricultural or engineering institution. This precludes the affiliation of Queen's College, Rampur, if raised to degree status, to the Allahabad or Lucknow University.

7. The degree colleges in the Province are serving a useful purpose and there should be provision for their affiliation to or association with some University without prejudice to any of them growing into Universities. 17
18
8. Technological and Research institutions should be affiliated to a University, each case being considered on its merits. 26
9. University Colleges should not retain their Intermediate classes except as a transitional measure for a reasonable time. A period of five years after the Committee's recommendations have been incorporated in an Act of the Legislature would be a reasonable time in the opinion of the Committee. 79
10. A University College should have post-graduate classes in some subjects at least. 80
11. In regard to research in the Agra University and its Colleges the Committee recommends as follows : 81
- (1) No University professors as such are needed, and the provisions in this respect in the Agra University Act and Statutes should be dropped. If the University can afford to do so, it should give grants for teaching posts to the Colleges, but the work of teachers appointed to such posts should be controlled by the Colleges.
- (2) All the resources available should be placed at the disposal of the Colleges to enable them to develop according to a well-planned and co-ordinated scheme.
- (3) It would not be wise to start a University Library as only a very small fraction of teachers and students would be able to benefit by it. The money available should be given as grants to the Colleges for building up their own libraries in the subjects in which they specialize.

III—University Studies

12. The length of the course for the first University degree both in the teaching and affiliating Universities should be three years. 12
- In view of this recommendation it is not necessary to retain the distinction between Pass and Honours courses as established at present. 13
13. The object of University studies being to develop in the student a scientific outlook and a critical attitude towards problems with which he may be faced, courses of study for under-graduates should consist of groups of allied subjects and a higher standard should be attained than at present. 14
14. The length of the course for the Master's degree should be one year but the Universities may make it two years if they consider it desirable. 15
- (Recommendations regarding the scheme of examinations for a three-year degree course appear separately for Affiliating and Teaching Universities.)

IV—Expansion and Co-ordination of Studies

15. Efforts should be made to establish within a reasonable period of time a system of higher education capable of supplying the needs of the Province in all departments of life and enabling its people to develop its natural resources, industry, education and culture and to shoulder the responsibility for its administration and defence. 65
16. Government, with the co-operation of all available agencies including the Universities, should undertake a systematic survey of the natural resources and economic potentialities of the Province and determine in what directions further development is possible and desirable and then take steps to train the specialists and technicians necessary to take charge of them. Where the number of such specialists needed is small, arrangements for their training may be made in co-operation with other provinces or in other countries. 65

- 65 17. The range of studies at present prescribed at the Universities should be extended and the standard of the work done should be raised, higher work and research being emphasized. For this purpose a staff of teachers of the highest qualifications should be recruited from wherever the best men can be found and at salaries which will attract them; such recruitment should be for the transitional period necessary for a generation of specialists to grow up within the country after which it should cease.
- 65 18. The preference at present shown in recruitment for the public services to persons possessing foreign degrees should be restricted and should cease as soon as suitably qualified persons are trained in the Universities within the country.
- 65 19. Education should be closely related to the life of the people at large so that the educated class may assume the natural leadership of the people in all spheres of life and so that education may receive those benefactions which are the mainstay of institutions of higher learning all over the world but which in this country run into other channels.
- 65 20. The heavy initial cost of organizing this system of higher education should be met by raising funds by a public appeal to philanthropists, old alumni and local bodies, by contributions from flourishing industries and trades and by a public loan. It should be made capable of being financed from current revenues within a reasonable period of time.
- 66 21. Both under-graduate and post-graduate work should continue to be done at both the Teaching Universities in all the subjects at present (January, 1940) taught for degrees, subject to the arrangement suggested in the next paragraph in regard to post-graduate work. Under-graduate teaching should also continue in all existing subjects at such Colleges as are able to satisfy the University at a fresh inquiry that they have adequate staff, libraries and laboratories and have during the past five years maintained an average enrolment not below the minimum figure determined for each subject at a Conference of Universities to be convened by Government. The same principles should govern the continuance of post-graduate work in the future, in existing subjects as well as in newly started subjects.
- 65 22. The Committee looks forward to a much higher degree of specialization at the post-graduate stage in most subjects so that it may be assumed that the post-graduate work in a subject will consist of a number of courses in specialized branches of it. The number of students offering each course will, as a rule, be small. Duplication should in such cases be avoided and no branch should be permitted to be offered at more than one centre in the Province. To ensure this the higher posts in the departments dealing with it should be ear-marked for the speciality and should be filled by persons specializing in it.
- 65 23. The assignment of special branches to particular centres should be determined initially by agreement among the units concerned, at a conference which Government may convene. Cases of unreconciled disagreement may be decided by Government on the advice of a competent Committee which may be the same as the Committee constituted to advise about grants—as this Committee will in any case consist of persons of standing as educationists, financiers and publicists. The assignment of subjects once made at a conference of the units concerned may be revised from time to time, as need arises at similar conferences.
24. Facilities for research and advanced work should be available at the centre to which the branch of the subject under which the work falls is assigned.
- 53 25. The modern languages of the Province (Urdu and Hindi) should be made independent subjects of study for both the B. A. and M. A. degrees and

should be placed under separate and independent departments of teaching in Lucknow University as they already are in the Allahabad University.

About one-third of the work in these languages at both the post-graduate and first degree stages should be on a classical language and another modern Indian Language or Prakrit provided that it is not the classical or modern language already taken by the student as a subject for his Intermediate or equivalent examination. 53

26. The Departments of Arabic and Persian in the Lucknow University should, when feasible, be combined under one head as they are in the Allahabad University. Allahabad which has at present at the head of the combined Department a specialist in Arabic should continue to have a Professorship of Arabic and Lucknow should, when a Professorship is created, appoint to it a specialist in Persian the other subject being in each case dealt with by teachers of other ranks. 54

27. While under-graduate work continues in all the places where it is being done at present higher studies in Commerce should be developed at Cawnpore, but not at a community college. (Messrs. Gurtu and Gupta dissent.) 55

28. The Committee recommends the institution of new Faculties and expansion of existing Faculties as follows :

(i) A Faculty of Fine Arts at Lucknow which has a nucleus for such a Faculty in the Marris College of Hindustani Music and the Government School of Arts. Under-graduate work in Music and Painting may be done at any place but post-graduate work should be confined to Lucknow. 57

(ii) Faculties of Education in both Lucknow and Allahabad Universities for the training of teachers for the Secondary Schools recommended by the Education Re-organization Committee. These Faculties should provide a two-years' course open only to graduates.

(iii) Faculties of Engineering and Technology in both Lucknow and Allahabad Universities. Branches of Engineering such as Electrical, Mechanical, Military, Naval and Mine Engineering should be developed.

(a) The Civil Engineering College, Roorkee, should be affiliated to Lucknow University and should develop the study of Architecture. 58 and 59

(b) The Technological Institute, Cawnpore, should be affiliated to Allahabad University. 60

(iv) A University should, in due course, be developed at Cawnpore to take over the Commercial and Technical Institutions. 61

(v) A Faculty of Agriculture in Allahabad University fully equipped for advanced work and research and with a wider range of studies than at present, including Forestry and Veterinary Science as well. The Government Agricultural College at Cawnpore should be affiliated to this Faculty.

(vi) The Faculty of Medicine in Lucknow University should be further developed so as to undertake advanced work and research.

The provision in section 24(1) of the Allahabad University Act relating to the institution of a Faculty of Medicine in that University should be deleted.

(vii) The Faculty of Law at Allahabad should be developed so as to provide post-graduate and advanced work.

29. The Committee is not in favour of curtailing the existing facilities for under-graduate teaching in Law and Commerce, but it is strongly of opinion that post-graduate studies in these subjects should be restricted to places where adequate facilities for teaching and research are available. 16

30. The Committee favours an early start with some subjects (which are indicated in the next paragraph) and with a view to minimise the cost involved it recommends as follows :

(i) Each of these new subjects should be introduced as a rule, at one centre in the Province which should be selected on the ground of its possessing, or being in a position to provide, the requisite staff, library and laboratories, having allied studies already established or having local advantages such as past associations, facilities for local study and investigation, etc. In some cases the place where the Committee thinks that a subject should be localized, is indicated.

(ii) In subjects whose introduction as full-fledged subjects for degree examinations requires a large expenditure, courses of a lower standard may be started and instruction may be provided for diplomas and certificates.

(It will be seen that many of the subjects suggested are special branches of subjects already studied in the Universities. These will need to be introduced only at the post-graduate stage entailing comparatively small expenditure.)

62 31. The following new subjects should be started at an early date :

Faculty of Arts

Archaeology (in Allahabad).

History of Oudh (Lucknow).

Sociology (including Anthropology) at Allahabad in addition to Lucknow where it is already studied.

Public Administration (Allahabad and Lucknow).

International Relations and the Languages, Literature, and culture of Asiatic Countries. (Strongly recommended for both Allahabad and Lucknow.)

Experimental Psychology	} as independent subjects.
Comparative Philology	
Comparative Religion	

Faculty of Commerce

Insurance and Actuarial work (Cawnpore). (Mr. Gurtu dissents.)

Journalism (to be taught for a diploma wherever provision can be made).

Faculty of Science

Mineralogy (Allahabad).

Astronomy (Allahabad, existing provision to be developed).

Statistics (Allahabad and Lucknow).

Applied Physics, particularly—

Radiology, Meteorology, Aeronautics.

Applied Chemistry, particularly—

Pharmaceutical Chemistry .. (Lucknow).

Biochemistry

Food Chemistry (Allahabad).

Textile Chemistry.

Applied Zoology, particularly—

Helminthology ; Entomology.

Applied Botany, particularly—

Economic Botany (Lucknow).

Faculty of Medicine

Dentistry.

Oto-Rhino-Pharyngology

Bacteriology

Dentistry

Ophthalmology

} for diploma course.

Geography should, for the present, be developed in Allahabad where a beginning has already been made. (Mr. Gupta strongly dissenting urges its introduction also in Lucknow.) 64P

V—Medium of Instruction

32. The Committee recommends the immediate adoption of Hindustani as the medium of instruction in certain subjects such as Oriental Classics and modern Indian languages. Hindustani should become increasingly the medium of instruction as the scheme of secondary education recommended by the Education Re-organization Committee comes into full operation and as vocabularies of technical terms and text-books become available. 2

33. The following measures of preparation for the adoption of Hindustani as the medium of instruction are recommended :

(1) A survey of the literature available in Hindi and Urdu on different subjects. 6

(2) Production of a dictionary of scientific and technical terms by co-operation among the Governments of the United Provinces and the neighbouring provinces or of all Hindustani-speaking provinces and with the assistance of Universities. 7

(3) Production of original works and translations of works on different subjects by the co-operative efforts of the Universities, the Hindustani Academy, the Hindi Sahitya Sammelan, the Anjuman-i-Taraqqi-i-Urdu, the Shibli Academy, the Vijnan Parishad, the Nagri Pracharini Sabha and other similar learned bodies. 8

For this purpose—

(a) the creation of a Board to co-ordinate the labours of various agencies;

(b) provision of Government aid for these bodies.

34. Measures should be taken to ensure a competent knowledge of English among entrants to the Universities. In particular—

(1) students not already well-versed in Hindustani should be required to acquire a competent knowledge of it ; a paper in Hindustani during their degree course should be compulsory for students who have not taken the Secondary College course or passed a satisfactory examination in Hindustani ; 9

(2) teachers not versed in Hindustani should be required to acquire a working knowledge of it ; individuals may be exempted for good reasons during the transitional stage ; 10

(3) Hindustani should be made a compulsory subject at the Public Service examinations. 11

35. Government should take stock of the situation after the lapse of ten years from the introduction of the new scheme. 4 and 5.

VI—Extra-Mural Activities

36. The Universities should recognize the provision of extra-mural instruction of a popular character for the benefit of the general public as a definite obligation. Each University should have a programme of popular lectures on literary, scientific and cultural subjects, open to the general public, to be given at the Universities as well as outside. As far as possible such lectures should be in Hindustani. 39 (74 of S.C. I.)

37. The following means are suggested for fostering the sense of civic duty and social obligation among students :

(1) formation of social service societies in colleges and hostels ;

(2) organization of citizenship-lectures and lectures for cultural advancement ; 39

(3) social and economic surveys of slum areas in the University towns by students particularly of Economics and Sociology ;

(4) starting of " University Settlements " in selected wards of the University town to give students training in civic work and social service ;

(5) organization of literacy work ;

(6) organization of rural camps with a body of students under the guidance of teachers going out into the country to do rural uplift work and to acquire first-hand knowledge of the condition and manner of life of the people. (This may be best done during the months of October, November and December. Batches of students may be taken into camp at different seasons of the year) ;

(7) a course of lectures on rural uplift should be organized before students are taken into camp so that they may put the ideas imbibed from these lectures into practice ;

(8) assignment of groups of villages to batches of students for the purpose of rural uplift work.

30 38. All social service activities should be organized on a voluntary basis.

304 39. It is desirable that a physical culture institute should be set up
S.C. at one or other University centre and better financial provision is needed
I. for adequately organizing physical training.

VII—Holidays and Vacations

33 40. There should be 200 working days in the year.

34 41. Denominational holidays should be reduced to the lowest minimum, in no case exceeding those in the Collector's list.

35 42. The present long vacation should be so reduced as to permit the Dasehra and Christmas vacations being extended to as near one month as may be practicable.

VIII—Finance (General)

(a) Sources of Income

50 43. Each University and College should have a block-grant for its " maintenance " and additional grants should be doled by Government on the recommendation of the University Grants Committee constituted for the purpose. (Detailed recommendations appear separately.)

287 44. Government should take necessary measures by legislation or other-
S.C.I wise to secure financial assistance for scientific and industrial research from industries and trades likely to profit by such research. When Government decide upon a programme of industrial development regular arrangements should be made for such contribution.

33 45. The suggestion that the scales of fees should be graduated according to the domicile of the student and the circumstances of his family is not
286 acceptable.

288 46. The Universities should appeal to their alumni for more substantial and
S.C. regular financial assistance than has been obtained from them in the past.

I. 47. Local bodies should be approached to restore their contributions to the
99 funds of Degree Colleges.

92 48. The Municipality where a University or a Degree College is situated
93 should (i) reduce by 25 per cent. its demand from the University or College on account of house-tax and water-rate, and (ii) exempt from octroi or terminal tax all material imported by the University or College for educational purposes.

96 49. Each Local Body (including District, Municipal or Cantonment Board)
and 47 should be required by law to grant at least two scholarships, of a value not less than the tuition fee payable, to poor students from its area reading in any of the Universities and Colleges of the Province, the award of the scholarship being based upon a test of merit among candidates who satisfy the prescribed " means " test.

50. The concessions enumerated in paragraphs 47 to 49 should be made obligatory by an amendment of the law. 94
- The savings made by the University or College in consequence of these recommendations should be earmarked for aiding poor students. 95
- (b) *Aid to poor Students*
51. The proportion of students receiving free and half-free tuition should be 7 per cent. each as a minimum. 97
52. The following further means of helping poor students are suggested to the Universities and Colleges : 98
- Page
27
- (1) The proportion of free and half-free students may be raised to 20 per cent. of the enrolment.
- (2) Maintenance scholarships of a value sufficient to defray all the expenses of the recipient should be awarded, on the result of a "Means test" and a competitive examination, to 5 per cent. of the students, who should also receive free tuition.
- (3) Students should raise a fund by voluntary subscription for assisting their poorer contemporaries. (Societies for this purpose have been functioning in Benares and Aligarh. The Aligarh "Duty" Society was founded in 1892 and raises its funds not only among students in residence but from outsiders by sending out deputations.)
- (4) Students may be asked to give away their old books for the use of others.
- (5) Old boys should contribute to a fund for assisting poor students. (In Aligarh old boys have been expected to contribute $\frac{1}{2}$ to 1 per cent. of their income and a sum of about Rs.4,000 has been raised in a year.)
- (6) Local Bodies should contribute for the assistance of poor boys generally or of those from their local areas.
- (c) *Travelling Allowance*
53. By way of travelling allowance only the actual expenses incurred on journeys and halts should be payable provided the total claim does not exceed the amount admissible under the following rules put in the form of Ordinances. 84
- (These rules are based on Ordinances in Chapter XLIX of the Allahabad University Calendar, 1939.)
- "1. Members of Authorities, Boards and Committees shall be granted travelling and halting allowances for attending meetings, other than a Convocation of the University, at places at which they do not reside, the amount payable being equal to the amount of actual expenses incurred or the amount admissible under the following rules, whichever is less. 263
- S.C.
I.
- (i) For all journeys performed by rail, one and a half second class fare for the member, each way from his permanent place of residence :
- Provided that in the case of a person who has his headquarters at the seat of the University but is away from it in the normal course of his duties and is obliged to travel to and from it solely for the purpose of a University meeting, the Executive Council, may allow travelling allowance.
- (ii) For all journeys performed by road, four annas per mile from his permanent place of residence to the nearest railway station and back, provided the distance travelled is not less than five miles.
- (iii) For each day on which a meeting is attended Rs.4-8.
2. When a member under Ordinance 1 has to attend two meetings of the University with an interval of less than four days between the meetings attended, he shall be entitled to charge only halting allowance for the intervening days.
3. The Vice-Chancellor will be granted travelling and halting allowances at the rate of a single first class fare and Rs.7 a day while halting on duty. He will be allowed to take an orderly with him when travelling on duty.
4. Travelling allowance to an Examiner shall be on the following scale, provided that in exceptional cases the Executive Council shall decide what allowances shall be given :
- One and a half second class fare each way and an allowance of Rs.4-8 a day for halting.
- For all journeys performed by road 4 annas per mile from his permanent place of residence to the nearest railway station and back provided the distance travelled is not less than 5 miles.
5. Other servants of the University will be given a single fare each way and halting allowance and mileage in accordance with the provisions of the Government Rules."

(d) University Grants Committee

- 100 54. The University Grants Committee should consist of the following members :
- (1) The Education Minister (Chairman).
 - (2) The Director of Public Instruction.
 - (3) Four educationists nominated by Government of whom two should be Scientists representing respectively the Physical and Biological Sciences.
 - (4) Three members of the Legislative Assembly chosen by election.
 - (5) One member of the Legislative Council chosen by election.
 - (6) One Vice-Chancellor (being the Vice-Chancellor of the University whose requirements are for the time being, under the Committee's consideration.)
- 101 55. The following officers should help the University Grants Committee :
- (1) The Accountant General or the Examiner, Local Fund Accounts.
 - (2) The Inspector General of Civil Hospitals.
 - (3) A senior officer of the Public Works Department, Buildings and Roads Branch.
- 102 56. The University Grants Committee should have the following functions :
- (1) Advising Government as to a block-grant and as to additional recurring and non-recurring grants from Provincial Revenues.
 - (2) Valuation of the assets in the possession of the Universities and reporting on their upkeep.
 - (3) Considering schemes of expansion put up by Universities and making recommendation to Government in regard to them.
 - (4) Reviewing the academic work of the Universities.

353
S.C.
I.

IX—Miscellaneous*(a) Officers of Universities*

- 87 57. For the Registrar and Assistant Registrar the scales of pay, conditions of service and provisions relating to security of tenure should be the same in all the Universities.
- 88 58. The pay of the Registrar should be Rs.500—25—750 and that of the Assistant Registrar Rs.250—15—400.
- 89 59. The security of tenure afforded by Section 47 of the Allahabad University Act and the corresponding section of the Lucknow University Act should be extended to the Registrar and Assistant Registrar of the Agra University as well.

(b) Teachers in Legislative Bodies

- 27 60. In the opinion of the Committee service in a University or College cannot be combined with membership of a Legislative Body ; provided, however, that the Governing Body concerned may at its discretion grant leave without pay for a period not exceeding five years to a member of the staff who is elected by a constituency or is nominated by Government to be a member of a Legislative Body.

(c) Examinations and Examiners

- 28 61. The following rules should be adopted in respect of the amount of examination work undertaken and remuneration received by teachers :
- (1) The maximum number of answer-books which a teacher may examine in a year shall be 1,000 inclusive of answer-books examined as internal examiner for his own University but exclusive of any work done for a Public Service Commission ; provided that the amount of remuneration earned by him for any work connected with examinations of his own University or of any other University or examining body—other than a Public Service Commission—shall not exceed Rs.1,500 a year.

(2) If an examiner exceeds the limits laid down above he shall pay to the institution in which he is employed the amount of remuneration drawn in excess of Rs.1,500 or the amount of remuneration received for the number of answer-books examined in excess of 1,000. In each case the income-tax paid on the additional amount shall be re-imbursed to the teacher.

(3) Every teacher shall furnish to his University or College at the beginning of each session a certificate of the number of answer-books examined by him during the preceding academic year.

(4) Teachers in the Teaching Universities shall not be paid for the work done by them as examiners in their own University. 29

(Recommendations regarding the manner of appointment of examiners appear separately in paragraph 140 below.)

(d) *Women's education*

62. Though the number of women attending the Universities has increased it is still very far from satisfactory for supplying the needs of the country. The Committee is, therefore, unwilling to suggest any steps which would make it more difficult for women to attend University classes. It considers that every facility should be given to women to attend Universities. 39

63. The present arrangement in the Allahabad University under which a separate but incomplete section is maintained for women-students, should be abolished as soon as it becomes feasible to do so. 40

64. The Committee deprecates the provision of special so-called "women's subjects" as it does not believe that a woman's intellectual capacity is, in any way, different from or inferior to man's. 41

65. The Committee recommends the following measures for advancing higher education among women:

- (1) More hostel accommodation where necessary. 42
- (2) More scholarships and stipends for poor and deserving women students. 43
- (3) Adequate provision for their health and physical instruction. 44

CHAPTER VIII—(continued)

PART II

Recommendations Relating to the Teaching Universities

[Figures in the margin indicate the serial numbers of the resolutions of Sub-Committee I in which the recommendation is incorporated. The numbers of resolutions of Plenary meetings, where cited are followed by the letter 'P'.]

References to the Calendars of the Universities are to the latest issues—

Allahabad University	1939
Lucknow University	1938-41

X--Chancellor

41 (a) P 66. The Chancellor should be a person appointed by the Governor, i.e. the Provincial Government, for a period of five years and should be eligible for re-appointment.

(S.C. II, Page 7) 67. The present functions of the Chancellor, which are of two descriptions, should be separated. The functions which he exercises as the highest officer of the University e.g. presiding over the Court and the Convocation, sanctioning the appointment of the Vice-Chancellor, acting as umpire in disputes between the University authorities, should continue to be exercised by the Chancellor.

68. Functions such as that of giving assent to or withholding assent from Statutes and considering and cancelling Ordinances, in the performance of which the Chancellor is responsible for maintaining uniformity of standards among the Universities of the Province, should be transferred to the Governor, i.e. the Provincial Government.

XI—Vice-Chancellor

170 69. The Vice-Chancellor should hold office for four years and should not be eligible for appointment at any future date.

168 70. The existing bar against the appointment of an Honorary Vice-Chancellor should be removed by the opening sentence of Section 12 of the Allahabad University Act and Section 11 of the Lucknow University Act being amended to read as follows:

“ There shall be a whole-time salaried or honorary Vice-Chancellor. ”

174 71. The Vice-Chancellor should be appointed by the Chancellor after considering the recommendations of the Executive Council.

175 72. The Vice-Chancellor should have a salary of Rs.1,000 per mensem without any other allowances. If he is honorary he should have an inclusive allowance of Rs.500 per mensem (apart from clerical assistance).

176 73. The Vice-Chancellor should not be subject to any rule prescribing the age of superannuation.

177 74. He should be entitled to the benefits of the Provident Fund on the new scale recommended by the Committee for University employees.

178 75. He should be entitled to vacation and leave in accordance with rules applicable to teachers of the University but no leave should be admissible after the expiry of his term of office.

179 76. It should not be permissible for the Vice-Chancellor or the Executive Council (even if the Vice-Chancellor is honorary) to appoint a Pro-Vice-Chancellor.

77. If a teacher of the University is appointed its Vice-Chancellor he should resign his post before assuming office as Vice-Chancellor and should not be eligible for further employment in the University after relinquishing the office. 169

78. The present incumbents of the office of Vice-Chancellor in the two Universities should not be eligible for appointment as Vice-Chancellor under the new constitution; but provision should be made in the new Acts to enable them to complete their current terms of office and the recommendation disqualifying a teacher who has held the office of Vice-Chancellor from further employment in the University, should not apply in their cases. They should, however, not be eligible for holding the office of Vice-Chancellor any longer. 171 172

[Mr. Gupta's amendment to this recommendation which the Committee decided to record is as follows :

"If the present incumbents of the office of Vice-Chancellor take advantage of the option to continue in office for the unexpired portion of their present terms, if any, after the coming into operation of the new Acts, they should not be eligible for further employment in the University after their retirement from the Vice-Chancellorship.] 173

XII—Treasurer

79. The Treasurer should be appointed in each University by the Chancellor after considering the recommendations of the Executive Council concerned. 191

80. He should hold office for six years; but this recommendation should not affect the present incumbents in the two Universities. 192

81. The existing provisions of the University Acts relating to the functions of the Treasurer should stand. 190

82. The Treasurer should continue to be a member of the Executive Council and Chairman of its Finance Committee.

XIII—The Court

Functions and powers

83. The functions and powers of the Court should be the same in the two Universities and should be expressed in the language of section 19 of the Allahabad University Act with modifications, as follows (changes are italicized) : 192

(i) The Court shall be the supreme governing body of the University and shall have power to review the acts of the Executive and Academic Councils (save when such Councils have acted in accordance with powers conferred upon them under the Act, the Statutes or the Ordinances).

(ii) Subject to the provisions of this Act the Court shall exercise the following powers and perform the following duties viz.

(a) of making Statutes, and of amending or repealing the same ;

(b) of considering and cancelling Ordinances ;

(c) of considering and passing resolutions on the annual report, the annual accounts, the financial estimates and on any matter of general policy connected with the University ; such resolutions shall be communicated to the Executive Council which shall take such action thereon as it thinks fit or inform the Court, when no action is taken, of its reasons therefor.

(iii) The Court shall exercise such other powers and perform such other duties as may be conferred or imposed on it by this Act or the Statutes.

Meetings

133 84. There should ordinarily be one meeting of the Court in a year.

183 85. In order to enable the Court to exercise its power of legislation by Statute more expeditiously than is possible under the existing law, provision should be made so that a member of the Court desiring to propose the making of a Statute, may give notice of his proposal and send a draft of the proposed Statute to the Registrar sufficiently in advance of the date of the meeting to enable the Registrar to obtain the views of the Executive Council and other authorities concerned and submit them for consideration along with the proposed Statute at the same meeting.

Composition

187 86. The Court of the Allahabad University should be composed of the following classes of members, viz :

Class I—Ex officio members :

(a) The Chancellor.

The Vice-Chancellor.

The Treasurer.

The Proctor.

The Librarian.

(b) The Hon'ble Premier.

The Hon'ble Minister for Education.

The Vice-Chancellors of the other Universities in the United Provinces.

The Chief Justice of the Allahabad High Court.

The Director of Public Instruction or his Deputy.

The Director of Industries.

The Director of Agriculture.

The Chief Inspectress of Girls' Schools.

The Superintendent of Sanskrit Studies.

The Chairman, Public Service Commission.

The Chairman, Municipal Board, Allahabad.

(c) Members of the Executive and Academic Councils.

Class II—Life members including :

(1) Persons who donate a sum of Rs.20,000 or more.

(2) Persons appointed by the Chancellor to be life members on the ground that they have rendered eminent services to education :

Provided that not more than two such persons may be appointed during the life-time of a Court and there shall not be more than six at any time.

Class III—

(a) Two Wardens of Hostels, by rotation.

(b) A representative of each of the following activities or such of them as are recognized by Ordinances:

(1) Physical Education (to be represented by the Officer Commanding the University Training Corps, or the Superintendent of Physical Instruction).

(2) Social Service.

(3) Extra-mural instruction.

Class IV—Representatives (not exceeding six) of learned Societies and Institutions prescribed by the Statutes ; including such institutions as—

(1) The Academy of Science.

(2) The Hindustani Academy.

(3) The Nagri Pracharini Sabha.

(4) The Shibli Manzil.

(5) The Provincial Board of Scientific and Industrial Research.

Class V—Representatives (not exceeding two) of Scientific, Technical and Research Institutions prescribed in this behalf by the Statutes.

Class VI—Representatives (not exceeding five) of Industries and Commerce as prescribed by the Statutes.

Class VII—Representatives of donors and subscribers as follows :

(1) Every individual making a donation of Rs.10,000 and above should be entitled to be a member of the Court or to nominate a person to represent him on the Court, for a period of 10 years. 194

(2) Every Association making a donation of Rs.25,000 or more should be entitled to nominate a person to represent it on the Court for a period of 10 years.

(3) Every person making an annual contribution of Rs.2,000 or more to the funds of the University should be a member of the Court so long as his contribution continues. (This should supersede the relevant part of the existing Statute.) 195

(4) Persons making contributions of sums of less than Rs.2,000 but not less than Rs.100 a year to the funds of the University should be entitled to elect five persons to represent them on the Court provided that if the number of such persons is less than 50 or falls below 50, the number of their representatives should not exceed 10 per cent. of the number. (It follows that if the number of such persons is less than 10 they have no representation.) 196

Class VIII—Representatives of registered graduates (elected by all registered graduates of two years' standing), not exceeding 10 per cent. of the number of graduates on the Register, or 40, whichever is less, provided that no employee of the University and no registered graduate of less than three years' standing as a registered graduate should be eligible for election to the Court.

Class IX—Twelve persons nominated by Government, of whom two should be Judges of the High Court and two practising lawyers. In making its nomination Government will bear in mind the desirability of having some members of the Scheduled Castes in the Court.

Class X—Eight persons representing the Legislature, of whom six should be elected by the Legislative Assembly and two should be elected by the Legislative Council.

Class XI—One teacher from each Department of Teaching in the University who shall be a Reader and a Lecturer in alternate years, chosen by rotation in order of seniority, determined by the date of appointment, from among persons of his class, care being taken that there shall be as nearly as possible an equal number of Readers and Lecturers on the Court under this head.

87. The Court of the Lucknow University shall consist of the following classes of members : 198

Class I—Ex officio members—

(a) The Chancellor.

The Vice-Chancellor.

The Treasurer.

The Proctor.

The Librarian.

(b) The Hon'ble Premier.

The Hon'ble Minister for Education.

The Hon'ble Speaker of the Legislative Assembly.

The Hon'ble President of the Legislative Council.

The Vice-Chancellors of the other Universities in the United Provinces.

The Chief Judge of the Chief Court of Oudh.
 The Director of Public Instruction or his Deputy.
 The Director of Industries.
 The Director of Public Health.
 The Chairman of the Lucknow Municipality.

(c) All members of the Executive and Academic Councils.

Classes II to XI—Same as in the Allahabad University scheme except that in class IX only one Judge of the Chief Court of Oudh should be nominated by Government.

Registered graduates

- 184 88. Registered graduates should be encouraged to take greater interest in the affairs of the Universities.
- 185 89. A graduate should be eligible for registration directly after the conferment of his first degree.
- 186 90. Graduates should be registered for life only, on payment of Rs.15.

XIV—The Executive Council

- 161 91. The Executive Council of the Allahabad University should consist of :
 (1) The Vice-Chancellor ;
 (2) The Treasurer ;
 (3) to (6) The Deans of Faculties ;
 (7) One Principal of a College by rotation ;
 (8) The Chairman of the Public Service Commission ;
 (9) The Accountant General ;
 (10) The Director of Public Instruction or, in his absence, the Deputy or Assistant Director ;
 (11) and (12) Two Heads of Departments, other than the Deans, chosen from among the eligible Heads of Departments by rotation in order of seniority, determined by the date of appointment as Head of a Department.
 (13) to (16) Four persons nominated by Government of whom one should be a woman in case no woman has been returned under any other category.
 (17) to (23) Seven persons not engaged in teaching, of whom at least three should be registered graduates of 10 years' standing, elected by the Court on the basis of proportional representation by the single transferable vote.
- 162 92. The Executive Council of the Lucknow University should consist of :
 (1) The Vice-Chancellor.
 (2) The Treasurer ;
 (3) One Principal by rotation ;
 (4) to (8) The Deans of Faculties ;
 (9) The Inspector General of Civil Hospitals ;
 (10) The Parliamentary Secretary to the Hon'ble Minister for Education ;
 (11) and (12) Two Heads of Departments other than the Deans, chosen from among the eligible Heads of Departments by rotation in order of seniority determined by the date of appointment as Head of a Department ;
 (13) to (16) Four nominees of Government of whom one should be a woman in case no woman has been returned to the Council under any other category ;
 (17) to (24) Eight persons not engaged in teaching elected by the Court on the principle of proportional representation by the single transferable vote, of whom three should be Registered Graduates of 10 years' standing as Registered graduates, and one should be a person elected to the Court by the donors.

93. In making its nominations Government will bear in mind the desirability of securing the presence of at least one member of the Scheduled Castes in the Executive Council of either University. 181

94. The functions and powers of the Executive Council in the two Universities should be brought in a line and in particular— 163

(1) Residuary powers should be vested in the Executive Council of the Allahabad University as is already the case in the Lucknow University. 164

(2) The Executive Council in Lucknow University should be subject to the superior authority of the Court as in the Allahabad University and within the limits at present prescribed. 165

95. The following changes are recommended in the existing law relating to the powers and functions of the Executive Council : 166

(1) Sub-Section (1) of Section 19 of the Allahabad University Act should be amended by the omission of the concluding part, "and shall exercise all the powers of the University . . . and the Regulations", and should, as amended, replace the corresponding sub-section of Section 18 of the Lucknow University Act.

(2) Section 21 of the Allahabad University Act should be amended to the following extent and should, as amended, replace Section 20 of the Lucknow University Act—

(i) the proviso to sub-section (c) should read as follows :

Provided that the Executive Council shall not take action in any matter relating to teaching and research and the number and emoluments of teachers and examiners, except after obtaining the views of the Faculties concerned, through the Academic Council.

(ii) Sub-section (j) should read as follows :

'shall appoint examiners on the recommendation of the Faculties in the manner and subject to the restrictions prescribed in the Statutes.'

(iii) the word "teachers" should be omitted from the text of sub-clause (g) which should be numbered (h) the following sub-clauses being renumbered accordingly.

(iv) a new sub-clause numbered (g) should be inserted reading as follows : 213

"shall appoint teachers of the University on the nomination of Committees of Selection constituted by the Statutes for the purpose and in accordance with the procedure prescribed in the Statutes." 213

(v) A new sub-section (m) should be added reading as follows :

'(m) shall exercise all the other powers of the University not otherwise provided for by this Act or the Statutes.'

(3) Statute 2 in Chapter II of the Allahabad University Calendar relating to the powers of the Executive Council should be amended to the following extent and should, as amended, replace First Statute 4 of the Lucknow University (printed at page 172 of the Calendar) : 167

(i) Sub-clause (b) to read as follows :

"to abolish or suspend after consulting the Academic Council and the Faculty concerned any Professorship, Readership, Lectureship or other teaching post ;"

(ii) Sub-clause (d) to be deleted.

193

XV—The Finance Committee

96. The Finance Committee, of which the Treasurer should be Chairman, should consist of seven members of the Executive Council, appointed by the Council for a period of two years, of whom at least three should be persons elected to the Executive Council by the Court.

133

XVI—The Academic Council*Composition*

97. Each University should have an Academic Council of smaller size than at present, consisting of the Heads of the Departments of teaching and the Principals of Colleges with the Vice-Chancellor as Chairman. (This recommendation was adopted by the casting vote of the Chairman, the rival recommendation being that the Academic Council should be abolished.)

Functions

134

98. The functions of the Academic Council should be modified by the amendments indicated below of the existing provisions of the University Acts and Statutes :

(1) In Section 21 of the Lucknow University Act and Section 22 of the Allahabad University Act which define in general terms the scope of the Council's functions, the words " Research and " should be added after the words " be responsible for." (It is intended that Research should be one of the most important concerns of this Council.)

135

(2) Sub-section (2) of Section 37 of the Allahabad University Act should be repealed. (This is intended to relieve the Academic Council of an impossible duty now imposed on it.)

136

(3) Sub-section 4 of Section 38 of the Allahabad University Act and of Section 35 of the Lucknow University Act should be amended to read as follows :

" Each Faculty shall appoint an Examination Committee for each subject comprised in the Faculty, consisting of members of its own body or of other persons or of both, as it thinks fit, to moderate question papers, to review the results of examinations and to report to the Faculty on the maintenance of standards."

137

(4) Clause 2 of Statutes in Chapter IV of the Allahabad University Calendar and First Statute 6 of the Lucknow University which set forth the powers and duties of the Academic Council in practically identical terms except for Sub-Clause (c), should be retained and amended to the following extent :

Sub-clause (a) should be amended so as to read as follows :

"to forward, with its own recommendations thereon, proposals from the Faculties to the Executive Council for the institution of Professorships, Readerships, Lectureships or other teaching posts and in regard to the duties thereof."

139

Sub-clause (b) should remain.

Sub-clause (c) should be retained in an amended form as follows :

" to make recommendations in connexion with the rosters of internal and external examiners submitted by the Faculties to the Executive Council."

140

Sub-clause (d) should be retained with the omission of the part after the words " their use" in line 3.

141

Sub-clause (e) should remain.

Sub-clause (g) should read as follows and should be placed first among the functions of the Academic Council, and numbered (a), the other sub-clauses being re-numbered accordingly:

142

"to promote research within the University and to require reports on such research from persons engaged thereon through the Faculties. The Academic Council shall submit a report annually to the Executive Council on the research work done in various Departments, with its own views thereon, for presentation to the Court."

(5) First Statute 22 of the Lucknow University (page 380 of the Calendar) and corresponding Statute 1 of Chapter XIX of the Allahabad University Calendar should be amended so as to read as follows : 143

“ The Executive Council shall have power to confer degrees and academic distinctions, other than honorary degrees, on the recommendation of the Faculties.” 144

(6) First Statute 1 of the Lucknow University (page 381 of the Calendar) and First Statute 18 of the Allahabad University (page 204 of the Calendar) should be replaced by the following :

“ (i) All proposals for the conferment of honorary degrees shall be made to a Committee consisting of the Deans and the Vice-Chancellor and shall, if approved by the Committee, be considered by the Executive Council. Every such proposal accepted by the Executive Council shall require the assent of the Court before submission to the Chancellor for confirmation. 145

(ii) Any honorary degree conferred by the University may, with the previous approval of the Court and the sanction of the Chancellor, be withdrawn by the Executive Council.” 146

(7) The Academic Council should not have power of dealing with individual cases such as those contemplated in Ordinance 1 of Chapter XXXII-B and Ordinance 1 of Chapter XXXIII, Allahabad University Calendar. 147

XVII—The Faculties

99. Provision relating to the creation of Faculties should be brought in a line in the two Universities. For this purpose Section 24(1) of the Allahabad University Act should be amended so as to read like Section 23(1) of the Lucknow University Act with the omission of the word “ Medicine.” 150

100. Each Faculty other than that of Law should be composed of : 151

(1) All Professors and Readers in the various Departments comprised in the Faculty.

(2) One Lecturer from each Department comprised in the Faculty by rotation in order of seniority, determined by the date of appointment.

Provided :

(i) that where the number of Lecturers in a Department exceeds four, two of them shall be members of the Faculty for two years, in rotation in the manner indicated above.

(ii) that the Faculty shall invite such Lecturers as are in charge of important branches of subjects to be present at its meetings and to give opinion on particular questions relating to their subjects.

(3) One expert from each of the other Universities in the Province which have a corresponding Faculty, nominated by the Vice-Chancellor concerned. (The Vice-Chancellor of the University requiring the services of the expert will intimate to the Vice-Chancellor who is to nominate him, the subject in which the expert is needed.)

(4) Not more than five other experts co-opted by the Faculty.

101. The Faculty of Law should consist of : 152

(1) All teachers of the Department of Law in the University.

(2) Three experts, co-opted by the Faculty.

(3) Three Judges of the High Court at Allahabad nominated by the Chief Justice and two Judges of the Chief Court at Lucknow nominated by the Chief Judge.

(4) One member of the Bar Council nominated by the President.

(5) Four practising Lawyers of at least 15 years' standing, co-opted by the Faculty.

(6) The Advocate-General.

154 102. The functions of the Faculty should be defined in each University in terms of First Statute 9 of the Lucknow University which should replace Statute 4 of Chapter V of the Allahabad University.

Besides these functions the Faculty should have also the functions devolved upon it by recommendations no. (3), (4) and (5) of paragraph 99 under the head "Functions of the Academic Council" above.

These are :

- (1) To appoint an examination committee for each subject comprised in the Faculty for the purpose of moderating question papers, reviewing the results of examinations and reporting on the maintenance of standards.
- 137 (2) To initiate proposals for the institution of Professorships, Readerships, Lectureships and other teaching posts and in regard to the duties thereof.
- 139 (3) To prepare rosters of eligible persons for appointment as internal and external examiners in subjects assigned to the Faculty.
- 143 (4) To forward to the Academic Council reports on research in subjects assigned to the Faculty from persons engaged thereon.
- 144 (5) To recommend to the Executive Council the conferment of degrees and academic distinctions other than honorary degrees.

(i) *Deans of Faculties*

103. The existing provisions of the University Acts and Statutes relating to Deans of Faculties should be amended to the following extent :

156, 202 (1) The Dean of each Faculty other than that of Law, should be one of the Heads of Departments comprised in the Faculty taking office in rotation according to seniority, determined by the date of appointment as Head of a Department.

(2) The Dean of the Faculty of Law should be elected by the Faculty from among its members, the appointment not being confined to the Head of the Department of Law.

200, 201 203 Provided that no whole-time teacher of the Department of Law, other than the Head, and no part-time teacher holding a rank below that of Reader, should be eligible for election as Dean.

(3) The length of time for which a person should hold office as Dean of a Faculty should be prescribed in the Statutes and should be two years.

155 (4) The functions of the Dean should be defined in the Statutes as under :

(i) The Dean of each Faculty shall be the executive officer of the Faculty subject to the control of the Vice-Chancellor, and shall preside at its meetings.

(ii) He shall issue the lecture-lists of the University in the Departments comprised in the Faculty and shall be responsible to the Vice-Chancellor for the organization of teaching therein.

(iii) He shall have the right to be present and to speak at any meeting of any Committee of the Faculty but not to vote unless he is a member of the Committee.

(It has been sought in this recommendation to place the Dean under the control of the Vice-Chancellor in respect of the organization of teaching in the Departments comprised in the Faculty.)

157 (5) The existing provision in Section 24(4) of the Allahabad University Act and Section 23 (3) of the Lucknow University Act by which the Dean is responsible for the due observance of the Statutes and Regulations relating to each Faculty should continue.

158 (6) Section 24(5) of the Allahabad University Act and Section 23(5) of the Lucknow University Act which make provision for the payment of a remuneration to the Dean should be repealed.

(ii) Heads of Departments

104. The existing provisions in Sections 24(6) of the Allahabad University Act and 23 (6) of the Lucknow University Act relating to Heads of Departments should be recast as follows :

(1) Each Faculty shall comprise such departments of teaching as may be prescribed by the ordinances. The Head of every such Department shall be the Professor of the Department or, if there is no Professor, the Reader.

(2) If there are more Professors or Readers in a Department, as the case may be, than one, the Vice-Chancellor shall appoint one of them to be Head of the Department by rotation for a term of years; provided that no Professor or Reader in such a Department, other than the seniormost, shall be eligible for appointment as Head till he has completed five years service as Professor or Reader as the case may be.

(3) That persons on whom the honorary designations of Professor and Reader are conferred, shall not be eligible for appointment as Heads under these recommendations.

(4) The Head of a Department shall be responsible to the Dean for the organization of teaching in the Department.

XVIII—The Selection Committees

105. Selection Committees should be made "Authorities" of the University by being included as item (VI) in the list of "Authorities" appearing in Section 16 of the Allahabad University Act and Section 15 of the Lucknow University Act.

106. The obligation of the Executive Council to consult the Selection Committees and give due weight to their recommendations should be embodied in the University Acts. For this purpose Section 21 of the Allahabad University Act should be amended as follows :

(1) The word "teachers" should be omitted from the text of sub-clause (g) which should be numbered (h), the following sub-clauses being renumbered accordingly.

(2) a new sub-clause numbered (g) should be inserted reading as follows: "shall appoint teachers of the University on the nomination of Committees of Selection constituted by the Statutes for the purpose and in accordance with the procedure prescribed in the Statutes."

Corresponding amendments should be made in Section 20 of the Lucknow University Act.

107. (a) All permanent appointments including the appointment of part-time teachers as well as temporary appointments for periods exceeding six months should be advertised and be made on the recommendation of the Selection Committee concerned, the recommendation being made, so far as possible, after an interview with some selected candidates.

(b) Teachers in University Colleges should be recognized by the Executive Council after obtaining the approval of the Selection Committee concerned as to their qualification ;

(c) The power of the Executive Council in appointing teachers of subjects which are taught for Certificates and Diplomas only (and not for University degrees) should not be subject to these restrictions.

108. The procedure prescribed in Regulations no. 6 and 9 appearing in Chapter XIII of the Allahabad University Calendar should be prescribed in Statutes and be applicable to both Universities.

109. The procedure at present prescribed for making the appointment of Professors and Readers should be followed also in the case of appointments to Lectureship and the Selection Committee should recommend three names for each appointment in order of merit or preference, with reasons.

208 110. Provision should be made so that in cases where an appointment is referred to the Chancellor he will give his decision after taking suitable advice.

205 111. In each Faculty there should be a Committee of Selection composed of:

(i) The Vice-Chancellor of the University concerned (Chairman).

70P (ii) The Treasurer of the University concerned.

An alternative recommendation favoured by the Committee under this head is:

(ii) "The Chairman of the Public Service Commission or a member appointed by the Chairman, the Inspector General of Civil Hospitals taking the place when an appointment in the Medical Faculty is under consideration."

69P (iii) A member of the Executive Council (being one of the members elected to the Council by the Court) nominated by the Vice-Chancellor.

71P (iv) One member appointed by Government separately for each subject out of a panel composed of persons possessing expert knowledge of each subject comprised in the Faculty but not belonging to the staff of either University, the Panel being formed by the election of two persons by the Faculty of each University.

72P (v) One member appointed by the Government who is not a teacher of either of the two Universities concerned.

(vi) The Head of the Department in the University concerned except in cases where the appointment to be made belongs to a grade higher than the one to which the Head himself belongs, in which case the Dean shall take his place.

(vii) Another Head of a Department in the Faculty by rotation on the basis of seniority.

Members under heads (iv) and (v) should be common to the two Universities and members under heads (iv) and (vi) will change with the subject with which the teacher to be appointed is to deal. [Thus the Committee recommended here will have a separate composition when dealing with different subjects and will contain two members who will function in respect of both the teaching Universities.]

206 112. The Selection Committees should be standing committees; members other than *ex officio* members should be appointed for three years and the member under (iv) should continue to function for as long after the expiry of his term of appointment as may be necessary to give the appointing authority an opportunity of appointing his successor.

204 113. Separate Committees are not needed to deal with higher and lower posts nor is a separate Selection Committee needed for recruiting a Professor abroad.

212 114. The appointment of administrative officers e.g. Registrar, Assistant Registrar, Wardens, Assistant Wardens or Superintendents of Hostels and the Superintendent of King George's Hospital, should be made on the advice of Selection Committees appointed by the Executive Council for the purpose.

XIX—Other University Bodies

Committee of Reference

160 115. The Committee of Reference should be abolished.

Co-ordination Board

349 116. The Board of Co-ordination serves no useful purpose and may be abolished.

Board of Residence, Health and Discipline

350 117. The Board of Residence, Health and Discipline in each University should consist of the following:

The Vice-Chancellor.

The Principals of Colleges.

- The Wardens and Superintendent of Hostels.
 The Medical Officer or Officers of the University.
 The Proctor.
 The President or Presidents of the Athletic Associations of the University.
 The Officer Commanding the University Training Corps.
118. The senior Medical Officer of the University should be the Secretary of the Board of Residence, Health and Discipline. 351
119. The functions of the Board of Residence, Health and Discipline in Lucknow University should be adopted also in the Allahabad University. 352

XX—University Legislation

120. The existing provision by which the Universities are empowered and required to provide for a variety of matters by means of Statutes, Ordinances and Regulations made in a prescribed manner should continue with the modifications embodied in the following recommendations.
121. In consequence of the recommendation that the Chancellor should be a person appointed by the Government the power, hitherto vested in the Chancellor, of giving assent to Statutes and disallowing Ordinances, should be transferred to the Governor, i.e., the Provincial Government. 273
122. Section 30 of the Allahabad University Act and Section 27 of the Lucknow University Act should be amended to read as follows: 274
 & 275
 " Subject to the provisions of this Act, the Statutes shall provide for the following matters, viz: 278
- (a) The conferment of honorary degrees.
 - (b) The term of office and conditions of service of the Vice-Chancellor.
 - (c) The designations and powers of the Officers of the University.
 - (d) The constitution, powers and duties of the Authorities and Boards of the University.
 - (e) The institution and maintenance of Colleges and Hostels.
 - (f) The classification and the mode of appointment of the teachers of the University.
 - (g) The constitution of a pension or provident fund for the benefit of the officers, teachers and other servants of the University.
 - (h) The maintenance of a register of registered graduates.
 - (i) The discipline of students.
 - (j) All matters which by this Act are to be or may be prescribed by the Statutes."
123. Section 32 of the Allahabad University Act and section 29 of the Lucknow University Act should be amended so as to read as follows: 274
 & 277
 " Subject to the provisions of this Act and the Statutes, Ordinances shall provide for the following matters: 278
- (a) The admission of students to the University.
 - (b) The conditions under which students shall be admitted to the degree or diploma courses and to the examinations of the University, and shall be eligible for degrees and diplomas.
 - (c) The conditions of residence of the students of the University and the levying of fees for residence in colleges and hostels maintained by the University.
 - (d) The recognition of Colleges and Hostels not maintained by the University.
 - (e) The number, qualifications and emoluments of teachers of the University.

(f) The fees to be charged for courses of instruction in the University given by teachers of the University, for tutorial and supplementary instruction given by the University, for admission to the examinations, degrees and diplomas of the University and for the registration of graduates.

(g) The formation of Departments of Teaching in the Faculties.

(h) The conditions and mode of appointment and the duties of examiners.

(i) The conduct of examinations.

(j) All matters which by this Act or the Statutes are to be or may be provided for by the Ordinances.

XXI.—Teaching and Places of Instruction

(See also Section III of this Chapter)

- 233 124. (a) The character of formal instruction given in the Universities should be materially improved by reducing the amount of formal teaching in each subject to such a number of lectures as will give the student an authoritative exposition of the essentials of the subject and the results of the latest researches in it.
- 234 (b) The amount of tutorial instruction given at present being in the Committee's opinion inadequate, the amount of such work should be increased and
235 supplementary instruction, as envisaged in Statute 2 of Chapter XXII of the
Allahabad University Calendar, should be introduced. With a view to emphasizing
236 the importance of tutorial and supplementary instruction it is desirable that
attendance at both these forms of instruction should be made compulsory as
it is at present in the case of formal lectures.
- 237 (c) Under the scheme of teaching envisaged in (a) and (b) above, colleges will
have greater scope than at present for imparting supplementary instruction
238 besides the tutorial and these functions they may perform in respect of students
residing under them and of as many more as may be permitted by the Statutes.
- 239 (d) It may be possible in course of time for hostels also to impart tutorial
and supplementary instruction to the students residing in them.
- 240 (e) The Committee is not in favour of the formal teaching envisaged in
(a) above, which is under the Act to be given exclusively by the University, being
imparted by Colleges as well. The privileges at present enjoyed in Lucknow by
the Isabella Thoburn and Mahila Vidyalaya Colleges may, however, be allowed
to continue in view of the special circumstances of the case.
- 242 125. In the interest of the educational progress of the Province the establishment
of new University Colleges by private enterprise should be encouraged.
- 243 126. Permission should be sparingly given to University teachers for taking
up tutorial work in colleges, inasmuch as their services will be increasingly
required for such work within the University and its hostels, as tutorial work
is more and more emphasized.
- 276 127. Provision relating to religious instruction should be deleted from the
University Acts. Clause (h) under Section 32 and the proviso appearing under
Section 6 of the Allahabad University Act should be deleted. Corresponding
provisions should be deleted from the Lucknow University Act also.
- 107 128. In case the Universities decide to have only one year's course for the
Master's degree they should not allow the study of law to be combined with it.
- 216 129. The adoption of a system of Electives as prevalent in American
Universities would require a much larger staff than the Universities can afford
to have at present.

XXII—Research (Teaching Universities)

130. A Provincial Board of Industrial and Scientific Research should be established. It should be composed of : 91
- (1) the Hon'ble Ministers for Education and Industries ;
 - (2) representatives of Industries ;
 - (3) the Government Officer or Officers, concerned, to be nominated by Government ;
 - (4) Scientists from Universities and technical institutions ;
 - (5) representatives of the United Provinces Academy of Sciences.
131. It should have the following functions : 91
- (1) to suggest and allocate practical problems of research to Universities and technical institutions, the allocation being made in each case with the concurrence of the institutions concerned ;
 - (2) to administer the funds provided by Government for the purposes of research.
132. The co-operation of Universities should be secured by Government departments in the solution of problems requiring expert knowledge and research. 92
133. Government should take necessary measures by legislation or otherwise to secure financial assistance for scientific and industrial research, from industries and trades likely to profit by such research. In the Committee's opinion, when Government decide upon a programme of industrial development regular arrangements should be made for such contribution. 287
134. Larger grants should be made for libraries and laboratories. 9
135. Facilities should be provided for the publication of research work done at Universities and in this connexion the advisability of setting up University Presses should be considered. 94
136. More emphasis should be laid on Research than has been the case hitherto. 226
137. A teacher who is keen on research should in special cases be exempted from teaching work for one term in a year on conditions to be laid down by the Executive Council in consultation with the Academic Council and the Faculty concerned. 95
138. Students in the appropriate departments of the Universities should carry out social and economic surveys of the University town and surrounding districts. 1 (a)

XXIII—Examinations and Examiners (Teaching Universities)

(See also paragraph 61 of this Chapter)

139. The two following schemes of examination for the First Degree are recommended for the consideration of the Universities : 83
- (1) A degree examination in the whole course at the end of three years with the result of which the marks obtained by the candidate in terminal examinations during his residence and (when considered feasible by Universities) the record of tutorial work also, should be considered in determining the success or failure of the candidate and the class of his degree.
 - (2) Examination in two parts—one at the end of two years, the other at the end of the third year—in such subjects as the University may decide ; success and class of degree to be determined by the combined marks of the two parts.
140. The following recommendations are made as regards the appointment of examiners : 84
- (i) There should be an equal number of internal and external examiners in each subject, except that if the number of examiners appointed is uneven, there may be one more of either category.

(ii) Each Faculty, in consultation with the Committee of Courses and Studies concerned, should prepare a roster of the teachers qualified to be examiners in different subjects and branches of subjects, for the various examinations, and a similar roster of external examiners; after the rosters have been approved by the appropriate authorities appointments shall be made out of them by rotation, so far as possible. The rosters may be revised from time to time.

- 77
29P. (iii) External examiners should be paid.
(iv) Teachers in the Teaching Universities should not be paid for the work done by them as examiners in their own University.

XXIV—Teachers

(i) Classification

- 53 141. There should be four classes of University teachers as at present, viz. Professors, Readers and Lecturers of A and B Grades (or Senior and Junior Lecturers).
48 142. The classification of teaching posts should be understood to be meant for the purpose of stimulating effort and should not lead to any such discrimination as would hamper the growth of comradeship in the academic and social life of the University. Facilities for work should be equally available to all.

(ii) Appointment

- 46 143. It is necessary for Universities to secure and retain the services of the most brilliant graduates in order that they (the Universities) may be in a position to give as good education as is available anywhere and conduct higher research comparable to that of advanced countries.
52 144. Only the best men with a capacity for original work should be recruited to University service and as far as possible work should be so divided as to give each teacher a branch or part of his subject, in which he can carry on higher study and investigation and teach the highest classes.
47 145. Scales of salary should be so devised that together with prospects of promotion, facilities for work and other attractions of academic life, they may enable the Universities to secure and retain the services of the most capable graduates. The initial salary should be sufficient to enable the young teacher to provide himself with books and other literature and to occupy a social position befitting his calling.
68 P. 146. All permanent appointments including the appointment of part-time teachers as well as temporary appointments for periods exceeding six months should be advertised and be made on the recommendation of the Selection Committee concerned, the recommendation being made, so far as possible, after an interview with some selected candidates.
219 147. Future appointments to Professorship and Readership in the Faculty of Medicine should be made for a period not exceeding seven years and the appointment of persons at present on the staff (e.g. Government servants) who are not employed on contracts of permanent service should also be subject to this limit.

(iii) Promotion

- 49 148. The number of posts of each class in a subject should be so fixed as to afford reasonable prospects of rise to a higher rank to every capable man who does good work. The conditions of promotion prescribed by the Allahabad University (and printed at pages 389-90 of the University Calendar for 1939) may be adopted as criteria of good work.

There is at present a preponderance of posts of the lower ranks in some departments.

149. When vacancies are not available in higher ranks a teacher who has reached the maximum of his grade and satisfies the conditions of promotion should be given the honorary designation of the next higher rank, provided that the appointment shall be subject to the procedure prescribed for permanent appointments being complied with and provided further that the acquisition of such honorary rank, shall not, in itself, constitute a claim to appointment in a permanent vacancy. 50

(iv) *Superannuation*

150. Extension of service should not be granted beyond the age of retirement which should be fixed by Statute at 60 years in the case of persons in the service of the Universities and 55 years (or such other age as may be prescribed by Government) in the case of Government servants on deputation to the Universities. Eminent Professors may, after retirement, be appointed 'Emeritus Professors'. 51
38 P.

(v) *Standard of Conduct*

151. The Committee looks forward to a closer association of teachers with students and to their manner of life working as a powerful character-building influence. It, therefore, regards a high standard of duty, conduct and dignity among teachers as a matter of vital importance and recommends that Universities should take measures to ensure it by all possible means. The Committee suggests that teachers who lead lives unworthy of their position or who notoriously evade the payment of their debts should, if a warning by the Vice-Chancellor proves ineffective, be served with notice of termination of their services. 85

(vi) *Conditions of service in the Medical Faculty*

152. The following conditions of service are recommended for application to teachers in the Medical Faculty :

(1) All future appointments to Professorship and Readership should be made for a period not exceeding seven years and the appointment of persons at present on the staff, e.g. Government servants, who are not employed on contracts of permanent service should also be subject to this limit. 219

(2) In the case of Professors and Readers (at present in service as well as those employed in future) consulting practice only should be permitted under conditions prescribed by the University and subject to the following maximum scale of fees :

(i) Consulting Fee—Rs.16.

(ii) Fee for Chemical and Pathological tests—Rs.5.

(iii) Fee for X-Ray and Light Therapy—Rs.4 to Rs.7, according to the nature of the work.

(iv) Radiologist's fee for Radiograms and Skiagrams—Rs.5 to Rs.15, according to the nature of the work.

(3) Fees under (ii), (iii) and (iv) above should be shared with the University. 221

(4) A Consultant should be defined as a person who can be consulted in a case by the medical attendant only and not directly. 222

(5) Lecturers should be allowed general private practice to the extent at present permitted, subject to the conditions and maximum rates of fees mentioned in sub-paragraph (2) above. 223

(6) Existing incumbents whose scale of salary carries with it a restriction on private practice should continue to be subject to the restriction. 224

(7) The Medical Officer of the Canning College should not be a member of the staff of the Medical Faculty. 227

(vii) Scales of pay

54 153. The following scales of pay are recommended for teachers in Faculties
37P other than Medicine :

Lecturer B Grade—Rs.170—10—250, with an efficiency bar at Rs.230.

Lecturer A Grade—Rs.250—10—350, with an efficiency bar at Rs.300.

Reader—Rs.350—15—560, with an efficiency bar at Rs.440.

Professor—Rs.600—20—800, with an efficiency bar at Rs.700.

Efficiency bar to be crossed in each case after reference to the Selection Committee.

229 154. The following scales of pay are recommended for teachers in the
66P Faculty of Medicine :

Professor not allowed consulting practice—Rs.1,000—40—1,200.

Reader not allowed consulting practice—Rs.550—35—760.

Professor allowed consulting practice—Rs.800—40—1,000.

Reader allowed consulting practice—Rs.450—35—660.

Lecturer—Rs.250—15—400.

Demonstrator—Rs. 200 (fixed).

Part-time teacher—Rs.100 and Rs.150 (in place of the present Rs.150 and Rs.200).

230 The allowance of Rs.70 per mensem now allowed to a Lecturer who is not permitted private practice should continue.

55 155. Provision should be made for the recruitment in special cases of teachers on special salaries from any part of the world.

56 156. There should be no bar to the appointment of honorary teachers provided they are appointed in the manner prescribed for regular posts and provided further that such honorary work should not constitute a claim to a paid appointment.

270 157. The scales of pay for women teachers should be approximately 20 per cent. below the scales prescribed for men in the corresponding posts.

318 158. The attention of Government is drawn to the fact that while Government servants on deputation to Allahabad University draw the personal pay to which they are entitled in their respective services, those in Lucknow University receive salaries considerably higher than their personal pay in their services.

XXV—Clerical Staff

117 159. The Chief Inspector of Offices should inspect the University Offices and report to Government as to the adequacy or otherwise of the clerical establishment. Action should be taken on the report after consultation with the Universities.

118 160. The existing scales of pay for the clerical establishment should not be further reduced,

119 161. The minimum salary of a clerk should be Rs.40 and the lowest grade should be Rs.40—3—70.

XXVI—Engineering Staff

130 162. The Committee considers the staff of the Engineering or Works Department of the Allahabad University inadequate and recommends that Government may depute an officer of the Public Works Department to recommend a suitable staff.

206 163. Government should allow the Allahabad University Engineer's pay to be raised and grant an additional sum of Rs.900 per annum for the purpose.

XXVII—Inferior Servants

Pay

164. (a) The scale of pay for inferior servants of the peon class in the Universities should be the scale prescribed by Government for peons employed in the Departmental Offices in Allahabad and Lucknow, viz. Rs.12-4-16, and the Universities may prescribe suitable scales of pay for servants of classes inferior and superior to this class. 281
- (b) Individual cases in which the adoption of the scales of pay recommended above does not result in an immediate increase of Rs.2 per month in pay, should be dealt with by the grant of a personal pay sufficient to make up this increase. 282

Leave

165. The rules [contained in G. O. no. G-281(4)/X—130-1939, dated the 1st April, 1939] allowing leave of three kinds (earned leave, medical leave and leave on private affairs) to the inferior servants of Government should be adopted by the Universities with the modification that, so far as possible every inferior servant should be allowed to avail himself of half the University vacation and his leave account (including amount of leave accumulated and permitted to be accumulated) should be debited with 8 days' earned leave and 15 days' leave on private affairs for every half-vacation of which he is permitted to avail himself. 126
166. Inferior servants should be kept on duty during the whole vacation in very exceptional cases for reasons to be submitted to and accepted by the Vice-Chancellor concerned.

Gratuity

167. The rules of the Allahabad University in regard to the grant of gratuity printed in Chapter XLV of the Calendar, (pp. 346-9) should be adopted by both Universities with the following modification, viz. : 125
- (a) the words " but shall not be bound to " appearing in brackets in Statute 3 should be omitted ;
- (b) the following two provisos should be added, viz. :
- (i) that no inferior servant shall be entitled to a gratuity whose services shall have been dispensed with for what, in the opinion of the Executive Council, is gross misconduct, and
- (ii) that the University shall be entitled to recover as the first charge on the amount of gratuity earned, a sum equal to the amount of any loss or damage at any time sustained by the University by reason of his dishonesty or negligence. No such recovery shall, however, be made unless a decision to this effect has been taken, after proper enquiry, at the time of the occurrence of the loss.

XXVIII—Leave Rights

168. The two Universities should have a uniform set of Leave Rules. 59
(Leave Rules for inferior servants have been recommended in the preceding section.)
169. Leave Rules for whole-time University employees, other than rules relating to study leave, should be the same as those prescribed in the Fundamental Rules for Government servants of Indian domicile, provided that in cases of leave on medical grounds, the University concerned may constitute its own Medical Board where such a Board is required in the Fundamental Rules. 60
170. Part-time servants should not be entitled to any kind of leave with allowances except Casual Leave. 61
171. The leave rights of whole-time employees appointed for a term of years on a contract should be governed by the following rules : 61
- (a) Where the contract is for more than one year and less than three years leave on average pay up to 1/11th of the period spent on duty.

(b) Where the contract is for three years or over, leave on average pay up to 1/11th of the period spent on duty subject to a maximum of four months at a time.

(c) Leave may be granted after the expiry of contract only where it has been applied for during the period of the contract and refused owing to the exigencies of the public service.

(d) During their period of probation or apprenticeship, probationers and apprentices are entitled to leave on average pay up to 1/11th of the period spent on duty, provided that the total leave granted under this rule does not exceed three months reckoned in terms of leave on average pay.

If the University employee is entitled to the long vacation leave under (a), (b) and (d) may only be granted in case of urgent necessity and shall be subject to the deduction provided for in the Rules on this account.

62 172. The grant of study leave to teachers of the Universities should be governed by the following principles :

(i) the two Universities should have uniform rules ;

(ii) study leave should be available for study abroad up to a maximum of two years at a time (including the duration of any vacation falling within the period or prefixed or affixed to it, and for study in India up to a maximum of four months which should be permitted to be combined with a vacation, but should be exclusive of it ;

(iii) a teacher (irrespective of rank) should be eligible for study leave in India when he has completed three years' service and for study leave abroad when he has completed five years' service. In either case he should be recommended by the Head of the Department and the Dean of the Faculty concerned and by the Vice-Chancellor ;

(iv) a teacher should be entitled to full pay for one vacation at the commencement or termination of his leave, provided that in the latter case the maximum period of leave admissible (two years) is not exceeded. In case it is exceeded average pay may be drawn for the part of the vacation falling within the two years' limit ; for the remaining period of leave the teacher should receive half average salary; the period for which such half-average salary is received should be debited to his leave account. In case the period exceeds the period for which leave on half-average salary is due to him he shall earn it by duty after return from leave. In the event of his quitting the service of the University before earning the leave granted to him in advance, he shall refund the amount of the leave salary for the unearned period. There shall be an agreement to this effect between the University and the teacher before leave is granted ;

(v) not more than one teacher from any department of teaching and not more than 5 per cent. of the total number of teachers in the University may be absent on study leave at one time.

269 173. The new Leave Rules recommended by the Committee should be applicable to all employees of the Universities irrespective of their dates of appointment.

271 174. In addition to the leave admissible to them under the ordinary rules women teachers should be allowed Maternity leave on full pay for a period not exceeding four months on each occasion. Maternity leave shall not be 90 P. combined with any kind of leave other than medical leave. In case medical leave is taken in continuation of maternity leave the whole period shall not be treated as medical leave.

XXIX—Provident Fund

175. The employee should subscribe to the Provident Fund $6\frac{1}{2}$ per cent. of his salary and have option to subscribe more. 64
176. The University should contribute 10 per cent. of the salary in the case of employees drawing up to Rs.300 per mensem and $6\frac{1}{2}$ per cent. in other cases. 65
177. All employees receiving Rs.30 per mensem and above should subscribe to the Provident Fund. 66
178. Whole-time employees engaged on contract for a term of years as well as part-time employees, if appointed for at least five years at a time in either case, should be entitled to the benefits of the Provident Fund except so far that the University's contribution in the case of part-time employees should be 5 per cent. 67 & 110
179. University contribution to the Provident Fund of all employees irrespective of their date of appointment should be at the rates recommended by the Committee. 268
180. The assignment by a subscriber of his Provident Fund in a manner which totally excludes his immediate family from participation in the benefits thereof should be prevented by rule if it is not already prevented by the Provident Fund Act under which the fund is placed. 70
181. The present regulation no. 5 of Chapter XL of the Lucknow University (page 885 of the Calendar) requiring that a declaration should be made by the Executive Council before a person becomes entitled to receive the amount which has accumulated to his credit in the Provident Fund should be repealed and the provisions of clause (4) of the First Statute 26 of the Lucknow University appearing at page 882 of the Calendar should be replaced by clause 7 and the last proviso appearing under clause 6 of the Statute forming Chapter XLIII, page 336 of the Allahabad University Calendar. The object of these changes is to entitle an employee to receive payment of the University's contribution to his Provident Fund without any formal declaration on the part of the Executive Council subject only to its being withheld or reduced in amount in certain circumstances specified in the Statute. 71

XXX—Residence and Care of Students

182. The Universities should explore the possibilities of establishing residential units less expensive than the existing hostels, in order to have the maximum proportion of students in residence. 326
183. The growth of cheaper hostels and "approved" lodging houses should be encouraged. 31
184. The present practice under which hostels and colleges maintained by private bodies receive grants-in-aid direct from Government should continue. 102
185. A system of assigning students to teachers should be introduced in order to ensure personal contact outside the class-room. 75
186. Each Hostel maintained by the Universities should have the following staff : 250
- (a) an Honorary Warden ;
 - (b) a Superintendent with a consolidated allowance of Rs.60 per mensem without any other perquisites ;
 - (c) a number of attached teachers at the rate of one teacher for every 30 students in residence (residue being ignored), each with an allowance of Rs.25 per mensem.

205. The Managing Committee of the Hospital should have its existing 342
functions and should be composed of the following 15 persons :

(a) the six heads of the sections concerned with the Hospital, viz. Surgery, Medicine, Radiology, Ophthalmology, Pathology, and Pharmacology ;

(b) the Superintendent of the Hospital ;

(c) the Treasurer of the University ;

(d) three persons nominated by the Executive Council of whom one should be a local medical practitioner ;

(e) three persons nominated by Government of whom two should be members of the Legislature ;

(f) the Inspector General of Civil Hospitals (Chairman).

206. It is desirable that the services of honorary physicians and surgeons 343
should be utilized to a much larger extent than has been the case hitherto.

XXXVII—Finance (Teaching Universities).

(See also Section IX of Part I)

Property

207. The conditions on which the Muir College buildings were transferred 100
to the Allahabad University, viz., that they should remain in the use and custody of the University so long as they are used for educational purposes, should apply to all the buildings placed at the disposal of the Universities of Allahabad and Lucknow by Government.

208. It is necessary to allow a larger grant than hitherto for maintenance 99
and repairs at the time the future block-grant is fixed by Government.

209. Suitable provision should be made for the maintenance and repairs 291
of the buildings and roads in the possession of each of the Universities and for the repair and replacement of the furniture, fittings, apparatus and other equipment, the amount being determined by the University Grants Committee to the advice, if necessary, of experts.

Staff

210. The following additional teaching staff should be given to the 294,
Allahabad University : 300

(1) a Lecturer B Grade for each of the departments of English, 307
History, Politics, Commerce and Hindi ;

(2) a Lecturer B Grade to teach Experimental Psychology in the Philosophy Department ;

(3) a Wireless Operator for the Physics Department ;

(4) an Artist for the Botany Department.

211. The following additional posts should be given to the Lucknow 317
University :

(a) a Lectureship of A Grade in Orthopaedic Surgery ;

(b) two Fellowships of a value of Rs.150 per month each, the holders of which should assist the present Medical and Surgical Registrars in their work. (Mr. Gupta dissents. He insists on two whole-time Registrars on the scale of pay recommended by the Committee for Lecturers A Grade but without the right of private practice) ;

(c) additional part-time Anaesthetist on a monthly allowance of Rs.100 ;

(d) a part-time teacher in Oto-Rhino-Laryngology on Rs.150 per month ;

(e) a Lecturer A Grade in Ophthalmology ;

(f) a Fellowship on Rs.100 per month in the Department of Chemistry for Pharmaceutical Chemistry the work to be done in collaboration with the Department of Pharmacology ; the holder to receive the

251 187. The Warden, Superintendent, and teachers should be appointed by
to the Executive Council from among the teachers of the University, the Superin-
254 tendent being appointed on the recommendation of a Committee consisting of
the Vice-Chancellor, the Warden concerned and two members of the Board of
Residence, Health and Discipline. They should be appointed for three years at a
time. Appointments may be renewed but no person should be appointed
Warden or Superintendent for more than two terms.

255 (a) The Superintendent and the Attached Teachers should reside in
& quarters assigned to them by the University which should be near the Hostel,
256 and, so far as possible, within its grounds. The students in residence should
be equally divided among them. It is expected that this will give each of
them between 25 and 30 students.

257 (b) Their duties should be to supervise the studies and the social and athletic
activities of the students assigned to them and to see to their well-being
generally. For this purpose it is expected that each of them will visit the
hostel at least once every day and record his remarks on each student in a
register once a fortnight.

258 (c) The Superintendent should in addition have the administrative duties
which he has at present.

259 (d) The Warden should have the position and duties now assigned to him
in the rules of the Allahabad University.

260 188. No rent-free quarters should be provided for any member of the
hostel staff (honorary or stipendiary). Rent and all other charges should be
payable in respect of residences, in assigning which the University should keep
in view the rent-paying capacity of the occupant.

261 189. The admission of students and allotment of rooms being in the hands
of the Superintendent and Warden, they should also make the assignment of
students to teachers.

XXXI—Denominational Hostels and Colleges

32 190. The Committee is opposed to denominational institutions in principle
and is of opinion that only such denominational institutions should be recognized
and given grants as do not restrict admission on communal grounds.

103 191. The Governing Bodies of denominational institutions may be asked to
amend their rules so far as they restrict admission to particular communities.

104 In the case of an existing institution, receiving a Government grant, which
may have legal difficulties in amending its rules as recommended above
the question of continuing the grant should be left to the discretion of
Government.

XXXII—Physical Training

192. In the opinion of the Committee —

33 (a) arrangements for physical training are inadequate ;

34 (b) such arrangements as exist are not efficiently worked ;

35 (c) no attention appears to have been paid to the question of nutrition
and the provision of a balanced diet.

304 193. It is desirable that a Physical Culture Institute should be set up at
one or other University centre and better financial provision is needed for
adequately organizing physical training.

XXXIII—Discipline

87 194. The Committee considers that a spirit of unrest has made its appearance
among University students as among other strata of society in this country and
in other parts of the world. In the case of Universities where this leads to
discreditable incidents the Committee considers that University authorities should
exercise the powers they have in restoring discipline and is convinced that in this

they will receive the support of Government. Further, the Committee considers that a closer contact between University teachers and students would do much to restore discipline to its former standard.

XXXIV—Student Bodies and Representative Council

195. There should be a representative body of students, constituted by Ordinance as the Students' Representative Council, and consisting of representatives (elected on a broad basis) of the Colleges and Hostels, the Delegacy, the Union, the Athletic Clubs or Association with the following functions and powers :

- (i) it should be the recognized channel of communication between the students and the University authorities ;
- (ii) it should have the right of making representations to the University authorities on any matter affecting the interests of students ;
- (iii) it may be consulted by the Vice-Chancellor on any matter at his discretion ;
- (iv) it should help the University authorities in maintaining discipline
- (v) it may run students' self-help activities (such as charities, help for poor students, organization of vacation employment, etc.) with funds raised from students.

90

196. The existing Students' Union and Athletic Association and Clubs should be re-organized on the following lines :

- (i) the Union should be an association of such students as voluntarily become members and pay the prescribed subscription (the University assisting in the collection of subscription and giving other help) ;
- (ii) the Athletic Association or Clubs should aim at maintaining and improving the standard of various games in the University. For this purpose it is necessary that the colours-men of the various games in the colleges, hostels and delegacy should co-operate in putting up the best teams for the University. The hostels and other institutions should be expected to organize athletic activities for the general mass of students.

XXXV—Medical Faculty

197. In view of the high cost of medical education it is necessary that students should make the best use of their time at the Medical College and with this end in view the Committee recommends that higher fees should be charged from students who stay longer at the College than a reasonable period which may be prescribed by the University.

33

198. With a view to improving the quality of practitioners of other systems of Medicine the Committee recommends that arrangements should be made in the Medical College for imparting instruction in the basic elements of the Medical Science (Anatomy, Physiology, etc.) to persons intending to pursue the study of the Ayurvedic, Unani and Homeopathic systems of medicine, the University prescribing the requisite admission qualifications.

333

199. The Committee approves the existing rule regarding the admission of women students to the Faculty.

334

200. It is desirable that there should be provision for regular instruction for the post-graduate degrees of M. D. and M. S. for which an examination is prescribed, as this is necessary to satisfy the requirements of Section 4(2) of the Act.

225

(See also Section XXIV of this Chapter headed "Teachers")

XXXVI—Hospitals

201. The accommodation in King George's and Associated Hospitals should be increased by the construction of fresh wards (of which about a dozen should be cottages of the existing pattern), by the completion of unfinished portions of existing buildings and by the utilization of unoccupied space, to 500 beds immediately and 1,000 beds ultimately.

337

336 In the Committee's opinion the accommodation available in the Hospital is inadequate for the needs of a Provincial institution, being considerably less than that available in the Hospitals attached to the Medical Colleges in the smaller Provinces of Bihar and the Punjab and that the accommodation available to paying patients is entirely inadequate.

338 202. In view of the following recommendations it is desirable that in newly constructed wards, and where possible in existing wards, arrangements should be made for a reasonable degree of individual privacy.

339 203. Persons whose income is Rs.100 per mensem or less as well as their dependents strictly so called, should be admitted to the General Wards in the Hospital and provided with food, medical attendance, medicines and all services such as surgical operations, radiological examination and treatment and pathological and chemical tests, free of charge.

340 204. Persons with incomes of Rs.100 and over and their dependents should pay Hospital dues of which the following scale is suggested :

(a) For persons with incomes of over Rs.500 and their dependents—

(i) Rent at Rs.5 or Rs.3 per day according as they are accommodated in a Private Ward or a Cottage and Rs.2 a day so long as they are accommodated, for want of room, in a General Ward.

(ii) Full cost of food and extras and of expensive medicines, dressings, etc.

(iii) Charges for operations at the full rates prescribed by the University.

(iv) Charges for radiological examination and treatment and pathological and chemical tests at the full rates recommended by the Committee in paragraph 152 above.

341 (b) For persons with incomes above Rs.100 and up to Rs.500 per month and their dependents strictly so called —

(i) Rent at Rs.2 per day for accommodation in the new type of ward recommended by the Committee and in cases of emergency the General Ward.

(ii) Full cost of food and extras and expensive medicines, dressings, etc.

(iii) Charges for surgical and other services at half the prescribed rates.

Besides the above recommendation which was accepted by the majority of members present, two other suggestions were considered by the Committee and were required to be recorded, viz :

(1) that all services and facilities should be the same for every patient ; no charge should be made from persons with incomes of Rs.100 per month or less and their dependents ; an inclusive charge of Rs.2 per day should be made from those with incomes of Rs.101-250 per month ; a charge of Rs.5 per day from those with incomes of Rs.251-500 and Rs.10 per day from those with incomes of over Rs.500 per month, dependents being in each case treated as belonging to the class of their supporters;

(2) that persons with incomes of Rs.100 and below should be entirely free ; persons with incomes from Rs.101 to Rs.500 should pay charges for accommodation, food, medicine, dressings, surgical and all other services at a basic rate to be fixed by the University ; persons with income from Rs.501 to Rs.1,000 per month should pay these charges at twice the basic rates ; those with incomes from Rs.1,001 to Rs.1,500 at three times the basic rates and so on, dependents being treated like their supporters.

205. The Managing Committee of the Hospital should have its existing functions and should be composed of the following 15 persons :

(a) the six heads of the sections concerned with the Hospital, viz. Surgery, Medicine, Radiology, Ophthalmology, Pathology, and Pharmacology ;

(b) the Superintendent of the Hospital ;

(c) the Treasurer of the University ;

(d) three persons nominated by the Executive Council of whom one should be a local medical practitioner ;

(e) three persons nominated by Government of whom two should be members of the Legislature ;

(f) the Inspector General of Civil Hospitals (Chairman).

206. It is desirable that the services of honorary physicians and surgeons should be utilized to a much larger extent than has been the case hitherto.

XXXVII—Finance (Teaching Universities)

(See also Section IX of Part I)

Property

207. The conditions on which the Muir College buildings were transferred to the Allahabad University, viz., that they should remain in the use and custody of the University so long as they are used for educational purposes, should apply to all the buildings placed at the disposal of the Universities of Allahabad and Lucknow by Government.

208. It is necessary to allow a larger grant than hitherto for maintenance and repairs at the time the future block-grant is fixed by Government.

209. Suitable provision should be made for the maintenance and repairs of the buildings and roads in the possession of each of the Universities and for the repair and replacement of the furniture, fittings, apparatus and other equipment, the amount being determined by the University Grants Committee to the advice, if necessary, of experts.

Staff

210. The following additional teaching staff should be given to the Allahabad University :

(1) a Lecturer B Grade for each of the departments of English, History, Politics, Commerce and Hindi ;

(2) a Lecturer B Grade to teach Experimental Psychology in the Philosophy Department ;

(3) a Wireless Operator for the Physics Department ;

(4) an Artist for the Botany Department.

211. The following additional posts should be given to the Lucknow University :

(a) a Lectureship of A Grade in Orthopaedic Surgery ;

(b) two Fellowships of a value of Rs.150 per month each, the holders of which should assist the present Medical and Surgical Registrars in their work. (Mr. Gupta dissents. He insists on two whole-time Registrars on the scale of pay recommended by the Committee for Lecturers A Grade but without the right of private practice) ;

(c) additional part-time Anaesthetist on a monthly allowance of Rs.100;

(d) a part-time teacher in Oto-Rhino-Laryngology on Rs.150 per month ;

(e) a Lecturer A Grade in Ophthalmology ;

(f) a Fellowship on Rs.100 per month in the Department of Chemistry for Pharmaceutical Chemistry the work to be done in collaboration with the Department of Pharmacology ; the holder to receive the

results of the work of the Kanta Prasad scholars in the Laboratory of the Allahabad University for further investigation. (Mr. Gupta dissents. He presses for the acceptance of his own proposal that the holder of the Kanta Prasad Research Scholarship should, after a year's work in the Chemical Laboratory of the Allahabad University, devote the second year to work in the Pharmacology Department of Lucknow University);

(g) a Lectureship of B Grade in the Department of Chemistry for Bio-Chemistry;

(h) a Lectureship of B Grade in Mathematical Economics.

212. In the Committee's opinion additional teachers will be required for efficient tutorial instruction.

Fees

213. The Teaching Universities should be left free to prescribe their own scales of fees and the manner of their collection.

New sources of income

[As in Section VIII(a) of this Chapter.]

Scales of pay, Provident Fund, etc.

(As in the Sections XXIV, XXVIII and XXIX of this Chapter.)

Allowances

Duty allowances

214. An allowance of Rs.50 per mensem should be granted to such incumbents of the offices of Proctor and Librarian as are drawing a salary not exceeding Rs.600 per mensem in their substantive appointments.

215. When a teacher is appointed to officiate in a post of a higher class than the one he holds substantively, and the officiating period exceeds three months, he shall receive pay at the lowest rate admissible under any of the following formulae, provided that it is not less than his substantive pay :

(1) the minimum of the scale of pay recommended by the Committee for the higher class in which he officiates ;

(2) the next step of pay in the scale for the higher class, above his substantive pay ;

(3) an addition of Rs.25, Rs.50 and Rs.75 to his substantive pay according as he officiates as Lecturer A Grade, Reader or Professor.

216. No allowance shall be admissible to the Registrar for carrying on the current duties of the Vice-Chancellor as a temporary measure.

217. The Assistant Registrar shall receive an allowance of Rs.50 per mensem for officiating as Registrar provided he is appointed to officiate and the officiating period exceeds three months.

218. These rules should apply to old employees of the Universities as well as new.

See Section VIII of this Chapter for recommendations about Travelling Allowance.

Allowance for hostel staff

(As in section XXX of this Chapter headed "Residence and care of Students.")

Government Grants to Universities

(1) Annual Block-Grants

219. The amount of the Government grant to the Universities of Allahabad and Lucknow should be specified in the University Acts but should be subject to revision every 10 years.

220. The amount of the Government Grant to each of the Universities of Allahabad and Lucknow should be the sum of the following : 314

(i) the actual amount of the salaries of the teaching staff (including officiating appointments) during the year 1939-40, but excluding temporary appointments ;

(ii) the amount of the University's contribution to the Provident Fund of all teachers included in (i) above at the new rates recommended by the Committee

(iii) the amount needed to finance the urgent needs recommended by this Committee as such and enumerated in the Appendix to this Section ;

(iv) the amount needed to enable the Universities to grant to their inferior servants the increment recommended by the Committee ;

(v) the amount needed to enable the Universities to give the benefit of the new scale of pay recommended by the Committee to Lecturers Grades A and B, both new entrants and existing incumbents.

[An alternative plan of calculating the Block-grant (suggested by Mr. Gurtu) is reproduced in the Appendix to this Section.]

221. In order to maintain the autonomy of the Universities no conditions or restrictions should be imposed on them as to the purposes to which the Government grant should be devoted or as to the manner in which savings, if any, should be dealt with. 346

222. The Universities should be free to utilize at their discretion the income from their property and investments and any further income which they may derive from any source, and the Government should not treat any part of this income as part of the Government grant. 347

223. Additional financial provision should be made for arrangements to fill leave vacancies only if it is found that in the past extra expenditure has been actually incurred by Universities in making these arrangements, over a period of five years. 289

(ii) Non-recurring grants

224. The following non-recurring grants are recommended for Allahabad University :

(1) Rs.5,000 for a Commerce and Economics Museum. 290

(2) Rs.5,000 for Mathematical appliances for the higher study of Astronomy.

(3) A non-recurring grant for the purchase of necessary apparatus in order to place the teaching of Experimental Psychology on a satisfactory basis. 305

(4) Government should, after an inquiry into the amount borrowed by the University for the acquisition of land for the Women's Hostel and the amounts granted by it formerly for the purpose, make a further grant now to liquidate the University's debt under this head by one or more instalments. 309

225. The following non-recurring grants are recommended for the Lucknow University :

(1) The unpaid balance of the grant sanctioned by Government for the Kailash Hostel. 320

(2) A non-recurring grant for the purchase of necessary apparatus in order to place the teaching of Experimental Psychology on a satisfactory footing. 322

323 (3) In view of the popularity of the Botany Department in this University and the research work being done there a non-recurring grant should be made for additional apparatus required for it.

324 (4) In view of the desirability of further developing the teaching of Dentistry, a non-recurring grant should be made for the alterations desired by the University in the Dental Out-patients Department.

(III) Items for which better financial provision is needed

226. *In Allahabad University :*

306 (1) The expenditure on the laboratories has been much higher than the amount (Rs.25,000) recommended by the Teyen-Harrop Committee and Government grant for this purpose should be increased.

308 (2) In view of the Committee's recommendation that a Faculty of Agriculture should be established at Allahabad, provision should be made for the development of agricultural studies and research.

227. *In Lucknow University :*

319 Expenditure on the Laboratories and Gas-Plant has been much higher than the amount recommended by the Teyen-Harrop Committee and Government grant for this purpose should be increased.

228. *In Both Universities :*

327 (1) In the Committee's opinion additional teachers will be required for efficient tutorial instruction.

304 (2) Better financial provision should be made for organizing physical training.

(IV) Grants not considered urgent by the Committee

325 229. The Committee resolved to recommend that the items of the statement of needs submitted by the two Universities on which the Committee has made no recommendation either because they are not urgent in its opinion or because it has not the data for coming to a decision about them, should be referred to the University Grants Committee.

(V) Grant not recommended

310 230. The Committee did not agree to the following demands of the Allahabad University :

- (1) Additional grant of Rs.500 for the Academy of Sciences.
- (2) Linguistics.
- (3) Village Service League.

321 231. The Committee is not in a position to recommend any specific non-recurring grant for the purchase of books, reports and back-numbers of periodicals for Political Science and other departments, not being in possession of full information about the present equipment of the libraries of the Universities in these Departments.

(VI) Budget and Accounts

348 232. The existing provisions of the University Acts relating to the Budget and Accounts of the Universities should continue in force and be supplemented by provisions for the inspection and valuation of the assets in the possession of the Universities by the University Grants Committee.

102P. 233. The Universities of Allahabad and Lucknow should adopt the same form for their Budget and accounts.

APPENDIX

APPENDIX REFERRED TO IN PARAGRAPH 220 OF THIS CHAPTER

(A) Urgent needs of the Universities accepted as such by the Committee

ALLAHABAD UNIVERSITY		Annual amount Rs.
Upkeep of Commerce Museum	.. .. .	200
Upkeep of Mathematical Appliances	.. .. .	200
Replacement of Apparatus	.. .. .	2,000
Replacement of Fittings	.. .. .	2,000
Music Department	.. .. .	1,000
Additional Staff:		
Lecturers B Grade in English, History, Politics, Hindi, Commerce and Experimental Psychology.		
Wireless Operator for Physics Department.		
Artist for Botany Department.		
Increment to Engineer	.. .. .	900
Provident Fund contribution in respect of new posts.		
Increased pay of Inferior Staff.		
Additions to Clerical Staff, if any, recommended by the Chief Inspector of Offices.		
Educational Excursions.		
Total amount for Libraries	.. .. .	20,000
Research	.. .. .	6,000
Additional Grant for Laboratories.		

LUCKNOW UNIVERSITY

Total amount for Libraries	.. .. .	28,000
Research	.. .. .	7,000
Repair and Replacement of Fittings	.. .. .	2,500
Ditto Apparatus	.. .. .	2,500
Additional Expenditure on Provident Fund Contribution		
Ditto increased Clerical Staff	.. .. .	} if any.
Ditto increment to inferior servants	.. .. .	}
Educational Excursions.		
Medical College Laboratories (additional)	.. .. .	3,000
Other Laboratories (additional).		
Museum, Anatomy Department	.. .. .	1,000
New posts:		
1 Lectureship A Grade in Orthopaedic Surgery.		
Ditto Ophthalmology.	.. .. .
1 Lectureship B Grade in Bio-Chemistry.		
Ditto Mathematical Economics.	.. .. .
1 Part-time Teacher in Oto-Rhino-Laryngology (Rs.150 per mensem).		
1 Part-time Anaesthetist .. (Rs.100 per mensem).		
2 Fellowships of Rs.150 per mensem each.		
1 Fellowship of Rs.100 per mensem.		
Recurring expenditure involved in the increase of accommodation in King George's Hospital to 500 beds.		

(B) Details of items comprised in Mr. Gurtu's proposal about Government grant

Item	Allahabad University	Lucknow University
	Rs.	Rs.
HEAD I		
1. Block—grant recommended by the Teyen-Harrop Committee ..	7,66,300	9,46,200
2. Amount of expenditure since approved by Government ..	31,775	..
HEAD II		
1. Pay and Provident Fund contribution in respect of—		
(1) Six posts of Lecturers B Grade recommended by this Committee.	13,464	..
(2) Wireless Operator in Physics Department and Artist in Botany Department.	2,090	..
(3) Two Lectureships A Grade in Medical Faculty at Rs.250 per mensem+Provident Fund at 10 per cent.	..	6,800
(4) Two Lectureships B Grade at Rs.170 per mensem+Provident Fund at 10 per cent.	..	4,488
(5) Two Part-time teachers at Rs.100 and Rs.150 per mensem respectively+Provident Fund at 5 per cent.	..	3,150
(6) Two Fellowships at Rs.150 and 1 at Rs.100 per mensem ..	..	4,800
2. Increase in—		
(1) Salaries of Lecturers B Grade in consequence of increase in scale of pay.	2,794	2,000
(2) Pay of inferior servants	5,000	10,000
3. Allowances to Librarian and Proctor	1,200	1,200
4. Music	1,000	..
5. Research	6,000	7,000
6. Replacement of equipment	2,000	2,500
7. Ditto fittings	2,000	2,500
8. Upkeep of Mathematical Appliances	200	..
9. Do. Commerce Museum	200	..
10. Do. Anatomy Museum .. .. .	..	1,000
11. Library	10,000	12,500
HEAD III		
1. To make up for 10' 5 per cent. freeships on the number of scholars in 1939-40.	20,000	20,000
2. For maintenance including salaries of Engineering Department and Provident Fund.	10,000	..
3. Additional Laboratory grant	5,000	8,000
4. Two Lecturers B Grade to strengthen the Department of Agriculture +Provident Fund.	2,244	..
5. Additional clerks (2) in Registrar's office+Provident Fund ..	1,100	1,000
6. Allowances for trips of students	1,500	1,500
7. Increased grant for Physical Training	1,000	1,000
8. Allowance to Teachers attached to Hostels—16×25×12 ..	4,800	5,000
9. Leave allowances	6,000	7,000
HEAD IV		
Additional amount for normal growth of expenditure ..	10,000	10,000
HEAD V		
Additional recurring expenditure on account of 110 additional beds ..	..	1,00,000

Headwise Total

	Allahabad University	Lucknow University
	Rs.	Rs.
Head I	7,98,075	9,46,200
" II	45,948	57,738
" III	51,644	43,500
" IV	10,000	10,000
" V		1,00,000
GRAND TOTAL	9,05,667	11,57,438

A summary of the Recommendations relating to Agra University appears in Chapter XXVII.

CHAPTER XXVII

SUMMARY OF RECOMMENDATIONS RELATING TO AGRA UNIVERSITY

(I) Principles of Reconstruction

1. The University should be under the exclusive control of the Provincial Executive and the Provincial Legislature in order to enable it to co-ordinate the primary, secondary and university education of the Province.
2. It should be known as *the University of the United Provinces, Agra*, and should only be composed of the Arts and Science colleges of the Province. Continuation of the present election system is, therefore, unnecessary.
3. The University of the Province should be a function of the colleges just as a unitary university is the function of the Departments of Teaching and the Halls.
4. An end should be put to the friction between teachers and public men by the careful separation of academic and administrative functions.
5. In the interest of both the United Provinces and non-United Provinces areas, the two blocks of colleges should be organized into separate universities.
 - (i) It is suggested that the United Provinces Government should approach the Government of India with the request that some arrangements be made for the non-United Provinces colleges affiliated to the Agra University.
 - (ii) For the period of transition, which should be a fixed period not exceeding five years, the authorities of the new University may be allowed to continue the affiliating work of the Agra University in accordance with the existing Statutes and Regulations, subject to such modifications as the authorities may, after consulting the colleges concerned, deem necessary. But non-United Provinces colleges should not be entitled to representation on any University body.
 - (iii) The Committee is of opinion that the financial gain and loss will on the whole balance and that the question may be safely decided on non-financial grounds.

(II) Authorities and Officers of the University

1—Boards of Studies

6. (A) *Composition*—The Board of Studies in each subject should consist of (a) the Heads or Chairmen of the Departments of Teaching concerned with the subject of that Board in the University Colleges. No co-opted members are necessary. The Board is to elect its Chairman and Vice-Chairman. The Vice-Chairman is to represent the Board in the Academic Council when the Chairman is unable to attend. (2) The Board of Studies in Law is to consist of the Heads of the Law Departments of the colleges and of three lawyers or judges assigned to the Board by the Executive Council; these assigned members need not be members of the Executive Council. (3) The Board of Studies in Commerce is to consist of the Heads of the Departments of Teaching and of members, not exceeding three, assigned to the Board by the Executive Council. (4) Where the Heads of the Departments of Teaching are less than seven in number, the Executive Council shall have power of assigning members to that Board so as to bring the strength up to seven.

7. (B) *Function*—(1) Framing the syllabus of the subject for the consideration of the Academic Council. (2) Drawing up the panel of examiners for the subject. (3) Any recommendation they wish to make on the Academic Regulations appertaining to their subject. (4) Matters referred to them by the Academic Council, the Executive Council or the Vice-Chancellor.

2.—The Academic Council

8. (A) *Composition*—The Academic Board and the five Faculties provided for in the present constitution of the Agra University are to be replaced by an Academic Council. The Academic Council should consist of the Conveners or Chairmen of the Boards of Studies. The Vice-Chancellor is to be the Chairman *ex officio*. No co-opted members are needed. The Council should have power of constituting sub-committees (in particular sub-committees of the Chairmen of Arts and Science Boards) to do the preparatory work necessary.

9. (B) *Functions*—(1) Rules of procedure for the Council itself and for the Boards of Studies. (2) Syllabus or course of study. (3) Classification of subjects and regulations appertaining to them (Chapters XII, XIII, XIV, XV, XVI, XXX, XXXIIIB of the Present Calendar). (4) Research work; award of Doctorates (other than honorary). (5) All matters appertaining to examinations, other than the appointment of external examiners. (6) Non-regular candidates of all categories; condonation of attendance. (7) University scholarships, etc. (8) Disciplinary action against students. (9) Other duties assigned to the Academic Council by Statutes.

3.—Distribution of Powers between the Academic and the Executive Councils

10. The Committee recommends that both the Academic Council and the Executive Council be established as "authorities" of the University. The Act should make the Executive Council responsible for "administration and finance", and the Academic Council should have the "control and general regulation of, and be responsible for the maintenance of standards of instruction and for the education, examination, discipline and health of students and for the conferment of degrees (other than honorary)". At present the Faculties and the Academic Board are merely advisory bodies. "Under our scheme the Academic Council and the Vice-Chancellor take up the academic duties of the present Executive Council."

11. The Act and Statutes should, so far as possible, exhaustively define the academic and executive spheres; residuary power should be vested in the Executive Council.

12. Either Council should have the power of requesting the Vice-Chancellor for a ruling in case of a conflict and his decision should be final. The Vice-Chancellor may also give a ruling on his own initiative. Reference to Government is not necessary. The following amendment of Section 10(2) of the Act is suggested for the purpose. "It shall be the duty of the Vice-Chancellor to see that the Act, the Statutes, the Regulations and the Rules are faithfully observed and to decide all questions of jurisdiction between the authorities of the University. He shall have all powers necessary for the purpose."

13. The Regulations of the University are to be divided into Executive and Academic Regulations, the former being made by the Academic and the latter by the Executive Council. The Regulations framed by the two Councils during the year are to be placed before the Senate, and the Senate may by a majority of votes annul any Regulation. In case a Regulation of the Academic Council involves expenditure above an amount to be prescribed by Statute, the Executive Council may demand its reconsideration. In case of continued disagreement, the decision of the Senate is to be final.

14. Appointments, apart from appointment of examiners, should be divided into two classes. First, appointments definitely assigned to the Executive Council, e.g. appointment of persons to represent the University on other bodies, inspector of colleges, etc. Secondly; appointments which entail travelling expenditure but are of an academic nature, e.g. appointment of outside experts on the committees of the Academic Council, delegates to academic conferences, etc. Within the

limits of the budget, the Academic Council should be allowed to make appointments of the latter class with the sanction of the Vice-Chancellor.

4—The Executive Council

15. (A) *Composition*—(1) Vice-Chancellor, *ex officio* Chairman, (2) the Director of Public Instruction, *ex officio*, (3–6) Four members of the Legislature, one from the Council and three from the Assembly, the Assembly representatives being elected by the single transferable vote, (7–12) Six persons appointed by Government of whom at least one shall be a woman, (13–15) Three graduates elected by the Registered Graduates who are members of the Senate from among their own body by the single transferable vote, (16–23) Principals of all University Colleges, *ex officio*.

Further—(1) Persons other than *ex officio* members will cease to be members if they fail to attend three consecutive ordinary meetings but without prejudice to their re-election or re-appointment. (2) A provision should be incorporated in the Statutes to the effect that the proportion of the Principals to the other members shall be in the proportion of 2 to 3; so that as the number of Principals increases, one member may be added to each of the following categories by rotation—Persons nominated by Government, members of the Legislature, Registered Graduates. (3) The following provisions are recommended for the Executive Council as well as the other bodies of the University—(a) Where a member is elected from one body to another, he should cease to be a member of the latter body if he has ceased to be a member of the former, but he should continue to be a member till the body which sent him has a chance of making another nomination. (b) Elected and appointed members should hold office for three years and interim appointments or elections should be for the residuary term only.

16. (B) *Functions*—(1) Use and custody of the University seal; litigation on behalf of the University. (2) Framing of Statutes. (3) Executive Regulations. (4) Control of University property. (5) The University budget. (6) Appointment of University representatives to other bodies and authorities. (7) Control of the University office and the appointment and dismissal of all persons in the immediate service of the University. (8) Affiliation and disaffiliation of colleges; inspection of colleges; recommendations to Government about the recognition of new colleges. (9) Sanction of the appointment and dismissal of the college teaching staff. (10) Scrutiny of college returns; the college budget. (11) Recommendations to Government about the grants to the University and the colleges. (12) Any other duty imposed by the Act or Statutes. (13) Appointment of Examiners and of the Examination Committee. (14) Award of Scholarships, etc.

5—University Legislation

17. The Committee recommends that the laws of the University be divided into Statutes, Regulations and Rules. The procedure for the making of Regulations has been already described. Regulations may be made by either Council, according to the subject-matter of the Regulation. A Regulation is to come into force immediately; the assent of the Senate is not necessary; but all Regulations made during the year shall be placed by the Vice-Chancellor before the Senate at its next meeting, and the Senate may, by a majority of votes, annul any Regulation. The procedure for the framing of Statutes shall be discussed later. No Regulation or Rule may be made on a subject or topic which the Act has assigned to Statutes.

18. It is suggested that the "topics" be distributed between the Statutes and Regulations as follows:

A—Statutes

- (a) Conferment of honorary degrees.
- (b) Conditions of service of the Vice-Chancellor and other officers of the University.
- (c) The designation and powers of the officers of the University.

- (d) The constitution, powers and duties of the authorities of the University.
- (e) The conditions of recognition and affiliation, and of the continuance of recognition and affiliation, of the colleges by the University.
- (f) The classification, mode of appointment and condition of service of the teachers of the colleges.
- (g) The constitution of a pension or provident fund for the benefit of the officers and servants of the University and the teachers of the colleges.
- (h) Leave regulations of the college teaching staff.
- (i) All matters which by this Act are to be and may be prescribed by the Statutes.

B—Regulations

- (1) The fees to be charged for admission to the examinations of the University and for the registration of graduates.
- (2) The conditions and mode of appointment and the duties of examiners.
- (3) The conduct of examinations.
- (4) The admission of students to affiliated colleges.
- (5) The procedure to be observed at the meetings of the Councils, their committees and the Boards of Studies and the number of members required to form a quorum.
- (6) The notices to be given of the meetings of University bodies and of business to be transacted thereat, the keeping of records of their proceedings and similar matters.
- (7) The courses of study to be laid down for all examinations of the University.
- (8) All matters which by this Act or the Statutes are to be prescribed by Regulations.

6—The Senate

A—Composition

CLASS I—*Ex Officio* Members

- 19. (1) The Chancellor (*Ex Officio*).
- (2) The Vice-Chancellor (*Ex Officio*).
- (3) The Director of Public Instruction (*Ex Officio*).
- (4) All members of the Executive Council.
- (5) Ten persons elected by the Academic Council from among its own members.
- (6) The Vice-Chancellors of the Universities of Allahabad and Lucknow.
- (7) Such other *ex officio* members as may be prescribed by Statutes.

CLASS II—*Life-Members*

- (8) Such persons, not more than five at any time, as may be appointed by the Chancellor to be life-members on the ground that they have rendered eminent services to education.
- (9) All persons who have made donations to the value of not less than Rs.10,000 to the University or of not less than Rs.40,000 to a University College.

CLASS III—*Other Members*

- (10) Ten members of the Legislature, two from the Council and eight from the Assembly, elected by the single transferable vote.
- (11) Persons nominated by associations or individuals making to the University or to a University College donations or annual contributions of an amount to be prescribed by the Statute to or for the purpose of the University or a University College.

(12) A member of the Executive or Managing Committee of every University College, elected from among their own body.

(13) Twenty registered graduates elected by the registered graduates from among their own body*, provided that none of such elected registered graduates shall be teachers employed by the University or its affiliated colleges and provided that no graduate shall be entitled to vote or to offer himself as a candidate unless he has been on the register for three consecutive years prior to the date of election. (The Committee suggests that while persons already on the register are allowed to remain, in future the privilege of Registration be only extended to graduates who have taken their degrees in the Agra University after studying at a University College or as non-regular candidates domiciled in the Province.

(14) Ten persons nominated by the Government, two of whom shall be members of the authority controlling secondary education in the Province.

20. It will be seen that the proportion of the academic to the non-academic element is very small; excluding the Principals, there will be 10 college teachers in a Senate of 80 or more. The Chancellor is expected to fill up the places provided for his nominees. If the right of voting in the Registered Graduates constituency is restricted to persons who have been on the roll for three years, enrolment with a view to voting for particular candidates at the next election will be eliminated. At present there is only one donor, the Rev. Dean Davies. The Committee is of opinion that donors to the Colleges as well as to the University (of the amount mentioned) should be entitled to life-membership of the Senate. It should be immaterial whether the donation is of cash or property.

B—Functions

21. At present the Senate has a two-fold function. It is the electorate for the Executive Council and other University bodies. It is also the "supreme governing body" and as such can review the work of the Executive Council, exercise all residuary powers and consider Statutes. Under the Committee's recommendation the election-system of the Act of 1926 disappears and the Senate will no longer function as an electorate.

22. The Senate as the "supreme governing body" has no powers whatsoever, nor are there any acts of the Executive Council which the Senate can "review." The only residuary powers of the Senate not otherwise provided for by this Act are elections to other Universities and bodies. The Committee is of opinion that section 16(1) of the Act declaring the Senate to be the supreme governing body is meaningless and misleading, and should be deleted.†

23. Under the recommendations of the Committee the Senate will have the following powers :

(1) Submitting three names, each voted upon separately, for the consideration of the Government for appointment as Vice-Chancellor. At least one of the persons recommended shall be a non-Hindu.

(2) Resolutions on the annual report, the annual accounts and the financial estimates.

(3) Regulations prescribing the procedure at the Senate meeting.

*A person shall be eligible for registration as a Registered Graduate three years after the conferment of the first degree on him.

†Section 16(1) of the Act reads as follows :

"The Senate shall be the supreme governing body of the University and shall have the power to review the acts of the Executive Council (save when the Council has acted in accordance with the powers conferred upon it by this Act, the Statutes and the Regulations), and shall exercise all the powers of the University not otherwise provided for by this Act, the Statutes and the Regulations."

(4) Considering Executive and Academic Regulations made during the year. The Senate may annul any Regulation it does not approve by a majority of votes.

(5) Passing of Statutes.

(6) Any duty imposed upon the Senate by the Act or Statutes.

24. The Committee recommends the following amendments of Section 27 on the passing of Statutes in the light of past experience :

(1) The First Statutes shall be those set out in Schedule 1.

(2) The Statutes may be amended or repealed or added to by a Statute made by the Senate in the manner hereinafter appearing.

(3) The Executive Council shall propose to the Senate the draft of any Statute which it desires the Senate to pass. Such draft shall be considered by the Senate at its next meeting. The Senate may approve such draft and pass the Statute as a whole or it may return it to the Executive Council for reconsideration together with such amendment as the Senate may suggest. After the draft so returned has been further considered by the Executive Council, together with the amendments suggested by the Senate, it shall be again presented to the Senate with the report of the Executive Council. The Senate shall then pass the Statute if it approves of the draft as finally submitted by the Executive Council, and if it does not, it shall refer it to the Provincial Government.

(4)(a) When the Senate has approved the draft of a Statute submitted by the Executive Council and has passed the Statute, it shall be submitted to the Provincial Government who may sanction it or reject it or send it back for reconsideration.

(b) When the Senate and the Executive Council have failed to come to an agreement over the form of a Statute, the draft of the Statute shall be submitted to Government together with the views both of the Executive Council and the Senate, and Government may determine the form of the Statute by accepting, in whole or in part, the views of either authority.

(c) A Statute passed by the Senate shall not become valid until it has been sanctioned by Government.

(5) The Executive Council shall not propose the draft of any Statute or of any amendment of a Statute—

(a) affecting the status, powers, or constitution of any authority of the University until such authority has been given an opportunity of expressing an opinion upon the proposal. Any opinion so expressed shall be in writing and shall be considered by the Senate, and shall be submitted to Government.

(b) affecting the conditions of affiliation of colleges by the University except after consultation with the Academic Council.

7—The Chancellor

25. (a) *Appointment.*—The Chancellor of the University should be appointed by the Governor for a period of five years and should be eligible for re-appointment.

26. (b) *Powers.*—The functions of the Chancellor at present are of two kinds. *First*, functions which he performs in person, e.g., presiding over the Senate and the Convocation. *Secondly*, the Chancellor appoints certain number of members to the Executive Council and the Senate and sanctions the Statutes forwarded by the Senate and the Executive Council. The affiliation of a new college also requires his sanction. It is through him that the five universities of this Province are kept in a line. The second type of powers are really the powers of the

Provincial Government and they should be vested in the Government as such by the Act so as to make the Government responsible for their exercise to the Legislature and the country.

27. The following amended form of clauses (1) and (2) of section 8 of the Act is suggested :

The Chancellor shall, by virtue of his office, be the head of the University and the President of the Senate, and shall, when present, preside at meetings of the Senate and at any convocation of the University.

8—*The Vice-Chancellor*

28. (a) *Appointment*—The Vice-Chancellor shall be an honorary officer appointed by the Provincial Government for a period of three years from a panel of three persons, not necessarily members of the Senate, recommended by the Senate one of whom shall be a non-Hindu. Recommendation for each place on the panel shall be separately voted upon by the whole Senate.

29. No person in the employment of the University or of University Colleges shall be eligible for appointment as Vice-Chancellor. The Vice-Chancellor may not, during his term of office, be a member of the Executive Committee or Managing Board of any college.

30. The Vice-Chancellor, if not a resident of Agra, shall be provided with residential accommodation in the premises of the University and entitled to an allowance for conveyance and halt of Rs.20 per day for the period of his stay in Agra on the business of the University. Travelling allowance for all journeys and halting allowance outside Agra shall be at rates recommended for the Vice-Chancellors of Lucknow and Allahabad in the General Report.

31. No person who has held the office of Vice-Chancellor of the Agra University shall be eligible for re-appointment to the office within five years from the date of his relinquishing office.

32. The Vice-Chancellor shall reside in this Province.

33. If the office of the Vice-Chancellor becomes vacant by reason of death or resignation, the post shall be filled by the Executive Council till the next meeting of the Senate and election by the Senate in such a case shall be for the unexpired period of the term only.

34. If the Vice-Chancellor is unable to act on account of serious illness, absence from India or other cause, the Executive Council shall elect an Acting Vice-Chancellor, provided that the election shall be subject to all the conditions laid down for the office.

B—*Powers*

35. The Vice-Chancellor shall be the principal executive and academic officer of the University and shall, in the absence of the Chancellor, preside at meetings of the Senate and at any Convocation of the University. He shall be an *ex officio* member and Chairman of the Executive Council and of the Academic Council and shall be entitled to be present and to speak at any meeting of any authority or body of the University, but he shall not be entitled to vote thereat unless he is a member of the authority or body concerned.

36. It shall be the duty of the Vice-Chancellor to see that the Act, the Statutes, and the Regulations are faithfully observed and to decide all cases of jurisdiction between the authorities of the University. He shall have all powers necessary for this purpose.

37. The Vice-Chancellor shall have power to convene meetings of the Senate, the Executive Council and the Academic Council, provided that he may delegate this power to any other officer of the University.

38. (a) In any emergency which, in the opinion of the Vice-Chancellor, requires that immediate action should be taken, he shall take such action as he deems necessary, and shall at the earliest opportunity thereafter communicate

his action to the officer, authority, or other body who or which in the ordinary course would have dealt with the matter.

(b) When action taken by the Vice-Chancellor under this sub-section affects any person in the service of the University, such person shall be entitled to prefer an appeal to the Executive Council within fifteen days from the date on which the order of the Vice-Chancellor is received by him.

39. The Vice-Chancellor shall give effect to the orders of the Executive Council regarding the appointment, dismissal and suspension of persons in the employment of the University and shall exercise general control over the affairs of the University. He shall be responsible for the discipline of the University in accordance with this Act, the Statutes and the Regulations.

40. The Vice-Chancellor's emergency powers under the present Act should continue.

41. The Vice-Chancellor shall exercise such other powers as may be prescribed by the Statutes and the Regulations.

42. The Vice-Chancellor with the approval of the Executive Council, may nominate a member of the Council as Vice-President thereof. The Vice-President shall preside over the meetings of the Council in the absence of the Vice-Chancellor and perform such other duties (not being duties assigned to the Vice-Chancellor by the Act or Statutes) as the Vice-Chancellor may delegate to him.

9—Registrar and the Staff

43. The Committee is of opinion that the work of the University office will probably increase but no additional staff is to be employed till the need for it is definitely established.

44. The scale of pay, conditions of service, leave rules, provident fund and other rights should be the same for the Registrar and Assistant Registrars of all three Universities.

(a) The scale of pay of the Registrar should be Rs.500—25—750 and of the Assistant Registrar Rs.250—15—400.

(b) The security of tenure afforded by Section 47 of the Allahabad University Act and the corresponding Section of the Lucknow University Act should be extended to the Registrar and Assistant Registrar of the Agra University as well.

(c) The staff of the University office is to be taken into the service of the new University on the same terms, and subject to the same conditions, as at present, their claims of leave, provident fund and other privileges not being affected in any respect.

10.—Special Officer—Transitional arrangements

45. The Committee recommends that its scheme be worked out in a new Act with the first Statutes and First Regulations scheduled to it. This will enable the Government and the Legislature to settle the framework with which the University is to start. The recommendations of the Committee alter an Affiliating into a Provincial University and they cannot be put in as amendments to the Agra University Act of 1926.

46. The Committee recommends that a person in Government Service be appointed as Special Officer, to organize the University of the United Provinces and to perform the function of the Vice-Chancellor till such time, not later than two years after the passing of the Act, as the new University bodies are constituted and the Vice-Chancellor is appointed. As the University office is in working order, it will not be necessary for the person appointed as Special Officer to devote all his time to the work of the University.

III—Colleges of the United Provinces

47. There are at present eight degree colleges in the Province—three Public Colleges at Bareilly, Meerut and Agra; two Hindu community colleges at Cawnpore (D. A.-V. College and S. D. College); and three Missionary Colleges (St. John's College, Agra; Christ Church College, Cawnpore, and St. Andrew's

College, Gorakhpur). The management of every college is differently planned. Broadly speaking, there is, *first*, a large body, the Society or Board, which exercises a general supervision over the affairs of the college; *secondly*, there is a Managing Committee or Executive Committee which is in immediate charge of the College as the "executive body." The members of the Managing Committee, apart from the *ex officio* members, are generally elected by the Society or Board. In the case of the Missionary Colleges the functions of the Board are performed by the Parent Society in England. The Public Colleges of Bareilly, Agra and Meerut are organized by Government Rules. The other colleges are registered corporations.

The total expenditure of Colleges in 1938-39 was Rs.12,05,519 to which the Managing Committees contributed only Rs.92,010, i.e. about 8 per cent. They have, at the utmost, a six-pice share in the enterprise. The Committee is not prepared to admit the "proprietary claims" of the Managing Committees. But promises have been given to the founders of community and missionary colleges that the community missionary characters of their institutions will be maintained and these promises must be honourably kept.

1—Recognition

48. At present the Executive Council can affiliate any college it likes with the sanction of the Chancellor; on the other hand, a college can be disaffiliated by the Executive Council without any reference to the Chancellor. The Committee believes that the establishment and dis-establishment of colleges, indicated by the term "recognition," is a matter of public policy and should be a function of Government. The conditions of recognition must be clearly laid down in the Act and First Statutes. An institution desiring recognition should apply to Government direct, but Government before deciding the matter should ask the University to report on the capacity of the institution to fulfil the conditions prescribed. These were, in substance, the provisions of the Universities Act of 1904. Affiliation or the recognition of particular classes or courses of study in a college by the University is purely an academic matter and the University should have the right of "affiliating" and disaffiliating without reference to Government.

2—Government's power of Inspection

The Committee suggests the following amended form of Section 6.

49. The Provincial Government shall have the right to cause an inspection to be made by such person or persons as it may direct, of the University and its buildings, and also of the examination, teaching and other work conducted or done by the University, and to cause an inquiry to be made in like manner in respect of any matter connected with the University. The Government shall, in every case, give notice to the University of its intention to cause an inspection or an inquiry to be made and the University shall be entitled to be represented thereat.

50. The Government may address the Chancellor with reference to the results of such inspection or inquiry and the Chancellor shall communicate to the Senate and to the Executive Council the views of the Government. He shall, after ascertaining the opinion of the Senate and the Executive Council thereon and after ascertaining the action which the Executive Council has taken or proposes to take with the approval of the Senate upon the results of such inspection or inquiry, submit a report of the same to the Government within such time as Government may have directed.

51. Where the Executive Council does not, within a reasonable time, take action to the satisfaction of Government, Government may, after considering any explanation furnished or representation made by the Senate and the Executive Council, issue such directions as it may think fit and the Executive Council shall comply with such directions.

52. (a) The Provincial Government shall have the right, either on its own initiative or on the recommendation of the Executive Council of the University to cause an inspection to be made, by such person or persons as it may direct, of any college of the University, its buildings, libraries, laboratories or hostels and also of the examination, teaching and other work conducted or done by the college and to cause an inquiry to be made in the like manner in respect of any matter connected with the college. The Government shall, in every case, give notice to the University and to the college of its intention to cause an inspection or an inquiry to be made and the Executive Council of the University and the Management of the college shall be entitled to be represented thereat. The representative of the University may, at the discretion of the Government, be included among the persons appointed to conduct the inspection or the inquiry.

(b) The Government may address the Chairman of the Managing Board of the college, who shall communicate to the Managing Authorities the views of the Government and ascertain from them the action which they have taken or propose to take upon the results of such inspection or inquiry.

(c) The Chairman of the Managing Board shall submit to the Government the report of the Management on the action taken within the time, if any, appointed by Government.

(d) Where the Management does not within a reasonable time take action to the satisfaction of Government, Government may, after considering any explanation furnished or representation made by the Management, issue such directions as it may think fit and the Management shall comply with such directions.

3—Control of the University over the Colleges

The Committee recommends that the University be given the following powers with reference to the colleges :

53. Calling for all necessary information—the constitution of the college, registered articles of association ; proceedings of the Boards and the Managing Committees ; the college budget, etc.

54. Controlling residence, discipline and studies of students and regulating the work of the staff. This power is necessary if the University is to function properly. It is suggested that the following sub-section be added to Section IV of the Act which defines the powers of the University “ to control the admission, residence, discipline and studies of the students and to control and regulate the work of the staff of the University Colleges.”

55. Disciplinary control over the members of the College staff whenever they are entrusted with any University duties. Addition of the following sub-clause to Clause 9 (defining circumstances under which the service of an employee can be terminated) is suggested : “Misconduct, including misconduct connected with University examinations and other University duties.”

56. Withdrawal of affiliation from a college, in whole or in part, when the college classes fail to function properly, e.g., failure on behalf of the Managing Committee to provide a properly qualified teacher for post-graduate class. But students who are on the rolls at the time of its disaffiliation should be allowed to appear as private candidates for the examination for which they were preparing, irrespective of the fact whether or not they satisfy the definition of private candidates. The University may continue the disaffiliation till the normal standard of work has been restored. The Councils of the University should not consider the question of disaffiliation except on the recommendation of the Vice-Chancellor.

57. Control of the employment and dismissal of the teaching staff and prescribing the conditions of their service.

58. The Board of Inspection and Panel of Inspectors should be abolished. The five-yearly inspection of the colleges should continue for the purpose of stock-taking and in order to review the progress of the institution during the period. The Committee of Inspection should consist of the Vice-Chancellor, the Director of Public Instruction (or an Officer of the Department appointed by him) and the Principal of the college as *ex officio* members and of two or three persons appointed by the Executive Council on the recommendation of the Vice-Chancellor. Their report should be submitted confidentially to the Executive Council and Government.

59. In case of colleges applying for affiliation in a particular subject or class, the Academic Council may, on the recommendation of the Vice-Chancellor, appoint persons to inspect the institution if it feels that it is unable to decide the question on the basis of the information available. It should be the duty of the Vice-Chancellor to inform the Academic Council if the Department of Teaching in a college has ceased to function and to recommend that affiliation be withdrawn.

4—College Organization—Executive

60. The Committee recommends the incorporation of the following provision in the First Statute :

A—Powers of the Principal

(i) The Principal shall be the chief academic officer of the University College and, subject to the Statutes and Regulations of the University, he shall have absolute powers in all matters relating to the admission, promotion and expulsion of students, the discipline of classes, and the collection and remission of fees. He shall be solely responsible for the giving and refusing of holidays, for regulating the details of the courses of study and for the grant of scholarships in accordance with the rules.

(ii) The menial servants of the college shall be appointed and dismissed by the Principal subject to the general control by the Managing Committee. Appointments carrying a pay of less than Rs.50 per mensem shall be made by the Principal subject to the approval of the Managing Committee; appointments to all non-teaching posts carrying a higher salary shall be made by the Managing Committee on the recommendation of the Principal.

(iii) The Principal shall be an *ex officio* member of the Managing Committee. He shall also be an *ex officio* member of all committees appointed for selecting candidates for teaching posts and due regard shall be paid to his recommendations.

(iv) The appointment and dismissal of the Principal shall be subject to the sanction of Government, provided that in the case of community colleges the sanction of Government shall only be given to a person whose name is included in a list submitted by the Managing Committee to Government through the Executive Council of the University.

B—Managing Committee

61. For the Managing Committees of all colleges the Committee recommends the following provision.

62. The Managing Committee or Executive Body of every University College should include—(a) Four persons nominated by Government for a period of three years; provided that in the case of community and missionary colleges the persons so nominated shall be members of the community or the Church (as the case may be) to which the Society belongs, (b) two Chairmen or Heads of the Departments of Teaching in the college co-opted for a period of one year by the Executive Committee in order of seniority of service; provided that where the constitution of the Managing Committee or Mission confines membership of the Managing Committee to persons of a particular denomination, only Heads of Departments belonging to that denomination shall be eligible.

63. Representation shall not be allowed to a college, either on the Executive Council through the Principal or on the Boards of Studies or the Academic Council through the Heads of the Departments of Studies or to any other authority or body of the University, unless the college conforms to the conditions prescribed in regard to the constitution of the college Managing Committees.

5—*College Administration—Academic*

64. The Committee suggests the organization of Academic Councils, and Departments of Studies in the colleges on the same lines as in the University. This should not be interpreted as an interference with the power and responsibilities of the Principal as these bodies will have only recommendatory functions. The Committee also thinks that a better system should be evolved for supervising the residence and work of day scholars and making them an integral part of the institution. The details should be worked out by the Principal and the members of the staff.

6—*Procedure for Government grants*

65. A block-grant should be given to the University for its expenses, but this grant should, in the first instance, be for a period of three years only. The block-grant to the University as well as the annual grants to the colleges should be given by Government to the University and the University asked to forward to the colleges the grants earmarked for them.

66. Every college should submit its budget to the Executive Council (in the form prescribed by the Council) and the Council should forward it to the Government with its recommendation. The Executive Council may recommend a block-grant for a fixed period to a College if it is satisfied as to its administration and management.

67. The college budgets should, in our opinion, be printed by the University along with its own budget and submitted to the Senate. The salaries, grades, etc. of the teachers of the colleges should be given in the budget in the same way as in the budgets of the unitary universities.

68. The earmarked grants to the colleges should be the normal grant only, i.e. the money needed by the colleges for carrying on their ordinary work. Any amount over and above the normal grant should be given by Government to the colleges only after considering the report of the Executive Council.

69. All the savings of the University should be placed by it at the disposal of the colleges for purposes to be specified by the University; in particular, the money saved by the non-payment of examination remuneration to persons in the service of the colleges should be distributed by the University among the colleges to enable them to strengthen their financial position.

7—*Miscellaneous*

(1) *University teaching posts and the University Library*

70. The Committee is of opinion that provisions in the Act about University teaching posts and the University Library should be abolished. The reasons are obvious. The University should not compete with its own colleges. University teachers if working at Agra, will only be able to benefit Agra students; if they are attached to different colleges, the University has no means of supervising their work. A University Library at Agra will only be of use to local people; if it is allowed to lend out books, it will cease to be of any use to anybody. The University must work in and through the colleges and not directly.

(2) *Tuition Fee*

71. The scale of tuition fee, on the whole, appears to the Committee to be satisfactory. But the following amendments are recommended in the Educational Code. The minimum fee for degree classes should be raised to Rs.90 per annum

and the minimum fee for post-graduate classes to Rs.100 per annum. The colleges should, in addition, be allowed to charge Rs.10 to Rs.25 per annum as laboratory fee for B.Sc. classes and Rs.20 to Rs.40 per annum for M.Sc. classes.

72. The present examination fees of the University should be allowed to stand but the fees for B.Sc. and M.Sc. examinations should be raised by Rs.10.

73. The fees for Part I and Part II of the First Degree (B.A., B.Sc. and B.Com.) examination which will be conducted by the colleges should be Re.1-8-0 for regular students and Rs.5 for private candidates in respect of each of such examination. This fee is a part of the college revenue and should not be forwarded to the University.

(3) Local Bodies

74. The Committee recommends that the municipalities and district boards be approached with the request that their former grants to the college of their area be restored.

(4) Intermediate Classes at Degree Colleges

75. The Committee calculates that the separation of the Intermediate classes from the degree colleges will entail a total loss of about Rs.44,000 in their fee income and that they will not be able to meet this loss unless their Government grant is raised by about 10 per cent. The Committee does not recommend any immediate change. A period of about five years after the Committees' recommendations have been incorporated in an Act would be a reasonable time for this reform which has been hanging fire for such a long time.

IV—Tenure of Service of the College Teaching Staff

76. The Committee feels keenly that Statute 5 of Chapter XVII and the model form of Agreement appended to it are quite futile and do not give to the college staff the permanence of tenure to which they are entitled. The feeling of insecurity still persists and the door for the exploitation of educated labour is still left wide open. Cases of victimisation have not unfortunately been rare in the history of our colleges. The University College staff is entitled to the same security of tenure and conditions of service as the employees of the unitary universities. The Committee, therefore, cordially approves the suggestion of ex-Vice-Chancellor Basu "that the Executive Council should determine the general terms of appointment, minimum pay and qualifications of all members of the teaching staff and that all appointments and removals shall be subject to its control."

77. Section 25 of the Act should be recast so as to include the following provisions :

(a) The teachers of the University Colleges, other than those maintained by the Government, shall be appointed with the sanction of the Executive Council in such manner, and shall hold their appointments subject to such conditions, as may be prescribed by Statute; provided that members of the staff who are on a permanent contract approved by the University with a Missionary Society maintaining a College, shall not be required to enter into a second contract with the College.

(b) All such teachers shall be appointed on a definite written contract of permanent service which shall be prescribed by Statute and may not be varied without the previous sanction of the Executive Council; provided that, subject to the conditions prescribed by Statute, temporary appointments may be made for a term not exceeding three years and, in special cases, for short periods of service.

(c) All teachers who were in the permanent service of a College on 1st April, 1940, shall be deemed to be in the service of that College in accordance with the terms of the present Act, the First Statutes and any Statutes that may be made hereafter.

(d) Any dispute arising out of a contract between a teacher and a University College shall, at the request of either party or of the Executive Council of the University, be referred to a Tribunal of Arbitration consisting of the (i) Vice-Chancellor of the University, (ii) a judicial officer not below the rank of a district judge or a lawyer of fifteen years standing appointed by Government, (iii) and a person, not connected with any University College, appointed by the Executive Council. The Tribunal shall have the power to interpret the terms of the contract and the conditions of service and to inquire into all facts which it considers relevant. The decision of the Tribunal shall be final and no suit shall lie in a Civil Court in respect of the matter decided by the Tribunal. Every such request by a University College or a teacher shall be deemed to be a submission to arbitration upon the terms of this section within the meaning of the Indian Arbitration Act, 1899, and all the provisions of that Act, with the exception of Section 2, shall apply accordingly.

(e) The mode of appointment of the members of the Tribunal and the procedure for the settlement of disputes shall be prescribed by Statute and where the Statute is silent, the Tribunal shall decide its own procedure.

78. *Secondly*, in place of the present Statute 5 of Chapter XVII and the indefinite terms of First Statute 11(d), the Committee recommends the incorporation of the following provisions and contract of service in the First Statutes:

(1) Appointments to teaching posts shall be made by Managing Committee of the College but a person appointed shall not assume charge of his duties till his appointment has been sanctioned by the Executive Council of the University after considering the qualifications of all candidates for the vacancy and the reasons on which the appointing authority has taken its decision. If owing to urgency of work, a person appointed by the Managing Committee is allowed to take charge of his duties, such assumption of charge shall not constitute a claim to appointment.

(2) Appointments to posts in the non-community public colleges of Agra, Meerut and Bareilly, and of other non-community public colleges that may be established hereafter, shall be so made that the proportion of the various communities in the service of these colleges may be the same as the proportion accepted by the Provincial Public Service Commission for recruitment to the higher posts.

(3) All contracts of service shall be lodged with the Registrar of the University and a copy thereof shall be furnished to the College and to the teacher concerned.

(4) The salaries and scales of increment for the officers and teachers of the University Colleges shall be as follows:

(a) Principals : Rs.600—25—800 (or as by special contract with the permission of Government).

(b) Professors : Rs.300—25—500.

(c) Assistant Professors : Rs.200—20—300.

(d) Lecturers : Rs.100—12½—200.

(e) Demonstrators : the same scale of pay as for lecturers, if properly qualified.

Provided that :

(i) No existing incumbent of a post shall be adversely affected by the scale of pay prescribed by this Statute.

(ii) No existing incumbent of a post drawing a lower salary than that recommended by the Committee for the post shall be entitled to be put on the grade recommended unless he possesses the qualifications required for the post.

(iii) Existing incumbents, when eligible, shall start in the new scale at the point in the time-scale next above their present pay, provided that if the Executive Council is satisfied, after considering the recommendation of the College Managing Committee, that increment has been held up by abnormal conditions it may allow a higher start.

(iv) Teachers of Oriental Languages now in service shall be given the same scale of pay as teachers of other subjects, if properly qualified, and all persons hereafter employed for the teaching of Oriental Languages shall be appointed in the prescribed grades.

(v) Appointments may, with the previous sanction of the Executive Council, be made on a different salary and grade of teachers of special technical subjects.

(5) The scale of pay admissible in each case shall not be reduced on the ground of financial stringency, provided that a proportionate cut may be made on the salaries of all the college staff to enable the college to meet a deficit due to circumstances beyond its control.

(6) The salary of a teacher in permanent service may not be reduced with a view to securing funds for financing schemes of expansion or because such schemes of expansion have caused a financial loss to the college.

(7) The leave rules for all University Colleges shall be prescribed by the Regulations of the University.

(8) All University Colleges shall maintain a provident fund for their teaching staff and other employees in accordance with the provisions of the University Regulations : provided that the monthly contribution of the employee shall be 10 per cent. and of the College $6\frac{1}{2}$ per cent. of the monthly salary of the employee.

(9) Members of the Tribunal of Arbitration shall be appointed for a period of three years and the Tribunal shall meet at Agra whenever necessary. A teacher appealing to the Tribunal shall be required to deposit the sum of Rs.50 with his application. The tribunal shall decide the cost, if any, to be recovered from either party and the balance of the cost shall be borne by the University.

(10) The following contract-form is prescribed in accordance with Section 26 of the Act :

Agreement made thisday of.....19....
betweenof the first part and the Managing Committee
of the.....College, through the Principal/
Secretary of the second part :

WHEREAS the College has engaged the party of the first part to serve the College as....., subject to the conditions and upon the terms hereinafter contained ; Now this agreement witnesseth that the party of the first part and the College hereby contract and agree as follows :

1. That the engagement shall begin from the.....day of.....19...., and shall be determinable as hereinafter provided.

2. That the party of the first part is employed, in the first instance, on probation for a period of one year and shall be paid a monthly salary of Rs..... The period of probation may be extended by such further periods as the party of the second part may deem fit, but the total period of probation shall in no case exceed two years.

3. That on confirmation after the period of probation the College shall pay the party of the first part for his services at the rate of Rs.....(Rupeesonly) rising by annual increments of Rs.....to Rs.....(Rupees.....) per month. After confirmation the party of the first part shall be entitled to receive emoluments on the scale aforesaid and his salary shall not be varied except, in circumstances and in the manner specified below, viz., when reduction of expenditure is necessitated by financial stringency, the party of the first part shall be liable to a cut in salary being a proportion of it not exceeding that imposed upon the entire staff.

Provided that such a cut in salary shall not be imposed in order to secure funds for financing a scheme of expansion.

4. That the party of the first part shall be entitled to the benefit of the Provident Fund in accordance with the provisions laid down by the University in this connexion.

5. That the age of superannuation shall be sixty years, the actual time of retirement for the party of the first part to be the thirtieth day of April in the year in which he attains the age of sixty.

6. That the party of the first part shall be entitled to leave in accordance with the rules prescribed by the University for the time being.

7. That the party of the first part shall devote his whole time to the duties of his appointment and shall not engage, directly or indirectly, in any trade or business, or, without the sanction of the Managing Committee, take up any occupation which, in the opinion of the Principal, is likely to interfere with the duties of his appointment.

7. (a) That the party of the first part shall not undertake any remunerative examination work offered to him by a University or Board of Examination other than the Agra University without the permission of the Principal.

8. That the party of the first part shall, in addition to the ordinary duties, perform such duties as may be entrusted to him by the Principal in connexion with the social, intellectual or athletic activities of the College, and by the Agra University in connexion with examinations (in accordance with, and subject to the limits prescribed by the Statutes and Regulations of the University).

9. After confirmation the services of the party of the first part shall not be terminated except on the following grounds :

(a) Wilful neglect of duty or deliberate defiance of the orders of the Principal.

(b) Misconduct, including misconduct connected with University examinations and other University duties.

(c) Breach of any of the terms of this Agreement.

(d) Physical or mental unfitness.

(e) Incompetence : provided that the plea of incompetence shall not be admissible against the party of the first part after he has put in five years' service after confirmation.

(f) Abolition of the post ; provided that no post shall be abolished solely as a measure of economy necessitated by financial stringency or for the purpose of obtaining funds to finance a scheme of expansion.

(10) Except when termination of service has taken place under sub-clause (a), (b), or (c) of clause 9 above, neither the party of the first part nor the party of the second part shall terminate this agreement, except by giving to the other party three calendar month's notice in writing or by paying to the other party a sum equivalent to three times the monthly salary, which the party of the first part is then earning :

Provided further that it shall be permissible for the party of the first part to require that his case shall be referred to the Arbitration Tribunal, constituted under the Act and Statutes, whose decision shall be final and binding on both parties.

Note.—The period of notice referred to above shall not include the summer vacation or any part thereof.

Signed/ this day of 19.....

(1).....

(2).....

In the presence of—

(1).....

(2).....

1—*Cadre of College Staff*

79. The cadre of the college staff should be fixed by the Regulations of the Executive Council, which should keep in view the amount of work prescribed for the teachers, the size of the classes, etc. No uniform hard and fast rules can be laid down for all colleges but there should be a uniformity of procedure in the calculation made. Only 40 per cent. of the teachers in a Department of Teaching which has post graduate classes should belong to the upper grades (in Professors and Assistant Professors) and in departments that have no post graduate classes only 30 per cent. There should, as a rule, be only one Professor in a Department and no Professor should in future be appointed in Departments which have no post graduate classes.

2—*Leave Rules*

80. Some Colleges, at present, have no leave rules whatsoever, everything being left to the discretion of the Principal or the Secretary. The Committee recommends that Leave Rules be provided for by the Regulations of the Executive Council. The following rules are suggested:

“General Conditions”

- (1) Leave cannot be claimed as a matter of right.
- (2) If the exigencies of college service so require discretion to refuse or cancel leave is reserved with the sanctioning authority.
- (3) A member of the staff on leave shall not accept any other post during the period of leave.
- (4) No member of the staff shall be allowed to be absent from duty for a longer period than 24 months.
- (5) If a member of the staff has been on leave throughout an academic year, he does not earn the pay for the following vacation and the vacation will be counted as leave on leave allowance due under the rules.

*Various kinds of leave*81. 1. *Casual leave—*

- (a) Shall be for a period of 14 days after every 12 months of service;
- (b) shall be on full pay;
- (c) holidays falling within the casual leave shall count as casual leave;
- (d) holidays at the beginning or end of casual leave can be combined with it only if the total continuous absence is not more than 15 days;
- (e) cannot be combined with any other kind of leave;
- (f) any unavoidable absence without permission, if satisfactorily explained, will be classed as casual leave if casual leave is due;
- (g) the Principal in the case of the staff and the Honorary Secretary in the case of the Principal shall be the sanctioning authority.

2. *Privilege leave—*

- 81(A). (a) shall be for a period of 15 days after every 12 months of service;
- (b) shall be on full pay;
 - (c) can be accumulated up to two months;
 - (d) only the permanent staff shall be eligible for it;
 - (e) after resuming duty on return from privilege leave, one year's service must be put in before privilege leave can be allowed again, except where privilege leave has been taken on medical grounds;
 - (f) the Executive Committee shall be the sanctioning authority.

3. *Sick leave—*

82. (a) shall be for a period not exceeding one month in each academic year;
- (b) shall be on half pay;
 - (c) shall only be granted on furnishing a medical certificate from a duly qualified and registered medical practitioner or a recognized Vaid or Hakim;
 - (d) shall not accumulate;

(e) it can be combined with privilege leave so that any privilege leave due shall be availed of first and then the sick leave;

(f) the Executive Committee shall be the sanctioning authority.

4. Long-term leave—

83. (a) shall be for a period of one month after every 12 months of duty;

(b) shall be on half pay;

(c) shall be available only after six years continuous service;

(d) can be accumulated up to 12 months;

(e) can only be granted on the applicant showing some adequate reason for it, such as—

(i) further study in India or outside India;

(ii) prolonged illness: provided that in case of prolonged illness the Executive Committee may grant leave on such terms as it thinks fit but (a) an employee shall not be given more than six months leave on full pay, all leave in addition to this period to be on half pay.

(b) the leave granted shall not exceed a period of one month for every twelve months work which the employee has put in;

(iii) some important private business requiring prolonged absence from duty;

(iv) leave preparatory to retirement;

(f) can be combined with vacations and any privilege leave due;

(g) the Executive Committee shall be the sanctioning authority.

5. *Extraordinary leave*—(meaning leave which cannot be put in any of the above 4 classes)—

84. (a) shall be without pay;

(b) can be combined with any kind of leave, other than casual, up to a total absence from duty of not more than 24 months;

(c) any unavoidable absence without permission which has been satisfactorily explained will be classed under this head if no casual leave is due;

(d) extraordinary leave without pay cannot be considered duty and cannot be counted for purposes of leave;

(e) the Executive Committee shall be the sanctioning authority.

(V)—Examinations

1—*Admission Examination*

85. The following principle has been recommended for all the Universities of this Province.

“Students shall not be eligible for the First Degree Examination unless they have passed the final examination of the Provincial Board of Education or an examination recognized by the universities as equivalent thereto and have passed such additional tests (if any) as may be prescribed by the Universities.”

86. The following principles are recommended for incorporation in the Statutes with reference to the United Provinces University.

(1) The Academic Council should have the power of making regulations prescribing the optional subjects or groups of subjects in which a student should pass the final examination of the secondary college course in order to be eligible for admission as a regular or a non-regular student of the University.

(2) The Academic Council should also have the power of framing Regulations for, and prescribing the syllabus of, a supplementary test examination, if the Council is of opinion that such an examination is necessary. The examination should be conducted by the colleges and the result sent to the Registrar to enable the University to exercise such supervision over the examination as it may consider necessary.

87. It is recommended that before Government sanctions a Statute on the subject, it should avail itself of the recommendations of a committee consisting of the five Vice-Chancellors of the universities of the Province, or of their representatives, if they are unable to attend personally.

2—*The Three Parts of the First Degree Examinations*

88. The Committee is not in favour of terminal examinations as they fasten the attention of the teacher and the student exclusively to the syllabus. On the other hand, as it has been decided to extend the First Degree course (B.A., B.Sc. and B. Com.) to three years and there is a danger that, unless proper precautions are taken, this may only mean an extra year of idleness in the student's life.

89. The following plan for the three Parts of the First Degree Examination is recommended for incorporation in the Statutes :

(1) The First Degree (or Part III) Examination shall be an examination conducted by the University and shall cover the whole syllabus prescribed for study during the three years. The present system of inspection of examination centres should be discontinued and the Principals should be made responsible for the proper conduct of the examinations. *Viva Voce* examination of B.A. candidates is not, in our opinion, necessary. In other words, the University will conduct the First Degree examination in the same way as it is conducting the B.A., B.Sc. and B.Com. examinations at present. But in bringing out the University results, the results of the two annual "home examinations"—Part I and Part II—will also be considered.

(2) Part I and Part II examinations will be conducted by the colleges at the end of the first and the second year of instruction and, subject to the provisions of clause (6) below, no student who has not passed Part I will be allowed to appear for Part II and no student who has not passed Part II will be allowed to appear for Part III (or the First Degree) examination.

(3) The Board of Studies shall in their syllabus indicate the portions of it which are to be covered by Part I and Part II examinations, and students will not be permitted to appear for Part I till the end of the first year and for Part II till the end of the second year of their studies. At present the University merely prescribes the syllabus of the B.A., B.Sc. and B.Com. examinations ; it is left to the college, or to the Department of Teaching in the college, to mark off the part which is to be covered in the first year of instruction. There is naturally a tendency to leave much more than half the work for the second year. Under our plan the University syllabus will first prescribe the whole course for the First Degree Examination, and it will then proceed to specify the parts of it which are to be covered by Part I and Part II examinations. This will set the same pace for all colleges. It is obvious that a candidate will be examined in some parts of syllabus twice—perhaps thrice, if the syllabus of Part I is again included in Part II. In this we see no harm. It is for the Board of Studies to decide the principle of co-ordination with reference to their particular subject and its character. In some subjects it would perhaps be advisable for the syllabus of Part I to be re-included in the syllabus of Part II.

(4) The Principal of the college shall be responsible to the University for the proper conduct of Part I and Part II examinations for the students of his college and the non-regular candidates attached to it, and it shall be his duty to send to the Registrar :

- (a) the results of the examinations as he recommends them for publication by the University ;
- (b) the tabulation sheets or tabulated results ;
- (c) list of examiners and the papers set by them ;
- (d) copies of all question papers ; and
- (e) all examined answer-books.

90. These two examinations will be conducted by the colleges on behalf of the University, and the colleges will make all arrangements. But the University is entitled to all necessary information, and in so far as the result of these examinations is recognized by the University, it will have the power of scrutiny and control. It will be necessary for the Registrar's Office to keep the examined answer-books received from the colleges till after the publication of the result of Part III Examination. The result of all the three examinations should be published by the University.

(5) One-third of the total marks of every subject shall be allotted equally to that subject in Part I and Part II examination; any calculations that may be necessary shall be made by the Registrar's Office every year when the results of Part I and Part II are received from the colleges and shall be forwarded to the Tabulators for inclusion in the result of the First Degree (Part III) Examination.

91. At present the maximum marks for most B.A. and B.Sc. subjects are 150; if there are two papers in the subject, the maximum marks for each paper are 75; if there are three papers, the maximum marks for each paper are 50. We are not concerned with the actual maximum marks, the adoption of which is a matter of convenience, but with the principle of the distribution of these marks between the three examinations. Under our plan, if the maximum marks for a subject in Part III are 100, the maximum marks for that subject will be 25 in Part I and 25 in Part II, the proportion being 25 : 25 : 100. If there are two papers in the subject in Part I (or Part II), the examiners will probably find it very inconvenient to have 12½ marks as the maximum marks for a paper; low maximum marks lead to difficulty in the spacing of the examiner's award. It will in that case be more convenient to have 50 as the maximum marks for each paper and to adjust the result in the Registrar's Office. Thus a student who has obtained 33 marks out of 100 in the two papers (taken together) of Part I will be given 9 marks out of 25 by the Registrar's Office and these marks will be entered in the tabulation sheets when the final result is being calculated along with the examination award of Part III.

(6) No student shall be deemed to have passed Part I and Part II Examinations unless he has secured at least 25 per cent. marks in each subject; provided that in case of unavoidable absence a student may be promoted by the Academic Council of the college (if such a Council exists) or by the Principal, but all such cases of promotion shall be duly reported by the Principal to the Registrar for publication by the University. The percentage of marks for the first and the second divisions shall be the same for Part I and Part II as for Part III. It will be for the college to decide in what cases it will recommend for promotion a student who has not appeared for the examination. It is to be expected that cases of shamming will not be considered. For the student himself avoiding Part I and Part II will be a bad bargain, for he will not be able to carry over any marks to his credit in the final examination. Thus, if the marks for a subject (for all Parts) are 150, a student who avoids Part I and II will have to get 50 marks (i.e. the minimum pass marks for all the three Parts) out of 100 in his last examination. In other words, only candidates who secure over second division marks in Part III will be able to pass if they have avoided both Part I and Part II Examinations.

(7) No candidate shall be deemed to have passed his First Degree Examination unless he has obtained at least 25 per cent. marks in each subject in Part III examination and 33 per cent. marks in each subject in the aggregate of the three (Parts I, II and III) examinations. If, as assumed above, the total marks for the subject in all the three examinations are 150, a candidate will be required to obtain at least 25 marks out of 100 in that subject in Part III and 50 out of 150 when the result in that subject for all the three examinations is added together.

Such further conditions as are at present laid down for separate pass marks in practical examinations are not affected by our recommendations. We are also assuming that the percentage of marks required for a mere pass and for the second and first divisions (i.e. 33 per cent., 48 per cent. and 60 per cent., respectively) by the Universities of this Province will continue.

(8) The Examination Committee of the University may, in cases of grave discrepancy between the marks obtained by the candidates of a college in any or all subjects of Part III and those obtained by them in Part I and Part II, direct that the answer books of these candidates be re-examined, or, in the alternative, that the results of the candidates of that college for that subject be determined by the marks obtained by them in Part III examination only.

92. This reserve power in the hands of the University is a necessary part of our scheme. Owing to the provision suggested in sub-paragraph (6) above no candidate will be able to pass, whatever the result of his Part I and Part II examinations, unless he has obtained 25 per cent. marks in every subject; in other words, even if a college "cooks" its results, it will not be able to help its students who, in the opinion of Part III examiners do not deserve 25 per cent. marks. The margin of assistance for weak students will be 8 per cent. only. But the college results of Part I and Part II may have a serious repercussion on the division in which its candidates are placed. To take an extreme case, a candidate who has only obtained 40 marks out of 100 from the examiners of Part III may find himself in the first division if the examiners of Part I and Part II have given him cent. per cent. marks. Such cases are unlikely but they are possible. The published results of the examinations held by the Civil Service Commissions show that while in some subjects the Examiners give 65 per cent. to 75 per cent. marks to the best candidates, in other subjects the examiners are inclined to give 90 per cent. marks or even more. But if the final result is determined by the award of a large number of examiners, the average of all awards is, as a rule, satisfactory. In our scheme a candidate's division will be determined by over fifteen examiners.

93. We have suggested that the results of the two college examinations along with the examined answer-books be sent to the University. It will be possible for the University Examinations Committee to have the answer-books re-examined if it finds that the standard of the college examiner is not satisfactory. Re-examination of individual answer-books would not in general be desirable unless there is reason to suspect favouritism or foul play. But the Rules or Regulations of the Academic Council may well provide for steps to be taken in order to assure the maintenance of a uniform standard. *Secondly*, when the Tabulators are putting down the result of the same batch of college students, it will be possible for them to draw the attention of the Committee to any marked disparity in the results of the three examinations; and if the Committee feels that the college results are not reliable, it will be able to order that in the subject or paper concerned, only the award of Part III examiners be taken into consideration. This will mean, in substance, the re-institution of the present system for the students concerned. The existence of these provisions, we hope, will keep the college and the university examinations in a line. Lastly, as Part I and Part II examinations are conducted by the colleges on behalf of the University, the disciplinary power of the Results Inquiry Committee should extend to all work connected with these examinations.

(9) Grace marks should be awarded to such candidates as have failed in Part III of the Examination in one subject only by not more than 10 per cent. of the total marks in that subject but have obtained 50 per cent. marks in the aggregate of all subjects. In the case of such candidates the results of Part I and Part II of the Examination should not be considered. For each mark awarded to the candidate, 5 marks shall be deducted from his aggregate and his division should be determined by the marks left to him after this deduction.

(10) The Committee does not consider a supplementary examination for compartmental candidates either desirable or necessary.

3—Appointment of University Examiners

94. The minimum qualifications for the examiners should be increased and Statute 9 amended as follows:—“No person shall be eligible for appointment as examiner for a First Degree examination unless (a) he has at least five years experience of teaching or examining for an examination of equal or higher standard, or (b) he has at least three years experience of teaching or examining for a post-graduate examination. These conditions shall apply to external as well as to internal examiners but not to examiners in Law. For examiners in Law five years' teaching experience or seven years' professional standing shall be deemed necessary. An exception may be made in the case of experts or others possessing special knowledge of the subject concerned.

95. Out of persons so qualified, the Board of Studies shall submit to the Academic Council two Panels of examiners, one internal and the other external, indicating the subject and the papers which the persons on the Panel are competent to examine. The Academic Council shall finally sanction the Panel. The Panel shall be revised every year by the Academic Council after considering the recommendations of the Boards of Studies.

96. The Vice-Chancellor shall, after consulting the Conveners of the Board of Studies, recommend to the Academic Council the names of the internal examiners and to the Executive Council the names of the external examiners for appointment every year by rotation from among the members of the Panel, but the Vice-Chancellor shall have power to pass over individuals in the panel for reasons which should be recorded in writing and placed before the bodies concerned at the next meeting.

97. At least half the examiners in the papers for every subject at every University examination shall be external examiners.

98. The list of examiners appointed by the Councils shall be recorded in the Minutes of the University after the publication of the result.

99. No internal or external examiner shall be given more than 400 answer-books to examine.

100. No teacher of an affiliated college may accept remunerative examination work from any other University or examining authority without the permission of the Principal of his college.

101. The tabulators shall be appointed by the Executive Council on the recommendation of the Vice-Chancellor and paid at the rates fixed by the Executive Council.

102. There shall be no payment to persons in the service of the affiliated colleges for the examination work of the University.

103. The appointment of moderators is a matter for Academic Regulations. There should at present, be no moderation of question-papers but a paragraph should be added to the letter of instructions to the examiners informing them that as there are no arrangements for moderation, the University expects them to do their duty with the utmost care.

4—Examinations Committee

104. The Examinations Committee is at present constituted under Section 18(k) of the Act and a Statute passed by the Senate on 22nd October, 1927, and amended by the Senate on four subsequent occasions. It consists of the Vice-Chancellor, the Registrar, the Tabulators and two members of Executive Council appointed by that Council on the recommendation of the Vice-Chancellor.

105. The Committee recommends that the Examinations Committee be constituted by Statute as heretofore, but that the Executive Council be given a free hand in the appointment of the members who may or may not be members of the Executive Council itself. The Executive Council (by Regulations) should be allowed to define the Examination Committee's sphere of work.

The functions of the Examinations Committee should be : (a) Publication of results ; (b) Disciplinary action against candidates using unfair means, reported to it by the Registrar ; (c) Action necessary in the case of results of Parts I and II examinations ; (d) All matters appertaining to the conduct of examinations ; (e) Such other duties as may be assigned to it by the Regulations or by resolutions of the Executive Council.

5—*Inquiry Committee for Examinations*

106. It is recommended that a Committee of Inquiry for Examinations be constituted by Statute and the Executive Council be empowered to add to its functions by rules framed by the Vice-Chancellor and assented to by the Executive Council. The Committee should consist of :—(a) the Director of Public Instruction, *ex-officio*, or an officer of the Education Department nominated by him ; (b) a public man of standing and (c) a distinguished lawyer or judge. The Inquiry Committee should have the power to take cognizance of all cases of misconduct connected with the conduct of examinations placed before it by the Vice-Chancellor, the Executive Council or the Academic Council. The order of the Executive Council framed on the findings of the Committee in respect of the misconduct of any employee of a college shall be given effect to by the Managing Committee or other competent authority with the least possible delay. In case of failure to do so, the college concerned will be liable to withdrawal of affiliation. The recommendations of the Inquiry Committee, along with a note on the action taken thereon by the Executive Council, should be placed before the Senate at its next meeting. The Committee should be constituted for a period of three years along with the other University bodies ; the two members who are not *ex-officio* members should be appointed by the Executive Council out of a panel recommended by the Vice-Chancellor.

(VI)—*Non-Regular Candidates*

1—*Teachers, Inspecting Officers and Women Candidates*

107. Non-regular students of these categories are allowed to appear for the examinations of the University under conditions prescribed by the Statute and Regulations. The provisions prescribed seem to be satisfactory.

2—*Private candidates*

108. The Committee is strongly of opinion that, under conditions to be prescribed by the Statutes and Regulations, private candidates should be allowed to appear for the Arts and Commerce alternatives of the First Degree Examination on the ground that they are too poor to join a college or are in the service of the Government or a private employer. The question was raised by Mr. Desanges in the United Provinces Council in 1926 but his amendment was thrown out by 25 votes against 19, the Swarajist members being absent. No dangers need be apprehended from the experiment. The number of such candidates will not be large—about 10 per cent. or 12 per cent. of the regular candidates. Admissions to our colleges will not be affected ; for the private candidates will be from classes of boys who are not in a position to join the colleges. Almost all Intermediate Boards in India allow private candidates to sit for their examinations, but the admissions to our High Schools and Intermediate Colleges have not been affected. On the other hand, our recommendations will give relief to a number of really deserving young men.

109. It is recommended that the following words be added as sub-clause (8) of Section 4(2) :

“(d) have carried on private study under conditions laid down by Statute while residing in this Province.”

110. It is suggested that the following provisions be incorporated in the First Statutes :

(1) No person shall be eligible for admission to an examination of the University except on the ground that he has been in the service of Govern-

ment or of a private employer during the year preceding the submission of his application or because he is unable to join a University College on account of his poverty.

(2) No application for admission to Part I of the First Degree Examination shall be considered unless it is certified by the Inspector of Schools of the Circle in which the applicant habitually resides or to the other parts of the examination unless certified by the Principal of the college to which he has been assigned.

(3) Such private candidates shall only be allowed to appear for the Arts and Commerce alternatives of the First Degree Examination.

(4) No student who has attended a regular course of more than two months at a University College in an academic year shall be allowed to appear as a private candidate in any examination that year.

(5) No student who has passed either Part I or Part II examination as a regular candidate shall be allowed to proceed to a higher examination as a private candidate unless the Principal of his college certifies that (a) his character has been satisfactory and that (b) he is unable to continue his studies as a regular student on account of poverty or service.

3—*Assignment of Non-Regular Candidates to the University College*

111. The following provisions are recommended for incorporation in the First Statute :

(1) The first Degree Certificate granted to a successful candidate shall name the college of which he has been a regular student or, in the alternative, state whether he has appeared in the examination as a teacher, an inspecting officer, a woman candidate or a private candidate.

(2) All non-regular candidates who wish to appear at Part I of the First Degree Examination shall apply to the Registrar not later than the last date of October in the year preceding the examination in which they wish to appear, and the Registrar shall, in accordance with the directions of the Executive Council, assign them to a University College if the Council grants their application : provided that, so far as possible, no non-regular candidate shall be assigned to a college which does not provide instruction in the subject which the candidate proposes to study. A non-regular candidate shall be under the disciplinary control of the Principal of the college to which he has been assigned according to the provisions of Statute 7 of Chapter XX.

(3) Non-regular candidates shall be examined in Part I and Part II examinations by the University College to which they have been assigned and their names shall be sent up for Part III to the University by the Principal of the college in the same manner as the names of regular candidates.

(4) Non-regular or assigned students shall pay the same fee for Part III examination to the University as regular candidates ; this fee shall be realized from them by the college to which they have been assigned and forwarded to the Registrar in accordance with the Statutes and Regulations.

(5) A non-regular candidate who has been assigned to a college may be allowed to migrate to another college by the Executive Council on the recommendation of the Principals concerned.

(6) Non-regular candidates eligible for appearing at the examinations of the University shall be placed in the following categories in order of precedence : Teachers, Inspecting officers, Women and Private Candidates. The Executive Council may, on the recommendation of the Principal,

allow a non-regular candidate, who has been studying under one category, to continue his studies in another category : provided that a non-regular candidate shall, for the purpose of his First Degree Examination Certificate, be deemed to belong to the lowest category in which he has passed any Part of the examination.

(7) A non-regular student may be allowed to attend lectures by the Principal of the college to which he has been assigned on the payment of such fee as the Regulations may prescribe.

(8) Supplementary Regulations concerning non-regular students shall be made by the University.

It has been already recommended in the General Report that non-regular candidates of all categories, and such non-regular candidates as are eligible for post-graduate examinations (except the Doctorate) should be allowed to sit for the examinations of the United Provinces University only.

GOVERNMENT OF THE UNITED PROVINCES

No. U.O. 646/XVI—I.T.

PUBLIC HEALTH DEPARTMENT

RESOLUTION

20th November, 1941

READ—

The report of the Lucknow Improvement Trust Inquiry Committee appointed in Government Resolution no. 5488(3)/XI-66, dated the 5th October, 1938, to inquire into and report regarding the serious financial and other irregularities in the administration of the Lucknow Improvement Trust.

OBSERVATIONS—

THE recommendations of the Town Improvement Committee appointed by Government under the chairmanship of Mr. J. F. Sale, I.C.S., in 1935 to inquire into the finances, programme of work and other matters relating to improvement Trusts were under the consideration of Government. In the meantime, however, public dissatisfaction with the administration of Lucknow Improvement Trust grew in volume and was brought to the notice of Government by complaints from private individuals, agitation in the press and in the legislature. Government therefore appointed in 1938 an Enquiry Committee consisting of the following:

- (1) Rai Bahadur Babu Brijendra Swarup, B.A., LL.B. (*Chairman*).
- (2) Mr. Wajahat Hussain, I.C.S., Secretary to Government, Public Works Department (*Member*).
- (3) Mr. R. N. Dey, I.C.S., who was also to act as Secretary of the Committee. On his appointment as Secretary to Government, Local Self-Government Branch, he was replaced by Mr. G. A. Faruqi, I.C.S., as Secretary-cum-member of the Committee.

2. The final terms of reference of Committee were as follows:

(a) To inquire into the serious financial and other irregularities in the administration of the Improvement Trust, Lucknow (including the management of Government Nazul), or serious defects in the conception or execution of particular schemes during the last ten years that may have come to light.

(b) To inquire into specific complaints dealing with the same period, in those relating to—

- (i) management of the Marris Market;
- (ii) alleged delay and neglect in the execution of Civil Court decrees;
- (iii) alleged failure to provide roads, drains, mains, sewers, light-posts, before requiring the allottees of plots to put up houses within a specified time;
- (iv) conversion of lease-hold rights into free-hold and demand of excessive prices for such conversion.

3. The Committee issued a questionnaire and examined witnesses. Its report was finally received by Government on 17th March, 1941. It will be published in full for public information.

4. The Committee has in its report pointed out many serious irregularities in the administration of the Trust resulting in financial loss to it, e.g.—

- (i) The Judges' verdict in the Botting Embezzlement case was that it was due to neglect of rules for the maintenance of accounts and failure to take proper action even when serious defects were discovered.

Y:811:7.252CL N+e

41

16

(ii) The Trust has already suffered a loss of Rs.33,000 and is likely to suffer further loss in the working of the Marris Market. Dues were not realized from contractors and security was not taken from them. They were allowed possession without the execution of a lease and a suit was filed about three years late which naturally could succeed only partially.

(iii) The annual average collections of Nazul dues in the last ten years has been less than 50 per cent. of the annual demand. Rs.2,22,785 have been remitted from Nazul dues during that period.

(iv) Suits were not filed and action for the execution of decrees not taken in time.

(v) The demand and collection registers, rent rolls, *ghasra* and site disposal registers were incomplete.

(vi) The land register of the trans-Gomti civil lines area was so confused that it was sometimes difficult to distinguish Nazul land from Trust property.

(vii) Land was leased to members of the Trust and to relatives of Trust officials by private negotiation.

(viii) The principle of giving only one plot to one person was in practice not always followed.

(ix) Concessions in premium were allowed to certain persons even after the terms of the lease had been finally settled.

(x) In several cases Trust employees found guilty of serious misconduct were inadequately punished.

(xi) Sometimes original tenders were altered without the transmission of the Trust. The Trust failed to take any action against those responsible for these unauthorized inter-
polations.

(xii) Sometimes concessions which had not been advertised were allowed to contractors after their tenders had been finally accepted.

(xiii) A sum of Rs.6,000 was spent by the Trust on the improvement of the Oudh Sports Association ground, but the work done was quite unsatisfactory.

(xiv) In several cases leases were renewed and rents enhanced long after the due date.

(xv) No satisfactory arrangement for drainage, sewerage and light was made by the Trust in the Barudkhana, Badshahbagh, Charbagh and other development schemes. The Trust also failed to get owners of land to build houses within the prescribed time.

4. The collection of the dues both of the Trust and Nazul has been very lax. The average annual collections of Nazul dues in the last ten years has been less than 50 per cent. of the annual demand, and large amounts have had to be remitted as irrecoverable. The rent rolls and demand and collection registers were all found in disorder and palpably incorrect in several respects. Litigation for the realization of Trust dues showed equal laxity. As a rule, leases and contracts both for Nazul and Trust shops and buildings were given to persons without any inquiry into their financial status and credit and without taking security from them. In some cases dues were allowed to mount up for long periods, sometimes for years before a suit was filed and even when decrees were obtained, the Trust failed to execute them with vigour and promptitude, with the result that some of the decrees became time-barred while in others nothing could be realized.

5. Government is particularly interested in the administration of the Trust to whom valuable Nazul property has been entrusted for management; the annual income from which amounts to about Rs. 2½ lakhs per year, and from which the Trust gets a contribution of Rs. 40,000 per annum.

6. His Excellency the Governor has noted with regret that the administration of the Trust has been generally inefficient and unbusinesslike. It has involved the Trust in considerable financial loss a great deal of which could have been prevented by the exercise of ordinary care and the observance of elementary financial rules. In addition there are considerable arrears of work in the Trust Office. His Excellency the Governor has already issued orders that the Trust should, without delay take up the task of setting its house in order.

7. The Governor has further decided that (1) in order to prevent financial irregularities the accounts of all the three Trusts should be subjected to a concurrent instead of a test audit, and (2) in future schemes of all trusts should be scrutinized and reported upon by the Superintending Engineer, Public Health Department, so far as drainage and sewerage are concerned before these are finally sanctioned.

8. His Excellency considers that the Trust cannot succeed in the most difficult task, with which it is now confronted of overhauling its affairs generally and reorganizing its office, unless it employs as its chief administrative officer a person of outstanding capacity and experience. He is also of the opinion that the present Executive Officer of the Trust far from fulfils these requirements. When the Trust appointed him as Executive Officer on 14th February, 1939, Government pointed out the impropriety of the step. On this the Trust agreed to reconsider the matter in the light of the findings of the Inquiry Committee. These leave no doubt that unless the Trust appoint to the post of its Executive Officer a first class officer there can be no hope of a radical improvement in the Trust administration, which is necessary both in the interests of the public and that of Nazul management.

9. His Excellency the Governor takes this opportunity of thanking the President, the members and Secretary of the Committee for presenting this report, the preparation of which must have involved the devotion of considerable time and trouble on their part.

ORDERS—Ordered that a copy of this resolution be forwarded to the Chairman and other members of the Lucknow Improvement Trust Inquiry Committee, to the Commissioners of the Lucknow and Allahabad divisions, to the Chairman of the Improvement Trust of Lucknow, the Chairman of the Lucknow Municipal Board, to the Superintending Engineer, Public Health Department, United Provinces, and to the Examiner, Local Fund Accounts, United Provinces.

Ordered also that a copy be published in the *United Provinces Gazette* for general information.

By order,
B. N. DEY,
Secretary to Government,
United Provinces.

Report of the Lucknow Improvement Trust Inquiry Committee, 1940

CHAPTER I

PRELIMINARY

Appoint-
ment of the
Committee.

The Committee was appointed in accordance with Government (Municipal Department) resolution No. 5483(2)/XI-66, dated the 5th October, 1938, which reads as follows:

"The finances, programme of work and other matters relating to Improvement Trusts generally were examined by the Town Improvement Trust Committee presided over by Mr. J. F. Sale, I.C.S., in 1935. The recommendations of this Committee were partly of a general character and partly individual to the various Trusts. Final decisions on some of them have not yet been taken owing mainly to the impending revision of the body of the law relating to Local Self-Government including the question of the desirability of retaining the Trusts as separate bodies. In the meantime, however, public dissatisfaction with the administration of the Lucknow Trust seems to be growing in volume and has been brought to the notice of Government by complaints from private individuals, agitation in the press and in the legislature. The Municipal Board of Lucknow has even adopted a resolution asking for the abolition of the Trusts. The time thus seems to be ripe for a sifting inquiry into the affairs of the Lucknow Trust. In the course of replies to certain questions the Hon'ble Premier informed the Legislative Assembly on 17th January, 1938, that the affairs of the Trust would be looked into. The Government have, accordingly appointed the following Committee for the said inquiry:

(1) Rai Bahadur Babu Brijendra Swarup, B.A., LL.B., M.L.C. (*Chairman*).

(2) Mr. Wajahat Hussain, I.C.S., Secretary to Government, Public Works Department.

(3) Mr. R. N. Dey, I.C.S., Officer on Special Duty in the Local Self-Government Branch.

Mr. Dey will also act as Secretary to the Committee. It will hold its meetings in Lucknow and will determine its own procedure."

Terms of
Reference.

2. The terms of reference to the Committee are:

(1) To inquire generally into the administration of the Town Improvement Trust, Lucknow (including the management of the Nazul), for the last ten years.

(2) To inquire into specific complaints dealing with the same period, e.g. those relating to—

(a) management of the Marris Market

(b) alleged delay and neglect in the execution of Civil Court decrees;

(c) alleged failure to provide roads, drains, mains, sewers, light-posts, before requiring the allottees of plots to put up houses within a specified time;

(d) conversion of leasehold rights into freehold rights and demand of excessive prices for such conversion;

(e) examination of various proposals and suggestions for the re-organization of the Trust Office and the staff, and to make recommendations relating to these matters.

3. The Committee may also make recommendations about any other matter with a view to enable the object which Government had in view when they set up the Trust to be achieved.

4. All concerned are requested to assist the Committee in its inquiry.

On 10th October, 1938, the Chairman of the Committee was requested to indicate the preliminary procedure to be adopted for the collection of material. The Chairman decided that the Secretary should collect such information and figures from the office of the Improvement Trust, Lucknow, as he considered relevant and necessary for the purpose of the inquiry, and should then call the Committee to consider the same. As desired by the Chairman, he was in the meantime supplied with the Trust Annual Reports and Audit Notes and also with copies of the press notes and complaints relating to the Trust affairs. The Chairman of the Lucknow Improvement Trust was asked on 1st November, 1938, to prepare and submit to the Committee certain statements in the form prescribed by the Secretary. Procedure.

On 30th November, 1938, the draft questionnaire as prepared by the Secretary was sent to the Chairman of the Committee for approval. The questionnaire as finally approved by the Chairman is fully set forth in Appendix A. It was published in the *United Provinces Gazette*, and in all the leading Newspapers (English, Hindi and Urdu) of Lucknow. Questionnaire.

Copies of the questionnaire were sent to various Housing Associations, members of the legislature residing in Lucknow, members of the Municipal Board, leading citizens of Lucknow, lessees and owners of property in the Trust areas. The last date for the submission of replies to the questionnaire was 15th January, 1939, but in response to the requests received from the public, it was extended to 31st January, 1939. The replies to the questionnaire were sent to the Chairman, Improvement Trust, Lucknow, for report. The reports were received from the Trust by the end of May, 1939, and the Trust's own reply to the questionnaire was received on 9th September, 1939.

Mr. Dey, the Secretary of the Committee, was in the meantime appointed Secretary of the Local Self-Government Department, and so the work was held over till the appointment of Mr. G. A. Faruqi, I.C.S. as Secretary-cum-member of the Committee on 25th July, 1939, by Government resolution no. 275(2)/XI—66-I.T., dated the 25th July, 1939. Change in the personnel of the Committee.

Mr. Faruqi inspected the Lucknow Improvement Trust office in September and October, 1939, and submitted a detailed report to the Committee on the number of files which came to his notice. Inspection of the Office.

The first meeting of the Committee was held on 27th November, 1939, to consider the inspection notes submitted by the Secretary, to select the witnesses to be examined by the Committee and to fix a date for local inspection. Curtailement in the terms of references.

The terms of references of the Committee were in the meantime modified by Government in G. O. no. 5492(1), dated the 22nd December, 1939, which read as follows:

"I am directed to inform you that Government is desirous that the Lucknow Improvement Trust Inquiry should complete its work as early as possible.

2. I am to add that with this end in view the following modifications should be made in the scope of the inquiry as laid down in Government resolution no. 5485(2)/XI—66-I.T., dated the 5th October, 1938:

(a) The first term of reference was a general inquiry into the administration of the Trust including the management of the Nazul for the last ten years. It is felt that this is too wide. Government, therefore, desire that this should be narrowed down so as to exclude a comprehensive review of the entire administration of the Trust or an examination of all the various schemes that the Trust had carried out, during this period, and be confined

to serious financial and other irregularities in the administration of the Trust (including the management of the Nazul) or serious defects in the conception or execution of particular schemes relating to this period that may have come to light so far.

(b) The subject of inquiry mentioned in sub-clause (e) of the second term of reference need not be gone into by the Committee. It is understood that Mr. Faruqi, the Secretary of your Committee, has already inspected the Trust office thoroughly. He should, therefore, note on such defects in the working of this office as he may have discovered and make suggestions for a proper re-organization of the Trust office and its staff. The note need not be gone into but the Committee may merely form an annexure to the report of the Committee.

(c) Paragraph 8 of the Government notification referred to above asks the Committee to make recommendations about any other matter to enable the fulfilment of the objects of the Trust. It is possible to include among these a detailed future programme of operations for the Trust. I am to ask that the Committee should not attempt to lay down such a programme in view of the time and labour this will involve and the fact that the quinquennial Committee appointed for every Trust will have to do this in any case.

Meetings.

The second meeting of the Committee was held on 4th January, 1940, to consider the Government Order referred to above, and to revise its programme of work in accordance with the same. The Committee also decided to curtail the number of witnesses to be examined by it. In its later meetings, the Committee examined a number of witnesses whose names are given in Appendix B.

The comments of the Improvement Trust on the statements of these witnesses were received on 9th May, 1940. Owing to the late receipt of the comments, the transfer of Mr. Faruqi, the Secretary of the Committee and due to Dr. Brijendra Swarup's unfortunate illness, the Committee could not meet again earlier than 29th July, 1940. On this occasion the Committee met to consider the notes prepared by the Secretary on various matters and to examine the files referred to by him, with the help of Officers of the Lucknow Improvement Trust. The last meeting of the Committee was held on 30th July, 1940, when the Committee recorded its conclusions and asked the Secretary to draft the report.

APPENDIX A

QUESTIONNAIRE

1. Do you think that the administration of the Lucknow Improvement Trust of the past ten years has been satisfactory? If not, in what respects, in your view, the administration was dissatisfactory and what were, in your opinion, the causes which led to it?
2. Do you know of any concrete instances of gross negligence, incompetence or dishonesty in the administration of the Trust within the past ten years? If so, please give full facts and details of such instances?
3. Do you think that the schemes introduced by the Trust within the past ten years have been carried out satisfactorily? If not, what criticisms have to offer against them and what suggestions have you to make to improve the execution of such schemes in the future?
4. (a) Do you think that the schemes so far introduced by the Trust tend to the fulfilment of the object for which the Trust was set up? If not, what criticisms have you to offer against any of those schemes and what suggestions would you make to enable the Trust to achieve greater success in the achievement of that object?
(b) What schemes would you particularly recommend for the next five years for achieving the desired result?

5. Do you think that the Trust has taken adequate measures for rehousing those whose houses have been acquired or demolished in connexion with the improvement schemes? If not, can you give any concrete instances of the Trust's failure in this direction?

6. (a) Do you think that the Trust has taken adequate measures for internal slum clearance? If not, what particular suggestions would you offer to enable the Trust to achieve greater success in this direction?

(b) Which particular slums and congested areas should, in your opinion, be cleared by the Trust in the next five years?

(c) In what particular localities should the Trust introduce schemes to provide for the population dehousing as a result of the clearance of the slums?

7. (a) Do you think that the Trust has been successful in providing suitable dwelling houses (a) for workmen and poor classes and (b) for middle classes? If not, what suggestions would you offer to enable the Trust to achieve greater success in this direction?

(b) Do you favour the suggestion that the Trust should lease out lands to capitalists for building suitable quarters for either of the two classes mentioned above? If so, on what terms and conditions?

(c) Do you think it would be desirable for the Trust to itself construct quarters for these two classes to be let out to them on a hire-purchase system? If so, on what terms and conditions? If you do not approve of any of these suggestions, what other practical suggestions would you offer in this respect?

8. Do you think that the Trust has generally failed to provide roads, drains, mains, sewers, light-posts, etc., before requiring the purchasers or lessees of plots to put up buildings within a specified time? If so, please give specific instances of the Trust's failure in this direction? Did such failure on the part of the Trust cause any undue hardship to the allottees of plots? If so, in what respects? Do you favour the suggestion that the Trust should not sell or lease out lands for building purposes, before roads have been duly levelled, metalled, sewered and drained and suitable arrangements have been made for the supply of water, lighting the streets and sanitary conveniences? Do you think that the Trust is not justified in insisting on putting up buildings before the above amenities have been provided? Have you any other suggestions to make as to how the problem of providing such amenities in the schemes, introduced by the Trust, is to be tackled in the future?

9. Do you think that there is a keen and widespread demand for the conversion into free-hold rights of the existing lease-hold rights in Trust lands? If so, do you favour the suggestion that the policy of such conversion should generally be adopted by the Trust forthwith. If so, why? Would you prefer continuance of lease-hold rights in any cases? If so, in which cases?

10. Do you think that the Trust has demanded excessive or unreasonable prices for conversion of lease-hold rights into free-hold rights? If so, can you give any concrete instances in support of your allegation in this respect? What suggestions have to offer for fixing a reasonable price for such conversion?

11. Do you favour the suggestion that in the future the Trust should generally sell free-hold rights? Should the system of leasing lands be abandoned altogether or should it be maintained in certain cases, and if so, in which cases?

12. Do you think that the management of the Nazul land by the Trust has been satisfactory? If not, in what respects was the management unsatisfactory and what were the causes of this? Do you know of any specific instances in which there has been unfairness or partiality on the part of the Trust in the matter of leasing out Nazul lands? Do you think the rates and premiums, on which the Trust has been generally leasing out Nazul lands, have been excessive? If so, please give concrete instances. Do you think that it is desirable for the Trust to fix uniform rates in different localities for leasing out only to those who require lands to put up houses for their own residence and not to the capitalists who take lands for purposes of investments?

13. Have there been numerous cases of encroachment of Nazul lands during the Trust management? Has the Trust been able to successfully deal with such cases? If not, what are, in your opinion, the causes for the Trust's failure in this direction?

14. What practical suggestions have you to offer to put the management of Nazul lands on a better footing?

15. Do you think that the management of the Marris Market by the Improvement Trust has been unsatisfactory? If so, in what respects? Do you think that the Trust authorities or any of them have been guilty of dishonesty or gross neglect in the management of the Marris Market, resulting in heavy losses to the Trust? If so, please give specific instances with details in support of your reply. What practical suggestions have you to offer to place the management of the Marris Market on a more satisfactory basis?

16. Do you think that the Trust officials have been grossly negligent in the matter of executing leases, realizing rents, filing suits for recovery of Trust dues, and executing Civil Court decrees, resulting in heavy losses to the Trust? If so, please give specific instances of the same with full details.

17. Have you any special knowledge relating to the Trust office and its staff which would be useful in considering the question of its re-organization? If so, have you any concrete proposals and suggestions to offer for this purpose?

18. Do you have any special knowledge about any other matter, not comprised in the above questions, which might reveal defects in the administration of the Trust during the past ten years? Have you to make any practical suggestions or recommendations other than those comprised in your replies to the above questions, with a view to improving the administration of the Trust and achieving the object for which the Trust was set up?

APPENDIX B

NAMES OF THE WITNESSES EXAMINED

- (1) A representative of the United Provinces Civil Secretariat Association (Mr. K. F. Srivastava).
- (2) Secretary, Charbagh House-Owners' Association (Rail Sahib Atma Ram Jain).
- (3) Dr. V. Nath, M.B., B.S.
- (4) Rev. J. N. Mukand.
- (5) Babu Mahadev Prasad.
- (6) Mr. Gulam Hasan Butt.
- (7) Director of Public Health, United Provinces.
- (8) Superintending Engineer, Public Health Department.
- (9) Chairman, Municipal Board, Lucknow (Chaudhuri Khaliquz-zama Saheb).

CHAPTER II

MANAGEMENT OF THE MARRIS MARKET

There was a volume of public criticism and adverse comments against the management of the Marris Market, and so we have thought fit to deal with this matter in greater detail devoting a separate chapter to it.

The facts as regards the Marris Market are as follows :

The Trust decided some time about the middle of 1925 to leave out the Marris Market, but instead of advertising its proposal to lease out the market and inviting tenders which is the usual procedure in such cases, the Trust accepted in a hurry the solitary offer of Messrs. Chunnihal Jagannath without making any inquiry as to their financial condition. The offer of Messrs. Chunnihal Jagannath was received on 11th October, 1925 and on 20th October, 1925, the Trust sanctioned the lease in their favour without asking them to furnish any security. We were surprised to find that even before the offer of Messrs. Chunnihal Jagannath was formally placed before the Trust and accepted by it, they

were permitted to have the electric fittings installed in the market building in anticipation of the acceptance of their offer by the Trust. This indicates that the sanction of the Trust was taken to be only a formal matter and a foregone conclusion.

The lease of the market as sanctioned by the Trust was given to Messrs. Chunnilal Jagannath for six years beginning from 28th October, 1925, on the graded scale of rent as given below :

Rs.4,500 for the 1st year,
Rs.5,500 for the 2nd year,
Rs.5,830 for the 3rd year,
Rs.6,180 for the 4th year,
Rs.6,550 for the 5th year,
Rs.6,943 for the 6th year.

The annual rent was recoverable in quarterly instalments payable in advance on 1st November, 1st February, 1st May and 1st August of each year; but although no security was taken from the lessees and continual and persistent defaults were made by them in the payment of rents, no effective and practical steps were taken by the Trust to recover arrears of rents with the result that not a single pie was realized from the lessees on account of rent for the period of five years they remained in possession of the market.

The greatest mistake that was committed by the Trust in this matter was that the lessees were not required to furnish any security for the due fulfilment of their part of the contract of lease and that they were put in actual possession of the market without a duly executed and registered lease as required by law and permitted to continue in possession of the market for such a long period as five years in spite of deliberate and persistent default on their part in the payment of rents. The facts found on inquiry disclosed that there was gross negligence and extreme indifference on the part of the Trust officials in the matter of the execution and registration of the lease-deed as also in regard to the realization of rents. The lease was sanctioned by the Trust on 20th October, 1925, but even the draft lease was not ready until the end of February, 1926, and this draft lease was signed by the lessees only in April, 1927. The lessees were then asked to pay the cost of the stamp-paper required for the execution of the lease, but they expressed their inability to pay the stamp duty and other charges for the execution of the lease on the ground that the results from the market had been most disappointing. This clearly indicated that the lessees were in financial difficulties and not in a mood to pay anything to the Trust, but it is deplorable that even after knowing all this, the officials of the Trust were as indifferent in the matter as they were before and they took no steps for ejecting the lessees by terminating the lease for failure on their part to execute and register the lease, nor were the lessees even then required to furnish an adequate security for the payment of rents. On the contrary, the Trust paid the money for the purchase of stamp-paper from its funds, although such duty was legally payable by the lessees. The stamp-paper was purchased in August, 1927, but the stamped deed was not signed by the Chairman of the Improvement Trust till 11th November, 1927, when it was sent to the lessees for their signatures. The lessees, however, evaded execution of the lease for a long time and ultimately they declined to execute it and get it registered with the result that the suit had to be filed against them on 21st December, 1927 (i.e. more than two years after possession over the market had been delivered to them), for the specific performance of the contract of lease and also for the recovery of the arrears of rents, which had become due up to the date of the institution of the suit. For more than two years which elapsed between the delivery of possession to the lessees and the filing of the abovementioned suit all that the Trust practically did was to send five reminders to the lessees and an equal number of visits were paid to them by the Circle Overseer.

The suit filed by the Trust was decreed by the Court of first instance on 28th September, 1928, but on appeal the Hon'ble the Chief Court disallowed the prayer for the specific performance of the contract due to the defect of non-registration and held that in the absence of a registered lease the Trust was not entitled to enforce the terms of the con-

tract but was entitled only to recover damages for the use and occupation of the market; and so for ascertaining the amount of damages payable to the Trust the Chief Court remanded the case to the trial court for the determination of an issue as to the actual profits earned by the lessees from the market from 28th October, 1925, the date when the lessees entered into possession of the market to 25th September, 1929, when the judgment was delivered by the Chief Court. Ultimately on the basis of the finding of the trial court on the said issue, a decree for Rs.6,972 was passed by the Chief Court on 1st May, 1930, in favour of the Trust against the lessees. This sum of Rs.6,972 was awarded to the Trust as damages for the use and occupation of the market by the lessees up to 25th September, 1929, as against the sum of Rs.22,010 which the Trust was entitled to recover in accordance with the terms of the lease for the said period. Besides this, the Trust must have incurred expenses amounting to Rs.2,000 to Rs.3,000 in this litigation which sum was also lost to the Trust as the Chief Court made no order as to costs.

It is to be regretted that no action was taken by the Trust either at the time of instituting the suit or even after the decree was passed by the Court of first instance to secure the Trust against any possible attempt on the part of the lessees to defeat the execution of the decree that may finally be passed in the suit; but on the other hand there was an inordinate delay in executing the decree. The case was finally decided by the Chief Court on 1st May, 1930, but more than three months afterwards copies of judgment and decree were obtained, and the application for the execution of the decree was made only on 22nd May, 1931, i.e., one full year and three weeks after the Chief Court had passed the decree and so it was a matter of no surprise that when the Trust proceeded to execute the decree in 1931 it was discovered that whatever property the lessees owned had already passed out of their hands. The three shops in Aminabad belonging to them, which were already heavily encumbered had been sold by them for Rs.55,000 in November, 1929, while the two houses situated in Beronikhandak and Amanganj respectively were auctioned in satisfaction of an income-tax decree. In the meanwhile the lessees unperturbed by the existence of a decree against them and taking fullest advantage of the generous attitude of the Trust towards them continued to occupy the market without paying a single pie on account of rent to the Trust till 26th September, 1930. For this subsequent period, viz., from 26th September, 1929 to 26th September, 1930, the lessees were, in accordance with the terms of the lease, liable to pay Rs.6,550 as rent but in view of the judgment of the Chief Court in the abovementioned suit, the Trust could have claimed only damages amounting to about Rs.4,500 for the use and occupation of the market. The Trust, however, decided not to bring any suit for the recovery of these dues for the reason that the lessees were practically insolvent and there was no prospect of recovering anything from them. Throughout this subsequent period also, the Trust continued to supply water and provide conservancy service to the lessees although not a single pie was realized from them on account of rent. The Trust spent altogether a sum of Rs.3,454-9-7 in providing these amenities to the lessees during the whole period of five years during which the lessees remained in possession of the market but failed to realize even a fraction of this amount also from the lessees. The sum which the Trust had spent under this head up to the date of the institution of the abovementioned suit ought to have been claimed in that suit, but this was not done with the result that the claim for it not only became time-barred but on account of the omission to include it in the said suit it became also barred by Order II, rule (2) of the Civil Procedure Code.

The total loss suffered by the Trust on this transaction amounted to about Rs.35,000 as detailed below:

Rs.28,560 loss on account of non-recovery of rents.

Rs.3,454-9 the amount of money spent by the Trust on account of water and house taxes, pay of sweeper, and rent of meter, etc.

Rs.2,000 to Rs.3,000 cost incurred in the litigation.

In this connexion it may also be mentioned that after the final decision of the Chief Court, the amount of Rs.15,037-7 which was disallowed by the said Court, was written off by the then Executive Officer or his

own responsibility without referring the matter to the Trust and the sanction of the Trust was obtained only when after a couple of years or so the Auditors raised objections to it. We are of opinion that the Executive Officer should not have taken the responsibility on himself of writing off such a big sum but he should have obtained the sanction of the Trust before doing so.

CHAPTER III

CONVERSION OF LEASE-HOLD RIGHTS INTO FREE-HOLD RIGHTS

Part I—History

The policy of the Trust in connexion with lease-hold and free-hold rights was changed several times, in the last ten years. Prior to 1925 there were no rules according to which applications for conversion of lease-hold rights into free-hold rights were dealt with. An attempt was made to frame rules on the subject in 1925, and ultimately, by its resolution no. 4630, dated the 15th May (file no. 322/9), the Trust adopted a set of rules based on the principle of valuation of real property.

These rules remained in force till 1930 when Mr. Nihal Singh submitted a note (Appendix A), suggesting that the policy of the Trust should be different in different schemes and accord to the benefits accruing to it. He further suggested that conversion should be freely allowed in certain schemes while it should not be allowed in certain others. The Trust approved this note.

In 1935, Mr. Ainuddin put up a note (Appendix B) suggesting that outright sale of land and conversion of lease-hold rights into free-hold rights should be encouraged. He maintained that under his scheme the necessity of maintaining an expensive collection staff and the risk of losing Trust money on irrecoverable arrears would be eliminated. He stated that the collection staff of the Trust was grossly negligent and highly expensive and that 50 per cent. of the demand for rent was in arrears. The Trust approved this proposal, but no decision was taken as to the method of calculating the cost of conversion.

The matter was taken up again by Mr. Sucha Singh, and the Trust appointed a sub-committee to deal with it. The sub-committee, however, did not come to any decision and it was ultimately abolished in February, 1938. The matter came again before the Trust at a special meeting, when it was decided that the average rates at which Trust land had been sold in different localities within the last ten years should be worked out. The final decision taken by the Trust in this matter which is still in force is given in the following resolution:

Resolved that the Trust approves of the policy of converting lease-hold into free-hold both in respect of Trust and Nazul lands and that in case of Nazul lands Government sanction be applied for. As regards the rate of conversion each case be decided on its merits.

Part II—Comments and conclusions

Conversion of lease-hold rights into free-hold rights has been allowed by the Trust with certain limitations at all times, but the policy has not been uniform; and even rules which have been framed on the subject have not been followed consistently in all cases.

We examined 24 cases of conversion of lease-hold rights into free-hold rights. We are not satisfied that the cases of Dr. Baharsi Das, Messrs. A. P. Sen and H. K. Ghosh, Dr. Brijmohan Gupta, Mr. Triloki Nath Bhargava, Mr. J. F. Rosher, Mr. Dwarka Nath Chak, Mr. Ghazanfarullah Khan, Lala Ram Prasad, Mr. Gur Bakhsh Singh, Mr. John Jackson, Dr. Vyas and Mr. Ghulam Hasan Butt were dealt with according to any uniform principle.

We also note that owing to the frequent changes of policy discrimination seems to have crept in, in certain cases. We are, however, of opinion that outright sale of land and conversion of lease-hold rights into free-hold rights should not, as a rule, be allowed. The main objection to selling land outright is that the Trust loses all control over it, as in the case of an outright sale all conditions inserted in the deed of transfer restricting the free enjoyment of the land sold are absolutely void and are often disregarded by the purchasers and the Trust, which imposes

such limitations as a precaution against the land being too much built over or used for a purpose other than the one for which the land was sold, finds itself in a helpless position. We therefore suggest that land should be let out on lease for long terms not exceeding 999 years, at a nominal rent, and on payment of premium equivalent to the market value of the land at the time it is let out. In the case of people belonging to lower middle and working classes premium may be made payable in instalments suitable to their means. Steps may also be taken to change the conditions of the existing lease, whenever desired by the lessees, so as to bring them in line with our suggestion.

The witnesses who have been examined have failed to make out a case for outright sale of land or conversion of leasehold rights into freehold rights. They have put forward the argument that there is insecurity of tenure in the case of lease. They have also expressed the anxiety that the successors-in-interest of lessees may not be able to meet the recurring high charges of ground rent and may thus forfeit even the building constructed by their predecessors-in-interest at an enormous cost. To meet these objections, we have proposed that rent should be nominal and the lease should be for a very long period, e.g. 999 years.

APPENDIX A

I give below my proposals for the disposal of land in Trust areas in the future. I must point out, however, that if these proposals are accepted by the Trustees the policy set forth therein cannot be looked upon as a hard and fast one for the reason that we are governed by the recommendations of the Crosthwaite Committee and in order to fully carry out those recommendations it may become necessary to sell land which in my proposals I have suggested shall be leased. Such cases would be brought before the Trust for consideration when they arise.

Scheme no. 1, Husainganj—Only two small isolated plots remain to be disposed of. These should be sold by public auction.

The leases of six plots should not be converted as the rents are good and the leases provide for periodical enhancement.

Scheme no. 2, 5th section—There is actually only one plot for disposal, a small one of 274 square feet. This should be sold by public auction. There are no leases in this scheme.

The three strips of land on the alternative Chowk Road must not be lost sight of.

Scheme no. 3, Daliganj—So far no sales have taken place in this area and only three plots have been leased out of 102. The area has been undeveloped up till now and it is impossible to prophesy at this stage whether leasing or selling is the better policy. If development in the near future was likely, I would definitely recommend leasing, but there is nothing to show that early development is probable and it will be safer to first try a test auction of free-hold and then see whether leases on rents, based on the prices bid at that auction are readily taken up or not. If not, it will be obvious that selling outright will be the better policy in this area than leasing.

Scheme no. 5, Chowk Open Spaces—The plots available are situated on lanes and not approachable by vehicular traffic. This in itself makes their disposal by leases difficult because any houses built thereon will not be good letting propositions. Again in the Chowk the inhabitants are not of the class who go in for land except as outright owners. In the circumstances, the better policy will be to sell outright when any demand arises.

Scheme no. 6, Yehiaganj O. S.— Ditto. ditto.

Scheme no. 7, Industrial area—Here the established policy is to lease and I think we should continue this. As regards the terms for leases I find that they are given for a period of ninety years on an initial rate of Rs.200 per bigha per annum, the rent being enhanceable 50 per cent. every thirty years. I recommend that this be accepted as the minimum rate.

Scheme no. 9, Narhai—The plots adjoining the Parsi cemetery are likely to fetch much better prices by outright sale and I think that as the adjoining plots have already been sold we should sell the remainder.

As regards the larger plots fronting on to the Zoo, the two attempts to sell them have not given the results anticipated, and the policy here might be left for discussion when a demand arises.

Scheme no. 10 T. G. New Civil Lines—The values in this area depend on the efficiency of the bund now under construction. If this proves an effective safeguard against flood then land values are bound to rise. I therefore recommend a policy of leasing here. The present rents fixed by the Trust may be taken as the minima.

Scheme no. 11, Barudkhana—The policy here has been to sell throughout and there are only a few plots left and I recommend that the present policy should continue.

Scheme no. 12, Hazratganj Maqbara—The policy here has been to lease and I recommend continuance thereof. The leases should be auctioned as the land becomes available. I think that after the experience gained by the auction of the plots fronting on to Rutledge Road it will be better to fix rents for future leases based on the rents already obtained and auctioned the premia.

Scheme no. 13, Canning Street I
Scheme no. 40, Canning Street III
Scheme no. 45, Canning Street II } The present policy is to sell at

Rs.20,000 per bigha and to lease at Rs.100 per bigha per annum for building and Rs.50 per bigha per annum for garden leases. I think the policy should be continued but the rates should be the minimum.

Scheme no. 14, Nadan Mahal Road—The policy here has been to sell throughout and as only a few plots remain I recommend the continuance thereof.

Scheme no. 18, Sanitary Road, VI Section—This area has to be developed and we cannot decide on any policy without more data to go by. I think my recommendation for Daliganj should be adopted for this area.

Scheme no. 26, Mawaiya—The policy in this scheme varies with the situation of the plots. East of the Dayanand Anglo-Vedic School we have sold outright reserving certain special plots for auction which should, I think, be leased on the prices already received and the premia being auctioned. West of the Dayanand Anglo-Vedic School goes to the Kanyakubja Co-operative Society. South of the canal the policy has been to lease throughout except the shop sites on the old Cawnpore Road. For these latter I think we might try leasing on an initial rent of Rs.500 per bigha per annum and auction the premium. Two attempts to auction the free-hold of these plots have not been very successful. As regards the other land west of the Old Cawnpore Road, the leasing policy should continue on the present terms as the minima.

Scheme no. 28, Saadatganj—The policy here should be to lease as the demand arises. It is a market area with its possibilities in the future.

Scheme no. 34, Birhana—The policy here has already been settled by the Trust and has to be followed. As regards plots which are not on concession rates the policy should be to lease on a minimum initial rent at Rs.200 per bigha per annum.

Scheme no. 53, Kaliji Mandir Street—This area is on the same footing as Daliganj and I think a test auction should be tried before settling the policy.

26th February, 1930.

NIHAL SINGH.

Trust Resolution no. 6099, dated the 11th March, 1930.

Chairman's proposals, dated the 26th February, 1930, for the disposal of land in the Trust Scheme areas

Resolved that the proposals be approved.

APPENDIX B

Copy of note on the conversion of lease-hold rights into free-hold, wherever possible

The question of outright sale of Trust lands as well as that of conversion of lease-hold into free-hold rights of lands already disposed of by the Trust, has been raised before the Sale Committee by a number of witnesses that the finances of the Trust would improve a great deal if, instead of leasing land generally, the Trust adopted the policy of outright sale and conversion of existing lease-hold rights into free-hold, whenever such a demand was made by the present tenants. It is almost certain that the Committee will recommend such a course. On the assumption that this will be done, the programme placed before the Committee on behalf of the Trust is based upon the estimates of the cost of free-hold sales and conversions during the next five years. It is, therefore, necessary that the matter should be brought before the Trust with a view to obtain from the Trustees approval to the general policy of holding outright sales and of converting existing lease-hold rights where such a course would be advantageous to the Trust.

2. The position at present is that the capitalized value at twenty years' purchase of Trust land still undisposed of is Rs.9,42,000. The capitalized value of the land leased at twenty years' purchase is Rs.8,94,000. It is possible that the Trust may get more than twenty years' purchase value in some cases, while, on the other hand, it is also possible that in some cases even twenty years' purchase value may not be obtained. For this reason it is safer to make calculation on the basis of twenty years' purchase, and the figures given above may be accepted. My personal view is, and I have told the Committee also, that the policy of conversion of lease-hold rights into free-hold and of making outright sales would be profitable from several points of view. In the first place, the Trust has to retain a large staff for making collections. From past experience it is evident that this staff has grossly neglected its duty. Not only that the demand in most cases has not been realized, but in many cases it cannot be realized now as it is barred by limitations owing to the lack of energy or inability or unwillingness on the part of the Trust staff to discharge its duty. As the general policy of conversion materializes, it should be possible to do away with this staff gradually, or at any rate to reduce it and its inactivities to a minimum. In the second place, there is a great demand on the part of public for conversion of lease-hold into free-hold. The general feeling is that it is better to pay a large lump sum at once than to be harassed every year for generations by demands for rent. Thirdly, at present there is a great demand for land in Lucknow, and the Trust should take full advantage of it. This boom for land is not likely to continue indefinitely, and hence no time should be lost in acceding to the desire of the public for free-hold land. It is, therefore, for the consideration of the Trustees whether the present state of affairs should be allowed to continue or should the Trust try and get a big lump sum to enable it to go ahead with further much-needed improvements. In the present state of affairs, the position is that in almost 50 per cent. cases the demands remain unrealized, thereby causing to the Trust a loss not only of the principal, but also of the legal expenses incurred in securing decrees. In most cases legal action against the defaulter is not taken until he disappears. When a suit is filed and an *ex parte* decree has been obtained the execution proceedings start and end with the verdict that the judgment-debtor cannot be traced and hence the decretal amount should be written off. If my suggestion is accepted, the Trust will at least be in possession of hard cash to be utilized for more profitable and useful purposes than on senseless litigation which is slowly leading us to ruin. Presumably, free-hold rights were not granted in the past in order to secure a recurring income sufficient to continue the existence of the staff. I submit that the idea is fundamentally wrong, as no Improvement Trust can hope to exist for all times. A body like the Trust is brought into existence for a specific purpose. As soon as that purpose has been served there remains no necessity for the operative body to exist any longer. There is a stage for all improvements: when that stage has been reached, the activities of an Improvement Trust must necessarily merge in those of a Municipal Board which should naturally inherit all its predecessor's assets and liabilities. For this reason also the Trust would be well advised not to worry about the

future of individual members of the staff, but should look to the duty it owes to the public. It should be possible with ready money to make greater progress with the framing and execution of useful schemes than has hitherto been the case. It is not my intention that every land should be turned into free-hold at once or that the Trust should always stick to a twenty years' purchase. All that is required at present is general approval of the Trustees to the policy of outright sale and conversion of existing lease-hold rights into freehold wherever such a course would obviously be to the advantage of the Trust.

AINUDDIN,

Executive Officer Lucknow Improvement Trust.

13th December, 1935.

Trust Resolution no. 7256, dated the 19th December, 1935

The Executive Officer's note regarding conversion of lease-hold rights into free-hold, wherever possible, was considered.

Resolved that the Trust lands be sold in future on free-hold basis also and that the past assignments of lease-hold rights be converted into free-hold, wherever possible, at suitable rates.

CHAPTER IV

EMBEZZLEMENTS AND FINANCIAL LOSSES AND IRREGULARITIES.

The facts of the embezzlement case in which Mr. Botting was prosecuted are fully given in the judgment of the Sessions Judge who decided the case. The total loss caused to the Trust on account of these embezzlements amounted to Rs.28,231-8. The Judge in the course of his judgment observed that the series of embezzlements, which were committed in the course of four or five years, were made possible, because rules for the maintenance of accounts were not faithfully followed, and that even when serious mistakes were discovered, proper action in respect of them was not taken. This case has already come to the notice of the Government and a detailed discussion is unnecessary.

Botting
embezzle-
ment case.

We have already dealt with the Marris Market in Chapter II. In this case the Trust lost a sum of Rs.38,000. We understand that a further sum of Rs.10,000, representing the decreed arrears of rent for the period 1937-38, is not likely to be realized.

Marris
Market.

We have examined the statements of demands and collections of Trust and Nazul dues for a period of ten years commencing from 1928-29.

Collections
in general.

(a) *Nazul dues*—We observe that the annual average collection of Nazul dues has been less than 50 per cent. of the annual demand. The total sum which was remitted during the ten years amounted to Rs.2,22,784-9-4½, and the balance which remained unrealized at the close of the year 1938-39 was Rs.1,78,282-8-5, as against the arrears at the beginning of the year 1928-29, amounting to Rs.1,00,188-13-5. About six months after the submission of the first statement the Trust furnished another statement on 8th May, 1940, explaining in detail the remissions of Nazul and Trust dues. This statement was received so late that the Secretary could not get the opportunity to verify the figures. It has been claimed by the Trust that a sum of Rs.1,11,181 was refunded on account of rent, premium, and other charges in respect of certain sales and leases which were not ultimately sanctioned by the Trust. A sum of Rs.42,186-6-8½ was remitted under orders of Government on account of agricultural rents. We, however, note that during the ten years under review the arrears have gone on increasing, until at the close of the year 1938-39, the arrears were Rs.63,000 more than what they were at the beginning of the year 1928-29.

We noticed, when examining the statements that the unrealized balance at the close of a year was different from the arrears shown outstanding at the beginning of the following year.

The Trust has admitted the existence of many totalling and copying mistakes in the registers. Wrong demands were frequently entered, while legitimate demands were not recorded in the registers at the proper time.

(b) *Trust demand*—The position as regards the demand and collection of Trust dues is the same. The percentage of collection to demand in any one year has, however, been higher than that in the case of Nazul dues. The total remission of Trust dues during ten years amount to Rs.1,39,520-11-3. The improvement in the collection of Trust dues was, however, noticeable in 1938-39. Our remarks regarding variations between the closing balance of any one year and the opening balance of the following year, in the case of Nazul dues, apply equally to the Trust demands. These variations have been attributed by the Trust mainly to totalling mistakes, establishment of wrong demands, omission of legitimate demands for several years, and duplication of the same demand. Mistakes have been numerous in the case of 'Trans-Gomti New Civil Lines' accounts.

**Civil suits
and decrees.**

Statements of civil suits and decrees in respect of Trust and Nazul demands, and detailed notes on individual cases, were also examined.

Civil suits relating to the Trust—We find that 240 civil suits were filed by the Trust for arrears of rent and other demands during the period 1928-29 to 1937-38. In 126 cases, arrears had accumulated for periods varying between two to three years. In 22 cases, arrears related to periods varying between four to seven years and over.

In the case, *Lucknow Improvement Trust versus Bishambhar Dayal*, even though a decree had been obtained, the decree became time-barred due to the negligence of the then Trust Advocate. In some cases difficulties arose because a lease or contract had not been executed before delivery of possession. Delay of two to three years in filing suits and in taking proceedings for execution of decrees is a common feature. Trust in Makbara 'Amjad Ali Shah may be mentioned. The decreed claims in a few cases only could be realized, as many defaulters became traceless. In many cases decrees were obtained by the Trust against defaulters who ultimately got themselves declared insolvent. Some of the judgment-debtors had no property which could be attached and sold in satisfaction of decrees. Leniency was shown to persistent defaulters, with the result that large sums of money had to be remitted in the end. Leaving aside the case of Marris Market, the total amount of money which had to be remitted in respect of decreed claims during the period of last ten years works out to be Rs.12,398. The balance which is still outstanding is Rs.12,093.

Particularly bad cases are those of *Lucknow Improvement Trust versus Umrao Khan* and *Lucknow Improvement Trust versus Mohammad Husain*. In the first case, the tenant made no payment of rent for five years before a suit was filed against him and, in the second case, the extent of default was seven years. An equally bad case is that of *Lucknow Improvement Trust versus the widow of Qutubuddin*. She did not pay monthly house rent for a period of three years and one month before action was taken against her, and a sum of about Rs.900, which was due from her, was ultimately written off. It appears that no watch was kept over the staff responsible for making collections. Tenants of limited means were shown leniency, with the result that huge arrears got accumulated and it then became beyond the capacity of the tenants to pay them.

Suits relating to the Nazul—One hundred and twenty-nine suits were filed by the Trust on behalf of Nazul during the period 1928-29 to 1937-38. The general remarks which we have made in respect of Trust claims apply to the Nazul claims also. The amount of decreed claims which had to be remitted during the period of ten years was Rs.8,527. The balance of the decreed claims still outstanding is Rs.49,862.

One of the bad cases is that of Nishatganj Market, the contract of which was given to Wazir Mohammad on 18th March, 1926, for a period of one year for Rs.1,250. A sum of Rs.306-4 only was realized from him and the balance was written off, as he became an absconder. The Trust took about two years to file a suit and three years to execute the decree. The same man was involved in another case with the result that the Trust had ultimately to write off a further sum of Rs.3,840-4-6. In the case *Secretary of State versus Kallan Khan*, even though the claim was decreed by court, the decree became time-barred due to the negligence of the Nazul Vakil, who was responsible for a similar omission in a case relating to the Trust. In the case, *Secretary of State versus Sheo Nath* the rent fell in arrears for a period of ten years before action was taken against the defaulter. A case in which the Nazul sustained a substantial loss is that of the Valerios who wound up their

business some time ago. A sum of Rs.18,689-13 is still due from them and there is little chance of its recovery.

In the Annual Report on the working of the Lucknow Improvement Trust for the year ending the 31st March, 1940, it has been admitted that a sum of Rs.51,982-10, relating to Nazul decrees, and a sum of Rs.34,164-11-3, relating to Trust decrees are still outstanding. The Trust has further admitted in its report that a sum of Rs.56,698-3-3, could not be expeditiously realized, because some of the debtors had fraudulently transferred their property, while others had been declared insolvent or did not possess any property.

The facts given above are sufficient to prove that the Trust was lax in the collection of its dues. Very rarely an inquiry was made into the status and credit of persons to whom leases and contracts involving considerable sums were given. No security was demanded from these persons and prompt payment of rent was never insisted upon. Many defaulters found it a convenient way of evading payment of Trust and Nazul dues, to go to the Insolvency court and to have themselves declared insolvent. There were delays in filing suits and there were delays in executing decrees. Some decreed and certain undecreed claims got time-barred due to the negligence of the Trust officers. This state of affairs continued for a considerably long time without attracting the attention of the Trust and without any remedial measures having been taken by it.

A long list of other financial losses and irregularities can be found in the audit and inspection notes on the accounts of the Improvement Trust, Lucknow, for the ten years under inquiry. Serious defects were discovered in the accounts kept by the Improvement Trust and repeated warnings were given to it by the Auditors but they all remained unheeded. Collection of *tehbazari* dues and agricultural rents and management of Nazul and maintenance of demand and collection registers are some of the subjects on which the Auditors expressed themselves very strongly. The list of unsettled audit objections relating to previous years is a long one, and some of the objections relating to the year 1932-33 have not yet been settled. We reproduce below certain extracts relating to Lucknow Improvement Trust from the Annual Report on the working of the Local Audit Department in the United Provinces for the year 1938-39, compiled by the Examiner, Local Fund Accounts :

(1) At Lucknow . . . some important registers like registers of invoices and those of distribution of movable property and of approved estimates and sanctioned allotments were not maintained; the accounts of the rents of the Trans-Gomti Civil Lines scheme and of the public works were in great confusion and rather unreliable to some extent. The disposal of the audit note was also delayed by the . . . Lucknow Trust.

(2) The delay of over three years in giving possession of land and the execution of the leases in respect of certain plots disposed of under Trust resolution no. 6402 of January, 1932, caused a loss of rent amounting to Rs.521.

(3) Over Rs.28,000 were written off as irrecoverable on account of arrears of rents, purchase money, etc. on the ground, among others that they had become time-barred or that the defaulters were not traceable. The present arrangements for the collection of demands, which seemed to reflect a tendency for undue leniency in favour of some defaulters, could hardly be considered to be effective since over 21 per cent. of the total current and arrear rental demands remained outstanding at the close of the year under report.

(4) A sum of Rs.808 was paid to a contractor in connexion with the construction of a *bund* in a portion of the Trans-Gomti scheme as an emergent measure without proper scrutiny of his claims. The work was completed on 30th October, 1936. It was sanctioned by the Trust on 3rd July, 1937, and was shown to have been measured on the 26th *idem*. The measurements taken were more or less conjectural as the Trust Engineer remarked that it was not possible to check and verify the work at that stage. The preparation and passing of the estimate long after the completion of the work, the great delay in checking and measuring it and the omission to obtain detailed accounts from the contractor together with the necessary bills and receipts in support thereof, precluded the application of any effective check thereof in audit."

(b) *Trust demand*—The position as regards the demand and collection of Trust dues is the same. The percentage of collection to demand in any one year has, however, been higher than that in the case of Nazul dues. The total remission of Trust dues during ten years amount to Rs.1,39,520-11-3. The improvement in the collection of Trust dues was, however, noticeable in 1938-39. Our remarks regarding variations between the closing balance of any one year and the opening balance of the following year, in the case of Nazul dues, apply equally to the Trust demands. These variations have been attributed by the Trust mainly to totalling mistakes, establishment of wrong demands, omission of legitimate demands for several years, and duplication of the same demand. Mistakes have been numerous in the case of Trans-Gomti New Civil Lines' accounts.

Civil suits
and decrees.

Statements of civil suits and decrees in respect of Trust and Nazul demands, and detailed notes on individual cases, were also examined.

Civil suits relating to the Trust—We find that 240 civil suits were filed by the Trust for arrears of rent and other demands during the period 1928-29 to 1937-38. In 126 cases, arrears had accumulated for periods varying between two to three years. In 22 cases, arrears related to periods varying between four to seven years and over.

In the case, *Lucknow Improvement Trust versus Bishambhar Dayal*, even though a decree had been obtained, the decree became time-barred due to the negligence of the then Trust Advocate. In some cases difficulties arose because a lease or contract had not been executed before delivery of possession. Delay of two to three years in filing suits and in taking proceedings for execution of decrees is a common feature. Trust in Makbara 'Amjad Ali Shah may be mentioned. The decreed claims in a few cases only could be realized, as many defaulters became traceless. In many cases decrees were obtained by the Trust against defaulters who ultimately got themselves declared insolvent. Some of the judgment-debtors had no property which could be attached and sold in satisfaction of decrees. Leniency was shown to persistent defaulters, with the result that large sums of money had to be remitted in the end. Leaving aside the case of Marris Market, the total amount of money which had to be remitted in respect of decreed claims during the period of last ten years works out to be Rs.12,398. The balance which is still outstanding is Rs.12,093.

Particularly bad cases are those of *Lucknow Improvement Trust versus Umrao Khan* and *Lucknow Improvement Trust versus Moham-mad Husain*. In the first case, the tenant made no payment of rent for five years before a suit was filed against him and, in the second case, the extent of default was seven years. An equally bad case is that of *Lucknow Improvement Trust versus the widow of Qutubuddin*. She did not pay monthly house rent for a period of three years and one month before action was taken against her, and a sum of about Rs.900, which was due from her, was ultimately written off. It appears that no watch was kept over the staff responsible for making collections. Tenants of limited means were shown leniency, with the result that huge arrears got accumulated and it then became beyond the capacity of the tenants to pay them.

Suits relating to the Nazul—One hundred and twenty-nine suits were filed by the Trust on behalf of Nazul during the period 1928-29 to 1937-38. The general remarks which we have made in respect of Trust claims apply to the Nazul claims also. The amount of decreed claims which had to be remitted during the period of ten years was Rs.8,527. The balance of the decreed claims still outstanding is Rs.49,862.

One of the bad cases is that of Nishatganj Market, the contract of which was given to Wazir Mohammad on 18th March, 1926, for a period of one year for Rs.1,250. A sum of Rs.306-4 only was realized from him and the balance was written off, as he became an absconder. The Trust took about two years to file a suit and three years to execute the decree. The same man was involved in another case with the result that the Trust had ultimately to write off a further sum of Rs.3,840-4-6. In the case *Secretary of State versus Kallan Khan*, even though the claim was decreed by court, the decree became time-barred due to the negligence of the Nazul Vakil, who was responsible for a similar omission in a case relating to the Trust. In the case, *Secretary of State versus Sheo Nath* the rent fell in arrears for a period of ten years before action was taken against the defaulter. A case in which the Nazul sustained a substantial loss is that of the Valerios who wound up their

business some time ago. A sum of Rs.18,689-13 is still due from them and there is little chance of its recovery.

In the Annual Report on the working of the Lucknow Improvement Trust for the year ending the 31st March, 1940, it has been admitted that a sum of Rs.51,982-10, relating to Nazul decrees, and a sum of Rs.34,164-11-3, relating to Trust decrees are still outstanding. The Trust has further admitted in its report that a sum of Rs.56,698-3-3, could not be expeditiously realized, because some of the debtors had fraudulently transferred their property, while others had been declared insolvent or did not possess any property.

The facts given above are sufficient to prove that the Trust was lax in the collection of its dues. Very rarely an inquiry was made into the status and credit of persons to whom leases and contracts involving considerable sums were given. No security was demanded from these persons and prompt payment of rent was never insisted upon. Many defaulters found it a convenient way of evading payment of Trust and Nazul dues to go to the Insolvency court and to have themselves declared insolvent. There were delays in filing suits and there were delays in executing decrees. Some decreed and certain undecreed claims got time-barred due to the negligence of the Trust officers. This state of affairs continued for a considerably long time without attracting the attention of the Trust and without any remedial measures having been taken by it.

A long list of other financial losses and irregularities can be found in the audit and inspection notes on the accounts of the Improvement Trust, Lucknow, for the ten years under inquiry. Serious defects were discovered in the accounts kept by the Improvement Trust and repeated warnings were given to it by the Auditors but they all remained unheeded. Collection of *tehbazari* dues and agricultural rents and management of Nazul and maintenance of demand and collection registers are some of the subjects on which the Auditors expressed themselves very strongly. The list of unsettled audit objections relating to previous years is a long one, and some of the objections relating to the year 1932-33 have not yet been settled. We reproduce below certain extracts relating to Lucknow Improvement Trust from the Annual Report on the working of the Local Audit Department in the United Provinces for the year 1938-39, compiled by the Examiner, Local Fund Accounts :

(1) At Lucknow . . . some important registers like registers of invoices and those of distribution of movable property and of approved estimates and sanctioned allotments were not maintained; the accounts of the rents of the Trans-Gomti Civil Lines scheme and of the public works were in great confusion and rather unreliable to some extent. The disposal of the audit notes was also delayed by the . . . Lucknow Trust.

(2) The delay of over three years in giving possession of land and the execution of the leases in respect of certain plots disposed of under Trust resolution no. 6402 of January, 1932, caused a loss of rent amounting to Rs.521.

(3) Over Rs.28,000 were written off as irrecoverable on account of arrears of rents, purchase money, etc. on the ground, among others that they had become time-barred or that the defaulters were not traceable. The present arrangements for the collection of demands, which seemed to reflect a tendency for undue leniency in favour of some defaulters, could hardly be considered to be effective since over 21 per cent. of the total current and arrear rental demands remained outstanding at the close of the year under report.

(4) A sum of Rs.808 was paid to a contractor in connexion with the construction of a *bund* in a portion of the Trans-Gomti scheme as an emergent measure without proper scrutiny of his claims. The work was completed on 30th October, 1936. It was sanctioned by the Trust on 3rd July, 1937, and was shown to have been measured on the 26th idem. The measurements taken were more or less conjectural as the Trust Engineer remarked that it was not possible to check and verify the work at that stage. The preparation and passing of the estimate long after the completion of the work, the great delay in checking and measuring it and the omission to obtain detailed accounts from the contractor together with the necessary bills and receipts in support thereof, precluded the application of any effective check thereof in audit.

CHAPTER V

DEFECTS IN SCHEMES AND OTHER SERIOUS IRREGULARITIES

Defects in schemes.

A large number of files relating to the Trust schemes were examined by the Secretary. We discovered that considerable delay had occurred in the execution of a large number of schemes giving rise to justifiable complaints by the public and to an impression that the Trust was hardly doing anything to justify its existence and was quite useless. The period 1928-36 was the worst in this respect but there has been considerable improvement since 1936-37. We have examined the Director of Public Health, Superintending Engineer, Public Health Department and the Chairman of the Municipal Board, Lucknow, in addition to several other witnesses and they all have unanimously expressed the opinion that the execution of many Trust schemes has been defective. The Director of Public Health has mentioned Barudkhana, Badshahbagh and Charbagh schemes as instances of development schemes in which no satisfactory arrangements for drainage was made. He has also pointed out that their future expansion has not been kept in view in designing development schemes with the result that drainage works and sewers of inadequate dimensions have been constructed. The Superintending Engineer, Public Health Department, has also stressed these points and has stated that the schemes executed by the Lucknow Improvement Trust have not been carried out satisfactorily. He has said that rigid specifications for various kinds of works have not been followed with the result that these works are likely to saddle the department responsible for maintaining them with unnecessary additional recurring expenditure. According to him many of these works are not expected to last long and will have either to be replaced or to be repaired frequently.

Rai Sahib Lala Atma Ram Jain, representative of the Charbagh House-owners' Association, has complained to us that flush latrines have been constructed by house-owners in Charbagh area but they have not yet been allowed to connect them with the sewer. These flush latrines were constructed by house-owners on the undertaking given by the Improvement Trust that they will be allowed to connect them with the main sewer. The reason why the Trust failed to give sewer connections to house-owners in this area was that the Public Health Department refused to allow any discharge of sullage from Charbagh area into the Ghaziuddin Hyder Canal which was already running to its capacity. The Trust itself constructed a public flush latrine in this area at a great cost but could not connect it with the Ghaziuddin Hyder Canal. Rai Sahib has pointed out other instances of defective execution of work in this area and the Secretary on his inspection of the locality found them to be substantially true. We have had many complaints of similar nature from another witness Mr. K. P. Srivastava, representative of the United Provinces Secretariat Association, in respect of Blunt Square, Windsor Place and Clay Square.

The Trust has admitted that in the past it used to provide light, drains, water mains, sewers, etc. in development areas, after sufficient number of houses had been constructed. In many recent instances, however these amenities were provided long after houses had been constructed. There are instances of fragmentary sub-division of plots offending against the general character of the lay-out in the locality.

The Chairman of the Municipal Board, Lucknow, has supported the opinion expressed by the Director of Public Health and the Superintending Engineer, Public Health Department. Other matters of a controversial nature which were put forward by the Chairman have not been considered by us because they are beyond the scope of the present inquiry.

Other serious irregularities.

In a particular case four plots of land were given to one person by the Trust even though it had already decided not to lease more than one plot to any one person. Land was leased to some members of the Trust by private negotiations. Similarly, leases of plots of land were given to the relatives of the officers of the Trust without any public advertisement of the sale of those plots. Concessions in premium were allowed to certain persons after the terms of the lease had been settled. Very valuable land situated in a very important commercial locality was leased by private negotiations and it was wrongly represented that the

land belonged to the Nazul while it was actually the property of the Government of India. The Trust even went out of its way to purchase injudiciously a certain building which was of no particular use to it.

We came across certain cases in which the servants of the Trust were inadequately punished for serious misconduct. Figures in tenders were altered and original tenders were lost and yet the Trust did not take adequate action against the persons responsible for the same. Concessions which had not been advertised were allowed to contractors after their tenders had been accepted. In one case a double-storeyed servants' quarters was allowed to be constructed to the detriment of the privacy of a neighbouring house, and permission was later on given to have a second set of servants' quarters because the first was used by the owner for his own residence. The Trust did not insist on buildings being completed within the prescribed time and that retarded the development of various schemes. The Trust spent a sum of Rs. 6,000 on the improvement of Qudh Sports Association ground but failed to recover this amount from the Association because the work done by the Trust was not found to be worth the money. In several cases leases were renewed and rents enhanced long after the due date.

In view of the facts enumerated by us above we are of opinion that the administration of the Trust in the past has been loose and has failed to inspire confidence in the public.

In conclusion we would like to record our thanks to Mr. G. A. Faruqi. He had to collect material for our examination at a time when he was employed as Collector of Fatehpur; and he drafted the report while working as Assistant Commissioner of Ajmer. He has rendered us assistance at every stage.

Mr. M. H. Hanafi rendered useful assistance in collecting material and compiling statements. We would like to bring his services to the notice of his department.

- (1) RAI BAHADUR DR. BRIJENDRA
SWARUP (Chairman).
- (2) WAJAHAT HUSSAIN, I.C.S.,
Member.
- (3) G. A. FARUQI, I.C.S.,
Member-cum-Secretary.

Form D—United Provinces

Statement of Cotton pressed in the United Provinces for the week ending 14th November, 1941

[Section 5(2) of the Cotton Ginning and Pressing Factories Act, 1925]

1 Names of Division or Block	2 Number of bales pressed		4 Number of bales pressed	
	During the week	During the corresponding week last year	Since 1st September, 1941	During corresponding period of previous year
1. Upper Doab (a)	1,301	860	2,725*	1,31
2. Middle Doab (b)	987	590	1,320	1,16
3. Lower Doab and Bundelkhand (c)	225		304	26
4. Rohilkhand (d)	52	195	173	.
5. Rest of the Province (e)				19
Total	2,565	1,645	5,022	2,94

Districts included in the block—

(a) Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh, Muzaffarnagar.

(b) Muttra, Farrukhabad, Etah, Agra, Mainpuri, Etawah.

(c) Cawnpore, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur, Banda.

(d) Hardoi, Shahjahanpur, Bareilly, Moradabad, Budain, Bijnor, Pilibhit, Naini Tal, Almora, Garhwal.

(e) Mirzapur, Benares, Jaunpur, Ghazipur, Azamgarh, Ballia, Gorakhpur, Hasti, Gonda, Bahraich, Kheri, Unao, Lucknow, Bara Banki, Rae Bareilly, Sultanpur, Fyzabad, Partabgarh.

*Includes 35 bales for 7th November, 1941 not reported before.

C. MAYA DAS,
Director of Agriculture,
United Provinces