

ED. 86. I  
3,000

THE REPORT  
OF THE  
UNIVERSITY EDUCATION  
COMMISSION

(DECEMBER 1948—AUGUST, 1949)

VOLUME



PUBLISHED BY THE MANAGER OF PUBLICATIONS DELHI  
PRINTED IN INDIA BY THE MANAGER, GOVERNMENT OF INDIA PRESS SIMLA 1949

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## INTRODUCTION

### APPOINTMENT AND PROCEDURE OF THE COMMISSION

1. Appointment of the Commission.
2. Members of the Commission.
3. Terms of Reference.
4. Procedure of Work.
5. Inauguration.
6. Tour of Universities.
7. General Observations.

1. *Appointment of the Commission.*—We the members of the Commission appointed by the Government of India “to report on Indian University Education and suggest improvements and extensions that may be desirable to suit present and future requirements of the country” have the honour to submit our Report. We are grateful for the opportunity which we were given to survey the work of the universities, to assess their contribution to the educational progress of the nation, to appraise the value of their objectives and achievements and to examine their structure and functions in view of the great changes that have occurred in the political, economic and social life of the country in recent years.

2. *Members of the Commission.*—The scope of our enquiry is set forth in the resolution of the Government of India, Ministry of Education, No. 55-5/47-D/3, dated the 4th November 1948.

The following were appointed members of the Commission :—

1. Dr. S. Radhakrishnan, M.A., D. Litt., LL.D., F.B.A., Spalding Professor of Eastern Religions and Ethics at the University of Oxford. (Chairman)
2. Dr. Tara Chand, M.A., D. Phil. (Oxon), Secretary and Educational Adviser to the Government of India.
3. Dr. (now Sir) James F. Duff, M.A., (Cantab), M. Ed. (Manchester), LL.D. (Aberdeen), Vice-Chancellor, University of Durham.
4. Dr. Zakir Hussain, M.A., Ph.D., D. Litt., Jamia Millia Islamia, Delhi—(now Vice-Chancellor, Muslim University, Aligarh).
5. Dr. Arthur E. Morgan, D.Sc., D. Eng., LL.D., Former President, Antioch College, First Chairman, Tennessee Valley Authority, President, Community Service Inc.
6. Dr. A. Lakshmanaswami Mudaliar, D.Sc., LL.D., D.C.L., F.R.C.O.G., F.A.C.S., Vice-Chancellor, University of Madras.

7. Dr. Meghnad Saha, D.Sc., F.R.S., Palit Professor of Physics ;  
Dean, Faculty of Science; and President, Post-Graduate  
Council of Science, University of Calcutta.
8. Dr. Karm Narayan Bahl, D.Sc., (Panj.); D. Phil. and D. Sc.  
(Oxon), Professor of Zoology, University of Lucknow.
9. Dr. John J. Tigert, M.A. (Oxon.) LL.D., Ed. D., D.C.L.,  
D. Litt., L.H.D., formerly Commissioner of Education  
of the United States, and President Emeritus of the  
University of Florida.
10. Shri Nirmal Kumar Sidhanta, M.A. (Cantab.), Professor  
of English and Dean, Faculty of Arts, University of  
Lucknow. (Secretary).

3. *Terms of Reference.*—The terms of reference of the Commission were to consider and make recommendations in regard to :—

- (i) The aims and objects of university education and research in India.
- (ii) The changes considered necessary and desirable in the constitution, control, functions and jurisdiction of universities in India and their relations with Governments, Central and Provincial.
- (iii) The Finance of universities.
- (iv) The maintenance of the highest standards of teaching and examination in the universities and colleges under their control.
- (v) The courses of study in the universities with special reference to the maintenance of a sound balance between the Humanities and the Sciences and between pure science and technological training and the duration of such courses.
- (vi) The standards of admission to university courses of study with reference to the desirability of an independent university entrance examination and the avoidance of unfair discriminations which militate against Fundamental Right 23 (2).
- (vii) The medium of instruction in the universities.
- (viii) The provision for advanced study in Indian culture, history, literatures, languages, philosophy and fine arts.
- (ix) The need for more universities on a regional or other basis.

- (x) The organisation of advanced research in all branches of knowledge in the universities and Institutes of higher research in a well co-ordinated fashion avoiding waste of effort and resources.
- (xi) Religious instruction in the universities.
- (xii) The special problems of the Banaras Hindu University, the Aligarh Muslim University, the Delhi University and other institutions of an all-India character.
- (xiii) The qualifications, conditions of service, salaries, privileges and functions of teachers and the encouragement of original research by teachers.
- (xiv) The discipline of students, hostels and the organisation of tutorial work and any other matter which is germane and essential to a complete and comprehensive enquiry into all aspects of university education and advanced research in India.

4. *Procedure of Work.*—We were anxious to receive the help of those who had experience of university education or had shown interest in its problems. A comprehensive questionnaire was circulated to the members of the Constituent Assembly, Premiers and Ministers of Education in the Provinces and States, Vice-Chancellors of universities, Directors of Public Instruction, Heads of Colleges and Heads of Departments in universities, educationists, publicists and other prominent men throughout the country. In all about 2,900 copies of the questionnaire were sent out.

Correspondents were invited to submit answers on those aspects of the university problem in which they were specially interested. About 600 replies were received from the people addressed. The very full and varied answers received in response to our enquiry provide an interesting survey of the present conditions of university education. We are grateful to our witnesses and correspondents for their most helpful co-operation. The Questionnaire and summaries of written memoranda and of evidence are submitted in a separate volume. The publication *in extenso* of the memoranda and evidence would have required several volumes and might not have added appreciably to the value of the present abridged account. They are, however, sent to the Ministry of Education for purposes of record.

We also obtained from the colleges and institutions of the universities statistical and other information of importance for the consideration of our problem, relating to the number of students, residential accommodation, salaries of teachers, security of tenure, age of retirement, published contributions by the teachers, number

of working days etc. We wish to express our thanks to the Vice-Chancellors, Directors of Public Instruction, Registrars, Heads of Colleges, and others for their great courtesy in helping us with this information.

Our recommendations are largely based on the valuable evidence and the constructive suggestions we have received. We have endeavoured to interpret the hopes and ambitions of university men and women and tried to give form to their aspirations and ideals.

5. *Inauguration*.—The Commission held its first meeting in New Delhi on 6th December, 1948, when the Hon'ble Maulana Abul Kalam Azad, Minister for Education, Government of India, addressed the meeting and explained to us Government's intentions in regard to the purpose and scope of the inquiry.

6. *Tour of Universities*.—After preliminary discussions the members of the Commission visited the different university centres as follows :—

13th to 15th December, 1948	.. Delhi University, Delhi.
19th December 1948 to 2nd	
January, 1949	.. Madras University, Madras.
3rd to 7th January, 1949	.. Osmania University, Hyderabad (Dn.)
8th to 11th January, 1949	.. Nagpur University, Nagpur.
12th to 19th January, 1949	.. Calcutta University, Calcutta (and Viswabharati, Shanti-Nikatan).
20th to 23rd January, 1949	.. Allahabad University, Allahabad.
24th to 29th January, 1949	.. Lucknow University, Lucknow.
30th January to 2nd	
February, 1949	.. Muslimi University, Aligorb,
9th to 14th February, 1949	.. Calcutta University, Calcutta.
15th to 17th February, 1949	.. Gauhati University, Gauhati.
18th to 20th February, 1949	.. Patna University, Patna.
21st to 25th February, 1949	.. Hindu University, Banaras.
26th to 28th February, 1949	.. Agrā University, Agrā.
1st to 4th March, 1949	.. Rajputana University, Jaipur.
5th to 6th March, 1949	.. Ahmedabad.
6th to 12th March, 1949	.. Bombay University, Bombay.
14th to 17th March, 1949	.. Utkal University, Cuttack.
18th to 20th March, 1949.	.. Andhra University, Waltair.
22nd to 24th March, 1949	.. Annamalai University, Annamalainagar.
26th to 28th March, 1949	.. Madras University, Madras.
29th to 31st March, 1949	.. Travancore University, Trivandrum.
1st to 2nd April, 1949	.. Mysore University, Bangalore.
3rd to 6th April, 1949	.. Mysore University, Mysore.
6th to 7th April, 1949	.. Mysore University, Bangalore.



<i>11th to 12th April, 1949</i>	.. Saugor University, Saugor.
<i>13th April, 1949</i>	.. Jamia Millia Islamia, Delhi.
<i>29th to 30th April, 1949</i>	.. East Panjab University, Solan (Simla Hills).
<i>15th to 16th July, 1949</i>	.. Baroda University, Baroda.
<i>17th to 19th July, 1949</i>	.. Poona University, Poona.

The names of the universities and the colleges visited and the persons interviewed are found in Appendix ' A '.

Thus we were able to obtain a great deal of direct knowledge of the working of the universities and colleges. Within the limited time at our disposal, it was not possible for us to visit all the institutions and colleges which we would have wished to, but in the centres which we visited, we had discussions with the Ministers of Education, Vice-Chancellors, Members of the Syndicate (or Executive Council), leaders of public opinion, Principals and Professors and other members of the Staff, met them in small groups and heard their representatives. In many places we met the representatives of the students and acquainted ourselves with their points of view. We are indebted to them all for their very helpful attitude.

We are sensible of the inconvenience we caused by our visits to the university authorities and other generous hosts who looked after our comforts wherever we went. We gratefully acknowledge not only the generous hospitality but the enthusiastic co-operation we received from individuals, organisations and agencies, official and non-official. When we are indebted to so many, it will be invidious to mention names but we cannot refrain from mentioning the gracious hospitality extended to us in Government House, Lucknow by Shrimati Sârojini Naidu immediately before her fatal illness.

7. *General Observations.*—We were everywhere struck by a deep general awareness of the importance of higher education for national welfare and an uneasy sense of the inadequacy of the present pattern. While it is generally recognized that the universities should provide the best teaching over the entire field of knowledge of which its own resources may permit, that they should offer this teaching to the widest range of students irrespective of class, sex, caste or religion, that they should extend by original inquiry the frontiers of learning and, above all, mould and shape students not merely by the training of the intellect but by the disciplining of the spirit, university men and women were aware of serious shortcomings in the functioning of the universities in regard to these matters. The wonder is not that the universities have fallen short in many respects, but that they have achieved some measure of success in several directions. But this is no cause for complacency. The marked deterioration of

standards in teaching and examinations and increasing dissatisfaction with the conduct of university administration and elections to university authorities are matters of great concern. The universities as the makers of the future cannot persist in the old patterns, however valid they may have been in their own day. With the increasing complexity of society and its shifting pattern, universities have to change their objectives and methods, if they are to function effectively in our national life. A policy of drift in the vague hope that, if the universities are granted full autonomy and are permitted to pursue their own ends with intelligence and imagination, higher education will take care of itself, will be dangerous. Automatic and spontaneous adjustment will not take us to the future we want. We must develop a comprehensive positive policy within the limits of which there should be ample scope for pioneering and experimentation.

It is to the formulation of such a policy that we addressed ourselves after we reached Simla in the third week of April. We had to consider the evidence that we obtained in reply to the questionnaire, discuss questions of principle involved in university re-organisation, and set forth the best methods for implementing necessary changes in the present circumstances. The results of our survey are embodied in the Report.

The Commission is indebted to the members of its staff for the loyal and intelligent way in which they have served the Commission.

**APPENDIX N\***  
**Budget Estimates of Universities**  
**AGRA UNIVERSITY**  
*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other Funds	Total	Percentage of Government Grants to the total
.. ..	Rs. 40,000	Rs. 3,18,088	Rs. ..	Rs. 43,619	Rs. 4,01,707	9.96
.. ..	70,140	3,42,786	..	13,359	4,26,285	16.45
Estimate ..	84,000*	3,88,600	..	58,582	5,31,182	15.8

\* Includes Rs. 35,000 for extension of buildings.

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
.. ..	Rs. ..	Rs. 82,174	Rs. 2,77,825	Rs. ..	Rs. 3,59,799	Rs. +41,909
.. ..	..	99,034	3,40,671	10,000	4,49,705	-23,440
Estimate ..	..	87,375	4,46,016	..	5,33,391	-2,209

**ALIGARH UNIVERSITY**

*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
1946-47 ..	Rs. 5,59,065	Rs. 2,52,320	Rs. 2,71,636	Rs. 4,83,934	Rs. 16,67,455	35.7	
1947-48 ..	7,77,893	3,21,286	9,213	3,71,971	14,80,363	52.5	
1948-49 .. Estimate	7,48,000	3,83,153	3,360	3,04,522	14,39,025	52.0	

\* The figures in this appendix have been supplied by the Statistical Section of the Ministry of Education.

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	6,32,661	1,64,353	6,71,834	1,01,639	15,70,487	-3,032	
1947-48 ..	6,45,104	2,30,279	7,52,354	1,85,325	17,93,062	-3,12,700	
1948-49 .. Estimate	7,55,878	2,34,657	8,01,984	55,950	18,48,469	-4,09,444	

## ALLAHABAD UNIVERSITY

*Yearly Income—1946-1949*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	7,92,624	4,99,110	..	2,06,953	14,98,687	52.88
1947-48 ..	20,14,400	6,39,618	..	71,179	27,75,197	72.58
1948-49 Estimate ..	7,91,300	6,43,930	..	15,21,551	29,56,781	26.8

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47	10,17,745	1,08,659	4,76,569	69,385	16,72,358	-1,73,671
1947-48	9,24,879	2,30,578	5,70,994	70,101	17,96,552	+9,78,545
1948-49 Estimate	11,74,090	1,40,380	6,77,011	1,60,960	21,52,451	+8,04,330

**ANDHRA UNIVERSITY**  
*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
1946-47 ..	Rs. 3,07,000	Rs. 10,70,308	Rs. 28,020	Rs. 1,00,000	Rs. 15,05,328	20.4	
1947-48 ..	7,52,000	8,66,882	38,191	5,36,536	19,93,589	37.7	
1948-49 .. (Estimate)	4,22,000	8,61,590	75,463	12,68,575	26,27,628	16.1	

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
1946-47 ..	Rs. 3,34,451	Rs. 69,062	Rs. 7,09,363	Rs. 23,248	Rs. 11,36,124	Rs. +3,69,204	
1947-48 ..	3,31,038	2,02,394	9,55,978	2,38,113	17,27,523	+2,66,066	
1948-49 .. (Estimate)	3,42,180	2,01,455	13,80,925	4,45,153	23,69,713	+2,57,915	

**ANNAMALAI UNIVERSITY**  
*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total
1946-47 ..	Rs. 6,12,000	Rs. 2,90,590	Rs. 2,83,720	Rs. 98,630	Rs. 12,84,930	47.62
1947-48 ..	9,16,451	2,95,053	2,44,764	1,20,883	15,77,151	58.10
1948-49 .. (Estimate)	5,02,000	3,00,646	2,45,800	90,815	11,39,260	44.1

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
1946-47 ..	Rs. 2,30,535	Rs. 1,28,089	Rs. 4,38,456	Rs. 4,96,350	Rs. 12,83,330	Rs. +1,600
1947-48 ..	2,23,644	1,23,605	8,14,561	4,16,341	15,77,151	Nil
1948-49 .. (Estimate)	1,83,405	64,950	6,06,815	2,61,076	11,16,246	+23,014

## BANARAS UNIVERSITY

*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
1946-47 ..	Rs. 12,70,168	Rs. 7,81,484	Rs. 1,79,633	Rs. 1,15,02,373	Rs. 1,37,33,658	9.2	
1947-48 ..	21,11,919	9,35,228	13,22,147	41,76,981	85,46,155	24.7	
1948-49 .. (Estimate)	5,08,450	10,09,165	7,476	9,78,505	25,03,596	20.3	

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
1946-47 ..	Rs. 14,44,714		Rs. 25,11,699	Rs. 86,23,467	Rs. 1,25,79,880	Rs. +11,53,778	
1947-48 ..	17,50,171		49,65,690	9,21,956	76,37,817	+9,08,338	
1948-49 .. (Estimate)	26,15,568		15,94,405	26,20,790	68,30,763	-43,27,167	

## BOMBAY UNIVERSITY

*Yearly Income—1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
1946-47 ..	Rs. 2,09,063	Rs. 19,41,698	Rs. 67,287	Rs. 2,18,672	Rs. 24,36,720	8.6	
1947-48 ..	3,53,181	23,86,393	3,45,758	6,53,972	37,39,304	9.4	
1948-49 .. (Estimate)	3,37,277	24,72,700	84,544	1,77,154	30,71,675	11.0	

*Yearly Expenditure—1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
1946-47 ..	Rs. 2,41,876	Rs. 2,81,061	Rs. 21,75,765	Rs. 16,395	Rs. 26,95,096	Rs. -2,58,376	
1947-48 ..	2,87,545	2,48,718	25,83,152	1,96,250	33,15,665	+4,23,639	
1948-49 .. (Estimate)	2,81,766	3,08,154	24,87,657	1,000	30,76,576	-4,901	

## CALCUTTA UNIVERSITY

## Yearly Income, 1946-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	9,38,194	25,90,213	86,830	5,18,691	41,03,928	22.9	
1947-48 ..	8,27,112*	30,90,165	1,65,783	8,03,395	38,86,455	21.3	
1948-49 .. (Estimate)	17,85,500	34,17,111	1,90,852	3,70,400	57,63,863	31.0	

\* Excludes the sums of Rs. 8,94,280 and Rs. 2,19,459 as grants from Central Government and other bodies given to the University for specific purposes.

## Yearly Expenditure, 1946-49

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	10,89,132	6,50,269	16,02,290	5,80,583	39,22,274	+1,81,654	
1947-48 ..	12,87,221	12,81,267	21,26,460	90,133	47,01,081*	-9,04,635	
1948-49 .. (Estimate)	15,08,160	12,08,653	53,77,111	8,78,300	89,70,224	-32,06,361	

\* Excludes the sums of Rs. 4,19,332 and Rs. 88,405 on purposes specified by the Central Government and other bodies.

## DELHI UNIVERSITY

## Yearly Income, 1946-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	5,92,398	3,14,190	..	2,23,928	11,30,516	52.4	
1947-48 ..	7,30,913	3,28,780	..	34,450	10,93,243	66.7	
1948-49 .. (Estimate)	8,26,927	2,91,950	..	35,300	11,54,177	71.6	

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.		Rs.	Rs.	
1946-47 <sub>1</sub> ..	1,87,501	51,932	7,37,552		9,76,985	+1,53,531	
1947-48 <sub>2</sub> ..	2,63,800	61,000	7,59,576		10,84,376	+8,868	
1948-49 <sub>3</sub> .. (Estimate)	3,81,500	72,500	7,24,800		11,78,800	-24,623	

## EAST PUNJAB UNIVERSITY

*Yearly Income, 1947-1949*

Year	Government Grant	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grant to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	
1st October 1947 to 31st March 1948	11,76,570	2,90,924	11,76,570	6,953	26,51,027	44.38
1st April 1948 to 31st March 1949 (Estimate)	3,00,000	21,08,440	..	68,500	24,76,940	12.1

*Yearly Expenditure, 1947-1949*

Year	Salaries of the teaching staff	Salaries of the Administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.		Rs.		Rs.	Rs.
1st October 1947 to 31st March 1948.	1,52,708		5,41,005	..	6,93,713	+19,57,314
1st April 1948 to 31st March 1949 (Estimate)	5,26,641	2,68,574	21,73,526		29,68,741	-4,91,801



**GAUHATI UNIVERSITY**  
*Income 1947-1949*

Year	Government Grants	† Fees	Endowments	Donations and other Sources	Total	Percentage of Govt. Grants to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	
1947-48 .. ..	*16,00,000	1,40,102	..	2,213	17,42,315	92.8
1948-49 .. .. (Estimate)	5,00,000	1,90,842	..	29,385	7,20,227	69.2

\* Includes a non-recurrent grant of Rs. 11,00,000 for permanent buildings.

† Includes Hostel fees.

*Expenditure, 1947-1949*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	If running at a deficit.
	Rs.	Rs.	Rs.	Rs.	Rs.	
1947-48 .. ..	..	..	..	..	..	Balance to be taken over to next year Rs. 22,76,377.
1948-49 .. .. (Estimate)	2,14,478	78,093	3,78,719	3,39,158	10,10,448	Including last year's balance, the excess of income over expenditure Rs. 19,86,158 which will be used for permanent buildings next year.

**LUCKNOW UNIVERSITY**  
*Yearly Income, 1946-1949*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Govt. Grants to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	%
1946-47 .. ..	10,77,181	6,10,232	..	3,33,144	20,20,557	53.31
1947-48 .. ..	12,68,657	10,36,180	..	..	22,94,837	55.28
1948-49 (Estimate) ..	18,93,090	8,63,500	3,650	6,07,932	33,67,172	56.2

**LUCKNOW UNIVERSITY**  
*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47 .. ..	11,56,822	4,15,836	5,02,851	1,47,867	22,23,376	-2,02,319
1947-48 .. ..	12,79,914	3,75,839	8,05,674	78,668	25,40,095	-2,45,258
1948-49 .. .. (Estimate)	12,48,823	4,53,622	8,69,283	13,65,325	39,37,053	-5,69,881

**MADRAS UNIVERSITY**  
*Yearly Income, 1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 .. ..	4,60,000	9,69,763	27,542	5,08,390	19,65,695	23.4	
1947-48 .. ..	6,20,000	11,82,709	29,938	4,56,186	22,88,833	27.1	
1948-49 .. .. (Estimate)	8,10,000	11,78,700	30,000	3,82,170	24,00,870	33.7	

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 .. ..	2,67,189	2,61,914	9,13,420	2,07,864	16,50,387	+3,15,308	
1947-48 .. ..	2,42,390	3,19,111	11,32,911	1,42,838	18,37,250	+4,51,583	
1948-49 .. .. (Estimate)	3,02,316	3,04,204	12,03,784	6,37,000	24,37,304	-36,434	

## MYSORE UNIVERSITY

## Yearly Income, 1946-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	17,00,000	7,00,790	20,128	35,450	24,56,368	69.2	
1947-48 ..	22,76,000	6,88,452	45,374	1,75,506	31,85,332	71.4	
1948-49 .. (Estimate)	34,46,000	8,63,000	31,200	60,000	44,00,200	78.3	

## Yearly Expenditure, 1946-49

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	10,33,576	3,50,891	11,63,025	..	25,48,392	-92,024	
1947-48 ..	13,40,857	3,52,260	12,15,035	2,68,180	31,85,332	Nil	
1948-49 .. (Estimate)	14,32,613	37,070	19,07,334	14,24,128	48,01,145	-4,00,945	

## NAGPUR UNIVERSITY

## Yearly Income, 1946-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	1,13,300	3,36,241	1,67,089	1,17,340	7,33,970	15.4	
1947-48 ..	1,89,442	3,77,735	..	66,340	6,13,517	30.9	
1948-49 .. (Estimate)	1,86,537	3,25,685	..	10,40,590	15,52,798 O. B. 54,86,436 <hr/> 70,39,218	12.0	

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	1,05,149	1,27,200	2,95,160	1,50,609	6,78,118	+55,852	
1947-48 ..	85,957	1,21,976	3,74,480	..	5,82,413	+31,104	
1948-49 .. (Estimate)	1,19,120	40,955	6,07,235	7,76,260	15,45,570	+7,212	

**OSMANIA UNIVERSITY**  
*Yearly Income, 1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	34,98,342	3,33,220	..	..	38,31,562	91.3	
1947-48 ..	52,63,948	6,10,669	34,089	..	69,08,706	90.7	
1948-49 .. (Estimate)	22,08,227*	3,00,551	34,089	..	25,43,867	86.8	

\*Includes non-recurring grant of Rs. 5,57,140.

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	23,53,529	1,84,194	9,54,619	..	34,92,342	+3,39,220	
1947-48 ..	41,06,953		5,96,453	6,89,239	53,92,645	+15,16,061	
1948-49 .. (Estimate)	14,45,127	3,72,403	4,49,558	1,80,424	24,47,512	+96,355	

## PATNA UNIVERSITY

## Yearly Income, 1946-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	60,682	7,82,815	..	..	8,43,497	7.2	
1947-48 ..	79,750	12,34,523	..	..	13,14,273	6.1	
1948-49 .. (Estimate)	1,04,990	12,38,118	600	1,18,895	14,57,403	7.2	

## Yearly Expenditure, 1946-49

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	..	65,430	7,94,568	3,629	8,63,627	-20,130	
1947-48 ..	..	85,699	11,96,593	..	12,82,292	+31,981	
1948-49 .. (Estimate)	63,425	92,564	12,35,618	15,903	14,07,790	+49,673	

## RAJPUTANA UNIVERSITY

## Yearly Income, 1947-49

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Govt. Grants to the total.
	Rs.	Rs.	Rs.	Rs.	Rs.	%
July 1947 to June 1948	2,15,500	1,98,168	..	32,060	4,45,743	48.23
July 1948 to Dec. 1948	2,65,500	2,15,100	1,000	16,172	4,97,772	53.3
July 1949 to Dec. 1949 (Estimate)	2,65,500	2,15,400	..	16,050	4,96,950	53.4

*Yearly Expenditure, 1947-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
July 1947 to June 1948.	..	55,124	1,79,033	..	2,34,157	+2,11,586.
July 1948 to Dec. 1948 (Estimate).	5,000	39,578	2,87,819	16,749	3,49,146	Closing balance Rs. 1,48,626.
Jan. 1949 to Dec. 1949 (Estimate).	5,000	91,400	3,91,910	1,40,850	6,29,160	After adding last closing balances, there is a balance of Rs. 2,28,002.

**SAUGOR UNIVERSITY***Yearly Income, 1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	%
1946-47 .. ..	1,00,000	41,339	11,712	1,46,378	2,99,429	33.39
1947-48 .. ..	7,88,563	1,70,446	64,482	7,04,009	17,27,500	45.64
1948-49 .. .. (Estimate)	*19,75,862	2,34,044	..	4,42,041	26,52,847	74.5

\* Includes Rs. 3,00,000 for maintenance and Rs. 1,37,112 for Agriculture College.

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47 .. ..	56,104	19,377	67,857	1,30,659	2,73,997	+25,432
1947-48 .. ..	1,96,599	49,073	12,00,183	2,92,805	17,38,660	-11,160
1948-49 .. .. (Estimate)	2,23,485	78,226	6,13,910	23,89,750	33,05,371	-6,52,524

## TRAVANCORE UNIVERSITY

*Yearly Income, 1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.		
1946-47 ..	22,26,000	2,43,740	22,182	3,39,678	28,31,600	78.6	
1947-48 ..	34,00,000	7,50,662	..	11,188	41,61,770	81.7	
1948-49 .. (Estimate)	22,00,000	5,03,900	..	30,550	27,34,350	80.5	

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus	Remarks
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	5,46,625	5,45,401	14,76,102	3,961	25,72,089	+2,59,511	
1947-48 ..	0,89,201	4,17,463	10,86,695	7,52,954	29,46,313	+12,15,457	
1948-49 .. (Estimate)	8,43,008	7,27,252	9,30,736	2,32,222	27,34,118	+232	

## UTKAL UNIVERSITY

*Yearly Income, 1946-49*

Year	Government Grants	Fees	Endowments	Donations and other sources	Total	Percentage of Government Grants to the total
	Rs.	Rs.	Rs.	Rs.	Rs.	
1946-47 ..	40,000	1,68,804	16,790	1,90,429	4,16,113	9.61
1947-48 ..	61,194	2,33,947	101	63,818	3,59,060	17.04
1948-49 .. (Estimate)	20,000	2,18,620	..	1,02,660	3,41,280	5.9

*Yearly Expenditure, 1946-49*

Year	Salaries of the teaching staff	Salaries of the administrative staff	Other recurring expenses	Non-recurring expenses	Total	Surplus
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1946-47 .. ..	..	30,070	2,05,289	..	2,35,359	+1,80,764
1947-48 .. ..	..	32,828	3,03,246	..	3,36,074	+22,986
1948-49 .. .. (Estimate)	..	42,005	4,14,788	..	4,56,793	-1,15,513



## APPENDIX O

**TABLE SHOWING TOTAL YEARLY EXPENDITURE OF GOVERNMENT AND AMOUNT SPENT ON EDUCATION (TOTAL) AND ON UNIVERSITY EDUCATION**

Government, Central, Pro- vincial or State	Year	Total Ex- penditure of Government	Total Ex- penditure on Education	Expenditure on University Education	Remarks
		Rs.	Rs.	Rs.	
Central Govt.* ..	1946-47	4,01,35,61,000	2,60,85,990	13,08,421	
	1947-48†	2,04,83,56,000	3,81,84,608	46,70,252	
	1948-49†	3,82,19,04,000	4,47,88,645	46,01,572	
Assam ..	1946-47 A	5,69,57,000	73,95,439	7,91,702	
	1947-48 A	6,84,79,000	77,67,925	12,32,622	
	1948-49 B	8,21,67,000	86,69,699	12,90,022	
Bihar ..	1946-47	14,41,52,000	1,06,48,873	13,60,143	
	1947-48 A	16,79,98,000	1,24,09,279	14,16,832	
	1948-49 R	22,79,53,000	1,20,11,577	14,59,294	
Bombay ..	1946-47	36,41,55,193	4,52,03,488	27,67,580	
	1947-48	41,32,69,911	6,19,06,994	36,36,775	
	1948-49 R‡	51,91,44,000	8,37,43,000	69,04,615	
C. P. & Berar ..	1946-47	11,54,77,000	1,21,87,000	25,96,000	
	1947-48 A	11,35,90,000	1,83,92,000	31,80,000	
	1948-49 R	17,27,22,000	2,38,06,000	39,84,000	
East Punjab ..	1947-48 A	7,58,46,000	86,55,000	9,72,229	
	1948-49 R	17,82,25,000	1,35,92,000	14,78,268	
Madras ..	1946-47 A	56,98,89,000	5,89,69,585	55,95,967	
	1947-48 A	50,68,56,000	7,03,36,214	67,03,185	
	1948-49 R	57,04,60,700	8,86,62,600	96,50,100	
	1949-50 B	55,66,08,400	9,38,93,200	..	
Orissa ..	1946-47 A	4,48,93,317	63,14,885	9,75,042	
	1947-48 A	5,84,44,820	78,23,117	13,70,474	
	1948-49 R	7,90,35,000	96,53,000	16,12,563	
United Provinces‡	1946-47 A	..	..	..	
	1947-48 A	38,72,96,107	4,09,67,258	35,02,020	
	1948-49 R	48,47,41,700	5,41,63,709	46,30,400	
West Bengal ..	1946-47	52,01,49,000	3,30,30,000	52,01,490	Pre-parti- tion 7½ months.
	1947-48	14,80,21,000	1,30,91,000	19,24,270	
	1948-49	30,82,00,000	2,52,94,000	30,82,000	
..	..	..	..	..	
Tripura, Manipur, & Cooh-Bihar	1946-47	1,55,73,643	9,08,108	..	
	1947-48	1,86,56,685	12,23,150	..	
	1948-49	1,92,99,325	18,03,451	..	
Baroda ..	1946-47	4,54,46,038	50,48,296	5,45,353	
	1947-48	6,78,61,044	69,34,864	7,02,896	
	1948-49	6,32,10,000	83,48,624	6,95,310	

\* Supplied by the Statistical Section of the Ministry of Education.

† Figures of expenditure incurred by the Ministry of Relief and Rehabilitation are not available.

‡ Supplied by "Eastern Economist".

State	Year	Total Expenditure of Government	Total Expenditure on Education	Expenditure on University Education	Remarks
Bhopal ..	1946-47	1,34,96,174	6,08,843	2,06,491	
	1947-48	1,29,92,836	6,62,474	2,27,375	
	1948-49	1,40,14,492	6,73,730	2,24,232	
Bikaner ..	1946-47	3,53,73,422	13,06,218	4,95,228	
	1947-48	4,03,21,736	19,07,472	6,04,826	
	1948-49	4,00,46,207	23,58,654	8,81,017	
Cochin and Travancore.	1946-47	12,04,01,218	1,66,29,539	31,22,785	
	1947-48	14,73,13,266	2,08,58,023	41,20,795	
	1948-49	13,21,44,221	2,42,61,515	47,46,617	
Himachal Pradesh	1946-47	1,20,96,800	4,92,500	..	
	1947-48	1,30,40,300	6,79,300	..	
	1948-49	1,19,04,400	8,69,100	33,332	
Hyderabad* ..	1946-47	16,96,38,557	2,58,64,901	47,89,872	
	1947-48	22,91,17,714	2,98,70,828	69,93,905	
	1948-49	22,30,24,286	2,93,40,601	38,02,296	
Jaipur ..	1946-47	3,22,03,000	23,87,000	3,74,000	
	1947-48	3,03,00,000	30,41,000	6,39,000	
	1948-49	4,00,56,000	32,93,000	5,95,000	
Jammu and Kashmir*	1946-47	5,37,31,000	37,51,000	3,67,444	
	1947-48	5,92,88,000	33,49,000	3,77,300	
	1948-49	4,99,60,000	43,11,000	4,43,100	
Kolhapur ..	1946-47	1,38,42,581	19,02,494	3,32,222	
	1947-48	1,78,67,800	19,84,000	3,57,356	
	1948-49	1,41,68,600	19,91,900	3,68,384	
Kutch ..	1946-47	76,46,160	3,02,134	7,646	
	1947-48	77,47,897	3,05,800	7,748	
	1948-49	89,58,880	4,11,670	8,959	
Mysore ..	1946-47	11,74,88,551	1,30,84,492	17,03,584	
	1947-48	10,13,18,999	1,64,37,380	19,95,984	
	1948-49	11,37,59,000	2,75,12,000	34,46,989	
Patiala & East Punjab States Union.	1946-47	5,27,47,243	23,40,447	5,51,839	
	1947-48	5,69,30,054	23,98,933	6,07,079	
	1948-49	5,96,07,627	27,78,628	6,94,982	
Rampur ..	1946-47	89,88,678	8,31,267	..	
	1947-48	1,09,16,772	10,86,104	..	
	1948-49	1,05,71,894	10,36,775	..	
Tehri Garhwal ..	1946-47	31,11,955	91,357	30,808	
	1947-48	38,88,737	1,76,168	55,609	
	1948-49	53,64,116	5,45,487	29,985	

\*Budget figures.

## APPENDIX P

### I. THE DANISH PEOPLE'S COLLEGE<sup>1</sup> AND DANISH AGRICULTURAL EDUCATION

1. *Origin of the Danish People's College Movement.*—A description of the Danish People's College is appropriate to a study of Indian Universities. The conditions under which it came into being are strikingly similar to those in India in the recent past. The manner in which the originator of the People's College programme promoted his ideas, and the ideas themselves, are strikingly similar to those of Gandhiji and his Basic Education.

The People's College movement has been a major influence in raising Denmark from a very low condition to become the second state in Europe in per capita wealth, though there is scarcely a nation in Europe with less natural resources. The "peasant" rural class has become the leading social force in the country. The social legislation it has brought about is cautiously, though strongly, progressive.

Nicolai F. S. Grundtvig, father of the People's College idea, was born in 1783, and died in 1872. He began promoting his ideas of the People's College in 1838, in much the same way as Gandhiji presented the Basic Education idea just a century later. While neighbouring European countries were gaining strength and prestige, Denmark had been falling back. The country was sunk in illiteracy and poverty, and there was general disillusionment, pessimism and frustration.

Culturally the Danes had lost their bearing. Everything foreign was in high favour. The native language was being displaced by that of the nation which had recently defeated Denmark. Defeated in war, in 1813 the nation was officially declared bankrupt. Norway seceded, after 400 years of union. Educated Danes were completely under the influence of foreign scholarship. Instead of being aroused by these conditions, the Danish people sank into hopeless apathy, expecting national extinction.

It was in such an atmosphere that Grundtvig, at the age of 47, began to travel over rural Denmark, somewhat as Gandhiji did later over India, arousing men and women to the importance of education for the common people, and to love of the fatherland and loyalty to it.

Within a few years there was a strong movement in favour of his ideas. However, thirteen years passed before the first People's College was established.

2. *People's College Principles.*—Grundtvig held that the prevailing higher education had given young people undefined impressions of a culture foreign to them, and had taught them to neglect their own. He observed that the prevailing higher education rested on a system of examinations which students were

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<sup>1</sup> This description is largely paraphrased from "The People's College", by Holm-Jensen, "The Danish People's High School", by Hegland, and "The Folk High School" by A. H. Hollman.

The term "Folkehøjskole" is more accurately translated "People's College" than "Folk High School."

glad to take in the hope of "an assured livelihood" in government service. He saw little love of culture for its own sake. "There had resulted a caste of the educated, and the masses of the country were left in ignorance to slave for them". This type of education, he thought, was not valuable to society, or even to the few who had attained it. He said that constantly poring over books developed an unlovely book-worm type. They were mentally sterile. The students learned to look with disgust upon entering ordinary occupations.

He wrote, "The only good school to train a boy for life is the home of an able, industrious man where a boy can learn to know and also to enjoy the work to which he will afterward devote himself. To lock him up in what amounts to a scholastic reformatory spoils him for a simple life of industry". "It will not do", he wrote, "to have the whole population become professors, state officials or paupers, unless it be that they can literally live on air". At that time a University degree was required for most government appointments. It was largely that requirement which kept the Universities alive.

Grundtvig came to believe that a national awakening must begin with a spiritual enlightenment of the common people. The mother tongue, he believed, should be a ruling factor, and the fatherland the living centre to which all hearts must be drawn.

He began with great faith in books. But he found that the books he wrote did not change the people's lives. His years spent in writing books seemed to him wasted. So he turned to what he called "the living word". He would have his teachers live with the students, talking with them and being examples to them. He sought a relation similar to that of the old Indian *guru* with his pupils. He himself went about rural Denmark, meeting and talking with people face to face. He said, "Great teaching must be the fruit of actual experience on the part of the teacher, not the expression of mere theory".

The aim of his People's College, he held, "should not be examinations and an assured livelihood, but for each individual the development and enlightenment which bring their own reward. The aim of the school should be to find 'the common universal subjects' to which the students would want to devote their time because of their usefulness, or because of the pleasure they give".

Grundtvig insisted that there should be no examinations of any kind in the People's College. They were to teach only things which are of common interest to the whole people.

The study of the mother tongue and all that pertains to it he deemed of prime importance. This emphasis did not result in insularity. An observer wrote, "Foreigners are surprised when they learn that simple peasants are leaders in Parliament, and in important government departments."

Grundtvig held that the difference between the cultured and the uncultured person is that the former feels a sense of kinship with the intellectual life of the past which the latter is without.

The first People's College was established by Kristen Kolb, son of a shoemaker and a follower of Grundtvig, in 1851. It was started with a capital of less than Rs. 2,000, and with 15 students. He built a building for the school,

mostly with his own hands. His little peasantschool seemed insignificant, but "history makes no mistake when it attributes to it a decisive influence on the People's College", and a powerful influence in regeneration of Denmark. By his strong personality the People's College was given a solid footing in Denmark. Grundtvig said Kolb had transformed his ideas into reality in the best manner.

Kolb said, "I do not know so much about enlightenment as about enlivenment. I enliven first and enlighten afterward, or at least enliven and enlighten at the same time". Following his example, all the People's Colleges came to put their chief emphasis on the awakening and development of personality; imparting knowledge was treated as of secondary importance. He said, I found that not until the enthusiasm of my students was aroused were they ready for any instruction.

3. *Description of the People's College.*—The People's Colleges of Denmark are residence institutions for adult young people, chiefly from rural life. They are not vocational, but cultural, in their purpose. All of them, and of the agricultural schools, are private institutions, usually owned by the principals, but sometimes by an association. None but principals who combine such qualities as intelligence, forceful speech, business ability and good personality can succeed. Though the government gives financial aid it does not interfere in management. Many schools would surrender government aid rather than submit to formal examinations by government.

A People's College which applies for public funds must first be recognized by government. In order to get recognition the school must have been in existence for at least two years and in both years must have had at least ten students for a year. No student may be under sixteen, and not more than one fourth may be under eighteen. The government makes grants according to the number of students. The poorer schools lose students and finally close. Thus the students and not the government rate the schools. Since there are no examinations and no degrees, the problem of uniform tests does not arise.

While the government allows a certain proportion of students under eighteen, the People's Colleges are conducted on the assumption that it is well to have a break in schooling between the fourteenth and the eighteenth year, or even longer. Many Danes hold that in this period of adolescence and maturing, young people want to grapple with practical affairs, to become self-sufficient and self-reliant.<sup>1</sup>

Parents generally agree that only students over eighteen should attend People's Colleges. They feel that students should first learn the manual labour of their future occupations, and should not attend People's Colleges unless and until they have strong desire for education. The experience of the Colleges proves that this desire to learn asserts itself without any urging.

<sup>1</sup> While this programme of interrupted schooling has been highly successful for rural boys and girls, it is less so in the cities. For city youth the interruption of schooling often means that the time is spent in earning money and spending it freely on city distractions, so that when the years for People's College arrive, earning and spending and urban recreation habits have spoiled the natural interest. In Sweden urban People's Colleges have succeeded better, but they are more directly vocational in nature.

A typical school has about 125 students during the year, though some of the more popular ones have two or three times as many. Most People's Colleges are for both young men and young women. Generally the men attend from November to March, while the women, and sometimes men as well, attend from May to July. Some Danish People's Colleges are co-educational, as are most of those in Sweden.

The schools are nearly all located in the open country, a mile or two from a village or city. The students live in close association with teachers, often in one large building. The furnishings are simple, sometimes meagre, and so the students are not educated away from simple living. The principal and family have at least one meal a day with the students. Students and teachers eat at a common table, spend part of their evenings together, and there is the same familiar intercourse between students and teachers as among the students themselves.

Problems of discipline are practically unknown. Some schools have formal student government, but the shortness of the term prevents its full development.

About five per cent of the students come from cities and towns, and the rest from the farms and villages. About a third of the students go to schools in some part of the country distant from their homes, thus promoting national unity.

The curriculum of the People's College covers ground somewhat similar to that suggested by the University Commission's report concerning *general education* in the chapter on *Courses of Study*. The curriculum of the existing People's Colleges includes all major fields of general education, with literature, history, the art of government, the physical and biological sciences, and also ordinary practical school subjects to a greater or lesser degree.

Lectures are very much used. The secret of success with lectures seems to be the thorough mastery of the subject by the lecturer, his all-round education, and his great interest in his work. Text-books are not generally followed, though the library is much used.

The schools have a deeply religious spirit; but there is no formal instruction in religion. With a few church supported institutions this is not the case.

The People's College is attractive to young people. Many look forward to it for years, and save money for it.

Opponents of the People's Colleges held that the best preparation for a farmer is to learn agriculture, and that the People's Colleges were a waste of time. Others held that the peasants were incapable of culture. Agricultural schools were set up in opposition to the People's Colleges. They mostly failed except as they were taken over by men who had been trained in People's Colleges. The view has come to prevail that a young man should first attend a People's College and get a broad outlook on life, and then take courses in an agricultural school. There are as many agricultural colleges in Denmark with 40,000,000 of population as in India with 32,00,00,000. Since the boy or girl was out of school and at practical work from age 14 to 18 or 20, he has practical experience. The development of Danish rural life in agriculture, co-operatives, social legislation and decentralized industry is pointed to as evidence of the soundness of this position.

4. *Some Results of the People's College Programme.*—One over-all result is claimed for the People's College programme : that it has created an intellectual and spiritual climate in which progress seems to be the natural course. The People's Colleges do not have special courses on cooperatives, yet Denmark has a large and successful cooperative development, and most heads of cooperatives are men or women from People's Colleges. The People's Colleges are not political, yet it is claimed to be largely through their influence that Denmark is very advanced in social legislation. The Danes have a good government, yet they prefer to handle their own affairs in private cooperative groups, rather than to have an army of public officials and employees controlling their affairs. A list of some of the achievements of rural Denmark since the birth of the People's Colleges is instructive.

#### CULTURAL ACHIEVEMENTS

As a direct result of the People's College movement nearly every village and town has its lecture society. These have meetings once a month which combine literary and social interests. The meetings are eagerly attended. There is one such society for every 1,500 people in Denmark. The average attendance is about 100, so about 6 per cent. of the rural people of Denmark have such an experience each month.

A widespread habit of reading also has developed. Denmark publishes one magazine for each 2,200 people, and one daily paper for each 20,000 people. Nearly every home has its own library, and every small town its book store. The village public libraries of Denmark contain two and a half times as many books as do the city libraries, and the village circulation of books is larger. A new book is published each year for each 1,000 of the population, so each Dane must buy several books a year.

The speech of the common people, which Grundtvig nurtured as a literary form, has become the language of literature. The academic language of a century ago has entirely disappeared. With this simple speech of the people, Grundtvig held, " people can express the loftiest thought in plain words ". Of course, scientific nomenclature must recognize international usage.

The " old school ties " of the People's College help to keep alive fellowship and mutual understanding. There are alumni meetings each year, and also usually each fall several days are spent in a reunion where old students can refresh their outlooks and spirits. The attendance is large. Also extension lectures take the People's College to the villages.

#### SOCIAL LEGISLATION

Child labour is prohibited under fourteen years, and night work for children under eighteen. The old-age pension system of Denmark has been largely copied by England, the United States and New Zealand.

Insurance against accidents while at work is paid for by industry as a part of the cost of production. There is unemployment insurance, so that a person may continue to have an income if his job fails. This is managed, not by the government, but by the workers. Similarly " sick clubs ", to care for the

members during illness are privately organized and managed by the members, but with government financial help. There are also excellent old people's homes and provision for relief of invalids. Provisions for arbitration and conciliation between employees and employers, have largely eliminated industrial strife.

#### ECONOMIC DEVELOPMENT

Of young men and women who attend People's Colleges, about 90 per cent. return to their home communities, while many others become rural teachers, managers of cooperatives etc. Thus the People's College is strengthening and refining, rather than impoverishing, the rural life. The Danish farmer has become a scientist at his work, and Denmark has become like a big experiment station in agriculture. Whereas their grandfathers were mostly tenants, more than nine-tenths of the farmers now own the land they cultivate.

A century ago a considerable part of Denmark was waste heath land. Nearly all this has been reclaimed, though sometimes thirty years of continuous scientific treatment is necessary to turn a barren waste into productive farm land.

The country has a large number of cooperative organizations through which the people serve themselves in many ways. The following list, published in 1939, indicates how the education provided by the People's Colleges finds expression in economic affairs.

Kind of Cooperative	Number of Organizations (approximately)	Year the First was Organized
Food-stuff Societies .. .. .	1,387	1851
Dairies .. .. .	1,400	1882
Dairy Societies .. .. .	800	1887
Milk Testing Associations .. .. .	400	1902
Danish Dairy Butter-seal Societies .. .. .	1,400	1900
Bacon Factories .. .. .	62	1887
The United Bacon Factories .. .. .	60	1890
Danish Egg Export .. .. .	700	1895
Potato Export .. .. .	15	1913
Butter Export .. .. .	10	1888
Cattle Export .. .. .	15	1898
Danish Bacon Company .. .. .	1	1912
Cattle Breeding Associations .. .. .	700	1881



Kind of Cooperative	Number of Organizations (approximately)	Year the First was Organized
Horse Breeding Associations .. .. .	400	1879
Swine Breeding Associations .. .. .	200	1882
Sheep Breeding Associations .. .. .	150	1899
Goat Breeding Associations .. .. .	60	1009
Cow-testing Associations .. .. .	1,750	1892
Consumers' Societies .. .. .	1,824	1872
Credit Associations .. .. .	14	(1775)1850
Banking Associations .. .. .	160	1897
The Co-operative Bank, Copenhagen .. .. .	1	1913
Savings Associations .. .. .	500	1884
Cattle Insurance Associations .. .. .	2,500	(?) 1810
Bull Associations .. .. .	1,400	1884
Hail Insurance Associations .. .. .	20	1864
Storm Insurance Associations .. .. .	10	1866
Fire Insurance Associations .. .. .	10	1856
Accident Insurance Associations .. .. .	(200,000 members)	1898
Life Insurance Associations .. .. .	10	1904
Use of Machinery .. .. .	2,000	1914
Electrical Plants .. .. .	400	1895
Coal Supply Associations .. .. .	600	1913
Fertilizer Associations .. .. .	1,450	1866
Bakeries .. .. .	40	1888
Fruit Societies .. .. .	20	1903
Sanatorium Associations .. .. .	1,200	1904
Cement Associations .. .. .	650	1911
Renting Associations .. .. .	1	1912
<b>Total</b> .. .. .	<b>23,520</b>	<b>..</b>

There is a policy of "building from the ground up" and vesting the power in the local unit rather than in a central organization. The mortality of Danish cooperatives has been very low.

The cooperatives are open to all responsible persons, have democratic management, operate on a cash economy, and keep open accounts, with no secrets. The membership is voluntary and withdrawal without financial loss is made easy for a person who wishes it.

Throughout Denmark there are many agricultural study circles. Nearly every cottage has a radio, and broadcasts on agricultural and other subjects are frequent. There is an organization for national economic work for young people, for cooperative work undertakings, the aim of which is to increase the interest of young people in farming. There are gymnastic clubs in many villages.

Though Danish agriculture is very efficient, less than 10 per cent. of the rural people have attended even a six months' agricultural course. The agricultural quality is held to depend largely on a state of mind engendered by the People's College. The students develop a habit of study, the open mind, and appreciation of expert knowledge and of cooperation.

All over Denmark there are "societies of control". These are cooperative societies which employ agricultural experts. The expert advises on soil, crops and live herds, and prescribes feed and care. When market conditions change, the farmer is advised by his expert what to do, and he can at once change crops to meet new conditions. Thus the whole agriculture of Denmark has made quick shifts to meet new international conditions, and this without any government dictation.

The People's College has not been the only progressive element. The democratic constitution of Denmark, like that of India, was the result of a somewhat romantic middle class movement, following the trend of the times. Grundtvig believed that for actual democracy to appear there must be general education for the common people. When the new peasant party sought thorough-going reforms, the same liberals who put through the new constitution united with conservatives to prevent democratic policies from emerging. Two great political figures, Georg Brandes and Viggo Hørup, fought for democracy, and were largely instrumental in bringing it about. A vigorous contest raged from 1870 to 1901, when a new and very democratic constitution was adopted.

5. *Limitation of the People's College Movement.*—The Danish People's College is no self-perpetuating system for achieving high citizenship. When Grundtvig outlined its principles more than a century ago he was far in advance of his day, and the effort to achieve his ideals brought a great upsurge in the national life. Were he living today he doubtless would have accepted the scientific attitude and its social implications. His followers until recently tended to retain the position he held in his day, rather than to progress as he progressed during his life. Some people feel that some of the Danish People's Colleges through this kind of orthodoxy are tending to become static, and are losing their position of vital leadership.

6. *Lessons for India*.—There are two dangers in the Indian basic education movement. One is that it shall become conventional, worldly and self-seeking, losing its strong consecration to fundamental human needs and values. The other danger is that it shall fix as a rigid orthodoxy the position Gandhiji took under the particular circumstances of his time, and shall not grow and progress in his spirit of "experimenting with truth". There is danger of yielding to both these tendencies at the same time. A People's College movement would need to guard against both dangers.

For an institution similar to that of the Danish People's College to develop in India will require a supply of suitable teachers. This may well be one of the activities of the rural universities. The rural university in this way would help to build a bridge between the world of scholarship and the life of the common people. Fortunately there exists in India a body of men and women committed to rural education and experienced in it who could make a substantial beginning to that end.

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- Numbers 1, 3, 5, 6 and 7 and occasionally copies of the others, can be supplied by Community Service Inc., Yellow Springs, Ohio, U.S.A.

## APPENDIX Q

### II.—NEW RURAL PROFESSIONS

The following descriptions are of new or partly developed professions mentioned in the chapter on Rural Universities. Some of these are rural in their nature, while others, though concerned with the whole of Indian life, are definitely appropriate for rural university study.

*Water Control Engineering.*—Because of the seasonal distribution of rainfall over most of India, and of the semi-arid condition of much of the country, and also because the principal crop, rice, requires irrigation, the very life of India depends on the control of the water supply. If the use of the river flow in India should be increased from five or six per cent to twenty five or thirty per cent, and if other good agricultural practices should be followed, the crop yield of India might be more than doubled, floods could be reduced, and health conditions in some areas could be greatly improved. In this development water control engineering must play an important part. Large scale river control for irrigation, flood control, power development and navigation will go far in increasing the total water supply for irrigation.

Where electric power is generated, there need be no conflict between basic industries, such as aluminium and chemicals which use large amounts of electric power, and vigorous development of rural life and industry. The use of large amounts of power in basic industries may actually make more feasible the electrification of rural areas. Moreover, there is no reason why the basic industries should be located in cities. They can be located in the midst of a group of villages, getting their labour from such villages. The Alcoa, Tennessee plant of the Aluminium Company of America, the largest aluminium plant of the world, is so located.

The control of great river systems is only the beginning of the work of the water control engineer. After such great projects are carried to the utmost, a large part of India must depend on more limited sources of water supply. The construction of tanks by modern methods can be greatly extended.

As Indian farming is improved and mechanized, even though still conducted on a relatively small scale, perhaps twice as much total crop will be raised by a quarter as many farmers. Probably a hundred million Indians will be released from agriculture. One of the ways in which very large numbers of men can be used for long periods is in providing storage for surplus water, even by the excavation of great cisterns where that is the only possible method. In the need to find employment for the large numbers so released there will be justification for water storage projects which in other conditions would not be economically sound.

A great deal of Indian agriculture is carried on by pumping water from wells. So long as such pumping is by human muscle power or by bullock power there may be little danger of exhausting the ground water. With electric power a hundred times as much water might be pumped from a single well, and the ground water might be exhausted. Water control engineers should make careful ground water surveys where irrigation is by pumping. In some cases it will be necessary to rigidly limit the amount of pumping to prevent the failure

of agriculture in large areas. Legislation similar to that previously suggested for relocating villages could be used for administering the ground water supply.

Over a considerable part of the peninsula, ground water is found only in fissures in the underlying rock. If a well intercepts one of these joints or fissures an abundant supply may be had. If it misses a fissure by five or ten feet the well may yield almost no water. Much hard work is wasted in digging dry wells. The water control engineer should become skilled in geophysical exploration, so that by the use of electrical and electronic devices water veins can be located and the waste of digging dry wells can be avoided.

In some areas it is possible to spread the flood flow of rivers so that it will sink into the ground and renew the ground water. This process has been developed in California.

Irrigation often results in the accumulation of salts at the surface and in the ruin of fine irrigated lands. The water control engineer can prevent this, and can even reclaim land that is naturally too heavily impregnated with salts to raise crops.

We have outlined some of the work of the water control engineer to show how an only partially developed profession can grow and can contribute greatly to the wealth and economic security of rural India.

*Soil Improvement Engineering.*—The earth was not made for man's special benefit. He takes it as he finds it and improves it to suit his purposes. Civilization is largely made up of the efforts of men to master nature and to make it serve their needs. In very little of India is the rainfall ideally distributed for agriculture. So men correct the unbalance by irrigation. The soils of India are the results of geological forces having no purposeful relation to maximum productiveness. They must be studied, understood, and completed by human effort. There are some who disapprove of the use of mineral fertilizers to correct natural or man-made soil deficiencies. Natural soils vary greatly in the presence or absence of the mineral elements which are essential to the best growth of plants, and therefore in their fertility. It should be the aim of soil improvement engineering to secure the optimum mineral balance so that a soil being treated shall approximate to the best balanced and most productive soils found in nature. Just as land may be ruined by excessive or unskilled irrigation, so can it be injured by unskilful use of fertilizer. The cure in each case is not to "go back to nature", but to master the subject by scientific inquiry.

Much exploration is yet needed before the treatment of soil can be made to reach its full possibilities. This is true not only as to mineral contents, including such necessary "trace elements" as manganese, boron, cobalt, zinc and copper which have been overlooked until recently, but also with reference to soil organisms which help or hinder the growth of crops.

Much of the soil of India is seriously eroded, part of it so seriously that it is entirely out of use, except for poor pasture. By the use of good engineering and modern equipment such as bulldozers, millions of acres of this abandoned and can be brought back to full production.

Ancient Peru, which before its conquest had perhaps a higher degree of economic security than any country in the world, developed most of its agriculture on steep rocky mountain sides, by means of stone terraces so well built that after four centuries of neglect by the conquerors, they are still largely intact. A Peruvian, working for his government, might spend his entire life in building terraces and filling them with rock and soil so as to create a few acres of land. The process was time-consuming, but once completed and supplied with water through irrigation canals built along the mountain sides, the terraces formed new land which would support a family for generations to come. The Irrogotes of the Phillipines similarly practice successful hillside terracing, as do farmers in the Himalayas. As a means for using very large numbers of men displaced from agriculture in ways which will add to the permanent national resources, land terracing has vast possibilities for India.

At the mouths of India's great rivers are vast expanses of land a little below sea level, or so little above that they are too wet for cultivation. Holland has reclaimed large areas of such land, not nearly as fertile, and thereby has added to her population resources and to her wealth. With proper soil improvement engineering India can in the same way add fertile lands and good homes for millions of people. The Sunderban area in Bengal is evidence of such possibilities in India.

These suggestions by no means exhaust the possible fields for the soil improvement engineer, but they indicate what a variety of work is open to this new rural profession.

*Temperature Control Engineering.*—The tropical sun's heat, which now in many ways is a handicap to Indian life, can become one of our great resources through the new profession of temperature control engineering. Much of India needs hot water, especially during the winter months. It is entirely feasible, by means of simple engineering and construction, to use the sun's energy to heat water which then can be stored in insulated tanks. In this way a year round supply of hot water can be provided without the use of fuel, as is done in America under far less favourable circumstances.

With somewhat greater expenditure the heating of entire houses during winter months can be done by using solar energy for heating and storing water, using circulating hot water for warming a house. In that way nearly all fuel for house heating may be saved. Homes, schools and factories of the future will have temperature control to make them pleasant places for working during hot weather.

Every good village should have a cold storage and "deep freeze" centre for the preservation of food, as well as refrigeration for each family. Every important fishing village and every large fishing vessel should have provisions for cleaning, packing and freezing fresh fish, and there should be provisions for shipping frozen foods. For these and other uses, temperature control engineering can have great extension in rural India. Food preservation by freezing will come to be one of the common necessities which a village cannot afford to be without, just as many villages cannot afford to be without irrigation water.

*Food Processing Technology.*—Many kinds of food are overproduced at some seasons and almost wholly lacking at others. Food processing and preservation can greatly increase and stabilize the food supply. Much grain is lost because it is stored with too much moisture. Control of the moisture content of grain for storage is becoming well developed. All these processes require a high degree of training and skill, and constitute a new profession or technology.

*“Chemurgic Engineering”.*—This is a term given recently in America to the process of turning farm crops, especially waste, into industrial products. The half million tons per year of waste molasses in the sugar industry should be used for production of industrial alcohol, stock feed, fertilizer or other useful products. Sugarcane bagasse and jute waste should become an important source of highly desirable building materials for interior work. Castor oil may become an important source of nylon fibre. The vegetable oils of south India may be processed for many industrial purposes. The possibilities of sisal have not been fully explored. Many of the forest trees and wild plants of India are unexplored as to their chemical industrial possibilities. *“Chemurgic Engineering”* opens new world for rural industry.

*Ocean Products Technology.*—India is bordered by fishing villages, but the processes are almost as primitive as a thousand years ago. The head of the Oceanographic Institute at Woods Hole in the U.S.A. recently expressed the opinion that in large areas of ocean south of India an acre of ocean would produce twice as much food as an acre of good Indian land. Ocean products technology can begin with improvements in packing, cooling or freezing, transporting and marketing fish products, and in processing and selling fish wastes for industrial products, poultry food and fertilizers.

But that need be only the beginning of a great new field of industry. As the profession of ocean products technology develops we may look forward, not only to a great direct increase of food supply, but to a very large increase of fertilizer, made of all living things in the ocean, plant or animal, not otherwise useful. The ocean, especially those parts where “plankton” and other life is most abundant, can be a vast source of vitamins, drugs, oils, glue, chemicals, leather, poultry food and fertilizer. The fishing villages and towns around the coast of India may become places of varied industrial life. Ocean resources may go far towards balancing India’s food budget.

*Mineral Processing.*—India has a great variety of mineral products. There is no reason why these should be sent to large cities or to foreign lands for processing. Much of that work can be done by village or small town industries at or near where the minerals are found. Mica can be prepared ready for final use, including ground mica for paints and lubricants. Kyanite can be made into furnace linings, asbestos into roofing and other products. The field of mineral processing is so large and so varied that any detailed discussion is out of place.

*Rural Industrial Counselling.*—By and large, the chief disadvantage of much small industry is less in small scale production than in the limitations of small scale management. Big industries can afford specialists in administration, in buying, selling, finance, accounting, labour management, and in the

development of manufacturing processes, and research. For small scale industry to realize its full possibilities it is necessary that such special services shall be available to small industries as well as to large ones.

This need of small industry for specialized services is only now becoming generally recognized. In America such help is becoming available, chiefly from private organization, but in a lesser degree from the government. In Scandinavia the same results are being achieved by cooperation of small industries with the help of government.

In Finland a very interesting process is under way. About two hundred small metal industries, scattered over Finland, with from three or four employees to two hundred employees each, have developed a cooperative organization for supplying the member firms with these specialized services. A central office was set up, supported by a percentage of the income of each member firm. This office supplies its members with technical advice and services of many kinds. It looks after import and licencing arrangements, purchases supplies and raw materials, works out new technical methods for manufacturing, prepares accurate working drawings and specifications for products being manufactured, helps in marketing products, supervises accounting and business management, and arranges loans at the banks. Where the central office, with its staff of forty members, cannot supply the research facilities or the technical services in Finland, it can locate such services in the adjoining countries, and can quickly make the necessary arrangements.

Thus these little firms, through their cooperative organization, have available the highly specialized modern technical services which had been available only to great corporations. This development has occurred in a poverty stricken, war devastated nation, in a barren country along the arctic circle among a people just emerging from primitive life. They do have the advantage of a high quality of integrity in personnel, business and public relations. In India a similar movement has been suggested by Sir M. Visvesvaraya through the All India Manufacturers' Organization. The Indian rural university might well undertake to develop and to supply leadership for these services so essential to the success of small rural industry. Somewhat similar services are necessary for agricultural marketing cooperatives.

*Rural Public Administration.*—The profession of public administration in a rural democracy has yet to be developed in India. Democracy cannot thrive unless the people learn to handle their local affairs themselves. If the new India is to be truly democratic it must learn to combine the local management of local affairs, and the regional management of regional affairs, with co-operation and unity in those matters which must be dealt with by the nation as a whole.

In all democratic government, while the general over-all control rests with elected representatives of the people who come from every walk of life, the actual administration of the public business can best be performed by professionally trained, skilled and experienced specialists. The *firka panchayats* will need permanent secretaries. District police supervisors should be, not politicians, but professionally trained men who are skilled in the theory and



art of public order and safety. The rural university should train professional safety directors. While in much of India land records are well kept and present no serious problem, yet in other parts such record keeping has been a vast source of petty blackmail, graft, special privilege and coercion by small officials and self-seeking persons. This whole field of title recording and administration should be raised to a professional level. It should fall to the rural university to develop good methods of title administration, and to train men for that work.

There are many other elements of rural public service for which the rural university should prepare. Travelling accountants could train local officers in simple accounting methods for villages, and for the larger administrative units between village and district, which have different names in different parts of India. They could also supervise accounts and prevent irregularities. Sanitary officers will need to be trained, the distribution of irrigation water should be improved, and the collection of taxes should be regularized.

*Rural Social Welfare.*—Over all of rural India, aside from missionary undertakings, there is very little provision for the care of the aged or orphans, crippled, blind and deaf. Nor is there any orderly provision for relief in time of natural catastrophe. Rural social services should be developed, not to take the place of neighbourly care and friendliness, but to help them to intelligent action and to supplement them where necessary. This work should not be over-professionalized, but should strive to make the ordinary processes of family life and neighbourliness intelligent and effective.

Even though care of the sick is a neighbourhood service, performed without pay, the educating of village women in such intelligent care will provide work for many well trained professional women. Education in community life, cooperation and organization may quite change the spirit and character of a village. The quality of family life can be greatly changed for the better by wise family guidance, and by education directed by qualified workers. The teaching of nutrition and food preparation in villages will provide careers for many trained women. Village people do well to direct their own recreation, yet a trained recreation leader may be effective in teaching the best folk dances, games and other forms of recreation. The work of a single recreation leader has sometimes changed the recreation habits of many villages and developed local amateur leaders of community recreation. Keeping in mind the policy that so far as possible the social services of villages should be voluntary neighbourly action, yet in many fields there is room for well trained professional social workers to provide education, encouragement and supervision for such voluntary effort. The various rural social services are now scattered through several departments of government, with consequent overlapping and confusion. The rural university might well be an agency for unifying and harmonizing the rural social service work of the various departments of government.

The field of professional social service is constantly broadening and is providing training for men and women in new and important fields. There is prospect that it may contribute substantially in enlarging and refining the cultural and social quality of rural India.

*Rural Land and Village Planning.*—As discussed elsewhere in this report, most Indian villages should be entirely rebuilt, often on new locations. It may seem at first thought that a village is only a village and needs no skilled planning. Such is not the case. The wise location of streets so that the natural drainage will be good, the proper planning and location of sewers and drains, the best size, shape and location of house sites, the best size and location of playgrounds, school houses, public buildings and meeting places, garden plots, pastures and barns, airplane landing fields, and locations for industries—all these are important, and trained and experienced men and women can best handle them. In many cases groups of villages will unite in planning landing fields, playgrounds, schools, common pasture, or industries. There again professional planners will be useful.

One of the great wastes of Indian agriculture is the fragmentation of land holdings. Land planners, working under suitable legislation, should become skilled in working out and administering the consolidation of land holdings, and in suggesting improvements in legislation for that purpose.

More and more India will want to preserve its wild spots of natural beauty, making them precious possessions of the whole people. Land planners should be skilled and experienced leaders in this movement.

Altogether the profession of land planning can become highly developed and highly useful. To make it such should be the work of the rural university.

*The Profession of Social Engineering.*—In the old days most disputes or other differences were settled by local panchayats or village elders. Few cases went to the courts. With the imposition of English law and the rise of urban university law schools the condition has greatly changed. There is litigation everywhere. Small town lawyers thrive chiefly as people quarrel. We are told by well informed advocates that outside large cities, more than 90% of legal practice is due to quarrels and litigation.

For the welfare of rural India the legal profession as it now exists should be largely replaced by the profession of social engineer. His work should be, not to win law suits and thereby to pile up a fortune, but to prevent the need for litigation and to further social harmony. He should aim at reviving the settlement of differences by informal agreement before panchayats or rural elders, and to clarify social customs and social relations, so that there would be fewer occasions for disputes. He should encourage the habit of making clear records of important agreements so that misunderstandings will not result from poor memory. The English law brought traditions of equality of rights to a culture in which some persons were considered to be superior and others menials. While we hold to the new concept of equality of rights emphasized by our constitution, the old habits of internal harmony and informal solving of differences should be revived. Social engineering should be not a technique for maintaining the *status quo* of privilege or class stratification. The basic human rights of the new Indian constitution should be its guide.

The drafting of legislation affecting rural life should be the careful, skilled work of the social engineer who has learned to fully understand and to fully state the issue, who knows what legislation of the kind in this or other countries has been most successful, and who knows how to provide the simplest, most economical, and most easily understood legislative expression. A vast amount of bad government comes from unskilled drafting of legislation. As a rule the politician wants his legislation to be successful, and would welcome such help. The social engineering profession would also watch proposed legislation to draw public attention to that which would be harmful because of careless drafting. The social engineer should be recognized as no less important to society than the public health officer, and should similarly be supported by the public.

*Rural Sociology and Anthropology.*—The field of rural sociology should not be a bookish subject, though a solid background of scholarship is necessary. The culture of India possesses many elements. It should be the chief business of the rural sociologist and anthropologist to know what these cultural resources are, to insure the preservation and discrimination of their valuable elements, and to introduce new cultural elements which will add to the range and quality of social life.

*Rural Arts.*—Similarly, the resources of rural arts, crafts, games, music and dancing should be explored and the best preserved and spread, somewhat as is being now accomplished at Santiniketan. Numerous such centres of influence at rural universities, with mutual give and take with primary and secondary schools, would be desirable.

*Rural Medical Service.*—Most doctors trained in urban medical schools shun rural life. Both in urban and rural medicine there are many physicians who are maintaining a high standard of unselfish public service. But perhaps there are not enough of them to determine the over-all attitude of the profession. One reason for inclining to this opinion is that many of the successful urban physicians have inherited the traditions of undemocratic aristocracy. The medical schools find difficulty in securing able men who will give up large incomes for teaching. The rural university should develop a different medical tradition. The rural physician should cast his lot with the people he serves, taking only a moderate income, such as will give him moderate economic security and enable him to keep fully in touch with developments in his profession.

The possibilities of cooperative medicine and health service should be developed. Along with the training of rural physicians the rural university should train physicians' assistants and nurses. These assistants can handle the routine health work of the villages from secondary school centres, while the rural physician can receive the more difficult cases at larger clinics or hospitals properly spaced, where feasible at the sites of medical schools. These need not be in cities. We are informed by the head of a very large clinic in a very small town that distance from the city is an advantage. It sifts out the ordinary routine cases, and leaves space for difficult cases from which students can learn most.

## APPENDIX B

### III.—SUGGESTIONS FOR RESEARCH IN RURAL UNIVERSITIES.

In extension of the discussion of research in the chapter on Rural Universities, the following are illustrative of subjects that would be appropriate for rural university research, though many of them would be suited to other universities as well. In most of the fields described there are opportunities for good and important work, even where laboratory equipment is meagre or perhaps entirely absent. As a rule some library facilities would be necessary. Of course, adequate laboratory facilities would greatly assist research, and in some cases, as in much exploration of natural resources, would be necessary.

*Ethical Research.*—Cannot the spirit of research challenge the saying that science is concerned only with statistical facts, and not with values. Where is there better opportunity than in India to use the methods of science to explore both the means and ends of living? Ethical research can address itself to the practical problems of rural India. What personal and social customs tend to encumber and degrade life? What conditions lead to those habits? Can clear statements of ethical policy be made, based on disciplined scientific observation and therefore subject to test and verification, which will define desirable personal and social attitudes, and therefore lay a basis for removing harmful human relationships?

Such ethical research might well cover all the motives and customs which so obstruct harmonious and effective living. It can explore the conditions which produce these undesirable attitudes and the conditions which favour goodwill, integrity, and wholesome human relations. Such inquiry will call for the help of biology, psychology, sociology and anthropology. Seldom does any one field of research stand alone. A chief hindrance to such exploration is moral timidity. It takes courage to examine objectively a custom which is general and long-lived.

*Psychological Research.*—What prevents the rural Indian mind from constantly searching for better ways of living? Is it not true that the rural Indian mind is naturally as keen and vigorous as any other? In what way can old sets of mind be broken and an attitude of eager inquiry be awakened? The methods used by C. H. Robertson in China in arousing whole areas of seemingly lethargic villagers to a high pitch of interest in modern science, might well be studied. The psychologists have the rare opportunity of critically exploring the processes of the rural Indian mind, and of learning how on a vast scale to arouse and awaken those minds without coercing or dominating or exploiting them. As a rule, psychologists who are from the villages and who know and respect the village mores can do this best.

*Sociological, Anthropological, and Cultural Research.*—The social background of India is exceptionally rich in what is very good, but also contains elements that account for much of her troubles. Research in rural sociology, anthropology and culture should prevent any impulsive rejection of India's past as being out of date, and may help bring an end to blind acceptance of harmful or useless elements, now retained because they are old and deeply

entrenched. Such evaluation will objectively and critically examine, explore, test and appraise in order to disseminate what is good, and to purify the cultural inheritance from that which has prevented fulfilment of possibilities. The method of disciplined critical objective inquiry, applied to a study of rural India, may bring about greater changes in decades than otherwise might occur in as many centuries, and the changes can be wise and discriminating, rather than a drifting with the prevailing currents.

*Research in Population.*—The impoverishment of rural life in India has been accompanied by excessive increase in population. Quite commonly the people who seem to have least to live for have the most children. When life is rich and varied and there are many interests to share attention, families are generally small. When life is reduced to ignorance, poverty, and the bare rudiments of existence, the birth rate is usually high.

The regard for large families, which may have been appropriate when infant death rates were very high, may be inappropriate in modern society. Population policy should be a live study, adjusting to whatever conditions actually exist, whether they be of over or under-population. Here is a very important field for research, especially in India where a dense population is increasing rapidly. The fundamental inquiries are yet to be made. What density will bring the greatest total value of living? Should numbers increase to the very limit of subsistence? Are there other desirable limits of population than capacity for subsistence?

What aesthetic values are concerned with population policy? Is it desirable to have fewer people, so that each may have space for self-expression and freedom of motion? It is almost universal for successful men to try to surround themselves with ample, uncrowded space, if necessary keeping out the crowd by walls or other barriers. In such ways they give expression to the deep and nearly universal human craving for "elbow room". What every man craves for himself may be a desirable aim for society. Should space be saved for those who crave quiet and solitude? Should parks and areas of natural beauty be preferred to filling those spaces with more population? What degree of contact and intimacy makes for the best quality of living? Unless a basis for policy is laid by sound research, how can population policy be based on any factors except limits of subsistence, or the need for armies for defence or conquest?

Even while such fundamental studies are being carried on, practical consideration may call for policies which will check population growth. What has been the experience with such policies? How long a natural lag will there be between reduction of the infant death rate and reduction of the birth rate? What are the affects of contraceptives? How can the public best be educated in birth control, and what forms of birth control are desirable?

What eugenic practices and policies can help to raise the average quality of the population while checking its uncontrolled increase? What basis have we for eugenic judgment, and how can that basis be enlarged? How far can eugenic policy be furthered by education? Does not India have in the cultural

background of certain elements of her population some of the best eugenic policies the world has known? If so, how can such policies be appraised, purified, strengthened and transmitted to the whole people?

*Research in Rural Public Administration.*—There is a tendency for public administration to continually accumulate "red tape", routine and bureaucracy. If each particular operation in the public business were carried through with the full reasonable possibilities of economy and expedition, it is not beyond reason that the whole public business of India could be done with less than half the present budget.

Public administration research, from the village administration through the whole of public life can explicitly point out where the waste occurs, and how it could be eliminated. This process could be everywhere active. Every elementary basic school child, by personal observation and by questioning parents could discover waste in village administration and could devise ways for reducing it. The facts learned could be passed on to secondary schools, colleges, and universities and to research institutes. For many persons at all stages of education to be thinking about elimination of public waste and to be observing the difference between efficient and wasteful methods would be a powerful influence for bringing about desirable change.

Along with the saving of waste should go studies of the best ways of using the manpower released, by projects which will increase the public wealth, education and culture. Ethical and psychological research and education would need to go along with that which is chiefly administrative.

*Rural Economic Research.*—Critical research into the economic structure of rural India as to land tenure, taxation, marketing, finance and money, and the administration of natural resources and public property, might pave the way for removing barriers to productive work, and might provide incentive for creation of social wealth. Economics is commonly looked upon as a theoretical, generalized subject in which rural life may supply interesting illustrations, but can have no determining influence. If rural people discover, in some respects in which they had thought of themselves as helpless pawns of fate or victims of national or world strategy, that they need not be helpless, but can in large degree be masters of their own destiny, such knowledge will add hope and courage to their work.

Money economy for the Indian village is fairly new. Until recent times villages or groups of villages were largely self-contained. They lived almost wholly by barter or local exchange. Even taxes were paid by delivering a portion of the crop. Nearly everything used in the village or group of villages was produced there. If there were a nation-wide or world-wide panic, the village did not know about it, except by hearsay. Its local exchange of local goods went on, almost regardless of financial cataclysms in the wide world. Its surplus stores were insurance against most famines. Except as disturbed by merciless exploitation by despotic central governments, which levied heavy tribute and took away famine reserves, this simple barter economy provided fairly stable and well entrenched security.

With the coming of the industrial revolution and of cash economy, the great convenience of money as a universal medium of exchange, as contrasted with the limitations of direct barter, led to the dying out of barter. As a common result of this change, the economic autonomy of the village or small region tends to fade. Once the barter habit is lost it seldom is regained. As old time barter gives away to cash trading, even local village affairs are deeply affected by great fluctuations in the national or world money market. In case of a national or international money panic, lack of money for exchange brings even the village economy almost to a stop. The local area may have, in local goods and labour supply, most of what it needs to live comfortably, yet because barter has given away to the use of money, and money has largely disappeared, local goods cannot be exchanged or labour used, and the village shares in the national depression. Would a local medium of exchange for local goods and services partly recover the old village autonomy ?

For village and local groups to get a feeling of independent power and possibility would be stimulating. For them to feel that they were not helpless pawns in the great abstract process called economics, but were in some degree masters of their own economic destiny, would be a contribution to democratic self-reliance. Promising methods for achieving a considerable degree of local economic autonomy are awaiting competent research and trial.

Economics, like any other practical study, should be seen, not as an inflexible framework in which life is irretrievably cast, but as a technique for creative endeavour. In this as in other fields, rural life needs to escape from a sense of fatalism to one of hope and adventure. Rural university research should be an agency for creating that sense of creative possibility.

*Research in Rural Natural Resources.*—Modern science turns waste into wealth, finds value where none was expected, and finds new and better ways for using familiar materials. The region of the Dead Sea, for thousands of years a forbidding useless desert, becomes a great treasure house of chemical resources. Waste wood processed into wallboard becomes excellent building material. The waste of the sea becomes fertility for the land. Abrasives, refractories, insulating material, anti-friction materials, industrial chemicals, cements, fuels, building materials, paint materials, and many other products are awaiting research and development. Part of this must be the work of highly trained, graduate scientists, but even in highly industrialized countries a large part of the development of natural resources up to the present has been the work of far less scientifically qualified men, who made the best of their opportunities. The rural university should prepare men for the most exacting scientific research, as well as for practical ability to turn natural resources to profitable use.

*Rural Industrial Research.*—With the present condition of Indian rural life and industry it will be found that much of the desirable modernization has already had the necessary research in other countries, which needs only application to Indian conditions. Rural industrialization calls for a vast amount of preparatory investigation. To discover what industries can best be developed

in small units, to find industries which are suited to given locations and conditions, or to find locations and conditions suited to a particular industry, requires competent exploration. The difference between blundering and wasteful industrial development and that which has a high probability of success may largely depend on industrial research. As rural post-basic education calls for small industries to contribute to self-support and to provide practical industrial experience, much competent industrial inquiry will be needed.

*Research in Housing and in Building Materials.*—The rebuilding of Indian villages requires extensive research. Pioneering in the design of village homes should assemble all that is known of good home design in every land. It should be thoroughly and intimately familiar with Indian village life. It should be scientifically and critically minded, and should have creative genius. All these qualities should be trained to the end of designing village homes that will combine great economy, durability, convenience and usefulness, and the full possibilities of beauty. This is a new world of inquiry for the Indian university.

*Agricultural Research.*—Agriculture in basic education should make boys and girls familiar with the best of the old methods of raising crops, but should not stop there. It should lead them to be interested in the nature of soils and how they can be improved. It should interest them in improving varieties of crops, and in learning how to work the soil so as to get the best crops with the least effort. The aim should be that teachers of agriculture should be persons from villages who have gone through basic primary schools, basic secondary schools, and basic education universities, and who are at home on the land.

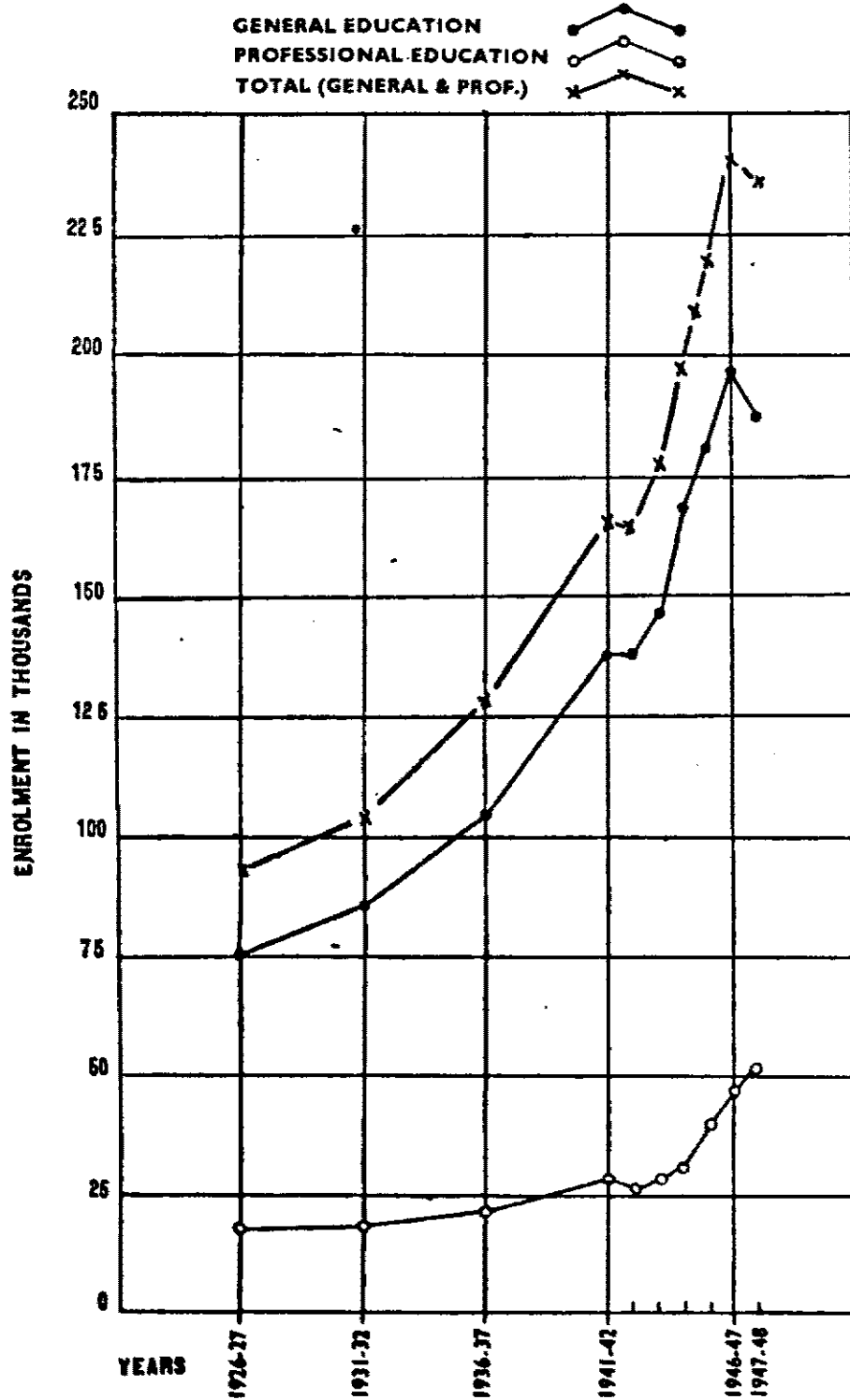
Research in agriculture can begin in basic education elementary schools. Where a crop is injured by disease, are there a few plants that do not get the disease, and that can be saved for seed? Nature is constantly producing changes in nearly all species of plants. Some of these are improvements. If such useful changes are noticed and are propagated, there is improvement in the crop. If there are only a few university men who have their eyes open, most of such favourable changes will pass unnoticed and will be lost. If all boys and girls doing farm and garden work in basic education should know that nature is constantly making changes, and should get the habit of noticing them and of saving the most promising, improvement of varieties of crops might take place a hundred times as fast.

The same is true in many other lines, as in the improvement of farm tools, and in quicker and easier methods of cultivating, irrigating or gathering crops. This matter is discussed in detail to show that research is not a strange process that only university graduates can know about. Every boy or girl can be a research worker, and can get much interest in the process.

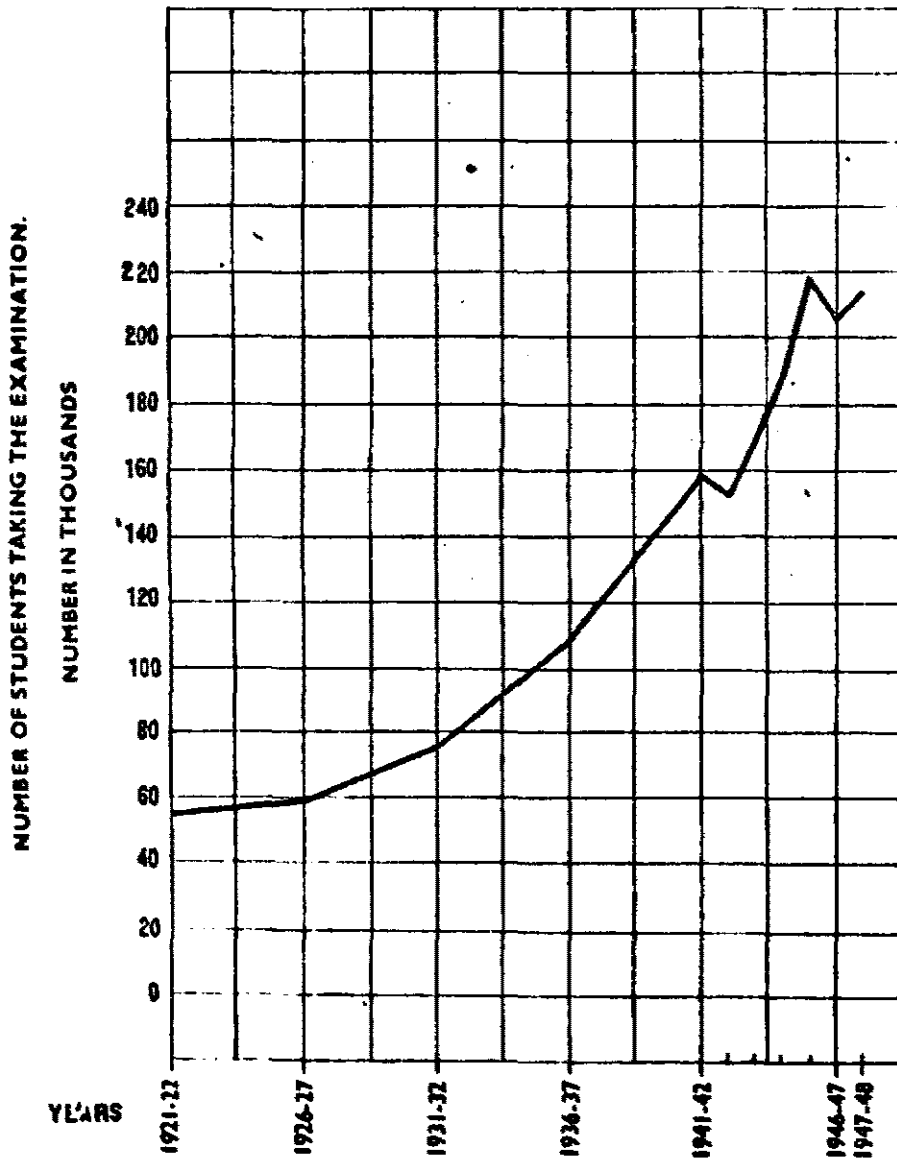
In a good basic education programme, the phenomenon which the boy or girl cannot understand will go to the teacher for explanation. The question which is beyond the university teacher will go to the research centre. If the specialist at such a centre wants to find something which may occur in nature, he can, through the basic schools, have a thousand pairs of eyes on the watch for it.



## ENROLMENT IN UNIVERSITIES IN INDIA



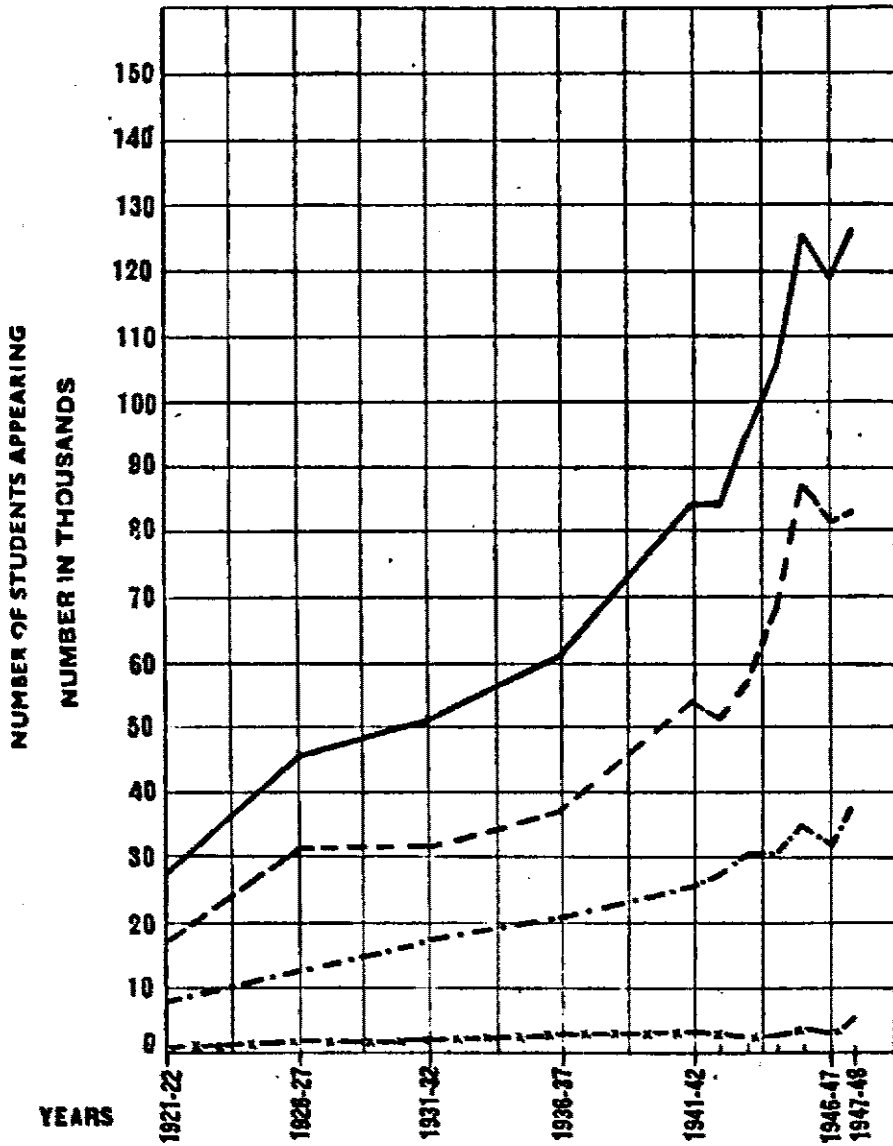
## MATRICULATION & EQUIVALENT EXAMINATIONS IN INDIA



## UNIVERSITY EXAMINATION IN INDIA

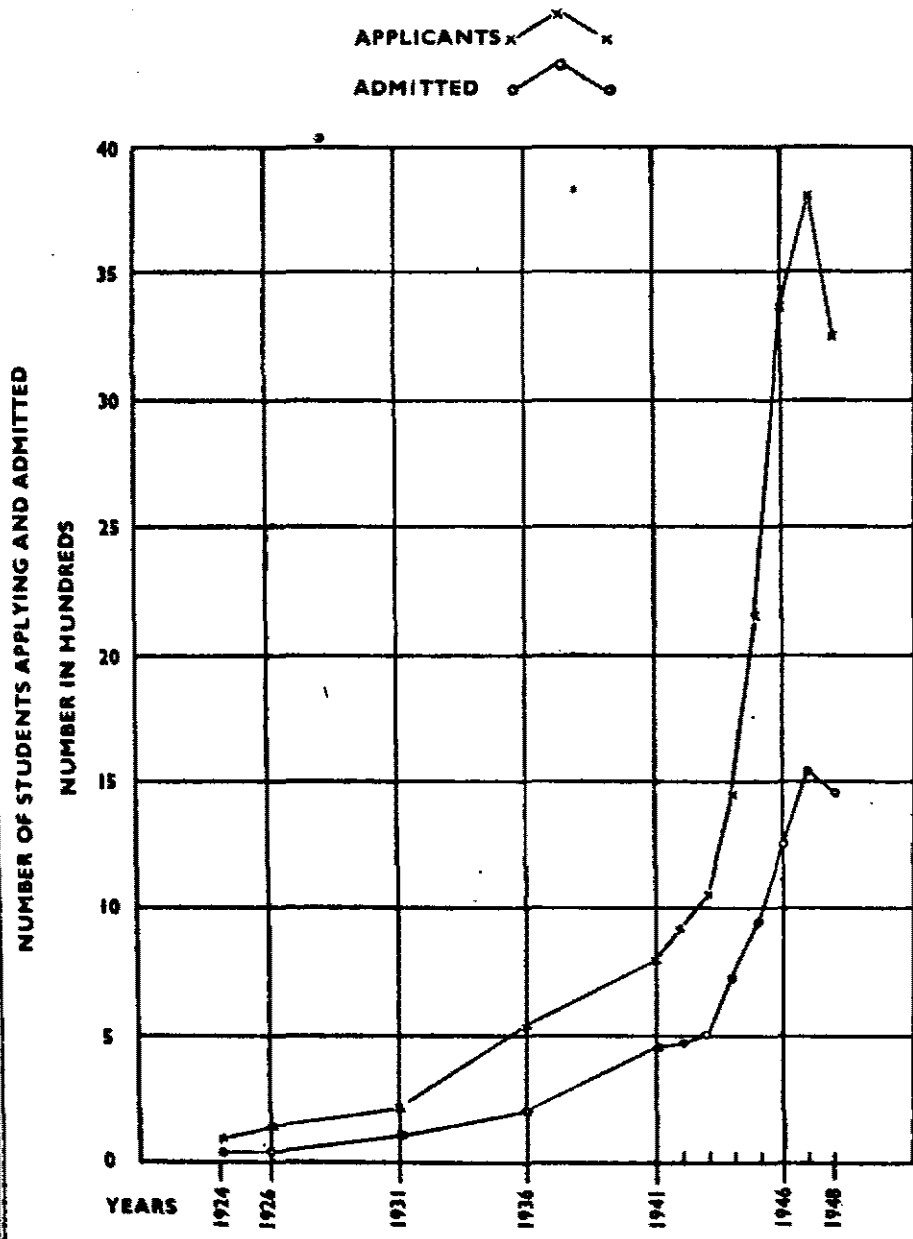
### GENERAL EDUCATION

- ARTS & Sc. INTER
- - - B.A. & B.Sc.
- · - M.A. & M.Sc.
- TOTAL



# AGRICULTURAL COLLEGES IN INDIA

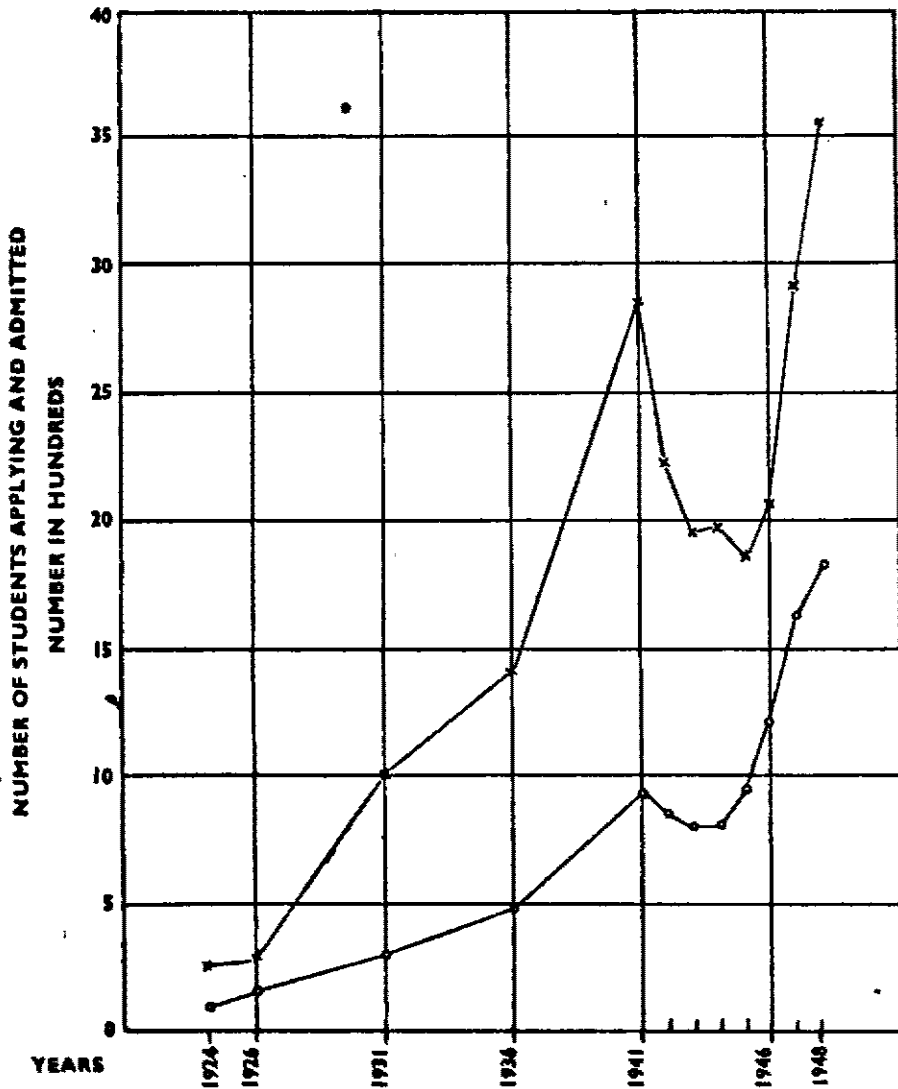
NO. OF APPLICANTS AND THOSE ADMITTED DURING 1924-48



## TRAINING COLLEGES IN INDIA

NO. OF APPLICANTS AND THOSE ADMITTED DURING 1924-48

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# ENGINEERING COLLEGES IN INDIA

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