



ADMINISTRATIVE REFORMS COMMISSION

**REPORT
OF THE STUDY TEAM
ON
AGRICULTURAL
ADMINISTRATION**

VOLUME II--ANNEXURES

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ANNEXURE I

BRIEF HISTORY OF THE DEVELOPMENT OF AGRICULTURAL ADMINISTRATION IN INDIA

BRIEF HISTORY OF THE DEVELOPMENT OF AGRICULTURAL ADMINISTRATION IN INDIA

Agricultural departments in most States were established between 1876 and 1905. Till the year 1920 these departments largely consisted of a few Deputy Directors of Agriculture, Agricultural Chemist, Economic Botanist, Entomologist, Mycologist, and some supporting staff. As the usefulness of plant breeding and genetics came to be recognised, posts of crop specialists or additional Economic Botanists were added to the Departments. During the thirties, under the inducements offered by liberal grants from the Indian Council of Agricultural Research and the Commodity Committees, a large number of research posts were created on a temporary basis ; but the staffing of the education and extension branches remained unchanged. Staff was added as each individual new scheme was sanctioned with the financial assistance from the bodies referred to above, and some of these posts were made permanent later on. Owing to financial stringency in the States, it became difficult to secure any general expansion of the department, unless financial assistance was available from outside. This often led to starving of research on vital food crops like rice, millets and pulses, as the meagre State resources were allocated to research on sugarcane, cotton etc. Thus, conditions for planned growth and development of the Departments of Agriculture did not exist.

It was only after 1944 that, under the stimulus provided by the Grow More Food Campaign, a real effort was made to strengthen the extension side of the Agricultural Departments. Some substantial expansion in the field of agricultural education occurred during the Five Year Plans mainly arising from the demands made by the Community Development Programme. This programme, however, did not succeed in motivating the vast majority of the farmers towards increased agricultural production programmes. Later Panchayati Raj was introduced in 1959 to provide institutional support and agriculture was allotted as its main responsibility. Cooperatives were geared to supply to the farmers the necessary credit, inputs for the agricultural production but all these efforts have not achieved the desired results.

Agricultural Service

Prior to 1920, only Bombay and erstwhile Central Provinces had a regular Provincial Agricultural Service but as a result of the recommendations of the Public Services Commission, also known as the Islington Commission, such services were constituted in all the States after 1920, partly by absorption of special posts, partly by promotion from subordinate services and partly by direct recruitment. Below the Provincial Service, there

were Subordinate Services with varying rates of pay, for which the qualification required was a degree or diploma of an agricultural college. The scales of pay differed greatly.

The Royal Commission of Agriculture in 1928 made important recommendations with regard to the service conditions, but unfortunately most of these recommendations have not been implemented. They recommended that—

- (i) the scale of the Indian Agricultural Service should be sufficient for Class I appointments with special pay for research and administrative posts requiring exceptional qualifications.
- (ii) agricultural research in India required men who combined scientific knowledge and technical research of the first order, with a vision and creative power essential to the opening of an original line of work. They should be recruited to Class I Service and those fitted to carry on the work along well established lines be appointed to Class II and the promotion from Class II to Class I were to be rare in the case of research posts.
- (iii) on the administrative side vacancies in Class I appointments be normally filled by promotion of Class II officers.
- (iv) promotion to Class II posts should be directly by selection on grounds of merit and that no weight should be attached to seniority.
- (v) the posts of Director of Agriculture and the Principal of an Agricultural College were scheduled as selection posts outside the cadre of Class I officers.
- (vi) the Director of Agriculture should be placed on terms of equality with the Heads of other important Departments, such as those of the Public Instructions and Forests and the officers selected for the Directorship should combine administrative capacity with high scientific qualifications.

The Joint Indo-American Teams on Agricultural Research and Education in their Report (1955) stated—

- (a) some of the major difficulties in the way of developing improved technical leadership in the fields of agricultural research, education and related advisory services are due to current policies of administration and personnel management.
- (b) the problems relating to professional agriculturists and their administration in India are numerous and complex. They must be analysed carefully and definite steps taken to improve the

position of agricultural scientists and educationists, if technology in agriculture in the country is to progress.

- (c) the direction or supervision of research or educational programmes in agriculture, as in any other field, must be entrusted to individuals who have a full understanding of the potentialities in these technical fields. The heads of a research institution must be a stimulating driving force. Proper technical leadership will lend stability and provide for continuous progress in research. The same general qualities are required in the education and extension fields. There is tendency in some States or institutions to place non-technical administrative officers in charge of agricultural research, education and other technical services. This is a move toward mediocrity in technology.

In a State, the grade for Agriculture Inspectors which constitutes the department's main striking force at the field level has remained the same for the last 40 years. For raising the morale and for bringing about an improvement in the quality of the agricultural extension staff, it is necessary to upgrade the posts of District Agricultural Officers and Regional Deputy Directors of Agriculture. The District Agricultural Officer who is to play the role of an Adviser to the District Officers should be paid as well as other members of the District Team. Apart from these there should be arrangements for promotion, etc. Another factor retarding the development of scientific knowledge is the transfer of specialists trained in a certain discipline to high level position in another scientific field for which they are not especially qualified but to which they are not considered entitled on the basis of seniority. It is important that the interests of good research workers should be safeguarded and promotion given in their line.

It has also been observed that technical men find that officers from administrative services who have worked in a position subordinate to them in positions of authority in the higher rungs of the administrative machinery while they remain static on account of slow promotions and an absolute bar to their working in administrative posts in the field or the Secretariat. This creates a psychological background which is not conducive to their contributing their best in the service of the country. Based on these arguments the Nalagarh Committee recommended the constitution of an All-India Agricultural Service, with scales of pay and prospects at par with the IAS so as to raise the morale and efficiency of agricultural services and thereby attract equally suitable material for manning the services and bring about uniformity of standard.

Coordination

The problem of bringing about adequate coordination among various Departments and institutions connected with agricultural production was

examined by Dr. Ram Subhag Singh's Working Group in 1963. It recommended :

- (a) The two Coordination Committees set up by all State Governments—one at the Secretariat level presided over by the Chief Secretary and the other at the Cabinet level presided over by the Chief Minister should continue as they have helped in reducing red tapism.
- (b) The Departments and agencies concerned with the agricultural production and Panchayati Raj should be integrated into one Department of Agricultural and Rural Development. The Department should comprise Agriculture, Animal Husbandry, Fisheries, Community Development and Panchayati Raj, Co-operation and allied Departments.
- (c) The Secretary of the integrated Department should be designated and function as Commissioner for Agricultural Production and Rural Development and should coordinate the work of Head of Departments concerned with agricultural production, such as, Directors of Agriculture, Animal Husbandry, Fisheries and Panchayati Raj and Registrar of Coöperative Societies.
- (d) In view of the rise in the volume of work connected with Planning, the duties and responsibilities of Secretary, Planning should not devolve on the Secretary-cum-Commissioner, Agricultural Production and Rural Development.
- (e) Regional Commissioners should be assigned the supervisory role at the regional level.
- (f) The District Collector should be the Chairman of the Agricultural Production Committee of the Zila Parishad. If there is no Zila Parishad, an Agricultural Production Committee should be formed with the District Officers of the Departments concerned with agricultural production and representatives of non-official organisations as members and the Collector as Chairman.
- (g) The District officers of the integrated Departments concerned with agricultural production should be individually responsible for the implementation of programmes of their respective departments. The District Agricultural Production Officer should assist the Collector in coordinating the efforts of all Departments concerned with agricultural production at that level and should function under the overall direction of the Agricultural Production Committee.
- (h) At the sub-divisional level, the Sub-Divisional Officers will continue to inspect the activities of the block.
- (i) At the Block level, there should be an Agricultural Production Committee of the Panchayat Samiti, Panchayat Union or

Anchalik Panchayat, consisting of elected representatives of the Samiti and the Extension officers concerned with agricultural production. The Chairman of this Committee should be the Chairman or President of the Panchayat Samiti, Panchayat Union or Anchalik Panchayat.

- (j) The Extension Officers should be borne on the cadre of the respective technical departments.
- (k) At the village level the Village Level Worker is to be solely responsible for agricultural production programmes. The work relating to amenities should be transferred to the Panchayats.

Growth of the Department of Agriculture at the Centre.

In 1923, in the interest of economy and efficiency, the portfolios of Education, Health and Agriculture were combined and the Department of Education, Health and Lands was created. In 1945, the Department of Education, Health and Lands was trifurcated into three separate Departments, namely, the Department of Education, the Department of Health and the Department of Agriculture. The Department of Agriculture was renamed as the Ministry of Agriculture from the 15th August, 1947. Upto January 1951, the Ministries of Food and Agriculture functioned separately. This arrangement came to an end in February 1951, in pursuance of the Government of India's plan to re-organise certain departments to secure greater administrative efficiency and economy by amalgamating the two Ministries into one Unit designated as the Ministry of Food and Agriculture. In 1951, the Government of India set up a new Ministry of Natural Resources and Scientific Research. The work relating to the Survey of India, Botanical Survey of India and the Zoological Survey of India was transferred from the Ministry of Food and Agriculture to the Ministry of Natural Resources and Scientific Research. The main reason for this was that although the work relating to these surveys had some bearing on agriculture and forestry, there were a number of other important items which made the work of these surveys significant for purposes of defence and other matters. As such, it was considered necessary to develop various aspects of these surveys under the supervision of the newly formed Ministry of Natural Resources and Scientific Research. Again, with effect from 1956, the Ministry of Food and Agriculture was split up into two separate Ministries, namely a Ministry of Food and Ministry of Agriculture. In April 1957, the Ministry of Agriculture and the Ministry of Food were again combined into a single Ministry of Food and Agriculture having two different Departments, namely the Department of Food and the Department of Agriculture. The Department of Agriculture was responsible for the following broad functions:—

1. Agricultural Production.
2. Agricultural Research, Education and Extension.

3. Animal Husbandry, Fisheries and Forestry.
4. Fruit and Vegetable Products Industry.
5. Agricultural Economics & Statistics.
6. Agricultural Development.
7. Liaison with the Food and Agriculture organisation of the United Nations and other International Organisations and Technical and Economic Aid in the Agricultural sector.
8. Procurement and Distribution of Fertilizers.
9. Agricultural Marketing.
10. Land Reclamation.
11. Cooperation.
12. Tubewell and Minor Irrigation.
13. Soil Conservation.

The following are the main changes brought about in the Department of Agriculture since 1956 :

- (a) A separate Department of Cooperation was formed under the Ministry of Community Development in December 1958 and the subject of "Cooperation" was transferred from the Department of Agriculture to that Department with effect from the 30th December, 1958.
- (b) The work relating to the Central and States Warehousing Corporation was transferred to the Department of Food with effect from the 30th December, 1958.
- (c) The work relating to fisheries development including fisheries research and fisheries education, was transferred to the Department of Food with effect from the 8th September, 1962.
- (d) The work relating to the development of fruit processing industries was transferred to the Department of Food with effect from the 8th September, 1962.
- (e) In October, 1956, the work concerning production, technology, prices and distribution etc. of sugar had been transferred to the Department of Food while problems bearing on research, production and development of sugarcane continued to be handled by the Department of Agriculture. This latter work also was formally transferred to the Department of Food in March 1963.
- (f) Consequent on the reorganisation of the Indian Council of Agricultural Research, all work relating to the administration of

of Agriculture and Animal Husbandry Research Institutes handled by the Department of Agriculture were transferred to the Council with effect from 1-7-1965 and the Development work, which used to be handled by the Council, was transferred to the Department of Agriculture with effect from the same date.

- (g) With effect from 25th January 1966, the Ministry of Food and Agriculture and the Ministry of Community Development and Cooperation were combined into a single Ministry, namely, Ministry of Food, Agriculture, Community Development and Co-operation and was placed under one Minister. Consequent to this amalgamation and also to ensure better coordination between the Department of Agriculture and the Department of Community Development, these two Departments were also brought under one common Secretary with effect from the 11th March, 1966.
- (h) The work of Fisheries was again transferred from the Department of Food to the Department of Agriculture with effect from the 16th May, 1966.

On the eve of the Fourth Five Year Plan, the Department of Agriculture was reorganised keeping in view that agricultural production was to be the dominant theme and responsibility. The reorganisation became more imminent as a result of the Cabinet decision on the reorganisation of the Indian Council of Agricultural Research, so that it may have an autonomous status and be wholly responsible for research, education and high level training in agriculture. As a part of this process, the Commodity Committees for cash crops who were conducting research and some development work were also to be assimilated into the ICAR and the Department of Agriculture. This involved transfer of several developmental work hitherto performed by the ICAR and the Commodity Committees to the Department of Agriculture and transfer to the ICAR of some research institutions that were run by the Department. The distribution of work has also been rationalised and streamlined so as to have the Secretary to the Department more time and opportunities for over-all supervision and matters of policy.

ANNEXURE II

SUMMARIES OF A FEW COMMISSIONS AND COMMITTEES ON AGRICULTURAL ADMINISTRATION

- (A) The Royal Commission, 1928.
- (B) India's Food Crisis and Steps to meet it, 1956.
- (C) Agricultural Administration Committee (Nalagarh Committee) 1958.
- (D) Working Group on Inter-departmental and Institutional Co-ordination for Agricultural Production, 1963 (Dr. Ram Subhag Singh's Report).

SYNOPSIS OF RECOMMENDATIONS OF THE ROYAL COMMISSION

The main recommendations of the Commissions on varying subjects like organisation of agricultural research, demonstration and propaganda, animal husbandry, forests, irrigation, communications and marketing, finance of agriculture, cooperation and agricultural services are summarised below :

THE ORGANISATION OF AGRICULTURAL RESEARCH

1. Imperial Council of Agricultural Research to be constituted, the primary function of which would be to promote, guide and coordinate agricultural research; the Council will not exercise any administrative control over the Imperial or provincial research institutes. It will work as an advisory body to Imperial and Provincial Research institutes and also Imperial and Provincial Agricultural Departments.

2. As a link with the Imperial Research Council a provincial research committee to be established in each of the major provinces.

3. On the formation of the Imperial Council, the necessity for an Agricultural Adviser to the Government of India should disappear.

4. The Pusa Institute to be made a teaching institute of the highest standard.

AGRICULTURAL IMPROVEMENT AND THE SUB-DIVISION AND FRAGMENTATION OF HOLDINGS.

5. The question of manufacture of composts and of synthetic farmyard manure and where night soil is available of poudrette by municipalities should be investigated.

6. Investigation of the possibilities of extension of the oil crushing industry for the welfare of the agriculturists is commended to all local Governments.

7. The crushing of bones could be taken up on a larger scale but a far more thorough investigation and the economics of the bone crushing industry is required before the establishment of such materials by private enterprise.

8. Of the three methods of obtaining superior varieties of the agricultural crops, namely selection, hybridisation and acclimatisation, the method

of selection is the most hopeful line which offers the greatest immediate possibilities of effecting improvement.

9. In present conditions, the cooperative agencies seem to offer the best means of handling the distribution of the improved seeds.

10. A separate organisation is necessary within the agricultural department in each province to deal with seed distribution and seed testing.

11. The aim of an agricultural department should be to evolve a small number of types of implements and machinery suitable for a wide range of conditions and also suitable for mass production.

12. The improvement of existing agricultural implements and machinery offers a more promising field than the introduction of new types.

13. Railway authorities should consider re-examination of railway freight rates on agricultural implements and machinery and grant concessions whenever possible.

Demonstration and propaganda

14. Administrative plot for demonstration of actual agricultural processes is the most suitable and preferable to an agricultural farm.

15. Short courses in particular subjects for cultivators given on demonstration and seed farms form an excellent means of establishing closer touch between the agricultural departments and the cultivators.

16. Propaganda through the leaflets, lantern lights and cinema films will be of little value unless it is used in conjunction with actual demonstration of results.

17. The agricultural departments should make far greater use of the cooperative credit societies in their propaganda work.

18. An officer of the standing of a Deputy Director of Agriculture should be attached to the office of the Director of Agriculture in each province whose sole duty would be to organise and systematise propaganda work.

19. Valuable stimulus to agricultural development would be given if the Government of India were to award an annual prize for the most striking agricultural improvement of the year.

Animal Husbandry.

20. Four cardinal points in a policy of improvement must be (a) a reduction in the number of plough cattle; (b) an increase in the efficiency

of plough cattle ; (c) attention to all matters that would tend to decrease the number of bullocks required for cultivation ; and (d) an effort to secure better treatment for dry cows and calves.

21. No large addition to the existing grazing areas is possible. An effort should, therefore, be concentrated on increasing the productivity of the land already growing grass.

22. As regards the improvement of cattle by careful breeding, the aim should be to establish pure and improved types of the best cattle. But no attempt should be made to produce a "dual purpose" animal suitable both for drought and milking.

23. Improvement of indigenous breeds by selection is a safer policy for agricultural departments to pursue than cross breeding and this process should also be applied to buffaloes.

24. One of the members of the proposed Imperial Council of Agricultural Research should represent the interest of animal husbandry. He should be an authority either in livestock breeding or veterinary medicine.

Forests

25. Replacement of grazing by grass cutting should be encouraged.

26. The Railway Administration should offer the lowest rates for the transport of fodder compatible with their position as private earning concern.

27. An investigation into the cost of efficiency of wood, charcoal or coal in terms of the losses to agricultural production by burning cowdung is urgently required.

28. Possibilities of afforestation for the increase of fuel supplies should also be thoroughly investigated.

29. A forest utilisation officer should be appointed in every province for the development of forest industries as a matter of great importance to agriculturists.

30. In each province, the Government should aim at establishing two divisions within the forest department, the officers in one division to be responsible for the charge of forests, the preservation of which is desirable on climatic or physical grounds and of economical forest, *i.e.*, all those forests managed with a view to direct profits from the sale of timber and other forest products; the other division to be in charge of minor forests, fuel plantations, village woodlands and wasteland now chiefly used for grazing and often included under unclassified forests.

Irrigation

31. Further investigation and experiment in regard to the possibility of the sale of water by volume are eminently desirable.

32. There is no advantage in transferring the control of the distribution of water from the Irrigation to the Agricultural department.

Communications and marketing

33. Good communications are of great importance to the cultivator, for on them, largely depends his opportunity for the favourable marketing of his produce.

34. The importance of subsidiary communications which are of even greater concern to the cultivator is emphasised. His village must be linked up with the main arterial roads if he is to get the advantage of good communication.

35. The local Government should give liberal financial assistance to local boards etc. for road schemes. Such assistance should, however, be in the form of floatation of loans.

36. Liberal grants-in-aid should be given for the construction and improvement of village roads although even in that the main efforts should come from the villagers themselves.

37. It is desirable that the closer cooperation between the Railway and Agricultural Departments should be secured by the appointment of the Director of Agriculture or the Marketing Officer in each province as a member of the Local Advisory Committee on Railways.

38. Consideration of the establishment of regulated markets on the Berar system as modified by the Bombay legislation is recommended. The management of such markets should be vested with the Market Committee having adequate representation of the actual cultivators.

39. The weights and measures should be standardised.

40. In view of the growing importance of Indian Agricultural products in Europe, the Indian Trade Commissioner in London should be given the assistance of an officer with experience of agriculture and cooperation in India.

The Finance of Agriculture

41. It is desirable that the question of extending the principle of statutory restriction on the alienation of land be examined.

42. Where existing systems of tenure or tenancy laws operate in such a way as to deter landlords who are willing to do so from investing capital

in the improvement of their land, the subject should receive careful consideration with a view to the enactment of such an amendment as should remove such difficulties.

43. An enquiry into the cost of the failure to utilise the Usurious Loans Act should be made in all provinces.

44. The greatest hope for the salvation of the rural masses from their crushing burden of debt rests in the growth and spread of a healthy and well-organised cooperative movement based upon the careful education and systematic training of the villagers themselves.

Co-operation.

45. The reasons for failure of co-operative movement appear to be that while societies have been registered freely there has been a lack of patient and persistent education of the members in the principles and meaning of cooperation.

46. There is full scope for both the honorary workers and the official staff and the time has not yet come when the official staff can be eliminated or even reduced. It is, therefore, strongly recommended that every efforts should be made to build up a highly efficient and well trained official staff in all provinces.

47. The minimum period of tenure of the Registrar of co-operative societies should be not less than 5 years and the maximum not more than 10 years.

48. Government assistance to the cooperative movement might be given in the following ways:—

- (a) by contributing towards the out-of-pocket expenses of honorary workers both whilst under training and whilst they are working in the field ;
- (b) in assisting institutions whose object is to spread education and application of co-operative principles to various objects and assisting unions in supervision ;
- (c) in promoting organisations on a cooperative basis to facilitate specialised forms of cooperative activity, such as the consolidation of holdings, adult education, irrigation and the like;
- (d) in the propagation of the movement in backward tracts.

49. Various concessions such as exemption from Income tax, from stamp duty and from registration fees and the provision of facilities for the transfer of funds at par by means of remittance, transfer, receipts, should be granted by Provincial Government to Cooperative Societies.

50. Land mortgage banks should be established under the provisions of the existing Co-operative Acts. With regard to assistance by Government to these banks, Government should not subscribe to debentures but should give guarantee of interest on the debentures.

The agricultural Services.

51. The post of Director of Agriculture and principal of an agricultural college should be scheduled as selection posts outside the Cadre of Class I Officers.

52. The officers selected for the Director's post should combine administrative capacity with a higher scientific qualifications. If a suitable person is not available in a province the provincial Government may turn to the agricultural department of another province, failing that to the ICS or to the Educational Service.

53. The Directors of Agriculture should be placed on an equality with the heads of other important departments such as those of public instruction and forests.

54. The principals of agricultural colleges should get pay scale of Rs. 1500-50-2000.

55. The officers of the superior provincial agricultural service should have special qualifications in agricultural research.

56. The recruitment to the superior provincial service should not be restricted to the province itself.

57. Men capable of original research should be recruited to Class I service and other fitted only to carry on work along well established lines should be appointed to Class II posts.

58. Teaching side of the agricultural colleges should be strengthened.

59. In the earlier years of service, interchange between the administration, the research and the technical branches of the service should be freely allowed.

**REPORT
ON
INDIA'S FOOD CRISIS AND STEPS TO MEET IT**

(Ford Foundation sponsored)

(SUMMARY AND RECOMMENDATIONS MADE)

The following actions are urgently called for:—

1. An all our emergency Food Production programme to be given the highest priority.
2. The need for stabilization of Farm prices.
3. A Public Works Programme for increasing Food Production and Village Employments.
4. Priorities for Chemical Fertilizers.
5. Intensified Irrigation and Drainage Programmes.
6. Selection of certain crops and certain areas for more intensive efforts.
7. Security of Land Tenure and Land Consolidation.
8. Immediate Large-scale Credit through Cooperatives.
9. Progressive Reduction of cattle numbers.
10. Urgency of a high level coordinating Food Production Authority.

RESOURCES FOR INCREASING PRODUCTION

Labour resources

1. The vast potential to be utilized for land and village improvements.

Capital Resources required

2. Sufficient capital must be provided to permit the most effective use of the abundant labour resources. The ratio of capital expenditure to added output will be much less in food production than in most other enterprises and that the increase in output will generally come more quickly from investments in food production than from investments in heavy industry or very large irrigation projects.

Lack of Knowledge—a limiting factor

3. Many improved practices have been adopted by some cultivators, in some areas. But until this knowledge is more wide spread and acted upon food production targets cannot be achieved.

Combined practices required

4. The evidence is clear that startling increases in food production are possible if the known improvements are adopted in effective combinations.

Tailor-made Programmes

5. A nation-wide improvement programme should be developed which will concentrate on the combination of practices that are most likely to increase production quickly in the different areas.

ORGANISING TO MEET THE CRISIS

Extraordinary organisational and administrative measures and actions are required to mobilize the nation to meet the challenge of producing enough food to meet minimum requirements of a rapidly growing population.

Many separate agencies have more or less direct interests in various aspects of food production. Their programmes and activities are diverse and at times seek different and not always consistent goals. Coordination is not always good. Conflicts in purposes, in methods, in emphasis, are not uncommon. Divided and diluted responsibility among agencies concerned with food production creates an environment in which inaction and delay are accepted as normal, and where assumption of leadership and initiative is discouraged.

To deal effectively with the food crisis, powerful emergency organs of Government having unquestioned and unfettered authority to act are necessary.

The crisis in food requires action at the highest levels of Government. Decisions which are binding on all Ministries of Government and on all levels of Government, and which are supported by political leaders, must be made.

Far reaching centralized authority with a clear line of command and execution alone can meet the challenge of growing more food. At each level, agencies and officers should be given well-defined, manageable and inescapable responsibility with full authority to discharge that responsibility. They should be judged by their initiative, their ability to push through the programme, and by their concrete accomplishments in increasing food production.

BETTER ECONOMIC AND ADMINISTRATIVE ARRANGEMENTS

1. Price Stabilisation

A conscious and consistent price policy is necessary to guide production to planned targets. This policy should aim not merely at reducing price variations but should maintain relative positions among agricultural

commodities to attain desired patterns of output. Special price inducements or deterrents should encourage or discourage the use of agricultural resources for particular purposes. It is recognized that the erratic nature of production prevents exact response in the short run; flexibility, therefore, is required to meet changing supply situations.

The specific assurances required by the cultivator as incentives for increased production are:

1. A guaranteed minimum price publicised in advance of the planting season.
2. A market that is ready to accept his crops at the floor price at the time he wants to sell.
3. Availability of this market within the bullock-cart hauling distance.
4. Suitable local storage for the portion of the crops which he does not wish to sell at harvest time.

The major need for price stabilisation is a systematic and continuous effort to maintain food-grain prices at the desired level. This can be accomplished by a permanent agency which can formulate price policy and implement this policy with the required action.

This agency be given responsibility for :

1. determining base prices and the permissible range in variations from these prices,
2. announcing the prices well in advance of the sowing season.
3. initiating purchase or sales operations as required by circumstances,
4. establishing the locations for stocks of each food-grain and the recommended supplies to keep in reserve,
5. determining export and import duties and quotas and such other devices for controlling prices as may be necessary,
6. encouraging the development of an effective grading system.

The price fixed should neither be too high nor too low.

It is apparent that the level of price guarantees will need to be established on the basis of the best possible estimates of domestic and world supply of food-grains, and on the basis of import prices as well as estimated domestic demand. It seems doubtful that a rigid formula can be developed

which can be followed from year to year. Estimates will need to be made concerning prices for different foodgrains that are likely to clear the market. Then the price guarantees to farmers will have to be established with due regard for competition with other crops, for necessary handling margins and for fluctuations in production.

The data required for decision-making should be supplied by the economic intelligence and outlook organisation described in a later section. This organisation should have full responsibility for the collection and analysis of agricultural and related economic data. It should review the supply, demand and price situation on a continuing basis and present the results of its appraisal to the policy group as a basis for their decisions.

The floor price should be announced to cultivators before sowing time and remain in effect for one full year. A further announcement should be made that floor prices will be established for an additional two years at levels 10 to 15 per cent below the import price, at a stated time each year. The actual prices are likely to rise above the minimum levels, at least in some years.

2. Land Reform & Food Production

In some areas uncertainties with respect to the application of land ceiling are at present retarding private investments in agriculture that could result in additional food production. Such retardation emphasizes the urgent need for passage of land reform legislation at the earliest possible dates, and then for immediate execution of the provisions of such legislation. Only in this way can uncertainties be eliminated, and assurance be given to cultivators so that they can safely make desirable land improvements.

Unfortunately, insufficient research is available in India on which to base decisions concerning desirable land tenure programmes. Arrangements should be made to analyse current data concerning distribution of ownership and tenancy by areas in each State, and by size of holdings and types of tenure. Research should also be undertaken to determine the advantages of various sizes of farmers under prevailing and improved methods of production, and for individual as well as cooperative operations. Rental arrangements, including crop-sharing, also need to be studied, with a special reference to their bearing on adoption of improved farming methods and thus on increased food production.

Even if these land resources are fully developed, they are not sufficient to provide a living for all the families now dependent on the land. And they are certainly inadequate to provide for the projected increase in village population (an increase of 45 million by 1966). Consequently, income improvement for the landless and for those with too little land must be

sought in ways that will permit subsequent adjustments in land holdings and in farm sizes when non-farm employment opportunities can be arranged for those not needed in agriculture.

As non-farm employment expands India should expect greater mechanization of its agriculture. Larger farms may then be needed for more efficient operations than can be provided under present conditions. Care should be taken, therefore, to avoid freezing a pattern of land tenure that cannot later be modified to meet changing conditions.

It is just as necessary to establish a minimum standard of land resources per family as it is to set a ceiling on land holdings. The minimum standard necessarily vary in acreage, depending upon the physical productivity of the land whether it is irrigated or unirrigated, and its location with respect to markets. Consequently, the minimum standard will need to be adapted to local conditions, but the general principle of a minimum unit for adequate living for a farm family must be kept in mind.

Cooperative farming and Land use

While experience is being gained by careful analysis of the first cooperative farming ventures that are established, attention can also be centred on alternative ways of accomplishing cooperation in farm operations. For example present owners or tenants operating small units could be encouraged to arrange for joint ownership and operation of bullock or mechanical power, and for use of the necessary equipment. Such operation permits individual attention by the cultivator to his unit of land.

Management assistance to cultivators, combined with supervised credit, and perhaps with joint ownership of equipment, offers a way to obtain the advantage of better management while still retaining the incentive gained by individual operation. The magic of individual attention to the land may not 'turn sand into gold', but there is ample evidence that it can constitute a powerful drive for improvement of operations.

Consolidation of Fragmented Holdings

By carrying on land consolidation with soil and water conservation, planning, land areas can be laid out so that field irrigation, canals, drainage ditches, contour bunds, and stone terraces are on the boundaries between holdings, or parts of holdings. Such locations of field boundaries are very important. It is not always necessary or even desirable to bring all the land of one holder into a single block especially where two or more contrasting soils of unlike management requirements are involved. It is more desirable to bring together those fragments of holdings that have similar soil.

Since land consolidation requires satisfactory settlement of tenure problems, prompt action on all phases of tenure and land ceilings is urgently needed.

Immediately steps should be taken: (1) to initiate soil survey and topographic surveys, where needed, ahead of planning for consolidation and with highest priority to areas of contrasting soils; and (2) to ensure that planning for consolidation takes full account of needed field structures for irrigation, drainage and contour bunds. In fact, a poor job of planning may result in few benefits and great confusion later when a proper scheme is attempted.

It was, therefore, recommended that firm plans be developed immediately to schedule the completion of the consolidation of fragmented holdings, village-by-village, as soon as possible. The work should be based upon adequate soil surveys and on a coordinated plan through which the boundaries of holdings could fall on the same lines as drainage ditches, irrigation canals, contour bunds, stone terraces, and similar structures. It was also recommended that high-level coordinating agencies be established at the Centre and in each state to develop schedules, and to ensure effective coordination with the requirements for soil and water conservation, giving special emphasis to needed structures for water control, distribution, and disposal.

Many States now have laws for undertaking land consolidation. Not all have laws to prevent further uneconomic fragmentation. Such laws should be enacted in States and necessary enforcement should be provided for. It was, therefore, suggested that draft legislation be prepared and submitted for consideration of the States not now having such laws, to prevent fragmentation of small holdings into tiny uneconomic units.

3. A Public Works Programme to increase rural employment and to provide more food

It was proposed that a public works programme be instituted in the interest of increasing rural employment and at the same time increasing food production.

Projects undertaken under this programme should be limited to those:

1. Which will have a direct effect on food production ;
2. Which require little or no capital expenditure and can be carried out primarily with hand labour ;
3. Which require little or no scarce material and little or no foreign exchange ;
4. For which people with the necessary skills to supervise work are available or can readily be trained.

Priority should be given to projects in those areas where serious rural unemployment prevails and, within those areas, to activities which will make the greatest and most immediate contribution to food production.

Examples of such projects are: contour bunding and terracing, land levelling, surface drainage, minor irrigation works, construction of wells and tanks, farm roads, godowns, etc.

4. The Role of Cooperatives in expanded Food Production

There is no magic in the cooperative form of organisation which assumes its success. Cooperatives will succeed only if they perform economic functions better than they are now being performed. They will be able to do so only if they are built on sound business principles.

Present plans make no provision for the States to advance loan funds to the smaller primary societies. We believe that the primary societies must become important in the extension of credit in rural India. To achieve this goal, the State Governments must advance loan funds to supplement the capital investment of the members, to provide a capital base large enough to support the complete borrowing needs of cultivators. If this is done, the Reserve Bank can then provide the necessary loan funds through the cooperative bank system, so that no society will be forced to deny a loan or given an inadequate loan because it does not have sufficient resources.

Although the village is the basic social unit in rural India, there is great variation between villages as to size, relative economic status, availability of markets, type of agriculture conducted, etc. These and other variables make it necessary that cooperatives be built to fit the circumstances existing in the specific area to be served. It was considered that the structure of a primary cooperative society was not as important as the result it achieved. Fundamental principles of cooperation must be adhered to, but the type of functions a society performed, the nature of its membership, and the number of villages served will have to be determined by the circumstances found in each situation.

Very little of this type of educational work is being done at the village level. It is the opinion of this Team that the extension staff, especially at the block level, must be strengthened in this respect by adding sufficient personnel to do intensive educational and promotional work on cooperative bank, with the cooperative unions (where they exist) and with the VLWs, but they should take initiative for carrying out the educational and promotional assignment.

It was found that the cooperative banks and primary societies generally were not familiar with the agricultural programmes being conducted in their areas, nor were they acquainted with their agricultural techniques. There should be close working relationship between the agricultural technicians and the officials of both the primary societies and the cooperative banks, in order that technical agricultural knowledge be used to strengthen repayment capacity and enhance loan recovery probabilities.

It was suggested that marketing and supply cooperatives be strengthened by using them as agency for price stabilisation. Quite commonly food-grain shortages exist in urban areas and in those rural regions which are not major food-grain producers, while elsewhere surplus grain are available and prices may be quite low. State purchase operations through marketing cooperatives in surplus areas would have the effect of strengthening prices there. Movement of these supplies through cooperative marketing societies in deficit areas would ease inflationary pressure and further develop the cooperatives' facilities.

The processing of agricultural produce is a complementary activity of cooperative societies which could be expanded. Because of the heavy investment required, marketing societies often need to join forces to build processing plants. This is true with respect to cotton ginning, sugar mills etc. The required investment for paddy hulling or rice mills, on the other hand, is relatively small and could be borne by individual societies. It is interesting to note, however, that most of the cooperative activity in India in the processing field is in connection with cotton and sugar where large investments are required. It appeared that the greatest need today was for more cooperatively owned paddy hulling and rice mills in major rice-producing areas. Efforts to market rice cooperatively have not been too successful and the lack of processing facilities has been frequently reported as a major contributing cause. The present ban on new paddy hulling plants is keeping cooperatives out of this activity. Some means should be found to let cooperatives enter this field.

The future of the cooperative movement in India depends upon the people who lead, direct and manage it. In addition to many qualified people in the Government, India has capable, well-informed and educated people in the cooperative movement itself. This "non-official" group can provide informed and practical information essential to the development of sound and practical policies and plans. Their counsel and advice should be sought. Unless "non-official" leadership is recognized and developed, cooperatives will be led and dominated by Government. This is not India's objective.

5. Improving Extension Work through Community Development

For effective extension there should be (1) programme goals for greater production set by village cultivators with the aid of extension workers and (2) an administrative organisation to motivate and assist cultivators in applying improved practices suited to local conditions and essential to reach the goal set.

Extension programmes can be improved by focussing them more directly upon local conditions, upon village production problems and

production potentials, and by having village farmers participate more actively in programme determinations, including setting the priority order of programme action.

Block extension workers should set up village food production committees through which the local farm people, assisted by block extension personnel and VLWs, first, can assess the present production and optimum productive capacities of village farms, and, second, determine the combinations of improved farming methods necessary to achieve expanded production. Where the village has a panchayat, the food committee could act as a sub-committee of the panchayat.

The top priority programme objective of community development in the foreseeable future must be to marshal the educational force and drive that will stimulate village cultivators to produce more food. The application of many more technological improvements, and the vigorous impact, of science, are greatly needed at the field level in order to obtain the magnitude of production required. This demands the use of technical agricultural specialists in the blocks and also other adjustments in current block staff assignments.

Immediate steps must be taken at the Centre, State and District levels to strengthen extension work. Unless the Block staffs are adequately supported by a core of agricultural subject-matter specialists up the line specialists who are continuously in touch with current research developments the local staffs cannot be expected to carry on successful extension programmes to increase crop yields by modern farming methods.

At the Centre, some of the nation's most competent agricultural technicians and scientists—in such fields as rice and other cereal crop production, irrigation, plant protection, soil fertility, animal husbandry, farm management and agricultural economics—must be recruited to give broad, general leadership to State extension specialists. The men selected must be capable of commanding the complete respect of their opposite numbers in research. At State and District levels men of similar qualifications are needed to give leadership and direction to the men in blocks and villages.

The jobs of VLWs and Extension Officers should be more specifically geared to food production. The State Departments of Agriculture should provide adequate agricultural information services.

BETTER USE OF PHYSICAL & BIOLOGICAL RESOURCES

1. Soil & Water Conservation

Eighty per cent of the annual rainfall, over the greater part of India, is received in less than four months. Since India has a tropical or sub-tropical climate, it has a potential to grow crops on a year-round basis.

An adequate water supply in the soil can provide opportunity for increasing crop production several fold. Often too much or too little water and its inefficient use are primary limiting factors to increased crop production. India is blessed with one of the largest water supplies of any country in the world, but only a small portion of its potential has been developed. Continued emphasis, therefore, should be given to the development of irrigation water supply through storage reservoirs and direct diversion from rivers and streams which will permit water delivery on a continuous yearly basis.

The tube-well programme should be greatly expanded in those areas where there is now a relative sure supply of good ground water. This would include large areas in Uttar Pradesh, Punjab, West Bengal, Bihar, Madras, Andhra Pradesh and parts of Bombay and other States. Those areas which have potential for 2 and 3 crops per year should have highest priority.

The programme for shallow masonry wells should be expanded to meet the maximum demand consistent with good irrigation planning.

The development of tanks should be encouraged and public assistance, through loans or subsidies, should be given for their construction and repair.

Improved water conveyance, within the village and on the farm, land preparation for uniform water distribution, and proper practices as to time and amount of water applied for various crops, soils and climates, offer some of the greatest opportunities for increasing food production. To get such practices used correctly on irrigated lands, and for contour bunding, terracing and land levelling on non-irrigated areas, requires technical assistance to the farmer. The Report recommended that:

Seepage studies should be made in the canal systems losing more than 15 per cent of their water; where excessive seepage is occurring, action should be taken to reduce it.

Each State should provide for a staff of technicians in soil and water conservation, not only for project work but also for direct technical assistance to cultivators and groups of cultivators as the need is identified by agricultural extension officers.

India now gets only one-fifth to one-fourth ton increase in crop yields on irrigated lands as compared to non-irrigated lands. Moreover, only about 12 per cent of irrigated acreage grows more than one irrigated crop per year. India cannot afford this waste of resources. Better water management is needed. In fact, India can make greater and more immediate gains in food production by intensifying expenditure of time and effort on water management on farms than by constructing large scale

irrigation projects which take years to develop. The III Plan should allocate substantial funds for technical assistance to aid cultivators in making better use of available water. Provision must also be made for a more comprehensive approach, with coordination of all relevant departments.

Recommendation

1. An increased effort should be made through technical assistance, extension and demonstration to get improved water management practices, combined with proper fertilizers, recommended seeds and cropping systems on farm fields as rapidly as possible.
2. Research experiments and demonstrations should be greatly expanded to deal with the proper combinations of: (a) water management (b) fertilizers (c) good seeds (d) other cultural practices necessary for high production.
3. An adequate percentage of the total cost of each new major irrigation project should be earmarked and made available through appropriate agencies of the Agricultural Department, so that funds necessary to start demonstrations of irrigation farming and other phases of their programmes will be available at the same time the engineering construction phases of a new project are begun.
4. One agency should be given the responsibility for coordination and improvement of natural and artificial drainage ways, and that the improvement of natural drainage ways be given a high priority.
5. Research and demonstration should be expanded on the reclamation of waterlogged, saline and alkali soils, and that increased efforts should be made to reclaim present areas so affected, but that no tiling or internal drainage should be started until after surface drainage has been affected.
6. Contour bunding and terracing, especially stone terracing should be given a top priority on soils (a) that can be shifted from rough pasture to good cropland, (b) that can be shifted from one fair crop to two good crops, and (c) that can give increase in production of 2 fold or better.
7. Since contour bunds to be effective must be laid out accurately, and since they must be continuous without breaks, except to well-prepared outlets, legislation should be adopted that permits a majority in a village (or wider area) to vote for contour-bunding or terracing schemes that obligate all landholders in the village (or wider area).

8. Adequate regulations should be formulated and enforced to provide that unused or poorly used land suited to crop production be leased or otherwise made available to cultivators.
9. All plans for bringing new land into use and for land consolidation should be made jointly with experts on soil and water conservation on the basis of soil surveys.
10. The Soil Conservation Board, in cooperation with State agencies, should work out ways to guarantee cultivators against loss from the adoption of radically different but well-proved systems of soil and water management that promise substantial increases in both yields and income.
11. Demonstrations of combinations of fertilizers use, bunding, terracing, controlled grazing, and similar practices should be accompanied by explanations of costs and returns.
12. The Centre should (a) give assistance to States for the coordination of departments dealing with agriculture, irrigation, public works, consolidation of fragmented holdings, land development and allotment, forestry, and related functions; and (b) the effectiveness of such coordination major emphasis in determining grants to the individuals States for projects in soil and water conservation or projects related to it.

2. Chemical Fertilizer—a top priority

Specifically, added emphasis should be given to:

1. the standardization of laboratory soil test with field experiments on the important kinds of soil ;
2. coordination of the soil-testing scheme with the soil survey ;
3. follow-through by field officers of test results ;
4. full recognition of other factors besides test results of surface soils that influence recommendations ;
5. a wider network of village demonstrations ;
6. estimates of economic returns along with physical demonstrations of the results of fertilizer use ;

and

7. developing definite cooperative relationships in the soil-testing scheme with the Soil Conservation Research Stations and all other experimental stations doing research on or conducting demonstrations with soils or crops.

3. The Multiplication & Distribution of Improved Seeds

In meeting the urgent need for improved seed, India has assigned responsibility to the extension workers who are loaded with many other duties. Progress has been made, but extension workers, especially at the block and village level, lack adequate training and time and are failing to make satisfactory progress both with respect to seed supply and seed quality. Demands for seed services will grow, as well the job of seed inspection and shopkeeping. The needed progress in improved seed multiplication and distribution can only occur under the leadership of competent seed specialists.

It was recommended that (1) village, block and district extension workers should be responsible primarily for improved seed education, (2) the State Departments of agriculture should be responsible for seed certification and (3) cooperative and private growers should be encouraged to assume the role of supplying improved seed. In the interim, as recommended in the section of the report on extension, the block cooperatives officer should assume primary responsibility for improved seed supply. In this transitional period, it is important that improved seed programmes do not suffer.

To reduce roguing costs in seed increases, and to improve genetic purity of seed for the cultivator, a continuing supply of 100 per cent pure Breeder seed is needed. To maintain varietal purity, seed multiplication procedures must be adapted to the type of crop—self or cross fertilized or hybrid. The plant breeder must maintain recurring supplies of pure Breeder seed of improved varieties, and seed multiplication methods must be employed which will maintain varietal purity in seed increases.

Effective steps should be taken to upgrade the quality of seed included in improved seed programmes. As an aid in accomplishing this, the States should establish and operate modern seed testing laboratories and enact suitable seed law.

Government stock seed farms should be established only at the rate at which competent management can be trained and recruited. Fewer farms of larger size will more fully utilize competent managers and equipment.

Increased production of improved seed should be concentrated in each block in one, or at the most two, selected "seed multiplication villages". These villages should receive special technical assistance, fertilizer allocations, plant protection measures, etc. to facilitate maximum production of high-quality seed. Wherever feasible, improved seed multiplication should also utilize the well-managed middle or larger sized farms.

All possible speed should, therefore, be used in developing supply co-operatives, and where feasible private enterprise, to assume major responsibility for certified seed distribution along with other agricultural supplies.

Progress in improved seed schemes can be ascertained by determining the proportion of the acreage planted to recommended varieties. Such data has in the past often been improperly determined and reported. Grossly misleading data is less useful than no data. Hence only statistically sound methods of reporting acreage planted to improved seeds should be employed. Such determinations should also include consideration of seed quality.

4. Live stock Development and Food Production

Unless problems associated with excessive cattle numbers and the attendant shortage of feed supplies are dealt with realistically, contributions of animal husbandry to increased food production will be extremely difficult, perhaps impossible. To a Westerner, a realistic approach to the solution of these problems would have to include a cattle slaughter programme. Yet one who accepts an assignment to advise India on such matters must keep the doctrine of ahimsa in mind and be prepared to analyse problems within the limitations of that doctrine. Unless he is prepared to do this, it perhaps would be better he not accept the assignment.

1. A graduated tax on cattle which would make the maintenance of useless cattle a burden on their owners ;
 2. Compulsory confinement of all bulls kept for natural service ;
 3. Mandatory castration of all young bulls not required for breeding ;
 4. Compulsory sterilization of surplus cows and heifers
- and
5. Measures to control open grazing.

Substantial increases in the production of milk, eggs and poultry are possible in the next seven years. To obtain these increases will require much more effective integration of live-stock production and crop production than has been attained heretofore in India. Moreover, technical personnel in animal husbandry, agriculture, cooperation, community development and related subjects, instead of working alone, will have to work together as a team. There must be one programme for animal husbandry, including the all-India key village scheme, mixed farming projects and dairy development, irrespective of where the work is done or who does it.

For example, an intensive programme of cattle development may be introduced immediately in all villages from which milk is collected for urban consumption.

It is recommended that the Indian Council of Agricultural Research evolve a plan for shaping and carrying out animal husbandry projects. This plan should stress (1) the interdependence of livestock production and crop production (2) coordination and team work among agencies and technical personnel concerned with (a) production and use of fodder and feed, (b) the improvement of livestock, and (c) the marketing of milk, eggs and poultry.

ECONOMIC INTELLIGENCE AND OUT-LOOK

If food production targets are to be established on a firm basis, and realistic plans made for their achievement, adequate information must be available on demands in different markets, and on production potentials in different producing areas. Available information on production, market supply, demand and price on foodgrains are inadequate. Yet these data must be used as a basis for decision-making by Government administrators, co-operatives and cultivators, as well as by other agencies and individuals concerned with food problems.

The development of an Agricultural Economic Intelligence Organisation at the Centre with the responsibility for making short-term and long-term forecasts and summaries for foodgrains and other agricultural commodities was necessary. This involves the collection and organisation of the necessary data, and rapid processing of the data to permit timely analysis for use in decision and reporting. An excellent beginning has been made within the Ministry of Food and Agriculture. The major need is to broaden the data collecting process, speed up the processing and improve the dissemination of the results. The information provided by an economic intelligence organisation is not only essential for administrators; it will provide a basis for obtaining an understanding of the food situation by cultivators and the general public. As cultivators learn the need for expanded food production and the production potentials of their own village, they can participate intelligently in establishing production targets that represent realistic achievements village by village and area by area.

GENERAL COMMENTS ON AGRICULTURE RESEARCH AND EDUCATION

To ensure that research is making its proper contribution to food production, an inventory of agricultural research should be made to determine what information may be lacking, what research gaps need to be filled, and what new projects should be undertaken,

It was urged that India should give greater consideration to team approaches in both planning and implementing research. Most agricultural problems are complex and can often be solved most effectively by the combined efforts of scientists from two or more disciplines. Indeed there are few problems which cannot be solved more effectively by a team approach, in less time and with less expenditure of effort and money.

IMPROVING EXTENSION WORK THROUGH COMMUNITY DEVELOPMENT

In the opinion of the Team, present agricultural extension programmes in India would be capable of making a much greater contribution to increased food production if they were focussed more directly upon local conditions, village production problems and village potentials.

To be effective, a programme to increase agricultural production must take into account the people whose behaviour is to be changed and the factors that affect their behaviour or limit the possibilities of change. It would appear that extension programmes in India have not given sufficient concern to the factors of human motivation.

Rural women and youth need to be more actively involved in food production efforts. Village agricultural production committees need to be set up.

Since the District staff have more administrative duties, the block staff do not get the needed technical support. Additional District extension specialists may be appointed to overcome this, and till such time, the present duties of District Agricultural and Animal Husbandry officers should be rearranged so that servicing functions can be transferred to District Cooperative officers. The District Agricultural and Animal Husbandry officers should work closer together as an integrated team.

With respect to State-level direction, leadership and technical guidance for agricultural extension workers in the field, the Team supports the recommendation made in the Agricultural Administration Committee Report. It is important that each State promptly establish and fill with best qualified candidate the position of extension joint director. It is necessary also that several extension subject-matter specialists be posted with the extension joint director to guide field staff in a programme of extension education soundly based upon research.

These State extension specialists should work in continuous liaison with counterparts in research in order that research information be made available to the village cultivators through the field service, and that local problems retarding production be transferred to the attention of the research staffs. State extension units in agricultural departments should

be confined strictly to agricultural extension functions. Responsibilities for supplies & regulatory activities should be transferred as rapidly as feasible to the cooperative and other appropriate departments.

SPECIALIZED ADMINISTRATIVE FUNCTIONS

Budgeting

(a) Block budgets for all aspects of food production programmes should be more flexible, and should, in total, amount and in detailed breakdown, reflect priority programme needs and potentialities as identified at the block level.

(b) Budget procedures should be drastically simplified to permit more final decisions to be made at the block level without the delays now part of the complex sanctioning system. Similar reforms are also necessary at other levels, as has been pointed out in recent Report of the Agricultural Administration Committee.

(c) Greater emphasis should be placed upon programme budgeting and on appraising expenditures in terms of programme accomplishments, than on elaborate and refined controls before expenditure. This emphasis on programme is necessary if the goal of rapid, flexible and effective food production programme administration is to be achieved.

Accounting & Reports.—Need to understand the necessity to permit greater margins of error, and to expect more errors of judgement.

Records & Reports.—Too numerous to be drastically cut.

Management, Procedure Experimentation.—A district area might be selected in each State in which greater control over budget allocation, without the need for superior approval, be given to the BDOs. Accounting and auditing criteria might also be experimented with, and in sample blocks or village circles, the reporting requirements might be reduced to a bare minimum in order to determine the best ways to simplify and decentralize certain administrative operations that reflect upon food production programme effectiveness.

Personnal Policies

Job descriptions.—To be specific.

Job tenure.—There is too rapid job turnover.

Among the conditions which the Team believes are contributed to job turnover are :

Low salaries, especially when compared to roughly similar jobs in India generally.

Lack of respect and status for agricultural employment.

Insecurity in the job.

Limited promotional and salary increase opportunities except by moving to other positions.

Political influence in appointment in some areas.

Supervision.—Dual supervision is frustrating.

SYNOPSIS OF THE REPORT OF THE AGRICULTURAL ADMINISTRATION COMMITTEE (THE NALAGARH COMMITTEE REPORT).

General

The Government of India constituted a Committee in Feb. 1958 with Raja Surendra Singh of Nalagarh as the Chairman to suggest simplification of administrative and financial procedures in order to expedite the implementation of agricultural production schemes, model agricultural organisation in the States and delegations of suitable powers at various levels in the States so that agricultural production could be carried out speedily. The Committee comprised of 5 members and confined its study to the functioning of the Agriculture Department only; the working of the Animal Husbandry and Forest Departments were, however, excluded from the purview of the terms of reference of the Committee. The report was submitted in October 1958. The Committee issued a questionnaire and also visited the states of Assam, Bombay, Bihar, Punjab, Andhra Pradesh and Madras and the Union Territory of Himachal Pradesh. Discussions were also held with various functionaries connected with the agricultural programme.

2. The recommendations of the Committee are summarised below.

Growth of Agricultural Department

3. The Committee has deprecated the growing dependence of the State Governments on stimulus from the Centre for taking action on subjects which are the responsibility of the States, and have suggested that the states should examine periodically, the structure, objectives and policies of the State Department of Agriculture with a view to providing balanced growth and enunciating programmes and policies. A committee of eminent agricultural administrators scientists and progressive farmers should carry out such a review once in five years or so.

A similar Committee may be appointed at the Centre also for examining programmes & policies of the Central commodity committees and other Central Institutions dealing with agriculture.

4. Present day problems of low morale and inefficiency in the administration have been attributed to poor service conditions. The Committee has recommended that all temporary posts continuing for more than three years should be made permanent. In order to attract the best talent in the country to the field of agriculture, their pay scale should be at par with the general administrative services and there should be adequate recognition of merit at all stages.

An All India Agricultural Service should be formed. Such a service would facilitate exchange of officers from one state to another and from the states to the Centre. Till such time as an All India Service is created, an 'Agricultural' or 'Technical' cadre or pool may be created in the I.A.S.

5. States should revise service rules for recruitment, confirmation and promotion to avoid any cause for discontentment or frustration. Only those persons who have an aptitude for agriculture should be recruited.

6. It is desirable that research and teaching posts are filled by the most competent persons available.

Training and Assessment

7. Fresh agricultural graduates recruited by the Agricultural Departments should be given orientation as well as 'on the job' training. 'Job training' should impart a practical working knowledge of different types of jobs.

8. A systematic programme of training should be prepared in such a manner that before the officer is called upon to fill a higher post, he receives orientation and 'on the job' training to equip him for the new task. Further, permanent arrangements should be made for imparting refresher training so as to keep agricultural officers abreast of latest developments in research.

9. Short term intensive courses of four to six weeks duration should be organised during summer vacations at post-graduate colleges for the benefit of research, teaching and extension staff.

10. The need for foreign training should be assessed on a long term basis for each state and panels of suitable candidates for different subjects kept ready. Only those candidates should be sent for training who are on the approved panel. *Ad hoc* selections should be avoided.

11. For recognising competence, initiative and keenness, it is necessary that there should be adequate and thorough technical supervision, at different levels, so that the right officers are located, trained and their work appreciated properly. For proper assessment of subordinates competent Boards should be set up. Gazetted officers should be assessed by a Board of Agricultural scientists and technical men of repute.

Coordination

12. Coordination work has tended to become routine. To ensure effective coordination, adequate authority and power should be vested in

coordinating bodies at all levels. The Committee has suggested that the Development Commissioner should have a status higher than Secretaries to Departments. Field Officers should not be burdened with multiplicity of reports and returns. To ensure coordination, it is better that coordination bodies meet frequently.

13. All research programmes should be examined by working parties consisting of specialists in the concerned subjects and then by a Research Committee consisting of Heads of Research Sections, Professors, Principals, Deputy Directors of Agriculture, etc. For suggesting research problems there should be Regional Advisory Committees.

Similarly there should be a committee at the state level for dealing with extension programmes and also Regional Advisory Committees to discuss district programmes.

14. Educational programmes should be prepared by an Educational Programme Committee at the State level. The committee should deal with education at different levels. Training programmes prepared by heads of various training institutions should be considered by this Committee. However, training programmes of Farm Leaders, Village Level Workers and Farmers should be drawn up initially at the Divisional level.

15. There is gross lack of coordination between Irrigation and Agricultural Departments, both in planning and execution. This has resulted in irrigation resources not being fully utilised. It has been suggested that Irrigation Department should have special Agricultural officers to liaison between agriculturists and the State Department of Agriculture; this will ensure maximum utilisation of water.

Evaluation and Assessment of Development work

16. There should be a small unit at the headquarters of the Director of Agriculture for evaluating and assessing the progress of new extension programmes, land development schemes (reclamation, minor irrigation, drainage and soil conservation) and schemes for training and organisation of farmers. This unit should conduct every year detailed studies of a few schemes. In addition, Heads of Research Sections should arrange to study and evaluate progress in extending the recommendations of research officers and implementing them into field practice.

17. Inspections should be purposeful and pre-planned to provide technical guidance and solutions on the spot. Detailed inspection in a smaller area would give much better value than inadequate supervision over a large area. Each technical officer should be responsible for a minimum number of visits to units under his control.

18. A regular system of oral reports from subordinates has been recommended whereby senior officers could remain in continuous touch with progress of work.

Programme Planning

19. The principal tasks of educating farmers in adopting new methods of cultivation have receded into the background and the concept of benefiting the farmer by supplying him the required material has come to be recognised as the major task. Such benefits can be secured by only those farmers, who have funds to invest on purchase of fertilisers, seeds, etc. leaving a vast majority of farmers who cannot afford these necessary inputs.

20. Agricultural Departments have no effective say in framing policies, which contribute to production. It is essential that a "technological balance" is maintained in planning programmes for different areas.

21. The Agriculture Department should evolve plans for increasing agricultural production in every village. Integrated plans will result in better achievement of targets and increased output. The present system of fixing targets state-wise and then breaking them into district, tehsil and village targets is defective.

Budgeting, Sanctions, Procedures and Delegations of Powers

22. The short-fall in physical targets and actual achievements for various agricultural schemes has been ascribed to late receipt of financial sanctions. This results in limited achievement, and mounting expenditure during the last quarter of the year. Means should be devised to ensure that expenditure is spaced evenly throughout the year.

23. While a strict scrutiny of schemes is necessary, it was felt that various stages of action from the formulation of schemes to their implementation should be completed more expeditiously, and unnecessary references to the Centre and State Finance Departments eliminated. Plan Schemes should be taken up in the beginning of the financial year; technical and financial scrutiny should be completed before making budget provision. Once schemes have been included in the budget after proper scrutiny, a second reference of the Finance Department for sanction of expenditure should not be necessary.

24. Organisational improvements such as the posting of an Internal Financial Adviser with powers to take decisions in the state Departments of Agriculture should be made.

25. There should be greater delegation of powers at all levels from the Director of Agriculture downwards for speedy execution of work. These powers should be clearly specified.

Supply procedure

26. It has been generally felt in the States that not only insufficient quantity of fertilisers are being allotted by Government of India, but the fertilisers allocated from Sindri and other factories are not received regularly and in time. The contributory factors for these difficulties should be solved by proper advance planning. It may also be advisable to start centrally administered godowns, conveniently situated in various parts of the country, where fertilisers can be received and stored for supply to the consuming centres.

27. State Departments of Agriculture should not involve themselves in the distribution of non-descript seed, and should confine their attention only to the propagation on Government Farms, of improved pedigree seeds of guaranteed purity, which has been inspected and rogued in the field prior to harvesting and threshing of the crops.

28. The quota of iron and steel for agricultural purposes should be increased substantially according to the demands of the states and placed at the disposal of the State Agricultural Departments so that they may organise the manufacture of improved agricultural implements.

29. The entire organisation for supply of fertilisers, improved seeds, insecticides and agricultural implements should be separated from the extension and technical functions of the Agriculture Departments and transferred to Cooperative organisations.

Model agricultural organisation to suit present needs

30. In order to fulfil the expectations of the people in the field of agriculture, State Agriculture Departments should be organised to handle the growing demands of the farmers in an efficient manner. Among other things, the Department should provide facilities for educating and training farmers, demonstrate better methods of cultivation and disseminate knowledge through audio-visual channels, organise farmers for adopting improved techniques of production and for working together, pick up problems of the farmers and pass them on for solution to research sections and then transmit their solutions back to the farmers. The agricultural Extension agency should concentrate entirely on educating and organising the farmers to produce more. The Department should deal with technical knowledge and education rather than trade in supplies.

31. The feasibility of the portfolios of Agriculture and Irrigation being held by one Minister should be considered, because the problems of irrigation, drainage and flood protection are not only intimately connected with agriculture, but there is lack of coordination between the two departments. This would ensure rapid progress. There may be two secretaries under the Minister for Agriculture; one for Agriculture dealing

with Agriculture, Reclamation, Soil Conservation, Animal Husbandry and Veterinary Science and the other for Irrigation, Forests, Cooperation and Agricultural marketing. Frequent changes in Ministers and Secretaries should be avoided as this dislocates work.

32. A Works Division should be set up within the Directorate of Agriculture under a Joint Director of Land Development with full powers of a Superintending Engineer. This will ensure speedy implementation of minor irrigation and building programmes within the agricultural sector.

33. Soil conservation of agricultural lands should be the function of the Agriculture Department and in Forest areas of the Forest Department.

A separate land development wing may be established in the Department of Agriculture to look after land reclamation, minor irrigation, flood control, soil conservation and drainage under a Joint Director of Land Development.

34. At the Headquarters, the Director of Agriculture should be assisted by Joint Directors for (i) Land and Development, (ii) Extension and (iii) Research and Education. In States where research and educational activities have already extended, the Joint Director of Research and Education should be provided with a Deputy Director.

As the number of Seed Farms is likely to increase and would require expert knowledge and guidance, these may be looked after by a Deputy or the Joint Director of Extension. The Joint Director of Extension should also be assisted by, at least, four extension subject-matter specialists in Agronomy, Plant Protection, Soils and Soil Fertility and Horticulture and any other subjects depending upon local conditions. The extension specialists should be assisted by similar specialists at the District level and ultimately at the block level.

35. The Director of Agriculture should have an Administrative Officer and a budget and Accounts Officer, subordinate to him, to relieve him of routine administrative and accounts matter at the Headquarters.

36. The State Department of Agriculture should also have a full time Progress and Evaluation Officer, assisted by a small unit of staff, for collection of statistical data and evaluation of programmes.

37. A Farm Advisory Service should be developed in each Agricultural Department so that properly trained extension specialists would form an effective link between the research institutions and the field level extension agency. This Service, to be fully effective, should be supported by an Agricultural Information Service consisting of trained staff specialising in mass communication methods.

Organisation for Agricultural Research and Education

38. The research programme at present is inadequate to meet the needs and the demand for improved agricultural materials and practices. It is necessary to establish major Research Stations for serving the needs of each agro-climatic region and for undertaking research work in all branches of agricultural improvement. These stations should have a suitable complement of plant breeders. Ultimately agricultural colleges and training centres should be built up around these major research stations. Subject matter specialists working at district stations should visit the regional stations.

39. At least one of these regional stations should develop into a first rate post-graduate training institution with tripartite organisation for research, education and extension. Where the Regional Research station and the Agricultural college are located at one and the same place, it is desirable to have a single officer to head both institutions. This Officer—the Principal or the Dean—should have two Deputies, one for education and the other for research, so that both the branches receive adequate attention.

40. Agriculture Colleges and Research Institutes should organise two separate sections for carrying on teaching and research work in the field of Agricultural Economics. In order that teaching is related to field needs, it is imperative that research facilities should be available and carried out in the field.

41. Close coordination between research, education and extension branches should be maintained through a system of annual conferences held at major research stations and should be attended by all officers working in the region. Similar meetings should be held at District levels.

**REPORT OF THE WORKING GROUP ON INTER-DEPARTMENTAL
AND INSTITUTIONAL COORDINATION FOR AGRICULTURAL
PRODUCTION—1963.**

(Dr. Ram Subhag Singh's Report)

A SYNOPSIS

The problem of bringing about adequate coordination among various Departments and institutions connected with agricultural production has been considered often. The Working Group under Dr. Ram Subhag Singh was set up as a consequence of the recommendations of the joint conference of State Ministers of Agriculture and Community Development and Panchayati Raj held in 1963 with the object to review the existing arrangements and suggest concrete measures for bringing about adequate coordination within the entire administrative and organisational structure, from village level to the level of the Development Commissioner.

The Working Group has taken into consideration the following general facts in making their recommendations:—

- (i) The main object of the agricultural extension services is to help the farmers in the provision of technical know-how, promotional and educational activities, arrangements for credit, marketing, supplies and services, development and conservation of land, water and other allied resources, institutional reforms etc.
- (ii) Side by side with effective integration between different agencies, programmes and operations, there should be clear-cut definition and enforcement of specific responsibilities on the part of each agency and functionary at various levels.
- (iii) Integration between Panchayati Raj institutions and public services should not result in breaking the chain of technical and administrative responsibility and,
- (iv) The agriculture and Cooperative programmes must support and sustain each other.

Some of the important recommendations are summarised below:

STATE LEVEL

1. The services of the two Coordination Committees, one at the Secretariat Level presided over by the Chief Secretary and the other at the Cabinet level presided over by the Chief Minister should be availed of for taking quick decisions and for implementing them expeditiously without

any inter-departmental references. The Cabinet should delegate full powers to its Committee.

2. The Departments and agencies concerned with the agricultural production and Panchayati Raj should be integrated into one Department of Agriculture and Rural Development. The Department should comprise Agriculture (including Cane and Minor Irrigation), Animal Husbandry, Fisheries, Community Development and Panchayati Raj, Cooperation and allied departments.

3. The Secretary of the Integrated Department should be designated and function as Commissioner for Agricultural Production and Rural Development and should coordinate the work of Heads of Departments concerned with Agricultural production, such as, Directors of Agriculture, Animal Husbandry, Fisheries and Panchayati Raj and Registrar of Co-operative Societies.

He should take over functions and responsibilities of Development Commissioner which post should cease to exist.

REGIONAL LEVEL

4. In some States the Regional Commissioners have been assigned a supervisory role at the regional level. This may continue.

DISTRICT LEVEL

5. The District Collector should be the Chairman of the Agricultural Production Committee of the Zila Parishad. If there is no Zila Parishad, an Agricultural Production Committee should be formed with the District Officers of the Departments concerned with agricultural production and representatives of non-official organisations as members and the Collector as Chairman.

6. The District Officers of the integrated Departments concerned with agricultural production should be individually responsible for the implementation of programmes of their respective Department. The District Agricultural production officer should assist the Collector in coordinating the efforts of all the Departments concerned with agricultural production at the level and should function under the overall direction of the Agricultural Production Committee.

BLOCK LEVEL

7. At the Block Level, there should be an Agricultural Production Committee of the Panchayat Samiti, Panchayat Union or Anchalik Panchayat, consisting of elected representatives of the Samiti and the Extension Officers concerned with agricultural production. The B.D.O. should function as Member-Secretary and should be in executive charge of the implementation of the programme. The Chairman of this Committee should be

the Chairman or President of the Panchayat Samiti, Panchayat Union or Anchalik Panchayat.

8. All agricultural schemes, except those which conform to the pattern already laid down by the Department should have the prior approval of the concerned Technical District Officers.

9. The Extension Officers should be borne on the cadre of the respective technical departments.

10. The annual assessment of the work and conduct of the Extension Officers should be made by the B.D.O. who should initiate their character roll and forward it to the District Officer of the respective Department. The disciplinary control over the Extension Officers should rest with the District Officer of the Department concerned who should also have the powers to transfer them within the District.

11. The disciplinary control over the B.D.O.'s in the district should vest in the Secretary, District Agricultural Production Committee (District Agricultural Production Officer) and he should have the powers to transfer the B.D.O.'s within the District.

12. To enable the B.D.O. to devote all his time and attention to agricultural production and allied programmes, the rest of his work, including programmes of amenities and social services and routine office work, be entrusted to the Panchayat Extension Officer or S.E.O.

13. The development staff working at the District level and below should not be transferred at least three years except in very special circumstances.

VILLAGE LEVEL

14. The Village Level Worker should devote all his time to agriculture and allied production programmes.

15. The Extension Officer (Agriculture) should draw up a programme of work for the village level workers in the Block in consultation with the Extension Officers Animal Husbandry and Fisheries, Cooperation and Panchayati Raj, laying down the detailed programme of work.

16. The Village Level Worker should not be burdened with activities not connected with agricultural production.

17. To enable the Panchayats to deal with amenities social services and other functions, a separate functionary should be provided as an employee of the Panchayats.

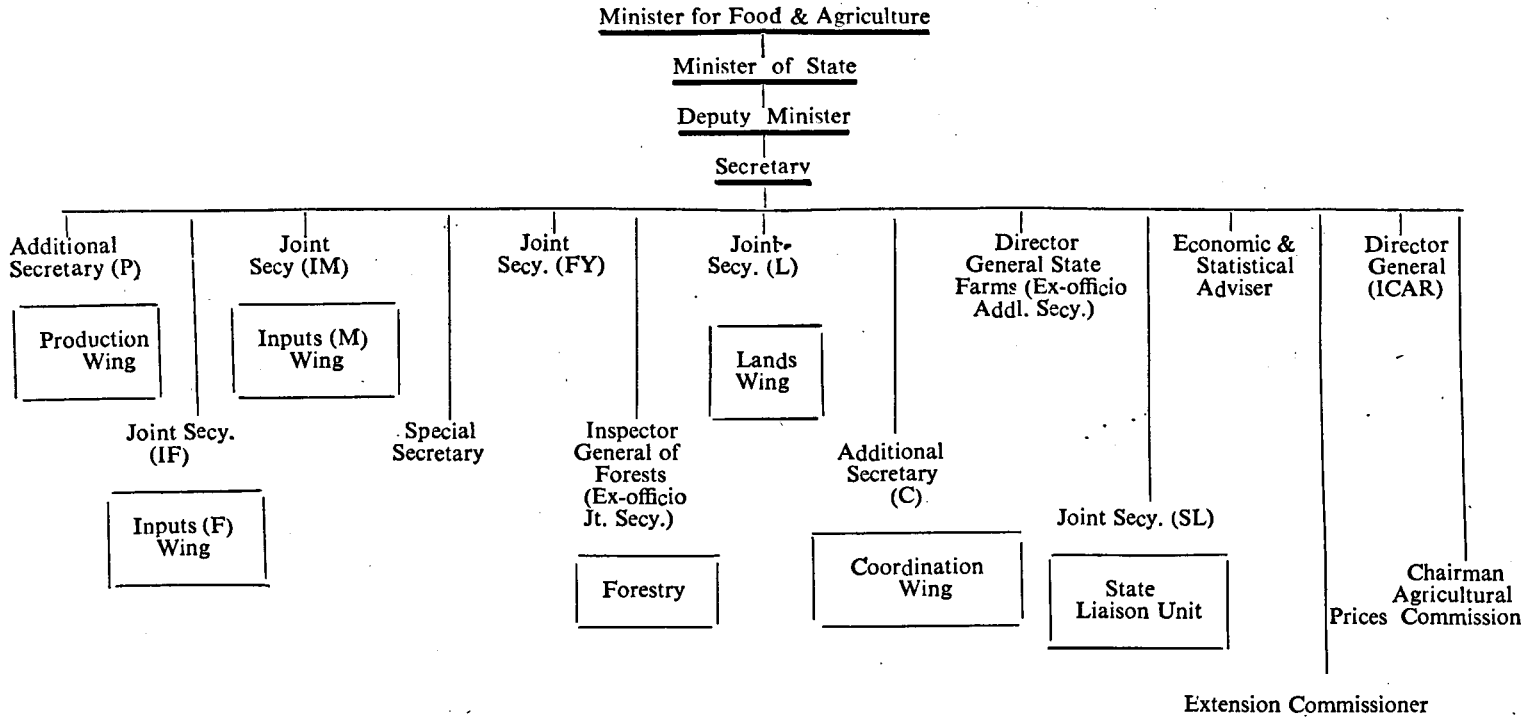
18. The Village Level Worker should function under the administrative control of the Extension Officer (Agriculture).

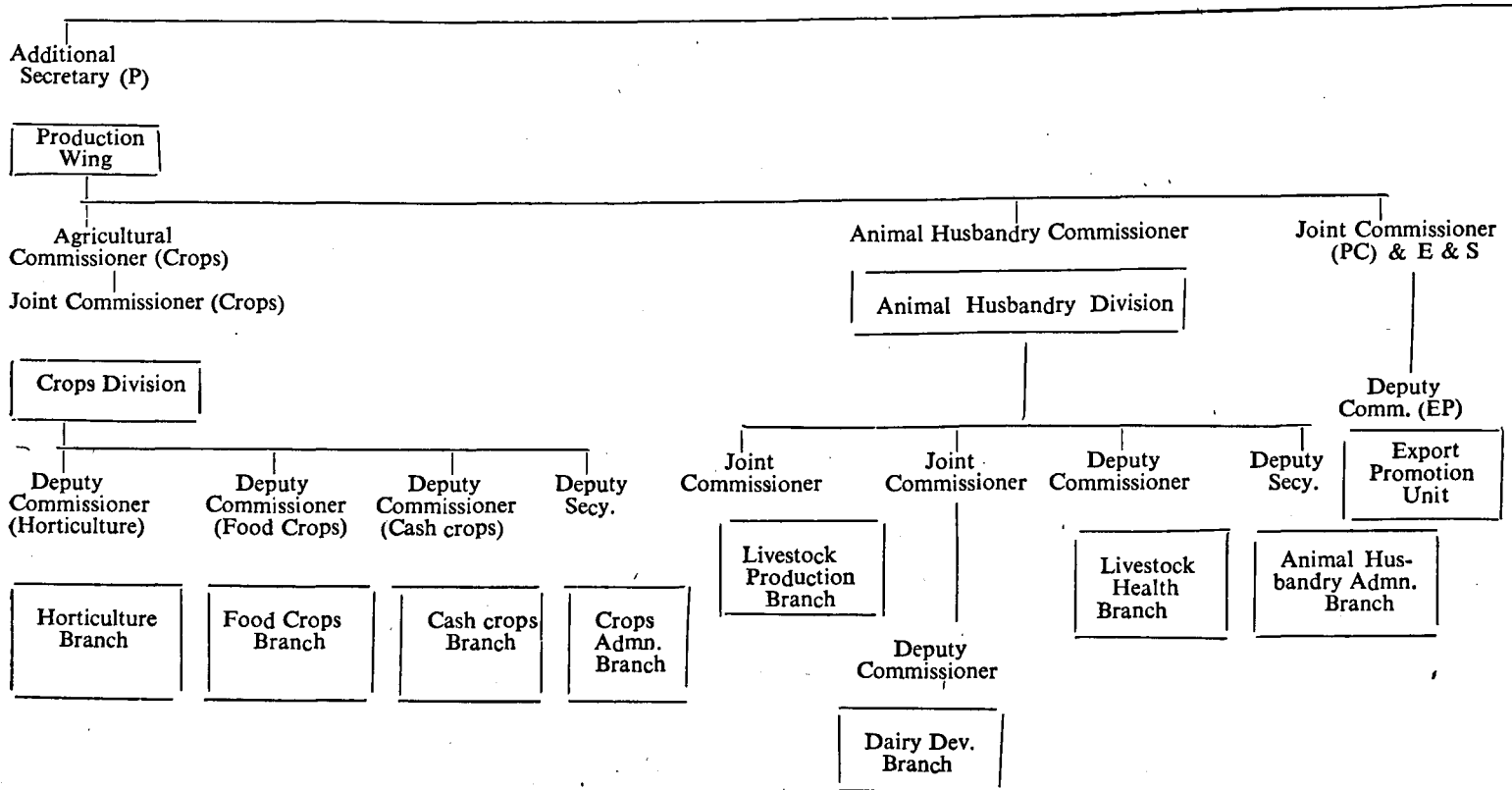
ANNEXURE III

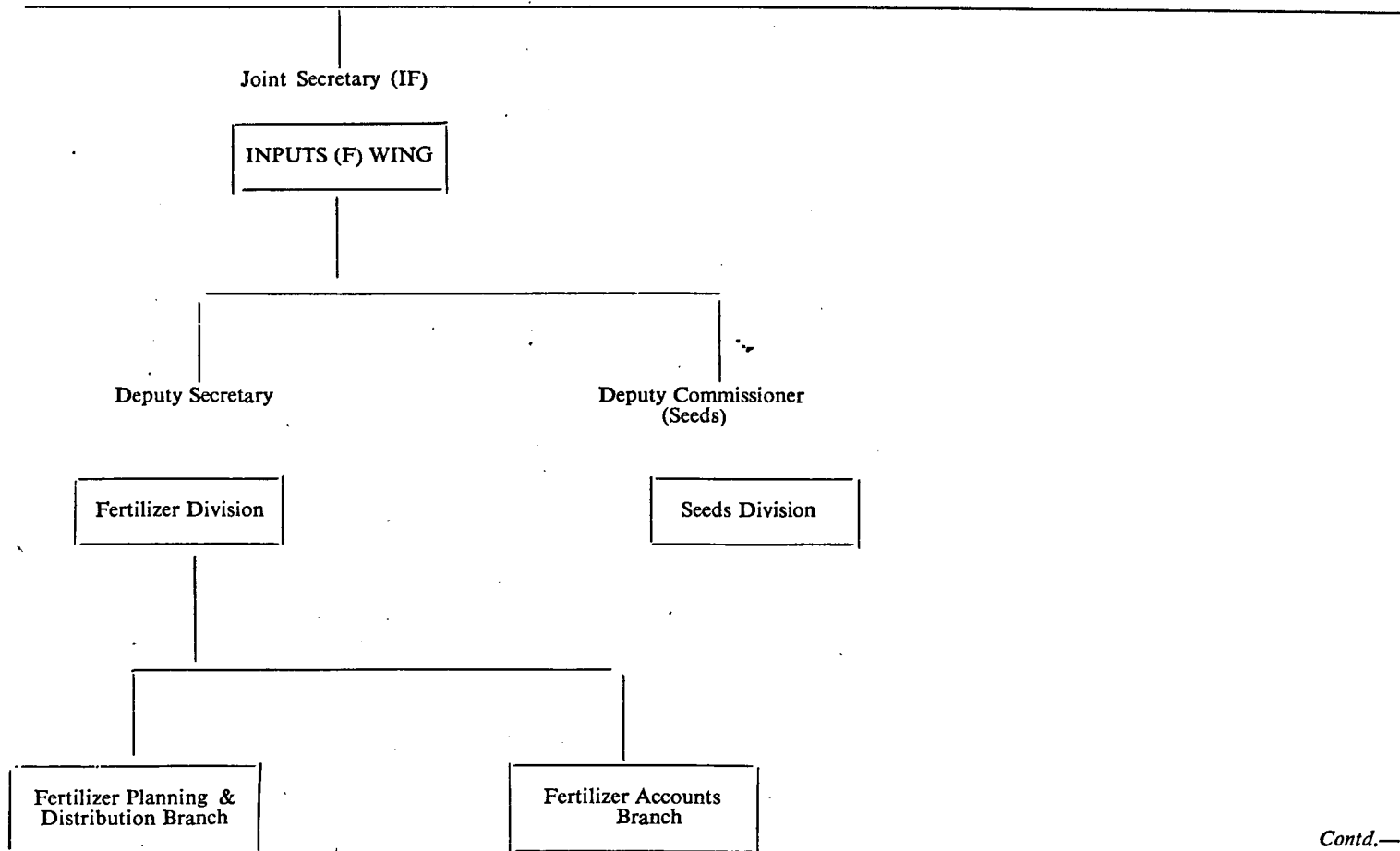
ORGANISATION OF THE MINISTRY OF FOOD, AGRICULTURE, C.D. & C., GOVERNMENT OF INDIA

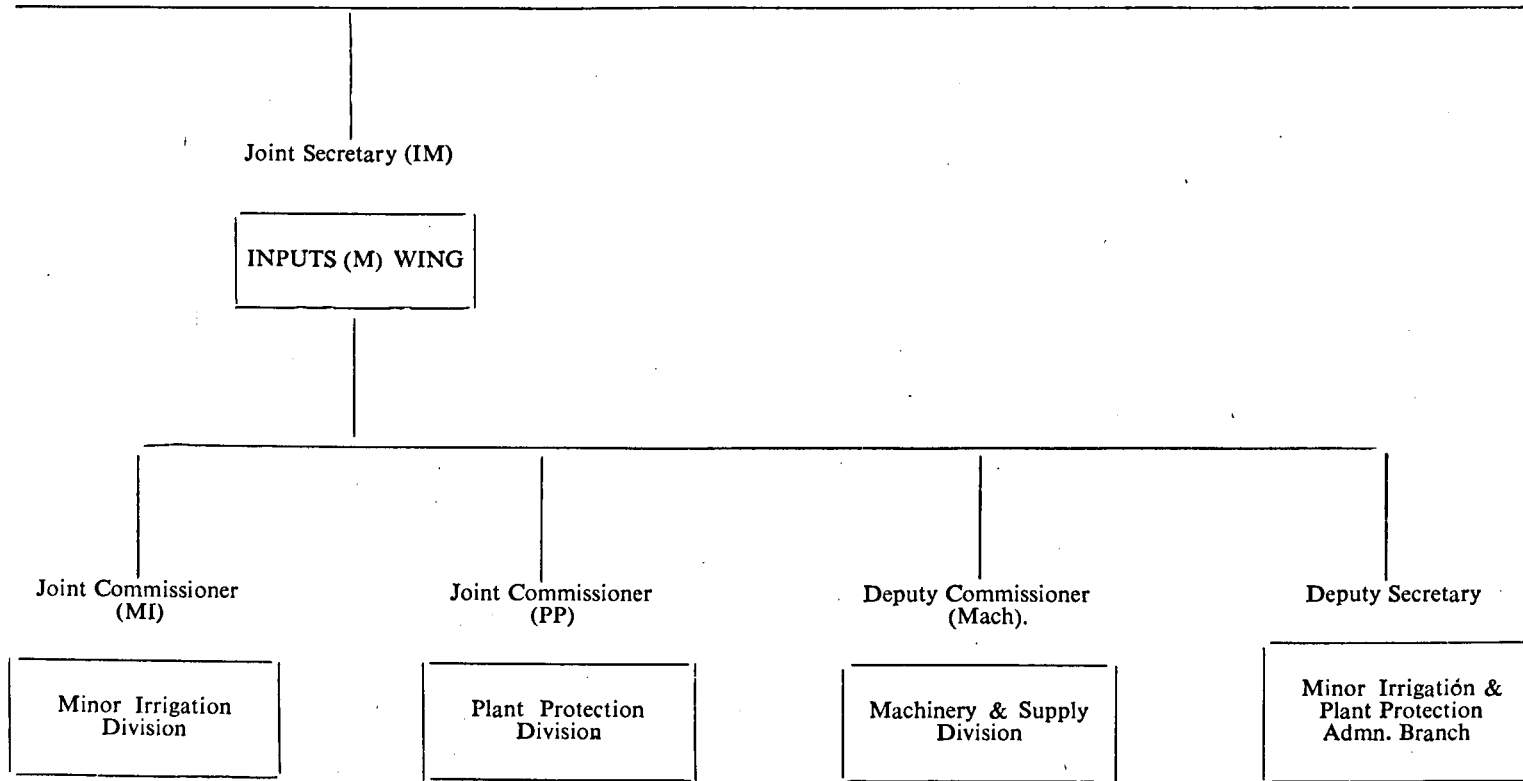
- A. Department of Agriculture.
- B. Department of C.D.
- C. Department of Cooperation.
- D. Department of Food (Nº. of staff).
- E. Directorate of Marketing and Inspection.
- F. Soil & Water Conservation Division.
- G. Central Land & Water Use Survey Division.
- H. Live-stock Wing, Ministry of Food, Agriculture, C.D. & C.
- I. Directorate of PPQ & S.

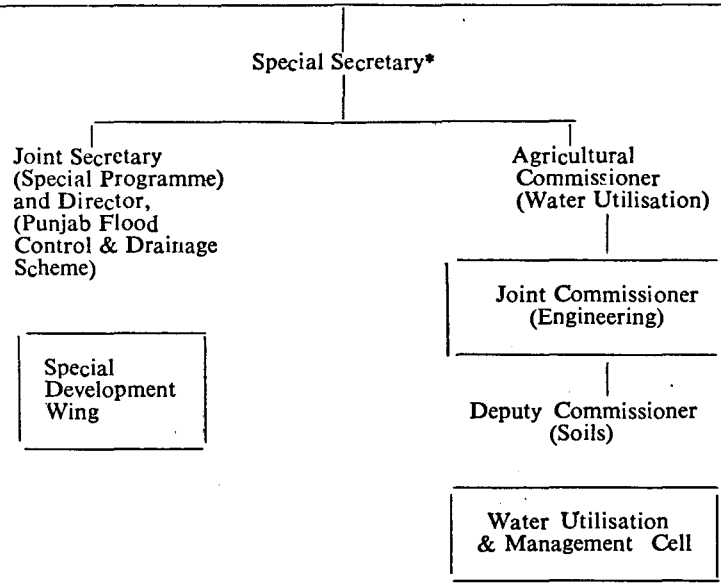
ORGANISATION CHART OF THE DEPARTMENT OF AGRICULTURE



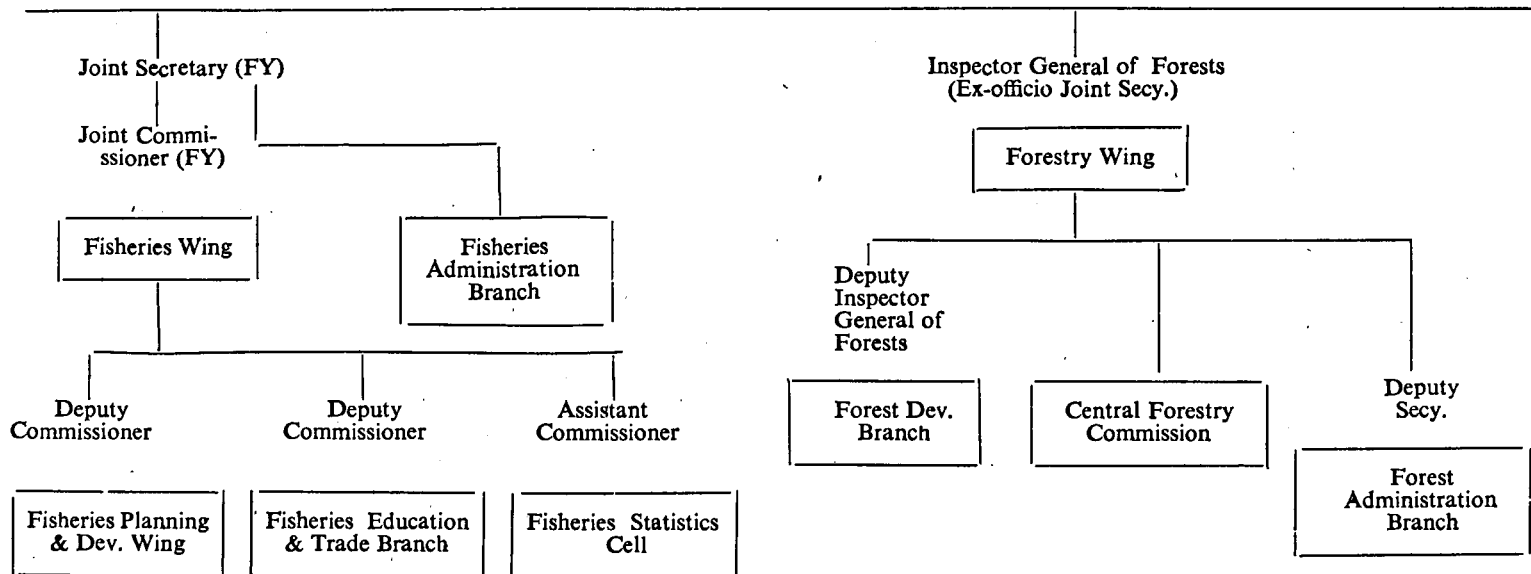


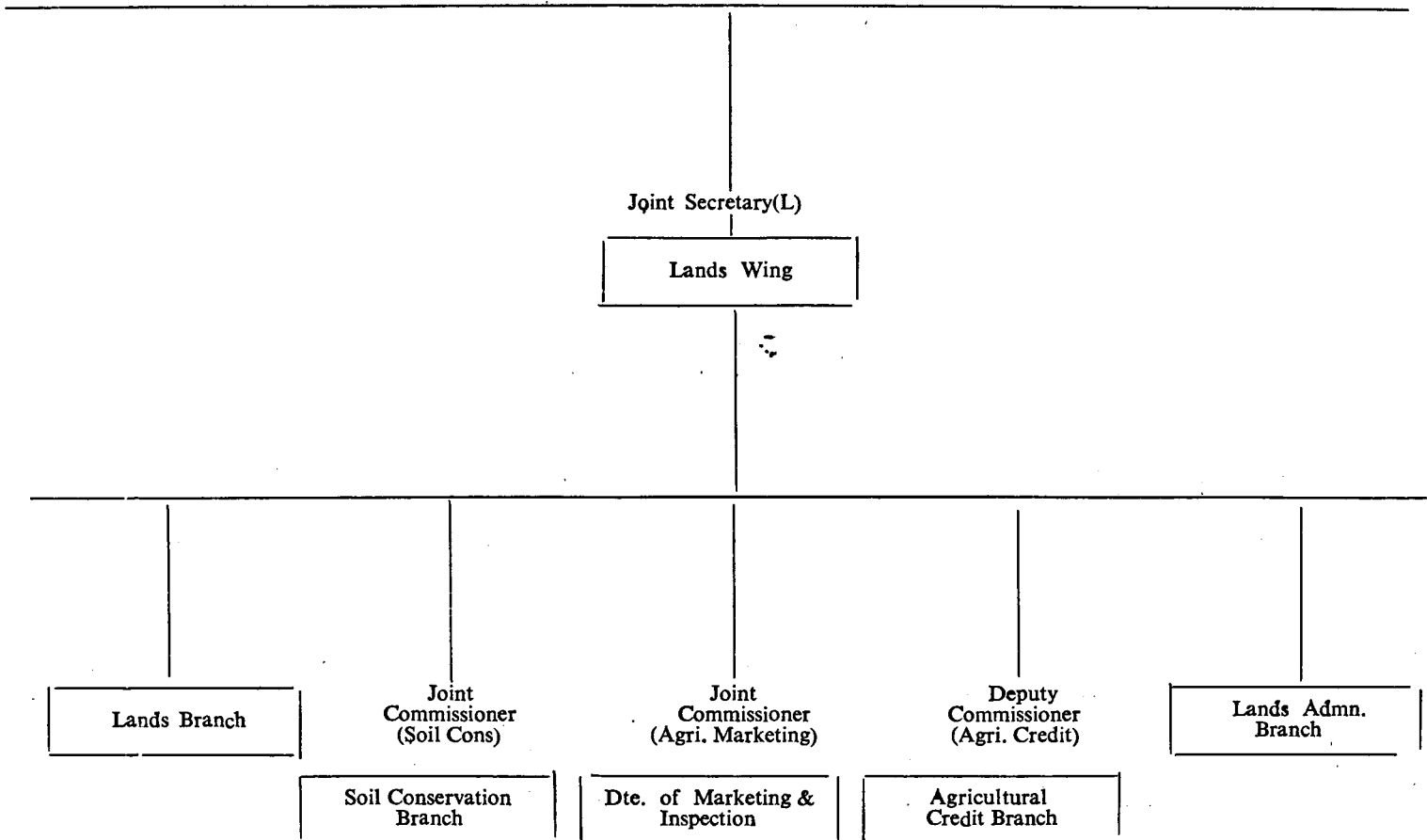


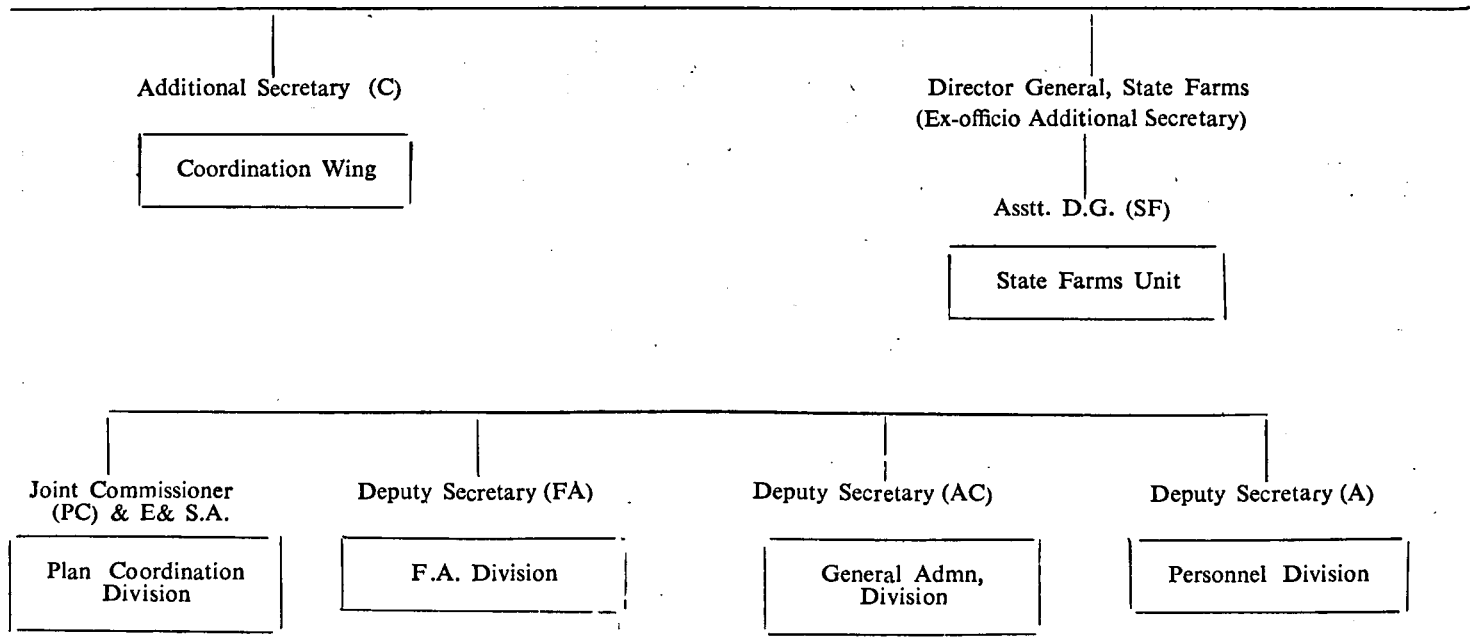


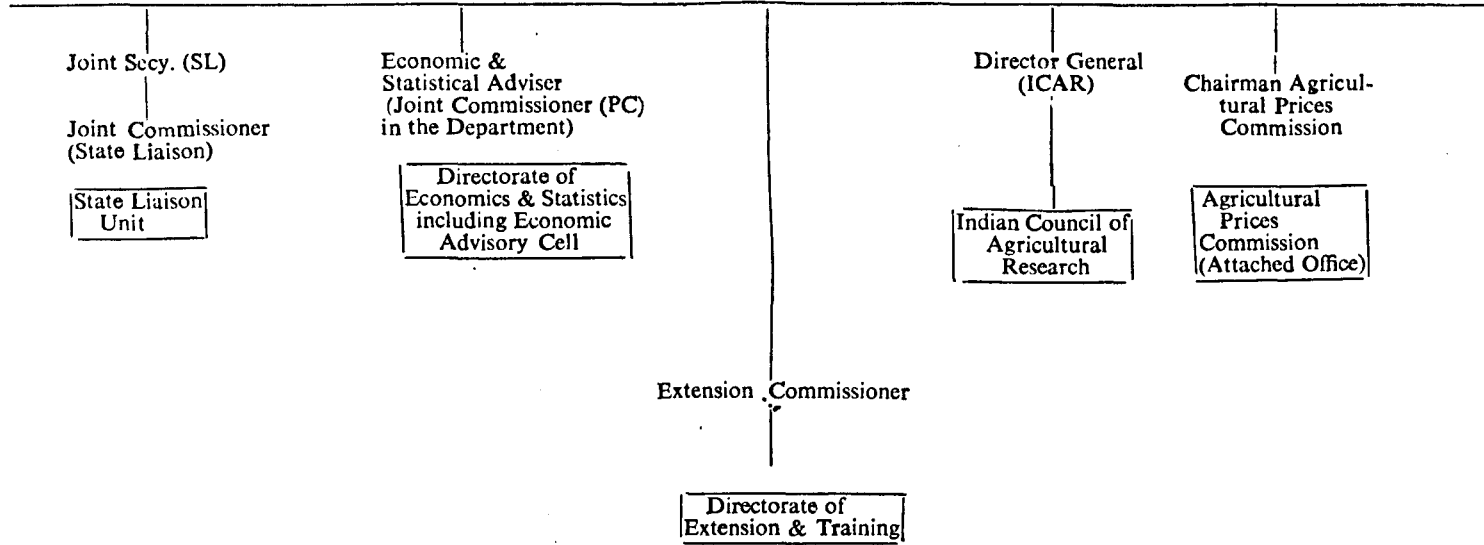


*At present held by Additional Secretary.

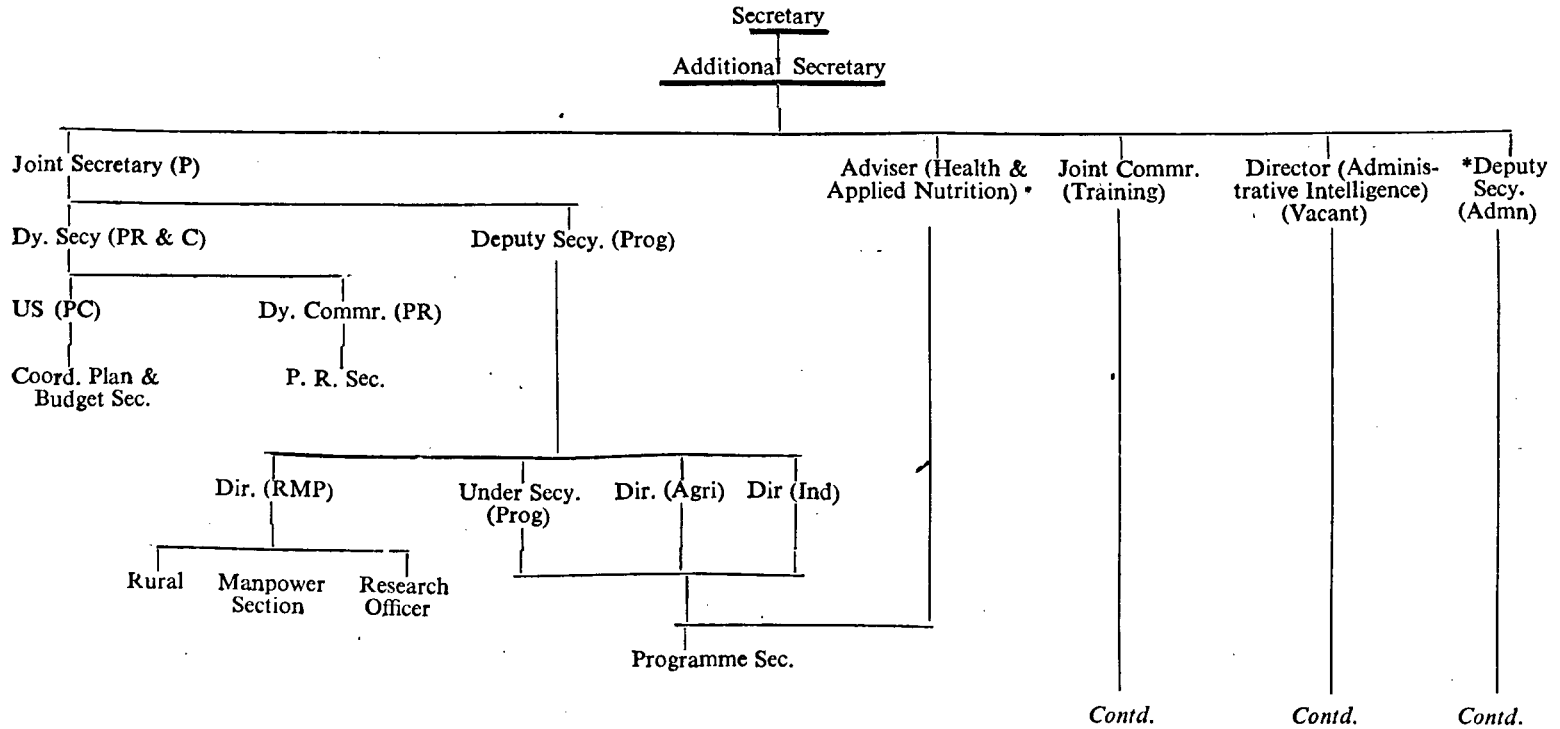


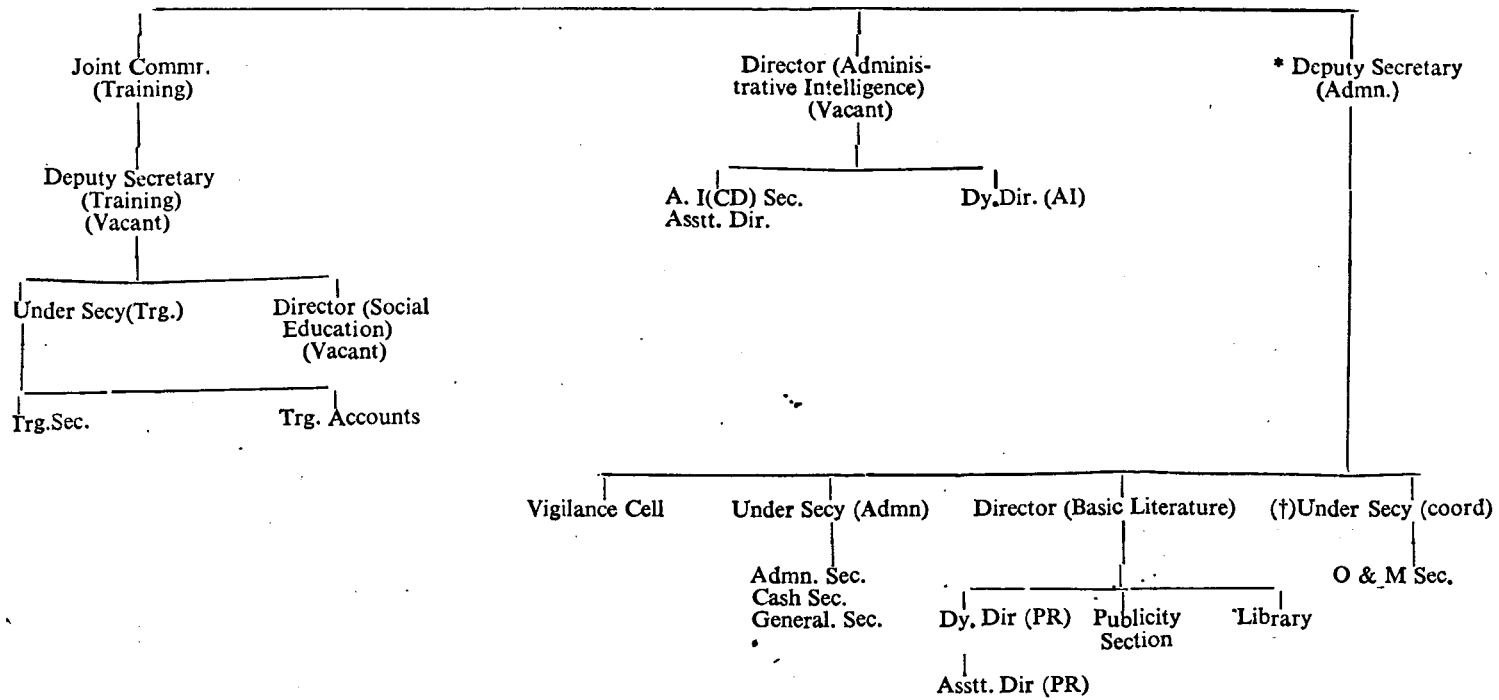






ORGANISATIONAL SET UP OF DEPARTMENT OF COMMUNITY DEVELOPMENT



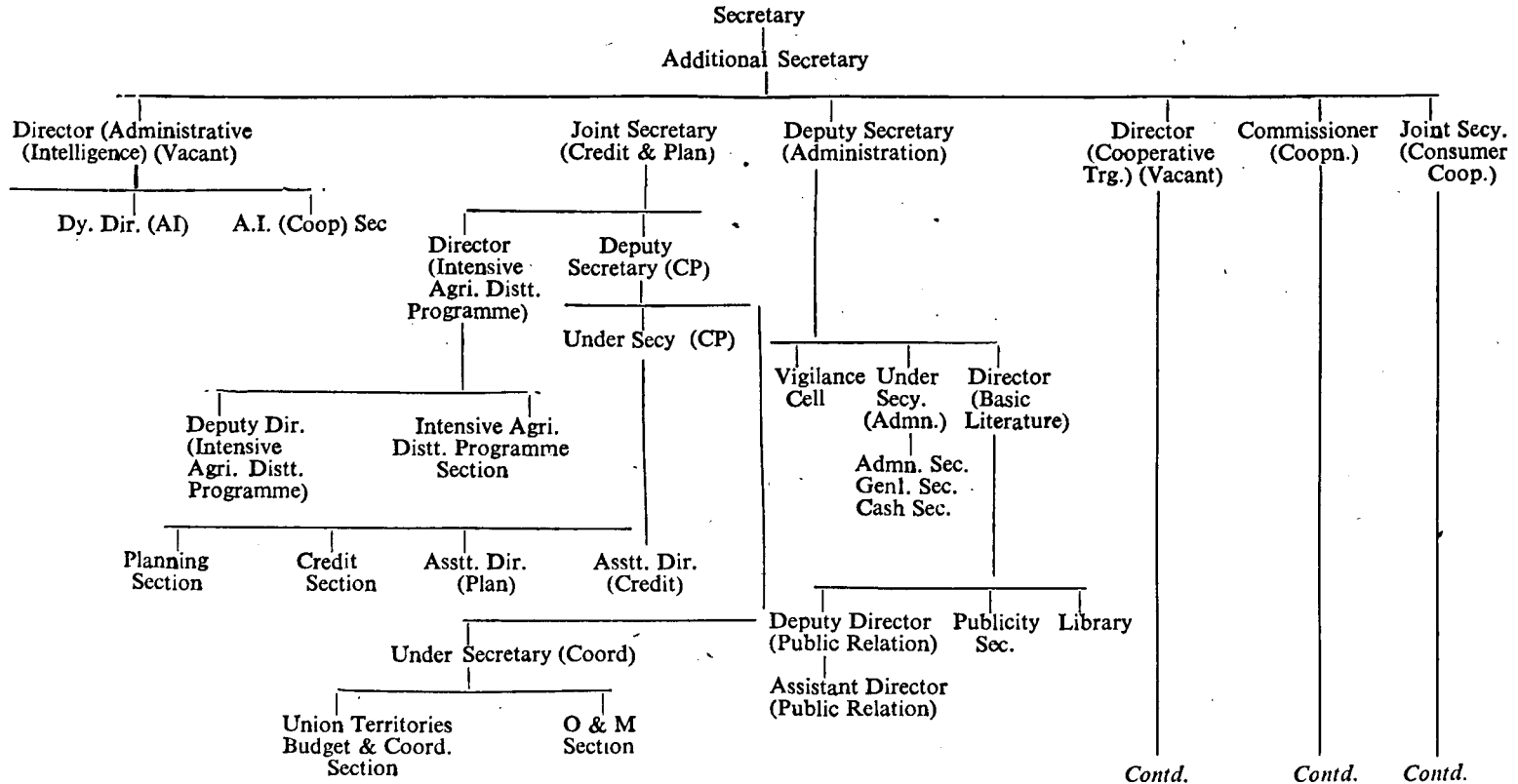


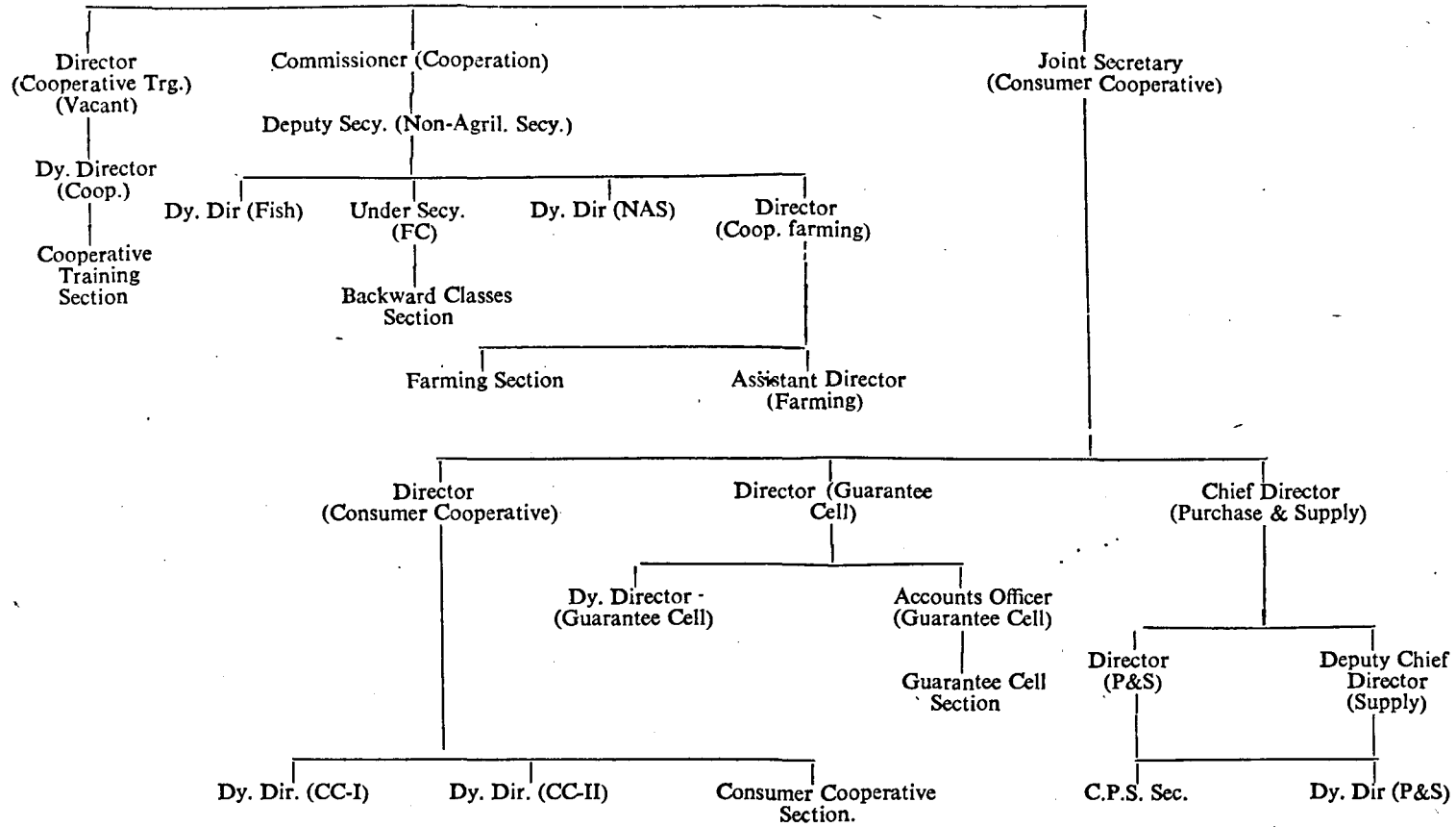
*Deputy Secy (Adm) and the Officers working under him are on the strength of the Department of Cooperation but they serve both the Departments of Community Development and Cooperation.

†This Post is in the Department of Cooperation.

As on 26-7-1967

ORGANISATIONAL SET UP OF DEPARTMENT OF CO-OPERATION





ANNEXURE III(D)

DEPARTMENT OF FOOD

Number of posts in the Department and its Attached and Subordinate Offices

Post	General	Technical/ Scientific	Total
<i>Headquarters</i>			
Class I	189	59	248
Class II (G)	87	62	149
(NG)	269	..	269
Class III	396	24	420
Class IV	232	..	232
<i>Attached Office</i>			
<i>Directorate of S & V</i>			
Class I	11	9	20
Class II	23	..	23
Class III	48	7	55
Class IV	62	..	62
<i>Subordinate Offices</i>			
<i>Regional Directorates</i>			
Class III	5,926	547	6,473
Class IV	4,552	..	4,552
(Includes Figures for Hapur Institute also)			
<i>N.S.I. Kanpur</i>			
Class I . . . . .	..	19	19
Class II	19	..	19
Class III	141	..	141
Class IV	121	..	121
<i>Indian Institute of Sugarcane Research, Lucknow.</i>			
Class I	1	8	9
Class II . . . . .	..	4	4
Class III	74	..	74
Class IV	82	..	82
<i>Sugarcane Breeding Institute, Coimbatore</i>			
Class I	1	11	12
Class II . . . . .	..	6	6
Class III	55	..	55
Class IV	109	..	109

**DIRECTORATE OF MARKETING AND INSPECTION
ORGANISATION SET UP**

Headquarters	No. of posts
1. Agricultural Marketing Adviser	1
2. Deputy Agricultural Marketing Advisers	3
3. Director of Administration	1
4. Administrative Officer	1
5. Senior Marketing Officers	9
6. Marketing Officers	16
7. Section Officers	5
8. Accounts Officers	1
9. Accountants	2
10. Assistants	25
11. U.D.C.	28
12. L.D.C. (State-clerks-7)	57
13. Stenographers	11
14. Stenotypists	4
15. Senior Inspectors	8
16. Junior Inspectors	4
17. Statistical Officer	1
18. Proof Reader	1
19. Hindi Translator	1
20. C.M.O.	4
21. Librarian	2
22. Supdt. Technical	1
23. Draftsmen, etc.	6
24. Map makers	4
25. Editor	1
26. Photographer	1
27. Artist	2
28. Studio Attendant	1
29. Jamadars, Peons, Farash, etc.	56

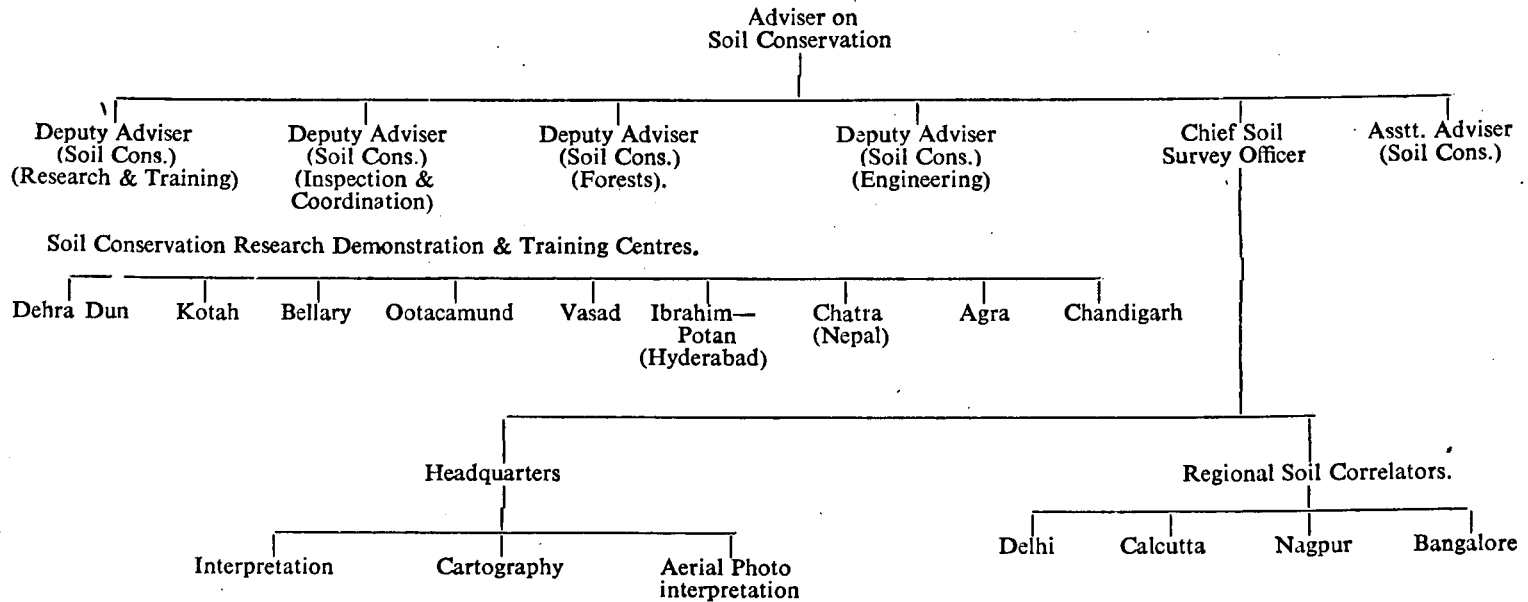
Regional and other officers (D.M.I)

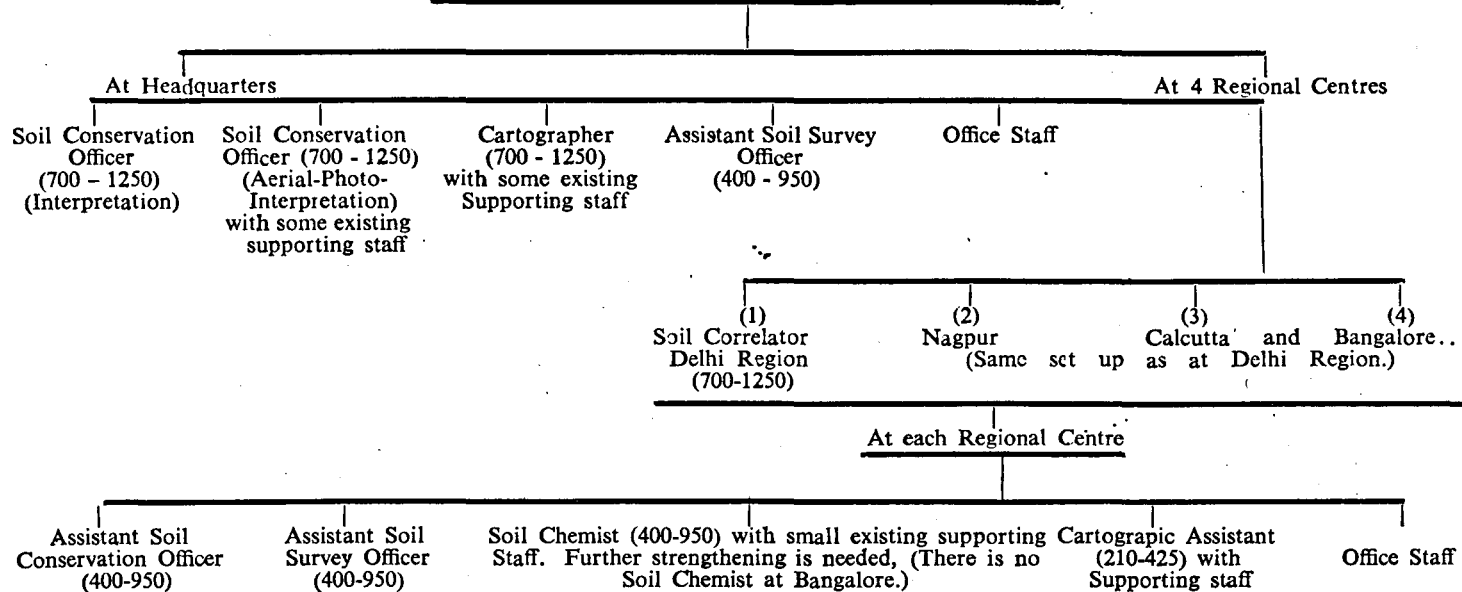
Regional Offices	Director Dy. Director/ Asstt. Director	S.M.O.S. M.O.S. M.D.O.S. Dy. Director , M.D.OS. S.D.M.O.S. A.M.O.S.	Supdt.	Sr. Inspector	Jr. Inspector	Sr./Jr. Chemist	Lab. Asstt. Analyser	Lab. Attendant	Grade Attendant
1. New Delhi	1	15	..	21	..	..	2	..	14
2. Bombay . . . . .	..	35	1	30	5	1	7	2	41
3. Madras . . . . .	..	24	..	36	2	10	10	..	41
4. Calcutta . . . . .	..	12	..	13	1	..	3	..	11
5. Scheme for Quality control . . . . .	..	57	..	19	1	4	12	10	34
6. Agmark laboratories . . . . .	..	9	..	..	1	110	106	56	11
7. Fruit Products Orgn. . . . .	..	15	..	16	..	..	..	..	7
8. Training Course for Secretaries of Market Committees.	..	3	..	..	3	..	..	..	1
TOTAL	1	170	1	135	13	125	140	68	160

Regional Offices	Assistant Cataloguing U.D.C.s	L.D.C.s Stat. Clerks	Accountant	Store Keeper	Head Clerk	Stenographer	Stenotypist	Peons Chowkidars	Driver
1. New Delhi	4	11	..	..	..	..	2	5	..
2. Bombay	7	28	1	1	1	1	2	19	..
3. Madras	7	18	1	..	1	..	2	10	—
4. Calcutta	2	10	1	..	1	..	2	6	..
5. Scheme for Quality control	4	25	1	..	2	..	25	38	2
6. Agmark Laboratories	5	11	1	6	4	1	5	32	..
7. Fruit Products Org.	6	9	..	..	..	..	5	14	..
8. Training Course for Secretaries of Market Committees. . . . .	..	3	..	..	..	..	..	3	..
TOTAL	5	41	5	7	9	2	43	127	2

ANNEXURE III(F)

ORGANISATIONAL CHART SHOWING THE SOIL CONSERVATION DIVISION IN THE DEPARTMENT OF AGRICULTURE, MINISTRY OF FOOD, AGRICULTURE, COMMUNITY DEVELOPMENT & COOPERATION.



EXISTING STAFF OF THE ALL-INDIA SOIL & LAND USE SURVEY ORGANISATION**CHIEF SOIL SURVEY OFFICER (1300 - 1600).**

15 originally sanctioned field parties (13 parties at Bangalore.) Each party is under the charge of Soil Survey Assistant (210-425) and supported by surveyors, Field Assistants, Khalasis, Drivers, (only 6-7 per Centre). 5 more field parties sanctioned with a proviso to appointing only after procurement of jeeps.

Established 1946

**ORGANISATIONAL CHART OF THE DIRECTORATE OF
PLANT PROTECTION, QUARANTINE & STORAGE
4/19, ASAF ALI ROAD, NEW DELHI**

**ANNEXURE III (I)
Position as on 21-5-1966**

MINISTRY OF FOOD AND AGRICULTURE (DEPARTMENT OF AGRICULTURE)

Plant Protection Adviser to the Govt. of India
& Director, Locust Control

Officer-on-special Duty
(Agr Aviation)

LOCUST & STORAGE DIVISION **DIVISION ON PLANT DISEASES & WEEDS** **PLANT PROTECTION DIVISION** **PLANT QUARANTINE DIVISION** **ADMINISTRATIVE DIVISION**

Storage Entomologist

Assistant Director (Locust Control)

L.W.O.

E.S.I.I.

L.W.C.

Field Staff

Bikaner

H.O. Staff

L.S.S. Jodhpur

Locust

Deputy

D.L.E.

Entomologist

Entomologist

Contd.

Contd.

AERIAL UNIT
Officer on Special
Duty (Operations)

1. Senior Pilot
2. Junior Pilots
3. S.A.M.E.
4. J.A.M.Es.
5. Aircraft Mechanics
6. Store-keeper
7. Cleaners
8. Chowkidar

Jodhpur Circle
ALE/AO/AE/SO

Bikaner Circle
(A.L.E.)

Barmer Circle
(A.L.E.)

Palanpur Circle
(A.L.E.)

Contd.

Outposts

1. Jodhpur
2. Shergarh
3. Ptalodi
4. Nokh
5. Pokaran
6. Nagaur
7. Didwana

Outposts

1. Bikaner
2. Pugal
3. Lunkaransar
4. Sri Kolayatji
5. Suratgarh
6. Anupgarh
7. Churu
8. Sri Dungargarh
9. Taranagar
10. Noharl
11. Sikar
12. Narnaul

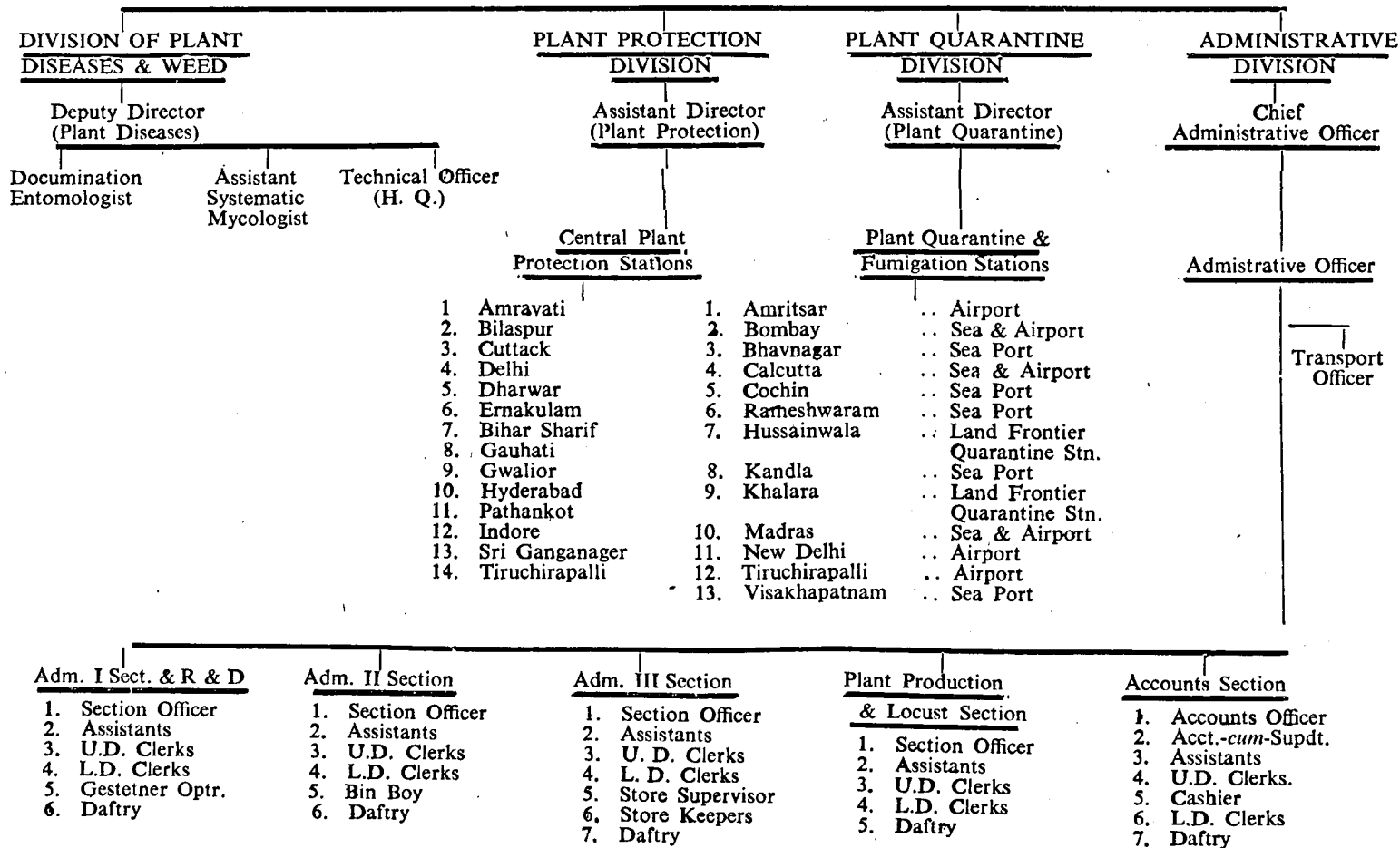
Outposts

1. Barmer
2. Balotra
3. Gadra Road
4. Chohtan
5. Jaisalmer
6. Mohangarh
7. Ramgarh
8. Sam

Outposts

1. Palanpur
2. Tharad
3. Jalore
4. Sanchore
5. Bhuj

Contd.



ANNEXURE IV

FUNCTIONS OF THE SEVERAL DIVISIONS OF THE MINISTRY OF FOOD, AGRICULTURE, C.D. & C.

- (a) Divisions & offices, in the Department of Agriculture and attached/subordinate offices.
- (b) Directorate of Marketing and Inspection of Government of India.

DEPARTMENT OF AGRICULTURE STRUCTURE

At the top of the entire structure will be the Minister for Food & Agriculture, who will be assisted by a Secretary. There will be six separate Wings dealing with the Agricultural Production Board and Special Areas Development, Agricultural Production, Inputs, Land Problems and Coordination. In addition, there will be three Directorates—a Directorate of Extension, a Directorate of Economics & Statistics and a Directorate of Central Mechanized Farms and a few independent units/cells.

Attached to the several Wings/Divisions in the Department will be secretariat Units under Secretariat Officers of the rank of Deputy Secretary/Under Secretary, which will be required to deal with the various administrative and financial matters arising in relation to the Wing to which they are attached such as the preparation of estimates, issue of sanction orders, coordination of Parliamentary work, etc.

AGRICULTURAL PRODUCTION BOARD AND SPECIAL AREAS DEVELOPMENT WING

This wing will be under a Special Secretary and will consist of two Branches—the A.P.B. Branch under a Deputy Secretary assisted by an Under Secretary and the Special Areas Development Branch under a Deputy Commissioner.

The future of the Board is under consideration. The Agricultural Production Board Branch will function as the Secretariat of the Agricultural Production Board and the Special Cooperation Committee of the Board.

The Special Areas Development Branch will deal with planning of the Development of Special Areas including the areas, which may be demarcated from time to time. The Branch works in close cooperation with the Planning Commission and other connected Ministries/Departments.

I. AGRICULTURAL PRODUCTION WING.

The Agricultural Production Wing is concerned, at the Departmental level, with policies and programmes on Agriculture, Animal Husbandry, Forestry and Fisheries. The Wing is under the overall charge of Additional Secretary (P). There are four Divisions in this Wing—Crops, Animal Husbandry, Fisheries and Forestry. The details are given below:—

I(a) Crops Division

This Division will be under Agricultural Production Commissioner and will be responsible for development and production programmes for crops

Note furnished by the Ministry of F.&A. C.D & C. (Deptt. of Agriculture).

of all varieties but will be concerned with research. It will have two branches under it.

(i) **Food Crops Branch.**—This Branch is under Joint Commissioner (Food Crops). Apart from formulating programmes for development and production in the Department itself, he will also organize and supervise the work of Crop Development Officers of Sugarcane, Rice, Fruits and Vegetables, Wheat, Millets and Pulses. These Subordinate offices are located in different places in the country and are responsible for keeping contact with State Governments, Institutions and various bodies for the Implementation of various Plan Schemes. There will be one Assistant Commissioner and one Section under him.

(ii) **Cash Crops Branch.**—The Head of this Branch will also be a Joint Commissioner with duties similar to those of Director (Food Crops) but will concentrate on cash crops, namely Jute, Lac, Oilseeds, Tobacco, Cotton, Arecanut and Spices, Coconut and Cashewnut. For each of these major crops there is a Crop Development Officer as head of Subordinate office located in different parts of the country. There will be one Assistant Commissioner and one Section under him.

I(b) Animal Husbandry Division

The Animal Husbandry Division will be under the Animal Husbandry Development Commissioner and will be responsible for laying down policies and formulating programmes relating to livestock and dairying. The Division will consist of three Technical Branches—Dairy Development Branch, Livestock Production Branch and Livestock Health Branch.

Dairy Development Branch.—The Dairy Development Branch will be under the Joint Commissioner (Dairy Development). Under the Joint Commissioner will be a Deputy Commissioner in charge of a Dairy Products Section and a Dairy Engineer incharge of a Dairy Engineering Section. The former Section will deal with matters of dairy development relating to the procurement and production of milk and milk products. The Engineering Section, as its name implies, will deal with the engineering aspects of dairy development and dairy machinery.

Livestock Production Branch.—This Branch will be under a Joint Commissioner, who will have under him 3 Sections, the first with two Assistant Commissioners and ancillary technical staff to deal with matters relating to the development of cattle (including buffaloes), the second with a Deputy Commissioner, two Assistant Commissioners and ancillary technical staff to deal with matters relating to the development of sheep and piggeries, and the third with the Deputy Commissioner and one Assistant Commissioner with necessary staff to deal with poultry development.

Livestock Health Branch.—The Livestock Health Branch will be under a Deputy Commissioner assisted by an Assistant Commissioner. This Branch will be responsible *inter alia* for drawing up schemes and taking adequate measures to improve the health of livestock in the country, to tackle epidemics, to improve the quality of meat for human consumption, etc.

I(c) Forest Division

The Forest Division will be headed by the Inspector General of Forests and will be responsible for evolving a National Forest Policy for the country, forestry education, including administration of the Forest Research Institute and Colleges, the administration of Andamans Forest Department and the Country's Wild Life. The Division will consist of two Branches—

Forest Development Branch.—This Branch will be under a Deputy I.G.F. assisted by an Asstt. I.G.F. and ancillary staff. It will deal with the various schemes and problems relating to the development of forest and preservation of the country's wild life.

There is also a Central Forestry Commission which is a technical organisation set up to study the National Forest Policy and to standardise forestry techniques. A statistical cell is attached to the Commission for the purpose of collection and publication of Forestry statistics. The Commission is headed by the I.G.F. assisted by a Secretary.

Forest Secretariat Branch.—The Forest Secretariat Branch will be headed by a Deputy Secretary assisted by an Under Secretary and two Secretariat Sections. This branch will deal with matters relating to the administration of the Forest Research Institute and Colleges, the Andamans Forest Department, the Delhi Zoological Park, Pre-investment Survey Project, the Logging Training Centres Project and other administrative and financial matters relating to Forest Division.

Fisheries Division

The subject of 'Fisheries' has only recently been transferred to this Department and has yet to be reorganised to fall in line with the rest of the Deptt. of Agriculture. At present it is under a Joint Secretary, who is assisted by a Fisheries Development Adviser, a Deputy Fisheries Development Adviser and Assistant Fisheries Development Adviser and Under Secretary. There are three Sections in this Division—Fisheries (Development) Section, Fisheries (Institute) Section and Fisheries (Technical) Section.

II. INPUTS WING I

This inputs Wing will be under the overall charge of a Joint Secretary and will be concerned with policies and programmes relating

to the procurement, distribution and utilisation of chemical fertilisers and organic manures and the development of improved seeds. The Wing will consist of two Divisions—Fertilizers Division and Seeds Development Division.

Fertiliser Division

An Officer on Special Duty is being appointed for a period of six months to examine the existing set up of this Division and to submit proposals for a revised set up. For the present the Division will be under a Deputy Secretary assisted by two Under Secretaries, Four Assistant Commissioners and an Accounts Officer and will deal with procurement and distribution of chemical fertilizers and the utilisation of organic manures, etc. There will be five Sections in the Division.

(i) **Fertiliser Planning Section.**—This Section will be responsible for programming for increased utilisation of chemical fertilisers, manures and composts, fixing of targets of consumption etc.

(ii) **Fertiliser Procurement Section.**—This Section will be responsible for all work connected with import of fertilisers as well as internal procurement.

(iii) **Fertiliser Distribution Section.**—The Fertiliser Distribution Section's function will be, *inter alia*, to ensure proper and timely movement and distribution of available stocks of fertilisers.

(iv) and (v) **Fertiliser Accounts Sections.**—There will be two Accounts Sections in the Fertilisers Division under an Accounts Officer, which will cover all accounts matters relating to the procurement and distribution of fertilisers, including prices, payment of bills, adjustments, write off etc.

Seeds Development Division

The Seeds Development Division is under a Deputy Commissioner who is assisted in technical matters by two Assistant Commissioners and two Technical Assistants and in administrative matters by a part-time Under Secretary and appropriate Junior Secretariat staff. The Division is concerned with schemes for production, procurement and distribution of improved seeds and other inter-related matters.

III. INPUTS WING II

This Inputs Wing also is under the charge of a Joint Secretary. It is concerned with Plans and programmes relating to Minor Irrigation (including Tubewells) Plant Protection and Agricultural Machinery and supplies required for agricultural purposes, like iron and steel, cement, diesel oil, etc. There will be three Divisions in this Wing.

(i) Minor Irrigation Division

The Minor Irrigation Division will be under a Joint Commissioner assisted by a Deputy Commissioner. Under the Deputy Commissioner will be two Assistant Commissioners, each having a section under him—one dealing with Tubewells and the other with Minor Irrigation. The Tubewells Section will handle schemes relating to tubewell irrigation as well as open wells and groundwater exploration. The Minor Irrigation Section will deal with schemes relating to other types of minor irrigation.

(ii) Plant Protection Division

This is really the Plant Protection Directorate which has the status of an Attached Office with the Plant Protection Director at its head. It deals with problems relating to plant protection in general including procurement and utilisation of pesticides, locust control and quarantine measures relating to the import of plants, seeds, etc. All references (including files) on technical matters relating to plant protection will flow from the Plant Protection Director (who will function like the Joint Commissioner in other Wings) direct to the Joint Secretary incharge of this Inputs Wing. A small Secretariat Unit is located in the Department proper under the Wing to deal with administrative and financial matters relating to the Directorate.

(iii) Machinery and Supplies Division

The final set up of this Unit has not yet been decided. For the present it will consist of a Deputy Commissioner with supporting junior staff. It will deal with all work relating to agricultural machinery (except categories specifically dealt with in other divisions of the Department), coordination of requirements of such machinery, procurement by import, where necessary supply of material like iron and steel, cement, etc. required for agricultural purposes.

IV. COORDINATION WING

The Coordination Wing consists of three Divisions, Plan Coordination Division, Foreign Aid Division and Administration Division.

Plan Coordination Division

The Plan Coordination Division will be under a Deputy Secretary (Plan Coordination) who holds this post in an ex-officio capacity in addition to his duties as Economics & Statistics Adviser. He will be assisted by an Under Secretary and a Unit of the E & S Directorate under an Assistant E.S.A. The Division will deal with coordination of Plan Schemes in the field of agriculture, coordination of expenditure in respect of such schemes and economic policy in relation to agriculture.

Foreign Aid Division

The Division will function under a Deputy Secretary. There will be four Sections and an Evaluation Cell with two Under Secretaries incharge. The Division will deal *inter alia* with the various foreign aid programmes both bilateral and multilateral, including analytical studies of the utilisation of foreign aid, matters arising out of India's Membership of International Organisations, hospitality to distinguished foreign visitors, effective utilisation of the services of foreign experts, foreign exchange etc.

Administration Division

The Administration Division will have two Deputy Secretaries and six Under Secretaries with an appropriate number of sections/Units and will be responsible for work relating *inter alia* to establishment (including service problems of officers and staff of Attached/Subordinate offices), budget, accounts, general coordination, organisation and methods and work study, staff welfare, parliamentary, supplies and services etc. Administrative/financial matters relating to the Indian Council of Agricultural Research, Extension Directorate, E & S Directorate and the Agricultural Prices Commission will also be dealt with in this Division.

V. LAND WING

The Lands Wing will be under a Joint Secretary. The final shape of the Wing is yet to be decided. For the present, there will be three Branches in the Division dealing with matters relating to land, soil conservation and agricultural credit. The Agricultural Marketing Directorate will also come under this Wing.

(i) Lands Branch

This Branch will be under a part-time Under Secretary and will deal with the administration of the Land Acquisition Act, utilisation of wastelands and Railway lands and land reclamation scheme etc.

Another Section under a Research Officer will deal with all land reforms work under the direct supervision of the Joint Secretary.

(ii) Soil Conservation Branch

The Soil Conservation Branch will be under a Joint Commissioner with two Deputy Commissioners and one Assistant Commissioner to assist him. The Branch will deal with problems and programmes of soil conservation including desert reclamation, dry farming soil and land use survey, etc.

(iii) Agricultural Credit Branch

The final set up of this Branch is under active consideration. It will deal with all matters relating to the provision of credit for agricultural operations, with particular reference to intensive agricultural programmes. At

present advice on agricultural credit matters is being given for the most part by the Agricultural Credit Specialist of the Extension Directorate.

Administrative and financial matters referred to by the Directorate of Marketing to Department will be dealt with in the Secretariat Sections attached to the Lands Wing. Technical work relating to Agricultural Marketing will be sent by the Agricultural Marketing Adviser direct to the Joint Secretary incharge of the Wing as in the case of the Plant Protection Director.

In addition to the regular Wings, there will be 3 Directorates as follows:—

(i) **Directorate of Extension.**—The Directorate is a Subordinate Office of the Department. At its Head is the Extension Commissioner. Broadly the function of the Directorate is to operate and supervise the implementation of various programmes of agricultural production in the States, both in the Central and State Sectors. In particular, it will be concerned with the implementation of Intensive Agricultural Production and the High Yielding varieties programme. For this purpose it will remain in close contact with the subject matter and inputs division in the Department. It will also use its regional units for supervision of the programme in the States. It will also undertake field training programme including extension training, farmers' education and farm information. All matters of technical policy requiring reference to the Department will be submitted by the Extension Commissioner direct to Secretary. All Administrative/financial matters requiring a decision at the level of the Department will be submitted by the Directorate to the Administration Division in the Coordination Wing under J.S. (Coordination).

(ii) **E & S Directorate.**—This Directorate functions as an attached office of the Department. At its Head is the Economic & Statistical Adviser. Although it has been placed under the Department of Agriculture, its advice is also available to the Department of Food. The functions of the Directorate include the giving of advice on economic matters, collection and compilation of agricultural statistics, etc. As a measure of administrative convenience, the Economic & Statistical Adviser has been given the ex-officio status of Deputy Secretary in the Department proper. In matters related to the technical work of the Directorate, the E & S Adviser will work directly under the Secretary of the Department. References relating to administrative/financial matters pertaining to the Directorate will be made by the Directorate to the Administration Division in the Coordination Wing of the Department under J.S. (Coordination).

(iii) **Directorate General of Farms.**—This will constitute a regular Wing of the Department proper and will be under a Director General (State Farms) assisted by an Assistant Director General. This Wing will be responsible for the running of the existing Central Mechanised

Farms at Suratgarh and Jetsar and the establishment of other similar farms in various other States, where land is made available by the State Governments concerned.

Export Promotion Unit.—This Unit will be under a Deputy Commissioner and will be responsible for laying down policies for, and increasing the export of agricultural and other products handled by the Department of Agriculture. It will maintain close liaison with the Ministry of Commerce and the Board of Trade.

States Liaison Cell.—This cell consists at present of a Joint Secretary and one other officer of slightly lower status. The officers forming this cell will not have any subject matter responsibility but will be mainly concerned with visiting the States to expedite specific programmes and watch the progress of various schemes. They will report directly to the Heads of the various wings and to the Secretary.

Economic Advisory Cell.—This cell will for the present consist of the Chairman of the Agricultural Prices Commission and an another Senior Economist. Its main function will be to prepare papers on specific problems and advise the Secretary and Minister.

Statement showing the broad Function and Authorised personnel strength of the various attached/subordinate offices under the Deptt. of Agriculture.

S. No.	Name of Office with location	Broad functions	Authorised Personnel strength		
			Gaz.	Non-Gaz.	Total
1	2	3	4	5	6
Part I—Attached Offices					
1.	Indian Council of Agricultural Research, New Delhi.	To promote, guide and coordinate agricultural research and veterinary research throughout India, train research workers under a scheme of scholarship, collect and collate information in regard to research agriculture and veterinary matters and to publish scientific papers, monographs journals etc.	83	380	463
2.	Directorate of Plant Protection, Quarantine and Storage, New Delhi.	Locust Survey, intelligence, investigation and control of desert areas of India, operation of plant quarantine service, organisation of control campaigns against pests and diseases, regional training programmes, collection, collation and dissemination of information about pests, plant diseases and plant protection measures, techniques, pesticides machines and problems, etc.	115	432	547

1	2	3	4	5	6
3.	Directorate of Economics and Statistics, New Delhi.	Collection, compilation and dissemination of Agro-economic intelligence. The functions of the Directorate are four-fold : (i) to prepare memoranda on current issues of agro-economic policy arising out of the work of the Ministry and to advise on those issues, (ii) to prepare special periodical statements and reports for the use of the Ministry or submission to the U.N. bodies, (iii) to collect, compile, maintain and improve economic intelligence and statistics and (iv) to publicise through the medium of pamphlets, etc. the information collected on agro-economic matters.	68	498	566
4.	Directorate of Marketing and Inspection, Nagpur.	Promotion of grading and standardisation of agricultural livestock and forest produce ; Statutory regulation of markets and market practices; Market Research and Surveys ; Training of personnel in Agricultural Marketing and Market Extension work. It has also got four regional offices viz. at Madras, Bombay, Calcutta and Delhi.	189	1,160	1,349
Part II—Subordinate Offices					
5.	Directorate of Extension, New Delhi.	To disseminate scientific knowledge gathered from agriculture research in Institutes/universities to the farmers for increasing the agricultural production. Coordination of the training of Gram Sevaks and Sevikas. Coordination of the activities of the Department of Agri. and Deptts. of Community Development and Cooperation and Development Commissioner in the States in regard to agricultural extension.	70	385	455
6.	Delhi Milk Scheme, New Delhi.	The scheme aims at re-organisation of the milk trade in capital city with a view to assuring a remunerative market to the milk producers on the one hand and supply of good wholesome milk and milk products at reasonable prices to the consumers.	79	1,972	2,051
7.	Delhi Zoological Park, New Delhi.	Delhi Zoological Park was brought into being in the year 1955 for keeping wild animals and birds of different species and different lands for showing them to the public. This is also undertaking the work of breeding of wild animals.	4	245	249

1	2	3	4	5	6
8.	Exploratory Tube-wells Orgn, Faridabad.	Ground water exploration to delineate areas having ground water potentialities for development of tube-well irrigation. Also to assist State Governments in the construction of irrigation tube-wells. Recently undertaken two new schemes (i) UNDP (Special Fund) project on ground-water surveys in Rajasthan and Uttar Pradesh, (ii) Training scheme on ground water and water well techniques in India.	68	631	699
9.	Central Tractor Orgn, New Delhi.	This unit of the Central Tractor Orgn. was created for the reclamation of the land. It has since been wound up and will stop functioning as soon as accounts are cleared.	2	8	10
10.	Agricultural Prices Commn, New Delhi.	To make recommendations to government on price policy and price structure in respect of agriculture commodities keeping in view the interest of consumers on the one hand and the producer on the other and keep under constant review the changing pattern of prices.	18	51	69
11.	Pre-investment Survey of Forest Resources, New Delhi.	The project has been undertaken by the Govt. of India in collaboration with the FAO and United Nations. The purpose of the project is to assist the Govt. in the development of the country's forest resources and associated forest industries. The aim is to increase the wood production to meet local needs in the field of pulp and paper.	5	23	28
12.	All India Soil and Land Use Survey Orgn.	Reconnaissance and detailed soil surveys are carried out for soil correlation and land use capability classification purposes with the ultimate aim of making the best use of the land for agricultural and non-agricultural purposes and to advise the State Govts. for formulating soil conservation schemes or development programmes. However, the soil survey work is mainly directed towards the catchments of river valley projects where the Government of India is interested to undertake soil conservation measures as a means of prolonging the useful life of the dams.	29	449	478

1	2	3	4	5	6
13.	Soil Conservation Research Demonstration & Trg. Centre, Ootacamund.	To carry out investigation on soil and water conservation problems for the region. These centres also impart training to the officers of the State Governments engaged on soil conservation problems and also carry out demonstrations on small areas of the cultivators field.	7	31	38
14.	Do. Kota	Do.	5	35	40
15.	Do. Dehradun	Do.	7	50	57
16.	Do. Barielly	Do.	5	37	42
17.	Do. Vasad	Do.	3	38	41
18.	Do. Chatra (Nepal)	Do.	3	21	24
19.	Do. Agra	Do.	1	20	21
20.	Do. Chandigarh	Do.	2	23	25
21.	Do. Ibrahimapata-nam.	Do.	3	26	29
22.	Regional Poultry Farm, Bombay.	To keep and produce high pedigree birds on modern and scientific lines for the foundation stock to be supplied to States for the purpose of multiplication and raising superior birds for development of poultry in the country.	1	30	31
23.	Do. Bhubaneswar	Do.	1	28	29
24.	Do. Bangalore	Do.	1	36	37
25.	Central State Farm, Suratgarh.	The Central State Farms are engaged in cultivation of crops suited to the area with a view to production of improved seeds for distribution to State Governments, Panchayat Samiti etc. At the Central State Farm, Suratgarh, Animal Husbandry Scheme (Cattle Breeding, Sheep Breeding, Poultry) have been started on pilot basis.	14	563	577
26.	Central State Farm, Jetsar.	Do.	4	190	194
27.	Central State Farm, Hirakud.	Do.	9	90	99

1	2	3	4	5	6
28.	Jersey Breeding Farm, Kataula (Mandi),	These farms were opened in the Third Plan to rear and multiply exotic breeds primarily to distribute them to State Governments Jersey Institutes for being utilised to up-grade indigenous stock under various cattle development schemes.	1	29	30
29.	Do. Hesarghatta	Do.	1	29	30
30.	Herd Registration Scheme, Rohtak.	To locate superior germs, plasm on the breeding tracts through Registration and to effect general improvement of the breed through formation of breeds societies and also to study the production records collected through organisations set up in the breeding tracts and to lay down the standards for selection.	1	14	15
31.	Central Cattle breeding Farm, Chip- lima.	To supply superior quality of bulls for improving the breeding programme in the livestock farm of the country.	2	7	9
32.	Forage Production, Hissar.	Cattle development Programme in order to meet the immediate requirements of the country.	1	4	5
33.	Do. Kalyani	Do.	1	4	5
34.	Regional Office, Cocanut Dev., Ernakulam.	To coordinate the research work being done under the various schemes sanctioned for the development of item in the country. The Institute also functions as Liaison office, to coordinate the research and development of the item.	5	38	43
35.	Regional Cashewnut Development, Ernakulam.	Do.	4	29	33
36.	Regional Office, Lac Development, Ranchi.	Do.	4	80	84
37.	Regional Office Tobacco Dev., Madras.	Do.	4	36	40
38.	Regional Office, Arecanut Dev., Kozhikode.	Do.	7	39	46
39.	Regional Office Cotton Dev., Bombay.	To coordinate the research work being done under the various schemes sanctioned for the development of the item in the country.	8	58	66

1	2	3	4	5	
40.	Regional Office Sugarcane Dev., New Delhi.	The institute also functions as Liaison Office, to coordinate the research and development of the item.	4	37	41
41.	Regional Office, Jute Dev., Calcutta.	Do.	8	206	214
42.	Regional Office, Commercial Oil Seeds Dev, Hyderabad.	Do.	8	60	68
43.	Desert Dev., Board, Jodhpur.	Constant review and preparation of schemes for development of Desert, removal of administrative bottlenecks hindering the progress of schemes, arrangements for the execution of scheme through State Government agencies, training of personnel required for the schemes and ensuring that the desert area of the country receive the attention they deserve.	5	23	28
44.	Tractor Training and Testing Stations, Budni.	To impart training in the use and maintenance of agricultural machinery to the nominees of the State Government and also to the progressive farmers.	5	87	92
45.	Tractor Training Centre, Hissar.	Do.	4	62	66
46.	Logging Training Centre, Dehradun.	The project has been undertaken by the Govt. of India in collaboration with the FAO of the United Nations acting as the executing Agency of the United Nations' Special Fund. The purpose of project is to train Indian Forest Personnel in the field of logging in order that they may improve logging training which they in turn can impart to forest workers.	12	86	98
47.	Forest Research Institute and College, Dehradun.	The function of the Institute is to conduct research into problems connected with forestry and the profitable utilisation of forest wealth and that of the Colleges to train officers and men for manning the Forest Departments for the various States. Primarily, the work of the Institute is research on problems connected with : (i) Conservation of forests, their rearing, protection and regeneration ; and (ii) efficient and profitable utilisation of forest products.	172	1,653	1,825

1	2	3	4	5	6
48.	Central Inland Fisheries Research Institute, Barrackpore.	To carry out research on various aspects of Inland Fisheries in order to increase the production of fish from inland and estuarine waters. The work is broadly divided into three sections, viz., Estuarine, Pond Culture and Riverine and Lacustrine. Investigations are stated to be in progress on the rearing and transport of fish seed food, habits, maturity, growth, breeding habits, and on many other problems of fresh water and estuarine fishes of commercial importance.	74	452	526
49.	Central Institute of Fisheries Technology, Ernakulam.	Also to impart training in regard to fish catching and fish rearing technique.	52	231	283
50.	Central Institute of Fisheries Education, Bombay.	Training of Fisheries Operative at higher levels. Do.	14	52	66
51.	Central Marine Fisheries Research Institute, Mandapam.	To carry out research on the biological, physio-chemical and other aspects of Sea Fisheries of India ultimately aimed at obtaining the maximum annual yield.	71	414	485
52.	Deep Sea Fishing Station Bombay & Off Shore Fishing Station Tuticorin, Cochin and Visakhapatnam.	To determine suitable types of power craft and gear for working in Indian waters, fishing seasons, the equipment best suited for the preservation, storage and distribution of fish and for charting of fishing grounds and training of personnel for working on mechanised fishing vessels.	11	304	315
53.	Central Institute of Fisheries Operative, Ernakulam.	Training of Marine Fisheries Operatives.	8	42	50
54.	Indo-Norwegian Project, Ernakulam.	It is a joint venture between the Govt. of India and the Govt. of Norway under an aid agreement. The functions of the Project broadly are (i) conducting and experimental fishing, in off-shore and deep sea water, (ii) conducting marine oceanographic research, (iii) imparting training in operational and processing lines.	9	205	214
55.	Regional Training Centre for Central Inland Fisheries Operatives, Hyderabad.	Training of Inland Fisheries Operatives.	5	29	34
56.	Regional Training Centre for Central Inland Fisheries Operatives, Agra.	Do.	5	29	34

MAIN ACTIVITIES AND FUNCTIONS OF THE DIRECTORATE OF MARKETING & INSPECTION*

The main functions of the Directorate of Marketing and Inspection can broadly be divided under six heads.

(i) Marketing Surveys and Research

In so far as survey and research work are concerned, the broad policy is that the Directorate of Marketing & Inspection will carry out surveys and investigations in respect of commodities which are of all-India importance and/or are important from the point of view of export trade.

These commodities are decided in consultation with the State Marketing Departments. The Directorate then develops a questionnaire and sends it to the State Marketing Departments for furnishing information for the respective States. An integrated all-India picture is then presented in the Marketing Survey Reports published by the Directorate. In addition, the State Marketing Departments are free to publish their own State Survey reports in respect of commodities for which all-India reports have been published. It needs to be mentioned that this does not involve any duplication, since an all-India report focuses attention on problems of all-India importance, whereas the State reports deal in greater detail the local problems.

In addition, the Directorate of Marketing and Inspection assists States to conduct marketing surveys of commodities of local importance. These reports are invariably published by the States.

(ii) Formulation of Grade Standards

The enactment of the Agricultural Produce (Grading & Marking) Act, 1937, by the Central Legislature enabled the Central Government to include any produce of agriculture or animal husbandry in the schedule to the Act and prescribe specifications therefor. So far, this Directorate has drawn up grade standards in respect of 90 agricultural commodities covering 277 trade descriptions.

It may be mentioned that Agmark grade specifications are drawn up on the basis of the results of analysis of a number of samples collected from different areas at different periods of the year. The nature of this work is such that it can be done only by a Central Organisation. Not only the co-operation of the State Marketing Departments is enlisted for the collection of samples from their respective States, but also the tentative

*Note prepared by this Directorate of Marketing and Inspection, Ministry of Food Agriculture, Community Development and Cooperation.

specifications drawn up are discussed with the State Marketing Organisations as also the trade interests and technical experts concerned. These specifications are then incorporated in the Government of India gazette for eliciting objects and views. Copies of these notifications are also sent to the State Governments for their views. After taking into consideration the objections or the comments received, if any, the Grading and Marketing Rules are finally notified in the Gazette of India.

The standards that are prescribed for any commodity should be on an All-India basis. It may be mentioned that the States empowered the Parliament to lay down such standards under the Prevention of Food Adulteration Act, 1954. Further to ensure uniformity in procedures for implementation of the standards, the Prevention of Food Adulteration Act was amended in 1963 to give concurrent jurisdiction to the Centre and the States.

It will thus be seen that close co-operation of State Marketing Departments is obtained at all stages in formulating the grade standards.

It needs to be mentioned that the Directorate of Marketing & Inspection also maintains close liaison with other institutions like the Indian Standards Institution, the Central and State Warehousing Corporations, the Export Inspection Council of the Ministry of Commerce and the Union Ministry of Health, which are also concerned with the standards as well as their implementation in respect of commodities which come within their purview. For example, with a view to avoiding multiplicity of standards in respect of agricultural commodities, the Directorate of Marketing and Inspection is represented on all the Committees of the Indian Standards Institution concerned with the standards for farm products. It has further been decided that Indian Standards issued by the Indian Standards Institution for commodities not so far covered under Agmark would be adopted as such for Agmark specifications. Similarly, the Indian Standards Institution standards in respect of items already covered under Agmark specifications would be required to be lined up with the latter. The Agricultural Marketing Adviser to the Government of India is also a member of the Export Inspection Council.

The Standards prescribed are periodically reviewed to suit the requirements of the trade, consumers etc. In these reviews the other Organisations, *e.g.* the Indian Standards Institutions, the Central Committee for Food Standards are also consulted besides the State Governments. The objective is to evolve practicable standards by all the organisations and avoid any kind of conflict in the standards that may be prescribed by different authorities.

Similarly, with a view to bringing about uniformity in the grade standards adopted by the Central & State Warehousing Corporations on the one hand and the Directorate of Marketing & Inspection, on the other

an Export Committee was appointed by the Ministry of Food & Agriculture. This Committee has since framed grade standards for cereals and pulses. These standards are to be adopted by all regulated markets, marketing cooperatives and Central and State Warehousing Corporations. In formulating these standards the view of the State Marketing Departments were at all stages obtained.

(iii) Grading

Grading activities can be broadly dealt with under three heads, *viz.* (a) Grading for Export, (b) Grading for consumers and (c) Grading at the farmers' level.

(a) **Grading for Export.**—Since the provisions of the Agricultural Produce (Grading & Marking) Act are of a voluntary nature, compulsion in regard to exports is brought about by issuing notifications under the Customs Act, 1962, prohibiting the export of the notified commodity unless the same has been graded and marked in accordance with the standards prescribed under the Agmark.

At present, 33 agricultural commodities, *viz.*, sann hemp, tobacco, bristles, wool, lemongrass oil, sandalwood oil, coat hair, bidi tobacco, palmmroea, oil myrobalans, black pepper, cardamons, chillies, vetiver oil, walnuts, groundnut oil, castor oil, linseed oil, cottonseed oil (refined), safflower oil (refined), animal casings, turmeric, ginger, tandu leaves, onions, garlic, table potatoes, green gram, black gram, red gram, lentils, moth and bengal gram, are being graded compulsorily for export under Agmark. To ensure that grading is done strictly in accordance with the prescribed specifications, separate inspectorate staff has been appointed at different centres including export points, where these commodities are packed for export. These offices have been located at key points to enable grading to be done with utmost speed for the convenience of the trade and to facilitate the free flow of exports. The staff works directly under the control of Agricultural Marketing Adviser to the Govt. of India.

(b) **Grading for consumers.**—On account of the widespread practice of adulteration, consumers find it difficult to obtain pure food articles. In order to safeguard the interests of the consumers and provide them with pure articles, a number of agricultural products such as ghee, butter, edible vegetable oils and eggs are being graded under the Agmark. Small quantities of wheat, atta, rice and fruits are also being graded under the agmark.

In certain articles like eggs, fruits and rice, where no laboratory tests are needed, grading is being supervised entirely by the staff of the State Marketing Departments. In the case of atta of wheat also, grading is done under the supervision of State Marketing staff. The Directorate of

Marketing & Inspection comes in the picture in so far as the samples collected by the State Marketing staff have to be analysed in the various laboratories set up by this Directorate.

There are, however, certain commodities like ghee, butter, edible vegetable oils and honey, the purity and quality of which can be determined only on the basis of chemical analysis, for which a well-equipped laboratory and trained staff are necessary. These products also enter inter-State trade in substantial quantities.

The primary responsibility for correct grading rests with the packers. They have, therefore, either to set up their own laboratories or have access to a laboratory before they are permitted to take up grading of ghee, butter, vegetable oils and honey. The chemists appointed to these laboratories are also required to possess requisite qualifications and experience and need to be approved by the Agricultural Marketing Adviser to the Govt. of India. Since the role of the chemists in the grading of these commodities is of vital importance, it becomes imperative that the chemists should be able to discharge their duties without fear or favour. This objective is sought to be achieved by exercising control on the chemists in varying degrees. In the case of butter and vegetable oils, the packers can have their own laboratories and appoint such chemists as are approved by the Agricultural Marketing Adviser to the Government of India or work through the laboratories owned by institutions and approved by the Agricultural Marketing Adviser to the Govt. of India or through the State Government laboratories. In the case of honey, the packers are required to work through the State Government laboratories wherever they exist or through the laboratories set up by the institutions and approved by the Agricultural Marketing Adviser to the Govt. of India. In the case of ghee, which is subject to various forms of adulteration, real control on chemists was not found to be satisfactory. Accordingly, it has been made obligatory that the chemists employed by the packers will be Central Govt. employees working under the administrative control of the Agricultural Marketing Adviser to the Government of India. However, where State Governments have set up their own laboratories, the chemists employed are State Govt. employees and at such centres it has been made obligatory that the packers work through these laboratories. Such State Government laboratories for grading of ghee are working in Andhra Pradesh, Gujarat, Madras, Maharashtra, Mysore, Himachal Pradesh, etc. It is only in such places, where the State Governments do not have their own laboratories that the packers are given the service of Central Government chemists.

It will thus be seen that a flexible approach has been adopted in the matter of laboratories and chemists for the grading of ghee, butter, honey and edible vegetable oils and fullest scope has been provided for setting up of the laboratories by the State Governments.

An effective check over the commodities graded under the Agmark as well as over the work of the chemists working in the grading laboratories are *sine qua non* for maintenance of standards of quality of graded products and for safeguarding the interests of the consumers. The Directorate of Marketing & Inspection has accordingly set up regional laboratories where test and check samples are analysed. The State Marketing staff is actively associated with the grading of these commodities as the applications for the grant of Certificate of Authorisation for the grading have to be recommended by the State Marketing Departments. The State Marketing staff is also authorised to draw check samples from the premises of the manufacturers and distributors, etc. and to send them under code to the various laboratories maintained by the Directorate. The staff of the Directorate of Marketing & Inspection also collects samples from the distributors and also makes inspections at grading premises to ensure that the rules are observed and hygienic conditions maintained.

(c) **Grading at farmers' level.**—To ensure that the benefits of grading accrue to the farmers, grading of produce before it is actually sold has recently been taken up in the Regulated Markets and by the Cooperative Marketing Societies. Here, grading is mostly confined to foodgrains and oilseeds. The standards are prescribed by the Directorate in consultation with the States. The Directorate of Marketing & Inspection also trains the graders and assessors. The work, however, is entirely supervised by the State Marketing staff. The officers of the Directorate of Marketing & Inspection, provide liaison help in resolving the bottlenecks and difficulties that may crop up.

A narration of the various facts of grading will be incomplete without a mention of the specific role played by the Central and Regional Agmark laboratories set up by the the Directorate towards quality control and the measures devised for the maintenance of uniformity in standards throughout the country. These are briefly dealt below:—

(a) **Laboratories.**—As already stated, for determining the purity and quality as also for exercising effective quality control of certain commodities, laboratory facilities are essential. Further, to ensure that analysis of test and check samples is taken up expeditiously, it was decided to set up eight Regional Laboratories in different parts of the country and one Central Agmark Laboratory at Nagpur. Out of the 8 Regional laboratories, seven have already been set up, one each at Cochin, Kanpur, Madras, Guntur, Rajkot, Bombay and Calcutta, and the eighth laboratory is being set up near Delhi. Two more laboratories are to be set up during the first year of the IV Plan—one at Bangalore and the other at Patna.

The Central Agmark Laboratory has to conduct research for finding out similar and quicker methods of analysis or to solve other problems faced and referred to by the trade. It has also to devise suitable methods

for detection of possible adulterants in commodities taken up for Agmarking. It also exercises supervision over the work of the Regional Agmark Laboratories. The Regional Agmark Laboratories, on the other hand, have to undertake analysis of test and check samples drawn by the Central and State Marketing staff from the commodities graded under the Agmark. These laboratories have also to undertake analysis of samples that may be collected from different parts of the country for drawing up grade standards.

It will be seen that the Central and Regional Agmark laboratories serve a definite purpose. In the absence of these laboratories, it will not be possible to exercise effective supervision over the quality of the products graded under the Agmark.

It may also be mentioned that under the Prevention of Food Adulteration Act, it has been decided by the Ministry of Health, Government of India, that ghee in certain areas which does not conform to the all-India standards, because of certain biological factors like the breed of the cattle or the feeds being given to the cattle, can move from one State to the other only if it is graded under the Agmark. Such ghee is produced in the Saurashtra region of Gujarat, and parts of Mysore, Madras, Maharashtra, West Bengal and Andhra Pradesh. It becomes, therefore, the responsibility of the Directorate of Marketing & Inspection that such ghee conforms to the prescribed standards and for the efficient discharge of these responsibilities, the maintenance of adequate laboratory facilities is essential.

(b) *Maintenance of uniformity and strict observance of standards.*—The responsibility for the administration of the Agricultural Produce (Grading & Marking) Act, 1937, devolves on the Agricultural Marketing Adviser to the Govt. of India. It becomes, therefore, necessary for the Directorate of Marketing & Inspection to ensure that any produce which carries an Agmark label satisfies the standards of quality prescribed under the Agmark for that commodity. It is in this context that the Directorate of Marketing & Inspection has to play an important part in the grading of agricultural commodities under the Agmark. Moreover, many of the commodities are exported from one State to the other, and unless there is a Central Organisation to keep a check on the quality of such products, the very purpose of evolving uniform standards of quality for the farm products in the country will be defeated.

It may not be out of place to mention that similar procedures exist in other countries as well, e.g., the USA and Canada. The USA has made considerable strides in grading and standardisation, and almost every farm product is to be graded before sale. In the USA, although many of the States have enacted legislation laying down standards for the farm products grown within those States, all commodities entering inter-State commerce or for export have to be compulsorily graded only in accordance with the standards prescribed under the Federal Laws. Even in the market news

reports published all over the country, prices are quoted on the basis of Federal grade standards only. The standards laid down under the State laws are applicable specifically for the produce which is consumed within the State itself. Similar provisions exist in Canada. It will, therefore, be seen that the practices followed in regard to grading in India are not only in consonance with the requirements of the situation but are also in conformity with those prevailing in some other countries of the world.

(iv) **Training of personnel in Agricultural Marketing**

With a view to ensuring the flow of trained personnel to take up the various developmental activities associated with marketing of farm products, the Directorate of Marketing & Inspection has arranged for the following courses of training:—

(a) **A course of one year's duration.**—This training is meant for superior personnel of the State Marketing Department. So far, 196 candidates have been trained in this course. The trainees are sponsored by the State Governments and the Government of India pays them a stipend of Rs. 75 p.m. each for the duration of the training.

(b) **A course of 5 months' duration.**—This training is meant for market Secretaries and Superintendents in the Regulated Markets. This training is being imparted at Sahgli in Maharashtra, Hyderabad in Andhra Pradesh and Lucknow in Uttar Pradesh. So far, 735 candidates have received training. These candidates are also sponsored by the State Governments and are paid a stipend of Rs. 50 p.m. each by the Central Government.

(c) **A course of 3 months' duration.**—This training is meant for Graders and Assessors who are required to man the grading units to be set up in the Regulated Markets, the Central and State Warehouses and by the co-operative marketing societies. So far, 408 persons have been trained. The candidates for training are sponsored by the State Cooperative and Agriculture Department as well as the Regulated Markets and co-operative marketing societies. They are also paid stipend by the Government of India at the rate of Rs. 50 p.m. each.

(v) **Regulation of Markets**

With a view to removing various malpractices such as short weights, excessive market changes, unauthorised deductions and allowances, by the commission agents and the buyers and providing machinery to settle disputes between sellers and buyers, the necessity of statutory regulation of markets was keenly felt. It is, however, a State subject and the Directorate of Marketing & Inspection coordinates the activities and render guidance to the State Governments in the regulation of markets. The draft Agricultural Produce Markets Bill prepared by various States is scrutinised and

necessary suggestions made, with a view to maintaining uniformity in regard to the pattern of regulation and effective enforcement throughout the country.

(vi) Marketing Extension

The Directorate has set up an Extension Cell. The primary aim of this is to enlighten the producer-seller and advise him on the proper methods of preparation for the market, grading, storing, packaging, handling and transportation. These improvements are designed to improve the quality of the produce as also to eliminate wastage and secure better returns to the growers. The Directorate is to provide the State Marketing Organisations with necessary publicity materials, who will make use of these materials as they are, or make certain modifications as may be necessary to suit the local requirements. The Extension Wing of the Directorate also arranges and conducts "communication workshops" for imparting training to the State Marketing staff in the ways and means of carrying the latest information and the results of research on marketing to the growers.

In conclusion it may be mentioned that the diverse functions performed by the Directorate of Marketing & Inspection are of a coordinating nature in so far as the various activities in the field of marketing are concerned. For proper discharge of such functions, it becomes necessary to have an all-India prospective, which can only be provided by a Central Organisation. At the same time, flexibility of approach has been maintained so as not to hinder the progress and also meet the exigencies of the situation. Fullest scope has been provided to the State Marketing Departments in the various developmental activities, subject only to the over-all interests of the country as a whole.

The Directorate has always received enthusiastic cooperation from the State Marketing Organisations and the entire credit for the progress in the field of Agricultural Marketing in India is largely due to the assistance rendered by the States.

ANNEXURE V

EXPENDITURE ON AGRICULTURAL ADMINISTRATION

- A. Department of Food, Government of India.**
- B. Department of Agriculture, Government of India.**
- C. Department of Community Development, Government of India.**
- D. Department of Cooperation, Government of India.**
- E. Expenditure on Intensive Agricultural District Programme. .**

ANNEXURE V (A)

DEPARTMENT OF FOOD

Budget Estimate for 1967-68

(Figures in lakhs)

	Headquarters	Attached and Subordinate Offices
Pay of Officers	16.38	30.74
Pay of Establishment	21.25	143.28
Allowances and Honoraria	18.46	118.66
TOTAL	56.09	292.68

**STATEMENT SHOWING THE SUMMARY OF DEMAND FOR GRANTS OF THE
DEPARTMENT OF AGRICULTURE**

S. No.	Demand No.	Provision in Budget 1967-68				Recoveries
		Pay of Officers	Pay of Estt.	Allow. & Hon. etc.	Total	
1.	32-Ministry of Food, Agri. CD & Cooperation (Dept. of Agriculture).	25,77,000	21,81,000	22,19,000	69,77,000	..
2.	33-Agriculture	84,46,300	1,51,14,500	1,31,72,500	3, 67,33,300	1,71,97,000
3.	36-Forest	21,38,500	35,06,600	26,93,700	83,38,800	..
4.	37-Other Revenue Expenditure, etc.	1,45,700	5,78,200	4,84,100	12,08,000	..
5.	122-Other Capital Outlay, etc.	8,200	16,800	13,000	38,000	6,00,000
GRAND TOTAL		1,33,15,700	2,13,97,100	1,85,82,300	5,32,95,100	1,77,97,000

N.B.—Compared to the total provision of Rs. 574.13 crores in the current years' budget both for Plan and non-Plan expenditure, the provision for expenditure for Establishments and Allowances comes to Rs. 5.33 crores which works out to less than 1% (0.92%).

Grant No. 32—Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)

S. No.	Name of Organisation	Provision in Budget 1967-68			Total	Recoveries	Remarks
		Pay of Officers	Pay of Estt.	Allow. & Hon. etc.			
1.	Secretariat—Department of Agriculture (Proper)	25,77,000	21,81,000	22,19,000	69,77,000	..	

Grant No. 33—Agriculture

S. No.	Name of Organisation	Provision in Budget 1967-68				Recoveries	Remarks
		Pay of Officers	Pay of Estts.	Allow. & Hon. etc.	Total		
1	2	3	4	5	6	7	8
1.	Dte. of Plant Protection Quarantine & Storage—						
	Headquarters	12,49,800	11,70,700	14,27,900	38,48,400	..	
	Locust Warning Orgn.	1,21,900	5,97,400	3,57,400	10,76,700	..	
	Fumigation of American Cotton . . . . .	..	70,600	44,700	1,15,300	..	
	TOTAL P.P.Q.S.	13,71,700	18,38,700	18,30,000	50,40,400	..	
2.	Dte. of Eco. & Statistics	5,99,200	12,23,400	9,97,300	28,19,900	..	
3.	All India Soil & Land Use Survey	2,22,400	7,02,600	6,26,500	15,51,500	(—) 1,24,000	
4.	Central Mechanised Farm	1,69,000	11,10,200	6,56,500	19,32,700	..	
5.	Dte. of Marketing and Inspection	11,20,800	19,66,900	15,33,200	46,20,900	(—) 71,000	
6.	Project for Ground Water Exploration E.T.O.	5,15,500	14,49,900	12,28,300	31,93,700	(—) 1,50,000	
7.	Indian Council of Agricultural Research	8,71,200	8,33,000	7,85,300	24,89,500	..	
8.	Fisheries	16,82,100	32,30,800	26,74,900	75,87,800	(—) 20,00,000	
9.	Training Scheme for Tractor Operators	1,19,300	3,05,700	1,77,600	6,02,600	..	

1	2	3	4	5	6	7	8
10.	<i>Extension wing :</i>						
	Nilokheri Training Centre	84,400	81,500	70,900	2,36,800	..	
	Fertiliser Demonstration Scheme	9,400	17,300	13,300	40,000	..	
	Dte. of Extension and Training	6,51,800	9,78,400	9,58,400	25,88,600 (—)	2,000	
	Intensive Agri. Distt. Programme	3,18,500	1,13,300	2,47,500	6,79,300	..	
		10,64,100	11,90,500	12,90,100	35,44,700 (—)	2,000	
11.	Agri. Prices Commission	2,31,200	1,40,000	1,65,800	5,37,000	..	
12.	Regional Offices for looking into Dev. & Marketing of Commercial crops	4,44,100	10,75,500	11,38,000	26,57,600	..	
13.	Resources Inventory Centres	16,000	9,000	30,000	55,000	..	
14.	Estt. of Five Regional Stations of Forage Production	19,700	38,300	42,000	1,00,000	..	
	TOTAL : 33-AGRICULTURE	34,46,300	1,51,14,500	1,31,72,500	3,67,33,300 (—)	1,71,97,000	

Grant No. 36—Forest

S. No.	Name of Organisation	Provision in Budget 1967-68				Recoveries	Remarks
		Pay of Officers	Pay of Estt.	Allow. & Hon. etc.	Total		
1.	Forest Research Institute & colleges	14,83,600	23,34,000	16,61,000	54,78,600	Nil	
2.	Logging Training Centre	88,300	1,12,500	1,06,000	3,06,800	Nil	
3.	Soil Conservation Research & Demonstration Training Centre.	2,90,400	4,94,700	4,13,700	11,98,800	Nil	
4.	Office of the Desert Development Commissioner, Jodhpur.	73,200	39,400	40,000	1,52,600	Nil	
5.	Pre-investment Survey of Forest Resources	51,000	57,000	75,000	1,83,000	Nil	
6.	Zonal Field Parties	1,15,000	4,22,000	3,62,000	8,99,000	Nil	
7.	Forest Inventory Section						
	TOTAL	21,38,500	35,06,600	26,93,700	83,38,800	Nil	

Demand No. 37—Other Revenue Expenditure of the Ministry of Food, Agriculture, Community Development & Cooperation

S. No.	Name of Organisation	Provision in Budget 1967-68				Recoveries	Remarks
		Pay of Officers	Pay of Estt.	Allow. & Hon. etc.	Total		
1.	Agricultural Attache, Embassy of India, Rome	22,800	15,300	67,900	1,06,000	..	
2.	Regional Poultry Farm	22,900	1,26,500	71,300	2,20,700	..	
3.	Delhi Zoological Park	33,000	2,78,000	2,10,500	5,21,500	..	
4.	Extension of herd registration to important breeding tracts and formation of breeding societies.	9,700	36,900	28,200	74,800	..	
5.	Farms for raising Jersey Cattle	13,700	66,600	43,600	1,23,900	..	
6.	Cattle breeding farms	17,000	19,000	14,500	50,500	..	
7.	Animal Quarantine & Certification Service . . . . .	..	10,000	7,000	17,000	..	
8.	Organisation of All India and Regional Livestock and Poultry shows.	26,600	25,900	41,100	93,600	..	
TOTAL		1,45,700	5,78,200	4,84,100	12,08,000	..	

Demand No. 122—Other Capital Outlay of the Ministry of Food , Agriculture, Community Development and Cooperation

S. No.	Name of Organisation	Provision in budget 1967-68			Total	Recoveries	Remarks
		Pay of Officers	Pay of Estt.	Allow. & Hon. etc.			
1.	Land Reclamation Scheme	8,200	16,800	13,000	38,000	6,00,000	On account of reclamation charges from the States.

ANNEXURE V (C)

**STATEMENT SHOWING THE PROVISION FOR THE
YEARS 1964-65, 1965-66 AND 1966-67 IN RESPECT OF
DEPARTMENT OF COMMUNITY DEVELOPMENT**

S.No.	Sub-head	1964-65	1965-66	1966-67
1	2	3	4	5
DEPARTMENT OF COMMUNITY DEVELOPMENT				
1.	Pay of Officers	6,24,600	5,45,400	4,16,800
2.	Pay of Establishment	6,60,300	5,00,100	3,92,700
3.	<i>Allowances and Honoraria :</i>			
	(a) Travelling allowances	1,20,000	1,70,000	65,000
	(b) Other Allowances	2,71,400	3,27,900	3,37,400
	TOTAL.	3,91,400	4,97,900	4,02,400
4.	Other Charges	1,90,000	2,00,000	1,00,000
	GRAND TOTAL	18,66,300	17,43,400	13,11,900

Expenditure on C. D. Programme during Three Plans Year-wise.

(Rs. in lakh)

Plan	Year	Expenditure	Total
1st Plan	1951-52	..	
	1952-53	81.00	
	1953-54	566.00	
	1954-55	1,483.00	
	1955-56	2,468.00	
			45,98.00
2nd Plan	1956-57	2,378.00	
	1957-58	3,130.00	
	1958-59	4,013.00	
	1959-60	4,344.00	
	1960-61	4,847.00	
			187,12.00
3rd Plan	1961-62	5,114.00	
	1962-63	5,414.00	
	1963-64	5,315.00	
	1964-65	5,527.00	
	1965-66	5,542.00	
			269,12.00
	TOTAL.		502,22.00

**Extent of Centre's Share of Revenue Expenditure on C. D. from
1955 onward with State's Share**

(Rs. in Lakh)

Year	Amount of Grant
1955-56	918·56
1956-57	922·68
1957-58	949·49
1958-59	1,230·68
1959-60	1,767·63
1960-61	2,039·39
1961-62	1,952·12
1962-63	2,501·06
1963-64	2,102·39
1964-65	2,360·42
1965-66	2,525·10
1966-67	1,721·01

Note.—State Share of revenue expenditure on C.D. is not available in this Ministry.

ANNEXURE V (C)

**DETAILS OF ACTUAL EXPENDITURE HEADWISE
DURING 1964-65 OF SUBORDINATE OFFICES**

Name of Office	Pay of Officers	Pay of Estt.	Allow. & Hon.	Other charges	Total
1	2	3	4	5	6
A. National Institute of Community Development	2,01,421	1,29,776	1,99,622	2,99,301	8,30,186
<i>B. Govt. Centres :</i>					
1. Orientation & Study Centre, Hyderabad	43,041	40,981	52,435	29,066	1,65,523
2. Tribal Orientation & Study Centre, Ranchi	79,507	61,359	84,363	61,675	2,86,904
3. Orientation & Study Centre, Junagadh	51,622	36,323	45,530	29,543	1,63,018
4. Tribal Orientation & Study Centre, Jabalpur	71,749	49,258	64,044	39,711	2,24,762
5. Tribal Orientation & Study Centre, Bhavanisagar	52,195	34,911	33,531	35,367	1,56,004
6. Orientation & Study Centre, Poona	1,070	90	276	10,392	11,828
7. Orientation & Study Centre, Mysore	54,959	43,421	42,262	24,359	1,65,001
8. Tribal Orientation & Study Centre, Bhubaneswar	38,201	28,361	45,684	83,127	1,95,373
9. Orientation & Study Centre, Nilokheri	76,514	69,720	65,601	34,681	2,46,516
10. Tribal Orientation & Study Centre, Udairpur	63,944	48,743	58,352	48,908	2,19,947
11. Orientation & Study Centre, Lucknow	66,435	42,291	49,023	35,194	1,92,943
12. Orientation & Study Centre, Kalyani	46,757	41,397	40,193	30,686	1,59,033
TOTAL 'B'	6,45,944	4,96,855	5,81,294	4,62,709	21,86,85
GRAND TOTAL 'A' & 'B'	8,47,415	6,26,631	7,80,982	7,62,010	30,17,038

**Details of Actual Expenditure headwise during 1965-66 of Subordinate
Offices of the Ministry.**

1	2	3	4	5	6
<i>A. Govt. Centre :</i>					
1. Orientation & Study Centre, Hyderabad	52,229	43,088	70,108	30,816	1,96,241
2. Tribal Orientation & Study Centre, Ranchi	77,028	65,019	86,181	49,206	2,77,434
3. Orientation & Study Centre, Junagadh	54,792	41,302	56,550	22,804	1,75,448
4. Tribal Orientation & Study Centre, Jabalpur	70,164	51,646	94,221	25,588	2,41,619
5. Orientation & Study Centre, Bhavani-sagar	45,906	36,377	44,575	19,433	1,46,291
6. Orientation & Study Centre, Poona	38,308	22,518	37,473	79,908	1,78,207
7. Orientation & Study Centre, Mysore	50,792	43,234	58,858	18,658	1,71,542
8. Tribal Orientation & Study Centre, Bhubaneswar	62,877	45,639	70,461	51,444	2,30,421
9. Orientation & Study Centre, Nilokheri	80,428	69,151	74,147	59,327	2,83,052
10. Tribal Orientation & Study Centre, Udaipur	69,063	50,892	75,553	51,486	2,46,994
11. Orientation & Study Centre, Lucknow	54,298	42,852	60,789	33,955	1,91,894
12. Orientation & Study Centre, Kalyani	53,972	43,115	52,028	37,099	1,86,214
TOTAL 'A'	7,09,857	5,54,833	7,80,943	4,79,724	25,25,357
<i>B. National Institute of Community Development, Hyderabad</i>					
	1,30,706	86,448	1,43,790	1,13,128	4,74,072
GRAND TOTAL 'A' & 'B'	8,40,563	6,41,281	9,24,733	5,92,852	29,99,429

**Details of Expenditure Figures on the basis of re-appropriation order
1966-67 of subordinate offices of the Ministry.**

1	2	3	4	5	6
1. Orientation & Study Centre, Hyderabad	34,600	44,600	62,400	29,100	1,70,700
2. Tribal Orientation & Study Centre, Ranchi	63,300	58,600	73,000	79,500	2,74,400
3. Orientation & Study Centre, Juragadh	43,000	44,500	57,500	22,300	1,67,300
4. Tribal Orientation & Study Centre, Jabalpur	62,500	47,700	76,500	18,000	2,04,700
5. Tribal Orientation & Study Centre, Bhanisagar	54,200	44,100	51,600	45,100	1,95,000
6. Orientation & Study Centre, Mysore	44,400	45,000	62,600	18,100	1,70,100
7. Tribal Orientation & Study Centre, Bhubaneswar	65,300	45,100	68,200	29,400	2,08,000
8. Orientation & Study Centre, Nilokhari	90,000	75,300	80,200	28,000	2,73,500
9. Tribal Orientation & Study Centre	66,300	53,700	75,900	26,700	2,22,600
10. Orientation & Study Centre, Lucknow	51,500	48,700	65,400	31,700	1,97,300
11. Orientation & Study Centre, Kalyani	49,500	44,700	58,800	37,700	1,90,700
TOTAL	6,24,600	5,52,000	7,32,100	3,65,600	22,74,300

ANNEXURE V (D)

**STATEMENT SHOWING THE PROVISION FOR THE
YEARS 1964-65, 1965-66 AND 1966-67 IN RESPECT OF THE
DEPARTMENT OF COOPERATION**

S. No.	Sub-head	1964-65	1965-66	1966-67
1	2	3	4	5
1.	Pay of Officer	4,10,300	5,10,800	6,30,000
2.	Pay of Establishment	2,60,300	4,36,300	4,61,000
3.	<i>Allowances & Honoraria</i>			
	(a) Travelling Allowances	90,000	1,10,000	1,10,000
	(b) Other Allowances	1,27,700	3,44,500	4,45,100
	TOTAL	2,17,700	4,54,500	5,55,100
4.	Other Charges	1,25,000	1,20,000	1,00,000
	GRAND TOTAL	10,13,300	15,21,000	17,46,100

ANNEXURE (E)

INTENSIVE AGRICULTURAL DISTRICT PROGRAMME—EXPENDITURE

(Rs. in lakhs)

States	Districts	Total provision under the III 5-Year Plan	Actual expenditure during				Anticipated expenditure during 1965-66	Total 1961-66 Col.(4) to Col. (8)
			1961-62	1962-63	1963-64	1964-65		
1	2	3	4	5	6	7	8	9
<i>(A) First group of districts</i>								
1. Madras	Thanjavur	150.00	14.81	16.35	20.79	31.32	24.84	108.11
2. Andhra Pradesh	West Godavari	100.00	6.67	16.40	18.45	28.48	43.00	113.00
3. Bihar	Shahabad	150.00	19.96	32.89	16.98	35.86	42.00	147.69
4. Madhya Pradesh	Raipur	100.00	14.05	18.68	22.67	25.50	24.90	105.80
5. Uttar Pradesh	Aligarh	150.00	26.044	37.877	18.477	34.00	28.00	144.398
6. Punjab	Ludhiana	90.20	6.75	10.61	9.30	27.70	28.00	82.36
7. Rajasthan	Pali	110.00	12.07	22.20	27.09	22.17	22.51	106.04
(i) TOTAL		850.20	100.354	155.007	133.757	205.03	213.25	807.398

1	2	3	4	5	6	7	8	9
<i>(B) Second group of districts</i>								
8. Kerala	Alleppey and Palghat	150.00	3.76	9.59	22.68	21.48	27.64	85.15
9. Mysore	Mandya	100.00	2.75	8.095	8.713	16.20	20.00	55.758
10. Gujarat	Surat	148.36	7.33	8.19	11.27	28.65	26.74	82.18
11. Orissa	Sambalpur	150.00	0.78	17.50	32.74	24.55	25.00	100.57
12. West Bengal	Burdwan	150.00	..	8.16	25.25	30.00	50.00	113.41
13. Maharashtra	Bhandara	95.00	..	4.67	14.21	24.79	22.19	65.86
14. Assam	Cachar	100.00	..	0.88	11.75	17.97	17.50	48.10
15. Jammu & Kashmir	6 Blocks—3 each in Jammu & Anantnag districts.	50.00	2.12	3.31	1.76	19.30	11.61	38.10
(ii) TOTAL		943.36	16.74	60.395	128.373	182.94	200.68	589.128
GRAND TOTAL (i) + (ii)		1793.56	117.094	215.402	262.130	387.97	413.93	1396.526

Foot Notes :

1. The outlay on the programme, provided for the Third Plan period, as shown in Column 3, included a small provision for medium-term loans also, as it was originally thought that such a plan provision would ensure that the requirements of the programme in respect of medium and a long-term loans were met fully. In actual practice, however, the State Governments provided loans for minor irrigation, implements, etc. in the IADP districts under the respective budget heads and not from the IADP budget.

2. Figures in columns 4 to 9 represent non-loan expenditure which was shared between the Government of India and the State Governments on an agreed basis. A statement showing the pattern of sharing of cost on the programme between the Government of India and the State Governments is enclosed. The figures represent the sum total of expenditure incurred on individual items, as shown in the enclosed statement.

3. The progress of expenditure in respect of the Second Group of Districts was not satisfactory as compared to the outlay provided in the Plan. The reason is that these districts generally introduced the programme during 1962-63, except Bhandara in Maharashtra and Cachar in Assam where the Scheme was launched in the field in 1963-64. Thus, in the Second Group of Districts the programme really acquired tempo only from 1963-64 onwards; the years 1961-62 and 1962-63 could be regarded as period of preparatory work.

4. So far as Jammu & Kashmir is concerned, the programme did not move at all during the Third Plan period, due mainly to slow administrative action on the part of the State Government. The progress of implementation was, therefore, extremely unsatisfactory and the level of expenditure low.

I.A.D.P. Pattern of sharing expenditure during the Third Five Year Plan period

Items	Percentage share of the Government of India.	Percentage share of the State Governments
1. Additional Staff	75	25
2. Additional Staff for Survey & Assessment work	100	..
3. Transport	100	..
4. Training	100	..
5. Implements Workshop	100	..
6. Quality Seed Programme	100	..
7. Soil Testing Laboratory	100	..
8. Scientific Demonstrations	100	..
9. Information Support Programme	100	..
10. Water Use & Management Scheme	100	..
11. Storage Godowns	To be financed under the normal Plan Scheme of the State Department of Co-operation.	

N.B.—From the year 1967-68 onwards till the end of the Fourth Five Year Plan period Government of India would meet 75% of the expenditure on all items of the I.A.D.P. the State Governments share being 25%.

ANNEXURE VI

**DRAFT OUTLINE OF THE PROPOSED INDIAN AGRICULTURAL
SERVICE**

DRAFT OUTLINE OF THE PROPOSED INDIAN AGRICULTURAL SERVICE

The Agricultural Administration Committee (Nalagarh Committee) which considered the question of re-organisation of agricultural administration felt concerned at the low morale and frustration prevailing among agricultural services in the States. Agriculture had not received its due share in the national intellect mainly for the reason that conditions of the service as compared to other services had not been attractive enough for the young men who offered agriculture as their subject. The Committee accordingly recommended that nothing short of an All-India Agricultural service, with pay and prospects at par with the I.A.S. would raise the morale and efficiency of Agricultural Service. This would also facilitate exchange of top level officers from one State to another and from the States to the Centre, thereby strengthening the Service and offer attraction to best talents. Similar views were also expressed by the Royal Commission who had recommended that the Director of Agriculture should be placed on terms of equality with the Heads of other departments. The Joint Indo-American Team on Agricultural Research and Education also pointed out that the progress in the technical fields of agriculture required the leadership of career agriculturists rather than career professional general administrators. A draft scheme of an All-India Agricultural Service, at present under consideration by the Ministry of Home Affairs, is given below.

THE INDIAN AGRICULTURE SERVICE

1. The service may be called the Indian Agricultural Service.
2. Each State will have a cadre of its own in the Service and there will be a combined cadre for Union Territories. Allocation of directly recruited officers to the various cadres would be made by the Central Government in consultation with the Governments concerned. The requirements of the Central Government will be met by obtaining officers from the State and Union Territories cadres on deputation basis. For this purpose all cadres will be on an equal footing and no special preferences will be given to any one cadre.
3. All posts in the State/Union Territories of the rank of District Agricultural Officer and above, concerned with general agricultural development and administration will be encadred in the proposed All-India Service. As regards encadrement of posts on the research and teaching side, the requirements of each State may be considered at the time of constitution of the respective cadre and only such posts may be included

for encadrement as are considered suitable for this purpose. The composition of a State cadre/Union Territories cadre may be as follows:—

1. *Posts under the State Govt. Union Territories*

- (a) Director of Agriculture.
- (b) Additional/Joint Director.
- (c) Deputy Directors.
- (d) Assistant Directors and District Agricultural Officers.
- (e) Equivalent Posts on the research and teaching side as may be considered suitable for encadrement.

	Total	X
2. Post to be filled by promotion from the State Services (see para 5 below)	33½ % of X	
3. Posts to be filled by direct recruitment.	66½ % of X	
4. Deputation Reserve. (On the basis of the actual posts required to be filled by deputation).	Y	
5. Leave Reserve.	11% of (3) above	
6. Training Reserve	5% of (3) above	
Direct Recruitment posts	$\frac{2X}{3} + Y + \frac{2X}{3} \times \frac{(11+5)}{(100)}$	
Promotion Posts = $\frac{X}{3}$		
Total authorised strength-	$X + Y + \frac{(2X)}{3} \times \frac{16}{100}$	

4. The scales of pay for the services will be as follows:—

- | | |
|---|-------------------|
| (1) Director of Agriculture/equivalent posts. | Rs. 2000-125-2250 |
| (2) Addl. Directors/Joint Directors/equivalent posts. | Rs. 1600-100-1800 |
| (3) Deputy Directors/equivalent posts. | Rs. 1300-60-1600 |
| (4) Asstt. Director/District Agricultural Officer/equivalent posts. | Rs. 400-1250. |

N.B.—The exact number of posts to be included in the service together with their relevant scales will be decided later in consultation with the State Governments.

5. **Method of Recruitment**

(i) 33½% of the posts will be filled by promotion of officers of the State Agricultural Services in accordance with rules and regulations to be framed for the purpose.

(ii) 66½% of the posts will be filled by direct recruitment through the Union Public Service Commission in accordance with regulations to be framed in this behalf.

6. Selected candidates will be appointed on probation for two years. The Central Government will, in consultation with the State Governments, take necessary steps to provide facilities for refresher courses and advanced studies to the members of the Service at various stages of their career.

Initial appointment to the Service

7. The usual practice is that whenever a new Service is created, persons who hold posts or hold liens on posts to be encadred in the service are considered for appointment at the time of initial constitution. The same general principle may be adopted in the case of the proposed Indian Agricultural Service. As there will be no Central cadre, officers (numbering about 150) at present holding the posts under the Central Government which will be manned by deputation from the cadre of the States and the cadre of the Union Territories, may also be considered for appointment at the time of initial constitution. Those selected may then be appointed to the Service and assigned for the purpose of 'parent cadre' to the various States/Union Territories. These officers would also be subject to the system of rotation because the Centre and the States like all other members of the State cadres.

All officers holding junior posts for more than six years may also be considered for appointment to the junior scale of the Service at the time of initial constitution. The selected officers will be appointed to their own State cadres, but if States are willing, some of the junior officers say, those upto the age of 30-32, may be allotted to States other than their own. In any case, it would be administratively desirable to ensure that while the criterion of selection is not lowered, the initial constitution does not lead to any large-scale disturbance in the existing position. It may, therefore be necessary to provide for the continuance of the officers even though not selected for the All-India Service, in posts included in the Service. This can be done by temporarily excluding these posts from the cadre concerned.

The selection for initial constitution, may be made by a Special Selection Board presided over by a representative of the U.P.S.C. and composed of two members, each to be nominated by the Central Government and the State Government concerned respectively.

Seniority

8. The seniority of members of the Service in each cadre shall be regulated by such rules as may be framed for the purpose.

9. The pattern of control over the proposed Service and other conditions of service may be broadly modelled on those of the existing All India Services (*viz.* IAS/IPS) according to the rules that may be framed for the purpose from time to time.

ORGANISATION FOR AGRICULTURAL DEVELOPMENT IN THE STATES

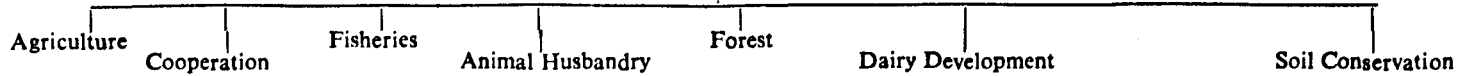
- A.- The general pattern in a few States.
- B. The number of staff of different categories working at different levels in a few States.
- C. Outlay and Expenditure on Programmes and Administration in Agriculture and allied departments in a few States.
- D. A note on the Agricultural Administration in Madras—Organisation and its functions.

The general pattern in a few states
KERALA

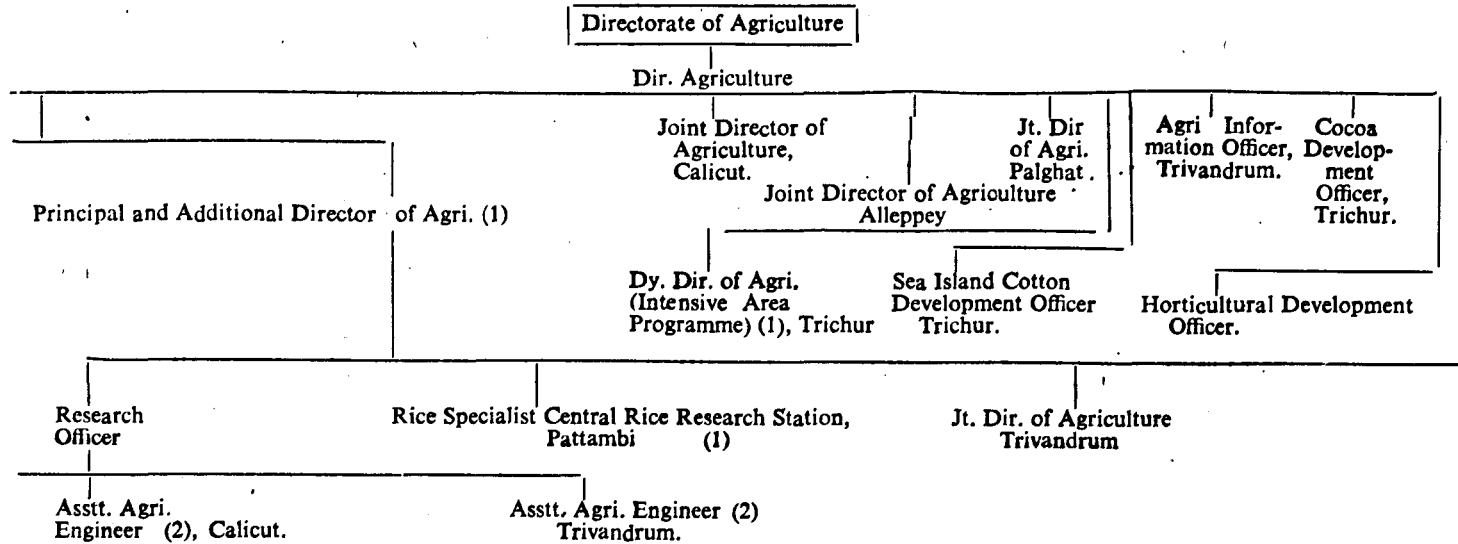
ANNEXURE VII(A)

State Level
(Sectt Level)

Commissioner for Agriculture & Rural Development



Department of Agriculture
(Head Office & Subordinate Offices)



457

MAHARASHTRA

State level

Dir(Agriculture)

Jt. Dir.
Agriculture
(I)

Jt. Dir.
Agriculture
(II)

Jt. Dir.
Agriculture
(III)

Jt. Dir.
Agriculture
(Extension)

Jt. Dir. Agriculture
(Horticulture-Vegetable and
Tuber Crops)

District Level

Zila Parishads

Agriculture
Development
Officer

Campaign
Officer

District
Agricultural
Officer

Block Level

Extension
Officer (Agr.)

V. L. Ws. Agril. Asstt.

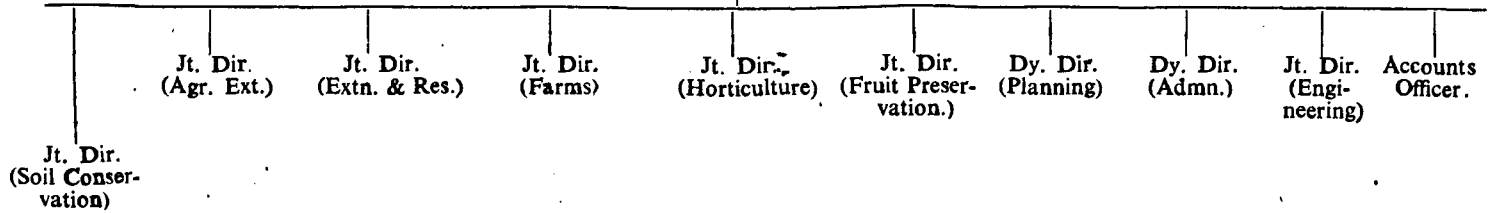
Cultivators.

ORISSA
DEPARTMENT OF AGRICULTURE
(DIRECTORATE OF AGRICULTURE)

State Level

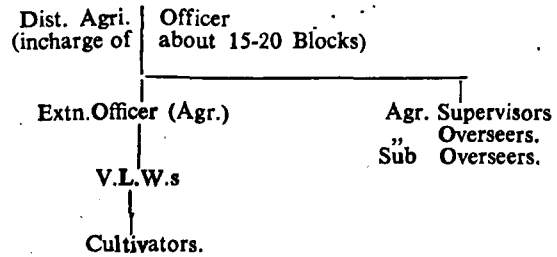
Dir (Agrl)

Additional Dir. Agr. (Tech.)



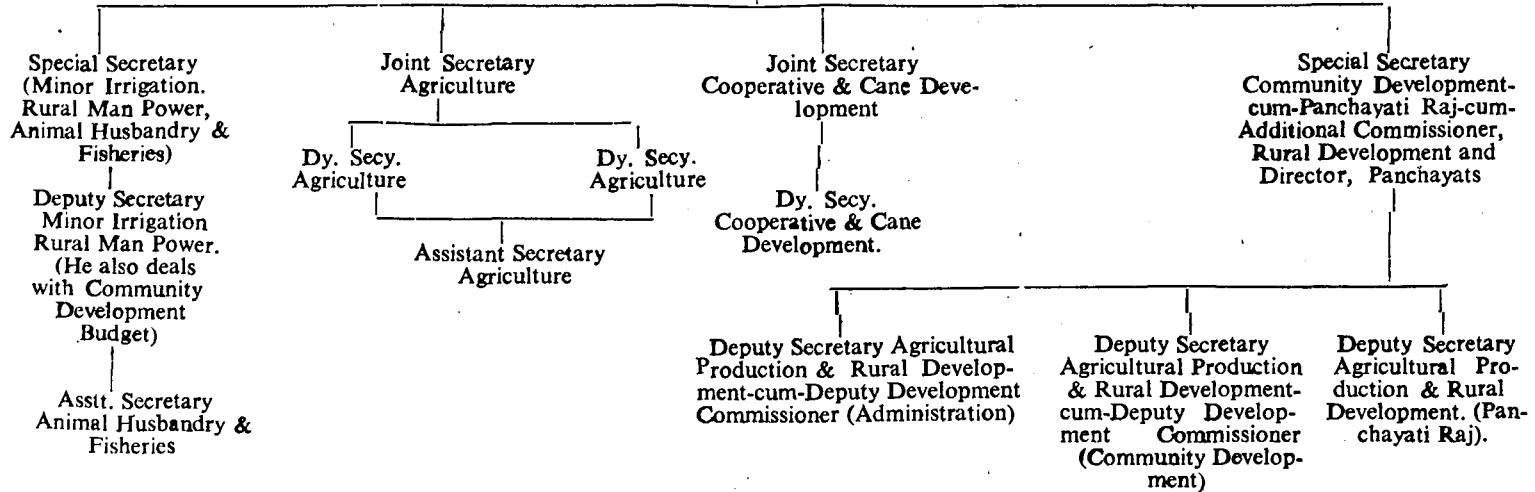
District Level

Block Level



UTTAR PRADESH

Commissioner & Secretary, Agricultural Production & Rural Development, U.P.



State Level

UTTAR PRADESH

(Directorate of Agriculture)

Director (Agrl.)

Addl. Director (Agrl.)

Joint Directors (6)

Regional Dy./Asstt. Dir. (Agrl.)

Agrl. Officer
(Seed Farms)

Asstt. Agr. (Engineer)

Plant Protection Officer

District Planning Officer

District Agriculture Officer (Belongs to Zila Parishad)

B. D. O.

Extension Officer (Agr.)

V. L. W.

Dist. Agr. Officer

Specialist

District Level

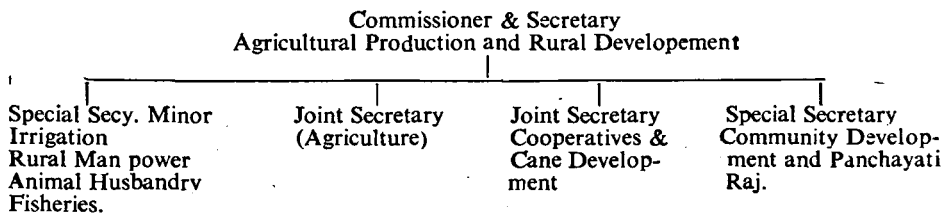
Block Level

UTTAR PRADESH

The sub-committee of the Cabinet ensures coordination and quick decisions and expeditious implementation of agricultural production programme. The sub-committee is headed by the Chief Minister with Ministers for Finance, Revenue, Irrigation, Agriculture, Cooperation and Community Development as Members.

The Department of Agricultural Production and Rural Development has been placed under the charge of a Senior Administrative Officer. The following Departments have been placed under him and he is the Secretary of all these Departments.

- (i) Agriculture
- (ii) Cooperative
- (iii) Cane Development
- (iv) Animal Husbandry
- (v) Panchayati Raj
- (vi) Community Development
- (vii) Minor Irrigation
- (viii) Tube wells
- (ix) Fisheries.



The Agricultural Department deals with activities relating to Development, Education, and Research.

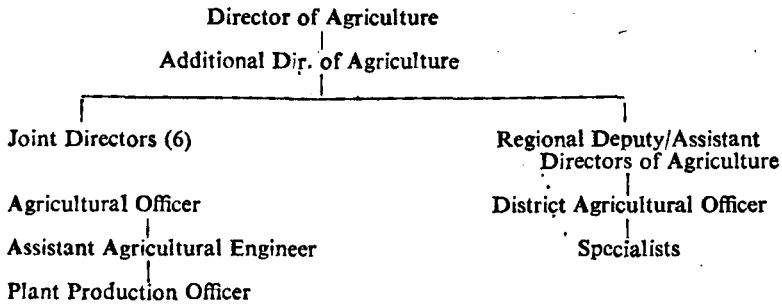
Education

There are 27 agricultural colleges in the State and 9 Agricultural diploma schools. The Uttar Pradesh Agricultural University, Pant Nagar is an autonomous body. The syllabi for agricultural colleges are prescribed by the Universities concerned. For undertaking extension work, Blocks are attached to Government agricultural colleges.

Research

There are 16 Research sections of the Agriculture Departments in the State. Most of these have sub-research stations under them.

Development



There is an Agricultural Engineer who is responsible for:

- (i) Guidance and supervision of the work of designing and testing of improved agricultural implements.
- (ii) Extension of improved agricultural implements.
- (iii) Production of agricultural implements.

Region

The State has been divided into 10 regions co-terminus with Revenue-Divisions. Regional Officers are mainly responsible for preparation and execution of agricultural production plans for each district in the region, distribution, purchase and exchange of quality seeds and green manure seeds, providing technical guidance to the field staff and liaison with Research Officers.

District

The District Agricultural Officer is assisted by one or more additional agricultural officers.

The District Agricultural Officer has been declared as an officer of the Zila Parishad and works under the immediate control of the District Planning Officer.

Block

At the Block level, the Block Development Officer is primarily responsible for agricultural production programmes. He is assisted by Assistant Development Officer (Agriculture).

Village

The Village level worker is primarily responsible for agricultural production work.

Cooperative Department

Secretary, Agricultural Production and Rural Development is also Secretary of the Cooperative Department. He is assisted by other officers.

Regional officers in eight Divisions are of the rank of Deputy Registrars and in other two regions of the rank of Assistant Registrars.

At the District level the Assistant Registrar is assisted by Additional Assistant Registrars.

At the Block level, the Assistant Development Officer (Cooperatives) is under the immediate control of the Block Development Officer.

Animal Husbandry

The Secretary, Agricultural Production-cum-Rural Development Department is also Secretary of the Animal Husbandry Department.

The Director of Animal Husbandry is assisted by Additional Director.

Region

Each region is under the charge of a Deputy Director.

District

The District is under the charge of District livestock Officer.

Block

One of the Veterinary Officer is in charge of the Programme.

Fisheries

The Secretary, Agricultural Production and Rural Development is Secretary of the Department.

The Director of Fisheries is assisted by two Deputy Directors—Extension and Research.

The programme is in operation in 46 districts grouped into 7 regional circles each under the charge of an Assistant Director.

At the District level there are senior and junior Fisheries Inspectors and Wardens, who work under the control of District Livestock Officer.

Minor Irrigation

A Superintending Engineer is the head of Department dealing with minor irrigation schemes as distinguished from major and medium irrigation schemes under the Irrigation Department. He works under the Secretary, Agricultural Production and Rural Development.

At the regional level an Executive Engineer (Minor Irrigation) is under the control of Joint/Deputy Development Commissioner.

At the District level, the District Planning Officer is responsible for execution of minor irrigation programmes.

At the Block, there is an Assistant Development Officer (Minor Irrigation).

Panchayati Raj Department

At the field level, there is a Director Panchayats who is also Special Secretary, Rural Development and Panchayati Raj.

There is no organisation under the Director of Panchayats at the regional level. However, at the District level there is an Assistant District Panchayat Raj Officer. At the Block there is an Assistant Development Officer for work of Panchayats and Social Education.

There is a Panchayat Secretary for each Nyaya Panchayat Circle i.e., for about eight to ten Gaon Panchayats.

Community Development

Secretary, Agricultural Production and Rural Development is also secretary of Community Development Department.

At the regional level, there is a Joint or Deputy Development Commissioner for each of the ten regions.

At the District level there is a District Planning Officer.

At the Block level, the Block Development Officer is under the Kshetra Samithi.

Role of Panchayat Raj Institutions in the field of agricultural production

At the village level the Gaon Panchayat, at the Block level the Kshetra Samithi and at the District level the Zila Parishad are associated

with agricultural production programmes. Each Gaon Panchayat is responsible for the formulation of the village plan. There is a Kshetra Samiti for each Block and a Zila Parishad for each District. They are responsible for ensuring the execution of the Block and Panchayat Development Plans.

Coordination

1. A Sub-Committee of the Cabinet has been appointed for agricultural production under the chairmanship of the Chief Minister.

2. At the secretariat level, one officer has been made secretary of the nine departments which are mainly concerned with agricultural production.

3. Each Division has a senior Administrative Officer as its Commissioner who is responsible for coordinated implementation of agricultural production programmes. They are assisted by Joint/Deputy Development Commissioners who work as the leader of the team of regional officers of all departments.

4. At the District level, coordination is done by the District Planning Officer who works under the immediate control of the collector as well as the Adyaksha, Zila Parishad. The District Planning Officer is assisted by

- (i) District Agricultural Officer.
- (ii) Assistant Registrar, Cooperative Societies.
- (iii) District Livestock Officer.
- (iv) Assistant Engineer.
- (v) District Organiser, Prantiya Raksha Dal.
- (vi) Assistant District Panchayat Raj-Officers.
- (vii) District Harijan and Social Welfare Officer.

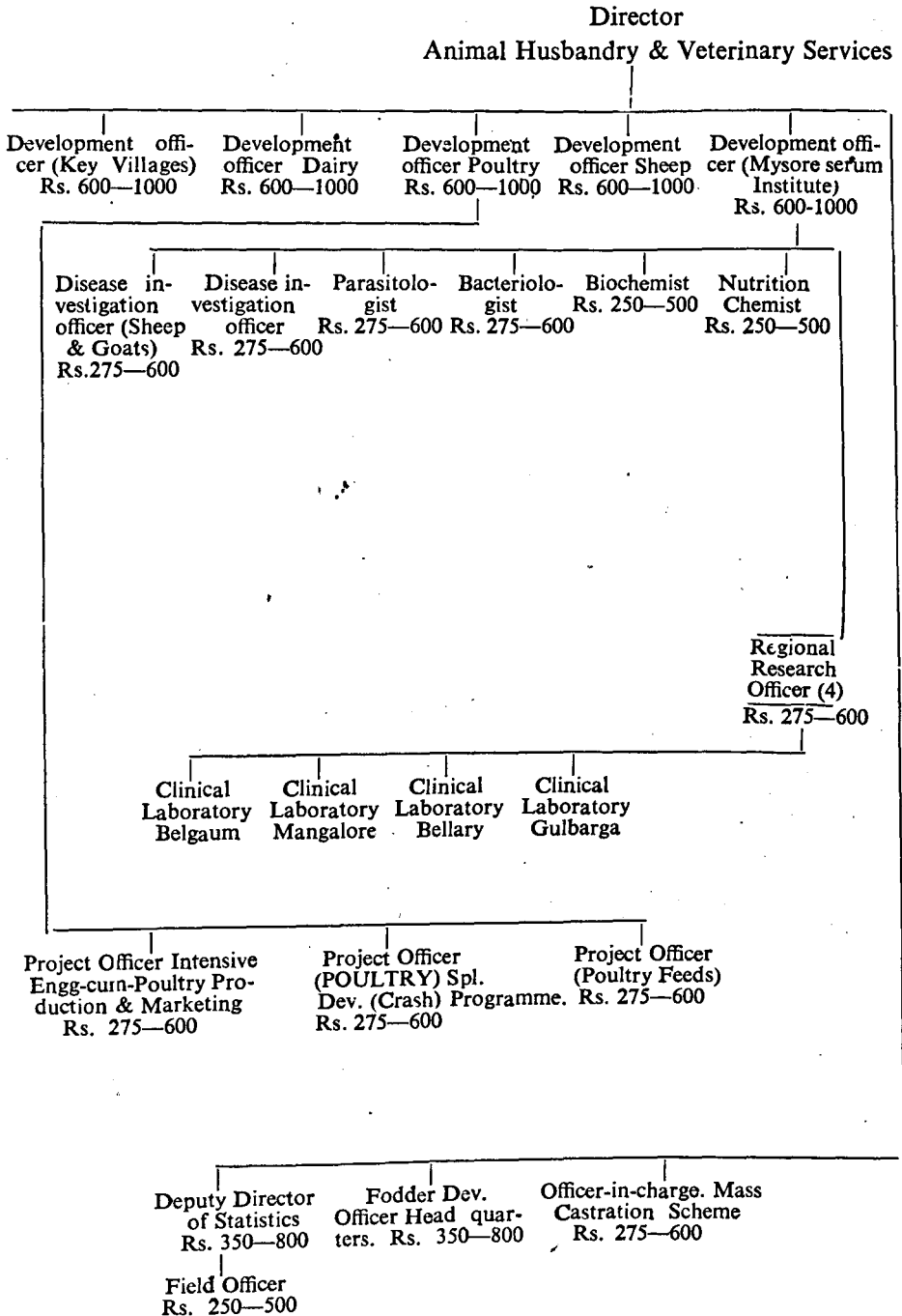
5. At the Block level, the Block Development Officer is the coordinating officer.

6. At the village level, the Village Level Worker devotes all his time to agricultural production work.

7. Besides there are coordination committees at all levels which are required to meet frequently.

**ORGANISATIONAL CHART OF THE DEPARTMENT OF ANIMAL
HUSBANDRY & VETERINARY SERVICES**

MYSORE STATE



Project Officer, Special develop- ment (Crash) Programme Rs.600-1000	Regional Deputy Directors Rs. 600-1000	Headquarters Assistant Rs. 350-800	Financial Assistant Rs. 350-800	Technical Assistant Rs. 275-600			
<u>Bangalore</u> <u>Division</u>	<u>Mysore</u> <u>Division</u>	<u>Belgaum</u> <u>Division</u>	<u>Gulbarga</u> <u>Division</u>				
District Officers (5) Bangalore Kolar Tumkur Chitradurga Shimoga Superintendent, Sheep Scheme Kolar Superintendent Milk Scheme, Bhadravathi Superintendent, Hesserghatta Farm Superintendent, Stud Farm, Kunigal Poultry Dev. Officer Hesserghatta Superintendent, Civil Stn. V.H. Bangalore Instructor in AH, G.T.C. Mandya.	District Officers (6) Mysore Mandya Hassan Chickmagalur South Kanara Coorg Superintendent, Milk Scheme Mangalore, Mysore, Kudige Superintendent, Sheep Scheme, Nagamangala Superintendent, Sheep Farm, Dhangur Superintendent Cattle Breeding Stn. Ajjampur Superintendent, Govt. Dairy Farm, Kudige, Superintendent, Distt. Livestock Farm, Koila. Superintendent, Cross Breeding, Mercara Instructor in AH, GCT, Kudige, Dairy Extension Officer, Mangalore.	District Officers (4) Belgaum Dharwar Karwar Bijapur Superintendent, Milk Scheme, Dharwar Belgaum Dairy Extension Officer, Dharwar Principal, Trg. Centre for Stock- Men, Guttal Superintendent, Sheep Scheme, Bijapur Ranebennur Instructor in AH, G.T.C. Bagalkot Lecturer, Trg., Centre for Stockmen, Guttal.	District Officers (4) Gulbarga Raichur Bidar Bellary Superintendent, Sheep Scheme, Gulbarga, Hospet, Superintendent, Milk Scheme, Gulbarga, Superintendent, Munirabad Farm, Instructor in AH, G.C.T. Gangavathi				
Cattle Dev. Officer Rs. 275- 600	Fodder Dev. Officer Rs. 275- 600	Dairy Extension Officer Rs. 275- 600	Propaga- ndist-cum Exhibi- tion Officer Rs. 275- 600	Officer in-charge Centralised Semen Collection Centre Rs. 275- 600	Asstt. Regis- trar of Co- op. Soci- ety Rs. 275-600	Statist- ical Officer Rs. 275-600	Officer- in-charge, Inser- vice Training in A.I. Technique Rs. 275-600

ANNEXURE VII (B)

STATEMENT SHOWING THE STAFFING POSITION UNDER AGRICULTURE & ALLIED DEPARTMENTS
STATE-WISE

S. No.	State	No. of Dis-tricts	No. of Towns	No. of Blocks	Departments	Level	Categories of Staff			Remarks
							Class I	Class II	Class III	
1	2	3	4	5	6	7	8	9	10	11
1.	Andhra Pradesh	20	223	445	Agriculture					Details attached.
					Cooperation	Headquarters	13	28	217	
						Regional	4	8	132	
						District	..	77	2,729	
						Special Posts	4	47	..	
					Panchayati Raj	State	13	341	..	
					Minor Irrigation	Directorate	3	..	23	
						Regional	38	..	..
						District	..	237	..	
						Field	..	..	3,954	Including 954 Asstt. Engineers and 300 Junior Engineers.
					Animal Husbandry	Directorate	1	4	2	
						Regional	..	..	10	
					Fisheries		1	5	31	Director .. 1 Dy. Directors .. 2 Principal .. 1 Asstt. Directors .. 15 Asstt. Director River Survey .. 1 Asstt. Director Lakes Reservoir 1 Asstt. Director Technology 1 Asstt. Director Research .. 1

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
2.	Bihar	.	17	153	575	Cooperation & Sugarcane.		35	128	51
					Animal Husbandry	State		5	21	1
						Regional		9	18	8
						District		..	51	34
						Field		..	101	11,437
						Special		8	41	225
						Education		34	96	84
					Fisheries	State		2	4	30
						Regional		..	2	6
						District		..	17	73
						Sub-Divisional		..	10	184
						Block		..	..	194
					Irrigation			61	156	

(Besides, Director of Fisheries is in Super-Class I)

3. Gujarat	17	181	224 .	Agriculture	State	70	273	200
				Regional	..	..	4,302	
				Cooperation	State	7	8	137
					Regional	..	3	60
					District	18	46	1,222
					Special Schemes	1	1	12
				Community Deve- lopment.	State	..	..	..
					Regional	..	..	..
					District	17	207	7,324
				Animal Husbandry	State	10	29	271
					Regional	5	5	175
					District	4	25	222
					Field	..	4	114
				Fisheries	State	5	10	65
					Regional	2	2	89
					District	3	10	198

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
4.	Haryana	..	..	..	Agriculture (as on 1-11-66)		12	43	1,208	
					Forests		7	10	346	
					Cooperation		11	22	959	
					Community Development		..	4	1,140	
					Animal Husbandry		12	27	949	
					Irrigation		108	348	3,328	
5.	Jammu & Kashmir	9	43	52	Agriculture		7	11	33	
					Cooperation		6	9	41	
					Community Development		3	9	33	
					Animal Husbandry		10	14	6	
					Fisheries		1	..	..
					Irrigation		1	..	7	

6. Kerala	9	92	142	Agriculture & Soil Conservation.	State	4	80	235	Details attached.	
					Regional	..	20	93		
					District	..	36	118		
					Field	..	174	2,372		
					Special Schemes	..	68	170		
					Cooperation	State	2	..		..
						Regional	..	10		10
						District	..	80		484
						Field	..	..		486
					Animal Husbandry	Directorate	3	12		62
						Veterinary College	1	63		47
						District & Field	..	169		672
						Special Schemes	..	67		297
					Fisheries	State	1	7		51
Regional	..	6	34							
District	..	9	49							
Field	..	7	250							
7. Madhya Pradesh	43	219	416	Agriculture	89	250	13,783	(Executives .. 2,145)		
				Cooperation	22	71	..	(Ministerial .. 2,723)		
				Animal Husbandry	27	118	3,913			
				Fisheries	6	32	433			

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
8.	Maharashtra	26	265	425	Agriculture	Directorate	34	39	135	Agriculture Deptt.
						Regional	24	74	79	64
						District	29	117	37	37
						Field	40	285	3,247	7,351
										(In addition there are 84 Class I (MAS) Officers, 416 (MAS) Class II Officers at Regional level and 22 (MAS) Class II Officers at the Distt. level in the Teaching and Research Section of the Department).
					Community Development.		25	370	9,910	
					Animal Husbandry	Regional	48	160	1,820	Super-time
					Fisheries	Department	15	32	522	
						Regional	1	..	2	
						District	2	15	87	
						Field	..	..	112	
						Special Schemes	..	2	15	
					Rural Manpower	Divisional	..	..	4	
						District	..	1	25	
						Block	..	..	115	

9. Mysore	19	230	263	Agriculture		124	180	4,283	There is no separate Irrigation Deptt. in Mysore State. It is a part of PWD. Hence number of officers in the PWD has been furnished.		
				Cooperation		26	109	2,061			
				Community Development.		32	233	7,950			
				Animal Husbandry		14	73	2,321			
				Fisheries		6	21	862			
Irrigation*		197	765	4,561							
<hr/>											
10. Orissa	13	62	307	Agriculture	Headquarters	14	12	283			
					Regional	6	15	146			
					District	9	76	1,655			
					Other Schemes	11	77	3,503			
				Community Development.	Secretariat	9	13	222			
					Regional	..	..	..
					District	13	6	214			
					Field Blocks	3	660	107			
				Gram Panchayat	..	..	..	11,428
					Sectt.	3	3	88			
					Regional	3	..	3			
					District	..	14	276			
				Field	..	..	..	502
										Break-up	
					Fisheries	Department	2	8		73	} Dir. of Fisheries =1 Jt. Dir. Fisheries =1 Dy. Dir. Fisheries =3 Asstt. Dir. Fisheries =12 Supdt. Fisheries =23
						Regional	3	..		123	
				District		..	20	89			
Field	..	13	344								
Irrigation		84	256	2,371	Officers =1109 Ministerial =1262						

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
11.	Punjab (undivided)	19	187	228	Animal Husbandry		9	25	1,151	
					Cooperative Societies		1	3	..	
12.	Uttar Pradesh	54	275	890	Agriculture	Regional	21	73	..	Particulars of staffing pattern in respect of Agriculture, Cooperation, Animal Husbandry & Fisheries Departments attached.
						District	11	170	..	
					Animal Husbandry	Headquarters	6	10	7	
						Regional	15	..	..
						District	4	80	75	
					Fisheries	Headquarters	4	4	2	
						District	..	1	20	
					Fruit Utilization	Headquarters	2	5	..	
						Regional	6	17	..	
						District	..	7	..	
						Field	..	3	..	

13	West Bengal	16	184	341	Agriculture & Community Development	Department	10	1	93	
						District	..	..	50	
						Field	..	335	5,809	
						Special Schemes	3	1	216	
					Directorate of Agriculture (Engineering)	Regional	2	1	45	
						District	13	48	161	
						Field	..	..	2,023	
					Marketing	Headquarters	..	..	..	101 Details Attached
						Regional	..	..	..	18
						District	..	..	..	179
						Field	..	..	..	104
					Cooperation	Department	8	..	59	
						Directorate	64	9	24	
						Zone	3	3	..	
						District	21	42	..	
						Field	..	..	1,089	
					Animal Husbandry & Veterinary.	Secretariat	6	..	39	
						Headquarters	79	84	1,208	
						Regional	18	..	110	
						District	17	48	744	
						Field	..	8	2,219	
					Fisheries		7	64	474	
					Irrigation & Waterways.		63	195	Not readily available.	

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
14.	Delhi	1	3	5	Agriculture		1	13	208	
					Forest & Soil Conservation.		..	1	10	
					Community Development.		..	5	99	
					Minor Irrigation		..	1	26	
					Animal Husbandry including Poultry		2	3	114	
					Fisheries		..	1	11	
15.	Himachal Pradesh	6	13	38	Agriculture		33	81	1,149	
					Cooperation		1	18	624	
					Animal Husbandry	Directorate	3	5	28	
						Regional	1	3	16	
						District	..	9	37	
						Field	..	..	570	
						Special Schemes	1	17	187	
					Fisheries		1	3	41	
					Irrigation		1	4	43	

16.	Manipur	•	•	1	1	14	Agriculture	1	16	165
							Cooperation	1	6	92
							Community Development.	2	4	25
							Animal Husbandry	..	3	214
							Fisheries	..	4	13
							Irrigation	1	3	72
<hr/>										
17.	Pondicherry	•	•	1	5	3	Agriculture	..	6	77
							Cooperation	..	1	45
							Community Development.	..	2	78
<hr/>										
18.	Tripura	•	•	1	6	15	Agriculture	1	18	665
							Cooperation	1	12	176
							Community Development.	1	21	92
							Animal Husbandry	1	5	232
							Fisheries	..	1	29
							Irrigation	1	4	36

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11
19.	Madras	• •	13	338	375	Agriculture		..	..	.. Detailed staffing pattern attached.
20.	Rajasthan	• •	26	145	232	Agriculture		..	..	.. Detailed staffing pattern attached.

**STAFFING PATTERN OF AGRICULTURAL DEPARTMENT IN
ANDHRA PRADESH**

S. No.	Name of the Post	At Directorate Level	At Regional Level	At District Level	At Field Level
1	Director of Agriculture	1	..	..	..
2	Joint Director	3	1	..	..
3	Headquarters of Dy. Director of Agriculture	3	..	..	..
4	Dy. Director of Agriculture	7	16	..	..
5	Specialists . . . . .	..	2	..	..
6	Agricultural Engineer	1	3	..	..
7	Divisional Soil Conservation Officer	1	7	..	..
8	District Agricultural Officer	6	..	122	..
9	Asstt. Statistician	2	..	2	..
10	Asstt. Agricultural Engineer	2	..	22	..
11	Asstt. Soil Conservation Officer . . . . .	..	..	22	..
12	Asstt. Agricultural Chemist . . . . .	..	..	21	..
13	Asstt. Fruit Specialist . . . . .	..	..	3	..
14	Supdt. Sugarcane Liaison Farm . . . . .	..	..	7	..
15	Superintendent, Agricultural Research Station, Samalkot . . . . .	..	..	1	..
16	Fertilizer Movement Officer	1	..	..	..
17	Personal Assistant	1	..	..	..
18	Administrative Officer	1	..	..	..
19	Accounts Officer	5	..	..	..
20	Assistant Accounts Officer	1	..	..	..
21	Agricultural Assistants	13	..	..	1,180
22	Soil Conservation Assistant	1	..	..	104
23	Agricultural Engineering Supervisors	3	..	..	73
24	Statistical Assistants	6	..	..	..
25	Superintendents	46	..	59	..
26	U.D.C.s	173	..	..	286
27	L.D.Cs.	84	..	1415	..
28	Typists	42	..	292	..

STAFFING PATTERN OF THE AGRICULTURE DEPARTMENT IN MADRAS

Service	Designation	No. of Posts
I.A.S.	Director of Agriculture	1
	Joint Director of Agriculture, (Planning & Administration) (Now held by a non-IAS Deputy Secretary)	1
Madras Agricultural Service	Joint Director of Agriculture	10
	Deputy Directors of Agriculture	16
	Research Officers	33
	Professors and Readers	18
	Agricultural Engineers	11
	District Agricultural Officers	102
	Assistant Research Officers & Lecturers	174
Madras General Service	Assistant Agricultural Engineers	67
	Administrative Officers	3
M.T. & A.	Personal Assistant and Registrar	2
	Accounts Officers	1
Madras Agricultural Sub-ordinate Service.	Upper Subordinate Agricultural Section	1,184
	Upper Subordinate Research Section	404
	Soil Conservation Assistants	257
Madras Agricultural Engineering Subordinate Service.	Agricultural Engineering Supervisors	194
	Agricultural Engineering Foremen	24
	Draughtsman	33
Madras Agrl. Engineering Subordinate Service.	Other categories such as Drivers, Cleaners, Fitters, etc.	987
Madras General Subordinate Service.	Demonstration Maistries	1,248
	Other Categories such as Laboratory Attenders, silk screen attenders, etc.	132
Madras Agrl.	Fieldmen	755
	Compost Development Inspectors	376
Madras Ministerial Service	Manager	1
	Superintendents	211
	Assistants	410
	Lower Division Clerks	909
Madras Last Grade Service	Typists	225
	Peons	666
	Field Assistants	343
	Workshop Artisans etc.	91

RAJASTHAN

S. No.	Categories/Classes	Pay-Scales	Numbers (Nos)			
			Nucleus	II Plan	III Plan	Total
I. Extension						
1.	Director of Agriculture	1,650—2,000	1	..	..	1
2.	Jt. Director of Agriculture	1,300—1,600	..	2	3	5
3.	Dy. Director of Agriculture	550—1,100	4	2	10	16
4.	Asstt. Director of Agr./Distt. Agr. Officers etc.	360—900	20	4	10	34
5.	Asstt. Plant Protection Officers/ Distt. Soil Conservation Officers, etc.	285—800	1	15	52	68
6.	A.E.Os./Agr. Asstts etc.	155—485	41	290	371	702
II. Research						
1.	Economic Botanist/Agr. Chemists, etc.	550—1,100	2	4	7	13
2.	Asstt. Botanist-Asstt. Chemist, etc.	285—800	..	18	49	67
3.	Research Assistant	225—485	5	55	58	118
III. Statistics						
1.	Deputy Director	550—1,100	1	..	..	1
2.	Asstt. Director	360—900	..	..	1	1
3.	Statisticians	225—640	..	1	3	4
4.	Research Asstt./Statistical Assistant etc.	170—385	..	4	11	15

**STAFF PATTERN OF AGRICULTURAL DEPARTMENT IN KERALA
DURING 1966-67**

S. No.	Designation of Post	No. of Posts	Scale of Pay
1	2	3	4
1	Director	1	1,000—1,300
2	Additional Director	1	800—1,100
3	Principal and Addl. Director of Agriculture (Research) Agrl. College, Vellayani	1	800—1,100
4	Professors of Agrl. College, Vellayani	8	700—1,000
5	Additional Professor, Vellayani	1	700—1,000
6	Rice Specialist	1	700—1,000
7	Joint Director of Agriculture	4	700—1,000
8	Research Engineer	1	700—1,000
9	Financial Assistant	1	550—800
10	Administrative Officer	1	375—800
11	Deputy Director of Agriculture	11	600—900
12	Plant Protection Officer	1	600—900
13	Assistant Soil Specialist	1	600—900
14	Junior Professor of Agrl. College, Vellayani	14	600—900
15	Sea Island Cotton Development Officer	1	600—900
16	Assistant Agrl. Engineers	3	350—700
17	Assistant Soil Chemist	1	350—700
18	Deputy Registrar of Cooperative Societies	2	350—700
19	Assistant Agricultural Engineers	2	350—700
20	Technical Assistant	1	350—700
21	Assistant Directors of Agriculture	12	350—700
22	Accounts Officer	1	350—650
23	District Agricultural Officers	9	350—700
24	Additional Distt. Agricultural Officers	9	350—700
25	Agricultural Information Officer	1	350—700
26	Editor for Magazine	1	250—450
27	Assistant Director of Statistics	2	350—700
28	Subject Matter Specialist	4	350—700
29	Agronomist	2	350—700

1	2	3	4
30	Specialists in Soil Science	2	350—700
31	Seed Development Officer	1	350—700
32	District Information Officers	2	350—700
33	Addl. Dist. Information Officer-cum-Radio Specialist	2	350—700
34	Research Officer	1	350—700
35	Fertilizer Demonstration Officer	1	350—700
36	Pepper Research Officer	2	350—700
37	Botanist	1	350—700
38	Banana Research Officer	1	350—700
39	Lemongrass Research Officer	1	350—700
40	Research Officer (Acid Soils)	1	350—700
41	Research Officer (Foliar Nutrition)	1	350—700
42	Research Officer	3	350—700
43	Research Officer (Saline Soils)	1	350—700
44	Research Officer (Survey of Microflora)	1	350—700
45	Research Officer (Pulses)	1	350—700
46	Research Officer (Bunchy top disease)	2	350—700
47	Tobacco Research Officer	1	350—700
48	Asstt. Research Engineer	1	350—700
49	Research Officer (Nematology)	1	350—700
50	Assistant Rice Research Officers	9	350—700
51	Research Officer (Taxicology)	1	350—700
52	Research Officer (Parasitology)	1	350—700
53	Research Officer (Insect Biology)	1	350—700
54	Research Officer (Radio active traces Laboratory)	1	350—700
55	Research Officer (Bio-chemistry)	1	350—700
56	Research Officer (Thermo-nutrient Laboratory)	1	350—750
57	Pepper Research Officer	1	350—750
58	Research Officer (Chemistry)	1	350—700
59	Research Officer (Agronomy)	1	350—700
60	Research Officer (Chicory)	1	350—700
61	Senior Lecturers	25	350—700
62	Assistant Virologist	1	350—700

1	2	3	4
63	Lecturer Physical Education	1	300—600
64	Agri. Marketing Officer	1	350—700
65	Horticulture Development Officer	1	350—700
66	Cocoa Development Officer	1	350—700
67	Cardamom Development Officer	1	350—700
68	Superintendent (Farms/Research Station/Farm Managers)	19	350—700
69	Assistant Rice Specialist	1	350—700
70	Senior Superintendents	4	250—500
71	Examiner of Loans	1	250—500
72	Statistical Officer	1	300—600
73	Special Tehsildar (Rubber Plantation)	2	250—500
74	Asst. Registrar of Cooperative Societies	3	250—500
75	Research Assistants	3	250—500
76	Chief Accountant	1	250—500
77	Assistant Entomologist	1	250—500
78	Junior Superintendents	20	190—300
79	Technical Assistants/Agri. Assistants/Asst. Information Officer/Campaign Officer	} 501	200—400
80	Research Assistant/Plant Protection Asstt.		
81	Seed Development Assistant/Demonstrator/Pepper Assistant/Horticulture Development.		
82	Assistant/Plant Pathology Assistant/Mycology Assistant		
83	Statistical Inspectors	4	190—300
84	Senior Cooperative Inspectors	2	190—300
85	Cooperative Extension Officer	32	190—300
86	Research Assistant (Engineering)	1	200—400
87	Sociologist	1	200—400
88	Economist	1	200—400
89	Statistician	1	200—400
90	Compiler	1	200—400
91	Asst. Agri. Engineer	1	200—400
92	Junior Engineer	1	225—425
93	Junior Lecturers	17	200—400
94	Instructor in Nutrition	1	200—400

1	2	3	4
95	Agri. Engineering Supervisors	3	200—400
96	Special Deputy Surveyors.	2	190—300
97	Nursery Assistants	2	200—400
98	Faircopy Superintendent	1	160—270
99	Headclerks	7	160—270
100	Photo Artist	1	160—270
101	Librarian	1	160—270
102	Field Assistant	1	160—270
103	Soil Conservation Assistant	3	200—400
104	Photographer	1	160—250
105	Stenographer	1	150—350
106	Extension Officers for Cooperation	9	130—250
107	Coopertative Inspectors		130—250
108	Assistant Grade I	1	130—250
109	U.D. Clerks/U.D. Accounts	148	120—230
110	U.D. Typists	20	120—230
111	U.D. Compilers	9	120—230
112	Agricultural Chemist	1	120—230
113	Technical Assistant/Supervisors/Senior Demonstrators/Assistant Editor, Supervisory Assistant	70	120—230
114	Driver-cum-Operator	1	120—230
115	Observer/Meteorological Observer	2	120—230
116	Motor Mechanic/Mechanic	7	120—230
117	Junior Scientific Assistant	11	120—230
118	Offset Press Operator	2	120—230
119	Laboratory Attendants/Laboratory Assistant	3	120—230
120	Draftsman	2	120—230
121	Graduate Laboratory Assistant	1	120—230
122	Tractor Foreman	1	120—230
123	Assistant Chemist	2	120—230
124	Herbarium Keeper	1	120—230
125	Dairy Assistant	1	120—230
126	Bacteriology Assistant	1	120—230

1	2	3	4
127	Farm Mechanic	2	120—230
128	Engineering Overseer	1	120—230
129	Overseer	3	120—230
130	Compounder	1	90—190
131	Fieldmen/Supervisor/Agrl. Demonstrator/Village Level Workers	215	90—190
132	Nursery Assistant	10	90—190
133	Stenographers	13	90—250
134	Chargemen	2	90—190
135	Stockman Compounder	1	90—190
136	Poultry Assistant	1	90—190
137	Matron	1	90—190
138	Surveyors	3	90—190
139	Draftsmen	1	90—190
140	L.D. Clerks/L.D. Accountants/Storekeepers/Store Clerk .	278	80—160
141	L.D. Typists	92	80—160
142	Senior Mechanic	2	80—160
143	Assistant Tractor Foreman	1	80—160
144	L.D. Compilers	22	80—160
145	Artist	5	80—160
146	Compositor	3	80—160
147	Asst. Operator/Asstt. Offset Press Operator	3	80—160
148	Laboratory Assistant	20	80—160
149	Fieldmen/Agrl. Assistant/Village Level Worker/Supervisors	896	80—160
150	Mechanics	55	80—160
151	Oil Engine Driver	9	80—160
152	Senior Tractor Driver	1	80—160
153	Assistant Librarian	1	80—160
154	Technical Assistant/Field Assistant	5	80—160
155	Driver-cum-Operator	1	80—160
156	Farm Mechanic	1	80—160
157	Special Revenue Inspector	2	80—160
158	Works Superintendent	5	80—160
159	Clerk-typists	20	80—160

1	2	3	4
160	Jeep Drivers/Lorry Driver/Tractor Driver/Oil Engine Drivers	187	75—135
161	Pump Drivers		
162	Mechanic/Driver-cum-Mechanic	11	75—135
163	Binder	2	75—135
164	Ploughmen	4	75—135
165	Boat Sprang	1	75—135
166	Welders	3	75—135
167	Laboratory Attender	1	75—135
168	Matron	1	75—135
169	Blacksmith	2	75—135
170	Steward	1	75—135
171	Electrician	1	75—135
172	Technical Assistant/Fieldmen	5	75—135
173	Labourer	1	75—135
174	Borers	6	75—135
175	Stencil Operator	1	65—95
176	Laboratory Attenders/Laboratory Keepers	61	65—95
177	Gallery Pressman	1	65—95
178	Field conductors/Maistries/Demonstration Protection	438	65—95
179	Maistries	1	
180	Chowkidar	1	65—95
181	Pump Opetator	1	65—95
182	Workshop Attender	1	65—95
183	Binders	2	70—110
184	Fitters	19	70—110
185	Blacksmith	2	70—110
186	Carpenters	3	70—110
187	Attenders	3	70—110
188	Mechanic-cum-Machinist	1	70—110
189	Milk Recorder	1	70—110
190	Carpenter	1	70—110
191	Daffedar	1	65—80

1	2	3	4
192	Library Attenders	12	65—80
193	Attenders	6	65—80
194	Peons/Messengers	302	60—80
195	Cleaners	33	60—80
196	Milker	1	60—80
197	Watchmen/Watchmen-cum-gardener	19	60—80
198	Binder Helpers	2	60—80
199	Malis	11	60—80
200	Mazdoors	72	60—80
201	Hospital Servant/Servants	9	60—80
202	Beetle Picker	1	60—80
203	Budders	1	60—80
204	Labourers	1	60—80
205	Maistry	1	60—80
205	Scavenger	1	60—80
207	Specimen Collector	1	60—80
208	Fieldmen	2	60—80
209	Chairmen	4	60—80

UTTAR PRADESH

Staff pattern—Agriculture Department

S. No.	Name of the Post	Scale of Pay	No. of Posts
1	2	3	4
<i>(a) Gazetted</i>			
	Director of Agriculture	1,500—1,700	1
	Joint Director of Agriculture	750—1,400	5
	Principal, Govt. Agri. College	1,050—1,350	1
	Addl. Director of Agriculture	1,500—1,700	1
	U.P.A.S. Sr. Scale (Dy. Directors, etc.) Chief Accounts Officer	600—1,250	38
	U.P.A.S. Jr. Scale (Asstt. Directors, Accounts Officers, Distt. Agril. Officers, etc.)	300—900	260
	Accounts Officers, Lecturers at College	250—750	6
	Personal Assistant to Director of Agriculture, Accounts Officers	400—550	3
	Professors of Agricultural Colleges	700—1,200	18
<i>(b) Non-Gazetted</i>			
	S.A.S. Gr. I Artist, Foreman, Research Assistant	225—500	1
	Accounts Officer (Non-Gazetted)	200—450	632
	S.A.S. Gr. II Draftsman	160—280	1,780
	S.A.S. Gr. III, Mechanic Supervisors	120—220	2,784
	Overseers	175—300	6
	Tractor Mechanics, Head Clerks		
	Head Mistri, Asstt. Superintendent	150—260	61
	Artists, Photographers, Superintendent of Stores	180—380	13
	Head Assistant	350—450	2
	Head Clerks, Stenographers	160—320	47
	Accountant, Foreman, Mechanics, Statistical Assistant	200—400	159
	Senior Noter and Drafter	140—280	57
	Assistant Accountant . . . . .	..	..
	Stenographers, Computers Compiler	120—250	278
	Record Keepers, Accountant, Clerks, Cashier	120—220	706
	Clerks, Typists	120—180	2,934

1	2	3	4
Paid Apprentices	75 (fixed)	19	
Amins	100—160	3	
Peons, Orderlies Ploughman, Lab. Assistant, Lab. Attendants, Sweepers	55—75	5,635	
Chowkidars, Bakrunners Cleaners, etc.			
Driver	80—140	286	
Drivers Bee Organisers	75—115	119	
Daftri, Counters Kamdars	60—80	2,671	
Headchaudhri, Mistri, Mechanic.	65—90	189	
Noter and Drafter	150—360	2	
Head clerk- <i>cum</i> -Accountant	200—380	1	
Lecturers	150—250	13	
Lecturers	250—550	18	
Mechanics	120—320	16	

UTTAR PRADESH
Staffing Pattern--Co-operation Deptt.

Designation of Post	Old Scale	New Scale	No. of post in				Remarks
			50-51	51-52	60-61	65-66	
1	2	3	4	5	6	7	8
	Rs.	Rs.					
<i>Class I Officers—</i>							
Registrar	Senior I.A.S. Scale		1	1	1	1	
Additional Registrar	500—1,200 plus 100	750—1,400	2	1	2	3*	*(One in I.A.S. Scale)
Deputy Registrar	500—1,200	600—1,250	7	7	15	14*	*(One in I.A.S. Scale)
Agricultural Officer	500—1,200	Do.	..	..	1	1	
Education-cum-Publicity Officer	Do.	Do.	1	1	1	1	
Processing Adviser	Do.	Do.	..	..	..	1	
Senior Accounts Officer	Do.	Do.	..	..	..	1	
<i>Class II Officers—</i>							
Assistant Registrars	250—850	300—900	33	33	64	107	
Principals	Do.	Do.	..	..	9	6	
Publicity Officer	Do.	Do.	1	1	*1	*1	*(Abeyance)
Statistical Officer	Do.	Do.	..	..	1	1	
Public Relation Officer	Do.	Do.	..	..	..	1	

1	2	3	4	5	6	7	8
Assistant Engineer	250—850	300—900	..	..	2	2	
Pharmaceutical Expert	Do.	Do.	1	1	1	1	
Asstt. Agricultural Officer	Do.	Do.	..	..	1	1	
Accounts Officer	Do. plus 100	400—1,000	2	2	2	2	
Accounts Officer	250—850	300—900	..	..	1	1	
Accounts Officer	220—675	250—750	..	..	1	2	
Personal Assistant	350—500	400—550	..	..	1	1	
Liaison Officer	250—850	..	1	1	..	..
Inspector Grade I	200—350	200—450	57	58	118	112	
Lecturers	Do.	Do.	10	10	27	18	
Senior Farming Inspectors	Do.	Do.	..	..	..	45	
Senior Instructor (Farming)	Do.	Do.	..	..	1	1	
Publicity Assistant	Do.	200—400	1	1	1	1	
Field Asstt. (Publicity)	200—350	200—400	..	..	..	1	
Statisticians	Do.	Do.	1	1	64	64	
Executive Officer (Processing)	Do.	200—450	..	..	..	2	
Inspector Gr. II	120—250	160—280	263	263	817	748	
Artist (Publicity)	Do.	175—300	1	1	1	1	

Overseers	120—250	175—300	..	..	4	4
Entomologist	Do.	160—280	..	..	3	3
Junior Instructor (Farming)	Do.	Do.	..	..	1	1
Junior Statistician	Do.	Do.	..	..	2	2
Supervisors	75—120	100—180	10	20	127	125
V.L.W.	Do.	120—220	..	..	..	45
Lab. Asstt. (Drug)	Do.	100—180	1	1	1	1
Grading Assistant (Drug)	Do.	Do.	3	3	10	10
Statistical Assistant	Do.	Do.	..	..	106	106
Head Assistant	300—400	350—450	1	1	4	4

UTTAR PRADESH
Staff Pattern—Animal Husbandry

Sl. No.	Name of the Post	Scale of pay	No. of Posts
1	2	3	4
<i>(a) (i) Gazetted Class I</i>			
1	Director of Animal Husbandry, U.P.	1,500—50— 1,700	1
2	Addl. Director of Animal Husbandry, U.P.	1,500—50— 1,700	1
3	Dy. Directors of Animal Husbandry	600—1,250	9
4	Dy. Director i/c B.P. Section	600—1,250	1
5	Dy. Director (Hqrs)	600—1,250	1
6	General Manger, Regional Pig Breeding Station-cum-Bacon Factory, Central Dairy Farm	600—50— 1,250	1
7	Principal, Model Training-cum-Production Centre, BKT, Lucknow	600—1,250	1
8	Officer-in-charge Polworth Scheme, Pashulok	600—1,250	1
9	Dy. Director (Poultry)	600—1,250	1
10	Dy. Director, Rinderpest	600—1,250	1
11	Dy. Director (Small animal)	600—1,250	1
12	Project Officer, Intensive Cattle Development Scheme	600—1,250	3
<i>(ii) Class II</i>			
13	Distt. Livestock Officers	300—900	29
14	Bacteriologist	300—900	1
15	Seriologist	300—900	1
16	Gaushala Development Officer	300—900	1
17	Poultry Development Officer	300—900	1
18	Asstt. Director (Planning)	300—900	1
19	Farm Supdt. Pashulok	300—900	1
20	Farm Manager, Cattle Breeding-cum-Dairy Farm, Kalsi	300—900	1
21	Farm Manager, State Livestock Farm	300—900	1
22	Asstt. Rinderpest Officer (Vaccine)	300—900	1
23	Asstt. Disease Investigation Officer (Sheep and Goat)	300—900	1
24	Officer-in-Charge Cross Breeding Scheme	300—900	1
25	Asstt. Director-in-charge, Hill Development Scheme	300—900	1

1	2	3	4
26	Research Officer (Mastitis)	300—900	1
27	Officer-in-charge, Sheep Breeding Research Station Pipalkuti	300—900	1
28	Disease Control Officer (Poultry)	300—900	1
29	Accounts Officer (Hqrs)	400—1,000	1
30	Accounts Officer, at C.D.F.	400—1,000	1
31	Research Officer (Poultry) Ration	300—900	1
32	Cattle Utilisation Officer at B.K.T. Lucknow	300—900	1
33	Officer-in-charge, Bacon Factory, Central Dairy Farm	300—900	1
34	Dead Cattle Utilisation Officer	300—900	1
35	Fodder Development Officer	300—900	..
36	Officer-in-charge, Pig Breeding Scheme C.D.F.	300—900	1
37	Manager (Technical) B.K.T. Lucknow	300—900	1
38	Asstt. Director, Key Village Scheme	300—900	3
39	Asstt. Rinderpest Officer Standardization B.K.T.	300—900	1
40	Officer-in-charge, Stockman Training Class	300—900	2
41	Statistician	300—900	2
42	D.C.O. (Pigs) Central Dairy Farm	300—900	1
43	Officer-in-charge Inservice Trg. Class	300—900	1
44	Senior Poultry Specialist	300—900	1
45	Officer-in-charge, Large White Yarkshen Pigs, Central Dairy Farm, Aligarh	300—900	1
46	Manager Footwear & Leather Utilisation B.K.T. Lucknow	300—900	1
47	Research Officer, Immature Amphistomiasis	300—900	1
48	Asstt. Rinderpest Officer	300—900	1
49	Project Officer (Poultry), Intensive Poultry Development Scheme	300—900	3
50	Cattle Development Officer Intensive Cattle Development Block	300—900	3
51	Personal Assistant to Director of Animal Husbandry U.P.	400—500	1
52	Hide Development Officer	225—500	1
53	Field Extension and Publicity Officer	225—500	1
54	Officer-in-charge, 9 months Diploma Course in Swine Husbandry and Pork Proceeding C.D.F	250—550	1
55	Asstt. Dairy Manager, Central Dairy Farm	250—550	1
56	Accounts Officer	250—750	1

1	2	3	4
57	Asstt. Poultry Development Officer	225—500	1
58	Lecturer Inservice Training Class	250—550	2
59	Lecturer Stockman Training Class	250—550	2
60	Field Officers	250—550	3
61	Officer-in-Charge, Semen Collection Station	250—550	11
62	Distt. Livestock Officer	250—600	25
63	A.I. Officers	250—550	23
64	Lecturer, 3 months Certificate Course in Poultry	250—550	1
65	Officer-in-charge Development of Hill Cattle	250—550	1
66	Farm Manager, State Poultry Farms	250—550	9
<i>(b) Non-Gazetted</i>			
1	Jr. Assistants	200—450	9
2	Vety. Asstt. Surgeon	225—500	932
3	Vety. Officers	250—550	97
4	Vety. Inspectors	200—450	9
5	Research Assistants	220—450	93
6	Senior Research Asstt.	200—450	5
7	Sheep Supervisor	200—450	12
8	Lecturers at C.D.F.	200—450	1
9	Technical Assistant	200—450	22
10	Technical Assistant (Fodder)	200—450	1
11	Marketing Inspectors	200—400	1
12	Senior Fodder Inspectors	200—400	4
13	Asstt. Statistician	200—400	4
14	Livestock Marketing Intelligence Inspector	200—400	1
15	Farm Superintendent	200—400	2
16	Farm Manager	200—400	1
17	Marketing, Intelligence Inspectors	160—280	5
18	Fodder Inspectors	160—280	12
19	Marketing Inspector-cum-Auction Organizer	160—280	2
20	Stockman	80—140 120-220	2,331
21	Vety. Compounders	100—180	462

1	2	3	4
22	Lab. Assistant	100—160 or 80—140	10 50
23	Milk Recorder	120—220	91
24	Livestock Supervisors	120—220	18
25	Refrigerator Mechanic	150—260	9
26	Electrician	40—65	1
27	Assistant Statistician	200—400	6
28	Computer (Marketing Sec.)	140—280	1
29	Computers	120—250	6
30	Progress Assistants	120—250	6
31	Computers	120—220	5
32	Senior Statistical Asstt.	160—320	1
33	Statistical Assistant	160—280	3
34	Statistical Assistants	120—250	5
35	Artist-cum-Photographer	175—300 if 3 years diploma and Rs. 180— 380 if 5 years diploma.	1
36	Librarian	120—220	1
37	Electrical-cum-Mechanical Supervisors	175—300	1
38	Overseers	175—300	2
39	Trailor Mechanic	175—300	11
40	Draftsman	160—280 for qualified	1
41	Tracers	100—160	1
42	Glass Blower	100—160	1
43	Publicity Supervisors	100—180	5
44	Assistant Dairy Manager M.E.-cum-Workshop-Supdt.	250—550	2
45	Dairy Incharge/Sales Supervisor	200—400	2
46	Pig Purchase Supervisor Cultivation/Incharge/Statistical Assis- tant	150—350	3
47	Project Officer	160—300	1
48	Chemist/Assistant Sales Manager	150—350	2
49	Electrical Supervisor	150—260	3
50	Manager/Supervisor	100—180	10

1	2	3	4
51	Creamery Supervisor/Salesman	120—250	2
52	Supervisor and S.K. Workers/First Aider	75—115	31
53	Senior Poultry Inspector	200—400	17
54	Farm Manager	200—400 the post has been kept in abeyance.	1
55	Farm Superintendent	200—400	7
56	Asstt. Project Officer	200—400	4
57	Asstt. Publicity Officer	200—400	1
58	Poultry Inspector	120—250* * 5 Posts out of 9 posts are in abeyance.	45
59	Publicity Inspector (Mech.)	120—250	1
60	Poultry Supervisor	120—220	36
61	Electrician-cum-Blacksmith	65—90	3
62	Electrician-cum-Mechanic	80—140	3
63	Carpenter	75—90	1
64	Asstt. Hide Development Officer	200—400	1
65	Hide Playing Inspector	150—260	10
66	Master Players	80—140	57
67	Recorders	75—115	9
<i>Gosadan Scheme</i>			
68	Managers	150—260	4
69	Fieldman-cum-master curer (Old Scale)	75—120	4
70	Master Flayers	80—140	24
<i>Bakshi-ka-Talab Lucknow</i>			
71	Chief Instructor	200—400	1
72	Senior Technical Assistant (Footwear)	200—400	1
73	Technical Assistant (Training)	200—400	1
74	Technical Assistant-cum-Machine Operator	150—260	12
75	Bottomer-cum-Finisher	160—220	1
76	Designer-cum-clicker	160—220	1
77	Mechanic	120—220	1
78	Chief Mechanics	150—260	1

1	2	3	4
79	Production Supervisor	150—260	1
80	Boiler Mechanic (Old Scale)	75—120	1
81	Bilder Driver-cum-Mechanic (Old Scale)	45—80	1
82	Asstt. Accounts Officer	180—380	1
83	Master Flayers	80—140	3
84	Gut Master	80—140	1
<i>Dead Cattle Utilisation Scheme</i>			
85	Senior Cattle Utilisation Inspectors	200—400	2
86	Cattle Utilisation Inspectors (Old Scale)	75—120	2
87	Boilerman	75—120	2
88	Tractor Operator	80—140	1
89	Head Assistant	300—450	2
90	Senior Auditors	200—450	3
91	Head Clerk	160—320	3
92	Senior Noter and Drafter	140—280	39
93	Auditors	160—280	10
94	Stenographers	160—320	7
95	Head Clerk	150—260	22
96	Accountant	200—400 or 120—250	12
97	Statistical Clerk	120—250	1
98	Stenographer	120—250	2
99	Jr. Noter and Drafter Reference Clerk, Accounts Clerk, Cashier, Camp Clerks, Senior Clerk, Accountant- cum-Typists	120—220	228
100	Routine Clerk, Camp Clerks, Clerk, Store-keeper, Typist, Jr. Clerk	100—180	288
101	Noter and Drafter (in U.P. Section)	80—130	2
102	Paid Apprentices	40 per month each.	6
103	Class IV employees supervisor/skilled worker/tubewell opera- tor/Jamadar/Head Shepherd	60—80	250
104	Peon, Chowkidars, Night Chowkidar, Flayer Bull Attendant, Animal Attendant, Goatman, Packer, Veterinary Attend- ants and Mali, etc.	55—75	3,324
105	Drivers and Tractor Operators	75—115 or 80—140	132

UTTAR PRADESH

Statement Showing the Position of Staff Fisheries Department
from 1961-62 to 1966-67

Designation of the Post	Total Strength as on 27-6-67	Employed
1	2	3
Director of Fisheries 1,500—1,700	1	1
Dy. Director Fisheries (Extension) 600—1,250	1	..
Dy. Director Fisheries (Research) 600—1,250	1	1
Dy. Director Fisheries (induced breeding)	1	1
Asstt. Director Fisheries (Development) 300—900	1	1
Asstt. Director Fisheries (Planning)	1	1
Asstt. Director Fisheries (Training)	1	1
Research Officer Chemistry	1	1
Research Officer (Induced Breeding)	1	1
Research Officer (Botany)	1	1
Gear Technologist	1	..
Fish Farm Specialist	1	1
Additional Accounts Officer 250—750	1	1
Asstt. Director Fisheries (Circle)	20	15
Asstt. Director Fisheries (Training)	1	1
Personal Assistant 400—550	1	1
Lecturers 225—550	4	2
Senior Auditor 200—450	1	1
Senior Research Asstt. (Chemistry) 200—450	3	..
Senior Research Officer (Zoology) 200—450	2	2
Senior Research Asstt. Botany	1	1
Technical Asstt. 200—400	1	1
Statistical Investigator	1	1
Senior Fisheries Inspector	29	29
Statistical Asstt. 120—250	1	1
Overseers 175—250	2	2
Draftsman 160—230	1	..
Junior Auditor 160—230	2	2

	1	2	3
Research Asstt. (Chemistry)		2	2
Research Asstt. (Biology)		1	1
Field Asstt.-cum-Project Operator 120—250		1	1
Demonstrator 160—230		3	3
Fisheries Inspector 160—230		141	117
Fisheries Development Worker 120—230		151	147
Asstt. Fisheries Warden		9	9
Junior Technical Asstt.		1	1
Mechanics		5	1
Laboratory Asstt. 100—160		2	2
Laboratory Asstt. 80—140		2	2
Drivers 80—140		58	34
Drivers 75—115		29	23
Driver-cum-Mechanic for Fishing Vessel 75—115		1	..
Boat Driver 75—115		13	1
Blacksmith-cum-welder		1	..
Tailor 65—90		1	..
Carpenter		1	..
Fieldmen 60—80		4	3
Fieldmen 55—75		2	..
Fishermen 60—80		542	..
Fish Guard 55—75		2	2
Daftiy 60—80		1	1
Jamadar 60—80		1	1
Net Maker 55—75		1	1
Laboratory Attendant		1	1

WEST BENGAL

No. of Officers in Various Categories of the Directorate of
Agricultural Marketing Branch

S. No.	Designation	Hqrs.	Region	Distt.	Field
1	2	3	4	5	6
1	Addl. Director of Agriculture (Marketing)	1	..	..	..
2	Jt. Director of Agriculture (Marketing)	1	..	..	..
3	Chief Instructor	1	..	..	..
4	Supdt. of Agri. Marketing	4	3	..	..
5	Market Intelligence Officer	1	..	..	..
6	Market Research Officer	1	..	..	..
7	Chemist	1	..	3	..
8	Asstt. Chemist	1	..	2	..
9	Distt. Agril. Marketing Officer	9	..	14	..
10	Special Officer	..	..	1	..
11	Investigation Officer	2	..	..	..
12	Jute Grading Assessor	..	..	5	..
13	Asstt. Jute Grading Assessor	..	..	5	..
14	Instructor	4	..	5	..
15	Sub-divisional Agril. Marketing Officer	6	..	48	..
16	Supervisor	2	..	2	..
17	Supervisor C.S.	..	..	..	5
18	Demonstration Officer	..	..	4	..
19	Market Reporter	4	..	..	77
20	Packer Asstt.	..	..	..	12
21	Grading Asstt.	1	..	2	..
22	Research Asstt.	2	..	..	..
23	Analysis Expert	1	..	..	..
24	Field Asstt.	4	..	..	..
25	Grader Recorder	1	..	..	10
26	Laboratory Asstt.	3	..	2	..
27	Laboratory Asstt.	3	..	6	..
28	Inspector Oil Grading	2	..	4	..

1	2	3	4	5	6
29 Steno	· · · · ·
30 Head Clerk	· · · · ·	1	..	..	..
31 U.D.C. & Clerk-in-Charge	· · · · ·	6	..	..	..
32 Head Clerk Accountant	· · · · ·	..	3	..	..
33 Grade I Typist	· · · · ·	1	..	..	..
34 Accountant	· · · · ·	1	..	..	..
35 L.D. Clerk (Directorate)	· · · · ·	16	..	..	..
36 L.D. Clerk	· · · · ·	1	3	..	..
37 Compiler	· · · · ·	1	3	..	..
38 Clerk Typist	· · · · ·	4	3	..	..
39 Typist	· · · · ·	3	..	..	..
40 L D. Clerk Typist	· · · · ·	..	3	14	..
41 Typist-cum-Despatcher	· · · · ·	1	..	..	..
42 Clerk Compiler	· · · · ·	6	..	57	..
43 Driver	· · · · ·	2	..	5	..
44 Record Supplier	· · · · ·	2	..	..	..
45 Duplicating Machine Operator	· · ·	1	..	..	..
TOTAL		101	18	179	104

ANNEXURE VII(C)

STATEMENT SHOWING THE OUTLAY/EXPENDITURE ON DIFFERENT PROGRAMMES AND ADMINISTRATIVE MACHINERY STATE-WISE

(Rs. in lakhs)

State	Department	Outlay (Programmes)			Expenditure (Programmes)			Outlay (Administrative Machinery)			Expenditure (Administrative Machinery)		
		1964-65	1965-66	1966-67	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67	1964-65	1965-66	1966-67
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Andhra Pradesh	Agriculture	383.03	501.40	413.10	430.27	459.61	946.97	..	..	..	..	..	..
	Cooperation	77.23	252.29	142.61	81.44	244.99	142.61	6.54	22.18	1.00	6.48	15.62	1.00
	Minor Irrigation	415.00	462.00	225.00 (upto Sept. 66)	..	..	..	42.00	53.00	30.00 (upto Sept. 66)	..	..	..
	Animal Husbandry	208.77	242.93	225.36	185.88	224.58	..	..	..	..	..	..	..
	Fisheries	140.84	87.59	87.23	62.96	81.56	28.88 (upto Sept. 66)	3.03	3.07	3.80	2.46	2.98	1.66 (upto Sept. 66)
Bihar	Fisheries	12.92	18.90	42.00	12.48	22.68	33.76 (antici- pated)	..	..	..	..	..	..

Gujarat	Agriculture	939.57	1156.14	1413.91	756.22	1007.36	1413.91	117.70	132.51	166.99	93.43	112.67	130.18
	Cooperation	60.20	63.98	75.61	58.26	65.62	22.83 (for 5 months)	..	..	..	..	..	..
	Community Development.	110.84	148.52	156.34	129.43	154.19	158.60	..	..	..	..	..	..
	Animal Husbandry	38.48	47.28	67.02	13.20	17.70	..	..	..	..	..	..	..
	Fisheries	12.02	13.30	14.96	11.35	13.43	15.50	..	..	..	..	..	..
Haryana	Agriculture	..	..	245.68	..	..	228.44 (anticipated)	..	..	..	..	..	..
Jammu & Kashmir	Agriculture (Plan & Non-plan)	203.75	270.02	318.78	166.76	190.08	292.11	..	..	..	90.86	135.95	..
Kerala	Agriculture, Horticulture, Marketing, Agricultural Extension, Research & Education (Plan & Non-plan)	215.39	275.56	385.25	235.63	264.63	313.71	..	..	..	50.95	87.78	..
Madhya Pradesh	Agriculture—												
	Plan	1720.30	1696.91	..	1582.46	1506.16	..	..	..	..	..	..	..
	Non-Plan	90.72	90.80	..	85.77	93.92	..	..	..	..	..	..	..
	Animal Husbandry	185.17	200.00	283.00	86.90	120.64	37.88 (upto Sept. 66)	..	..	..	72.08	83.57	42.72 (upto Sept 66)

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Maharashtra	Agriculture	1658.26	3031.29	4205.83	1678.83	2947.54	619.24	..	..	..	259.20	368.84	114.04
						(including staff charges)	(for 4 months)						(for 4 months)
	Community Development.	787.23	757.24	538.31	693.47	607.75	150.23	..	..	..	..	..	..
							(upto Sept. 66)						
	Animal Husbandry	101.90	182.78	213.49	113.66	182.13	73.26	..	..	..	..	..	..
							(upto Sept. 66)						
	Fisheries	35.09	56.41	84.89	54.57	105.53	84.89	18.33	22.23	38.37	18.33	22.21	38.37
	Rural Manpower	136.06	189.85	128.25	111.48	101.24	8.97	..	..	..	..	4.00	..
				(upto June 66)			(upto June, 66)						
Nagaland	Agriculture	26.71	65.88	67.33	33.30	42.59	..	..	..	..	..	..	..
	Horticulture Fisheries, Major & Medium Irrigation (Plan & Non-Plan)												
	Co-operation (Plan & Non-plan)	0.90	3.99	6.72	..	..	..	..	..	..	..	..	..
	Community Development.	26.00	20.00	20.00	..	..	..	..	..	..	..	..	..
	Animal Husbandry (Plan & Non-Plan)	9.29	22.99	19.45	..	..	..	..	..	..	..	..	..

Orissa . . . Agriculture . . . 252.38 248.89 543.81 219.65 229.49 306.44 76.34 102.34 190.30 69.82 93.59 119.71

Punjab . . . Agriculture

Plan . . . 307.20 401.36 252.67 332.20 114.52 104.29**Excludes Haryana and Himachal Pradesh Share from 1-11-66 to 31-3-67. Details of outlays and expenditure since 1951 attached.

Non-plan 162.34 182.19 217.65

Horticulture—

Plan . . . 19.83 26.68 35.6 8.39* 11.95* 9.12*

Non-plan . . . 2.1 2.3 3.7 *Both Plan & Non-plan

Soil Conservation 13.85 34.07 21.15 13.76 33.98 17.89

Agriculture Market-
ing—

Plan . . . 0.46 0.29 7.83 1.12 0.98 1.23

Non-Plan . . . 0.99 0.62 1.06

Agriculture Extension 171.57 241.44 209.23 41.46 184.37 222.88 63.61 82.55 82.92

Minor Irrigation 215.07 213.86 261.39 213.45 231.41 268.00

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Uttar Pradesh	Agriculture—												
	Plan	469.38	512.27	572.36	449.25	484.79	93.64 (upto Sept. 66)	..	..	..	..	..	..
	Non-Plan	...	...	...	1069.75	1303.56	2049.18	..	..	..	227.18	236.35	468.35
	Horticulture—												
	Plan	27.71	27.31	...	...	...	..	12.14	14.42	..	..	..	..
	Non-Plan	21.65	22.89	41.01	22.29	24.18	..	..	..	..	..	..	..
	Marketing												
	Plan	7.09	10.81	..	..	..	..	5.43	5.81	..	..	..	..
	Non-Plan	3.97	4.21	11.52	4.30	4.81	..	..	..	..	..	..	..
	Agriculture Extension												
	Plan	2.48	2.48	..	..	..	..	0.21	0.20	..	..	..	..
	Non-Plan	255.30	195.51	348.14	200.60	108.14	..	..	..	..	..	..	..
	Panchayati Raj												
	Plan	39.61	28.09	30.02	..	..	..	..	..	..	..	..	..
	Non-Plan	99.05	127.91	132.68	..	..	..	..	..	..	19.52	21.82	23.80
	Minor Irrigation	485.70	464.90	280.53	111.78	129.15	74.28	..	..	..	..	..	..
	Animal Husbandry—												
	Plan	12.16	14.09	6.53	..	..	..	..	..	..	2.89	3.84	1.63
	Non-Plan	13.50	14.44	18.49	13.48	14.65	19.14	..	..	..	7.04	8.21	10.57
	Fruit Utilization—												
Plan	17.24	13.23	12.01	9.07	10.53	10.24	..	..	..	5.04	6.54	..	
Non-Plan	23.55	25.13	27.06	..	..	..	..	..	..	..	14.87	..	

West Bengal	Horticulture . . .	3.32	7.47	..	3.29	3.39	..	..	..	..	..	..	..
	Agri. Exten. . . .	42.50	70.17	..	28.44	32.35	..	..	..	..	..	..	..
	Agri. Production excluding Horticulture & Extension.	359.00	491.48	..	343.58	363.26	..	..	..	..	..	..	..
	Agri. Marketing Programme.	30.04	35.20	22.12	8.83	9.64	10.02	..	..	..	..	..	..
	Agri. Engineering Wing.	489.89	496.27	583.25	489.89	496.27	400.00 (upto Sept. 66)	34.17	41.00	33.50	34.17	41.00 (upto Sept. 66)	25.00
	Cooperation . . .	45.72	50.08	55.41	52.40	47.61	..	..	..	..	..	..	..
	Community Deve- lopment.	125.13	121.98	89.45	118.67	106.36	..	..	..	..	..	..	..
	Irrigation & Water- ways.	69.13	26.20	34.59	7.28	11.54	23.47	8.13	9.58	10.60	..	..	..
	Animal Husbandry & Veterinary Pro- grammes.	660.77	660.27	697.25	338.00	592.23	528.91	52.26	64.96	66.08	47.22	57.00	70.20
Fisheries	85.07	80.07	64.00	14.93	70.03	64.00	17.32	18.62	31.01	21.48	22.54	40.83	
<hr/>													
Rajasthan . . .	Agri. Production . .	185.74	201.11	..	175.31	187.40	..	..	..	..	..	..	..
	Soil Conservation	30.64	32.91	..	26.64	30.73	..	..	..	..	..	..	..
	Cooperation	53.50	73.26	..	45.11	75.02	..	..	..	..	..	..	..
	Community Deve- lopment.	238.16	249.50	..	232.92	242.84	..	..	..	..	..	..	..
	Minor Irrigation	320.50	323.89	..	314.52	305.24	..	..	..	..	..	..	..
	Animal Husbandry	75.30	98.78	..	72.14	91.48	..	..	..	..	..	..	..
	Dairy & Milk Supply	14.43	..	..	10.06	10.14	..	..	..	..	..	..	..
	Fisheries	3.45	3.50	..	2.22	2.86	..	..	..	..	..	..	..

ANNEXURE VII(B)—Contd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Delhi	Agriculture .. .	26.10	20.73	29.45	22.51	8.27	14.25	..	..	..	..	..	..
	Forest & Soil Conservation.	2.12	2.31	1.40	0.95	1.08	0.31	..	..	..	..	..	..
	Minor Irrigation	8.00	10.27	17.00	2.25	8.77	14.16	..	..	..	..	..	..
	Animal Husbandry, Poultry & Dairy.	13.01	3.47	5.00	2.18	3.19	2.47	..	..	..	..	..	..
	Fisheries . . .	3.22	2.15	1.60	0.51	0.40	0.35	..	..	..	..	..	..
Himachal Pradesh	Agriculture . . .	32.74	119.96 (Sept. 66)	15.34	98.24	114.82	47.07 (Sept. 66)	..	..	..	..	..	..
	Cooperation . . .	..	..	..	13.37	14.70	5.34 (upto August 66)	..	..	..	..	..	..
	Animal Husbandry Plan & Non-Plan.	48.00	45.65	45.29	45.82	51.55	25.54 (upto October 66)	..	..	..	..	..	..
	Fisheries (including Admn. machinery)	3.70	3.29	5.03	3.67	2.94	5.28	..	..	..	..	..	..

Manipur	Agriculture	..	..	..	..	..	..	..	..	..	..	3.33	6.37	2.01
	Cooperation	..	..	..	..	..	..	..	..	..	..	2.73	3.29	1.88
	Community Development	..	..	..	..	..	..	..	..	..	..	0.86	1.07	0.93
	Irrigation	..	..	..	..	..	..	..	..	..	..	1.49	1.95	1.25
	Animal Husbandry	..	..	..	..	..	..	..	..	..	..	2.52	3.86	3.57
	Fisheries	..	..	..	..	..	..	..	..	..	..	0.42	0.44	0.36
<hr/>														
Pondicherry	Agriculture	15.06	13.97	13.19	14.34	14.55	1.25	3.89	4.53	4.16	3.57	4.22	1.46	(upto Oct. 66)
<hr/>														
Tripura	Agriculture	38.20	42.18	71.33	38.59	44.60	71.50	15.23	17.73	20.80	16.06	16.15	19.30	
<hr/>														
Mysore	Agriculture													
	Plan	272.82	404.50	352.17	181.27	235.76	..	..	..	..	..	..	..	..
	Non-Plan	249.35	448.58	448.30	..	..	..	..	..	..	..	..	..	..
	Animal Husbandry & Veterinary—													
	Plan	..	..	..	32.51	84.76	65.83	..	..	..	..	..	..	..
	Non-Plan	..	..	..	111.13	152.79	143.00	..	..	..	..	..	..	..
Horticulture—														
Plan	28.67	55.12	54.20	30.18	50.84	53.88	..	..	..	..	..	..	..
Non-Plan	20.89	23.18	26.50	23.47	22.27	24.29	..	..	..	..	..	..	..

KERALA

Budget Provision and Expenditure since 1951 under (a) Agriculture (b) Horticulture (c) Marketing and (d) Agricultural Extension, Research and Education.

First Five year Plan Period (Plan and Non-Plan)

Years	Total Budget Provision	Total Expenditure
	Rs.	Rs.
1951-52	15,75,800	10,95,368
1952-53	17,15,300	11,34,927
1953-54	19,07,900	11,99,542
1954-55	17,96,300	14,07,703
1955-56	21,14,770	18,49,300
TOTAL	91,10,000	66,86,840

Second Five Year Plan Period

Years	Non-Plan		Plan	
	Budget Provision	Expenditure	Budget Provision	Expenditure
	Rs.	Rs.	Rs.	Rs.
1956-57	20,50,100	19,11,500	26,24,000	24,47,000
1957-58	22,76,900	21,87,550	33,19,700	36,88,000
1958-59	26,72,700	16,66,300	54,89,700	49,61,000
1959-60	18,78,000	19,59,750	75,91,800	60,78,000
1960-61	19,07,400	11,15,220	90,70,000	56,45,000
TOTAL	1,07,85,100	88,15,220	2,50,95,200	2,28,19,000

Third Five Year Plan Period.

Years	Non-Plan		Plan	
	Budget Provision	Expenditure	Budget Provision	Expenditure
	Rs.	Rs.	Rs.	Rs.
1961-62	59,31,200	52,32,814	1,16,79,400	67,22,000
1962-63	53,32,500	47,77,949	1,66,26,600	1,21,65,000
1963-64	44,82,600	40,81,627	1,35,85,600	1,88,32,000
1964-65	37,74,900	33,49,496	1,78,14,900	2,02,14,000
1965-66	38,17,100	29,01,505	2,37,39,300	2,35,62,000
TOTAL	2,33,38,300	2,03,43,391	8,34,45,800	8,14,96,000

Fourth Five Year Plan Period

Year	Non-Plan		Plan	
	Budget Provision	Expenditure	Budget Provision	Expenditure
	Rs.	Rs.	Rs.	Rs.
1966-67	62,93,700	55,94,100	3,22,32,000	2,57,77,000

KERALA

Expenditure on staff including allowances—Agriculture

Year	Amount
	Rs.
1951-52	5,59,108
1952-53	5,71,667
1953-54	7,06,485
1954-55	6,60,300
1955-56	6,83,095
1956-57	8,44,144
1957-58	14,67,893
1958-59	24,85,492
1959-60	29,11,915
1960-61	30,75,558
1961-62	30,24,172
1962-63	43,48,320
1963-64	51,94,251
1964-65	50,95,535
1965-66	76,95,748
1966-67	87,78,800
TOTAL	4,81,03,483

Expenditure on TA, DA and other allowances

Year	T.A.	D.A.	Other allowances
	Rs.	Rs.	Rs.
1951-52	52,227	1,51,181	132
1952-53	64,896	1,76,297	2,039
1953-54	65,441	1,54,450	1,990
1954-55	76,950	1,75,560	3,100
1955-56	52,000	1,44,700	3,200
1956-57	70,626	1,98,269	14,420
1957-58	1,31,360	4,23,168	19,740
1958-59	1,57,800	6,93,740	30,200
1959-60	2,80,474	8,48,414	32,675
1960-61	2,94,040	6,25,968	2,57,007
1961-62	3,27,579	5,10,851	1,49,669
1962-63	4,13,925	4,53,377	2,28,112
1963-64	5,38,047	3,38,914	2,42,025
1964-65	7,04,258	5,81,318	2,05,786
1965-66	8,11,018	13,80,189	2,89,128
1966-67	7,45,100	23,54,200	2,55,300
TOTAL	47,84,701	92,10,536	17,34,523

PUNJAB

Soil Conservation (Plan Side)

*Loans To Local Funds Private Parties Etc. Expenditure
On Soil Conservation Scheme.*

	Budget Provision		Expenditure	
	Plan	Non-Plan	Plan	Non-Plan
1961-62	..	..	..	..
1962-63	3,81,690	..	1,10,380	..
1963-64	8,97,540	..	8,20,158	..
1964-65	13,85,700	..	13,76,984	..
1965-66	34,07,830	..	33,98,701	..
TOTAL	60,72,760	..	57,06,223	..
1966-67	21,15,360	..	17,89,659	..
TOTAL	21,15,360	..	17,89,659	..

PUNJAB

Annual Budget Provision of Non-Plan Schemes from 1951-52 to 1966-67

(Figures in thousands)

	1951-52	52-53	53-54	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Agricultural Extension	4,460	4,990	3,380	4,410	3,245	4,410	4,661	8,370	11,150	10,451	11,675	9,696	10,663	14,146	18,437	22,288
Horticulture	140	160	105	140	101	137	146	260	348	311	426	351	321	201	231	337
Agricultural Marketing	47	53	36	47	33	45	50	90	31	104	41	38	84	99	62	106
Any other Programme	..	..	..	..	..	..	..	..	695	503	840	537	..	..	..	..
TOTAL	4,647	5,203	3,521	4,597	3,379	4,592	4,857	8,720	12,224	11,369	12,982	10,622	11,068	4,446	18,730	22,731

PUNJAB STATE

(Erstwhile)

(Rs. in thousands)

Sub-head	1st Five Year Plan					2nd Five Year Plan					3rd Five Year Plan					4th Plan
	1951-52	52-53	53-54	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67
<i>1. Expenditure incurred under sub-head 'Agricultural Production of Plan Schemes'</i>																
Agricultural Production	8,242	3,492	1,888	3,202	5,796	1,835	5,941	6,116	8,696	11,168	10,248	11,588	15,748	33,220	11,452	10429*
Minor Irrigation (Agriculture Portion)	1,174	1,306	1,674	2,136	3,145	644	1,406	2,750	4,152	2,638	6,494	6,315	12,303	21,345	21,341	26,800
<i>2. Annual Budget provision of the Sub-head 'Agricultural Production' and other sub-groups of the Plan Schemes</i>																
Agricultural Production	5,440	3,503	2,136	5,132	3,996	6,379	11,529	9,089	11,831	12,574	13,289	14,970	15,871	30,720	40,136	25,267
Horticulture	97	87	99	90	90	1,569	1,493	1,236	1,144	1,335	940	1,013	846	1,983	2,668	3,561
Agriculture Extension	5,035	3,088	1,674	2,840	2,410	2,782	6,744	5,363	6,448	6,621	8,356	9,103	8,462	17,157	24,144	20,923
Agriculture Marketing	..	..	..	..	..	24	19	58	58	52	49	65	13	46	29	783
Other Schemes (Research & Education)	308	328	363	2,202	1,496	2,004	3,273	2,432	4,181	4,566	3,944	4,809	6,550	11,534	13,295	†
Minor Irrigation (Agriculture Portion)	2,304	2,265	1,758	3,598	3,228	1,670	1,570	2,800	3,140	3,298	8,368	8,500	4,372	21,507	21,386	26,139

*Excluding Haryana and Himachal Pradesh share from 1st November, 1966 to 31st March, 1967.

†Relates to Agricultural University.

Expenditure incurred on Agricultural Development since the inception of the First Five Year Plan on Non-Plan Sector year-wise

(Figures in Lacs)

Name of State	1951-52	52-53	53-54	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67
Punjab . . .	46.37	51.95	35.11	45.85	33.75	45.86	48.06	87.13	87.98	100.22	112.48	104.87	105.02	162.34	182.19	217.65

PUNJAB
Any Other Programme

(Figures in thousands)

	1951-52 to 1958-59				1959-60		1960-61		1961-62		1962-63		1963-64 to 1966-67	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
Pay of Establishment	46	118	279	85	139	225	210	194	..	..
Travelling Allowance	11	48	67	35	5	10	8	7	..	..
Dearness Allowance	19	55	111	41	49	102	117	118	..	..
Other Allowances	9	14	55	11	5	11	..	3	..	..

PUNJAB

Agricultural Extension

Statement showing the break up on staff personnel Travelling Allowance, Dearness Allowance and other Allowances under Agricultural Development since the inception of First Five Year Plan on both Non-Plan and Plan Sectors (Year-wise)

	1951-52		52-53		53-54		54-55		55-56		56-57		57-58		58-59	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	367	426	372	602	208	535	180	555	467	265	746	310	770	581	1,064	188
Travelling Allowance	99	87	100	124	56	110	48	115	125	110	201	127	157	120	286	39
Dearness Allowance	169	100	171	283	95	251	83	261	125	216	345	145	356	273	491	88
Other Allowances	28	31	29	44	16	39	14	41	36	20	57	20	59	43	82	14

	1959-60		60-61		61-62		62-63		63-64		64-65		65-66		66-67	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	362	1,895	1,348	1,208	742	3,078	1,193	2,434	1,042	1,819	1,514	1,928	2,144	2,004	1,915	1,996
Travelling Allowance	98	390	363	248	183	468	244	433	279	385	458	424	650	416	548	501
Dearness Allowance	127	892	622	568	374	1,383	584	1,219	497	845	763	940	1,381	1,204	1,382	1,301
Other Allowances	28	139	104	355	75	218	93	183	75	136	143	191	240	216	203	446

P = Plan.
NP = Non-Plan.

PUNJAB
Horticulture

(Figures in thousands)

	1951-52		52-53		53-54		54-55		55-56		56-57		57-58		58-59	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	65	12	65	18	36	16	32	16	83	7	132	9	136	18	188	5
Travelling Allowance	17	2	17	3	9	3	8	3	21	2	34	2	35	3	49	1
Dearness Allowance	34	7	34	10	19	9	17	9	43	5	68	6	71	10	98	3
Other Allowances	14	1	14	3	8	2	7	2	18	1	28	2	30	3	41	1

	1959-60		60-61		61-62		62-63		63-64		64-65		65-66		66-67	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	64	55	147	50	198	112	326	70	222	51	385	46	500	53	305	91
Travelling Allowance	17	10	38	9	55	15	57	10	60	8	89	10	126	11	92	25
Dearness Allowance	34	31	77	28	96	56	148	39	112	28	195	25	342	34	245	71
Other Allowances	14	7	32	6	31	20	53	12	43	7	86	3	122	7	69	14

P = Plan.
NP = Non-Plan.

PUNJAB

Agricultural Marketing

	1951-52		52-53		53-54		54-55		55-56		56-57		57-58		58-59	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	21	12	22	17	12	15	11	15	26	3	43	8	44	17	63	5
Travelling Allowance	2	1	2	1	1	1	1	1	3	2	5	1	5	1	7	..
Dearness Allowance	4	4	4	5	2	5	2	5	5	2	8	2	9	5	13	2
Other Allowances	..	1	..	1	..	1	..	1	..	1	..	..	..	2	..	1

	59-60		60-61		61-62		62-63		63-64		64-65		65-66		66-67	
	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP
Pay of Establishment	22	52	47	49	3	17	8	16	25	38	27	49	31	33	8	55
Travelling Allowance	2	3	3	5	..	1	1	..	3	2	3	5	5	4	7	7
Dearness Allowance	5	17	15	10	2	7	3	8	5	13	6	16	6	12	6	18
Other Allowances	..	6	5	..	..	2	..	..	..	4	1	5	3	4	3	19

P = Plan
NP = Non-Plan

ANNEXURE VII(D)

**A NOTE ON AGRICULTURAL ADMINISTRATION AS ORGANISED
IN MADRAS STATE FROM AGRICULTURAL DIRECTORATE
ALONG THE ENTIRE LINE TO THE FIELD IN THE
VILLAGES**

Broadly, the department can be divided into three major heads namely (i) Agricultural Extension; (ii) Agricultural Education and Research and (iii) Agricultural Engineering. The Director of Agriculture who is the head of the Department is assisted by Joint Directors of Agriculture at headquarters, one of whom is drawn from the Indian Civil/Administrative Service cadre (now held by an officer belonging to the cadre of non-I.A.S. Deputy Secretary to Government), the remaining being technical officers.

2. All the Joint Directors have State-wide jurisdiction and they work on a functional basis as shown below:—

- | | |
|---|---|
| 1. Joint Director of Agriculture, (Planning and Administration) | Coordination of Plan proposals, General Administration, Financial sanctions. |
| 2. Joint Director of Agriculture (Intensive Agricultural Area Programme). | Intensive Agricultural District Programme and Intensive Agriculture Area Programme. |
| 3. Joint Director of Agriculture, (State Seed Farm). | State Seed Farm. |
| 4. Joint Director of Agriculture, (Extension). | Agricultural Extension work relating to all crops other than Commercial Crops. |
| 5. Joint Director of Agriculture (Inspection and General). | Inspection of subordinate Officer/Plant Production work. Chemical Fertilisers and Marketing. |
| 6. Joint Director of Agriculture, (Commercial Crops). | Commercial Crops such as Groundnut, Sugarance, Cotton, Tobacco, etc. |
| 7. Joint Director of Agriculture, (Engineering). | Soil Conservation and land Improvement, Land Reclamation <i>i.e.</i> Tractor Maintenance Organisation. Minor Irrigation such as sinking of Tube-wells, borewells, filter point wells etc. |

Besides the above, there is a Joint Director of Agriculture at Thanjavur in charge of the Intensive Agricultural District Programme in Thanjavur District.

3. (i) Under the scheme for Agricultural Education and Research, there is an Agricultural College at Coimbatore to which a Research Institute is

attached. This institution is one of the Premier institutions of the country. The Agricultural College which was, till 1958, running only an Undergraduate Course has been upgraded with the addition of postgraduate courses leading to the award of M.Sc., and Ph.D. degree in Agriculture. The Agricultural College and Research Institute, Coimbatore, function under the overall control of a Dean, who is assisted by an Associate Dean. In the College, there is a Professor in each important faculty and the Professor functions as Head of the Section in so far as his faculty is concerned with the assistance of Readers, Lecturers and Assistant Lecturers on the teaching sides and Research Officers, Assistant Research Officers and Research Assistants on the Research side. The Dean, Agricultural College and Research Institute, Coimbatore, is given the Ex-officio status of Additional Director of Agriculture to assist the Director of Agriculture in matters relating to Education and Research dealt with by the Department.

(ii) A second Agricultural College leading to the award of the B.Sc. (Ag.) degree has been opened at Madurai during 1965 to meet the increasing need for Agricultural Graduates. Only teaching staff has been appointed now. The Principal is of the rank of Associate Dean.

(iii) The Research Stations in and outside Coimbatore undertake intensive research on different crops in different disciplines. Each one of these is under the control of a Chief Officer. All the research stations are under the overall technical supervision of the Dean. The Specialists at Coimbatore in the different disciplines also conduct field work in the research stations and technically supervise such work.

4. The state has been divided into five divisions for purposes of Agricultural Administration; each division being in charge of a Deputy Director as indicated below:—

1. Deputy Director of Agriculture, Madras	. . . . .	Madras South Arcot North Arcot Chingleput.
2. Deputy Director of Agriculture, Coimbatore.	. . . . .	Coimbatore Nilgiris Salem Dharmapuri
3. Deputy Director of Agriculture, Thanjavur	. . . . .	Thanjavur Trichy
4. Deputy Director of Agriculture, Madurai	. . . . .	Madurai Ramanathapuram
5. Deputy Director of Agriculture, Tirunelveli,	. . . . .	Tirunelveli Kanyakumari.

Each Deputy Director has District Agricultural Officers under him. The general Agricultural Extension work is carried on by these District Agricultural Officers with the assistance of Extension Officers in Agriculture in each Development Block. The nomenclature of District Agricultural Officers which came into existence at a time when the officers were each in charge of a whole Revenue District continues even now although the jurisdiction of the officers has been reduced and each District Agricultural Officer (with a few exceptions) is at present in charge of an area coterminous with a Revenue Division in almost all the Districts. A proposal to redesignate these officers as Divisional Agricultural Officers is under examination. The work of the District Agricultural Officers is supervised by the Deputy Directors of Agriculture who functions on a regional basis.

5. The District Agricultural Officer is incharge of all extension and all primary seed production. For looking after extension work, he depends principally upon the staff of the Development Block. Each District Agricultural Officer has a number of Development Blocks varying from 6 to 14 under him. Ordinarily each Block has one Agricultural Extension Officer, one Compost Development Inspector, one Fieldman and two Demonstration Maistries. The Intensive Agricultural District Programme or Package Programme is being implemented in Thanjavur District and in this District, each block has, in addition, 3 extension officers (Agriculture). The Intensive Agricultural Area Programme has been introduced from the last year in the 4 Districts of Chingleput, Coimbatore, Madurai and Tirunelveli. Here every block which has more than 10,000 acres of irrigated area has one additional Extension Officer (Agriculture) and 5 additional fieldmen Village Level Workers. The other blocks in the Intensive Agricultural Area Programme Districts have the normal staff. In all Development blocks in all the Districts, there are 10 Gramasevak/ Village Level Workers, who are earmarked wholly for agricultural work. In the Intensive Agricultural District Programme District of Thanjavur this No. is 20.

6. Every District Agricultural Officer has two Plant Protection Assistants of the cadre of Upper Subordinate to look after Plant Protection work. In addition Special Agricultural Demonstrators for Cotton, Oilseeds, Sugarcane and Coconut are functioning in all the districts, the number depending upon the Intensity of work relating to these crops in the district.

7. Production of primary paddy and millet seeds is carried on almost wholly in State Seed Farms 74 in Number. The total area is a little more than 5000 acres. Each of these farms is looked after by a Farm Manager of the Upper Subordinate or Agricultural Demonstrator cadre, who works under the direct supervision and control of the District Agricultural Officer of the Agricultural Division in which the farm is situated. The

primary seed produced by these farms is multiplied into secondary seed by selected cultivators called Gramasahayaks, under the general supervision of the District Agricultural Officers. Any shortfall in the production of primary seeds—this occurs mainly in millets in the State Seed Farms—is made good by production in select private holdings under the supervision of the District Agricultural Officers and the Regional Deputy Directors of Agriculture. Each of the Deputy Directors at Madras, Coimbatore and Madurai has a Seed Development Officer of the grade of District Agricultural Officer attached to him to assist him in the supervision of the work of multiplication and distribution of improved seeds. The Deputy Director of Agriculture, Thanjavur has no such officer but, instead, there is a Special District Agricultural Officer (Seeds) in Thanjavur District who is incharge of the intensive seed production programme carried on as part of the Intensive Agricultural District Programme.

8. Special staff has been appointed in the Intensive Agricultural District Programme District of Thanjavur for the special extension work, carried on under the Package Programme. This consists, besides the Special Joint Director of Agriculture (Package Programme) four Subject Matter Specialists of the rank of Deputy Director of Agriculture—one to deal with Agronomy, one to deal with Farm Management, a third drawn from the research side for plant protection work and the fourth also from the research side to work as Soil Chemist—and one Assistant Project Officer of the grade of a District Agricultural Officer and a Special District Agricultural Officer (Seeds) already referred to above.

9. While the regular Deputy Directors of Agriculture and District Agricultural Officers look after extension and seed production work in general, programmes relating to particular crops, especially commercial crops, are looked after by Special Officers of the cadre of Deputy Directors of Agriculture, Package Programmes for such crops as Groundnut, Cotton, Sugarcane, etc., are looked after by respective Special District Agricultural Officers appointed for the purpose and working under the Special Deputy Director dealing with that crop. A short account of the work of each one of these is given below. The Special Deputy Directors of Agriculture in charge of particular crops look after not only the Special or package programmes relating to these crops where they are assisted by the Special District Agricultural Officers but also the normal work relating to these crops in non-package areas carried on by the regular District Agricultural Officers and other regular staff.

1. STATE COTTON DEVELOPMENT OFFICE OF THE CADRE OF DEPUTY DIRECTOR OF AGRICULTURE

He is incharge of all cotton extension scheme and has his headquarters at Coimbatore. He is also incharge of the package programme for cotton. As far as general extension work is concerned, he is assisted

by 5 Assistant Cotton Development Officers who are of the cadre of Assistant Research Officers (equivalent to District Agricultural Officers on the research side) with headquarters at Coimbatore, Madurai, Tiruchirapalli, Tiruppur and Koilpatti. These officers are principally incharge of the seed production programmes and distribution of quality cotton seeds. The package programme for cotton is in operation over an area of 1.30 lakh acres in the districts of Coimbatore, Tiruchirapalli, Madurai, Tirunelveli and Ramnad and covers both summer cotton and winter cotton. There are 5 special District Agricultural Officers for this programme, one each at Avanashi, Srivilliputhur, Tirumangalam, Coimbatore and Tiruchirapalli. These District Agricultural Officers are in-charge of the Intensive Programme of production of Cotton and concentrate on areas where there is large-scale cultivation. In the other areas, the regular District Agricultural Officers are incharge of cotton in the same manner in which they are in-charge of other crops.

(2) OILSEEDS DEVELOPMENT OFFICER IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE

He is also an Officer with State-wide jurisdiction with headquarters at Coimbatore. He is in-charge of the Integrated Oilseeds Development Schemes which aims at the multiplication of improved varieties of Groundnut, Gingelly and Castor, procurement and distribution of seeds of these oilseeds and general extension work relating to these crops. This is looked after by the regular District Agricultural Officers. In addition, he is in-charge of the package programme for the production of groundnut which is in force in areas where there is large-scale production of groundnut. He is assisted by an Assistant Oilseeds Development Officer in the grade of District Agricultural Officer at his headquarters, by 9 Special District Agricultural Officers in-charge of the Groundnut Package Scheme, a Special District Agricultural Officer for Oilseeds Development with headquarters at Madurai, a special District Agricultural Officer incharge of Oilseeds Multiplication Programme at Salem and a special District Agricultural Officer, incharge of Gingelly at Villupuram.

(3) STATE SUGARCANE DEVELOPMENT OFFICER IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE

He is also an officer with State-wide jurisdiction and with headquarters at Madras. He is incharge of all schemes of Sugarcane Development throughout the State and is assisted by four Cane Development Officers in the grade of District Agricultural Officers at Vellore, Coimbatore, Tiruchirapalli and Cuddalore. The Cane Development Officers, in addition to looking after sugarcane development work are also incharge of Zonal Farms in factory areas for production of quality sugarcane sets and

for conducting trials to find out the suitable varieties and Agronomic practices for the tract. These farms are supervised by officers of the department in the cadre of Upper Subordinates. There is one Sugarcane package programme at Madurantakam which is looked after by the Cane Development Officer, Vellore.

(4) STATE COMPOST DEVELOPMENT OFFICER IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE.

This officer who has State-wide jurisdiction with headquarters at Madras is in-charge of all schemes for the Development of Local Manurial Resources in the State. He looks after all schemes for the production of Green Manure and Compost. At headquarters, he is assisted by a Sewage Development Officer of the cadre of District Agricultural Officer who looks after all programmes of Sewage Development run by Local Bodies. There are 6 field Officers of the cadre of District Agricultural Officer designated as Field Manure Officers working under the State Compost Development Officer with headquarters at Madurai, Thanjavur, Tirupattur, Palayamcottah, Coimbatore and Madras.

(5) COCONUT EXTENSION OFFICER IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE

He is also an officer with State-wide jurisdiction with headquarters at Tiruchirapalli. He is incharge of all Coconut Development Schemes in this State. In addition to the normal Development programmes, he looks after Coconut nurseries and schemes for the competition of Mother Palms and also the coconut package scheme in Thanjavur District. At the divisional level, Coconut Extension work is looked after by the regular District Agricultural Officer who has special development Assistants of the cadre of Upper Subordinates under him for this purpose.

(6) TOBACCO DEVELOPMENT OFFICER IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE.

He is also an officer with State-wide jurisdiction with headquarters at Coimbatore. He is incharge of all Tobacco Development work in this state. He has a Special District Agricultural Officer for the Tobacco Package Programme at Mettupalayam who looks after the intensive cultivation of tobacco in this area. In the other areas, the Tobacco Development Officers work through the regular District Agricultural Officers and 4 Special Tobacco Development Assistants sanctioned for tobacco development work. These two work under the general control of the District Agricultural Officers and the Tobacco Development Officer.

(7) STATE MARKETING IN THE GRADE OF DEPUTY DIRECTOR OF AGRICULTURE.

He is an Officer with State-wide jurisdiction and with headquarters at Madras. He looks after all Agricultural Marketing and the functioning of all Regulated Markets under the Madras Regulated Market Act in this State. He has 5 Regional Assistant Marketing Officers of the cadre of District Agricultural Officers, under him. These have their headquarters at Madras, Madurai, Coimbatore, Tiruchirapalli and Thanjavur. There are 2 officers of the cadre of Assistant Marketing Officers at headquarters to assist the State Marketing Officer in the Survey of Agricultural Crops, Grading of Agricultural Commodities, etc.

(8) HORTICULTURIST (VEGETABLES) MADRAS.

He is an officer from the Research side of a grade equivalent to a Deputy Director of Agriculture. He is incharge of all Horticultural Development Schemes in this State. Under him, there are 3 Special District Agricultural Officers incharge of Development of Plain and Hill Vegetables and Potato, the special District Agricultural Officer for vegetables in plains being at Madras and the two special District Agricultural Officers for vegetables in hills and Potato being at Ootacamund and Kodaikanal respectively. A special package programme for the production of banana is in operation in North Arcot, Tiruchirapalli, Madurai and Coimbatore districts, and it is looked after by the Horticulturist. There are 3 Special District Agricultural Officers incharge of the scheme, one each at Vellore, Erode and Dindigul. The Horticulturist also has 2 Assistant Horticulturists working under him, one incharge of Fruit Development and the other-in-charge of Arecanut Development, each of them concentrating on areas particularly suited for the respective purpose. There is also a special officer of the grade of Assistant Horticulturist incharge of Cashew Development with headquarters at Thanjavur and a Special District Agricultural Officer for Cashew Development incharge of Cashew Plantations in East Ramanathapuram district with headquarters at Sivaganga. These two also work under the Horticulturist.

(9) SPECIAL DEPUTY DIRECTOR OF AGRICULTURE FOR COCONUT DEVELOPMENT, RAMNAD.

He is incharge of a special scheme for the raising of Coconut in the coastal areas of Ramnad. Refugees from Ceylon are also being settled in waste lands here under this scheme. He has a staff of assistants under him.

10. All the Special Officers mentioned in the previous paragraph with the exception of the State Compost Development Officer and State Marketing Officer work under the control of the Joint Director of Agriculture (Commercial Crops). The State Marketing Officer works under the Joint Director of Agriculture (Inspection and General) while the Compost Development Officer is under the Joint Director of Agriculture (Extension).

(10) AGRICULTURAL INFORMATION, PROPAGANDA AND PUBLICITY.

To give publicity to the results of research and to popularise improved agricultural practices, an Agricultural Information Unit is functioning in Madras under the control of the Joint Director of Agriculture (Extension). The unit is headed by an Agricultural Information Officer of the grade of a District Agricultural Officer. He is assisted by another officer of the rank of a District Agricultural Officer designated as Radio Agricultural Officer who arranges publicity through the medium of the Radio by means of talks, interviews with progressive farmers, short plays, etc. The information unit also publishes a monthly journal known as 'Mezhichelvam' and an annual villagers' guide-cum-calendar.

There is another Information Unit at Thanjavur exclusively for the Intensive Agricultural District Programme District. This is headed by an Information Officer of the rank of a District Agricultural Officer working under the direct control of the Joint Director of Agriculture (P.I.). Posters, pamphlets, Flip charts and other publicity materials required for the package programme are prepared by the unit.

To serve as a liaison between Research and Extension, there is an Extension Specialist at Coimbatore of the rank of a Deputy Director of Agriculture. He is assisted by four Assistant Extension Specialists. This staff looks after—

- (a) Training of undergraduate students in Agricultural Extension work.
- (b) In-service training of Departmental officers.
- (c) Agricultural Schools run by the Department for boys from agricultural families where a one year training is imparted.
- (d) Field surveys for gauging effect and success of extension work.

The Extension Specialist publishes a monthly newsletter for circulation among Departmental officers giving the results of research and answering the questions of Extension workers.

The Agricultural Schools mentioned in (c) above are 14 in number and are run in State Seed Farms. There is an instructor in each school of the grade of Upper Subordinate. There is, in addition, a lecturer of the grade of a District Agricultural Officer in Coimbatore working directly under the Extension Specialist who goes round these schools regularly and delivers lectures and supervises the training. The intention behind these schools is to give a minimum amount of agricultural training to sons of agricultural families to enable them to take to modern and scientific cultivation.

11. The Agricultural Engineering Wing of the department which is under the Joint Director of Agriculture (Engineering) is incharge of all schemes relating to Soil Conservation, Drilling, use of Improved Agricultural Implements and Land Improvement and Land Reclamation. At the district level there are two distinct categories of staff, one dealing with Soil Conservation and Land Improvement and the other dealing with all the other items of work entrusted to the Agricultural Engineering Wing. As far as Soil Conservation and Land Improvement is concerned, there are 3 Regional Agricultural Engineers, one each at Villupuram, Madurai and Coimbatore, with a total of 29 Assistant Agricultural Engineers and a number of Agricultural Engineering Supervisors and Soil Conservation Assistants under them. It is proposed to appoint one more Regional Agricultural Engineer with headquarters at Tiruchirapalli (with a consequent redistribution of jurisdiction) and 10 additional Assistant Agricultural Engineers. This staff looks after all Soil Conservation work in the plains and in the hills. All Soil Conservation work on the holdings of farmers is done on a loan basis, the actual cost of the operations less the subsidy allowed being collected from the farmers as a long term loan. In addition, special items of work like Ravine Reclamation, Reclamation of Wind Swept areas, etc. are also looked after by this wing. A staff of 5 Assistant Agricultural Engineers has also been recently sanctioned by Government for looking after maintenance of Soil Conservation work. There is a Soil Conservation Training Centre at Madurai which is under the control of an Agricultural Engineer. Here training is imparted in Soil and Water Conservation to the Agricultural Engineering Supervisors, Soil Conservation Assistants and Sub-Assistants of the Department.

The Joint Director of Agriculture (Engineering) is assisted as far as Soil Conservation is concerned, by an Agricultural Engineer (Soil Conservation) at headquarters.

12. As far as all other activities of the Agricultural Engineering Wing are concerned, there are 11 Assistant Agricultural Engineers at the field or district level who look after them. Each of these is in charge of revenue district except Kanyakumari, Nilgiris and Dharmapuri districts which are in charge of the Assistant Agricultural Engineers, Tirunelveli, Coimbatore and Salem respectively.

In South Arcot District where there are two Assistant Agricultural Engineers—one looking after sinking of Borewells and the other looking after all other Engineering activities. They look after (a) drilling of tube-wells in farmers' holdings (b) drilling of bores in existing open wells in farmers' holdings (c) deepening of existing open wells in farmers holdings (d) hiring of tractors to farmers for ploughing (e) hiring of bulldozers to farmers for reclamation of lands, (f) use of improved agricultural implements by farmers and the like. At present there is no Regional Organisation as far as this item of work is concerned; but there is a proposal

before Government to appoint three Regional Agricultural Engineers to supervise the work of the Assistant Agricultural Engineers who are dealing with these items of work. At headquarters, the Joint Director of Agriculture, in supervising the work of these Assistant Agricultural Engineers, is assisted by 2 different Agricultural Engineers, one designated as Agricultural Engineer (Drilling) and looking after all items of work relating to sinking of tube wells and deepening of wells all over the State and the other designated as Agricultural Engineer (Implements) who looks after all work relating to the use of improved agricultural implements and machinery.

13. In the Intensive Agricultural Programme in the District of Thanjavur, there is a special Crash Programme for the sinking of Filter Pilot Tube Wells. This is looked after by an Agricultural Engineer (Crash Programme), at Thanjavur specially appointed for the purpose with 3 Assistant Agricultural Engineers under him.

14. There is an Agricultural Engineering Workshop at Madras where the manufacture of hand boring sets and other such drilling tools and the repair of all agricultural engineering machinery is taken up. This is managed by an Agricultural Engineer with one Assistant Agricultural Engineer to assist him. There is an Agricultural Engineering Implements Workshop at Tiruvarur in Thanjavur district which takes up the manufacture of simple agricultural implements and also looks after the maintenance of agricultural machinery in the Intensive Agricultural District Programme District of Thanjavur. This is looked after by an Agricultural Engineer with one Assistant Agricultural Engineer to assist him. There is also a Tractor Workshop at Coimbatore which services and repairs tractors and bulldozers belonging to the Department. This is under the control of an Agricultural Engineer who has one Assistant Agricultural Engineer to assist him.

15. There is a Research, Training and Testing Centre in Coimbatore which carries on these three items of work in respect of agricultural implements. There is an Agricultural Engineer in charge of this. One Agricultural Engineer assisted by one agricultural Engineering Supervisor is also engaged on the special job of preparation of a technical hand-book on drilling.

16. In all these agricultural engineering programmes and in the Agricultural Engineering Workshop, there are Agricultural Engineering Supervisors and Foreman, their number and disposition being dependent upon the volume and nature of the work. As far as work relating to the distribution of improved agricultural implements to farmers is concerned, the Agricultural staff in the block and the gramasevaks look after these items of work also at the village level.

ANNEXURE VIII

**LIST OF VARIOUS INSTITUTIONS, RESEARCH/SUB-SECTION
FARMS (FISHERIES), MAINTAINED BY THE CENTRAL AND
STATE GOVERNMENTS.**

ANNEXURE VIII

**LIST OF VARIOUS INSTITUTIONS, RESEARCH/SUB-STATIONS
FARMS (FISHERIES), MAINTAINED BY THE CENTRAL
AND STATE GOVTS.**

Subject	Centre	State
1	2	3
ANDHRA PRADESH		
Agriculture	1. Regional Research Station, PIRRCOM, Rajendra Nagar, Hyderabad.	1. Agricultural Research Station (Warangal).
	2. All India Coordinated Rice Improvement Project, Annexe, PIRRCOM Building, Rajendra Nagar, Hyderabad.	2. Agricultural Research Station, Rajendranagar, Hyderabad.
	3. Central Tobacco Research Institute, Rajahmundry, East Godavari Distt. A.P.	3. Regional Agricultural Research Station, Rudrur, Nizamabad Distt.
	4. Cigarette Tobacco Research Sub-Station, Guntur (A.P.).	4. Agricultural Research Station, Maruteru, West Godavari Distt.
		5. Agricultural Research Station, Anakapalle, Visakhapatnam.
		6. Agricultural Research Station, Vizianagaram, Visakhapatnam Dt.
		7. Agricultural Research Station, Lam, Guntur. (Guntur Dt.).
		8. Agricultural Research Station Nellore, Nellore District.
		9. Agricultural Research Station, Nandyal, Kurnool Dt.
		10. Andhra Pradesh Agricultural University, Dilkhusha, Hyderabad.
		*11. Agricultural College, Bapatla.
		*12. Agricultural College, Rajendra Nagar.
		*13. S.V. Agricultural College, Tirupati.
Soil Conservation		1. Soil Conservation Research Station, Anantapur (Anantapur Dt.).
Marketing Laboratories.	Regional Agmark Laboratory, Guntur.	1. State Grading Laboratory, Mudanur.
		2. State Grading Laboratory Vijayawada.
		3. State Grading Laboratory Samalkot.

*State Agricultural and Veterinary Colleges, administered by the States.

1	2	3
Animal Husbandry		<ol style="list-style-type: none"> 1. A.P. Veterinary College, Tripati. *2. College of Veterinary Sciences & Animal Husbandry, Hyderabad. 3. The Veterinary Disease Investigation Laboratory, Mallapalli. 4. Disease Investigation Laboratory, Guntur.
Poultry		<ol style="list-style-type: none"> 1. Poultry Farm, Hyderabad. 2. Poultry Farm, Karim Nagar. 3. Poultry Farm, Madak. 4. Poultry Farm Mehboob Nagar. 5. Poultry Farm, Anantapur. 6. Poultry Farm, Cuddapah. 7. Poultry Farm, Chittoor, 8. Poultry Farm Nellore. 9. Poultry Farm, Guntur. 10. Poultry Farm, Krishna. 11. Poultry Farm, East Godabari. 12. Poultry Farm, Visakhapatnam. 13. Poultry Farm, Saroor Nagar. 14. Poultry Farm, Patancheru. 15. Poultry Farm, Samalkot. 16. Poultry Farm, Gannavaram. 17. Poultry Farm, Gopannapalem. 18. Poultry Farm, Muktyal. 19. Poultry Farm, Mudivarthipalem. 20. Poultry Farm, Vanvasi. 21. Poultry Farm, Hindupur. 22. Poultry Farm, Nirmal. 23. Poultry Farm, Kakinada.
Fisheries	Regional Training Centre for Inland Fisheries operatives, Hyderabad.	<ol style="list-style-type: none"> 1. Estuarine Fisheries Research Station, Kakinada. 2. Fisheries Technological Station, Kakinada.

1	2	3
Fisheries—(contd.)		3. Fresh water Biological Station, Nagarjunasagar. 4. Fresh Water Prawn Farming Station, Manthani. 5. Fishermen Training Centre, Kakinada.
ASSAM		
Agriculture	1. Potato Experimental & Trial Centre, Upper Shillong Farm, Assam. 2. Ramie Research Station, Sorbhog, Distt. Kamrup (Jute). 3. Regional Arecanut Research Station, Kahikuchi, Kamrup.	1. Rice Research Station P. O. Titabar District, Sibsagar. 2. Rice Research Station, Karimganj, P.O., Karimganj, Distt. Cachar. 3. Rice Research Station, Barpeta, P.O. Barpeta, Distt. Kamrup. 4. Rice Research Station, P.O., Upper Shillong, Distt. K & J. Hills. 5. Botanical Laboratory, P.O. Jorhat, District, Sibsagar. 6. Mycological Laboratory, P.O. Jorhat, District Sibsagar. 7. Entomological Laboratory, P.O. Jorhat, District Sibsagar. 8. Agricultural Chemistry, Laboratory, P.O., Jorhat, Distt. Sibsagar. 9. Sugarcane Research, Laboratory P.O., Jorhat, District Sibsagar. 10. Pulse & Oilseeds Research Station, P.O. Roha, District Nowgong. 11. Jute Research Station, Shillongani, P.O. Nowgong, District Nowgong. 12. Cotton Research Station, P.O. Diphu, Distt. Mikir & N.C. Hills. 13. Regional Fruit Research Station, Kahikuchi, P.O. Azara, District Kamrup. 14. Citrus Research Station, Burnihat, P.O. Burnihat, Dist. K & J Hills.

1	2	3
Agriculture—(contd.)		<p>15. Temperate Fruit Res. Station, Shillong, P.O., Azara, District Kamrup.</p> <p>16. Regional Coconut Res. Station Kahikuchi, P.O. Azara, District Kamrup.</p> <p>17. Regional Arecanut Res. Station P.O. Azara, Dist. Kamrup.</p> <p>18. Ginger Research Station, Nayabunglow, K & J Hills.</p> <p>19. Regional Potato Research Station, P.O. Upper Shillong, Dist. K & J Hills.</p> <p>20. Vegetable Research Station, Shillong, P.O. Shillong, District K & J Hills.</p> <p>21. Maize Research Station, Upper Shillong, P.O. Upper Shillong, District K & J Hills.</p> <p>22. Assam Agricultural College, Jorhat, District Sibsagar.</p>
Marketing Laboratories		<p>1. State Grading Laboratory, Gauhati.</p>
Animal Husbandary		<p>*1. Assam Veterinary College & Livestock Research Station Khanapara, Gauhati.</p>
Poultry		<p>1. Poultry Farm, Khanapara.</p> <p>2. Poultry Farm, Siligoorie.</p> <p>3. Poultry Farm, Khankar.</p> <p>4. Poultry Farm, Tura.</p> <p>5. Poultry Farm, Barhampur.</p> <p>6. Poultry Farm, Bhoi.</p> <p>7. Poultry Farm, Barbbeta.</p> <p>8. Poultry Farm, Tezpur.</p> <p>9. Poultry Farm, Joysaza.</p>
Fisheries		<p>1. Fisheries Research Station, Joysagar.</p> <p>2. Fisheries Training Institute, Joysagar.</p>

1	2	3
BIHAR		
Agriculture	<ol style="list-style-type: none"> 1. Botanical Sub-Station, Pusa, District Darbangha. 2. Central Potato Research Station P.O. Sahay Nagar, Patna. 3. Indian Lac Research Institute, P.O. Namkum, Ranchi. 4. Hookah & Chewing Tobacco Research Station, Pusa, Bihar. 	<ol style="list-style-type: none"> 1. Sugarcane Research Institute, Pusa. 2. Field Experimental Service Station, Patna. 3. Regional Agricultural Research Institute, Patna. 4. Regional Agricultural Research Station, Sabour. 5. Regional Agricultural Research Station, Kanke. 6. Regional Agricultural Research Station, Dholi. 7. Irrigation Research Station, Vikramgang. 8. Irrigation Research Station, Madhipura. 9. Irrigation Research Station, Khurasela. 10. Irrigation Research Station, Markan. 11. Jute Research Station, Katihar. 12. Citrus Research Station, Chianki. 13. Banana Research Station, Hazaripur. *14. Govt. Agricultural College, Sabour. *15. Ranchi Agricultural College, Konka. *16. Tirhut College of Agriculture, Dholi, Distt. Muzaffarpur.
Soil Conservation	Damodar Valley Corporation's Centre, Hazaribagh.	<ol style="list-style-type: none"> 1. Soil Conservation Research Station, Hill Area, Hazaribagh. 2. Soil Conservation Research Station, Araria.
Marketing Laboratories	Regional Agmark Laboratory, Patna (To be opened).	State Grading Laboratory, Darbhanga.
Animal Husbandry		1. Livestock Research Station, Patna.

1	2	3
Animal Husbandry (<i>Contd.</i>)		*2. Bihar Veterinary College, Patna. *3. Ranchi College of Veterinary Science and Animal Husbandry, Kanke.
Poultry		1. Poultry Farm, Patna. 2. Poultry Farm, Muzaffarpur. 3. Poultry Farm, Pusa. 4. Poultry Farm, Saharasa. 5. Poultry Farm, Purnea. 6. Poultry Farm, Katihar. 7. Poultry Farm, Jama. 8. Poultry Farm, Jamui. 9. Poultry Farm, Gaya. 10. Poultry Farm, Daltonganj. 11. Poultry Farm, Bokaru. 12. Poultry Farm, Dhanbad. 13. Poultry Farm, Ranchi. 14. Poultry Farm, Khurthi. 15. Poultry Farm, Chaibasa. 16. Poultry Farm, Neterhat.
Fisheries		1. Fisheries Training Centre, Patna.
GUJARAT		
Agriculture		1. Agricultural College & Research Station, Junagarh. 2. Agricultural College & Research Station, Navsari. 3. Dry Farming Research Station, Rajkot. 4. Cotton Agricultural Research Station, Surat. 5. Paddy Agricultural Research Station, Nawagam. 6. Millet Agricultural Research Station, Jamnagar. 7. Horticulture Agricultural Station, Junagarh.

1	2	3	
Agriculture (<i>Contd.</i>)		8. Sugar cane Research Station, Kodinar.	
		9. Hill Millets Agricultural Research Station, Waghai.	
		10. Maize Research Station, Godhra.	
		11. Cigarette Tobacco Research Station, Vijapur.	
		12. Oilseeds Agricultural Research Station, Junagarh.	
		*13. College of Agriculture, Junagarh, Gujarat.	
		*14. N.M. College of Agriculture, Navsari.	
	Marketing Laboratories.	Regional Agmark Laboratory, Rajkot.	1. State Grading Laboratory, Bhavnagar.
			2. State Grading Laboratory, Veraval.
			3. State Grading Laboratory, Patau.
			4. State Grading Laboratory, Porbander.
			5. State Grading Laboratory, Khambaha.
	Animal Husbandry		1. Govt. College of Veterinary Service & Animal Husbandry, Anand.
	Poultry		1. Poultry Farm, Junagarh.
		2. Poultry Farm, Baroda.	
		3. Poultry Farm, Dohad.	
		4. Poultry Farm, Ahma.	
		5. Poultry Farm, Rajkot.	
Fisheries		1. Marine Biological Laboratory, Okha.	
		2. Pearl Fisheries Research & Investigation Scheme, Jamnagar.	
		3. Fisheries Research Laboratory, Ahmedabad.	
		4. Fishermen Training Centre, Veraval.	

1	2	3
Fisheries (<i>Contd.</i>)		5. Fishermen Training Centre, Kolak.
		6. Fishermen Training Centre, Ahmedabad.

JAMMU & KASHMIR

Agriculture		1. Provincial Experimental Farm, Shalamar.
		2. Paddy Experimental Farm, Khudwani.
		3. Provincial Experimental Farm, Galsamandar.
		*4. Govt. Agricultural College, Jammu.
		*5. Govt. Agricultural College, Sore, J & K.
Animal Husbandry		1. Govt. Sheep Breeding and Research Farm, Banihal.
		2. Veterinary Disease Investigation Section, Srinagar.
Poultry		1. Poultry Farm, Cheshma Shahi.
		2. Poultry Farm, Belichalan.
Fisheries		1. Fisheries Training School, Kashmir.

KERALA

Agriculture	1. Central Coconut Research Station, Kayangulam, P.O. Ochira.	1. Agricultural College & Research Institute, Vellayani, Trivandrum.
	2. Central Coconut Research Station, Kasargod, P.O. Kudlu Cannanore District, Kerala.	2. Central Rice Research Station, Pattambi.
	3. Regional Arecanut Research Station, Palode, Trivandrum.	3. Regional Rice Research Station, Kayamkulam.
	4. Regional Arecanut Research Station, Peechi, Trichur.	4. Regional Rice Research Station, Mannuthy.
	5. Central Tuber Crops Research Institute, Trivandrum, Kerala.	5. Regional Rice Research Station, Moncompu.
		6. Rice Research Sub-Station, Vyttila.
		7. Rice Research Sub-Station, Kottarakara.

1	2	3	
Agriculture (<i>Contd.</i>)		8. Agronomic Research Station, Chalakudy.	
		9. Agronomic Research Station, Coyalannam.	
		10. Model Agronomic Research Centre, Karamana.	
		11. Central Coconut Research Station, Nileshwar.	
		12. Regional Coconut Research Station, Kumarakam.	
		13. Regional Coconut Research Station, Balaramapuram.	
		14. Banana & Pineapple Research Station, Kannara, Trichur.	
		15. Cardamom Research Station, Pampadampara.	
		16. Cashew Research Station, Anakayam.	
		17. Pepper Research Station, Panniyur, Taliparamba.	
		18. Agricultural Research Station, Ambalavayal.	
		19. Lemongrass Research Station, Adakkali.	
		20. Oil Seed Research Station, Kayamkulam.	
		21. Oil Seed Research Station, Eruthampathy.	
		22. Research Testing & Training Centre, Vellayani.	
		*23. Agricultural College and Research Institute, Trivandrum.	
	Marketing Labora- tories.	Regional Agmark Laboratory, Cochin.	1. State Grading Laboratory, Alleppey.
			2. State Grading Laboratory, Quilon.
	Animal Husbandry		1. Kerala Veterinary College and Research Institute, Mannuthi, Kerala.
	Poultry		1. Poultry Farm, Mudayad.
			2. Poultry Farm, Malampuzha.
			3. Poultry Farm, Olukkara.

1	2	3
Poultry (<i>Contd.</i>)		4. Poultry Farm, Mannarcad. 5. Poultry Farm, Kurupuzha. 6. Poultry Farm, Khunu. 7. Poultry Farm, Chathanagalam. 8. Poultry Farm, Kodapanakunnu. 9. Poultry Farm, Chengannur.
Fisheries	1. Central Institute of Fisheries Technology, Ernakulam 2. Indo-Norwegian, Project, Ernakulam.	1. Fisheries Technological Station, Calicut. 2. Marine Biological Station West-Hill. 3. Marine Survey Station, Vizhinjain. 4. Estuarine Research Station, Ernakulam. 5. Lime Shell Research Station, Kumarakam. 6. Fisheries Research Station, Edathva. 7. Fisheries Research Station, Pannivalichira. 8. Fishermen Training Centre, Vizhanjam. 9. Fishermen Training Centre, Ernakulam. 10. Fishermen Training Centre, Beypore. 11. Fishermen Training Centre, Cannanore. 12. Fishermen Training Centre, Quilon.

MADHYA PRADESH

Agriculture	Wheat Breeding Sub-Station, Indore.	1. The M.P. Agricultural Research Institute, Jabalpur. 2. Agricultural Research Station & Experimental Farm, Bilaspur. 3. Agricultural Research Station & Experimental Farm, Waraseoni. 4. Agricultural Research Station, Chhindwara.
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1	2	3
Agriculture (<i>Contd.</i>)		5. Agricultural Research Station, Khandwa.
		6. Agricultural Research Station, Kargoni.
		7. Agricultural Research Station, Badnawad.
		8. Agricultural Research Station, Powarkheda.
		9. Agricultural Research Station, Mandsaur.
		10. Agricultural Research Station, Bagwai.
		11. Agricultural Research Sub-Station, Jagdalpur.
		12. Agricultural Research Sub-Station, Durg.
		13. Agricultural Research Sub-Station, Dindori.
		14. Agricultural Research Sub-Station, Seoni.
		15. Agricultural Research Sub-Station, Betul.
		16. Agricultural Research Sub-Station, Ujjain.
		17. Agricultural Research Sub-Station, Shapur.
		18. Agricultural Research Sub-Station, Jaora.
		19. Agricultural Research Sub-Station, Abevillagain.
		20. Agricultural Research Sub-Station, Naogone.
		21. Agricultural Research Sub-Station, Reorca.
		22. Regional Agricultural Research Institute, Raipur.
		23. Regional Agricultural Research Institute, Rewa.
		24. Regional Agricultural Research Institute, Sehore.
		25. Regional Agricultural Research Institute, Indore.
		26. Regional Agricultural Research Institute, Gwalior.

1	2	3
Agriculture (<i>Contd.</i>)		27. Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur. *28. College of Agriculture, Jabalpur. *29. College of Agriculture, Gwalior. *30. P.A.K. Agricultural College, Sehore. *31. Govt. Agricultural College Rewa. *32. College of Agriculture, Indore. *33. College of Agriculture, Raipur.
Animal Husbandry		*1. College of Veterinary Service & Animal Husbandry, Jabalpur. 2. Govt. Vaccine & Research Institute, Gwalior. *3. College of Veterinary Service and Animal Husbandry-cum-Livestock Research Institute, Mhow.
Poultry		1. Poultry Farm, Bhopal. 2. Poultry Farm, Durg. 3. Poultry Farm, Chhindwara.
Fisheries		1. Fisheries Training School, Nowganj.
MADRAS		
Agriculture	1. Sugarcane Breeding Institute, Coimbatore. 2. Wheat Breeding Sub-Station, Wellington. 3. Plant Pathological Research Sub-Station, Wellington. 4. Regional Research Centre, Pirrcom, Lawley Road, Coimbatore. 5. Potato Experimental & Trial Centrel, Fernhill, P.O. The Nilgiris, Ootacamand.	1. Rice Research Institute, Coimbatore. 2. Rice Research Station, Aduthurai. 3. Regional Research Station, Koilpatti. 4. Regional Research Station, Tindivanam. 5. Sugarcane Research Station, Cuddalore. 6. Fruit Research Station, Periakulam.

1	2	3
Agriculture (<i>Contd.</i>)	6. Cigar & Cheroot Tobacco Research Station, Vedasandur.	7. Rice Research Station, Tirukkuppam. 8. Agricultural Research Station, Bhavanisagar. 9. Agricultural Research Station, Polur. 10. Agricultural Research Station, Nanjanad. *11. Agricultural College & Research Institute, Coimbatore. 12. Agricultural Research Station, Parambikulam. 13. Rice Research Station, Ambasamudram. 14. Fruit Research Station, Kallar. 15. Fruit Research Station, Burliar. 16. Pomological Station, Coonoor. 17. Govt. Botanic Gardens, Ooty. 18. Bryant Park, Kodaikanal. 19. Sim's Park, Coonoor.
Soil Conservation	Soil Conservation Research Demonstration & Training Centre, Ootacamund.	1. Soil Conservation Centre, Madurai.
Marketing Laboratories.	Regional Agmark Laboratory, Madras.	1. State Grading Laboratory, Erode. 2. State Grading Laboratory, Karur. 3. State Grading Laboratory, Salem. 4. State Grading Laboratory, Tirunelveli. 5. State Grading Laboratory, Virudhunagar. 6. State Grading Laboratory, Madras. 7. State Grading Laboratory, Madurai. 8. State Grading Laboratory, Coimbatore. 9. State Grading Laboratory, Villupuram.

1	2	3
Animal Husbandry	Central Sheep Research Sub-Station, P.O. Mannavanur, Distt. Madurai.	1. Livestock Research Station, Hosur. 2. Livestock Research Station, Chettinad. 3. Institute of Veterinary Preventive Medicine, Ranipet. 4. Madras Veterinary College, Madras.
Poultry Farm		1. Poultry Farm, Madras. 2. Poultry Farm, Hosur. 3. Poultry Farm, Orathanad. 4. Poultry Farm, Ramanathapuram. 5. Poultry Research Station, Teynampet, Madras.
Fisheries	Central Marine Fisheries Research Institute, Mandapam, Camp.	1. Fresh Water Biology Station, Bhavanisagar. 2. Up Land Fishery Research Unit, Ooty. 3. Public Health Fisheries Research Unit, Chetpet. 4. Brackish Water Fisheries Research Unit, Adayar. 5. Marine Biological Station, Cape Comorin. 6. Marine Biological Station, Ennore. 7. Marine Biological Station, Krusdai, Island. 8. Marine Biological Station, Tuticorin. 9. Fisheries Technological Station, Tuticorin. 10. Fisheries Technological Station, Cape Comorin. 11. Fisheries Technological Station, Nagapattinam. 12. Fishermen Training Centre and Staff Training Institute, Madras. 13. Fishermen Training Centre, Golachel.

1	2	3
Fisheries (<i>Contd.</i>)		14. Fishermen Training Centre, Tuticorin. 15. Fishermen Training Centre, Mandapam. 16. Fishermen Training Centre, Nagapattinam.

MAHARASHTRA

Agriculture	1. Plant Research Station, Agricultural College Estate, Poona. 2. Plant Introduction Sub-Station, Chaitanya Building, P.O. Camp, Amravati. 3. Potato Experimental & Trial Centre, Khed-Poona. 4. Technological Research Laboratory (Cotton) Adenwala Road, Matunga, Bombay-19.	1. Rice Research Station, Karjat. 2. Regional Rice Research Station, Sindewahi. 3. Regional Rice Research Station, Shirgaon. 4. Rice Research Sub-Station, Panwal. 5. Rice Research Sub-Station, Tuljapur. 6. Wheat Research Station, Niphad. 7. Regional Wheat Research Station, Washim. 8. Regional Wheat Research Station, Bandapur. 9. Millets & Pulses Research Station, Parbhani. 10. Regional Millets & Pulses Research Station, Vijapur. 11. Regional Millets & Pulses Research Station, Digraj. 12. Regional Millets & Pulses Research Station, Amravati. 13. Millets & Pulses Research Sub-Station, Marodi. 14. Millets & Pulses Research Station, Saidapur. 15. Cotton Research Station, Nanded. 16. Regional Cotton Research Station, Achalpur. 17. Regional Cotton Research Station, Kopargaon. 18. Regional Cotton Research Station, Akola.
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1	2	3
Agriculture (<i>Contd.</i>)		19. Cotton Research Sub-Station, Nawapur. 20. Cotton Research Sub-Station, Digraj. 21. Cotton Research Sub-Station, Ambejagai. 22. Sugarcane Research Station, Padegaon. 23. Regional Sugarcane Research Station, Kolhapur. 24. Regional Sugarcane Research Station, Marathwada. 25. Oil Seeds Research Station, Jalgaon. 26. Regional Oil Seeds Research Station, Warora. 27. Regional Oil Seeds Research Station, Akola. 28. Oil Seeds Research Sub-Station, Digraj. 29. Oil Seeds Research Sub-Station, Buldhana. 30. Vegetable Research Station, Nasik. 31. Agronomy Research Station, Poona. 32. Soils Science Research Station, Sholapur. *33. College of Agriculture, Poona. *34. College of Agriculture, Nagpur. *35. College of Agriculture, Akola. *36. College of Agriculture, Dhulia. *37. Govt. Agricultural College, Parbhani. *38. Govt. Agricultural College, Kolhapur. *39. College of Agriculture, Dapol.
Horticulture		1. Horticulture Research Station, Katol. 2. Horticulture Research Station, Poona.

1	2	3
Marketing Laboratory.	1. Central Agmark Laboratory, Nagpur. 2. Regional Agmark Laboratory, Bombay.	1. State Grading Laboratory, Arvi. 2. State Grading Laboratory, Sholapur.
Animal Husbandry		*1. Bombay Veterinary College, Bombay. *2. Nagpur Veterinary College. *3. Regional Animal Nutrition Centre, Anand. 4. Sheep & Wool Research Laboratory, Poona.
Dairying	Western Regional Station, National Dairy Research Institute, Aarey Milk Colony, Bombay.	1. Dairy Science Institute, Aarey Milk Colony, Bombay.
Poultry	Regional Poultry Farm, Bombay.	1. Poultry Farm, Kurdwadi. 2. Poultry Farm, Aurangabad. 3. Poultry Farm, Kosbad. 4. Poultry Farm, Poona. 5. Poultry Farm, Nagpur. 6. Poultry Farm, Kolhapur (2) 7. Poultry Farm, Sholapur. 8. Poultry Farm, Kopargaon. 9. Poultry Farm, Dhulia.
Fisheries		1. Taraporevala Marine Biological Research Station, Bombay. 2. Marine Biological Station, Ratnagiri. 3. Fisheries Technological Laboratory, Bombay. 4. Fishereis Training Centre, Versova. 5. Fisheries Training Centre, Ratnagiri. 6. Fisheries Training Centre, Bassein. 7. Fisheries Training Centre, Ali-bag.

1	2	3
MYSORE		
Agriculture	1. Central Arecanut Research Station, Vittal, P.O. South Kanara Distt. (Mysore State). 2. Regional Arecanut Research Station Hirehalli, Tumkur Dt. 3. Tobacco Research Station, Hunsur (Mysore).	1. Agricultural Research Institute, Dharwar. 2. Agricultural Research Institute, Bijapur. 3. Agricultural Research Institute, Nagenahalli. 4. Agricultural Research Institute, Hebbal. 5. Agricultural Research Institute, Mandya. 6. Agricultural Research Institute, Raichur. 7. Agricultural Research Station, Annigeri. 8. Agricultural Research Station, Bagalkot. 9. Agricultural Research Station, Dharwar. 10. Agricultural Research Station, Gangavathi. 11. Agricultural Research Station, Hiriyyur. 12. Agricultural Research Station, Mugad. 13. Agricultural Research Station, Renebennur. 14. Agricultural Research Station, Sirsi. 15. Agricultural Research Station, Nipani. 16. Agricultural Research Station, Arbhari. 17. Agricultural Research Station, Bailhongal. 18. Agricultural Research Station, Gadag. 19. Agricultural Research Station, Hagari. 20. Agricultural Research Station, Mangalore. 21. Agricultural Research Station, Nargund.

1	2	3
Agriculture (<i>Contd.</i>)		<p>22. Agricultural Research Station, Sankleshwar.</p> <p>23. Agricultural Research Station, Siriguppa.</p> <p>24. Agricultural Farm, Alnawar. Experimental</p> <p>25. Agricultural Farm, Bidar. Experimental</p> <p>26. Agricultural Farm, Ponnampet. Experimental</p> <p>27. Agricultural Farm, Ankola. Experimental</p> <p>28. Agricultural Farm, Mercara. Experimental</p> <p>29. Agricultural Farm, Saundatti. Experimental</p> <p>30. College of Agriculture & Research Institute, Dharwar, Mysore.</p> <p>*31. Agricultural College, Hebbal, Bangalore.</p> <p>32. University of Agricultural Sciences, Bangalore.</p>
Soil Conservation	1. Soil Conservation Research Demonstration & Training Centre, Bellary.	
Marketing Laboratory.	Regional Agmark Laboratory, Bangalore (To be opened).	<p>1. State Grading Laboratory, Belgaum.</p> <p>2. State Grading Laboratory, Sankleshwar.</p> <p>3. State Grading Laboratory, Baghalkot.</p> <p>4. State Grading Laboratory, Bidar.</p> <p>5. State Grading Laboratory, Mercara.</p> <p>6. State Grading Laboratory, Mandya.</p> <p>7. State Grading Laboratory, Sirsa.</p>
Animal Husbandry		1. Mysore Veterinary College, Hebbal, Bangalore, Mysore.

1	2	3
Animal Husbandry (<i>Contd.</i>)		2. Composite Livestock Farm, and Research Station, Hus-sarghatta. 3. Mysore Serum Institute, Hebbal.
Dairying	Southern Regional Station, National Dairy Research Institute, Adugodi, Bangalore.	
Poultry	Regional Poultry Farm, Ban-galore.	1. Poultry Farm, Muirabad. 2. Poultry Farm, Gangavati. 3. Poultry Farm, Bajpe. 4. Poultry Farm, Muddidri. 5. Poultry Farm, Kaila. 6. Poultry Farm, Sultra. 7. Poultry Farm, Ponnampet. 8. Poultry Farm, Murnad. 9. Poultry Farm, Ramanagram. 10. Poultry Farm, Bangalore. 11. Poultry Farm, Bobeneusipera. 12. Poultry Farm, Kudige. 13. Poultry Farm, Byndoor. 14. Poultry Farm, Holenarasipur.
Fisheries		1. Fisheries Technological Research Station, Mangalore. 2. Inland Fisheries Research Station, Bangalore. 3. Fishermen Training Centre, Mangalore. 4. Fishermen Training Centre, Gangoli. 5. Fishermen Training Centre, Honavar. 6. Fishermen Training Centre, Karwar. 7. In-Service Training Centre, Bangalore. 8. Marine Products Processing Training, Mangalore.

1	2	3
ORISSA		
Agriculture	1. Central Rice Research Station, Cuttack. 2. Sisal Research Station, Bamra, Distt. Sambalpur (Jute).	1. State Research Station, Bhubaneswar. 2. Regional Coconut Research Station, Sakhigopal. 3. Rice Research Sub-Station, Berhampur. 4. Rice Research Sub-Station, Jey-pore. 5. Citrus Fruit Research Station, Angul. 6. Agricultural Research Station, Sambalpur. 7. Turmeric Research Station, Udayagiri. 8. Orissa University of Agriculture & Technology Bhubaneshwar, Orissa. *9. Utkal Krishi Mahavidyalaya, Bhubneswar.
Soil Conservation		Soil Conservation Research Demonstration & Training Centre, Bhubaneswar.
Animal Husbandry		*1. College of Veterinary Science & Animal Husbandry, Bhubaneswar.
Poultry Farm	1. Regional Poultry Farm, Bhubaneswar.	1. Poultry Farm, Angula. 2. Poultry Farm, Sundargarh. 3. Poultry Farm, Koraput. 4. Poultry Farm, Bolangir. 5. Poultry Farm, Bhaj Nagar.
Fisheries		1. Biological Research Station, Chilka Lake, Balugaon. 2. Biological Research Station, Kausalyaganga. 3. Technical Research Station, Balugaon. 4. Inland Fisheries Training Centre, Kausalyaganga. 5. Marine Fisheries Training Centre, Chandlali.

1	2	3
PUNJAB (Erstwhile)		
Agriculture	Potato Experimental & Trial Centre, P.B. No. 4, Jullundur City.	<ol style="list-style-type: none"> 1. Agricultural Research Station, Ludhiana. 2. Agricultural Research Station, Hissar. 3. Agricultural Research Station, Gurdaspur. 4. Agricultural Research Station, Abhor. 5. Agricultural Research Station, Kapurthala. 6. Agricultural Research Station, Jullundur. 7. Agricultural Research Station, Gurgaon. 8. Agricultural Research Sub-Station, Kheri. 9. Agricultural Research Sub-Station, Samrala. 10. Agricultural Research Sub-Station, Karnal. 11. Agricultural Research Sub-Station, Sirsa. 12. Agricultural Research Sub-Station, Nasirpur. 13. Agricultural Research Station, Jagadhri. *14. Punjab Agricultural University, Ludhiana. *15. College of Agriculture, Hissar. *16. Agricultural Engineering College, Ludhiana.
Horticulture		<ol style="list-style-type: none"> 1. Horticultural Research Station, Gurdaspur. 2. Horticultural Research Station, Abohar. 3. Horticultural Research Station, Bahadurgarh.
Soil Conservation		Soil Conservation Research & Training Centre, Pinjore.

1	2	3
Marketing Laboratories.		State Grading Laboratory, Narnaul.
Animal Husbandry		* College of Veterinary Science & Animal Husbandry, Hissar.
Dairying	National Dairy Research Institute, Karnal.	
Poultry		<ol style="list-style-type: none"> 1. Poultry Farm, Gurdaspur. 2. Poultry Farm, Jullundur. 3. Poultry Farm, Ludhiana. 4. Poultry Farm, Maler Kotla. 5. Poultry Farm, Nabha. 6. Poultry Farm, Bhatinda. 7. Poultry Farm, Patiala. 8. Poultry Farm, Ambala.
Fisheries		<ol style="list-style-type: none"> 1. Fisheries Research Station, Sangrur. 2. Fisheries Research Station, Chandigarh. 3. Fisheries Research Station, Neilla.

RAJASTHAN

Agriculture	1. Central Arid Zone Research Institute, Jodhpur.	1. Agricultural Research Station, Durgapur, Jaipur.
	2. Plant Introduction Sub-Station, Central Arid Zone, Research Institute, Jodhpur—Rajasthan.	2. Regional Agricultural Research Station, Kotah.
	3. Regional Research Sub-Station, PIRRCOM Tabiji Farm, P.O. Tabiji-Ajmer.	3. Regional Agricultural Research Station, Bansware.
		4. Regional Agricultural Research Station, Sriganganagar.
		5. Regional Agricultural Research Station, Jodhpur.
		6. Regional Agricultural Research Station, Ajmer.
		7. Botanical Sub-Station, Bassi.
		8. Botanical Sub-Station, Mandor.

1	2	3
Agriculture (<i>Contd.</i>)	.	9. Governmental Experimental Farm, Makera. 10. Governmental Experimental Farm, Tabiji. 11. Universtity of Udaipur, Rajasthan. *12. College of Agriculture, Udaipur. *13. College of Agriculture, Jobner. *14. College of Agriculture Engineering, Udaipur.
Soil Conservation	Soil Conservation Research Demonstration & Training Centre, Kota.	
Marketing Laboratories.		1. State Grading Laboratory, Jaipur. 2. State Grading Laboratory, Alwar. 3. State Grading Laboratory Jodhpur.
Animal Husbandry	Central Sheep & Wool Research Institute, Malpura.	1. Disease (Veterinary) Investigation Laboratory, Bikaner. 2. Pathological Laboratory (Veterinary), Jaipur. *3. College of Veterinary & Animal Sciences, Bikaner.
Poultry		1. Poultry Farm, Jaipur. 2. Poultry Farm, Udaipur. 3. Poultry Farm, Ajmer. 4. Poultry Farm, Jodhpur. 5. Poultry Farm, Tonk. 6. Poultry Farm, Alwar.
Fisheries		Fisheries Training School, Udaipur.

UTTAR PRADESH

Agriculture	1. Indian Institute of Sugarcane Research, Rae Bareli Road, Lucknow.	1. Principal Research Station of the State, Kanpur.
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1	2	3
Agriculture (<i>Contd.</i>)	2. Wheat Breeding Sub-Station, Bhowai, Distt. Nainital.	2. Regional Research Stations, Meerut.
		3. Regional Research Station, Hardoi.
	3. Potato Experimental & Trial Centre, Babugarh, Distt. Meerut.	4. Regional Research Station, Varanasi.
	4. Regional Research Centre, PIRRCOM, Kalianpur, Kanpur.	5. Regional Research Station, Nawabganj.
	5. Central Potato Research Station, Muketeswar (Kumaon) Distt. Nainital.	6. Regional Research Station, Amrukh.
	6. Indian Grassland & Fodder Research Institute, Jhansi.	7. Cotton Research Station, Bulandshahr.
	7. Sunnhemp Research Station, Pratapgarh.	8. Tobacco Research Station, Saraimiran.
		9. Paddy Research Station, Masodha.
		10. Flood Resistant Paddy Research Station, Bahraich.
		11. Sugarcane Research Station, Shahjahanpur.
		12. Sugarcane Research Station, Gorakhpur.
		13. Sugarcane Research Station, Muzaffarnagar.
		14. Sugarcane Research Station, Gola Gokaran Nath.
		15. Research Station on Plant Physiology, Almora.
		16. Jute Research Station, Bahraich.
		17. Cotton Research Sub-Station, Raya (Mathura).
		18. Paddy Research Sub-Station, Nagina (Bijnor).
		19. Paddy Research Sub-Station, Bansdih (Ballia).
		20. Paddy Research Sub-Station, Majhera (Nainital).
		21. Paddy Research Sub-Station, Kunraghat (Gorakhpur)
		22. Paddy Research Sub-Station, Tisui (Mirzapur).

1	2	3
Agriculture (<i>Contd.</i>)		23. Paddy Research Sub-Station, Balchandpur (Bahraich). 24. Regional Agricultural Sub-Station, Rudrapur. 25. Regional Agricultural Sub-Station, Majhera. 26. Regional Agricultural Sub-Station, Bharari (Jhansi). 27. U.P. Agricultural University, Pantnagar. *28. Government Agricultural College, Kanpur. *29. Agricultural Engineering College, Pantnagar. *30. College of Agriculture, Pantnagar.
Horticulture		1. Horticultural Research Station, Saharanpur. 2. Horticultural Research Station, Basti.
Soil Conservation	Soil Conservation Research Demonstration & Training Centre, Dehradun.	1. Regional Soil Laboratory, Aligarh. 2. Regional Soil Laboratory, Kanpur. 3. Regional Soil Laboratory, Varanasi. 4. Regional Soil Laboratory, Rudrapur. 5. Regional Soil Laboratory, Jhansi. 6. Regional Soil Laboratory, Nainital. 7. Soil Conservation Research Training Centre, Rehmankhera, (Lucknow). 8. Soil Conservation Research Training Centre, Majkhali (Almora). 9. Soil Conservation Research Training Centre, Mauranipur (Jhansi).
Marketing Laboratories	1. Regional Agmark Laboratory, Kanpur.	1. State Grading Laboratory, Lucknow.

1	2	3
Marketing Laboratories (Contd.)	2. Regional Agmark Saibabad (to be opened shortly.)	2. State Grading Laboratory, Haldwani. 3. State Grading Laboratory, Meerut. 4. State Grading Laboratory, Varanasi. 5. State Grading Laboratory, Agra.
Animal Husbandry	1. Indian Veterinary Research Institute, Izatnagar. 2. Indian Veterinary Research Institute, Mukteswar.	*1. U.P. College of Veterinary Science & Animal Husbandry, Mathura. 2. Livestock Research Station, Mathura.
Poultry		1. Poultry Farm, Dehradun. 2. Poultry Farm, Meerut. 3. Poultry Farm, Moradabad. 4. Poultry Farm, Nainital. 5. Poultry Farm, Mathura. 6. Poultry Farm, Khere. 7. Poultry Farm, Lucknow. 8. Poultry Farm, Gonda. 9. Poultry Farm, Ghaziabad. 10. Poultry Farm, Azamgarh.
Fisheries	Regional Training Centre for Inland Fisheries, Agra.	1. In-Service Fisheries Training Centre, Kathuo Tal, Lucknow District. 2. Fisheries Training Centre, Gujrat, Jaunpur District.

WEST BENGAL

Agriculture	1. Plant Virus Research Sub-Station, Kalimpong, Darjeeling, (W.B.). 2. Wart Testing Station Fairholm, Belombre Road, Darjeeling, (West Bengal). 3. Central Saline Rice Research Station Port Canning, 24-Paraganas, W.B.	1. State Agricultural Research Institute, 230, Netaji Subhas Bose Road, Calcutta-40. 2. State Agricultural Research Institute, 238, Netaji Subhas Road, Calcutta-40. 3. Rice Research Station, Chinsurah, Distt. Hooghly. 4. Banana Research Station, Chinsurah, Distt. Hooghly.
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1	2	3
Agriculture (<i>Contd.</i>)	4. Technological Research Laboratory (Jute), Tollygunge, 12, Regent Park, Calcutta -40.	5. Wheat Research Station, Kalyani, Distt. Nadia.
	5. Jute Agricultural Research Institute, Nilgunj Bazar, P.O., Barrackpore.	6. Maize Research Centre, State Agricultural Farm, Kalimpong, Distt. Darjeeling.
	6. Regional Arecanut Research Station, Mohitnagar, Jalpaiguri.	7. Oilseeds Research Station, Berhampore, Murshidabad.
	7. Wrapper & Hookah Tobacco Research Station, Dinhat (West Bengal).	8. Potato Experimental Station, Bhanjang, Distt. Darjeeling.
		9. Potato Multiplication Farm, Rangbull, Distt. Darjeeling.
		10. Salt Resistant Paddy Research Station, Canning, Distt. 24, Parganas.
		11. Flood Resistant Paddy Research Station, Satui, Distt. Murshidabad.
		12. Drought Resistant Paddy Research Station, Hatwara, Distt. Purulia.
		13. Zonal Station for Research on Hill Paddy, Kalimpong, Distt. Darjeeling.
		14. Rice Research Sub-Station, Bankura, Distt. Bankura.
		15. Mango Research Station, Malda, Distt. Malda.
		16. Pineapple Research Station, Salboni, P.O. Sukhna, Dist. Darjeeling.
		17. Sugarcane Research Station, Bamanganga, Plassey, Distt. Nadia.
		18. Vegetable Research Station, Kalimpong, Distt. Darjeeling.
		19. University of Kalyani, Distt. Nadia, W.B.
		*20. Birla College of Agriculture, Hanrighate.
Horticulture		State Horticultural Research Station, Krishnagar, Nadia.
Soil Conservation		Soil Conservation Research Station, Midnapore, Distt. Midnapore.

1	2	3
Marketing Laboratory	1. Regional Agmark Laboratory, Calcutta.	1. State Grading Laboratory, Midnapore. 2. State Grading Laboratory, Howrah.
Animal Husbandry		1. West Bengal Institute of Animal Husbandry and Dairying, Haringhata. *2. Bengal Veterinary College, Belgachia, Calcutta. 3. Livestock Research Station, Haringhata. *4. College of Animal Sciences, Kalyani.
Dairying	Eastern Regional Station, National Dairy Research Institute, Kalyani, University Campus, Kalyani (W.B.).	
Poultry		1. Poultry Farm, Darjeeling. 2. Poultry Farm, Jalpaiguri. 3. Poultry Farm, Burdwan. 4. Poultry Farm, Midnapur. 5. Poultry Farm, Nadia. 6. Poultry Farm, 24-Parganas. 7. Poultry Farm, Tollyganj. 8. Poultry Farm, Ranaghat. 9. Poultry Farm, Mohtinagar. 10. Poultry Farm, Kalimpong. 11. Poultry Farm, Gobardanga. 12. Poultry Farm, Durgapur.
Fisheries	1. Central Inland Fisheries Research Institute, Barrackpore, Calcutta. 2. Training School, Central Inland Fisheries Research Institute, Barrackpore.	Fisheries Research Station, Kalyani.

1	2	3
DELHI		
Agriculture	Institute of Agricultural Research Statistics, Library Avenue, New Delhi-12.	
Poultry	Regional Poultry Farm, Delhi. (Administered by Delhi Admn.)	
Fisheries	Fisheries	Research Station, Okhla.
HIMACHAL PRADESH		
Agriculture	<ol style="list-style-type: none"> 1. Wheat Breeding Station, Tuti-kandi, Simla. 2. Central Vegetable Breeding Sub-Station, Katrain, (Kulu Valley) H.P. 3. Plant Introduction Sub-Station, Phagli, Simla, H.P. 4. Plant Pathological Research Station, Flowerdale, Simla-2. 5. Central Potato Research Institute, Simla-1. 6. Potato Breeding & Certification Station, Kufri/Phagu, Simla. 	<ol style="list-style-type: none"> 1. Agricultural Research Station, Dhaula Kuan. 2. Agricultural Research Station, Keylong. 3. Agricultural Research Station, Nagrota. 4. Agricultural Research Station, Palampur. 5. Agricultural Research Station, Kulu. 6. Agricultural Research Station, Bajaura. 7. Agricultural Research Station, Katrain. *8. Himachal Agricultural College, Solan.
Horticulture		<ol style="list-style-type: none"> 1. Horticultural Research Station, Mashobra. 2. Horticultural Research Station, Chini. 3. Horticultural Research Station, Kandaghat. 4. Horticultural Research Station, Katrain (Kulu)
Marketing Laboratory.		State Grading Laboratory Chamba.
Animal Husbandry	Central Sheep Research Sub-Station, Gersa, Via Bhuntar, Distt. Kulu.	Sheep Breeding Research Station, Sarahan.

1	2	3
Poultry	Regional Poultry Farm, Kam- lahi. (Administered by H.P. Administration)	1. Poultry Farm, Nahan. 2. Poultry Farm, Sundernagar. 3. Poultry Farm, Chamba. 4. Poultry Farm, Solan. 5. Poultry Farm, Tapri.

Notes.—*State Agricultural & Veterinary Colleges, administered by the States.

1. Research in Animal Sciences is carried on generally in the agricultural universities and Veterinary Colleges located in the States. However, a few States have also established research stations, laboratories etc. for conducting research in animal sciences.

2. All the agricultural Universities and the Colleges running post-graduate courses are also actively engaged in conducting research. Again, some of the Central Research Institutes such as I.A.R.I., I.V.R.I., N.D.R.I., I.A.R.S. also conduct courses of study leading to award of M.Sc. and Ph. D. Degrees.

ANNEXURE IX

SCHEMES

- A. Schemes—Central and Centrally sponsored for IV Plan and outlays for the Department of Agriculture and Department of Food.
- B. Schemes for live-stock development proposed for the IV Plan.
- C. Salient features in the Intensive Cattle Development and Key Village Schemes.
- D. Schemes for Fisheries development during the IV Plan.
- E. The Scheme for Farmer's training and education.
- F. Schemes for the development of agricultural implements and machinery during IV Plan.
- G. Details of schemes proposed for quality control and marking of agricultural implements and machinery.

ANNEXURE IX (A)

AGRICULTURAL SCHEMES—FOURTH FIVE YEAR PLAN
CENTRAL AND CENTRALLY SPONSORED SCHEMES—GROUP-
WISE FOURTH PLAN PROPOSALS, OUTLAYS FOR 1966-67
PROPOSALS FOR 1967-68 (SUMMARY STATEMENT)

(Rs. crores)

Group	Fourth Plan proposals	Revised Outlays 1966-67	Proposals for 1967-68
1	2	3	4
1. Improved Seeds	5.86	1.03	1.50
2. Fertilisers	4.00	0.20	0.36
3. Plant Protection	8.87	0.66	2.26
4. Agricultural Implements	5.00	1.00	1.00
5. Land Development	7.63	0.72	0.88
6. State Farms	7.46	0.22	2.95
7. <i>Agricultural Research</i>			
(a) Coordinated Research Schemes	16.80	0.55	5.19
(b) Research Institute	11.12	0.32	2.60
8. Agricultural Education	32.74	1.96	7.29
9. Development of Commercial Crops (Crops for Export Promotion)	7.35	1.08	5.12
10. Horticulture	3.77	0.20	0.81
11. Agricultural Marketing	0.95	0.06	0.09
12. Agricultural Research Statistics	3.51	0.22	0.72
13. Statistics	2.86	0.18	0.43
14. Agricultural Extension & Training	17.85	0.71	5.88

	1	2	3	4	
15. Ayacut Development		15.00	0.75	2.25	
16. Minor Irrigation		12.05	1.97	4.43	
17. Soil Conservation		21.58	2.97	3.16	
18. Animal Husbandry		15.73	0.06	1.86	
19. Dairying		5.06	0.43	1.27	
20. Forestry		33.09	2.81	5.10	
21. Subsidy on Electricity Rates for Agricultural purposes		..	0.60	0.20	
22. Desert Development Board	0.02	0.10	
23. Fisheries		36.95	4.75	15.38	
		TOTAL	275.23	24.01	70.83
Schemes Transferred to the State Plan Sector		11.37	1.19	3.63	
GRAND TOTAL		286.60	25.20	74.46	

CENTRAL AND CENTRALLY SPONSORED SCHEMES
**SCHEME-WISE OUTLAYS FOR THE FOURTH PLAN AND FOR 1966-67 AND PROPOSALS
 FOR 1967-68**

(Rs. in lakhs)

Schemes	Fourth Plan Outlay	Outlay for 1966-67		Proposed Outlays for 1967-68	Remarks
		Original	Revised		
1	2	3	4	5	6
I. Improved Seeds					
1. National Seeds Corporation—Production of foundation Seeds of Wheat & Rice	525.00 (2,000.00)	100.00	100.00	135.00 (net)	
2. Production of Breeder's stock of rice and wheat (Centrally sponsored)	30.00	5.00	3.00	15.14	
3. Maintenance of Buffer stock of improved seeds of different crops	30.50	(Included in scheme No. 1)			
4. Establishment of Breeders' stock of Potato Seeds		(Included with CPRI—VIIB—24)			
5. Cold storage of potatoes		(Transferred to State Plan Sector)			
TOTAL	585.50	105.00	103.00	150.14	
II. Fertilizers					
1. Subsidy on soil Conditioners (a) Lime (b) Gypsum (c) Basic slag and (d) Dolomite— (Centrally Sponsored)	300.00	30.00	20.00	20.00	

	1	2	3	4	5	6
2. Procurement and distribution of chemical fertilisers (Fertilizer Promotion Corporation)		100.00 (229.00)	10.00	..	16.30*	*Token provision proposed.
TOTAL		400.00	40.00	20.00	36.30	

III. Plant Protection

1. Strengthening of Central Plant Protection Stations	5.00 (3.97)	1.84	1.84	0.52	
2. Training Institute-cum-Field Station for Plant Protection, Hyderabad	12.00 (9.69)	0.92	0.92	3.90	
3. Expansion of plant quarantine facilities	10.00 (6.90)	1.47	1.47	1.54	
4. Expansion of Field Station for investigation of locusts	4.01 (4.53)	0.47	0.47	0.93	
5. Plant Pests & Diseases—survey & warning services	2.00 (1.82)	0.19	0.19	0.39	
6. Strengthening of Dte. of P.P.Q. & S.	4.00 (3.49)	0.56	0.56	0.69	
7. Coordination of locust Entomology and Meteorology	2.15	0.35	0.35		(Scheme is integrated with scheme No. 4)
8. Study of pest infestation in storage conditions, etc.	6.26 (5.68)	0.82	0.82	0.51	
9. Strengthening of Agricultural Aviation Service	395.50 (266.00)	..	..	82.00	

10. Epidemic Control (Centrally Sponsored)	200.00 (683.00)	30.00	30.00	120.00†	†Includes Rs. 40 lakhs for Rodent Control.
11. Prophylactic Treatment (Centrally sponsored)	96.00	16.00	16.00	16.00	
12. Rodent Control (Centrally Sponsored)	150.00‡		12.90	226.48	(Shown with Epidemic Control). ‡Included with Epidemic control.
TOTAL	886.92	52.62	65.52	226.48	

IV. Agricultural Implements

1. State Agro-Industries Corporation (Central)	500.00	100.00	100.00	100.00
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V. Land Development

1. Survey and categorisation of Waste lands in blocks of less than 250 acres .

(Transferred to the State Plan Sector)

2. Tractor Trg. & Testing Centres	75.00	2.19	2.19	18.11
3. Resettlement of Landless agricultural Labourers (Centrally Sponsored)	687.50 (500.00)	70.00	70.00	70.00
TOTAL	762.50	72.19	72.19	88.11

	1	2	3	4	5	6
VI. State Farms						
1. Central Mechanised Farm, Suratgarh		150·00	8·34	8·34	35·42	
2. Central Mechanised Farm, Jetsar		96·00	13·37	13·37	19·95	
3. New State Farms		500·00 (450·00)	..	..	240·00	
	TOTAL	746·00	21·71	21·71	295·37	

VII. Agricultural Research

A. Coordinated Research Scheme

1. All-India Coordinated Project for Rice Improvement (Centrally Sponsored)	250·00	71·0	} 5·10	{ 89·84
2. All-India Coordinated Project for Wheat (Centrally Sponsored)	32·61	5·10			{ 43·06
3. All-India Coordinated Project for Barley (Centrally Sponsored)	9·91	1·48	..	6·77
4. All-India Coordinated Maize Breeding Scheme (Centrally Sponsored)	54·17	..	..	12·34
5. All-India Coordinated Millet Improvement Scheme (Centrally Sponsored)	50·65	6·00	4·50	13·80
6. All-India Coordinated Sorghum Improvement Scheme (Centrally Sponsored)	84·22	8·00	6·05	17·27
7. Coordinated Research Project on Forage Crops	37·34	..	..	2·25
8. Cotton Research	65·00	17·64	..	17·64

9. Programme for technological Research on Vegetable oils & Oilseeds	52·00	12·92	..	12·91
10. Oilseeds Research	100·00	35·27	..	35·26
11. Jute Research	50·00	..	..	10·75
12. Coconut Research Arccanut Research	65·00	..	..	33·83
13. Tobacco Research	56·70	} 35·00	} 15·00	} 21·77
14. Lac Research (Reorganisation of LRI)	60·36			
15. Spices and Cashewnuts Research	100·00			
16. Sugarcane Research	56·70			
17. Soyabeans Research	6·54	2·07	..	2·07
18. Coordinated Agronomic Experiments (Centrally Sponsored)	250·00	8·00	8·00	57·05
19. Research in water use & management (Central)	298·46	10·89	10·89	67·26
20. Zonal Research & Design Centres for improved agricultural implements	..	2·81	2·81	15·94
21. Agronomy and Physiology of cotton both under irrigated and dry farming conditions	..	..	..	15·36
TOTAL A	1,679·66	149·44	54·91	518·86

B. Agricultural Research Institutes

22. I.A.R.I. Schemes	679·00	20·12	20·12	159·93
23. C.R.R.I.	90·00	..	..	30·01

	1	2	3	4	5
24 C.P.R.I. including Breeders stock of seed potatoes	134·90	5·50	5·50	37·51	
25. I.G.F.R.I.	147·81	5·06	5·06	17·00	
26. Central Plant Virus Research Institute	38·69	..	..	14·74	
27. Financial Assistance to Scientists in Agriculture & Animal Husbandry	3·48	0·90	0·90	0·90	
TOTAL B	1,111·88	31·58	31·58	260·09	

VIII. *Agricultural Education* (Centrally sponsored)

1. Improvement of facilities in Agricultural Colleges (Including Post Graduate Education)	..	10·00	10·00	140·17	§Including Rs. 60 lakhs for improvement of facilities Vety. Colleges.
2. Provision of facilities in Central Universities (Centrally Schemes)	§610·00	5·00	5·00		
3. Agrl. Extension Wings		1·00	1·00		
4. Agricultural University	2,376·00	257·40	157·40	564·60	
5. Teachers Training in Agriculture	20·00	..	..	1·60	
6. Award of merit Scholarships to under-graduate students in Agriculture and Animal Sciences.	79·17||	10·67	10·67	10·20	||Including Rs. 14.28 lakhs for scholarships in animal sciences.
7. Post-graduate fellowships for Post-graduate studies/Research in Agrl./Animal Husbandry and Dairying subjects	109·00 (95·81)	5·00	5·00	8·72	

8. Travel & Study grants-cum-loans etc. for Agrl./Vey. College Teachers & Research workers	40.00 (50.00)	4.50	4.50	1.58
9. Central Staff College	20.00 (30.00)	..	..	..
10. Production of Agrl. Institutional Films	20.00	..	2.83	2.00
TOTAL	3,274.17	293.57	196.40	728.87

IX. *Development of Commercial Crops for Export* (Centrally Sponsored)

1. Free supply of Urea for foliar spray on Jute	735.00||	25.92	25.92	31.64	||Excluding amount to be financed out of cess fund.
2. Subsidised distribution of low volume power spray to be used for foliar spray	..	1.08	1.08	4.29	
3. Retting tank facilities for jute	..	..	..	30.00	
4. Scheme for Maximised production of cotton in areas of assured water supply (package prog. on cotton)	..	183.63	10.00	174.67	
5. Scheme for production of nucleus & foundation seed of cotton	..	6.98	4.00	8.81	
6. Scheme for Dev. of sea Island Cotton	..	2.04	..	2.04	
7. Maximised production of groundnut in selected areas	..	67.32	20.00	81.07	
8. Development of V.F.C. Tobacco	..	47.19	16.61	134.26	
9. Schemes for Development of Cashewnut	..	..	..	21.85	

	1	2	3	4	5	6
10. Scheme for the Development of coconut . . . . .		..	..	..	2.00	
11. Development of Sisal and Ramie . . . . .		..	..	..	18.30	
12. Mixed cropping of castor with groundnut . . . . .		..	..	..	1.64	
13. Estt. of a Central Nursery for pepper and ginger . . . . .		..	..	..	1.00	
TOTAL		735.00	334.16	107.61	511.57	
<i>X. Horticulture</i>						
1. Coordinated Research projects		200.00	1.00	5.96	33.27	
2. Certification, Inspection & Registration of Virus free citrus plants (Centrally sponsored)		16.24	1.66	1.66	4.91	
3. Coordinated Research Prog. for improvement of important vegetable crops (Centrally Sponsored)		62.04	4.50	4.50	12.54	
4. Intensification of Research on Tuber Crops—						
(a) All-India Coordinated Research on Tuber Crops other than Potato (C.S.)		43.93	4.81	4.81	1.75	
(b) All India Coordinated research on Potato (C.S.)	7.45					
5. Estt. of Regional Research Stations for Medicinal & Aromatic Plants		13.28	0.82	0.82	3.94	
6. Financial Assistance to Agril./Horticultural Societies and others		..	0.40	..	..
7. ICAR Instt. of Horticulture		41.22	2.00	2.00	16.67	
TOTAL		376.71	15.19	19.75	80.63	

XI. *Agricultural Marketing*

1. Setting up of Regional Agmark Laboratories	5.00	1.25	1.25	1.25	
2. Award of stipends to trainees under the various courses conducted by the Directorate of Marketing & Inspection	4.65	0.93	0.93	0.93	
3. Compulsory grading of agricultural commodities for export	15.00	0.98	0.98	0.97	
4. Lint grading units	4.00	2.50	2.50	0.62	*Jute Grading Scheme with an outlay of Rs.16.3 lakhs is yet to be approved by Planning Commission.
5. Kapas grading and Jute grading Scheme (Centrally sponsored)	62.50*					5.00
6. Setting up of grading units for fruits and vegetables	3.00	..	..	..
7. Grading of livestock products	1.00†	..	..	..	†The scheme have been deferred.
TOTAL	95.15	5.66	5.66	8.77	

XII. *Agricultural Research Statistics* (Centrally sponsored)

1. Crop Estimation Survey on Fruits and Vegetables	12.00	..	..	2.33
2. Crop Estimation Survey on cashewnuts and spices crops	14.00	..	..	4.11
3. Study of impact of milk supply scheme, of rural economy in milk collection centres	2.00	..	..	2.11

	1	2	3	4	5	6
4. Survey of fertilisers practices		6.50 (6.30)	..	..	1.21	
5. Estimation of incidence of Pests and disease		60.00	..	..	7.81	
6. Estimation of cost of Production of Poultry and Eggs		3.54	..	..	0.66	
7. Estimation of livestock products		40.00	..	..	17.00	
8. Cost of Production of crops		5.00	1.83	1.27	2.50	
9. Cost of Production of milk		5.00	0.95	0.95	0.96	
10. Crop Insurance (Central Scheme)		5.00	..	..	0.60	
11. National Index of Field Experiments		18.00	..	..	2.74	
12. Cattle Insurance		20.00	1.55	1.55	2.70	
13. Strengthening of I.A.R.S. (South)		25.00	..	..	7.83	
14. Block level estimates of Agricultural production		135.00	..	19.00	19.81	
TOTAL		351.04	4.33	22.37	72.37	

XIII. Statistics

1. Improvement of Land records and Agricultural Statistics

10.00

..

..

No provision has been made as a result of economy measures for 1967-68 also.

2. Agricultural Census 1970 (Centrally sponsored)	20.00	..	..	..
3. Statistics of Inter-State movement of foodgrains (Centrally sponsored)	8.00	0.50	0.50	1.40
4. Improvement of market Intelligence	35.00 (28.00)	0.80	2.93	3.81
5. Improvement of Land records for Land reforms (Centrally Sponsored)	50.00	20.00	10.00	15.59
6. Farm management Studies (C.S.)	82.81	3.75	3.75	12.40
7. Agro-Economic Research	45.00	..	..	6.98
8. Meteorological Data needed for Agr.	35.00	..	0.39	1.97
9. Studies in economics of dairy, poultry & other supplementary enterprises . . . . .	..	0.50	0.50	Included under Farm management studies.
TOTAL	285.81	25.55	18.07	43.15

XIV. Agricultural Extension and Training

1. Upgrading of G.S. Trg. Centres (Centrally Sponsored)	500.00	40.00	40.00	118.00
2. Organisation of courses in subject matter and extension education	18.00	1.26	1.26	2.46
3. Improving professional competence of officers working in Agrl/ A.H. Deptts.	2.00	0.46	0.84	2.23
4. Training of prof. & lecturers of Extension Wings	1.00	0.21			0.17
5. Continuance of three Extension Departments in Home Science colleges	6.48 (6.00)	0.39	1.12	0.05

1	2	3	4	5	6
6. Organisation of concentrated subject-matter courses for instructors, etc.	2.80	0.71	..	0.52	
7. Strengthening of 3 Extension Education Instts.	30.00 (9.00)	1.50	1.50	1.00	
8. Organisation of International Young farmers exchange programme	5.00	0.62	0.62	1.08	
9. Setting up of an Information Workshop-cum-Seminar Division	4.00 (3.19)	..	..	0.81	
10. All-India Crop Competitions	2.66 (2.26)	0.15	0.15	0.15	
11. Strengthening of Directorate of Extension	27.00	..	..	7.74	
12. Control of Flying foxes, parrots and monkeys	10.00	..	1.00	2.00	
13. Nation-wide Demonstration on Major Food Crops	10.00	3.39	3.39	Nil.	
14. Popularisation of cow dung Gas Plant†.	25.00	1.60	5.00	..	†The Scheme has been de- rred.
15. Training -cum-production scheme for Farm Mechanics and vil- lage Artisans at Workshop Wings attached to GRG's.					(Transferred to State Plan Sector)
16. Procurement of publicity-cum-Exhibition Vans					(Transferred to State Plan Sector)
17. Training-cum-Production Scheme for Farm Mechanics, etc. at EET. Nilokheri	4.40 (1.25)	0.65	0.63	0.15	
18. Fertiliser Demonstration and Training					(Transferred to State Plan Sector)
19. Mobile soil testing vans (Centrally Sponsored)	579.00 (net)				

20. Farmer's Education (Centrally sponsored)	230.75 (1,390.70)	..	..	238.00	
21. Upgrading of Workshop Wing at EET, Nilokheri	4.00 (3.38)	0.72	0.55	0.86	
22. Pilot Project for demonstration of improved Agrl. implements (Centrally sponsored)	200.00	..	..	57.41	
23. Intensive Agrl. Programmes—(IADP/IAAP/PVP)	120.75§	11.89	15.36	128.60	§For IADP only.
24. Pilot Project for demonstration of Fertiliser Drills	..	..	..	4.00	
25. Grant of scholarships to Meritorious VLWs.	1.75 (5.00)	..	..	0.75	
26. Procurement and distribution of films on high yielding varieties	..	..	..	9.00	
27. Estt. of Farm Radio Services¶	..	..	..	4.50	¶Fourth Plan Provision included with scheme No. 20.
28. Production of Films	..	..	..	8.44	
TOTAL	1,784.59	63.55	71.42	587.92	
XV. Ayacut Development (Centrally Sponsored)	1500.00	120.00	75.00	225.00	
XVI. Minor Irrigation					
1. Schemes of Exploratory Tubewells orgn.	844.77	138.64	178.64	205.17	
2. Research in Irrigation & Water use (Centrally Sponsored)	40.00	4.00	4.00	12.00	
3. Training in Irrigation and Water use (Centrally Sponsored)	40.00	4.00	4.00	6.00	

1	2	3	4	5	6
4. Survey and Investigation of Ground water Resources (Centrally Sponsored)	280.00 (750.00)	10.00	10.00	55.00	
5. Orientation Training Course in I.I.T.	Included under Training in Minor Irrigation and water use.				
6. Water Resources and Agricultural Study	(300.00)	..	..	75.00	
TOTAL	1,204.77	156.64	196.64	443.17	

XVII. Soil Conservation

1. All-India Soil and Land Use Survey	60.00	26.85	13.20	7.95	||Including Rs. 0.63 lakhs for resources inventory centre.
2. Soil Survey in IADP and Problem areas (Centrally Sponsored)	70.00	8.00	4.00	6.00	
3. Strengthening of Soil conservation organisation	15.00	..	..	1.00	
4. Soil Conservation Research demonstration and Training Centre	30.00	..	..	1.00	
5. Soil and Water Conservation in water-sheds of River Valley Projects (Centrally Sponsored)	1,900.00	280.00	280.00	300.00	
6. Survey of Ravine Areas	Transferred to State Plan Sector.				
7. Pilot Project on reclamation of Saline and Alkaline Soils	Transferred to State Plan Sector.				
8. Soil Conservation in Kosi Project	Transferred to State Plan Sector.				

9. Central Arid Zone Research Institute	82.78	..	..		*Scheme being revised.
10. Subsidy to State Governments for Soil Conservation Training at Soil Conservation Research, Demonstration and Training Centres	Transferred to State Plan Sector.				

TOTAL	2,157.78	314.85	297.20	315.95
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XVIII. *Animal Husbandry—*

A. *Cattle and Buffalo*

1. Expansion of livestock Farm, Hissar	Transferred to State Plan Sector.			
2. Expansion of Jersey cattle Breeding Farms	16.50	..	..	1.20
3. Est. of cattle breeding farms	400.00	1.00	1.00	5.92
4. Intensive cattle Development Blocks in milkshed areas of Delhi Milk Scheme (Centrally Sponsored)	340.00	25.00	25.00	25.00
5. Extension of Registration to Breeding Tracts and formation of Breeding Societies	Transferred to State Plan Sector.			
6. Salvage and rearing of calves (Central)	25.00	3.40	3.40	2.00
7. Organisation of Regional and All India Cattle and Poultry shows	7.40	1.08	1.08	..
8. Scheme for Improvement of Milk Production by cross Breeding of Cattle	Transferred to State Plan Sector.			
TOTAL	788.90	30.48	30.48	34.13

	1	2	3	4	5	6
B. Central Council of Gosamvardhan						
9. Financial Assistance to registered/recognised societies by C.O.G.		25.00	5.00	5.00		
10. Model Gosadan Scheme		1.00	0.10	0.10		17.25
11. Scheme for Central Council of Gosamvardhan		160.00	4.00	4.00		
12. All-India Milk yield competition :		2.50	0.30	0.30		
13. Control of Wild and Stray Cattle		5.00	1.00	1.00		
14. Estt. of Five Large Scale sheep Farms (Centrally Sponsored).		50.00	..	..		14.80
	TOTAL	243.50	10.40	10.40		32.05
C. Poultry and Duck						
15. Duck Breeding Farms		Transferred to State Plan Sector.				
16. Provision of Rail-cars for Transport of Eggs		20.00	Scheme not yet finished.			
17. Egg. Powder Factory		Transferred to State Plan Sector.				
18. Central Poultry Breeding Farms		12.67	..	..		5.05
	TOTAL	32.67	..	..		5.05
D. Piggery						
19. Pig Breeding station-cum-bacon factory		Transferred to State Plan Sector				

E. Research Institutes

20. Central Sheep Breeding Research Institute	20.93	9.14	9.14	32.31
21. Indian Veterinary Research Institute (including strengthening of Division of IVRI for poultry, animal nutrition and genetics).	70.00	4.48	4.48	23.17
22. Animal Virus Research Institute	67.00	0.50	0.50	7.01
*23. Poultry Science Institute	75.00	0.45	..	..
†24. Animal Nutrition Institute	72.00	0.48	..	..
†25. Animal Breeding Institute	50.00	..	..	..
26. Coordinated Research Projects in animal Sciences (23 Projects) .	..	..	..	50.00
TOTAL .	414.93	15.05	14.12	112.49

†Scientific Advisory committee of the Cabinet advised that these three schemes may be substituted by strengthening the corresponding division of IVRI and the matter is under consideration.

F. Disease Control

27. Rinderpest Eradication (Centrally Sponsored)	30.00	1.25	1.25	1.25
28. Animal Quarantine and Certification Services	20.00	0.27	0.27	0.27
TOTAL .	50.00	1.52	1.52	1.52

	1	2	3	4	5	6
<i>G. Education and Training</i>						
29. Training Centre for sheep husbandry and wool technology (Centrally sponsored)		5.00	0.60	0.60	0.60	
30. Improvement of Facilities in Veterinary Colleges		Included in Scheme I under Agril. Education.				
31. Award of Scholarships to Under-graduates		Included in Scheme No. 6 under Agril. Education.				
32. Further Training of Emergency Diploma Holders		20.00	2.00	2.00		
TOTAL		25.00	2.60	2.60	0.60	
<i>H. Animal Welfare</i>						
33. Animal Welfare Board		15.00	2.00	2.00	0.10	
34. Animal Experimentation Committee		3.00	0.27	0.27	0.20	
TOTAL		18.00	2.27	2.27	0.30	
(TOTAL ANIMAL HUSBANDRY)		1,573.00	60.32	60.32	186.14	
<i>XIX. Dairying</i>						
1. Delhi Milk Scheme		258.00	35.00	35.00	94.50	
2. National Dairy Research Institute		248.00 (223.00)	7.74	7.74	32.59	
TOTAL		506.00	42.74	42.74	127.09	

34-3 AROND/67
XX. Forestry

1. Forest Research Institute	180.00	3.36	3.36	32.13
2. Pre-investment Survey of Forest Resources	110.00	21.62	21.62	30.60
3. Delhi Zoological Park	25.00	1.94	1.94	0.90
4. Logging Training Centres	35.00	4.40	4.40	6.04
5. Forest Resources Survey (Centrally Sponsored)	120.00	..	..	12.00
6. Plantation of Quick Growing Species (Centrally Sponsored)	2,800.00	250.00	250.00	400.00
7. Farm Forestry and Fuel Wood Plantations	Transferred to State Plan Sector			
8. Miscellaneous (Booms) (Construction of Booms)	38.50 (40.00)	..	..	28.50

TOTAL **3,308.50 281.32 281.32 510.17**

XXI. Subsidy on Electricity rates for Agricultural purposes	(305.00)	60.00	60.00	20.00
XXII. Desert Development Board	(917.00)	10.00	2.00	10.00

XXIII. Fisheries

1. Landing and Berthing facilities at Minor Ports (Centrally Sponsored)	500.00	20.00	15.00	178.00
2. Deep sea Exploratory Fishing	300.00	41.84	29.20	186.80
3. Central Marine Fisheries Research Instt.	45.00	19.48	7.48	31.50
4. Central Inland Fisheries Research Institute	45.00	5.85	4.85	5.00

	1	2	3	4	5	6
5. Central Institute of Fisheries Technology		80.00	5.15	5.15	38.00	
6. Central Institute of Fisheries Operatives		125.00	6.70	8.00	18.20	
7. Central Institute of Fisheries Education		100.00	24.65	16.95	49.00	
8. Pilot Projects, Corporation, Indo-Norwegian Projects, etc.		1,300.00	130.55	219.11	509.25	
9. Landing and berthing facilities at Major ports and UNICEF pre-survey		1,200.00	40.00	169.07	522.50	
TOTAL		3,695.00	294.22	474.81	1,538.25	
GRAND TOTAL		27,520.00	2,654.64	2,400.22	7,083.70	

OUTLAYS ON CENTRALLY SPONSORED SCHEME TRANSFERRED TO STATES SECTOR

Name of the Scheme	Fourth Plan Proposals	Outlay for 1966-67		Proposals for 1967-68
		Original	Revised	
1	2	3	4	5
<i>Improved Seeds</i>				
Cold Storage for Potatoes	200·00	100·00	60·00	150·00
<i>Land Development</i>				
Survey & categorisation of waste lands in blocks of less than 350 acres	62·50	15·00	15·00	20·00*
<i>Agricultural Extension & Training</i>				
1. Training-cum-production scheme for Farm Mechanics and Village Artisans at workshop wings attached to G.T.C.'s	13·50	4·00	4·00	4·00
2. Procurement of Publicity-cum-exhibition vans	19·00 (18·60)	--	--	9·90
3. Fertiliser Demonstration & Training	240·00	25·00	20·00	107·00
TOTAL	272·50	29·00	24·00	120·90
<i>Soil Conservation</i>				
1. Survey of Ravine Areas	80·0	3·00	3·00	3·00
2. Pilot Projects on reclamation of saline & Alkaline Soils	17·00	3·00	3·00	3·00
3. Soil Conservation in Kosi Project	45·00	..	..	..
4. Subsidy to State Govts. for conservation training at Soil Conservation Research Demonstration and Training Centres	4·30	4·30	4·30	4·40
TOTAL	74·30	10·30	10·30	10·40
<i>Animal Husbandry</i>				
1. Expansion of Livestock Farm, Hissar	20·00	10·00	3·35	10·65
2. Extension of Registration to Breeding Tracts and formation of Breeding Societies	20·00	0·73	1·47	1·21

*Repeated from the original proposals, as no outlay has been proposed.

	1	2	3	4	5
3. Scheme for improvement of Milk Production by cross breeding of cattle . . .		27·50	2·50	2·50	4·00
4. Regional Duck Breeding farms . . .		5·00	..	..	1·80
5. Egg Powder Factory		20·00 (27·37)	..	..	3·75
6. Pig Breeding station-cum-Bacon factory		35·00	..	..	10·00
TOTAL . . .		127·50	13·23	9·32	31·41
<i>Forestry</i>					
Farm Forestry & Fuelwood Plantations . . .		400·00	..	..	30·00
GRAND TOTAL . . .		1,136·80	167·53	118·62	362·71

NOTE—Figures in Brackets indicate revised outlays.

**MINISTRY OF FOOD, AGRICULTURE, COMMUNITY DEVELOPMENT & CO-OPERATION
(DEPARTMENT OF FOOD)**

Proposed Plan Programme for 1967-68 relating to Food Department under Central Sector

(Rs. in lakhs)

Sl. No.	Name of Scheme	Outlay for 1966-67 (Anticipated expenditure)	Outlay for 1967-68 (Estimates)	Total Outlay for 4th plan	Remarks
1	2	3	4	5	6
1	Development of National Sugar Institute, Kanpur.	6.35	10.00	168.00	
2	Construction of storage godowns including silos by the Department of Food.	250.00	250.00	1,400.00	
3	Construction of storage, godowns by the Food Corporation of India.	158.00	100.00	1,800.00	
4	Construction of Warehouses by the Central Warehousing Corporation and contribution to the share capital of State Warehousing Corporation.	200.00	30.00	800.00	
5	Establishment of an Applied Research Demonstration and Training Project in Grain Storage.	..	3.54	68.64	
6	Development of High Protein Foods and Groundnut Flour Projects.	5.66	50.00	372.00	
7	Schemes relating to research, training & preservation of Fruit/Vegetables.	1.46	8.37	59.89	
8	Grants-in-aid for (i) setting up Catering Institute, (ii) School Feeding Programmes, (iii) Craft Centres and (iv) Voluntary Organisation.	41.53	105.50	271.00	School feeding programme is not proposed to be taken up during 1967-68.

1	2	3	4	5	6
9	Extension work relating to popularisation of subsidiary foods & Nutrition and diversification of diet.	3.50	14.60	70.85	
10	Organisation of Food & Nutrition Board	0.50	1.15	30.00	
11	Miscellaneous Research Schemes	1.30	2.25	24.26	
12	Modern Rice Mill Projects	9.50	17.50	5,200.00	This is a continuing scheme and the total outlay for the 4th Plan has <i>not</i> yet been finalised. It is under consideration.
13	Modern Bakery Project	45.00 65.00 (loan)	55.00 100.00 (loan)	500.00	It is not clear from the Draft Fourth Five Year Plan outlay under which head this provision has been included. A reference has been made to the Planning Commission and their reply is awaited.
14	Setting up of Administrative Machinery in States for enforcement of the licensing control on trade and other Central measures.	100.00	150.00	Not yet decided.	The scheme is continuing from Third Plan and the amount to be included in the Fourth Plan has not yet been decided.
TOTAL		887.00	897.91	10,764.64	

ANNEXURE IX (B)

SCHEME FOR LIVESTOCK DEVELOPMENT—FOURTH FIVE YEAR
PLAN (ANIMAL HUSBANDRY)*State Plan Schemes*

(Rs. in lakhs)

Name of the Scheme	No. of Provision units	
	2	3
1	2	3
A. Cattle Breeding		
1. Intensive Cattle Development Blocks	30	2,100.00
2. Expansion of Key Village Blocks	209	2,029.39
3. Establishment of Key Village Blocks	100	1,052.00
4. Establishment of Central Semen Banks	33	66.00
5. Expansion of Cattle Breeding Farms	60	202.80
6. Establishment of Cattle Breeding Farms	20	171.80
7. Establishment of bull rearing Farms	27	99.90
8. Aid to Gaushalas	300	276.90
9. Assistance to private breeders	No targets	100.00
TOTAL		6,098.79
B. Feeds and Fodder Development		
1. Seed Production Farms	70	208.60
2. Development of Grass Birs	48	161.76
3. Establishment of Fodder Banks	14	55.44
4. Mixed Farming Units	20	49.00
TOTAL		474.80
C. Sheep and Goat Development		
1. Establishment of Sheep Breeding Farms	30	112.50
2. Expansion of Sheep Breeding Farms	46	86.48
3. Establishment of Sheep and Wool Extension Centres	300	519.00
4. Expansion of Sheep and Wool Extension Centres	218	257.24
5. Large Scale Wool Grading Centres	34	178.50

(Rs. in lakhs)

1	2	3
6. Introducing sheep in mixed farming economy (families)	8,150	231.65
7. Sheep and Goat Marketing yards	8	38.00
8. Establishment of large scale sheep breeding farms	Token provision	10.00
9. Establishment of goat breeding farms (Angora-3 Dairy type -9. Pashmina-1)	13	48.75
TOTAL		<u>1,482.12</u>

D. Poultry Development

1. Intensive eggs and Poultry production-cum-marketing centres	150	1,150.00									
2. Poultry Development in hills (families)	65,000	65.00									
3. Poultry Development for scheduled tribes, etc. (families)	1,00,000	100.00									
4. Research and Training facilities at Poultry farms	20	20.00									
5. Cold Storages	12	30.00									
6. Poultry Dressing Plants	15	210.00									
7. Egg and Poultry collection Centres	6	30.00									
8. Credit facilities to Poultry breeders	<table style="display: inline-table; vertical-align: middle;"> <tr> <td style="font-size: 3em; vertical-align: middle;">{</td> <td>Large</td> <td style="text-align: right;">25</td> <td rowspan="3" style="font-size: 3em; vertical-align: middle;">}</td> <td rowspan="3" style="text-align: right; vertical-align: middle;">432.50</td> </tr> <tr> <td>Medium</td> <td style="text-align: right;">400</td> </tr> <tr> <td>Small</td> <td style="text-align: right;">6,000</td> </tr> </table>	{	Large	25	}	432.50	Medium	400	Small	6,000	
{	Large	25	}	432.50							
Medium	400										
Small	6,000										
9. Assistance to private institutions	No Targets	25.00									
10. Establishment of Duck Breeding Farms	10	19.00									
11. Establishment of Duck Extension Centres	5	4.25									
TOTAL		<u>2,085.75</u>									

E. Veterinary Aid

1. Establishment of Hospitals	488	239.12
2. Expansion (upgrading) of dispensaries	838	184.36
3. Establishment of dispensaries	539	245.96
4. Establishment of Aid Centres	4,036	322.88
5. Establishment of Mobile Units	102	126.48
6. Eradication of Rinderpest	No Targets	100.00

(Rs. in lakhs)

	1	2	3
7. Control of Tuberculosis on organised herds		No Targets	50.00
8. Control of Poultry diseases		One team in each State.	20.00
9. Expansion Establishment of Biological product stations		14	75.00
		TOTAL	1,363.80
<i>F. Animal Husbandry Research and Statistics</i>			
1. Establishment and Expansion of Livestock Research Stations		16	150.00
2. Establishment of Clinical Investigation Laboratories		200	376.00
3. Re-organisation Establishment of Statistical Unit		No Targets	30.00
		TOTAL	556.00
<i>G. Equine Development</i>			
1. Expansion of Equine breeding farms		4	7.48
2. Establishment of Equine breeding Farms		1	5.82
		TOTAL	13.30
<i>H. Piggery Development</i>			
1. Establishment of Bacon Factories in Public Sector		4	208.00
2. Establishment of Bacon factories in Private Sector		3	23.25
3. Establishment of large pig breeding farms		4	799.80
4. Establishment of small pig breeding farms		15	69.60
		TOTAL	385.65
<i>I. Other Schemes</i>			
Gosadans		26	61.88
Rehabilitation of Nomadic Cattle Breeders (Families)		850	25.00
Utilisation of Wild and Stray Cattle (Teams)		15	15.00
Establishment of Hide Flaying and Carcass Utilisation Centre		35	94.50
Milk Yield Competition		No Targets	30.00

(Rs. in lakhs)

1	2	3
Cattle Shows	No Targets	25.00
Mass Castration of Scrub Bulls (Teams)	75	121.00
Animal Welfare Board	No Targets	42.00
Establishment of Slaughter Houses	Large	4 630.00
	Medium	25 98.00
	Small	128 284.00
	Markets	20 62.80
TOTAL		1,489.18

Summary (State Plan Schemes)

Cattle Breeding	6,098.79
Feeds and Fodder Development	474.80
Sheep and Goat Development	1,482.12
Poultry Development	2,085.75
Veterinary Aid	1,363.80
Research and Statistics	556.00
Piggery Development	385.65
Equine Development	13.30
Other Schemes	1,489.18
States Local Schemes	400.00
TOTAL	14,349.39

FOURTH FIVE YEAR PLAN (ANIMAL HUSBANDRY)

Central Schemes

(Rs. in lakhs)

Scheme	No. of units	Proposals for 4th Plan
1	2	3
A. Cattle & Buffalo		
1. Expansion of Livestock Farm Hissar	1	20.00
2. Expansion of Jersey Cattle Breeding Farms	2	16.50
3. Establishment of cattle breeding farms	6	360.00
4. Intensive Cattle Development Blocks in Milkshed areas of D.M.S.	4	350.00
5. Extension of registration to breeding Tracts and formation of breed Societies . . . . .	..	20.00
6. Salvage of Calves . . . . .	..	33.00
7. Development of Rathi Cattle & rehabilitation of Nomadic cattle breeders . . . . .	..	10.00
8. All India Livestock Shows . . . . .	..	20.00
9. Establishment of cattle Farm for D.M.S.	1	300.00
10. Progency Testing of Bulls	2	40.00
B. Central Council of Gosamvardhan		
11. Credit facilities to Goshalas other private Institutions . . . . .	..	50.00
12. Model Gosadans	2	5.00
13. Scheme for Central Council of Gosamvardhan . . . . .	..	50.00
14. All India Milk Yield Competition . . . . .	..	5.00
15. Catching of Wild & Stray Cattle . . . . .	..	5.00
C. Poultry & Duck		
16. Central Poultry Breeding Farms	4	20.00
17. Central Duck Breeding Farm	1	5.00
18. Provision of Rail Cars for Transport of eggs	6	20.00
19. Manufacture of egg powder	1	20.00

FOURTH FIVE YEAR PLAN (ANIMAL HUSBANDRY)

Central Schemes

(Rs. in lakhs)

1	2	3
D. Piggery		
20. Regional Pig Breeding Station	1	35.00
E. Research Institute		
21. General Sheep Breeding Research Institute	1	120.50
22. I.V.R.I.	1	70.00
23. Animal Virus Research Institute	1	67.00
24. Poultry Science Institute	1	30.00
25. Animal Nutrition Institute	1	30.00
26. Animal Breeding Institute	1	30.00
27. Provision for schemes approved by I.C.A.R. . . . .	..	200.00
F. Disease Control		
28. Rinderpest Eradication . . . . .	..	80.00
29. Animal Quarantine & certification service	4	20.00
G. Education & Training		
30. Training centre for sheep husbandry & wool technology	1	5.00
31. Undergraduate Education in Animal Husbandry . . . . .	..	35.00
32. Post graduate education in Animal Husbandry . . . . .	..	25.00
33. Teachers training in Animal Husbandry . . . . .	..	25.00
34. Further Training of Emergency Diploma Holders . . . . .	..	20.00
H. Animal Welfare		
35. Animal Welfare Board . . . . .	..	15.00
36. Animal Experimentation Committee . . . . .	..	3.00
TOTAL		2160.00

ANNEXURE IX(C)

SALIENT FEATURES ON THE INTENSIVE CATTLE DEVELOPMENT AND KEY VILLAGE SCHEMES.

Intensive Cattle Development Scheme

This is similar to the IADP and is started in the breeding tracts of breeds of all India importance and in the milk shed areas with the Dairy Projects and Milk Supply schemes. Each project covers one lakh of breedable cows and buffaloes. The salient features of this schemes are—

- (a) Village to village survey of animal husbandry conditions ;
- (b) Project is divided into 4 regions each of which will cover 25 sub centres ;
- (c) Livestock Improvement Act will be enforced and mass castration campaign schemes will be organised ;
- (d) Animal Contagious Diseases Act will be enforced ;
- (e) Loans on usual terms will be given for purchase of good quality milch cattle and also for cooperatives. In addition to the loans, production incentives and subsidies will also be given ;
- (f) Demonstration of different fodder crops through the supply of seeds, fertilisers, technical assistance, loans and subsidies for irrigation and pumping sets, for silo pits and chaff cutters ;
- (g) Dairy extension activities in areas where processing and marketing of milk is undertaken ;
- (h) The staff suggested for these projects are—
 - (i) Deputy Director in charge of the Project ;
 - (ii) Four Assistants to work as specialists, viz., Veterinary Officer, Fodder Development Officer, Assistant Registrar of Cooperatives Societies and Dairy Extension Officer.

There will be a Coordination Committee to review the programme and this Committee will consist of the representatives of Animal Husbandry, Dairy, Agriculture and Cooperative Departments of the State Government and a representative of the Government of India. It is proposed to take up 30 blocks of this type during the 4th Plan which will cost Rs. 2,100 lakhs.

Key Village Scheme

This scheme was started during the First Plan period and 454 key village blocks have been established so far. It is proposed to expand 209 of the existing blocks and to start 100 more new blocks during the 4th Plan with an investment of Rs. 3,081 lakhs.

The Key Village Scheme is more or less on the same lines as the Intensive Development Scheme excepting in intensity and extent of the area.

SCHEMES FOR FISHERIES DEVELOPMENT DURING FOURTH PLAN

When the Working Group for formulation of proposals in fisheries for the Fourth Five Year Plan met in 1964, it was contemplated that the Fourth Plan provisions for fisheries would be of the order of Rs. 300 crores of which Rs. 100 crores would be available from private sources, while Rs. 200 crores would be provided under the Plan. The figure of Rs. 200 crores was later on changed to Rs. 110 crores. The revised allocation now anticipated is Rs. 114 crores.

2. Fisheries resources and production potential.—It has been estimated that India can produce 96 lakh tons approximately of fish (85 lakhs—marine and 11 lakhs—inland) against which the annual production in recent years has varied from 8 lakh to 13 lakh tons from year to year. Details of these figures are given below:—

Estimated Production

Source of Supply	Quantity in lakh tons
1. Marine mid. water area	60.50
2. Marine offshore area	15.00
3. Marine inshore area	9.00
4. Culturable water (69 lakh acres at 500 lbs. per acre)	3.60
5. Reclaimed area (12 lakh acres at 500 lbs. per acre)	2.70
6. Rivers and canals (100 lakh acres at 1 lb. per acre)	0.05
7. Reservoirs (16 lakh acres at 5 lbs. per acre)	0.04
8. Estuaries (30 lakh acres at 10 lbs. per acre)	0.13
9. Brackish water (7 lakh acres at 20 lbs. per acre)	0.06
10. Brackish water swamps (50 lakh acres at 200 lbs. per acre)	4.50
TOTAL	95.58 or 96.00 lakh tons

Actual Production

	Inland	Marine	Actual Total Production (In 000 tons)
1955-56	266·30	572·38	838·63
1956-57	271·26	739·41	1,010·67
1957-58	276·23	880·51	1,156·74
1958-59	281·22	726·01	1,007·22
1959-60	286·19	531·65	817·84
1960-61	282·00	880·00	1,162·00
1961-62	277·00	684·00	961·00
1962-63	330·00	644·00	974·00
1963-64	390·00	656·00	1,046·00
1964-65	455·00	860·00	1,315·00

3. Appraisal of the first Three Plans.—The actual expenditure in the First Plan was Rs. 2.78 crores, in the Second Plan Rs. 9.06 crores and the sanctioned outlay for the Third Plan Rs. 28.64 crores *vide* details given below :—

	(Rs. in crores)	
	State	Centre
A. Marine Fisheries		
1. Mechanisation	4·28	—
2. Supply of fishery requisites	1·63	—
3. Fish storage and distribution	1·03	0·90
4. Landing and berthing facilities	1·97	0·05
5. Fish curing yards	0·22	—
6. Fish canning and processing plants and by-products	0·28	—
7. Exploratory fishing	—	2·04
8. Pilot and commercial fishing	0·40	—
9. Industrial units	0·38	1·00
10. Miscellaneous	0·11	..
	<hr/>	
TOTAL	10·30	3·99

(Rs. in crores)		
	State	Centre
B. Inland Fisheries		
1. Fish farming	3.37	..
2. Fish seed production and distribution	1.24	..
3. Reclamation and development of derelict fisheries	1.24	..
4. Development of reservoirs and lake fisheries	0.39	0.08
5. Riverine fisheries	0.17	..
6. Storage and distribution	0.22	..
7. Technical services and equipment	0.24	..
8. Survey of culturable waters	0.17	..
9. Fisheries Extension and Demonstration	0.27	..
10. Conservation of inland fisheries	0.03	..
TOTAL	7.34	0.08
C. Ancillary Schemes		
1. Fish Markets	0.71	..
2. Fisheries Cooperatives	1.70	..
3. Training	0.38	..
4. Research	0.65	1.55
5. Housing	0.40	..
6. Feeder Roads	0.10	..
7. Fisheries Education	0.17	1.10
8. Staff	0.17	..
TOTAL	4.28	2.65

The total additional production of fish during the First Plan was 8.39 lakh tons, during the Second Plan it was 13 lakh tons and the estimated additional production in the Third Plan was 15 lakh tons. The emphasis was mainly on mechanisation of fishing boats, exploratory fishing, evolution of fish farming techniques, research and training.

4. Supply and Demand position in the first two years in the Fourth Plan.—The present annual demand has been estimated at 72 lakh tons against which the Supply is between 10 and 13 lakh tons only. Though these figures are approximate, it is certain that there is a substantial gap between supply and demand and there is no prospect of any substantial change during the first and second year of the Fourth Plan period.

5. Targets to be achieved during the Fourth Plan.—In the marine fisheries development, the basic essentials to be considered are—fishing harbours, refrigerated transport, modernisation, of the fishing fleet and improvement in the processing capacity. For inland and estuarine development, reclamation of waste land for fish farming and exploratory fishing need greater attention. For all these, availability of capital and adequate arrangements for handling, processing and distribution are essential. The allocation of Rs. 114 crores during the Fourth Plan Period is proposed to be spent on the following items:—

	(Rs. in Crores)
(i) Capital for reclamation of inland areas	28·52
(ii) Contingent expenditure	9·54
(iii) Equipment for marine fisheries	37·50
(iv) Contingencies for marine fisheries	2·14
(v) Capital for processing, marketing, etc.	8·00
(vi) Contingencies for processing, marketing, etc.	3·00
(vii) Development expenses for harbours, approach roads, etc.	17·00
(viii) Research survey and training	8·30
TOTAL	114·00

5. Cost of production and economics.—In the Fourth Plan additional production of fish is estimated to be 8.25 lakh tons vide details below:—

	(In lakh tons)
<i>Inland</i>	0·55
<i>Marine—</i>	
Large boats	1·32
Small boats	6·38
TOTAL	8·25

The fishing industry occupies a peculiar position in that it cannot be looked upon merely from the point of view of the quantum of investment and its financial return. It is more in the nature of a “Food industry” of national importance. In ‘inland fisheries’ the crop takes 2 to 3 years to be marketable which brings along several factors e.g. drought, floods, disease; etc., leading to huge losses. Similarly, in marine fisheries the hazards of the sea and considerable fluctuations of the fish population from year to year affect the output. Besides, new fishing techniques are being developed rapidly and the industry is unable to keep pace with these developments. Accordingly, fishing industry is still one of the most heavily subsidised

industry in the world even in advanced countries. The United States is subsidising construction of new fishing vessels upto 50%. Various subsidies are given by Japan on refrigerated rail and road transport and other fishing requisites. Grants up to 165 per gross ton of landing are given by Canada for fishing vessels. United Kingdom gives 8/10th of expenditure for new vessels besides giving liberal grants to owners and charterers of fishing vessels. The climate in India for development of this industry has improved on account of the activities in the first three Plans but even then taking into account the fact that we have to compete in the world market, Government assistance has to be realistic and Government policy oriented to this and should take into consideration the following factors:—

- (i) Special financial hazards of the industry due to uncertainty of catching operations and high perishability of catches ;
- (ii) Increased production of fish means improvement in food supplies ;
- (iii) Abundance of fish supply can protect health and improve living standards of the consumers as well as the producers and also lead to increase in national income.
- (iv) Greater attention to Fisheries means better utilisation of natural resources which are otherwise likely to be exploited by other countries.

Summary of main recommendations

The following recommendations are contained in the Report of the Working Group:—

- (1) Capital aid should be provided for supply of fishing gear, for fish production and for fish marketing through cooperatives on Government guarantee.
- (2) The offshore fishing area should be covered by 8,000 additional mechanised boats with necessary arrangements for processing and marketing of fish. Suitable arrangements would also be necessary for the servicing, maintenance and inspection of the mechanised boats.
- (3) At least 30 fishing harbours should be developed for offshore fishing.
- (4) Work relating to Deep Sea Fishing Exploration should be taken up with foreign collaboration.
- (5) All major ports should provide special wharves for large fishing vessels.
- (6) Exploratory fishing should be taken up in deltaic estuarines and large reservoirs in the form of Package Programmes.

(7) The block pattern of development should be adopted to expand pisciculture in tanks with capital loans and subsidies to fishermen including Gram Panchayats and technical guidance should be provided through Extension Works.

(8) Brackish water fish farming, especially with prawns and mullets and reclamation of swampy lands into fish farms should be undertaken.

(9) In achieving the development of fishing industry, priority should be given to fishermen cooperatives in all possible fields and a chain of co-operatives should be organised in the country with suitable assistance for management expenses, capital etc., but pending the creation of such organisations, State cooperatives and private industry should be encouraged.

(10) Foreign collaboration should be sought for securing capital and services of technical experts, for training of fisheries operatives and research workers and for improving marketing arrangements.

(11) Manufacture of marine diesel engines, nylon yarn/twine and other ancillary equipment required for the fishing industry should be taken up in new concerns and the capacity of existing concerns should also be increased suitably. The existing concerns should also be increased suitably. The existing capacity of boat-building yard would also require substantial increase.

(12) Existing training institutes should be strengthened and new institutions should be started by the Centre as well as by the States for training fisheries administrators and operatives.

(13) Research in marine fisheries will consist of the study of important palegic fisheries like Sardines and Mackerel with regard to related oceanographic and psychochemical conditions. For research in inland fisheries and practices in the water of fry and fish should be studied with a view to increase the yield per acre from inland waters. Biological research institute should give priority to the evolution of small pilot plant suitable to Indian conditions for manufacture of dried fish, fishmeal etc. and should conduct research work on freezing, canning etc. with a view to continuing improvement in the quality of the products. Exploratory fishing units should study gear, fishing grounds and biology of fishes in selected estuarines and reservoirs. Research work of the different institutes should be integrated and coordinated with the work done by State laboratories.

(14) Facilities relating to approach roads and drinking water should be improved.

(15) Greater attention should be paid to establishment of ice factories cold storages, processing and canning factories and provision of insulated and refrigerated transport in fish producing and consuming areas.

(16) The industry needs special consideration by provision of liberal subsidies in the form of assistance from Centre and State Governments.

(17) The Administrative machinery at the Centre and the States should be strengthened in the following manner:—

(a) The following units should be added to the Fisheries Division of the Ministry of Food and Agriculture:—

- (1) Statistical Organisation.
- (2) Special Organisation for Harbour Development.
- (3) Directorate of Extension with panel of Specialists.
- (4) Directorate of Fish Marketing.
- (5) Special Wing for development of commercial Corporations.

(b) Each State should set up its own Fisheries Directorate with Special Extension Wing and Statistical Cells.

(18) To coordinate the activities of fisheries technical officers in various Ministries and the Planning Commission, it is essential to create a panel of experts on "Fisheries for Planning" with the Fisheries Development Adviser of the Ministry of Food and Agriculture as its Chairman.

(19) The Indian Fisheries Act should be revised to ensure uniformity in legislation throughout the country. While doing so, necessary legislative measures should be taken to ensure checking of pollution of rivers, estuaries and other inland waters by factory effluents and large scale destruction of fish by the use of dynamite near mining and industrial areas and suitable provision should be included to revise the arrangement of leasing tanks and other inland waters.

(20) The functions of the Central Fisheries Corporation which is proposed to be established with foreign collaboration during the Third Plan should be expanded to cover the additional requirements of the Fourth Plan and State Governments should be encouraged to set up their own Corporations on similar lines.

The details of the schemes for the development of Fishery Programme during the Fourth Plan is reproduced:—

I. Inland Fisheries

Capital for reclamation of land areas	Amount (Rs. in crores)
(1) Capital loan for 2,50,000 acres @ Rs. 750 per acre	18.75
(2) Capital subsidy for above @ Rs. 250 per acre	6.25

	Amount (Rs. in crores)
(3) Capital loan for Nurseries for 14,100 acres @ Rs. 1,875 per acre	2.64
(4) Capital subsidy @ Rs. 625 per acre	0.88
TOTAL	28.52
<i>Contingent expenses</i>	
(5) Establishment charges and contingent expenses on fish rearing	8.00
(6) Establishment charges and contingent expenses on rearing of spawns @Rs. 300 per acre	0.96
(7) Loan for fishing gear for reservoirs and rivers	0.38
(8) Grant for fishing gear for reservoirs and rivers	0.20
TOTAL	9.54
GRAND TOTAL	38.06

Phasing (During 4th Plan)

	1	II	III	IV	V	Total	VI	VII
Acres to be re-claimed	30,000	40,000	50,000	60,000	70,000	2,50,000	..	..
Capital investment (in crores)	3.00	4.00	5.00	6.00	7.00	25.00	..	..
Contingent expenses (in crores)	..	0.60	1.40	2.40	3.60	8.00	5.00	5.00
Anticipated production (in tons)	..	..	7,500	17,500	30,000	55,000	45,000	62,500
Value of produce (in crores)	..	..	1.5	3.5	6.00	11.00	9.00	12.50
Spawn required (in crores)	..	24	56	96	144	..	200.000	200.00
Fry required (in crores)	..	6	14	24	36	..	50.00	50.00
Space required	..	2,400	5,600	9,600	14,400	..	..	..
Capital for Nurseries @ Rs. 2,500 per acre (in crores)	0.60	0.80	1.00	1.20	..	3.60	..	..
Acreage to be ready	2,400	3,200	4,000	4,800	..	14,400	..	..
Contingencies	..	7.2	16.8	28.05	48.2	95.8	..	..

II. Marine Fisheries

Equipment for marine fisheries

	Amount (in crores rupees)
<i>Large Boats</i>	
(1) Capital loan for purchase of trawlers between 55' and 120'—100 trawlers @Rs. 4.00 lakhs each	4.00
(2) Capital subsidy for 100 boats of length varying from 55'—120'	1.00
<i>Small Boats</i>	
(3) Capital loan for 6,000 boats of 30' to 50' at an average rate of Rs. 50,000 each	30.00
(4) Capital subsidy for 2,000 boats @ Rs. 12,000 per boat	2.50
TOTAL	37.50
<i>Contingent expenses</i>	
(5) Subsidy on operational cost of 200 large boats @ 25%	0.24
(6) Subsidy on operational cost of 8,000 small boats	1.90
TOTAL	2.14
GRAND TOTAL	39.64

Phasing 4th Plan period

	I	II	III	IV	V	TOTAL	VI
<i>Small Boats</i>							
8,000 (30'—50')	1,000	1,000	1,500	2,000	2,500	8,000	..
Capital @ 50,000 per boat (in crores).	5.00	6.25	7.50	10.00	11.25	40.00 (Of this Rs. 32.50 crores will come out of the plan.)	..
Operational cost (in crores)	..	0.60	1.35	2.25	3.45	7.65 (Of this Rs. 1.90 crores will come out of the plan.)	4.80
Production in tons	..	50,000	1,13,000	1,88,000	2,87,000	6,38,000	4,00,000
Value (in crores)	..	2.00	4.50	7.50	11.50	25.50	16.00
<i>Large Boats</i>							
No.200 (55'—120')	20	40	40	50	50	200	..
Capital @ 4.00 lakhs per boat (in crores)	0.80	1.60	1.60	2.00	2.00	8.00 (Of this Rs. 5.00 crores will come out of the Plan provisions).	..

	I	II	III	IV	V	TOTAL	VI
Operational Cost (crores)	..	0.06	0.18	0.30	0.42	0.96 (Of this Rs. 0.24 crores will come out of the plan provision).	0.40
Production @ 400 tons per boat (tons)	..	8,000	24,000	40,000	60,000	1,32,000	80,000
Value @ Rs. 400 per ton (in crores)	..	0.32	0.96	1.60	2.40	5.28	3.20

III. Marketing		(in crores rupees) Amount
(1) Marketing and processing		6.00
(2) Capital to Cooperatives, Corporations and private enterprise		2.00
	TOTAL	8.00
(3) Contingencies for processing and marketing		3.00
	GRAND TOTAL	11.00

IV. Ancillary Investment		
(1) Fishing harbours with approach roads, water supply, electricity, etc.		17.00
(2) <i>Research, Training and Survey</i>		
Inland Fisheries (C.I.F.R.I.)		0.45
Technology (C.I.F.T.)		0.80
Marine Fisheries (C.M.F.R.I.)		0.45
Deep Sea Fishing		3.00
Fisheries Education (C.I.F.E.)		1.00
(C.I.F.O.)		1.25
State Research		1.35
	TOTAL	8.30
	GRAND TOTAL	25.30
GRAND TOTAL	(I+II+III+IV)	114.00

FARMERS TRAINING & EDUCATION

Agriculture production has been given the first priority in our plan. There are over 60 million farm families which are engaged in this task. To increase the agricultural production we need physical inputs like good seed, fertilizer etc. and human input to rationalize the physical inputs in a manner to obtain maximum production. This involves change in knowledge, attitude and skills of the farmer. In order to bring this change by providing scientific knowledge on improved method of increasing agricultural production and to impart necessary skills to the farmer the scheme of farmers education has been started by the Ministry of Food, Agriculture, Community Development & Cooperation. This programme is of great importance in our new strategy in agricultural production which requires efficient use of inputs and this can be achieved if our farmers are trained in their use.

To achieve this objective the following training programmes will be undertaken during the Fourth Plan:—

1. Short specialised courses for selected progressive farmers.
2. Short courses for farm women.
3. Short residential courses for young farmers.
4. Long duration (1 year) regular course for young farmers.
5. Demonstration-cum-training camps on package of practices.
6. Farmers discussion groups.
7. Farm Women discussion groups.
8. Production oriented Rural Youth Clubs.
9. Exchange of farmers within the country.

The salient features of the programmes mentioned above are as follows:—

(1) Short specialised courses for selected Progressive Farmers

These courses are designed to acquaint the farmers with special techniques and modern methods including the use of equipment, implements, seeds, pesticides and methods of poultry raising, vegetable farming, horticulture etc. 100 such centres will be started, each centre running 10 courses of 30 farmers each in a year. Already 65 such centres have been started. The objective is to train 92,250 farmers during the Fourth Plan period.

10 courses during the slack seasons lasting between 7 to 15 days will be organised by at least one agricultural training institution in each important district in the High Yielding Varieties Programme areas of each State for the purpose of giving timely training in greater depth to groups of 30 progressive farmers according to their interest. Separate courses for literates and illiterates will be organised according to the needs. They will be encouraged to serve as voluntary rural youth clubs leaders to other leadership roles in the villages and also will be convenors of the discussion groups.

Each centre will train about 300 farmers per year. Follow up will be provided mainly by the local VLWs who will use these farmers as demonstrators of improved practices. Each centre will attempt to use the trained farmers as a link for establishing closer extension ties with the surrounding communities. Trainees will be given free boarding and lodging and to and fro travelling charges.

(2) Short courses for Farm Women

Gramsevika Training Centres in the High-yielding varieties programme areas and other appropriate institutions in each State will be encouraged to organise short courses for about 30 farm women each lasting between 7 to 10 days. Training will include those agricultural activities performed by women plus information and training on nutrition and food preparation and home management and child care. Separate courses will be organised for literate and illiterate women. Selection and follow up will be made by the local Gramsevikas in cooperation with voluntary women's groups where existing. Each centre will train about 300 women per year who may serve as progressive home maker in their own villages. Trainees will have free boarding and lodging facilities and given transportation charges. They will become the convenors of the discussion groups for women. Uptil now 2000 farm women have been trained in 43 Gramsevika Training Centres. Each centre will train about 300 farm women per year.

(3) Short residential courses for Young Farmers

It is proposed to have 100 centres providing three courses of one to three months duration to 25 young farmers per course. The courses are centred round specific crops covering all field operations. It will be residential training. This will mean 7500 young farmers per year. Depending upon the slack periods between crop seasons, three courses will be organised for 25 young practising farmers preferably literate between the ages of 16 to 30 years. This training will be conducted at Gramsevak Training Centres and suitable agricultural training institutions in the High-Yielding Varieties Programme areas of each State. 75 young farmers will be given intensive training in specific crops, tractors, implements, soil conservation, poultry keeping, horticulture etc., which will form an appropriate part of the course.

Preference in selection of trainees will be given to rural youth club members. Trainees will be provided free boarding and lodging. Trained young farmers on return to their village will be encouraged to take the leadership in the discussion groups that would be formed. About 23,000 farmers will receive training during the Plan period. They will be the convenors of the discussion groups.

(4) Long duration (1 year) regular course for Young Farmers

Willing selected practising young farmers with minimum educational qualifications will be provided one year training in improved farm practices throughout the year on the farm. In addition, leadership training in forming farmers groups and how to function as agents for giving custom service in the plant protection, machinery repairing, fertilizer etc. will be given.

One year practical course for 25 young farmers will be organised by one or more agricultural institutions in each state. The trainees will be required to work in all agricultural operations during the year. The main emphasis will be on "learning by doing". Depending on local cropping practices some staggering of the course may be desirable in order to fit it between crop seasons. In selection, preference will be given to the rural youth club members. Special instructions will be given to those interested in conducting functional literacy courses in their own villages or providing custom services. Each trainee will be given stipend to cover boarding and lodging and other expenses. After completion of the training they will also be convenors of the discussion groups. These trainees will also be given a repair kit by which they can do custom service and assist the farmers around them.

(5) Demonstration-cum-Training Camps on Package of Practices

In every village level workers' circle in Intensive Agriculture Areas (which includes high-yielding varieties programme) and I.A.D.P. immediately before the crop season, the Demonstration-cum-Training Camps will be organised. The object is to give a brief but complete demonstration of the various techniques of growing particular crops and using the inputs, some of the steps are preliminary to the supply of inputs, the demonstration in the use of which will be given at the camp. The duration of the camp will be two days each. The camps will be conducted by the agricultural-extension officers in the block assisted by the VLWs and some progressive farmers, specialists from the district will also join their camps. In all the 130 districts such demonstration-cum-training camps will be organised before two cropping seasons and each group of 40 farmers will be trained. One camp will cover about 5 villages. One adult member per family who are taking up the high-yielding varieties programme will be encouraged to attend training camp before each crop season. Similar training camps are in vogue practically in all the 130 districts of the high-yielding varieties. The

proposed training will cover about 5 million farmers. This massive training in local situation is planned as it is generally recognised that farmers training in countries characterised by illiterate population must be on or near the farm, must not merely interfere with normal farming activity, must have immediate practical content and must be on a massive scale if it is to have considerable impact. The progressive farmers who have undergone specialised training will be requested to arrange the demonstration-cum-training camps.

(6) Discussion Groups

Farmer discussion groups will be formed in selected villages. Each group will become the principal permanent extension vehicle through which the agricultural extension service will reach and teach the farmers under the high-yielding varieties programme. The farm radio forum broadcast will serve as the focal point for convening farmers and the content of each broadcast will form the backbone of the discussion. Each group will appoint a convenor from amongst its literate membership who will receive a small monthly honorarium to defray postage and reporting expenses incurred in connection with the radio forum, broadcasts. The discussion will be farm-oriented. Farmers trained for short specialised courses may serve as group leaders in this discussion.

(7) Rural Women Discussion Groups

Existing women groups will be revitalised and streamlined to form rural women discussion groups. Such of those rural women who have undergone short courses for women may become leaders of groups. The Education Officers (Women) will assist and encourage the Gramsevikas and the women's voluntary organisations in this task. The discussion will be farm and home oriented. Special materials for this discussion group with content emphasis on the role of women in agricultural production and in rural home making will be prepared on the same lines as it will be for the discussion of men's group.

(8) Production-oriented Rural Youth Clubs

Each VLW will be responsible for organising and assisting at least one production oriented rural youth club per year for boys and girls in his area with the help of a local leader. The object of production oriented club will be to teach rural youth between ages of 12 to 25 to manage one important high yielding variety crop through learning by doing it. Village, block, district and State rallies and competitions will be organised in support of high-yielding varieties programme. Considerable farmers and young farmers who attended farmers training course will be covered to act as local voluntary leaders of these clubs. Each state will appoint one full-time rural youth club organiser to initiate the systematic development of production-oriented club activities.

(9) Exchange of Farm Leaders within the country

The scheme envisages to provide an opportunity to interested farmers to visit the farms of outstanding farmers, stay with them for a fortnight as their guests, observe the farm planning and farm operations carried out and to acquire skills in any specific item of the visiting farmers choice, being practised at the farm of the host family. In the initial stages, it is proposed to have this exchange within the State and after gaining some experience, the exchange will be extended to neighbouring States. Under this scheme, about 2,000 farmers are planned to be exchanged per year. During the current year which is the 2nd year of the implementation of the programme, about 3,000 farmers are expected to take advantage of this programme.

ANNEXURE (IX) (F)

**SCHEMES FOR DEVELOPMENT OF AGRICULTURAL IMPLEMENTS
AND MACHINERY PROPOSED DURING THE
FOURTH PLAN**

(Rs. in Crores)

	Cost of schemes
Establishment of a workshop at the Block level	16.08
Continuation of Research-cum-Testing Centres and expansion of some of them to serve as Regional Research and Engineering Centre	1.48
Manufacture of Power Tillers and Tractors of less than 15 H.P. Establishment of 1 Factory in Public Sector	5.00
Subsidy for popularisation of improved agricultural implements	22.56
Establishment of workshops at the State level	7.41
Establishment of Agricultural implements centres in the I.A.D.P. Areas.	7.92
Establishment and expansion of the Workshop Wings attached to Gram Sevaks Training Centres, Tractor Testing & Training Centres and expansion of Workshop Wing at E.E.I. Nilokheri	4.27
Implements Corporation	2.00
Loans to Agricultural Graduates	0.66
Demonstration of improved agricultural implements	11.20

Source—Working Group Report for formulation of Fourth Five Year Plan for Improved Agricultural Implements.

Establishment of a Workshop at the Block level

It is long-felt need that servicing and repairing facilities should be made available to the farmers within their easy reach. It has also been found from experience that intensive training of farmers or the artisans is an essential pre-requisite for the successful implementation of the Implements Programme. The VLW who is a multipurpose worker, has not enough time or technical skill in handling and effectively demonstrating the use of implements. It is, therefore, proposed to set up a workshop under the charge of a Farm Mechanic in each Block to repair, maintain and popularise agricultural implements in collaboration with the VLWs and to give necessary guidance to village artisans and farmers. The total cost on this scheme works out to Rs. 16.08 crores.

Continuation of Research-cum-Testing Centres and expansion of some of them to serve as Regional Research and Design Centre.

Seventeen Research Testing and Training Centres have so far been established in the country. These Centres undertake testing of bullock-drawn implements and machinery in the country, import standard implements and machines and test their suitability under field conditions in different regions, modify and improve upon the implements and machines tested at the Centre and popularise the implements and machines found suitable after testing. For obvious reasons, it would be necessary to continue these Centres during the Fourth Plan, and the expenditure for continuance of these Research Testing and Training Centres is to be treated as committed expenditure and would be met from within the budget of Indian Council of Agricultural Research.

Although the R.T.Cs are doing very useful work, there is urgent need to conduct more intensive research on central basis. Two of the existing Centres are, therefore, proposed to be upgraded during the Fourth Plan into Regional Design and Research Centres for tackling complicated problems. The Delhi (I.A.R.I.) and Coimbatore Centres will have to be expanded to take more fundamental type of work of All India nature, for which purpose it would be necessary to strengthen the staff and augment physical facilities.

Manufacture of Tractors and Power Tillers in Public Sector

In view of the increased cost of bullocks and their maintenance, increasing number of farmers are now inclined to purchase power tillers or tractors. So far these tillers and tractors are being manufactured in the Private Sector, but the results have not been very encouraging. It is, therefore, proposed that during the Fourth Plan manufacture of power tillers and tractors of less than 15 H.P. should be undertaken in public sector as well to supplement the supply of the private sector. For this purpose at least one Factory should be established in the public sector. This is estimated to cost about Rs. 5 crores. The provision for establishing the factory has to be made by the Ministry of Industry which has been requested for the same.

Scheme for popularisation of improved Agricultural Implements

With the establishment of the Agricultural Implements Workshops in the States, Centres, in the Districts and Workshop at Block level, the extension machinery would be established for popularising improved agricultural implements. In addition there is a proposal to have at least two sets of improved agricultural implements in each village for demonstration purposes. These sets would be used by the Village Level Workers, Trained Artisans, etc. for demonstrating them to the farmers and for loaning them for actual use in the field. With these measures, it would be possible to convince the farmers to go in for improved agricultural implements. With the increasing demand for such implements efforts will be made for

establishing small industries in rural areas for manufacturing the implements locally. Thus the supply line of simple implements at least will be created.

The subsidy to be given to the farmers for the purchase of improved agricultural implements would be 30 per cent on the average of the cost of the implement. In addition to the subsidy given by the Centre the State Governments will add their share of subsidy according to their own pattern. It is also suggested that the subsidy shall be given at the source of manufacture of the implement. A sum of Rs. 22.56 crores has been provided as subsidy for the Fourth Plan period. The subsidy would be given @ Rs. 800 per village and the number of villages for the purpose of subsidy is estimated at 2,82,050 in the country.

Scheme for hire-purchase of power machines

It is possible for farmers to purchase simple implements. Power implements are, however, too costly and beyond the means of average farmers. It is, therefore, necessary to supply such machinery to farmers on hire and hire-purchase system. For this purpose the costly machinery will be kept at the Agricultural Implements Centres at district level. Since these centres will have workshops, repair facilities will be available. Separate provisions have been kept for purchase of power machinery and for giving it on hire or hire-purchase. This is a very important scheme for increasing the agricultural production.

Establishment of Workshops at the State level.

It is proposed to set up a Workshop, one in each State under the overall charge of an Assistant Agricultural Engineer to undertake production, demonstration and popularisation of improved agricultural implements. Such a Workshop would form the nucleus of all the agricultural engineering activities in the district, such as provision of repair and maintenance facilities for agricultural machinery, tractors, implements and tools, sustenance of continuous flow of essential spare parts and demonstration of improved implements. A mobile unit will also be attached to the Centre in order to intensify on-the-job training, demonstration and on-the-spot servicing of the implements. The Centre would also be responsible for quality-marking of all the implements in accordance with the specifications approved by I.S.I. or the procedure followed by them. At present these Workshops are proposed to be opened one in each State and the number increased with experience gained. The total cost on this scheme during the Fourth Plan period is estimated at Rs. 7.41 crores.

Establishment and expansion of the Workshop Wing attached to Gram Sevak Training Centres, Tractor Testing and Training Centres and expansion of Workshop Wing at E.E.I., Nilokheri.

The training has to be continued for the official staff and non-officials to promote the agricultural engineering profession. The training has to be

given at every stage from the Village Artisan up to the Research Engineers and also Extension Officers to work in the Agricultural Engineering Departments. The following are the requirements of the trained persons for the Fourth Five Year Plan:—

1. Post-Graduate in Agricultural Engineering	200
2. Graduates in Agricultural Engineering	1,000
3. Diploma holders in Agricultural Engineering	5,000
4. Trainee @ one Artisan per two villages	2,80,000
5. Village Level Workers	50,000
6. Farmers @ one farmer in 5 villages	1,12,000

The above personnel will be trained either in Institutes, Colleges, Polytechnics and in Workshops. But even then there is need of orientating these persons according to the field conditions and extension technique in Agricultural Engineering for increasing agricultural production.

There is likelihood that only 50 workshop wings will be set up by the end of the Third Five Year Plan due to lack of funds available for this scheme against a target of 100 workshops, one each to be attached to Gramsevak Training Centre. It was proposed that the remaining 50 workshop wings of the Third Plan would be carried forward to Fourth Plan, but due to shortage of funds only 29 workshop wings are now proposed to be opened in the Fourth Plan, so that at the end of Fourth Plan the total number of workshop wings is at least 69.

The continuance of old 50 workshop wings will also require funds for strengthening, providing physical facilities and expanding their activities. State Governments could not divert more funds to create permanent workshops and some States started this scheme on participative basis. Therefore, the same amount of funds should also be provided for the workshop wings already in existence.

Many new items like repair and service of pumping sets, tractors and all kinds of improved agricultural implements will have to be organised in these workshops and later on these workshops would be having multipurpose activities like Implements Centre.

At present there are two Tractor Testing and Training Centres, one at Budni (Bhopal) and the other at Hissar (Punjab). These centres are engaged in performing tests on tractors, power tillers and other heavy machinery, on the lines of Nabaska Tractor Testing Centre in U.S.A. During the Fourth Five Year Plan, the number of tractors and power tillers is estimated to be of the order of 3 lakhs and 5 lakhs respectively. These tractors and power tillers will be tested at these Tractor testing centres as regards their

tractive performance, belt performance by changing the load, drawbar and fuel consumption, field operation performance, road speed performance and haulage performance. After these laboratory tests, the machinery shall be further tested in the farmer's fields. Thus these two centres will have to be considerably strengthened and a third centre shall have to be opened for which a provision of Rs. 0.87 crore has been made.

In the Fourth Plan there will be a large number of Chief Instructors, Training Officers, Instructors and other connected staff with the agricultural engineering activities who would require higher training to bring their knowledge up-to-date. For this purpose workshop wing at Nilokheri, will have to be strengthened. A provision of Rs. 5 lakhs has, therefore, been made for this purpose to impart higher training to these personnel.

Implements Corporation

It is necessary to establish an implements corporation which can deal with manufacture of implements, their quality control, etc. For this purpose a provision of Rs. 2 crores has been kept.

Loans to Agricultural Graduates

To encourage agricultural graduates, the Minister for Finance had suggested that they should be given loans to purchase tractors and implements. An amount of Rs. 0.66 crores has been set aside for this purpose (at the rate of Rs. 20,000 per graduate for 320 graduates).

Demonstration of improved agricultural implements

The most convincing way of showing the efficiency and utility of improved implements is practical demonstration to the farmers in their fields. Most of the farmers are reluctant to buy improved agricultural implements for carrying out the agricultural operations, because they are ignorant of their efficiency and quality of work. The non-use of implements is a serious bottleneck in increasing agricultural production. To demonstrate the use of improved agricultural implements to the farmers, a provision of Rs. 11.20 crores has been made, for purchase of 5,60,000 sets of five important implements costing Rs. 200 per set. One demonstration set shall be used for demonstration purposes in each village.

Establishment of Agricultural Implements Centres in the Districts of Intensive Agriculture Areas

As per recommendations of the Conference on manufacture of improved Agricultural Implements held in July, 1963, a scheme for the Agricultural Implements Centres in the Districts of Intensive Agriculture Areas has been drawn up. The number of these Implements Centres to be established during the Fourth Plan period was 135 but due to lack of funds it is reduced

to 17. These implement centres would provide a nucleus to all the Agricultural Engineering activities and would be very near to the farmers. In the busy season these centres would help farmers in various agricultural operations by hiring the equipment and in the off season these centres would impart training to the farmers on use, minor repairs and maintenance of improved agricultural implements. These centres would help farmers to adopt mechanised methods of cultivations and would therefore serve as agencies of popularisation of improved agricultural implements. Most of the farmers are lacking resources for an investment of mechanised cultivation and also are lacking initiative to use machines for not being conversant with improved implements and machinery. These centres will make them to use machinery in agriculture.

ANNEXURE IX (G)

**DETAILS OF SCHEME PROPOSED FOR QUALITY MARKING
SCHEME FOR IMPROVED AGRICULTURAL IMPLE-
MENTS TO BE ATTACHED WITH AGRICULTURAL
IMPLEMENTS CENTRES IN THE DISTRICT
OF INTENSIVE AGRICULTURAL AREA.**

Staff	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	Total
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Assistant Inspector Quality Marking (Diploma in Agril./ Mech. Engg.) Scheme @ Rs. 120—5—250	1,440	1,500	1,560	1,620	1,680	7,800
2. Clerk (Rs. 80—3— 180)	960	996	1,030	1,068	1,104	4,860
3. Peon (Rs. 50—1— 80)	600	612	624	636	648	3,120
4. Allowances & Ho- norary at Rs. 200 p.m.	2,400	2,400	2,400	2,400	2,400	12,000
5. Equipment (Calli- pers, meters, gauges, etc).	5,000	..	..	..	..	5,000
TOTAL FOR ONE CENTRE						32,780

Source.—Working Group Report for formulation of Fourth Five Year Plan for Improved Agricultural Implements.

**FINANCIAL IMPLICATIONS OF THE QUALITY MARKING SCHEME
FOR IMPROVED AGRICULTURE IMPLEMENTS TO BE
ATTACHED WITH IMPROVED AGRICULTURAL
IMPLEMENTS CENTRE**

Staff	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	Total
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Quality Marking Inspector @ Rs. 200—15—350	2,400	2,500	2,760	2,840	3,120	13,800
2. Assistant Inspector Quality Marking Scheme @ Rs. 120—5—250	1,440	1,500	1,560	1,620	1,680	7,800
3. Office Asstt. in the Grade of Rs. 80—3—180	960	996	1,030	1,068	1,104	4,860
4. Peon @ Rs. 50—1—80	600	612	624	636	648	3,120
5. Allowances & Honorarium @ Rs. 200 p.m.	2,400	2,400	2,400	2,400	2,400	12,000
6. Equipment	5,000	..	..	..	..	5,000
				TOTAL		46,580

ANNEXURE X

- A Reports of the administrative reviews made by the official team of the Ministry of Food, Agriculture, Community Development and Co-operation on the contribution of Panchayati Raj to agricultural production in.
- (i) Madras
 - (ii) Rajasthan
 - (iii) Maharashtra.
- B. Report on the impact of Panchayati Raj on agricultural production—
Note from the P.E.O., Planning Commission.
- C. Summaries of the report of the Foodgrains Policy Committee, Agricultural Prices Commission and of the Symposium on price policy and economic growth.
- D. Gist of the recommendations made by the Committee on Plan Projects on improved agricultural implements.
- E. Progress of Soil Conservation work during the last three Plans and the programme proposed for the Fourth Plan.
- F. Review of the various research programmes in soil and water conservation.
- G. Summary of the Second Evaluation Report on Intensive Agricultural Development Programme.

REPORT OF THE STUDY TEAM ON IMPACT OF PANCHAYATI RAJ ON AGRICULTURAL PRODUCTION IN MADRAS STATE.

I. Introduction

The Team toured Madras State from the the 7th to 10th July, 1966. On the 7th July 1966 we visited Nandivaram Gram Panchayat and Kattankolathur Panchayat Union, Singapermalkoil, large-sized co-operative society (known as Agriculture Bank in this State) in Chingleput District and met progressive gentleman farmers in village Athur. On the 8th July we paid a visit to Kaliampoondi model village and Uttiramerur Panchayat Union and large-sized co-operative society. In the afternoon, we met selected Presidents of Panchayat Union Council at Madras. Next day we visited Panchayat Union in Thanjavur district where intensive agriculture development programme has been undertaken. We met members of the Panchayat Union Council of Orathanad, members of the multipurpose co-operative society at Karambayam, saw Rural Manpower programme in Pattukkottai block and met district level officials at Rural Extension Centre, Pattukkottai. We also saw a poultry unit under the Applied Nutrition Programme in this block and visited the modern rice mill in the cooperative sector at Tiruvarur. Our tour was rounded off with discussions with the State level officers at Madras on the 10th July, 1966. Earlier we also called on the State Minister in charge of Community Development and Panchayati Raj on the 8th July.

II. Role of Panchayati Raj Institutions in Agricultural Production

1. It was heartening to note that the Panchayat and Panchayat Union Councils have been taking active and keen interest in formulating and executing production programmes. During the Third Plan a grant of Rs. 2 lakhs was made available by the State Government to each Panchayat Union for implementing schemes under agriculture, animal husbandry and fisheries based on a uniform plan drawn up for the entire State vide G.O. No. 2460 dated the 8th September, 1961. Certain schemes of this plan are entrusted to the Village Panchayats for execution and the rest to the Panchayat Unions. The village Panchayats have concentrated their efforts on mainly three schemes:

- (a) multiplication and distribution of improved seeds through Gram Sahayaks ;

- (b) development of local manurial resources through manufacture of compost and growing green manurial crops ;
- (c) raising Panchayat plantations in poromboke lands vested with them for proper maintenance and utilisation.

Besides some Panchayati Raj bodies have also stocked improved agricultural implements for hiring out to farmers. Under the seed multiplication scheme every year the Village Panchayats select one or two Gram Sahayaks for multiplication of improved seeds and ensure large scale exchange of seeds produced by them. It was reported that annually about 37,500 tonnes of paddy seeds and 3,000 tonnes of millet seeds were distributed to the village Panchayats under this scheme. In two districts, co-operatives have been asked to purchase seeds from the Gram Sahayaks, store and sell them as an experimental measure. If it is found to be a more satisfactory arrangement, it will be extended to other districts as well.

2. It was reported that 3,706 Panchayats out of 12,415 undertook manufacture of rural compost. Green manure crops were raised annually in about 12,500 acres by the village Panchayats on poromboks or leased lands mainly for gathering seeds and supply them to the farmers through the agricultural depots. We visited some of these plantations and compost yards and were struck by the enthusiasm and interest evinced by the Panchayats in the scheme. The Panchayats also arrange to collect village sweepings through paid scavengers and arrange for preparation of compost. In one of the Panchayats viz. Nandivaram, we were told that 40 tonnes of compost were prepared under the scheme and sold to farmers @ Rs. 2 per cartload. An expenditure of nearly Rs. 900 was incurred and the income was a little less than that. Sale of compost is by auction; attempt must be made to run them on profit basis.

3. Under the Panchayat plantations scheme 4,310 acres are reported to have been brought under plantations. Fruit plants, trees of economic value and fuel trees have been raised under the scheme, and thus communal lands and grazing grounds which have been lying barren, have been put to productive use and converted into local assets. We were told that some of the plantations that we visited, would easily fetch an income of Rs. 4,000 to Rs. 5,000 after a period of 4 to 5 years. This is a very good scheme and may be commended to other States also. We would suggest that provision should be made for irrigation in each case and by suitable cropping pattern, short-term crops like vegetables etc. grown in the same area as far as possible. This will be a great asset and a fruitful source of income to the Panchayats.

4. At the Panchayat Union level, the Block staff implement mainly extended schemes like running of demonstration farms, conducting demonstrations, stocking improved equipments like power sprayers, stocking and

distributing various agricultural inputs like improved seeds, green manure seeds, vegetable seeds, fruit seedlings, improved implements, pesticides etc. at subsidised rates with a view to popularise scientific methods of cultivation. There were numerous proposals seeking permission from the Agricultural Department to purchase tractors and other agricultural machineries and for construction of agricultural depots. 25 Unions were permitted to purchase tractors from their own general funds on a pilot basis. All Unions have been permitted to purchase one hand boring set and in millet tracts on power thrasher from the agricultural grant. Some of the Unions were also permitted to construct agricultural depots at a cost of Rs. 20,000 per depot. Some Unions have taken up cultivation of vegetables for seed production and have met the entire expenditure over these special projects from their general funds with absolutely no assistance from the Government.

5. Under the animal husbandry programme the Panchayat Unions have taken up schemes like distribution of pedigree bulls, rams and cockerels on exchange basis. They have provided, at places, rent-free houses for the key village scheme and purchased drugs for disease control.

6. Under the fishery scheme, the Unions have constructed 180 fish nurseries and distributed more than 5 lakhs of fingerlings during the Third Plan period. Training of selected Villagers in pisciculture will be a useful investment; some States like Orissa have taken up a regular programme of training of selected persons sponsored by Panchayats in fish development.

7. In addition, minor irrigation sources and Kudimarathu works have been entrusted to the Panchayat Union Councils and Panchayats for maintenance. Kudimarathu has gone into dis-use. People are reluctant to do this maintenance work. Panchayat Unions have not levied a tax to enable them to take this up.

8. Village forests raised by the Forest Department are maintained by some Panchayats in 6 blocks.

9. Although the Preamble to the Madras Panchayat Act, 1958 lays down the need for stepping up food production as one of the important factors to the formation of village Panchayats and Panchayat Unions, yet agricultural development has not been statutorily entrusted to the Panchayat Union Councils and Panchayats. The Panchayat Unions are no doubt under the statute charged with the responsibility for execution of the NES and Community Development but their functions do not include schemes of agricultural production in the same manner as other functions like establishment and maintenance of dispensaries, maternity and child welfare centres, opening and maintenance of elementary schools, providing maternity relief, promotion and encouragement of cottage industries have been spelt out. Similarly, while dividing the functions of the Panchayats into two categories—obligatory and discretionary—agricultural production has not been included in the list of obligatory functions. Our attention was drawn to

provision of Section 66 of the Madras Panchayats Act, 1958 which provides that the Government may entrust all or such other measures relating to the development of agriculture, animal husbandry, fisheries etc. and their execution to Panchayat Union Councils subject to such conditions and restrictions as may be specified by the Government from time to time. We would, however, strongly recommend that the statute should clearly and categorically cast responsibility for agriculture development in its wider sense on the Panchayats and Panchayat Union Councils and the existing statutes may be amended for this purpose. Circulars issued by Government should also clarify this and transfer more schemes in Panchayati Raj bodies than at present.

III. Planning for Agricultural Development

Excellent work has been done in this State in preparation of farm plans in IADP and IAA areas. But Panchayati Raj institutions have not been involved in the preparation of village, block and district agricultural plans. Planning and execution of the schemes entrusted completely to these bodies have no doubt been left to them, but our impression is that the general agricultural development plan of an area is not formulated in consultation with these bodies.

IV. Functions

It was disconcerting to find that only 3 schemes of agricultural development have been entrusted to the Panchayati Raj institutions for implementation in the State viz. multiplication and distribution of seeds and development of local manurial resources and plantations. The Agriculture Department has not yet developed all the schemes capable of implementation at the local levels over these institutions as has been done in other States. The programme of the Agriculture Department is, in the main, administered directly through the official hierarchy. The members and office-bearers of Panchayati Raj institutions are consulted individually but not collectively. Research, seed farms and allied schemes may be handled by the Department direct. But all other schemes that will need local support must be implemented through the representative institutions. Certain special schemes like intensive manuring scheme, new wells subsidy scheme are implemented through the Block agency keeping the Panchayat Union Councils informed. The scheme is, however, controlled by the B.D.O. It is desirable that all these schemes should be developed on the Panchayati Raj institutions. Similarly, crash programmes of cattle development and poultry development have been undertaken without consulting or involving Panchayat Union Councils in their implementation. Admittedly with the help of these bodies the programme could have been pushed through with greater vigour. Multiplicity of agencies for execution of various schemes should be avoided. The Panchayat Unions and Panchayats have been allowed to implement certain permissive schemes as mentioned in G.O. No. 2460 of the 9th Sept., 1961. Beyond this the Department of Agriculture

does not seem to trust them with any other scheme. We would urge that such of the departmental schemes that are capable of implementation at the local levels must be entrusted to the Panchayati Raj institutions. It is only these institutions that can mobilise the peasantry to participate fully in these schemes. The State Government may reconsider the whole matter in the light of the experience gained by other States. To cite one instance, the Maharashtra Government has entrusted almost all the schemes to the Zilla Parishads for execution; even seed farms have been made over to these bodies, for maintenance. Experience in other States shows that once responsibilities commensurate with funds and staff are transferred to these bodies, they give a good account of themselves in discharging them.

2. In this connection it was mentioned that even when the Panchayat Union Councils propose to take up certain schemes of local importance from their own funds the Agriculture Department is reluctant to accord necessary permission. The case of purchase of tractors was cited in this context; this was also represented to us in course of our tours. Numerous Panchayat Unions proposed to purchase tractors, but only 25 Unions were permitted to purchase them from their general funds and that too, on a pilot basis. There was a great demand in the areas that we visited, for purchase of tractors, pumping sets, storage of spare parts and other agricultural machineries and for making suitable arrangements for their timely repair and proper maintenance. We would urge upon the State Government to take a liberal view of the demand to provide the needed facilities to the Panchayati Raj bodies.

V. Resources

Adequate powers of taxation have been vested with the Panchayats and Panchayat Union Councils in the State. These institutions have also taken up remunerative enterprises. By and large they have exploited the sources of income properly; particularly the Panchayat Unions have made good use of local cess and local cess surcharge on which a matching grant is paid by the Government. On an average local cess surcharge at 16 paise per rupee on revenue has been imposed and collected by Panchayat Union. Loans and grants are also given by the Government for remunerative schemes like Panchayat plantations etc. We would only suggest that these plantations should be run on commercial lines and the Government may consider giving handsome rewards to such Panchayats that make substantial profit. Again it is suggested that the Panchayats and Panchayat Union Councils should be given greater freedom in spending their own funds over approved schemes of agricultural development.

2. Certain percentage of the general funds of these bodies should be earmarked statutorily for agricultural development schemes as has been done in some other States.

3. Whenever a scheme of the agricultural development is transferred, funds together with the staff sanctioned for the scheme should also be placed at the disposal of these bodies.

4. **Inputs.**—(a) It is our impression that distribution of inputs is not made in consultation with the Panchayati Raj institutions. The system of distribution should be streamlined so that the available inputs, even though limited when compared to demand, are distributed on the advice of the Panchayati Raj institutions.

(b) Panchayati Raj institutions should be allowed to stock pesticides for sale to farmers, in case cooperatives do not wish to handle them.

(c) The Panchayat Union Councils may also be permitted to purchase tractors, agricultural machinery, compressor units for digging of wells, spare parts etc. for hiring out to the farmers. The Department of Agriculture should provide necessary facilities for servicing, repair and maintenance of these machineries on a regular basis. Training of local persons in running and maintenance of these machineries will also be a useful investment.

5. **Credit.**—(i) The team was very much distressed to find signs of animosity between the Panchayati Raj institutions and the cooperatives in the State. There was hardly any administrative arrangement for mutual consultation and representation.

(ii) In spite of very liberal statutory provision for admission of members, under which a member is automatically admitted within a few days of his application unless the Society moves the Cooperation Department for not admitting him, we came across cases where for years the Societies have been refusing to admit large number of persons as members. Enforcement of the statutory provision leaves much to be desired.

(iii) Even the Farm Plans in Tanjore have not been accepted by the Central Banks for purposes of extending agricultural credit. This was rather surprising as one of the objectives of the IADP was to prepare the Farm Plans for each cultivator and the Reserve Bank had agreed at the very initial stage of this programme that this should form basis for agricultural credit. Implementation has been tardy.

(iv) The limit for agricultural credit per acre has been fixed at Rs. 275. This is generally all right for all crops, except sugarcane. However, the average loan per acre in some societies was found to be as low as Rs. 20. The restrictions placed by the Cooperation Department and the Central Banks on the eligibility of individuals for getting loans have perhaps reduced the limit drastically in this fashion. The Cooperation Department must inquire and find out why the limit set by them had not been applied in practice.

(v) Crop loan system is just being introduced during this season. The appreciation of the various aspects of the crop loan system is lacking all

along the line. Even under this system, sureties are to be produced in Madras. Where the surety has defaulted, the member cannot get a loan. Even if he is prepared to offer another surety approval has to be obtained from the Board of Directors of the Central Bank before he can be given a loan.

(vi) Tenants face considerable difficulty in getting loans. There are lower limits for tenants than for landlords in the case of maximum loans that they can get. They have to offer a surety who owns landed property. In many cases it has to be the landlord.

(vii) The Central Banks used to give cash credit accommodation to the agricultural banks. Because of some misuse of this power in some cases, this system has been abandoned. Even good societies with 100% recovery are denied this cash credit.

(viii) The sugar factories were advancing production loans to their members. Recovery was through the sale of cane. This system has been stopped at the instance of the Reserve Bank of India. Production credit has to come through Central Banks and Credit Societies. In one sugar factory area, against Rs. 15 lakhs distributed last year by the factory as production loan, it has been possible to sanction only Rs. 1.5 lakhs till now during the year for the same purpose under the new procedure. This has retarded the purchase and application of fertilisers and other inputs.

(ix) The Agricultural Banks in Madras were giving loans on the pledge of jewels. Now the Reserve Bank has imposed some conditions and virtually stopped issue of such loans. After giving loans on jewels, the Banks used to pledge them to the Central Bank and get reimbursement. The Reserve Bank has objected to this. These loans used to be given for non-agricultural purpose also from the own funds of the Agricultural Banks. In such cases also the Reserve Bank had said that reimbursement would not be permissible. In many cases these jewel loans were a method by which a cultivator could get credit immediately when he needs it. Later, when his loan is sanctioned by the Societies in due course, he retrieves the jewels. This has been considered as book adjustment and this practice has been stopped by the Reserve Bank.

(x) The pledge loans on foodgrains have also been stopped by the Reserve Bank.

(xi) The loan disbursement is made only once irrespective of the number of crops and the season for which loan is needed. Recovery dates also need adjustments.

(xii) One of the progressive farmers reported to us that Reserve Bank has directed scheduled banks not to enter rural credit field. The Team was a bit surprised to hear about this.

(xiii) The progressive farmers were keen to have an alternative agency for rural credit like the Food Corporation of India. In Chingleput district which we visited, we found that the Food Corporation had a programme of giving credit to persons for nearly 8,000 acres. Actually, only 4,000 acres have been covered. The reasons reported to us by the local people were that others own less than 2 acres and as such were not eligible for the Food Corporation's loan. Again the Food Corporation was giving loan only to those who were to grow High-yielding Varieties and not to others even if they had more than 2 acres.

(xiv) We would recommend the Corporation Departments in the State and in the Centre to consider these difficulties in Agriculture and cooperative credit programmes and find out ways and means for removing them.

VI. Administrative Arrangements

1. There is no statutory Standing Committee for agricultural production either under the Panchayat or Panchayat Union Council. The Standing Committees now formed by these bodies are advisory and since they are non-statutory, the members of these Committees are not entitled to get T.A. and D.A. with the result that the attendance is poor and the Committee does not carry same amount of prestige as other Standing Committees. Since agriculture occupies a pivotal position in the scheme of things now, it is suggested that statute may be amended so as to provide for constitution of Standing Committee for agricultural production at all levels. Besides, progressive farmers on the basis of performance should also be associated with these Committees.

2. Unfortunately, there is a growing tendency to establish single line command in the Agriculture Department. The basis of the block organisation is integrated approach through coordinated working of the functionaries of various Departments at that level. The present approach of the Agriculture Department will cut at the very root of the system that has been built up in course of the last 15 years. An impression has been stated by circulation of an agenda paper on the subject in the last Conference of the Chief Ministers which was convened to discuss the programme for high-yielding varieties that the Ministry of Agriculture advocated this approach. No such decision was, however, taken in the Conference, nor recorded in the proceedings. It would be desirable for the Department of Agriculture at the Centre to issue a clear policy circular spelling the doubt entertained in various quarters of the matter once for all and making it clear that the Ministry does not advocate a singleline of control by the Agriculture and allied Departments.

3. About 400 untrained V.L.Ws have been provided to IAA and IADP blocks. Most of them were recruited from amongst the field demonstrators and put through a short course of training. When the next batch of

V.L.Ws comes out of the training centres, the existing shortage in the ranks of the V.L.Ws in these blocks can be completely wiped out. Needless to say that the V.L.W. is the lynch-pin of the entire organisation and unless he is properly qualified and trained, he cannot be expected to deliver the goods. In fact, the demand now is to improve the knowledge of the V.L.W. in view of the advances made in agricultural techniques and increasing knowledge of the cultivators.

4. It was suggested that the Cooperative Extension Officer should be vested with the statutory power of execution of awards, attachment and sale. He should also concern himself with recovery of overdues.

5. The scheme for training of progressive farmers should be intensified.

6. It is good that the Department of Cooperation and Agriculture have been placed under one Secretary. This will facilitate coordination.

7. It was heartening to find that the relationships between the officials and non-officials are cordial.

8. It is our impression that the District Development Councils do not take interest in the IADP programme. Curiously enough, the Project Officer in charge of the programme is not a member of the Standing Committee on Agriculture Production. This Committee also does not review the progress of the IADP. Besides, the District Coordination Committee for IADP is not linked with the District Development Council. It was explained that this Committee is mainly concerned with evaluation of the programme. In our opinion the Agricultural Production Standing Committee of the District Development Council where all the officers of the Development Departments are included, should take charge of the programme and there is no need to have a separate Committee for this purpose. State Govt. may examine whether the Advisory Committee for IADP need be separate at all and whether this function should not be performed by the District Development Council.

9. Although the various schemes under the IADP have been taken up after discussion with the office bearers of the Panchayat Union Councils and Panchayats, individually the programme as such has never been placed before the Panchayat Union Council, nor is it reviewed by the Council. It was admitted that the programme would not have made significant progress but for the cooperation and support of the people. It, therefore, follows that the programme should not only be formulated in consultation with the P.R. institutions but it should also be placed before them periodically for review.

VII. Financial Arrangement

Routing of all the departmental funds through the Panchayati Raj institutions has been avowed object and much progress in this regard has been made in this State. The Panchayat Development schematic budget framed in this State has been commended to other States. For the current year Rs. 645 lakhs is the provision relating to the schematic development budgets of the Panchayat Unions and other connected activities of Panchayat Administration. In spite of all these exercises the requisite amount of funds of other Departments are not flowing through the Panchayati Raj channels. Eternal vigilance on the part of the P.R. institutions is the only remedy.

2. Pesticides have become very popular in the State. This is due to intensive propaganda through the block agency, demonstration by the Department and some development work undertaken by the firms dealing in pesticides.

VIII. General

1. The team visited the cooperative rice mill at Tiruvarur. Modern machinery has been installed. The silos are under construction. We were told that recovery was 6-7% more in this mill than elsewhere. This benefit can be passed on to the cultivator only if he is directly a member of the society running the mill. Now the mill belongs to the District Marketing Society of which other societies and a few individuals are members. The experience with cooperative sugar factories has to be utilised in this case also and steps taken to form a single society for rice milling in which all cultivators can be members directly. Steps may also be taken to reduce the capital cost of the mill.

2. There was a great demand for execution of minor irrigation project Tendarai resevoir in Kaliapoondi Gram Panchayat in Chingleput district. The State Government may kindly look into this.

3. In regard to A.N.P. it suggested that the economics of each scheme should be examined, executed with a view to become self-sustaining and self-generating.

4. The remarkable feature about the working of the Panchayati Raj in Madras is that the functions of the non-official organisations have been very clearly defined but equally clearly restricted to specific and limited number of schemes, particularly in the case of agriculture. The different Departments of Government implement the schemes at the Block and village level through the Block Development officer, the Extension Officers and the Village Level Workers. But for the schemes which have not been transferred to Panchayati Raj bodies, these officers are directly responsible

to the respective technical department. We would urge the State Governments to reconsider the whole issue and entrust more functions than at present to the non-official organisation.

5. The question of amendment of Section 3 of the Madras Panchayats (Amendment Act) which confers a right on the M.L.As and M.L.Cs to be elected as Chairman and Vice-Chairman of Panchayat Union Councils by virtue of being Presidents of the Panchayats was discussed by the Union Deputy Minister with the State Minister in charge of Panchayati Raj. It was mentioned that only 15 M.L.As are Chairman of Panchayat Union Councils out of 375 Panchayat Union Councils and once they are elected they should be allowed to hold office. The Ministry has been pressing for including M.L.As/M.L.Cs and M.Ps as associate member of the Panchayati Raj institutions without right to hold office.

6. The Union Deputy Minister suggested that an evaluation of the working of the Panchayati Raj system should be made by the State Government and this was agreed to.

Source.—Ministry of Food, Agriculture, Community Development and Cooperation (Department of Community Development).

**REPORT OF THE STUDY TEAM ON IMPACT OF PANCHAYATI
RAJ ON AGRICULTURAL PRODUCTION IN RAJASTHAN STATE.**

I. Introduction

We toured in Rajasthan State from 22nd to 24th June, 1966. We visited Mehnewas Gram Panchayat and Tedaraisingh Panchayat samiti and Zila Parishad in Tonk district on 22nd June. Next day we accompanied the Union Deputy Minister for Food, Agriculture, Community Development and Cooperation to Bassi's large-sized Cooperative Society and Gram Panchayat and to Jhothwara Panchayat Samiti and met the members of the Jaipur Zila Parishad. We discussed with some selected Pramukhs and Pradhans of other districts who were called to Jaipur. Discussions were also held with the district level officers of Jaipur district and the State level officers. We called on the Minister in charge of Community Development and Panchayat Raj and had also exchange of views with the Chief Secretary. The following is a brief resume of what we observed in course of our short visit to Rajasthan and discussions with the officials and non-officials.

II. Appraisal

Our field visits and discussions with the officials and non-officials at various levels convinced us that the Panchayati Raj institutions have played a notable role in stepping up agricultural production. Demand for inputs has outstripped supply. There is a general awareness about the benefits of fertilisers and pesticides. The Panchayati Raj bodies deserve credit for making the farmers articulate and creating in them an urge for higher production and use of inputs. Notable advance has been made in several directions particularly in the field of minor irrigation. The number of irrigation wells constructed in Dungarpur district in the last decade was about 6,000. 1,800 of these wells have been fitted with persian wheels and 150 with pumping sets. In Jodhpur district the number of wells in one Panchayat Samiti has gone up from 600 in 1959 to 2,800 in 1965-66; whereas there were 10 tractors in this district 10 years ago; now the number is 530. In Chittor district the number of wells in 1959 was 34,000 whereas it was reported as 52,000 in 1966. Irrigated area in this district has in consequences registered an increase from 1.45 lakh acres to 2 lakhs acres in 10 years. It is gratifying to note that a great demand has developed for extension of electricity to rural areas for irrigation purposes. Another machinery in great demand is compressor for deepening of wells. Some Panchayat Samitis have purchased these compressors and given them on hire. One is reported to have recovered the whole capital cost in one year.

Tractors are also very popular. Some of the enterprising Panchayat Samitis have hired them out also. Extraordinarily high yields have been obtained by individual farmers; 50 to 52 maunds per acre yield in wheat has been reported with the use of local improved varieties. New crops like groundnut have been introduced. There is unmistakable evidence of increasing use of fertilisers and pesticides and pressing demand for greater supplies in all the areas that we visited. In the last rabi campaign all the resources—men, materials were mobilised by the Panchayati Raj institutions. We have no doubt that but for their active and massive support of the elected representatives it would not have been possible to organise rabi campaign on such a large scale. Following is a detailed appraisal of the involvement of the Panchayati Raj institutions in various aspects of agricultural production.

III. Programme Planning

Agricultural plans at village and block levels have been prepared. But those are not comprehensive plans containing details of area under cultivation, area to be double-cropped and any other projection of increase in production per acre and the improved methods to be adopted for this purpose. It was explained to us that this plan was discussed in a meeting of Gram Sabha. Besides, the lists of cultivators for distribution of inputs are also prepared in consultation with them by the Gram Panchayat and then sent up to the Panchayat Samiti. At the Panchayat Samiti level the Agricultural Production Committee consolidates the plans in terms of requirements of inputs. It is, therefore, evident that both the Panchayats and Panchayat Samitis are involved in the process of planning for agricultural production. But at the district level we found lack of interest on the part of the Zila Parishads in agricultural production. The Agricultural Production Committee of the Zila Parishad is supposed to review the progress of agricultural production every month but we did not find any observation of the Committee while making such a review. It, therefore, appears to us that this is a mechanical process and neither the Zila Parishad nor the Agricultural Sub-Committee provide any guidance to the lower tier bodies in this matter. In fact, these committees have been recently set up. There is another Committee of officers at the district level known as the District Production Committee with the Collector as the President and the District Agricultural Officer as the Secretary, the Pramukh and two more members of the Zila Parishad have also been included in this Committee. This Committee has obviously been set up in accordance with the recommendations of the working Group on Inter-departmental and Institutional Coordination for agricultural production (1963-64 Dr. Ramsuhag Singh Committee).

IV. Inputs

It was heartening to note a growing demand for inputs. Short supply and untimely distribution of even the limited stock available seems to be

the main difficulty. While the need for greater supply of inputs cannot be overemphasised, we would urge streamlining the arrangement for timely distribution of available stocks. The members of the Panchayati Raj Institutions and the cultivators expressed disappointment over delay in supply of hybrid seeds. It is surprising to note that fertilisers loans are not given in kind as in other States. It will be advantageous to the farmers to get loan in kind subject to adjustment against cash loans. In regard to pesticides it was our impression that hazards in or handling pesticides have not yet been fully impressed upon the cultivators. Dusters and sprayers seem to be in short supply. Although some sets are available with the Gram Panchayats, yet there is a case for supply of larger number of these equipments.

V. Irrigation

There is a crying need for irrigation works in the State. Complaints about inadequacy of funds were made at all levels both by the officials and non-officials. Although a sum of Rs. 3.30 crores has been allotted under minor irrigation to the State, yet it was reported to be inadequate. Schemes costing less than Rs. 25,000 are entrusted to the Panchayati Raj institutions for execution. It is reported that such schemes estimated to cost nearly Rs. 2 crores have already been investigated and are ready for execution. As mentioned above finances from the Land Mortgage Banks are not available for these programmes in this State to supplement the State resources. There is a great demand for lift irrigation schemes, tubewells, pumping sets, extension of electricity. An Underground Water Board has already been set up in the State. Paucity of technical staff seems to be a great limiting factor. The Government of India have appointed another team to go into the minor irrigation programmes of the State in detail. We would, however, make a few suggestions for consideration:—

- (i) The programme for minor irrigation should be phased over a period of two to three years.
- (ii) A quick survey of underground water is a condition precedent to any expansion of the programme.
- (iii) Insufficient and irregular supply of diesel appears to be a serious difficulty. The Government of India should increase the quota for diesel for this State as a special case.
- (iv) A special scheme for installing 2,000 Persian wheels in Durgapur district in 14 tribal blocks at a cost of Rs. 750 each should be prepared and Central sanction obtained.
- (v) The system for providing loans from the Land Development Bank should be streamlined.

- (vi) The staff for the execution of the programme should be strengthened. It is suggested that overseers may be recruited from Kerala State where there is a surplus.
- (vii) Powers for sanction of projects appear to be inadequate; an estimate of work costing more than Rs. 5,000 is required to be sent to the Executive Engineer for technical scrutiny. More powers of technical sanction and administrative control should be delegated to various levels.
- (viii) Utilisation of irrigation in spite of pressing demand for more wells, tubewells, pumping sets etc. leaves much to be desired. It was found that the entire irrigated area is not double-cropped in many places. In one block it was noticed that although an area of 21,000 acres was irrigated, only an extent of 12,000 acres was double-cropped. Greater stress on utilisation of 'irrigation' in this State is particularly necessary, the investment even on construction of pucca and covered field channels from irrigation sources like tubewells etc. has been suggested to be worthwhile.

VI. Animal Husbandry

In the desert areas of this State where there is absolutely no scope for agricultural production, special attention should be given to animal husbandry schemes. The State Government have already taken up various schemes for cattle development in these areas. Even the V.L.Ws. to be posted to these areas are being given special training in animal husbandry. Perhaps good Animal Husbandry Extension Officers may be promoted as B.D.Os for the desert blocks. Fifty per cent of the C.D. budget in these blocks is earmarked for animal husbandry programmes. The arrangements made by the State Government for development of cattle in these areas seem to be adequate. It was, however, noticed that a separate Animal Husbandry Officer provided in each Block is not attached to the veterinary dispensary. Recently, the State Government have decided to base him on the dispensary. They may examine the need for a separate Extension Officer for Animal Husbandry. Another scheme that calls for attention is maintenance of bulls by Panchayats. It is felt that the Panchayats do not make adequate arrangements for their maintenance. Unless sufficient funds are earmarked by the Panchayats, such bull centres should not be handed over to them.

VII. Administrative and Financial Arrangements

(A) ADMINISTRATIVE

In Rajasthan all the schemes of agricultural production that are capable of being executed at local levels have been transferred to the Panchayati Raj bodies. Even seed production farms have been transferred to those institutions much against the technical advice. Now it has been decided

not to entrust management of any more farm to these institutions for obvious and valid reasons.

(ii) It was noticed that except distribution of loans and grants no detailed discussions about the existing output, plans of increase in production, adoption of improved practices etc. are held in the Agricultural Sub-committee of the Panchayat Samiti. For this purpose the Agricultural Extension Officer and the District Agriculture Officer should be held specially responsible. It is their duty to place a detailed picture before these bodies and lead them to fruitful discussion.

(iii) The Collector has been authorised to issue directive to the Panchayati Raj institutions where they are not implementing the programme in time or going against government policy. This is a good provision and its very existence has had salutary effects.

(iv) In Tonk district the Collector has been elected as the Chairman of the Agricultural Sub-Committee of the Zila Parishad. We feel that by bringing in the Collector as the Chairman of this important Committee greater coordination can be brought about between different departments engaged in agricultural production in the wider sense. This has been successfully tried in Andhra Pradesh and has yielded rich dividends. We would commend this system for adoption by the Government of Rajasthan. The Minister for Panchayati Raj and C.D., Rajasthan, was, however, of the view that Collector should be kept out of the Zila Parishad set up.

(v) At the village level an interesting and novel experiment is being made in this State. In 24 selected Panchayat Samitis the V.L.Ws. jurisdiction has been reduced so as to make it coterminus with a Panchayat and he has been entrusted with functions of Panchayat Secretaries in addition. In Tonk Panchayat Samiti there are trained 42 V.L.Ws. one for each Panchayat. It has also provided institutional link-up with the people's institutions. It was found that a V.L.W. under this set up is very effective. In another Panchayat Samiti Bassi, on the other hand, there are 10 V.L.Ws for 38 Gram Panchayats and there is a separate Secretary for each Panchayat. The Director of Agriculture was of the view that combination of functions of V.L.Ws and Panchayat Secretaries will, in the long run, be detrimental to the work of the V.L.W. as an agricultural extension agent and strongly pleaded for making V.L.W. a cent per cent agricultural worker.

(vi) We are glad to note that out of 2,400 V.L.Ws. in the State, only 200 are non-matriculates. However, the prospects of promotion of the V.L.Ws have not been attractive so far. Better prospects of promotion, creation of a selection grade, higher training for such of them as distinguish themselves in agriculture work so as to be eligible for promotion to higher posts in Agriculture Department are some of the steps that we would suggest for the consideration of the State Government. In this context a suggestion

made by the Chief Secretary to impart better type of training to the V.L.Ws. in view of the technological advance in agriculture so as to help the progressive farmers particularly in the irrigated tracts like Ganganagar district merits serious consideration. This would apply to the Agriculture Extension Officers also.

(vii) The district level officers have been given disciplinary control over their Extension Officers. It was, however, represented by the office-bearers of the Panchayati Raj institutions that they should have full control over the staff including the Extension Officers working under them. It was suggested that a separate Vikas Service should be created for different functionaries. There is already a Panchayati Raj cadre in the State consisting of the V.L.Ws. and the Panchayat Secretaries. The suggestion was to encadre Extension Officers, B.D.Os also. The feeling of the officials of the Agriculture Department is that even the V.L.Ws should now be placed under the Zila Parishad instead of the Panchayat Samiti. To the suggestion that the District Agriculture Officer should be placed under the Zila Parishad, the reaction of the Government officials was not favourable on the ground that the Zila Parishad was mainly an advisory body in the State; whereas in Maharashtra it was the executive body.

On the whole, the relationship of the elected representative with the Extension Officer and district level officers seems to be cordial. It was also felt that the departmental programmes were being properly implemented through the Panchayati Raj bodies and the B.D.Os were acting fairly, effectively as coordinators.

B. FINANCIAL

In regard to agricultural credit the situation seems to be a little serious. The cooperative movement in Rajasthan is very weak. It was puzzling to find a contrast between the working of a Panchayat and a cooperative. While the former is generally well run by the non-official leadership available in the village; the latter seems to be lagging behind. It was really an enigma as to why the non-official leadership at that level who could make a success of the Panchayat Raj could not infuse life into the cooperative institutions. It appears that successive failure of crops and drought has resulted in the present situation with huge overdues outstanding for a number of years. Previously the Reserve Bank did not agree to the conversion of short-term loans into medium-term ones in times of scarcity. This year as a special case the Reserve Bank has extended this facility for one year's overdues to the cooperative institutions in the State; yet there are overdues outstanding from previous years. Some complaints were made in regard to delay in admission of members. Even short-term loans are being granted on furnishing two sureties, even if the loanee is prepared to offer his unencumbered land as security. Delay in registration of documents for loans from the Land Mortgage Bank is another impediment. We

found that even though the credit limit of the Bassi Cooperative Society was Rs. 3.20 lakhs the loan advanced was Rs. 1.26 lakhs only even when the recovery was 90%. Again, loans are not given to cultivators on the basis of their requirement. Loans for both rabi and khariff crops are given in one instalment. Crop loan system is to be introduced only from the current agriculture season. The short-term credit given last year was Rs. 7.5 crores in the whole year and it is proposed to be raised to Rs. 10 crores this year. This is far too inadequate. The Land Development Bank advanced a total loan of Rs. 88 lakhs only. Unless the cooperative movement in the State is strengthened, the flow of agricultural credit will continue to be as tardy as at present with resultant impediment to agricultural production.

A good feature of the system is that the Panchayati Raj institutions have got mutual representation on cooperatives. This makes for coordination and smooth working of the two institutions. Credit requirements for agricultural production are not yet worked out as a part of agricultural production plan. Unless credit is linked up with production its implementation cannot make much headway. Following suggestions may be considered in this connection:—

- (i) The act and rules may be amended so as to avoid delay in admission of members. Madras law may be referred to.
- (ii) Credit limits for each crop in each area should be fixed and loans should be advanced for each crop separately.
- (iii) Government should provide substantial amount of share capital to the Cooperative Banks.
- (iv) Crop loan system which has been introduced for wheat crop only in IAA areas should be extended to all crops in these areas.
- (v) Rules for security should be simplified. In case of crop loan no further security other than crop should be insisted upon.
- (vi) A drive for increasing membership and recovery of overdues should be undertaken.
- (vii) The Extension Officer for Cooperation should help the bank-staff in recovery. It should be one of his duties and may be specified in his job chart.
- (viii) The Inspectors and Assistant Inspectors for Cooperative provided in IAA areas should be placed under the control of the Panchayati Raj bodies.
- (ix) If the cooperative structure is unable to meet the requirements of agriculture credit, an alternative line of credit should be established. The Government of India have already requested the State Government to furnish proposals for setting up Agricultural Credit Corporation.

- (x) The Land Development Bank should be strengthened by providing Government help in raising debentures, making registration of document and verification of encumbrances easy and increasing the efficiency of staff. We would suggest setting up separate registration offices. In fact, a part of the demand for irrigation wells, pumping sets etc. can be met by loans from the Land Development Banks as is done in other States. This will reduce the burden on the State Governments whose resources for minor irrigation are severely limited.

RESOURCES OF PANCHAYATI RAJ

It was our impression that Panchayati Raj institutions are not spending any money over agricultural production schemes out of their own resources, for instance, the income of Bassi Panchayat is Rs. 26,000 but nothing was spent on agriculture. Even though resources on Panchayats are slender, yet certain amount of their income should be earmarked for agricultural production schemes.

Government have allotted 15 acres of land to each Gram Panchayat but it is our impression that these lands are not properly managed. In Todaraisingh Panchayat Samiti a farm of 150 acres is under its control but it has not been well-managed. If these farms are to be departmentally run, it would be desirable to lay down a cropping pattern with a view to provide some additional income to these institutions. Where the lands are departmentally managed, separate staff should be given. In some Panchayats it is, however, proposed to lease out the land on share-cropping basis.

The Panchayat Samitis have substantial incomes. Todaraisingh Panchayat Samiti, for instance, had an income of Rs. 45,000 last year. But except for maintenance of the farm mentioned above it did not spend any other amount on agricultural schemes. The Zila Parishads in this State have no sources of income of their own.

We would suggest certain percentage of the income derived by the Panchayat Samitis earmarked for agricultural production schemes.

VIII. General

Certain other useful suggestions were made in course of discussions with the officials and non-officials. These are mentioned below:

- (i) The Development Commissioner emphasised the importance of intensive training of elected representatives and non-officials as well as key officials like B.D.Os and district level officials.
- (ii) The Chief Secretary suggested provision for prompt action against the elected representatives who are found guilty of

misuse of powers, embezzlement of public money etc. He strongly advocated for the establishment of the institution of Ombudsman. He agreed that for the present this job can be entrusted to the Vigilance Commission.

- (iii) The Rajasthan Government have abolished all women functionaries. Since the wives and daughters of farmers are to be involved in agricultural production, it is essential that Mukhiya Sevikas and Gram Sevikas should be provided. Literacy programmes for village women, kitchen gardens, improved methods of cooking and food preservation are some of the essential items of work which women functionaries alone can handle in the present village conditions. The lady teachers now entrusted with this work may not be able to do justice to either education or women programme.
- (iv) It was also pressed by the non-officials that the posts of Panchayat Extension Officers since abolished should be restored.
- (v) It was suggested that electric charges for agriculture should be reduced.
- (vi) There is a great demand for tractors in the State. It was suggested that the State Government may set up an Agro-Industrial Corporation to handle, purchase, supply and maintenance of tractors.

Source,—Ministry of Food, Agriculture, Community Development and Co-operation (Department of Community Development).

**REPORT OF THE STUDY TEAM ON IMPACT OF PANCHAYATI
RAJ ON AGRICULTURAL PRODUCTION IN MAHARASHTRA
STATE.**

I. Introduction

We toured in Maharashtra State from the 15th to 17th June, 1966. We visited villages Peth and Awsari in Ambagaon block in Poona district on the 15th June, one village Supa in Parner block in Ahmednagar district on the 16th June, 1966. We also discussed with officials and office-bearers of Panchayats Samiti Ambagaon and Parner blocks regarding role of the Panchayati Raj bodies in intensifying agricultural production drive. In addition, the programme of Applied Nutrition in Ambagaon and Rural Manpower in Parner were also reviewed. A separate note has been recorded on these programmes. Discussions were held with Deputy Director of Agriculture, Parishad Agriculture Development Officer, Deputy Chief Executive Officer, Zila Parishad at Poona on the 15th and the officers and office-bearers of the Zila Parishad at Ahmednagar on the 16th June. We also took this opportunity of attending a seminar of the representatives of the Panchayati Raj institutions and technical experts on high yielding varieties at Ashoknagar held under the Presidentship of Union Deputy Minister for Food, Agriculture, C.D. & C. Our visit was rounded off with discussions with the Secretary, Agriculture Department and other State Government officials at Bombay on the 17th June, 1966.

II. Panchayati Raj

The Panchayati Raj institutions in the State have played a very active and vital role in the agricultural production drive. Notable progress has been made in lift irrigation schemes under the emergency food production drive launched in the last rabi season. In one district Colaba an additional area of 7,000 acres was brought under irrigation in one season; this is equal to the total area under irrigation in the district till then. A number of kachha bhandaras have been built and a large number of wells have been sunk and all possible efforts have been made to bring largest possible area under irrigation. Panchayat Samitis have purchased pumps and given them on hire to needy cultivators. All this, we were told, would have not been possible without the active support of the people's representatives. Wherever we went, we found an increasing demand for inputs and services. Cultivators do not need any longer the normal extension approach for bringing home to them the advantages of fertilisers, pesticides etc. They are not

only alive to the needs in the changed situation but are also enthusiastic and keen to adopt new practices. What they now need is detailed technical help in using these inputs. The old image of an Indian cultivator being conservative and unresponsive seems to have completely obliterated. He is now receptive to new ideas provided these are backed by timely supplies. The Panchayati Raj institutions have certainly acted as catalytic agent in creating an awareness of and interest in technological advances in agriculture among the cultivators. The massive agricultural programme could not be carried out successfully on such a large scale without the active support and cooperation of the people. The officers at all levels were quite satisfied with the present system of routing of schemes of agriculture development through the Panchayati Raj bodies with the exception of certain special schemes like soil conservation, special crops etc. Details of the involvement of the Panchayati Raj institutions in the agricultural production programme are discussed below:

III. Planning

Although working plans for agricultural production at the village block and district levels have been prepared in consultation with the elected representatives; yet these institutions have not been actively involved in the process of detailed planning. The general pattern seems to be that the schemes and funds sanctioned by the Directorate are routed through the Zila Parishads to the lower tier bodies for execution. The elected representatives are more interested in distribution of loans and grants. The State targets are broken down to village level alright. At the village detailed work remains to be done with the cultivators who have been identified to take up specific programmes.

IV. Administrative and Financial Arrangements

A. ADMINISTRATIVE

1. All the schemes that are capable of execution at the local levels have been transferred to the Panchayati Raj institutions. Central schemes like soil conservation etc. are administered by the Department direct. There is a detailed list of residuary schemes which are looked after by a Special Officer appointed for the purpose. In our view adequate functions together with commensurate funds have been assigned to the Panchayati Raj bodies. We would have suggested transfer of soil conservation schemes also to these bodies for the reason that a programme of this nature can well be executed by mobilising concerned cultivators, but it was argued that, it being a specialised job, this could not be entrusted to the people's institutions. Besides, the programme is executed under a statute. It is, however, our view that maintenance of field bunds, contour bunds etc. even after completion of the essential soil conservation programme will require the assistance of the people's institutions.

2. We were impressed by the system of placing the District Agricultural Officer under the Zila Parishad. In other States, where this officer is outside the Zila Parishad, he is not very effective in getting the programmes implemented through the Panchayat Raj bodies. In Maharashtra since the District level officers are under the Zila Parishad and the whole team works under a senior and experienced executive officer of the rank of Collector, it has been possible to achieve extraordinary amount of coordination between the officials and non-officials. This feature may be commended to other States also.

3. It was rather surprising to find a dearth of agricultural graduates among the Agricultural Extension Officers. In Poona district one A.E.O. was an agricultural graduate, out of 25 A.E.Os. The Secretary, Agricultural Department, in course of discussions, explained that 50% of the agricultural graduates have been employed in special schemes administered by the Department direct and that is why there was shortage of graduate A.E.Os. in the Blocks. He indicated that the State Government were contemplating to appoint an agricultural graduate as an Assistant Block Development Officer in each Block. He will take complete charge of the agricultural programme and be responsible both to the B.D.O. and to the Panchayat Samiti. He will be assisted by 20 agricultural assistants at the village level. The exact number will vary with area and their special Programmes. With this additional staff, we believe that cultivators will get better technical guidance than at present. The coordination of the work of this staff with that of the rest of the block staff needs to be considered carefully and in detail by the State Government. Supervision of large staff of this kind will cause serious administrative problem both at the block and district levels. This also has to be remedied.

4. It was our impression from what little we saw that the B.D.Os were unable to give as much of their time and attention to agricultural programmes as one could expect in the present situation. This was attributed to the heavy load of work in connection with the management of primary education thrown on the B.D.Os. There are nearly 400 to 500 primary school teachers in each block with the result that the B.D.O. was to deal with disbursement of salaries of these teachers, their transfers, representations and other administrative matters. It is our considered view that either administrative and financial powers in regard to primary education should be delegated to the Extension Officer for Education or more supervisory staff should be appointed. Alternatively, an Assistant to the B.D.Os. may be provided for this purpose.

5. Unfortunately, at the village level there has been an amalgamation of the cadres of V.L.Ws. and Panchayat Secretaries. Some Secretaries of Cooperative Societies have also been selected for this rank; jurisdictions have been demarcated between these persons in such a way that each Panchayat will have a Secretary who will also act as V.L.W. for that area. At

present there are 45 functionaries of this variety for 60 Gram Panchayats in one block which we visited. The result is that trained V.L.W. wastes his time as Gram Panchayat Secretary and untrained Panchayat Secretary is fully responsible for all the work of V.L.W. in his area. In both cases quality of work suffers. Too much time is lost in paper work relating to Gram Panchayat. Very little of agriculture extension work is being done. This is also borne out by the indifferent type of detailed agricultural planning work at the village level noted by us earlier. These Panchayat Secretaries, we were told, were given short course of training but in our view unless a fully trained V.L.W. is provided, agricultural programme is bound to suffer. When this matter was discussed with the Secretary, Agricultural Department, he indicated that there was a proposal to provide 20 more V.L.Ws to each block. A scale has been decided upon for providing a V.L.W. for 1,000 acres of irrigated area and 2,500 acres of an unirrigated area. The V.L.W. is very much a multipurpose worker. His functions include among others reporting epidemics and recovery of taccavi loans given by block to cultivators. The present system admittedly suffers from many drawbacks and is likely to tell upon the agricultural production programme. While on the one hand, it has been contended that the V.L.Ws technical knowledge is not equal to that of progressive cultivators in the agriculturally advanced areas; it is ironic to find untrained persons acting as V.L.Ws in an advanced State like Maharashtra. The thinking in the Ministry is to appoint a wholtime secretary for a Panchayat, to train him up and to equip him to perform all functions of the V.L.W. other than those relating to agricultural consideration of the Planning Commission.

In this connection it may be added that while in most of the States matriculation is the basic educational qualification for recruitment of V.L.Ws in this State it is only 7th standard Marathi. Unless there are overwhelming reasons, qualification of the V.L.Ws should be fixed as matriculation, because it is on his calibre that the success of the entire agricultural programme at the village level depends.

6. The Department of Cooperation have appointed a number of Supervisors to assist the cooperative societies in the recovery of outstanding loans. These Supervisors should, in fact, be with the Cooperative Bank and the Extension Officer Cooperation should assist them in recovery work. At present, we understand, the Cooperative Extension Officer has no role to play in recovery of overdues. This is not what it ought to be. The State Government may perhaps consider spelling out the functions of the Extension Officer Cooperation and one of his functions should be helping in recovery of outstanding loans.

7. Currently there is a proposal of constituting a Zila Parishad cadre. A recent ruling by the High Court declares that the Government Departments cannot depute their employees to work under the Panchayati Raj

institutions without their prior consent. Now the consent of the employees at various levels is being obtained and there is great deal of discontent amongst these people. Our discussions with the State level officers, however, revealed that normal prospects of promotion will be ensured for these employees in the Zila Parishad cadres. (The Ministry should obtain a copy of the High Court judgement as it is of crucial importance in regard to the Panchavati Raj set up and study it).

Action: Deptt. of C.D.

8. A.E.O. is also used as a multipurpose worker. He looks into various items unrelated to his speciality. Not being an agricultural graduate generally he prefers this type of work. The State Government may consider reviewing this position.

B. FINANCIAL

The structure for advancing of credit in the State is very strong and the cooperative movement has gained unparallel momentum. Secretary, Agriculture Department said that last year a sum of Rs. 80 crores of credit was routed through the cooperatives and it is now proposed to raise this to Rs. 130 crores. In addition, the Land Mortgage Banks advanced medium-term and long-term finance amounting to Rs. 21 crores. It is also heartening to note that there is mutual representation of the Panchayati Raj bodies on the cooperatives.

2. Adequate finances have been provided to Panchayati Raj institutions to implement the agricultural production programmes.

3. The Zila Parishads derive substantial income by cess on land revenue @ Rs. 0.60 paise per rupee, for instance, the income of the Zila Parishad Ahmednagar from this source is Rs. 15 lakhs in the current year. To this will be added a matching grant of Rs. 12 lakhs by Govt. Government have issued detailed instructions specifying the special purposes for which the proceeds from the increase in cess should be utilised by each Zila Parishad. Yet it was surprising that out of an income of Rs. 27 lakhs the Zila Parishad, Ahmednagar earmarked only Rs. 2.30 lakhs for agricultural programmes. A major portion of the money was spent on roads and education. It would perhaps be desirable to earmark certain percentage of this income for agricultural development. Office-bearers of Zila Parishad should take greater interest in reviewing and giving good lead to the agricultural production programmes.

V. General

The training of progressive farmers was slowed down during emergency. It is now proposed to intensify this training and base it on Agricultural Colleges. A heavy outlay of Rs. 1 crore has been proposed for this purpose.

2. The Agricultural Production Committee of Zila Parishad needs to be activated. Apart from the distribution of loans and grants this Committee should also make a detailed review of the progress and take a lead in directing the programme in the field.

3. The Rural Manpower Programme should also be entrusted to Zila Parishad for execution. This would facilitate integration of the programme with the general development plans of the district. The programme has no doubt been placed under the Chief Executive Officer, but it is still outside the purview of the elected representatives. Such schemes of agricultural development which cannot be included in the normal plan but are essential, could be taken up under the programme in the selected areas.

Source.—Ministry of Food, Agriculture, Community Development and Cooperation (Department of Community Development).

ANNEXURE X (B)

PANCHAYATI RAJ AND AGRICULTURAL PRODUCTION REPORT BY THE PROGRAMME EVALUATION ORGANISATION

The Study Team on Agricultural Administration, Administrative Reforms Commission, has enquired whether the Programme Evaluation Organisation could furnish some information relating to the impact of the Panchayati Raj on agricultural production. The Study Team has been informed that no systematic studies have yet been undertaken by the PEO or elsewhere on this subject. Further, in any such study which may be undertaken in future, it may be extremely difficult to measure in quantitative or specific terms, the contribution of the new institution of Panchayati Raj on agricultural development. It has also to be noted that the Panchayati Raj institutions have come into existence only very recently and that also effectively in a few states. It may be, therefore, premature to make an appraisal of the role of Panchayati Raj before it has the chance of working for a sufficiently long period. However an attempt has been made in this note to present a factual picture of the role of Panchayati Raj in agricultural development on the basis of the materials available in the P.E.O.

2. At the request of the Ministry of Community Development the Programme Evaluation Organisation has just completed a field study on the functioning of the development blocks in their Post Stage-II period. In all, 39 blocks were covered for this field enquiry all over the country. A few aspects relating to the changes consequent on the introduction of the Panchayati Raj (in States wherever this has already been introduced) were also enquired into mainly through questionnaires canvassed to the official and non-official functionaries at the block level. In addition, the block level reports and other notes prepared for several studies recently undertaken by the field offices of the P.E.O. based on their experience of field work, interviews with various officials and non-officials and some other material examined by them at the block level, contain some information on the role of the Panchayati Raj in agricultural development. By its very nature, information collected through the questionnaire method has its own limitations. While no conclusive inference could be drawn on the basis of such materials these may be of some help to indicate the trend and direction of changes that are taking place in administering development programmes. Part I of this note contains some general observations, followed in Part II by the State Level notes in some detail.

PART I

3. There are indications that, as yet, no effective impact of the Panchayati Raj on increase in agricultural production has been noticed. This is so even in some of the 'so-called' advanced States from the point of view of the working of the Panchayati Raj, such as, Andhra Pradesh, Madras, Maharashtra, and Gujarat. This is largely due to the fact that the evaluation of this new institution and its proper integration with the existing development agency are still in a stage of flux. Further, except in a few States, neither full delegation of powers has been made nor sufficient resources placed at the disposal of these institutions. In many, States, the introduction of Panchayati Raj is in an experimental stage. Even then it is rather disquieting that a number of undesirable features which might endanger the very future of this experiment, have appeared on the scene.

4. One of the undesirable and disquieting features is the clash between the members of the new institutions and officials of the existing development agency. Each group is suspicious of the other. This is borne out by the fact that the field officers of the P.E.O. got completely divergent views on the role, working and impact of Panchayati Raj on agricultural development from the two camps. Except some officials in one block of Madras State it has been reported from everywhere else that the block officials complained of unnecessary interference by members of the Panchayat etc. in their activities and the non-official members of the Panchayati Raj complained of inefficiency, apathy and lack of adjustments on the part of the block officials. The interesting part of the whole story is that while, in some cases, the complaints made by the block level officers appear to be quite genuine; in other cases, the complaints voiced by the non-official members of the Panchayati Raj also contain a large amount of truth. This is essentially a human problem—problem of sharing power, status and responsibilities.

5. The second disquieting feature is the inability, or in some cases, unwillingness on the part of the members of these newly created institutions to fulfil one of the most primary assignments expected of them, i.e. preparation of village production plans, block plans and district plans. It is a well known fact that a large majority of the officials of the development agency starting from the block upwards entertain grave doubts about the feasibility, viability or utility of village, block or district plans. Against such a background, it is perhaps rather idealistic to expect that these would be prepared by a group of less informed and less experienced people. Even so it appears from our field enquiry that no worthwhile attempt has been made so far in any of the States to prepare village, block or district plans on a realistic basis. In some of the States, the plans prepared earlier, have remained unrealistic in content even after the introduction of the Panchayati Raj.

6. The third disquieting feature is the fact which has been noticed universally that members of the Panchayati Raj have shown great interest in distribution of loans and subsidies and in works programme rather than on extension and agricultural improvement. Loans have been sought to be sanctioned under pressure and they have been utilized for purposes other than agriculture. Individuals and works sites have been chosen from and by the groups which dominate the particular Panchayat or Panchayat Samiti.

7. The factions and group rivalries have tended to increase in the villages due to holding of elections to the Panchayati Raj bodies. As a result, some development activities, such as, digging of field channels, setting up of diesel pumps for lift irrigation, soil conservation works etc. have suffered a setback. The Panchayati Raj has also not given any special attention to the problems of the backward and weaker sections of the community. Finally, it has been observed that the officials of the block and village levels have been drawn into group politics much to the detriment of the development activities in those areas.

8. In spite of the above shortcomings and the fact that it is too short a period to make a rational and realistic appraisal of the role of Panchayati Raj in agricultural development, there are a few bright spots where the Panchayati Raj institutions have made effective contribution in some fields and thus, are gradually paving the way for intensifying agricultural development programmes. This has happened mainly in those areas where the local leadership has already started being built up and a few pioneering individuals have taken the opportunity of working through the Panchayati Raj institutions for the interest of the community as a whole. In these areas, the personal interest displayed by the members of the Panchayat have put the officials of the existing development agency into greater action and greater extension efforts. There is no doubt that they have been able to activate the block staff.

9. It has also been noticed in quite a number of blocks that the members of the Panchayati Raj institutions have helped in ensuring adequate and timely distribution of the needed supplies, such as, improved seeds, fertilisers, pesticides etc. The officials at the higher level who are responsible for arranging the distribution of supplies are more vigilant now because of the fact that any lapse on their part would attract much attention and would create public resentment much more than earlier. In some cases, greater cooperation is forthcoming from non-officials who have helped in intensifying efforts to increase agricultural production.

PART II

State Level Notes

The block and States covered in this note are given in the appendix. The important facts for each are mentioned below:—

1. ANDHRA PRADESH

10. Block plans were prepared by the block staff taking into account the resources available, local needs, potentialities for development etc. This plan was sent to the District Officers for their approval, after obtaining of which the same was placed before the Standing Committee of the Panchayat Samiti for final approval. The Standing Committee of the Samiti was more closely involved in taking decision on agricultural matters. From its proceedings it was found that apart from giving approval to budgets and programmes, the Committee selected the place and the individuals to be benefited by the programmes after long deliberations. In many of its meetings, ways and means were searched to ensure equitable distribution of fertilizers, and in many of its meetings the Standing Committee complained of the high handed disposal of stocks by officials and cooperatives outside the prescribed procedures. Right from the selection of villages where demonstration plots were to be located for crops, up to the review of tour diaries of extension officers, much interest was evinced by this committee. Thus, the Standing Committee as an informed body and aware of the conditions of the block area contributed much in promoting adoption of improved practices, and the block staff were pulled up in cases of unsatisfactory efforts. There was no delay in sanctioning loans; but it cannot be said that the sanction of such loans had always been impartial. Loans were given to the friends and relatives of the members of the concerned standing Committee. Most of the loans were given to the well-placed cultivators and the small cultivators continued to be unattended to. Adequate follow-up actions were not taken effectively after loans were granted. The Samiti members themselves adopted the improved practices and served as the non-official agency for the spread of improved practices. Even though the block officials complained of unnecessary interference, they admitted that the members of the Samiti were interested in the implementation of the agricultural programmes; and they took keen interest in getting the necessary action of agriculture allotted to the block by the higher authorities. They also admitted that because of the Panchayat Samiti the delay was minimized and agricultural production schemes were receiving better attention. The agricultural production programmes were also better implemented due to greater responsibility and consensus of the people generated by the Panchayati Raj institutions. As a result of the Panchayati Raj, immediate visits were made to villages on receiving the reports about the difficulties of the cultivators. This was not so before. Though the VLW was himself aloof from the village level policies the Panchayat President

involved him in such affairs. Thus, unwillingly, the VLW was forced to take sides. When there was monetary benefit, members of the Panchayat and the Samiti cooperated with the VLW.

2. ASSAM

11. It has been observed that no planning had been done in the real sense of the term for the block as a whole. Some schemes and programmes were prepared without much regard to the conditions existing in the block areas. In the case of both the blocks, the officials were unanimous in their views about the failure of the Panchayat to resolve bottlenecks of supplies required for agricultural production. The block staff complained that they had lost their initiative and enterprise and the members of the Anchalaik Panchayat constantly interfered and insisted on unnecessary details. On the other hand, the members of the Panchayat were not satisfied with the attitude of the block staff. The VLWs had indicated that they were consulted in the preparation and execution of production schemes. But because the villages were faction-ridden, the progress of work greatly suffered.

3. GUJARAT

12. As per the Gujarat Panchayat Act, the State provides funds to the Panchayati Raj institutions for local development works and schemes are transferred to them for implementation. The entire land revenue is made over to the Panchayati Raj bodies. All the officials interviewed stated that the Panchayat and its members instead of resolving the difficulties experienced by them in the implementation of the various agricultural production programmes, caused obstruction by unnecessary interference. With regard to the supervision and guidance from the higher officials at the district level as a result of the Panchayati Raj, the opinion was equally divided between the officials. One group stated that better guidance had been provided to them as the district level officers were also under the District Panchayat; whereas the other group commented that there was very little change in their attitude of indifference. The non-officials however were of the view that the block officials, being made responsible to the Panchayats, worked more for agricultural production and less for achievements on papers. A recent study carried out by the Directorate of Evaluation, Gujarat on 'Rabi Wheat Campaign during 1965-66' has indicated, amongst other things, the latest position regarding the impact of Panchayati Raj on agricultural production. It states, "On the whole, readiness to undertake responsibility and optimism in inspiring confidence among the cultivators, pervaded in all the Panchayats and among all the concerned officials. Personal interest and prominent part were taken by the Chairman of the Panchayats, Presidents and Chairman of the Food Production Committees, the non-official members of the Panchayat and officials down to the village level in promoting the drive and inducing the cultivators to respond....."

The success of the campaign has also proved that Panchayati Raj institutions have a great realisable potential and capacity for infusing a greater amount of programme consciousness among the peoples in rural areas."

4. MADRAS

13. In the preparation of block plans, there was not much of a change noticed in the method after the Panchayati Raj. Some block officials continued to do it, the only difference being that the Panchayat Council approved of it now instead of the department. Neither the Panchayat nor the Panchayat Union was in a position to prepare production plans as many of the members were not well informed. In one of the blocks, it was reported that because of the involvement of the members of the Panchayat and the Samiti in the implementation of the schemes, approach to villagers had become easier now and cooperation of villagers was easily enlisted for agricultural production schemes.

The main interest of the members was, however, on the works programmes. According to non-official views, the Panchayat Samiti had succeeded in raising the tempo of productivity and utilization of local manurial resources through the agency of village Panchayat. Members of the Panchayat Samiti attended to the bottlenecks regarding supplies etc., in agricultural production personally. According to official views, after Panchayati Raj, there were too many masters to serve and this hampered the normal extension work. The Panchayat members had been more interested in works programmes (capable of giving personal benefits), than in agricultural production and other programmes.

5. MAHARASHTRA

14. The delegation of responsibilities and powers to the BDO under the overall control of the Samitis had helped to reduce delays and had also considerably benefited the cultivators. Timely procurement and distribution of improved seed got facilitated with the delegation of powers of the District Agricultural Officer to BDO. Provision of loans for irrigation wells, oil engines, electric motors and land improvement through simplified procedures at Samiti level by the District Land Development Bank brought quicker results for irrigation programmes. The samitis and the Panchayats regulated the supply of seed; but it was found that the Panchayats were inactive and the cooperatives disinterested in distributing seed for want of ready and adequate sales. The Samitis were aware of the various problems, such as, balanced fertilization, proper irrigation, soil analysis and there were many members who adopted improvements in their individual capacity. As an institution, however, the Samiti had to prove convincingly that it took equal interest not only in sanctioning loans and subsidies but also in improvements for raising agricultural production. Heavy administrative work like attending meetings and preparation of reports was taking

much of the time of the BDO and so his field visits had become minimum. His supervision of the VLW was, however, facilitated by the triple functions of the village level functionary as VLW, patwari and secretary of the Panchayat. In this change-over, despite the emphasis on agriculture, attention to agricultural work was tending to become a casual affair. Works programme was being done more effectively now because of the involvement of the Panchayati Raj institutions in supplies of seed, fertilizers, plant protection material installation of oil engines and construction wells. In the recent Rabi and Kharif Campaigns, the Panchayati Raj at all the three levels had played an active role in providing oil engines to the cultivators, diverting some areas from non-food crops to food crops, raising paddy nurseries of improved varieties and propagating the Taichung Native-1 variety of paddy. Oil engines have been provided to the cultivators on nominal hire charges. Thus a noticeable improvement has been observed in the involvements of the Zila Parishad, Panchayat Samitis and Panchayats in mobilisation of resources organisation of supplies and propagation of improved agricultural practices.

6. MYSORE

15. In Mysore the Taluka Boards functioned as the Panchayati Samitis. One feature which was commonly reported from all the blocks was that, in the absence of schematic budgets, the Taluka Boards provided money from their own funds for some of the agricultural development programmes, such as, demonstrations, crop competitions, cattle shows, subsidizing supplies etc. Apart from these, the Boards did not take any direct interest in the promotion of agricultural development. An indirect benefit of the Panchayat Raj mentioned in all the three blocks was reaped from the personal interest displayed by the members of the Panchayat Samitis in their individual capacity in getting things done for the villagers by exercising their influence with the block officials. In one of the blocks, it was stated that the Samiti had been encouraging the Panchayats to supply improved seeds and fertilizers to cultivators wherever the cooperative societies were not active and had made a financial provision of Rs. 10,000 for the purpose to be utilized by the village Panchayats; but no Panchayat had apparently come forward to do so. Several pamphlets regarding the use of fertilizers and plant protection measures were reported to have been issued by the Samiti. Some Ex-Project Executive Officers had stated that with the advent of the Panchayati Raj, there was a noticeable change both in the attitude of the village community and the mental outlook of the villagers and that the non-official agency and local leadership which had developed after the advent of the Panchayati Raj, had been of great use in the promotion of improved agricultural practices. In another block, some officials had stated that the efforts of the Panchayati Samiti in promoting the adoption of improved agricultural practices and increasing agricultural production had not met with much success because of the dry cultivation carried in the area in the absence of adequate irrigation facilities.

7. ORISSA

16. All the three officials reporting from one block were of the view that more efforts in respect of agricultural production were being made now than before. But this was not because of the introduction of the Panchayati Raj, rather the increasing emphasis was due to the general shift in Government policies. All the VLWs had reported that the members of the Panchayat Samiti and Gram Sabhas were indifferent to their activities. It was reported that the members of the Panchayat Samiti exhorted the cultivators to increase agricultural production; but their exhortation had no positive effect. In nutshell, the overall impression is that the Panchayati Raj institutions have not contributed anything towards the drive for increased agricultural production. There have been quite a few cases where there has been friction between the BDO and the Chairman of the Panchayat Samiti resulting in a quick turnover of BDOs. With the constitution of Panchayat Samitis, it was expected that the Samitis would be able to elicit the cooperation and assistance of the non-official representatives who are behind these institutions. But unfortunately the experience has been sadly discouraging. There is a general resentment among Panchayats to levy taxes for fear of earning the unpopularity of masses. For the same reason, they are not even able to collect the usual taxes regularly.

8. PUNJAB

17. All the three officials reporting from one block were of the opinion that the Panchayat Samiti had made more efforts for increasing agricultural production than what was being done earlier. In cases of the other block, two officials reported that efforts for increasing agricultural production were the same as earlier; while one official felt the present performance to be better. In the former block, the members of the Panchayat Samiti had taken more interest in the work of the VLWs. However the VLWs in both the blocks felt that after Panchayati Raj, there were both officials and non-officials bosses and it was difficult to please all of them. A few even reported having been drawn in local politics and as such have become ineffective in their extension work. The Panchayat Samiti in one block was reported to have had intelligent and energetic leadership, while in the other, the Samiti was faction-ridden. In the latter case, no proposals could be finalized as the two groups were so evenly matched that each voted against the proposals of the other so-much-so that by September 1965, about Rs.5 lakhs had accumulated as unspent balances. On the other hand, the Panchayat Samiti, in the former case, took some positive decisions like grant of subsidy of Rs.10 per acre to those cultivators who adopted Japanese method of paddy cultivation and a subsidy of Rs.100 for laying of demonstration centres where all improved techniques were adopted.

9. RAJASTHAN

18. At the Samiti level, the members spent less time in discussion, understanding and implementation of the agricultural production programmes. Funds pertaining to the purchase of seed, distribution of fertilizers and pesticides, laying of demonstration plots, supply of improved agricultural implements, soil conservation, loans for irrigation wells and pumping sets, construction of field channels etc. were being operated by the Panchayat Samitis since the introduction of the Panchayati Raj. The Samitis held discussions on all these items, but their real interest had been largely in the distribution of loans and subsidies. Cases had occurred where loans had been sanctioned under pressure and they had been utilized for purposes other than agriculture. Few non-official members of the Panchayati Samitis had felt a sense of responsibility to adopt, demonstrate and propagate various improvements which could help increase agricultural production. They however thought that they did help increasing the tempo of agricultural activities by activating the block staff. The BDOs and other extension workers found conditions of work under Panchayati Raj considerably different. The BDO was now less willing to take initiative and responsibility. He had been able to do little field work now because he was weighed down by heavy administrative work. He was now carrying instructions issued to him and his contacts with villagers, as a consequence received a set-back. The turnover of the BDOs had also been considerable. The frequency of transfers increased since 1962. This might be partly attributed to lack of adequate understanding and adjustment between the BDOs and the Pradhans of the Panchayat Samitis. The support received from the District Officers in terms of supervision and guidance had declined under the Panchayati Raj. The District Officers considered themselves less bound to assist the BDO and his staff since most of the programmes were made over to and administered by the Samitis. Very few Gram Sahayaks of the two blocks had taken interest and helped the block staff in the adoption and extension of improvements in agriculture. Persons chosen for training were not local leaders while the tentative nature of the training and its very short duration tended to take away its purpose.

10. UTTAR PRADESH

19. Panchayat Samitis (Kshetra Samitis) in Uttar Pradesh have no powers to levy taxes nor are any grants-in-aid given to them. Kshetra Samitis being divided into groups, supported applicants of their own groups. The general consensus was that right selection was more often not made. Timely distribution of irrigation water, seed, fertilizers and other inputs had been facilitated. Complaints regarding delays were voiced vigorously. Use of fertilizers in particular and other practices had been advocated by the members of the Samiti individually. After the formation of the Kshetra Samiti, non-official participation in development programmes had slightly

become more vigorous. No special attention seemed to have been paid to backward areas which was mainly due to weak leadership and partly also of the indifference of the High caste members. Block efforts were better now; but it was difficult to say whether it was due to the formation of the Kshetra Samiti, it might be due to the increased stress on agricultural production coming from above. According to official views politics had crept into the block activities and probably stood in the way of improving conditions expected from the Panchayati Raj Institutions. According to the non-official views, the block officials under the control and supervision of the Kshetra Samiti worked more for agricultural production. Targets drawn were better fulfilled because of the personal interest taken by the members of the Agricultural sub-Committee of the Kshetra Samiti.

**LIST OF STATES AND BLOCKS COVERED UNDER POST-STAGE
II STUDY**

<i>States</i>	<i>Blocks</i>
1. Andhra Pradesh	1. Panswada 2. Pithapuram 3. Nandgal
2. Assam	1. Burbandha 2. Lakhipur
3. Gujarat	1. Manavadar 2. Modassa
4. Madras	1. Sankarankoil 2. Satyamangalam
5. Maharashtra	1. Bhir 2. Karveer 3. Morsi
6. Mysore	1. Gulbarga 2. Malavalli 3. Sorat
7. Orissa	1. Bhadrak-II 2. Junagadh-I
8. Punjab	1. Batala 2. Bhadson
9. Rajasthan	1. Hindaun 2. Ladpura 3. Sumerpur
10. Uttar Pradesh	1. Akola 2. Bhatat 3. Garur Baijnath 4. Maurampur

NOTE.—Note Prepared by the Programme Evaluation Organisation, Planning Commission.

NOTE GIVING THE OBJECTIVES OF FOOD POLICY, THE BASIC ASSUMPTIONS MADE BY THE FOOD GRAINS POLICY COMMITTEE AND THE RECOMMENDATIONS MADE BY THE COMMITTEE.

I. Objectives of Food Policy

- (i) To achieve self-reliance through adequate increases in production.
- (ii) Until self-reliance is achieved, to ensure through good management, equitable distribution of available supplies and keep prices stable and at reasonable level is fair to both producers and consumers.

II. Basic Assumptions

(i) The problem of shortage will be with us for a number of years. We must therefore plan for not less than five years, possibly ten. To plan from season to season will amount to living from hand to mouth.

(ii) The country will need prudent food management long enough in point of time and country-wide in point of area, covering good years and bad and surplus as well as deficit States. The need for food management will remain for the next decade.

(iii) Restraints of consumption and extension of procurement will be necessary for some time in lean years as well as in good. This will help to overcome the effects of a lean year when imports are no longer available.

(iv) There will be a substantial reduction in food imports. Our dependence on imports has been undesirable. In future, it may not even be feasible.

(v) To the extent that imports continue to materialise, a sizable part of them should be earmarked for buffer stock. A food reserve of not less than 4 million tonnes will be built up within three to four years.

(vi) Food policy will be supported by appropriate monetary and fiscal policies designed to maintain reasonable price stability. In the absence of a general price stability, attempts to control foodgrain prices will divert resources from food crops to other crops and discourage investment in agriculture.

(vii) Any decontrol of food, in small or large doses, will accentuate the existing inflationary forces.

(viii) Inter-State movements of foodgrains will continue under Government Control.

(ix) The food problem will offer only hard choices. There will be hardships at all points of its application, discipline at all levels, a sense and sharing of a common purpose and exercise of authority by the Centre for effective implementation of food policy.

(x) The administrative capacity and integrity necessary for good management will be developed and mobilised once it is realised that the issue is as vital as that involved in a military threat to the country's security.

(xi) It would be wise to allow for a shortfall in achieving the target of 120 million tonnes at the end of the Fourth Plan.

III. Recommendations

National Food Budget

(i) A National Food Budget should be prepared, based on estimates of surpluses and deficits of each State on as scientific and realistic basis as possible. This should take into account the estimates of production and consumption, normal patterns of consumption and inflows and out-flows of foodgrains. Certain basic quotas of procurement for movement outside the State should be fixed for the surplus say at 75% of the average net outflow during the period 1961 to 1963.

National Food Council

(ii) A National Food Council should be set up to formulate, review, revise and implement the National Food Budget. The Council should consist of all the Chief Ministers and the Union Food and Planning Ministers, with the Prime Minister as the Chairman. The Council should have a standing Committee consisting of four Chief Ministers drawn from both surplus and deficit States, the Union Food and Planning Ministers, and the Prime Minister. The Standing Committee should exercise all the powers of the National Food Council.

Central Food Committee

(iii) There should be a Central Food Committee under the Union Food Secretary consisting of the Union Agriculture Secretary, Food Secretaries of all the States, Chairman of the Agricultural Prices Commission and the FCI and six non-official members. This Committee will prepare the

National Budget for the National Food Council. The Central Food Committee should have a standing sub-committee under the Union Food Secretary, consisting of four State Food Secretaries, drawn from both surplus and deficit States and the Chairman of the Agricultural Prices Commission.

(iv) A strict adherence to the obligations under the National Food Budget by the surplus States should be ensured. The surplus States should consider themselves and not the Central Government, primarily responsible for meeting the commitments for the supply of foodgrains to the deficit States.

Public Distribution

(v) Statutory rationing should be extended to Ahmedabad and Bangalore. Its extension to other urban areas should be considered in the light of the availability of supplies, the needs of the food reserve and extension of public distribution to the rural areas. Fair price shops should be extended to the rural areas to protect the landless and the near landless.

(vi) Urgent steps should be taken to reduce the dependence of the public distribution system on supplies from abroad.

Food Reserve

(vii) A food reserve of not less than four million tonnes should be built up during the next four years to ensure interseasonal stability and even out fluctuations in the supply line. This should be given the highest priority in the formulation of the National Food Budget. Though the process will be difficult, the Central Government should put aside at least 1 million tonnes in every year. A sizeable part of such imports as may come in, should be earmarked for the food reserve. For rice and coarse-grains a substantial part of the food reserve would have to be built out of internal procurement.

(viii) This means that the programme of procurement should be drawn up in such a way that the Central Government is able to acquire quantities in excess of current commitments. It will also be necessary to undertake a special procurement drive in the intensive production programme areas.

(ix) The management of food reserve should be entrusted to the FCI and any drawal from it for purposes of current consumption (as distinct from rotation) should be subject to the approval of the Central Cabinet.

Procurement

(x) For purposes of procurement, a minimum graded levy on the procedures should be introduced. This will not, however, meet the requirements fully and other device of procurement would have to be adopted e.g.,

levies on millers and traders and markets purchases. Procurement should be undertaken in both surplus and deficit States.

(xi) Procurement should also be linked with aided programmes of production. This means that specific agreements between the Centre and the States should provide that in addition to the normal quantities specified for contribution to the National Food Budget, the States will provide certain agreed quantities in view of the resources given by the Centre for the intensive programmes. For the acquisition of these additional quantities agreements may be entered into by the State authorities with the farmers.

(xii) Adequate financial resources should be provided for procurement operations by the Central Government and the FCI.

Inter-State Movements

(xiii) State control over inter-state trade should continue, strictly for the purpose of fulfilling the objectives of the National Food Budget. All Inter-State movements should be handled by the FCI.

(xiv) A proper formulation and implementation of the National Food Budget will help to reduce inter-State price disparities, ensure more equitable distribution and reasonable price for the producers and the consumers.

Costs and Margins

(xv) The tendency to profiteer at the expense of consumers of the deficit States should be effectively checked. For this, the margins of the public agencies engaged in the inter-state trade should be kept at reasonable levels. The costs and margin allowed to the FCI and agency should, as far as possible, be placed on a uniform basis throughout the country.

F.C.I.

(xvi) The F.C.I. should play an increasing role in the procurement system and operations of each State. It should be allowed to function as a trader and as a procurement agent.

(xvii) There should be closer association and understanding between the Food Corporation and the State Governments. The FCI should establish three Commodity Divisions, viz., a Rice Division at Hyderabad, a Wheat Division at Delhi and a Coarse-grains Division at Nagpur; establish regional offices in all the States and advisory Committees to assist the Directors of the commodity divisions. The FCI should provide additional finance for procurement operations and rationalise its own procurement, handling and distribution operations with a view to reduce the costs.

(xviii) Over the next three years or so, the FCI should concentrate on its role in the area of foodgrains, procurement, handling, storage and movement in preference to taking on other responsibilities.

Minimum Prices

(xix) Guaranteed minimum support prices, should be announced well before the sowing season, valid for at least three years and given wide publicity. Adequate arrangements should be made at important primary markets for purchases at the support prices. Support prices should, however, be realistic and should not be fixed at levels which are not likely to be reached in actual practice.

Procurement Prices

(xx) Procurement prices would necessarily be higher than the support prices. In fixing procurement prices, the interests of the producer and the consumer should be taken into account. The objective of keeping the producers' and consumers' prices at reasonable levels can be achieved if the costs of procurement handling and distribution by the public agency are kept as low as possible. A close examination of the costs and margins at different stages of marketing should be undertaken as early as possible with a view to rationalise the cost structures in different states and or different foodgrains.

Subsidies

(xxi) Subsidies on imported foodgrains should be discontinued.

ANNEXURE X(C)

**SUMMARY OF RECOMMENDATION OF THE AGRICULTURAL
PRICES COMMISSION ON PRICE POLICY FOR KHARIF
CEREALS FOR 1965-66 SEASONS**

Long Term Food Policy

In framing the Food Policy it is important to keep in view the likely food situation over the next few years, and maintain a measure of continuity in the same.

As long as a sizeable supply gap continues, it will not be possible to build buffer stocks in the real sense of the term. In this situation, the only way of achieving the objective of maintaining a position of strength in the foodgrains market is to acquire 15 to 25 per cent of the marketable surplus of rice every year and distribute it through a system of Fair Price shops and rationing.

We do not think that in the present context the Government can acquire the requisite stocks through competitive purchases in the open market; though the Food Corporation of India and the co-operatives may make such purchases wherever possible. The major part of public stocks will.

therefore, have to be procured through a system of levy on producers/millers. Procurement should be undertaken in the surplus as well as the deficit States. The total quantity of purchases required would vary, according to the policy in regard to inter-State movement. The rate of levy will be uniform if there are no movement restrictions, but it will have to be higher in the surplus States if movement restrictions continue. The rationale of a levy in deficit States and its implications have been examined in the Report.

We do not favour monopoly purchase procurement on the ground that the quantities thus acquired will fall short of the requirements of the non-producer consumers. Since there will be no buyer except the Government, the prices offered by the Government, however reasonable they may be, would be considered low and unfair by the farmers. In consequence, they will not deliver to the Government the entire marketable surplus.

Inter-State Movement Restrictions

On movement restrictions our views are not unanimous. All of us agree that movement restrictions imposed on private trade if not compensated by planned movement on Government account would lead to price distortions, adversely affect the allocation of resources—particularly in respect of regional cropping patterns—and more importantly, generate a feeling that injustice is being done to the consumers in the deficit States and to the farmers in the surplus States. Yet, the majority of us think that in the prevailing situation of an acute supply gap, it would be too risky to depend on the private trade to distribute the available supply equitably over all regions without an excessive rise in prices. For the next season, we therefore, recommend the continuation of the Single State Zones. We have examined the case for the restoration of the larger zones, but find no particular advantage in it. We would, however, like to emphasise strongly that the system of Single State Zones imposes a rigid discipline which everyone concerned will have to observe scrupulously. Briefly, the discipline involves the willingness to share the national shortage equitably. The surplus or the deficit of each State should be determined on the basis of an agreed objective criterion. A National Food Budget should be prepared for the purpose.

Procurement

For the 1965-66 season, the acquisition of rice by Government (Central and States) should not be less than 22 lakh tonnes (including 5 lakh tonnes imports). If single State zones continue, this quantity will have to be stepped up to about 40 lakh tonnes, as compared to 38.6 lakh tonnes acquired during the current year. Of the 40 lakh tonnes which would be needed during the 1965-66 season, the acquisition on Central Government account will have to be about 25 lakh tonnes—20 lakh tonnes from domestic production and 5 lakh tonnes from imports. In the current year, the corresponding figures

are 24.6 lakh tonnes—16.8 lakh tonnes expected from domestic sources plus 7.8 lakh tonnes from imports. Moreover, the State Governments will have to procure about 15 lakh tonnes during 1965-66 season as against 14 lakh tonnes in the current year. The implications of accepting this commitment should be carefully considered.

Price Control

Besides the minimum support prices, we have suggested that only the prices for the Government purchases of rice should be fixed—the rest of the marketable surplus should be allowed to be sold at the open market prices. In the absence of sufficient (uncommitted) stocks, maximum wholesale prices are difficult to enforce—when such enforcement is needed most. Attempts to keep them within the ceiling by resort to coercive authority have invariably failed. They succeed only in distorting the flow of the marketable surplus and pushing it underground. On the other hand, allowing the non-levy portion of the marketable surplus to be sold at free market prices would help the acquisition of large stocks by the Government. Sale of 15 to 25 per cent of the marketable surplus through Fair Price Shops is, in the prevailing situation, the only instrument available to the Government for controlling the rise in price.

Coarse Cereals

In view of the limited extent of inter-State trade, no restrictions on movement or prices of coarse cereals should be imposed, nor purchases undertaken except as commercial purchases. If, however, the above policy cannot be adopted uniformly all over the country, and some States deem it necessary to impose movement restrictions, then it is essential that the outflows and inflows of all the concerned States be determined on a rational basis by the Central Government in consultation with all of them. Quantities to be moved should be determined so as to ensure that the States deficit in coarse cereals get their minimum requirements.

ANNEXURE X(C)

SUMMARY OF RECOMMENDATIONS SYMPOSIUM ON—PRICE POLICY & ECONOMIC GROWTH.

PRICE RISE TENDENCIES are inherent characteristics of the growth process. While agreeing that some price rise is inevitable we do not find a complete explanation of and justification for the present rise in general price level; in changes in money supply, or in changes in money wages relative to productivity, or in the level of investment activity. Hence, we conclude that there is not any single factor offering a complete explanation of the upward price pressures prevalent in the economy as they are generated by a plurality of causes or factors. The degree of influence on prices exercised by each of these factors, cannot be precisely quantified.

The foremost factor in the inflationary situation during the Third Plan is the failure of the agricultural sector to meet the demands on it both from the consuming public and the industrial and other sectors which depend upon agricultural products for their inputs. There is evidence to show that an increase in the prices of agricultural products has an impact only to a slightly less extent on the secondary sector. The result of stagnation in agricultural output and the non-response of farm output in investment has been greatly responsible for the high pressure on prices.

Even an impressive growth of output would not ensure a stable price level unless the composition of the growth of output keeps pace with the growing and qualitatively changing demand. The aim of the price policy is to establish a price behaviour absolute as well as relative most conducive to economic growth with the desired structure, production and composition of output.

The strategy of development chosen in India accords a high priority to capacity creation rather than the capacity utilisation. The money income generated as a consequence of large investment expenditure would certainly outpace the output creation. This choice though inconvenient is the result of foreign exchange shortages restricting the adequate flow of maintenance imports for ensuring a high degree of utilisation in sectors using imported raw materials. The presence of unutilised capacity affects the industrial price level considerably as the unit costs remain relatively high.

On the other hand, the expansion of the industrial base hastens the pace of urbanisation and strengthens the demand for food and agricultural raw materials. These two forces imply the need for a minimum rate of growth in agriculture, both in the foodgrains and the non-foodgrains sector. To foster a rapid and commensurate rate of expansion in agricultural output mere manipulation of prices of agricultural products will not be sufficient.

The implementation of a large scale investment programme is feasible in a country like India with a reasonable price stability only when there is an assurance of a minimum supply of essential commodities at reasonable prices.

As most of the essential commodities are agricultural or agro-based, the stabilisation of agricultural prices, deserves highest priority. The Government can minimise, if not eliminate through such an action the influence of a major factor (a rise in the cost of living) in the demand for wage increases. The operational aspect of such a growth-oriented price policy consistent with the national objective of assuring a minimum level of consumption to all will be spelt in the following paragraphs.

The level and structure of prices is the outcome of a number of decisions taken by the public authority, private bodies and consumers in the pursuit of their aims. As the Plan coordinates the public and private decisions, the price policy becomes an integral part of overall economic policy. In order to suggest consistent price policy taking into account all the aspects of national economic and social activities, we recommend the establishment of a National Price Stabilisation Board.

This Board shall be charged with the task of (a) suggesting a suitable agricultural price policy, (b) industrial price policy and wage policy for a five-year period taking into account the special conditions in the various industries, and (c) suggesting suitable administrative, monetary, fiscal and commercial measures needed for implementing the prescribed price policy.

It may be asked why a Board of this kind is necessary when we have already the Food Corporation, Agricultural Price Commission, Tariff Commission, Wage Boards and so on. The answer is that each one of these organisations has only limited purposes. The Food Corporation is concerned with procurement and distribution. The Price Commission is only concerned with finding the level of costs on the basis of which minimum food prices may be fixed. The Tariff Commission is concerned with prices for individual industrial products on the basis of data furnished by industry. The Wage Boards try to reconcile the claims of management and the workers and are more concerned with the wage policy, but do not seek to establish an objective basis. The purpose of the Board which is recommended here is to enable it to review the whole gamut of policies bearing upon price changes. It would be concerned not only with increases in the prices of food and raw materials, but also it will be concerned with prices in industry, with wage levels, with productivity and other factors. The important task of the Commission would be to ensure that wages and non-wages incomes including profits are not allowed to go above the productivity. It will serve as adviser to the Government in the same manner as in the USA the President's Council of Economic Advisers does.

The aim of the agricultural price policy is to reduce the extent of variation in the prices of agricultural products with a view to minimise the loss to the producer from precipitous price fall in the event of the bumper harvest, and reducing the hardship of the consumer from sharp price increases in the event of crop failures or scarce supplies. For safeguarding the interests of the producers and the consumers, the Board should advise the Government in the fixation of minimum and maximum prices for all major crops in the country. The minimum prices should be suggested after taking into account regional variations in the costs of production of respective crops and should also include a reasonable profit margin. As the costs of production differ from region to region the Price Stabilisation Board

should suggest a range for the minimum to be fixed. The maximum suggested should be so fixed that it gives due weightage to the quality variations in the crops.

The minimum prices may be fixed present in accordance with the recommendations of the Agricultural Price Commission taking into account the cost and incentive aspects of production.

The rationality of maximum prices is more apparent in the case of crops used as industrial raw materials like cotton, oilseeds, jute and sugarcane etc. A rise in the prices of these crops would be fully reflected in textile products, edible oils, jute textiles and sugar. Except jute products all the other products are essential goods in the pattern of consumption and these industries account for more than 50 per cent of the manufactured output of secondary sector. An undue rise in the prices of these crops would directly affect the general price index by raising the prices of these products and thus the cost of living and wages. In the case of foodgrains, as retail prices are fixed by the State, the maximum prices reflect only a payment to the producer for quality differences.

Foodgrains

The foodgrains prices have to be controlled at three levels :

(a) Producer, (b) Wholesaler, and (c) retailer.

- (i) The producer prices, both minimum and maximum, should be announced before the commencement of the sowing season.
- (ii) If it is accepted that there will be no total nationalisation of the foodgrains trade and the existing wholesale traders will be allowed to operate in the market or influencing the retail price, the Board shall fix the maximum margin of the wholesalers over and above the producer level. Only licensed wholesale traders should be allowed to operate in the foodgrains market. In the event of total nationalisation of the foodgrains trade, the licensed wholesale traders may operate in the market charging a fixed commission as the authorized agents of the State trading authority.
- (iii) The retail prices shall be suggested by the Board taking into account the total price spread and the extent of subsidy the Government might decide to give.
- (iv) Statutory rationing should be introduced in all urban areas with a population of 500,000 and above in the first instance.

The Government should aim for an internal procurement of the order of 3 to 4 million tonnes. The procurement programme should be implemented by the Food Corporation of India through direct agreements with the foodgrain producers entered in the sowing period. Procurement may be made on a compulsory basis if conditions were to demand it. The storage capacity under public control at the present moment is less than 1.5 million tonnes. To handle the stock of the suggested magnitude, additional storage capacity should be created.

All subsidisation of inputs needed for expansion of production should be channelled through Food Corporation (as provided in Food Corporation Bill) and substantial portion of credits granted through Food Corporation should be in kind, *e.g.*, agricultural implements, fertilizers, seeds, etc.

The Union Government should be responsible for the enunciation and implementation of the food policy in the implementation of the food policy in the country. The State Food Corporations should be under the administrative control of the Central Food Corporation of India. Thus through a vigorous procurement drive for building buffer stocks and an efficient distribution of foodgrains through fair price shops, it should be possible to ensure a minimum supply of foodgrains to the urban population and more especially to vulnerable sections of the urban population.

In respect of other non-foodgrain agricultural commodities, used as industrial raw materials, the present controls should be strengthened especially in regard to cotton and jute and if need be extended to oilseeds. Given the close cooperation of the industrial users and Government, it should be possible to minimise the extent of price fluctuations in the non-foodgrains agricultural sector.

ANNEXURE X(D)

SUMMARY OF RECOMMENDATION—REPORT ON IMPROVED AGRICULTURAL IMPLEMENTS IN INDIA—COOP.

1. In order to strengthen and stabilize the rural economy, speedy execution of land reforms is necessary.

2. In order to assess the progress in the introduction of improved agricultural implements and machinery, steps should be taken by the Directorate of Economics and Statistics (Ministry of Food, Agriculture, Community Development and Cooperation) to enumerate all important agricultural implements at the time of quinquennial live-stock census.

3. In the context of modern trends in the farming methods in India and abroad, mechanisation in agriculture is assuming considerable importance. It is, therefore, essential to examine in detail its scope and formulate a definite policy.

4. Each State has taken up research on a number of implements. It, however, seems necessary to clearly identify the problems of the various categories of farmers and pay special attention to those, which are of most urgent nature for the maximum good of the different sections of the agricultural community.

5. Since agro-climatic conditions vary from region to region in a State, it is necessary to set up adequate number of research sub-stations for conducting trials of implements designed at the State Research Stations, so as to modify them, if necessary, according to the draft capacity of the local animals and soil and climatic conditions.

6. Since experimental data on the role played by the improved agricultural implements in increasing production is very meagre and lacking, it is necessary to draw up a well-planned programme of cost-benefit research.

7. The all-India surveys of indigenous implements, have provided valuable basic material in respect of their design, construction, weight, cost, output, quality of work and estimated life etc. In order to find out their real worth, it is necessary to test them under field conditions and work out their efficiency, economy cost of operation and power requirements in relation to the draft capacity of the bullocks.

8. There is considerable overlapping in the research programmes of various Research-Testing-*cum*-Training centres and the State Engineering

Sections. Though some overlapping is inevitable, yet maximum benefit could only be derived if specific problems of a region or crop are tackled in co-ordinated basis.

9. The Research-Testing-*cum*-Training Centres must carry out more intensive research and field tests on the various types of handtools, which form an essential part of farm equipment. It is also necessary to start technical studies on their improvement so as to obtain maximum efficiency and output and determine most suitable postures for work, size of blades, handle attachment etc.

10. While the problems of All-India importance and fundamental nature may be tackled at the Agricultural Engineering Division of the I.A.R.I. the simpler and routine type of work connected with testing of farm implements and their modifications to suit local conditions, may be attended to by the State Research Centres.

11. The crop-oriented research on agricultural implements should mainly be conducted and coordinated by the Central Crop Research Institutes.

12. Most of the implements, which have been awarded prizes by the Indian Council of Agricultural Research have not yet found their way to the cultivators; adequate arrangements must, therefore, be made to promote their use.

13. Regular exchange of ideas amongst the Research Workers, particularly by circulating monthly progress reports and organising meetings at different centres, should be encouraged.

14. Instead of schematic approach to research, it will be desirable to build up a strong Agricultural Engineering Section in each State by pooling all the available resources.

15. In order to utilise effectively the available animal power in the country, there is an urgent need for making detailed and systematic study of harnesses, hitching devices and methods of hitching.

16. Concerted efforts should be made to design animal drawn multi-purpose implements, which could cover a wide range of operations, reduce the capital cost and recurring expenditure to the farmers.

17. It is necessary to carry out a proper survey of different types of handtools, commonly used in the country, with due regard to their uses, shapes, sizes, economics, efficiency, production cost etc.

18. Detailed studies and intensive field trials of tractors and power tillers, in different horse power ranges, require to be conducted at important

stations, on a coordinated basis, for drawing up realistic programme of promoting their use and manufacture.

19. In view of vast scope in increasing agricultural production in irrigated areas, special attention requires to be paid to the implements for land levelling, channel making, bund forming, etc.

20. In order to ensure more effective use of fertilizers, the development of proper seed-cum-fertilizer drill needs special attention of the research workers.

21. Transplanting of rice seedlings, which is done during the peak period of labour requirements, has, so far, defied mechanisation, Intensive efforts require to be made to develop a suitable device for this purpose.

22. There is a great need for research on sprayers and dusters, with a view to ensuring the application of pesticides evenly and thoroughly for effective control of pests and diseases.

23. Special attention requires to be paid for the development of suitable power and bullockdrawn threshers for the grain crops.

24. At the harvest time, Kurvai paddy crop in South India is damaged by rains, resulting in deterioration of quality and discoloration of grains. Development of a simple dryer is, thus, a matter of great importance.

25. Existing procedure of indenting for controlled items of iron and steel is very lengthy and cumbersome. Since the control is now exercised only on a few items, it should be feasible to authorise the State Iron and Steel Controller to indent for a specific quantity of iron, equivalent to the quantity supplied in a specific year, taken as a base, directly from the producers.

26. A representative of the Ministry of Food, Agriculture, Community Development and Cooperation may be taken as a Member on the Steel Priority Committee.

27. Requirements of steel for the manufacture of tractors, power tillers and improved agricultural implements should be given high priority, second only to the Defence needs.

28. Arrangements should be made to meet the requirements of the iron and steel of the village artisans, through the Cooperatives, from the Steel Stock Yards, proposed to be set up in the States.

29. Due to overall shortage of high carbon steel, it will be helpful if the high carbon scrap available from the Railways and Defence Departments is made available to the manufacturers through the State Governments.

30. In order to keep down the prices and improve the quality, the State Governments may encourage specialisation in the manufacture of implements, by helping suitable production units for the production of only those implements for which they possess the requisite technical know-how, experience and facilities.

31. It will be desirable to carry out periodical assessment of the resources, capacity, production potential and technical skill of the fabricators for the manufacture of particular types of agricultural implements so as to provide them with necessary facilities and draw up realistic manufacturing programme.

32. The Cooperative Societies should be encouraged to enter into the field of manufacture and distribution of agricultural implements, with the assistance of the Agro-Industrial Corporation.

33. It will be desirable if the public and private sectors work in co-operation with, and as complementary to one another in the manufacture of agricultural implements. While the vital parts of the agricultural implements like shares, points, discs, blades, etc., which require high carbon steel and high technical skill, may be manufactured in the public sector at the State or Regional level and supplied to the approved fabricators, the private sector may manufacture the remaining parts of the agricultural implements.

34. The manufacture of light-weight small engines (0.5 to 3.00 H.P.) required for plant protection equipment and other similar farm machinery require to be specially encouraged by affording necessary facilities to the manufacturers.

35. There is no quality control on agricultural implements either in regard to correctness of the design in relation to proto-types or the material used in their manufacture, which has given rise not only to unhealthy practices but also to the under-mining of the confidence of the cultivators in improved agricultural implements. It is, therefore, necessary to set up an organisation in each State for inspection and quality marking of implements and their components.

36. The States, which so far, have no arrangements for the preparation of the prototypes of improved implements and supplying them to the fabricators should set up State workshops for this purpose.

37. There seems to be a great necessity of setting up Agricultural implements and Machinery Corporation in the public sector, in each State, and in the case of small States for a group of States with homogenous conditions so as to ensure the manufacture and distribution of improved agricultural implements on a planned basis.

38. A critical review of the schemes running on subsidised basis requires to be made so as to restrict the use of subsidy only to essential items in the initial stages.

39. In view of anticipated increase in the requirements of the Agricultural Engineers in relation to their availability, it is necessary to augment the admission capacity of the existing Agricultural Engineering Colleges, and to introduce this subject in other Agricultural Universities.

40. The courses of study in agricultural engineering at the Agricultural Colleges should aim at more practical and field work by ensuring closer coordination between the Agricultural Engineers and Agronomists.

41. The Implements Museum at the Agricultural Colleges should keep up-to-date set of improved agricultural implements, recommended by the State Departments of Agriculture, as also those developed in other States, particularly in the neighbouring areas, so as to broaden the students outlook.

42. There should be periodical assessment of the courses of study taught at the Agricultural Engineering Colleges so as to include up-to-date developments in agricultural technology.

43. The present arrangements of imparting training to the village artisans in workshops attached to the Gram Sewak Training Centres are not considered satisfactory. It is necessary to examine the working of these workshops and take necessary steps to improve them.

44. In view of acute shortage of trained tractor operators and likelihood of increased demand for them in the Fourth Five Year Plan, it is essential to set up more tractor training centres in the country.

45. A training programme may be drawn up at the central or regional level for the periodical training of skilled employees, preferably of the cadre of foremen in the modern techniques of implements manufacture.

46. Short courses may be organised to train farmers, village volunteers and rural youths in the use of improved agricultural implements.

47. Refresher courses should be organised, on a regular basis, for the village level workers, agricultural engineers, District Agricultural Officers, Block Development Officers, Agricultural Extension Officers and overseers, with a view to refreshing their knowledge and acquainting them with the latest development in the field of agricultural implements.

48. The Chief Instructor and other Instructors at the workshop wings of the Gram Sewak Training Centres should be kept in touch with the recent developments in modern fabrication and techniques, by arranging refresher courses at selected institutes from time to time.

49. The quantum of financial assistance made available to the trained artisans requires to be substantially raised.

50. Periodical surveys of trained village artisans should be carried out in order to keep a regular contact with them and exchange ideas for the solution of the problems encountered by them in the field.

51. Apart from the handtools and bullock-drawn implements a few tractors, power implements, oil engines, power sprayers, dusters, irrigation appliances, should also be kept at the workshop wings for imparting adequate knowledge in respect of their maintenance and minor repairs etc., to the village artisans.

52. The trainees at the workshop wings should be given on-the-job training by attaching them for a short time with experienced trained artisans in the surrounding areas of the Extension Training Centres.

53. Adequate facilities by way of land, raw material and power should be provided to the trainees to set up their workshops in the Industrial Estates and rural areas.

54. Besides workshop wings at the Extension Training Centres, private, cooperative and State Industrial Units, engaged in the manufacture of agricultural implements, may also be utilised for the training of village artisans.

55. Since improved agricultural implements contribute in several ways towards increased production, it is necessary that exclusive demonstrations on the use of agricultural implements to prove their economics and utility to the cultivators, should be laid out, on a well-planned basis.

56. Wherever Farm Mechanics are appointed for the demonstration of improved agricultural implements, they should be required to work in close collaboration with the village level workers.

57. At present, every State is maintaining a long list of improved agricultural implements, some of which are now out-of-date. The list, therefore requires to be critically examined and curtailed so as to retain only those implements which are of proven utility and economic significance.

58. The implements kept at the village level workers centres and panchayats require similar review with an idea of keeping the number of implements in a set to the barest minimum. Proper procedure also requires to be laid down for their use and maintenance.

59. Since mechanisation is now assuming great importance a set of power tillers and other machinery should be kept at the block level for demonstration purposes.

60. The scheme for loaning implements to the cultivators suffers from a number of drawbacks. In order to obtain larger participation of cultivators in the scheme, it seems necessary that a nominal rent may be charged for the use of implements and a proper procedure may be laid down which should be rigidly followed.

61. At a number of Government agricultural farms, indigenous implements are still being commonly used. It should be incumbent on them to use the recommended implements so as to improve their working efficiency as also serve as demonstration units.

62. In order to ensure closer coordination between the activities of various sections and implementation of programmes a senior technical officer, higher in status than that of the heads of Sections, requires to be appointed in the Ministry of Food, Agriculture, Community Development and Cooperation.

63. Suitable status, at par with other equivalent technicians in the State Services, requires to be given to the heads of State Agricultural Engineering Sections.

64. The State Agricultural Engineering Sections are, by and large, inadequately staffed, especially at the lower level. They need to be thoroughly re-organised keeping in view the requirements of the State.

65. The full Finance Scheme, as experimented on a pilot basis by the Cooperative Departments, Madras, so as to meet the entire credit requirements of the farmers in an area, requires to be tried in the rest of the country.

66. The procedure for advancing loans to the cultivators requires to be simplified and recovery made in easy instalments. To safeguard against the misuse, it is necessary that loans should be advanced, as far as possible, in kind.

67. As to other small units, the Small Scale Industrial Sector should also advance loans to the manufacturers of improved agricultural implements.

68. The entire question of giving subsidy on improved agricultural implements requires to be thoroughly scrutinised by the Central and State Governments.

69. The maintenance of a fleet of tractors, power tillers for hiring out to the cultivators at 'no profit no loss basis' is not likely to prove of much use. It is doubtful if it can be run on self-financing basis.

70. The supply of spare parts by the Government organisation can be useful only to a limited extent. This service should generally be left to the private and cooperative sectors, subject to the rigorous control of the State Departments of Agriculture on the procurements, sale price and distribution of spare parts.

ANNEXURE X(E)

PROGRESS OF SOIL CONSERVATION WORK DURING LAST THREE PLANS AND PROGRAMME PROPOSED FOR FOURTH PLAN

First Five Year Plan

It was in the First Five Year Plan that need for taking up soil conservation programme on countrywide basis, in a coordinated way, covering survey, research, demonstration, training and extension was recognised. A Central Soil Conservation Board was set up towards the end of 1953. The Board was charged with the responsibility to initiate, organise and coordinate research in soil and water-conservation to train personnel to assist States in carrying out soil conservation programmes and spread education. During the short period of First Plan only spade work was done. A sum of Rs. 16 million was spent on soil conservation schemes. A large part of this amount was utilised for anti-erosion measure like contour bunding, and terracing on 7 lakh acres of agricultural land, mostly in Maharashtra and Madras States. A beginning was made in establishing 8 research-cum-training-cum-demonstration centres, at Dehra Dun, Chandigarh, Bellary Ootacamund, Kotah, Vasad, Agra and Jodhpur.

Second Five Year Plan

Soil conservation programme was pursued in a more intensive way in the Second Plan. Progress made is summarised below.

State Schemes.—Under the State schemes physical targets were set at 3 million acres, comprising of 2 million acres of agricultural land for contour bunding and terracing and one million acres of other areas for afforestation and pasture development measures. About 2.5 million acres of agricultural land were protected with contour bunding and terracing. Besides, an area of about 0.44 million acres was brought mainly under afforestation as a soil conservation programme. This covered ravines, hilly areas, waste lands, desert and denuded forests. There was no special emphasis on soil conservation work in the watersheds of river valley projects. Only about 1.5 lakh acres were protected in the watersheds of D.V.C., Bhakra and Machkund as a part of regular State schemes.

Programme of ravine reclamation was taken up on a modest scale only, largely as pilot projects or for developing these areas for fuel reserves. There was no scheme for reclamation of saline, alkali and waterlogged

lands, except a pilot polder scheme for reclamation of coastal saline lands in Gujarat.

The Programme of research and demonstration under State schemes was rather modest. No soil, land capability and land use survey was taken up to any significant extent. Only contour surveys were taken up for preparing contour bunding and terracing schemes.

Centrally Sponsored Schemes.—Under Centrally sponsored schemes 46 demonstration projects (40 on dry farming in arid and semi-arid areas; 6 in the catchment of Bhakra for watershed protection) were taken up as an educative programme for farmers. Out of 40 dry farming projects, work could be taken up on 18 projects. The work in the 6 watershed demonstration projects in Himachal Pradesh and Punjab in the catchment of Bhakra was completed.

Central Schemes of Survey, Research, Demonstration and Training

Survey.—Under All India Soil and Land Use Survey Scheme, soil survey both detailed and reconnaissance was completed for about 13.9 million acres. Out of this, 2.4 million acres were in the watersheds of Bhakra, Chambal, Machkund and Hirakud. (In D.V.C. survey was carried out by the project authorities under Central aid) and 11.5 million acres in other areas in the State of Maharashtra, Mysore, Madhya Pradesh, Andhra Pradesh, Madras, Kerala, Rajasthan, Punjab, Uttar Pradesh, Orissa, West Bengal, Delhi, Andamans, Tripura and NEFA.

Research.—Research was intensified at the Centres set up in the First Five Year Plan. One more centre was set up at Chatra to take up research on soil conservation problems of the watershed of Kosi River valley project. The centre at Jodhpur was reorganised to Central Arid Zone Research Institute in collaboration with UNESCO. The scope of work at the institute was enlarged to cover research in fundamental and applied aspects of physical and social sciences and human and animal studies connected with use, management and development of arid and semi-arid areas of the country. At Jodhpur, a pasture development scheme was started for stabilisation of drifting sand. Fifty one paddocks, each of 150—200 acres, in 18 extension blocks in 10 districts in Western Rajasthan were established for pasture development.

Training.—Training in soil conservation was imparted to about 170 Officers at Dehra Dun centre and about 900 Assistants at Bellary, Ootacamund, Kotah and Hazaribagh (D.V.C.).

Legislation.—The Board prepared a model soil conservation Bill for taking up soil conservation schemes on watershed basis and recommended to States for adoption with modifications, if necessary, for a preparation and execution of land improvement schemes including those for conservation and improvement of soil resources prevention and mitigation of soil

erosion, protection of land against damage by floods or drought and reclamation of waste lands. Out of 15 States and 5 Union Territories, 11 States and 3 Union Territories had some enactment for preparation and execution of soil conservation schemes.

Utilisation of Finances

Total utilisation of finances for soil conservation schemes was about Rs. 203.7 million for State schemes, Rs. 3.0 million for Centrally Sponsored Schemes and about Rs. 17.5 million for Central Schemes of survey, research demonstration, training, and pasture development programmes, against Plan outlays of Rs. 202.9, Rs. 6.2 and Rs. 20.9 million, respectively.

Third Plan Programme

In the Third Plan soil conservation received a high priority, second only to Minor Irrigation, after agricultural production programme. Financial allocation for the Third Plan was about Rs. 720 million. A significant point about this allocation was that, out of the total amount, a sum of Rs. 110 million was specifically allocated for soil conservation in the watersheds of river valley projects, as a Centrally sponsored programme, for protection of dams and reservoirs from siltation. Important physical targets included were, contour bunding and terracing of 11 million acres, adoption of dry farming practices 22 million acres, ravine reclamation 35,000 acres, reclamation of saline and alkali soils about 2 lakh acres, reclamation of waste lands 75,000 acres (under soil conservation only); afforestation in the water sheds of river valley projects about one million acres. Other programmes included were survey, research, demonstration and training.

In the wake of national emergency, National Development Council emphasised the need for taking up soil conservation on much bigger scale, as an emergency measure, to increase food production on sustained basis. Recommendation was made to raise the contour bunding target by 50 per cent i.e. to 16.5 million acres and that of dry farming to 50 million acres. Subsequent to National Development Council's recommendation, a high level Central Team was formed, to go round the State and discuss the ways and means of stepping up the Plan targets under various agricultural programmes including soil conservation. As a result of these discussions, it came to be realised, that the original targets laid down for the Third Plan were not realistic and hence could not be fully achieved. In fixing these targets, it was originally assumed, that there will be substantial contribution from voluntary cooperation of people, cooperative sector, block agencies and Land-Mortgage Banks etc. in achieving the targets. However, later experience showed, that, this was not possible, and hence could not be realised. Achievement of the original targets and any further increase would be possible only, if additional funds were made available. The final position that emerged out of the discussions of the Central Team with the

State officials was that the targets of contour bunding and dry farming could be revised only marginally to 11.7 million and 25 million acres respectively, provided additional funds to the extent of about Rs. 170 million could be made available to the States. Further, on the basis of the information from the States, the targets for afforestation and pasture development came to about 6.44 lakh acres and that of the programme in the watersheds of river valley projects to about 7.8 lakh acres.

Fourth Plan

In the Fourth Plan and after, following shall be the essentials of soil and water conservation programme:—

- (i) Soil conservation will be taken up on watershed basis in a composite and comprehensive way to tackle not only the problem of soil erosion, but also other factors associated with soil and water use and management including reclamation of saline and alkali/soils, improvement of soil physical condition, conservation irrigation, field drainage, sediment, control and flood control etc.
- (ii) Soil land use and land capability survey will be an essential requirement for all soil conservation schemes.
- (iii) There shall be no target for individual practices e.g. contour bunding or dry farming measures. The targets will be defined in terms of acres under various land uses that will be treated in a comprehensive way.
- (iv) In ravine reclamation, emphasis will be given to treatment and protection of agriculturally productive table lands, and the stabilisation of marginal lands and gully heads. Reclamation of ravines proper for agricultural purpose will be limited to very shallow ravines near gully heads, as may be necessary for effective stabilisation purpose. Deep ravines would be developed as fodder and fuel reserves.
- (v) For soil conservation in the watersheds or river valley projects, the programme will be prepared after making critical appraisal of the nature and extent of the problem through various surveys, e.g., engineering, hydrological, geological, soil and land use, and economic, by the regional planning units.
- (vi) There shall be a systematic and rigid programme of field evaluation for all soil conservation schemes to assess the benefits that accrue both in physical and economic units.
- (vii) With regard to reclamation of saline, alkali and waterlogged lands, the schemes will be prepared after adequate soil and underground hydrological surveys are completed.

Programmes Proposed

The major programmes proposed to be taken up in the Fourth Five Year Plan would be the following:—

- (i) Soil and water conservation on watershed basis.
- (ii) Soil and land use survey.
- (iii) Soil and water conservation in watersheds of river valley projects for the protection of reservoirs and flood control.
- (iv) Pilot demonstration Projects on watershed basis.
- (v) Stabilisation of ravines and protection of table lands.
- (vi) Reclamation of saline, alkali and water logged lands.
- (vii) Schemes for setting up and strengthening of soil conservation and soil survey organisations.
- (viii) Conservation, irrigation, water management and field drainage.
- (ix) Training in soil and water conservation.
- (x) Soil and water conservation research.
- (xi) Central Arid Zone Research Institute.

The statement showing tentatively the programme proposed to be taken up in fourth plan with likely physical targets, financial implications & technical personnel required is given below:—

Sl No.	Particulars of the Programme	Proposed target for the 4th plan (area in million acres)	Financial implication (Rs. in million)	Requirement of technical personnel		
				Officers	Assistants	Sub-assistants
1	2	3	4	5	6	7
(i)	Soil and water conservation on watershed basis	20.00	1,825.00	435	4,350	16,700
(ii)	<i>Soil and land use survey—</i>					
	(a) All India soil & land use survey	20.00	2.50	..	..	..
	(b) State Soil survey organisations	35.00	38.50	102	219	290
(iii)	Soil & water conservation in watersheds of river valley projects	2.50	510.00	112	749	2,573
(iv)	Pilot demonstration projects on watersheds basis	50 projects covering 0.1 million acres.	4.00	25	60	92
(v)	Stabilisation of ravines and protection of table lands	1.00	144.00	4	52	208
(vi)	Reclamation of saline, alkali & waterlogged lands	0.15	41.00	47	89	227
(vii)	Irrigation, water management and field drainage—					
	(a) Present waterlogged areas	0.4	155.00	471	1,993	3,282
	(b) Areas to come under new irrigation command	1.5				

(viii)	Setting up and strengthening of soil conservation & soil and survey organisations—				
	(a) State organisations—Provided under respective State Programmes.		161	286	85
	(b) Central organisation	3.90			
(ix)	Training in soil and water conservation	25.00	59	115	100
(x)	Soil & water conservation research—				
	(a) State research schemes	20.00	64	130	180
	(b) Central research schemes	20.00			
(xi)	Central Arid Zone Research Institute	7.70	81	175	47
	Miscellaneous	3.40	..	..	..
	TOTAL	2,800	1,542 or 1,550	8,218 or 8,300	23,734 or 24,000

ANNEXURE X(F)

SOIL AND WATER CONSERVATION RESEARCH—REVIEW OF

The attached statement gives the position with regard to research schemes sanctioned in the Third Five Year Plan for various States and the progress so far made in taking up the work. Compared with the magnitude of the problems, the number of research schemes sanctioned can be regarded as small and not adequate for the needs of the country. Even with this small programme, the achievement is not encouraging at all. In Assam, Tripura, Manipur and NEFA, where the schemes were approved for research in shifting cultivation, no work has been taken up and the chances are that nothing would be done in the remaining period of the Third Five Year Plan. Of the other States, where research schemes are sanctioned, no work is started in Gujarat. In rest of the States, although it seems, the work is taken up, no precise information is available about the type of problems on which work is taken up, the type of studies undertaken, the methodology adopted and the results achieved, except for Rahemankhera Station in Uttar Pradesh, for which periodically research reports are being received.

Consistent with the increased activity for application of soil and water conservation measures on the field, there is need for expansion of the research facilities, both by the Centre for study of regional problems, and by the States for study of the local problems. It is also necessary to undertake fundamental research, to lay sound basis for application of various practices and carry out research in watershed management.

Programme for the Fourth Five Year Plan

Regional Research Centres

In the Fourth Plan it is proposed to have sub-stations attached to the existing regional centres and develop facilities for research in drainage and water use, reclamation of saline and alkali lands, water shed management and fundamental research in soil and water conservation. Following is the proposed programme:—

- (i) Twelve sub-stations are proposed to be set up with each for Dehra Dun, Kotah, Bellary and Ootacamund centres and one each for Chandigarh, Vasad, Agra and Ibrahimpatnam.
- (ii) For taking up research in drainage and water use, it is proposed to set up four research centres, one each in Uttar Pradesh.

Punjab, Rajasthan and Gujarat. In addition to these, two-research centres are envisaged for taking up research in the problems relating to soil salinity in coastal saline areas.

- (iii) For taking up research in watershed management, it is proposed to have research units attached with four of the existing regional centres.
- (iv) The facilities for taking up the fundamental research in soil and water conservation are proposed to be developed at 2 of the existing centres in the first instance. These centres will be strengthened with additional staff and equipment.
- (v) The staff at the existing regional research centres is not adequate to take up full work-load of research and training. This would also need strengthening in an appropriate way.

Research in the States

It is necessary that each State should have at least one research centre in soil and water conservation. In some cases it may be necessary even to have more, depending on the physiographic and climatic variations. At present, only a few of the States do have centres for taking up research, to solve the local problems. In the Fourth Plan it is proposed to add 7 centres in the different States.

Phasing of the Programme

With regard to sub-stations to the existing regional research centres, it is proposed to set up three sub-stations each year starting from the first year of the Fourth Plan. With regard to research centres for drainage and water use, two centres are proposed to be set up each year starting from the first year of the Fourth Plan. Two of the centres on salinity problem may be taken up in the last year of the Third Plan and the other two in the first year of the Fourth Plan. Of the watershed units, two may be started in the Fifth year of the Third Plan and the other two to be taken up in the first year of the Fourth Plan. Basic research is proposed to be started from the first year of the Fourth Plan at two centres.

Requirement of technical personnel

The requirement of technical personnel for the proposed research programme is roughly estimated to be 64 senior level technical staff (Officers) specialised in different scientific disciplines, 130 junior level technical staff (Assistants) and 130 field level staff (Sub-assistants). In addition to this non-technical personnel required are estimated to be 108 ministerial and 182 Class IV.

Financial implication

For the proposed programme in the Fourth Five Year Plan, the financial requirement is estimated to be Rs. 40.0 million (being Rs. 20.0 million for Central stations and Rs. 20.0 million for research Stations in the States).

Preparatory work

As a preparatory work in the Third Plan, it is proposed to start one research centre on salinity problems and two watershed units in the last year of the Third Five Year Plan. The financial implication of the proposed preparatory work is estimated to be about Rs. 1 lakh.

Central Arid Zone Research Institute*Scope.*

The Central Arid Zone Research Institute was started in 1959, with the collaboration of UNESCO, by reorganising the Desert Afforestation and Soil Conservation Station. The Institute has five main Research Divisions of (a) Division I for Basic Resources Studies, (b) Division II for Resources Utilisation Studies (c) Division III for External Liaison in fields of Physical and Chemical Engineering (d) Division IV for Human Factors Studies, (e) Division V for Special Animal Studies.

Proposals for the Fourth Plan

Proposals for the Fourth Plan envisage the following:—

(a) Expansion of the existing divisions to provide facilities for research in the fields where the facilities do not exist, but the problems are very pressing. These proposals include strengthening of junior staff and reorganisation of some of the sections into new divisions.

(b) Starting new divisions at the Institute consistent with its enlarged activities.

Soil Conservation Research Stations in the States

Sl. No.	Name of State	Particulars	Remarks
1	2	3	4
1	Andhra Pradesh	One at Sahib Nagar for forestry.	Work in progress, details not available.
2	Assam	Station and two Sub-Stations for work on Shifting Cultivation.	Not started.
3	Bihar	Two Research Stations—One at Araria and another at Kan.	Work in Progress Details of work not known.

1	2	3	4
4	Gujarat	One Research Station.	Not Started.
5	Jammu & Kashmir	No Scheme.	
6	Kerala	Do.	
7	Maharashtra	No Scheme under Soil Conservation allocation.	
8	Madras	No Scheme.	
9	Mysore	Three schemes.	Work in progress, Nature of work undertaken not known.
10	Madhya Pradesh	Two centres, one at Phanda & another at Powerkhera. In addition, one more at Raipur is about to be started and one more is contemplated at Gwalior.	
11	Orissa	One station at Lamptaput	Work at progress. Details of work not known.
12	Punjab	Two stations for forestry and another for Pasture Development.	
13	Rajasthan	No Scheme.	
14	Uttar Pradesh	One at Rehmankhera .	Good work being carried out and progress reports are being received regularly.
15	West Bengal	No Scheme.	
16	Himachal Pradesh	Do.	
17	N.E.F.A.	One centre for research in Shifting cultivation.	Not Started
18	Manipur	Do.	Do.
19	Tripura	Do.	Do.

ANNEXURE X(G)

CONCLUSION OF THE EXPERT COMMITTEE ON ASSESSMENT AND EVALUATION ON INTENSIVE AGRICULTURAL DISTRICT PROGRAMME (1960-65)

1. The quick adaptation that a substantial number of Indian farmers have made, in the IADP as well as in certain other areas of new fertilizers, pesticides, seeds, implements and farming practices is indeed one of the most encouraging features of the Indian agricultural scene. In fact, what is holding up progress in the IADP areas today is not so much the lack of demand from the farmers but the lack of supply of essential inputs. One lesson of the IADP experiment is that it is not so much Indian agriculture which has failed the economy but it is Indian industry which has failed to supply the where-withal which Indian agriculture has been demanding. It has also proved that any programme for modernizing agriculture cannot be carried out in isolation. There has to be a corresponding progress in the field of industries supplying the needs of agriculture and processing the produce of it.

2. Thirdly, the IADP has proved that the small farmer can be no less progressive than the big farmer, especially where the adoption of improved practices is concerned and that the sort of technological progress (especially in respect of chemical and biological, if not mechanical, innovations) which has been possible in the small farms of certain other countries can be also achieved in the small farms of India provided the requisite pre-conditions for agricultural development are created. In fact, there are several areas within certain IADP districts where the increase in production would compare favourably with the record of areas of similar size in most other countries. If, however, the average is lower, the reason is that there are certain basic difficulties in the Indian situation which are beyond the means of the IADP by itself to correct and which requires policy decisions of a basic character, administrative reforms which are fundamental and execute actions which have to affect a number of sectors which are outside the IADP but which nevertheless act as a brake on the progress of the programme.

3. On the other hand, one of the important lessons one can draw from the implementation of the IADP is that the administrative system is not adequate for the job and has to be geared to the needs of the programme. In fact, one of the most serious obstacles that the IADP has had to face is the archaic administrative system that obtains in the country. This system based essentially on checks and balances evolved in a different time and

for a different purpose, has proved woefully inadequate for any operation, the aim of which is not to maintain the *status quo* but to change it. The IADP has thus been a square peg in a round hole. The main objective of the IADP is to accelerate the rate of growth by bringing about a basic change in the situation in which it operates. The main purpose of the administrative system that India has inherited is, on the other hand, to ensure security and hence allow only the minimum possible change. The IADP puts a premium on the technician who is the harbinger of change. The Indian administrative system gives primacy to the administrator whose main function is to lay down and administer the rules designed to ensure conformity. The basic idea of IADP is that it should be a tailor-made programme to suit the needs of a particular area which can be adjusted by the local authorities promptly and effectively as and when the situation changes. The main concern of the Indian administrative system has been to lay down general patterns of conformity to which the areas must adjust rather than otherwise and leave the least possible discretion to the authorities' lower down in the hierarchical structure.

4. Another lesson one can draw from the programme is that the Government's basic policy regarding the credit, marketing, prices, industries, import, investment and land were not conducive to the full realization of the benefits of this impact programme. These would require considerable modifications for the successful implementation of such a programme. An essential condition for the success of the IADP was that adequate credit should be available to the farmer promptly, almost on tap. But this has not yet been assured to him largely because of the inability on the part of the authorities to provide an effective alternative to cooperative system in areas where it was weak. The progress of neither cooperative marketing nor State trading has been such as to provide the facilities that the farmer requires. At the same time, in most of the rural areas private trade has not developed that competitive efficiency as could be relied upon to provide satisfactory marketing service to the farmers.

5. Again, it is a *sine qua non* for a programme of this kind that the farmer should be assured of a minimum price so that when he steps up his production at the cost of extra effort he may not be faced with such a decline in price that bulk of the fruits of his additional effort is lost to him. This was, however, not assured to the Indian farmer until 1964-65 and even now there are quite a few lacunae in the price policy. Further, pesticides and implements that he requires, partly because these industries have not yet been sufficiently developed in the country and partly because on account of foreign exchange shortage they cannot be imported from abroad. The investment policy in the agricultural sector itself has also been such that where a "package of practices" in order to yield optimum results require to be accompanied by a corresponding "package of works", funds available for investment in such work have often been less than adequate.

The pressure to develop other areas to meet the urgent food requirements of the country led also to a diversion of key materials and trained personnel to these areas especially the IAA (Intensive Agricultural Areas) and this left less resources than originally planned for the IADP. Also under the IADP, resource additions that require large capital investments and take time to mature are *e.g.*, irrigation, drainage, land reclamation, etc., are expected to be dealt with in the normal manner. The working of the programme, however, has brought into sharper focus the requirements of specific investments of this kind, particularly in the medium-term field. As was mentioned, in the first evaluation report, the short-term investment itself gets accelerated and begins to yield better results after medium and long term improvements have been carried out. The experience in the IADP districts, where attention has so far been paid mainly to short-term investments by way of seeds, fertilizers, pesticides, etc., has shown that there is a pressing need for complementary medium term investments. Thus the hard core of the programme may have increasingly to include measures for building up production resources of more than purely short-term character. The allocations for agricultural work of at least medium, if not long, term character should, therefore, be progressively fitted into the programme and taken up on a high priority basis.

ANNEXURE XI

NOTES ON POLICIES, PROGRAMMES, ETC.

- A. Establishment of State Farms—Programme and policy.
- B. Note on the working of Suratgarh State Seed Farm.
- C. A note on the facts and figures pertaining to Irrigation in India.
- D. A statement of rice mills and their distribution State-wise.
- E. Note on the roller flour mills.
- F. Statement showing the quantity of milk powder and other milk products imported and the value of imports thereof.
- G. Production and imports of Plant Protection equipment and chemicals.
- H. Facts and figures pertaining to agricultural implements and machinery in India.
- I. Statement showing the dairy plants in operation as on 1st April, 1966.
- J. Statement of losses in some of the dairy milk projects.
- K. Break-up of "No Profit No Loss" prices of various fertilizers for 1967-68.
- L. Statement showing the model break-up of the distribution margin fixed for the various types of fertilizers, the prices of which have been revised with effect from 1-4-1967.
- M. Statement showing the percentage of consumption of different fertilizers applied to food-grain and non-foodgrain crops.
- N. Fertilizer—local production, imports necessary, and foreign exchange requirements.
- O. A note on the regulated markets in the country.
- P. A note on the list of various types of agro-processing industries, their annual out-turn and the volume of agricultural products marketed through these industries.
- Q. A note on the storage facilities in the country.

ESTABLISHMENT OF STATE FARMS—PROGRAMME & POLICY

Realising the importance of the use of improved seeds in increasing food production a Committee was set up in November, 1965, under the Chairmanship of Secretary, Department of Agriculture, to explore the possibilities of establishing Central State Farms primarily for production of improved seeds. The Farms are proposed to be set up on blocks of land of approximately 10,000 acres each in different parts of the country wherein such land is made available by State Governments. Already two Central State Farms (Suratgarh & Jetsar), engaged in the production and multiplication of improved seeds, are functioning in Ganganagar District of Rajasthan State.

Central State Farm, Suratgarh (Rajasthan) had been set up with gift machinery costing about Rs. 75 lakhs received from the Government of U.S.S.R. The Farm at Jetsar (Rajasthan) was established in 1964-65 with the machinery purchased from U.S.S.R.

The proposal at present is to set up about 15 Farms in various States during the Fourth Five Year Plan period. Offer of sites for establishment of State Farms have been received from a number of States and these are being examined by the Seed Farm Committee. As per recommendations of the Seed Farm Committee, one Farm designed to cover 10,000 acres has just been set up in the foreshore and periphery area of the Hirakud Reservoir. The Committee has also recommended establishment of a seed and Sheep Farm in Hissar District (Haryana) over an area of 18,000 acres. Detailed Scheme for establishment of the Farm is under preparation. The Committee is also visiting the site in the Sutlej bed, tentatively offered by the Government of Punjab for establishment of a Farm of about 8,000 acres to consider its suitability for the establishment of a Central State Farms.

The Committee has already visited the site in the Thungabhadra area in Raichur District (Mysore State). Certain essential data such as irrigation potential etc. are under investigation.

The Government of M.P. have offered a site at Malthon and its potentiality for the establishment of a Central Farm is being investigated.

The Committee is also considering proposals from the Governments of Madras and Kerala. Correspondence is being carried on with the Governments of Bihar, U.P. and other States to ascertain availability of suitable sites.

As regards provision for the State Farms, a *token* provision of Rs. 200 lakhs has been included in the IV Plan. This may be increased, if considered necessary at the time of actual setting up the Farms.

The Government of U.S.S.R. have agreed to give machinery required for 5 farms as gift. Machinery for the remaining 10 farms is proposed to be imported from U.S.S.R. on long term credit basis.

ANNEXURE XI(B)

SURATGARH FARM

An extract of the Inspection Report on the audit of the Suratgarh Farm which throws light on the working conditions there is reproduced below.

Two statements (i) Inspection Report on the audit of the accounts and (ii) Production Account and Profit and Loss Account 1965-66 in respect of Suratgarh Farm are given below:—

Inspection Report on the audit of the recast Proforma Accounts of the Central Mechanised Farm, Suratgarh for the agricultural year 64-65(7)/64 to 6/65.

PART I-A

1. Introductory

(a) The audit of the recast proforma accounts of the Central Mechanised Farm, Suratgarh for the year 64-65 was conducted by Shri V. Borikar, Audit Superintendent from 22-8-67 to 26-8-67. During the period under audit the charge of the following posts was held by the officials mentioned against each:—

(i) General Manager	Shri C. P. Shrivastava upto 31-3-65 Shri S. R. Roy 1-4-65 to 30-6-65
(ii) Accounts Officer	Shri M. K. Subharao upto 4-6-65 Shri M. K. Sekhri 5-6-65 to 30-6-65
(iii) Stores Officer	Shri G. P. Saxena.
(iv) Casheir	Shri Jagdish Singh

(b) Working Results

The Central Mechanised Farm, Suratgarh was established in August 1956 with a gift machinery worth Rs. 67 lakhs from the Government of U.S.S.R. The farm had a cultivable area of 27,506 Acres.

The following figures show a comparative study of the working of the farm for the last three years:—

	62-63	63-64	64-65
Area cultivated (in acres)	27,930	25,777	25,832
Cost of Production (in rupees)	32 lakhs	36 lakhs	38 lakhs
Sales	44 ..	53 ..	34 ..
Capital employed	134 ..	133 ..	127 ..
Gross Profit	12.08 ..	9.41 ..	10.66 ..
Net loss	6.51 ..	11.77 ..	9.94 ..

As would be seen from the above data the working of the farm has been resulting into heavy losses year after year. Losses sustained during the last three years amount to about 25% of the capital employed. Except for two years viz. 58-59 and 60-61 the farm incurred net losses from its inception in 56-57 and the accumulated net losses to the end of 64-65 work out to Rs. 38.94 lakhs. Low yield and high cost of production due to recurring Nali floods and inadequate supply of water for irrigation purposes were stated to be the main reasons for such continued losses. The farm had not worked out the cropwise cost of production per acre for the year 64-65. A comparative study of the cost of production for 63-64 with those of selling rates fetched in 64-65 showed that sowing of rabi crops was uneconomical to the farm as would be evident from following cropwise data:—

	Area sown (acres)	Total yield K.G.'s	Average per acre	Selling rate per Quintl. in 64-65	Cost of Production per acre in 63-64
1. Jawar	217	15,286	70.40	50	306.19
Bajra	15	4,155	277.00	57	190.79
2. Maize	56.50	19,356	342.58	45	276.59
3. Jawar	206.50	54,500	263.92	42	384.44
Cotton	1,347	447,643	332.32	116	381.35
4. Sugarcane	616	3,885,251	6,307.00	5.00	451.35
Paddy	125	7,09,005	568.37	57.00	274.52
5. Wheat	9,393	3,287,664	349.99	63.50	242.54
6. Mustard	4,999.50	1,040,118	208.04	116.50	205.38
Gram	1,974	951,425	482.48	52.30	206.88
7. Barley	418	92,255	220.70	43.00	200.45
Torla	342	26,019	283.09	116.50	222.28
8. Taramira	304	24,004	78.90	88.05	174.14

PART I-B

2. Comments on Proforma accounts production account

(a) Spare parts consumed, Rs. 8,51,202.52.

The value of spare parts consumed is steadily increasing from year to year as would be seen from the following figures:—

	62-63	63-64	64-65
Area cultivated in acres	27,930	25,777	25,833
Value of spare parts consumed Rs.	4,14,206	6,05,129	8,51,202
Consumption per acre	14.80	25.30	32.9

Although the area cultivated in 63-64 was less than in 62-63 the value of spares consumed in that year was more. It increased by Rs. 2,46,073 in 64-65 when area was more or less the same as in 63-64. Reasons for the increased consumption may be investigated and results intimated to audit. The figure of spare parts consumed was not arrived at correctly on the basis of actual indents & issues made during the year in terms of provisions in paras 36 and 37 of chapter of the Accounting Manual but was arrived at by adding the purchases to the opening balance and deducting these from the closing balance stores. Suspense accounts for each category of stores viz. Agricultural Mechanical, General Stores etc. may be opened in the General Ledger and the total receipts & issues for each month may be posted therein. The closing balance at the end of the year as per General Ledger should be tallied with the lists furnished by stores section. This procedure will detect incorrect striking balances in individual stores accounts by the the store section.

(b) *Land Revenue*

Rs.
Direct 92,053
Indirect 5,947
<hr style="width: 10%; margin: 0 auto;"/>
98,000

Although these charges are incorporated in Prof. a/cs on the basis of bills raised by revenue authorities matter may be got finalised but the bill itself contain changes on *ad hoc* basis. The matter may be got finalised at an early date.

3. Interest on capital Rs. 5,16,381.76

According to order contained in Ministry of Food & Agriculture letter No. 13-9/57-FR 1866 dated 30-7-60 regarding accounting procedure 50% of interest on capital was required to be capitalized during first five years of the working of the farm written off in a period of 15 years from the date of inception of the farm. No action had been taken to comply with these orders. The proforma accounts do not, therefore, represent the true and correct position. These may be done in next year's accounts.

4. Balance sheet.

(a) **Asset side**

Residential & Non-Residential Buildings

A sum of Rs. 12,26,501 was credited to Buildings accounts as per details given below:—

	Rs.
Residential buildings	1,47,177
Non " "	10,79,324
	<hr style="width: 10%; margin: 0 auto;"/>
Total reduction	12,26,501
	<hr style="width: 10%; margin: 0 auto;"/>

Discrepancy in the value of these assets as per depreciation statement and those shown in balance sheet was pointed out earlier in the Inspection Report. As the values shown in the balance sheet were more necessary, adjustment was carried out during the year under audit so as to confirm with those shown in the depreciation statement. In absence of Buildings assets register showing the date of purchase, value and other full particulars of all individual assets, it could not be verified in audit as to which of the figures in respect of above assets were correct. The matter may be examined and correct position intimated to audit.

(b) S. Debtors

	Rs.
(i) For supplies	19,56,375.94
(ii) For Custom duties	21,92,000.00

A year-wise break up of the outstandings as on 30-6-65 was not worked out. In absence of a "control account" in general ledger the correctness of the outstandings as listed out from a subsidiary register could not be certified.

A break up of 8 Debtors outstandings as on date worked out by the department, was however as follows:—

<i>For Supplies:</i>	Rs.
59-60	23.58
60-61	8,754.45
61-62	2,485.83
62-63	82,515.06
63-64	604,698.60
64-65	718,532.94
65-66	972,110.69
TOTALS	23,90,121.15

<i>For Customs duty:</i>	Rs.
62-63	1,48,012.00
63-64	72,282.71
64-65	20,86,840.22
65-66	2,36,724.58
	25,43,859.51

As the heavy dues are outstanding for last three to four years expeditious steps may be taken to recover the same.

(ii) The amounts shown outstanding on account of customs duty represent duty erroneously charged and for which refund is to be obtained by the farm. Cases relating to past years may please be got expedited and refunds obtained.

(c) Liability side

Government Capital

(i) Remittances to Treasury Rs. 17,44,143.17.

The figures had neither been reconciled with A.G's books nor got certified from the Treasury Officer. The correctness of the figures incorporated in proforma accounts could not therefore be verified.

(ii) Adjustments to capital (—) figure of Rs. 17,09,155.00.

Out of the above figure deduction of Rs. 12,26,501 was made on account of buildings for the adjustments made for the difference viz. Rs. 4,82,654.00 (17,09,155—12,26,501) no details were furnished to audit. The correctness of these adjustment could not therefore be verified.

(d) S. Creditors for supplies Rs. 11,27,032.33.

L. Records not maintained

(i) The following accounts required to be prepared as per provision made in the farm's accounting manual were not prepared :—

(a) Workshop accounts.

(b) Subsidiary Profit & Loss accounts of Animal Husbandry and poultry.

(c) Cropwise production account.

(ii) Register of Buildings is not being maintained. The fixed asset is not in proper form for e.g. Machinery & other heavy equipment register does not record particulars of each item as date of purchase made estimated life, probable scrap value etc.

(iii) Separate record for direct & indirect expenditure of the following items were not maintained.

(a) Pay and allowances.

(b) Petrol, oil and lubrication.

(iv) No cost accounts were maintained. It has however been stated that the question is pending for consideration in the Ministry and decision thereof is awaited.

PRODUCTION ACCOUNT FOR THE YEAR 1965-66
Central Mechanised Farm—Suratgarh (Rajasthan).

Previous Year (Rs.)	Particulars	Amount Rs.	Previous Year	Particulars	Amount Rs.
3,74,946.00	To Cost of Pre-Kharif Operations	5,09,081.00	5,09,081.00	By Cost of Pre-Kharif operations.	3,46,177.00
			37,97.745.09	By Cost of Production.	35,41,349.00
9,96,692.00	To Expenditure on Pay & Allowances (Direct)	9,87,963.42			
6,25,880.84	To Expenditure on Labour (Direct)	6,42,706.72			
8,22,109.73	To Expenditure on P.O.L.	8,69,306.47			
2,70,934.00	To Cost of Seed used	1,80,273.94			
88,298.00	To Irrigation charges	57,819.99			
3,26,455.00	To Cost of Manure & Pesticides	81,179.54			
92,053.00	To Land revenue (Direct)	76,516.00			
17,222.00	To Compensation of Land (Direct)	15,599.00			
8,51,202.52	To Value of Stores /Spare Parts (consumed)	5,78,732.85			
<u>44,67,794.09</u>	TOTAL	<u>39,99,178.93</u>			
DEDUCT EXPENDITURE CAPITALISED					
97,660.00	(a) Development Expenditure	51,931.00			
<u>63,308.00</u>		<u>59,721.63</u>			
160,968.00		1,11,652.63			
<u>43,06,826.00</u>		<u>38,87,526.30</u>	43,06,826.09		38,87,526.30

TRADING ACCOUNT FOR THE YEAR 1965-66
Central Mechanised Farm-Suratgarh (Rajasthan)

Previous Year (Rs.)	Particulars	Amount Rs.	Previous Year	Particulars	Amount Rs.
To OPENING BALANCE			28,34,114.00	By Sale of Farm Produce	54,10,174.28
19,59,855.00	(a) Food Grains	24,68,626.00	..	By Sale of Gunny Bags	82,246.24
4,56,908.00	(b) Non-Food Grains	13,80,589.00		<i>By Departmental Issues</i>	
10,078.00	(c) Other Misc. Produce	7,685.00	2,45,563.00	(a) Wage paid in kind	1,30,125.00
	(d) Fodder	57,616.00	2,66,668.00	(b) Seed	1,25,449.00
37,97,745.09	To Cost of Production	35,41,349.30		BY SALE OF OTHER PRODUCTS	
49,695.65	To Cost of Gunny Bags	3,240.20		(a) Sajji and Lanna	2,290.00
10,66,579.26	To GROSS PROFIT		80,000.00	(b) Fodder	63,247.84
				BY CLOSING STOCKS	
			24,68,626.00	(a) Food Grains	8,05,341.86
			13,80,589.00	(b) Non-Food Grains	1,83,367.02
			7,685.00	(c) Other Misc. Produce	5,714.27
			57,616.00	(d) Fodder	991.00
				BY GROSS LOSS	6,50,157.99
73,40,861.00	TOTAL	74,59,105.60	73,40,861.00	TOTAL	74,59,105.50

PROFIT AND LOSS ACCOUNTS FOR THE YEAR 1965-66
Central Mechanised Farm—Suratgarh (Rajasthan).

49-3 ARCOND/67

Previous Year	Particulars	Current year	Previous year	Particulars	Current year
	.. To Gross Loss B.D.	650,157.99	10,66,579.26	By Gross Profit B.D.	..
2,63,342.00	To Indirect Pay and Allowance	2,53,594.00	88,352.64	By Hire Charges of Machinery	95,948.60
1,96,731.00	To Indirect labour (Wages)	51,336.00	85,388.30	Misc. Receipts	45,556.15
				.. By Interest	32,524.65
			9,93,517.93	<i>Net Loss</i>	24,16,840.90
<i>To Depreciation</i>					
4,90,461.00	(a) Agriculture Machinery	4,71,655.00			
44,670.00	(b) Workshop Machinery	43,983.00			
95,750.00	(c) Vehicles	65,112.00			
10,406.00	(d) Tools	9,030.00			
1,634.00	(e) Furniture and Fitting	2,184.00			
22,704.00	(f) Office Equipment	23,235.00			
	.. (g) Tarpaulins	..			
	.. (h) Tents	..			
41,684.00	(i) Residential Buildings	44,514.00			
37,506.00	(j) Non-Residential Buildings	40,326.00			

PROFIT AND LOSS ACCOUNTS FOR THE YEAR 1965-66—*Contd.*

Central, Mechanised Farm—Suratgarh (Rajasthan).

Previous year	Particulars	Current year	Previous year	Particulars	Current year
9,116.00	(k) Tubewell	19,116.00			
4,410.00	(l) Hume Pipes	4,683.00			
3,172.00	(m) Tanks and Reservoirs	3,172.00			
17,732.00	(n) Water Supplies & S/I	19,005.00			
9,085.00	(o) Electric Installation	9,723.00			
		7,45,738.00			
3,461.00	To Stationery & Printing (Office Contingency).	9,157.61			
10,136.00	To Telephone	7,980.11			
27,322.00	To Electric charges	2,333.43			
852.60	To Books & Periodicals (Pub.)	470.00			
5,000.00	To Amenities to staff . . . . .	..		
73,182.00	To Repairs to Buildings & Roads	16,636.67			
871.00	To Visitors & Entertainment	671.37			
8,592.00	To Maintenance of Livestock	14,220.57			
195.00	To Rest House Expenditure	918.20			

..	To Liveries	6.00
17,449.77	To Miscellaneous Expenditure . .	36,072.40
67,067.00	To Bad Debts. . . . .	..
5,16,381.76	To Interest on capital	5,18,518.29
12,292.00	To Audit Fee	7,763.00
12,891.00	To Pension Contribution	24,211.00
98,447.00	To Preliminary Expenditure Written off .	98,447.00
1,21,361.00	To Development Expenditure written off .	1,30,016.00
1,113.00	To Compensation of Land Written off (In- direct)	2,736.00
5,947.00	To Land Revenue (In Direct)	13,484.00
1,874.00	To Awards to staff	6,402.58

22,33,838.13	TOTAL	25,90,870.30	22,33,838.13	25,90,870.30
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ANNEXURE XI(C)

BRIEF NOTE ON Irrigation in India—Facts & Figures**IRRIGATION—FACTS AND FIGURES**

The following facts and figures reveal the available irrigation potential in India and the extent of its utilisation so far:

A. River Water

	Million acre-feet
(i) Total surface flow of river water in India is approximately	1,360
(ii) Unusable water for irrigation owing to physiological conditions.	910
(iii) Usable river water for irrigation.	450
(iv) Actual Utilization	
(a) Up to 1951	76
(b) By the end of Second Plan	20
(c) By the end of Third Plan (Estimated)	50
(d) Additional river water planned to be used of land one foot deep.	

Thus at the end of the Fourth Five-Year Plan period, about 200 million acre-feet or about 45% of the total usable river water resources will have been utilised, leaving 250 million acre-feet or about 55% still to be harnessed during the subsequent Five-Year Plans. This indicates the vastness of the Nature's gift to us in the form of river waters and the huge task still to be accomplished by harnessing these water resources.

NOTE—Acre-feet means the volume of water sufficient to fill an acre of land one foot deep.

B. Irrigated Areas

	Million Acres
(i) Total area which can ultimately be irrigated by MAJOR and MEDIUM irrigation schemes, utilizing all the usable river water resources.	112

(ii) Area which can be irrigated by MINOR irrigation schemes of surface water and ground water resources, (Surface-35 & Ground-40).	Million Acres
	75
TOTAL	187

Thus against the total cropped area (gross) sown in the country of about 385 million acres, only about 187 million acres can be irrigated even if the entire available water resources are utilized. The remaining about 200 million acres will have to continue to depend on rains.

(iii) *Area actually Irrigated*

(Figures in million acres)

Period	Large Medium Irrigation Schemes	Minor Irrigation Schemes	Total
(a) At the beginning of the First Five Year Plan (1950-51)	23.8	32.0	55.8
(b) Additional area covered during—			
(i) First Five Year Plan	3.1	4.5	7.6
(ii) Second Five Year Plan	5.2	5.2	10.4
(iii) Third Five Year Plan	5.4	9.2	14.6
Total area covered upto the end of the Third Five-Year Plan period.	37.5	50.9	88.4

C. Potential created and utilization

End of Year	Potential created at channel outlet (Million acres)	Utilization	
		Gross area irrigated (Million acres)	Percentage of potential created
1955-56	6.5	3.1	48
1958-59	9.7	6.3	67
1960-61	11.7	8.3	77
1963-64	14.3	11.0	83
1964-65	15.8	12.1	85

ANNEXURE XI(D)

A NOTE ON RICE MILLS

In order to regulate the rice-milling industry in the interests of the general public, the Rice Milling Industry (Regulation) Act, 1958 was enacted. The Rice Milling Industry Act provides *inter alia* that if immediately, before the commencement of that Act there is in force in any State to which the Act extends any laws or order relating to the regulation or control of Rice Mills in that State, that law or order shall stand repealed. The purpose of that Act is to regulate the working of rice mills in such a manner that while requisite facilities for conversion of paddy into rice for meeting the requirements of the country continued to remain available, the hand-pounding industry which is concentrated in rural areas, got reasonable facilities for development and people in the rural areas were provided with employment. The Rice Milling Industry (Regulation and Licensing Rules) 1969 provide for the procedural aspects for the installation etc. of rice mills.

2. The powers exercisable by the Central Government under section 4, 5, 8, 9, 10, 12, 15 and 18 of the Rice Milling Industry Act were delegated to all the State Governments and Union territories in 1959. The administration of the Act is done by the State Governments in exercise of the delegated powers. Under the Act no rice mill can be established without obtaining a permit and rice milling operations cannot be carried on unless a licence is obtained. The Act also provides for punishment for certain offences like establishment of a mill without a permit or rice milling without a licence. The licensing authority has to carry out detailed investigations laid down in the Act and the Rules for satisfying himself about the need for establishing a rice mill in a particular locality. Some of the factors which such investigation would take into considerations are:—

- (a) the number of rice mills operating in a locality;
- (b) the availability of paddy in the locality;
- (c) the effect that the operation of the new rice mill may have on the local economy;
- (d) the pattern of trade and commerce in the locality;
- (e) the necessity or otherwise for an addition to the productive capacity of the existing rice mills in the locality;
- (f) whether hand-pounding industry in the locality is already well organised and whether the establishment of a new rice mill is likely to affect adversely that industry;

(g) the scope for development of hand pounding industry in that locality.

The ensures that while the interests of hand-pounding industry are protected, such number of rice mills is established which is necessary.

3. About a decade before, the percentage of Rice recovered from the hand-pounding process was about 40. It may be seen from the statement showing the number of rice mills in different States (enclosed) that there are about 48000 licensed rice mills of different types. In the administration of the Act certain difficulties have been experienced, specially with regard to the control of hullers which are receiving the attention of the Governments.

4. The question of modernisation of rice milling industry is engaging the attention of the Government and a programme for this purpose has been included in the Fourth Five Year Plan. Government have recognised the potentiality of raising the out-turn of rice from paddy by adopting a combination of steps involving control of moisture, safe storage of paddy and rice, use of modern milling equipment etc. For this purpose it has been decided to make a beginning with a programme of pilot study and evaluation. Seven modern imported mills units of different types including a gift unit from East Germany have been established in seven different States. Six of these units are in the cooperative sector and one in the public sector. The results so far received have been quite encouraging and show improved yield, less broken and absence of unhusked paddy in the rice.

5. The Food Corporation of India is expected to take up the setting up of four tonne mills and have already entered into contract with a Japanese firm for import of five complete mills and components for 19 mills. The Corporation would set up 24 modern mills before the close of 1968. It also proposes to set up 4 mills in Tanjore district with the assistance to be received from the F.A.O. Freedom from Hunger Campaign.

Statement Showing the Total Number of Rice Mills

Sl. No.	Name of State and Admn.	No. of Rice Mills (Huller Type)	No. of Rice Mills (Sheller Type)	No. of Rice Mills (combined Huller and Sheller Type)	Total	As on quarter ending
1	2	3	4	5	6	7
1	Andhra Pradesh	5,647	385	2,000	8,032	30-9-66
2	Assam	197	2	242	441	30-6-66

1	2	3	4	5	6	7
3	Bihar	1,813	6	11	1,830	30-9-66
4	Gujarat	1949	187	122	2,258	30-6-66
5	Kerala	3,692	5	9	3,706	31-3-66
6	Maharashtra	1,903	273	404	2,580	30-9-66
7	Madras	8,898	16	111	9,025	30-6-66
8	Madhya Pradesh	2,300	150	259	2,709	31-12-66
9	Mysore	3,566	578	148	4,292	30-6-66
10	Orissa	1,708	2	140	1,850	30-9-65
11	Punjab	1,956	216	50	2,222	30-6-66
12	Rajasthan	154	2	..	156	31-12-64
13	Uttar Pradesh	1,403	195	115	1,713	30-9-66
14	West Bengal	6,769	6	33	6,808	30-9-66
15	Delhi	Nil	Nil	Nil	Nil	Nil
16	Himachal Pradesh	180	..	..	180	30-9-66
17	Manipur	50	2	..	52	30-6-66
18	Tripura	131	..	1	132	30-9-66
19	A & N Islands	54	..	3	57	30-9-66
TOTAL		42,370	2,025	3,648	48,043	

ANNEXURE XI(E)

**EXTRACTS FROM THE NOTE FROM THE DEPARTMENT OF
FOOD, MINISTRY OF FOOD & AGRICULTURE, GOVERN-
MENT OF INDIA (20-6-1967).**

Roller Flour Mills

"I enclose herewith a statement showing the No. of Flour Mills in each of the State in India together with their total monthly capacity as on 1st June 1967. The size of allocations of wheat to the Roller Flour Mills vary from month to month. However the quantities of wheat allotted to Mills in each State for the month of June, 1967 have been given in the enclosed statement.

The Roller Flour Mills at present are not allowed to make purchases of wheat from the open market and are therefore depending for supply of wheat from Central Stocks. The quantities of wheat to be utilised by the Mills for manufacturing of fine/whole meal atta is determined by the State Government concerned on the basis of their requirements and, therefore, varies from State to State.

Owing to the limited availability of wheat with the Centre the allocations are being made at present on restricted basis. It is not possible to anticipate at present when the Government will be in a position to utilise their full capacities."

Statement showing monthly Milling capacity of Roller Flour Mills and Allocations of Wheat to Mills in each State in the Country as on 1-6-1967

(in '000 tonnes)

Name of State	No. of existing mills	Monthly capacity as on 1-6-1967	Allocation of wheat for June, 1967	Remarks
1	2	3	4	5
<i>Northern Region</i>				
1. Punjab	10	29.6	5.2	
2. Haryana	6	14.4	2.5*	*Excluding allocation to M/s R.B. Banarasi Dass R.F.M. Ambala engaged on Defence grinding.

1	2	3	4	5
3. Himachal Pradesh	1	0.5	*	*Allotment under consideration.
4. Chandigarh	2	3.1	0.8	
5. Uttar Pradesh	30	76.1	21.0	Includes 3,048 tonnes wheat allotted for Defence grinding.
6. Delhi	7	25.2	17.5	
7. Rajasthan	4	5.6*	2.0	*(Includes capacity of M/s Sharda R.F.M. Sriranganga Nagar closed for repairs).
	60	154.5	49.0	
<i>Western Region</i>				
1. Madhya Pradesh	6	6.6*	2.0	*(Includes the capacity of M/s Pasari Fl. M. Vidisha temporarily out of order.)
2. Gujarat	8	9.1*	3.0	*(Excludes M/s B.B.S.-Rl. Fl. Mills, Ahmedabad, out of Commission.)
3. Maharashtra	8	29.5	20.0	
	22	45.2	25.0	
<i>Southern Region</i>				
1. Andhra Pradesh	6	10.4	4.0	
2. Madras	19	44.1	26.5*	*(Includes 4,700 tonnes of wheat for Kerala State).
3. Kerala	3	2.8	2.8	
4. Mysore	15	12.4	5.0	
	43	69.7	38.3	

1	2	3	4	5
<i>Eastern Region</i>				
1. Orissa	5	8.0	4.5	
2. West Bengal	25	45.6*	18.0	*(Includes capacity of M/s Imperial R.F.M. Calcutta temporarily out of commission.)
3. Assam	9	17.0	9.5*	*Includes 4,500 tonnes of wheat for Defence Grinding.
4. Bihar	14	22.5@	6.9	@Includes capacity of M/S Mazaffarpur R.F. Mills Muzaffarpur which was burnt down but has since been repaired and test grinding of which is now to be taken.
	53	93.1	38.9	
GRAND TOTAL	178	362.5	151.2	

ANNEXURE XI(F)

STATEMENT SHOWING THE IMPORTS OF MILK PRODUCTS FOR THE PERIOD APRIL, 1960 TO OCTOBER, 1965
COLLECTED FROM THE OFFICE OF COMMERCIAL INTELLIGENCE AND STATISTICS, CALCUTTA

Name of Product	April 1960 to March, 1961		April 1961 to March, 1962		April, 1962 to March, 1963		April 1963 to March, 1964		April, 1964 to March, 1965		April, 1965 to March, 1966	
	Quantity in tonnes	Value (in Rs. lakhs)	Quantity in tonnes	Value (in Rs. lakhs)	Quantity in tonnes	Value (in Rs. lakhs)	Quantity in tonnes	Value (in Rs. lakhs)	Quantity in tonnes	Value (in Rs. lakhs)	Quantity in tonnes	Value (in Rs. lakhs)
1	2	3	4	5	6	7	8	9	10	11	12	13
<i>I. Evaporated Milk</i>												
(i) Skimmed Milk	1,146	14.86	787	8.62	3,620	37.24	249	3.33	194	5.05	1,216	21.20
(ii) Whole Milk	814	12.56	20	0.55	479	19.79	38	0.74	145	2.85	85	1.70
(iii) Other products like sterilized cream, etc.	1,261	28.49	2,452	44.50	9	0.27	352	90.12	5	0.08	400	9.92
TOTAL	3,221	55.91	3,259	53.67	4,108	57.30	639	94.19	344	7.98	1,701	32.82
<i>II. Whole Milk Powder</i>												
(i) Whole Milk Powder (air tight)	..	..	..	..	..	..	..	..	7,971	140.83	68	2.50
(ii) Whole Milk Powder	239	10.49	336	16.62	320	11.29	1,337	120.29	57	1.53	342	9.42
(iii) Cream Dried & other kinds	2,550	57.97	4,896	94.04	4,336	120.61	52	2.20	..	..	246	7.20
TOTAL	2,789	68.16	5,232	110.66	4,656	130.90	1,389	122.49	8,028	142.36	656	19.12

III. Skimmed Milk Powder	18,793	325.67	47,474	650.83	42,060	625.05	52,833	667.84	25,035	516.51	35,722	595.14
<hr/>												
IV. <i>Butter & Ghee</i>												
(i) Butter Milk & Whey Dried	..	..	..	..	..	..	..	..	..	..	25	0.70
(ii) Butter	1.1	0.06	0.2	0.01	..	..	..	..	7	0.45	5.76	0.04
(iii) Melted Butter or Ghee	..	..	..	..	..	..	5	0.28	1,071	49.69	1,103	68.82
<hr/>												
TOTAL	1.1	0.06	0.2	0.01	..	..	5	0.28	1,078	50.14	1136.76	69.56
<hr/>												
Cheese & Curd	80	1.22	88	4.36	139	6.03	572	20.98	50	2.86	39.00	2.94
<hr/>												
Milk Foods for Infants	1,601	81.82	1,461	71.60	292	1.75	98	5.36	137	7.20	..	..
<hr/>												
GRAND TOTAL	26,485.1	536.14	57,514.2	891.13	51,255.0	822.03	55,536.0	919.14	34,672.0	727.05	39,251.76	729.58

Summary of the Imports of Milk Product for the period April, 1960 to March, 1966

Milk Products	Period	Quantity in tonnes	Value (in Rs. lakhs).
Evaporated milk, Milk Powder, Butter, Ghee, Cheese and Milk Foods for Infants and Invalids.	(i) April 1960 to March, 1961	25,485.10	536.14
	(ii) April, 1961 to March, 1962	57,514.20	891.13
	(iii) April, 1962 to March, 1963	51,255.00	822.03
	(iv) April, 1963 to March, 1964	55,536.00	919.14
	(v) April, 1964 to March, 1965	34,672.00	727.05
	(vi) April, 1965 to March 1966	39,251.76	729.58

Amongst these products skimmed milk powder imports were the highest and milk foods for infants were totally stopped during the period April, 1965 to March, 1966.

IMPORT AND MANUFACTURE OF PLANT PROTECTION EQUIPMENT

Year	Imported					Indigenously produced		
	Complete unit of sprayers & dusters		Engines for high and low volume application units		Spare Parts	Total value in lakhs Rs.	Units Nos.	Value in lakhs Rs. @
	Quantity Nos.	Value in lakhs Rs.	Quantity Nos.	Value in lakhs Rs.	Value in lakhs Rs.			
1	2	3	4	5	6	7	8	9
1959-60	*1,345	8.08	..	..	0.42	8.50	..	93.0
1960-61	* 31 & 4 aircraft	11.19	30	0.06	0.23	11.48	..	130.5
1961-62	1	0.0075	370	0.74	0.19	0.94	..	148.5
1962-63	*2,880	17.28	..	..	1.25	18.53	..	157.5
1963-64	600	5.50	1,572	2.72	0.30	8.52	..	213.0
1964-65	8,200	42.43	..	..	1.35	43.78	..	306.0
1965-66	3,300	21.92	3,083	15.00	..	36.92	..	319.5

*Price of motorised knapsack machine assumed at Rs. 600 per unit.
Includes the price of 4 Beavaer Aircraft.
Engine Rs. 200 per unit.

@2/3rd of the value represents indigenous production of equipment in the organised sector while the remaining 1/3rd is presumed as the value of the machines produced in the small scale sector.

Source:—Ministry of Food, Agriculture, Community Development and Cooperation.

STATEMENT I
Import and manufacture of pesticides

(Qty. In Tonnes
Value in lakh Rs.)

Year	Imported		Locally manufactured	
	Qty.	Value	Qty.	Value of formulated pesticides
1956-57 . . . . .	..	..	2,580	190.90
1957-58 . . . . .	..	..	2,864	211.90
1958-59 . . . . .	..	..	5,898	436.45
1959-60 . . . . .	..	..	6,056	448.15
1960-61 . . . . .	..	..	7,486	553.96
1961-62	3,920	140.0	12,842	545.50
1962-63	3,920	140.0	14,521	577.90
1963-64	6,800	243.0	9,562	578.60
1964-65	5,110	182.6	10,774	817.40
1965-66	7,800	278.8	12,235	1,021.20
1966-67	18,870	674.0	19,220	2,326.00

ANNEXURE XI(H)

SOME FACTS AND FIGURES REGARDING AGRICULTURAL IMPLEMENTS AND MACHINERY.

1. (a) Approximate number of power tillers in the country now is 1500.
(b) Approximate number of tractors in the country now is 40,000.
(c) Agricultural implements (all types) distribution figures of all States (statement enclosed) 1960-65.
(d) Improved iron ploughs state-wise distribution figures (1960-65) (statement enclosed).
2. (a) Government/Public Sector Workshops.
 - (i) Government Agricultural Engineering Workshop, Talkatora Road, Lucknow (U.P.)
 - (ii) Government Agricultural Engineering Workshop, Jhotwara, Jaipur (Rajasthan).
 - (iii) Government Agricultural Workshop, Nilokheri (Haryana).
 - (iv) Nahan Foundary, Nahan (Himachal Pradesh).
 - (v) Government Central Workshop and Stores, Sadar, Nagpur (Maharashtra).
 - (vi) Government Industrial Workshop, Tiruchirapalli (Madras).(b) Co-operative Sector.
(c) Private Sector (Given in the booklet "Agricultural Implements where to buy them from" a priced publication which can be got from Business Manager, of the Directorate of Extension and Training. However, this includes those at a & b above also).
3. Financial allocations during the 3 Plans.
 - (a) First and Second Plan—virtually nil.
 - (b) Third Plan: Rs. 8.00 crores provided in draft plan but Rs. 1 crore ultimately given and utilised for establishment of Research Centres.
 - (c) Fourth Plan: Rs. 80.50 crores provided in the draft report of Working Group on improved Agricultural Implements for IV Plan. The final provision is yet to be known.

4. Cost of Power tillers and tractors.

(a)	India (Rs.)	Foreign (Rs.)
	App. cost	App. cost
Power tiller	4,500	4,000
Tractor (HF)	22,000	12,000

5. During the Third Five Year Plan, subsidy to the extent of 25% of the cost of the implements was given by Central Government. The State Governments added their own share of subsidy varying from about 10 to 25%. There is nowadays a feeling that subsidy should be reduced and the money may be utilised for the demonstrations of improved agricultural implements. However, decision on the matter is yet to be taken.

Some State Governments are advancing loans to farmers for the purchase of tractors and other farm machinery.

Source—Directorate of Extension and Training Ministry of Food, Agriculture, Community Development and Co-operation.

Distribution of Improved Agricultural Implements (all type) State-wise

States & Union Territories	Units	1960-61	1961-62	1962-63	1963-64	1964-65
Andhra Pradesh	Nos.	39,300	69,108	16,503	10,739	9,384
Assam	"	740	1,373	4,809	2,467	2,955
Bihar	"	24,291	15,723	14,928	20,654	27,515
Gujarat	"	18,500	15,475	20,846	25,371	32,613
Jammu & Kashmir	"	50	303	106	73	992
Kerala	"	950	3,133	6,037	6,220	7,833
Madhya Pradesh	"	3,800	9,779	11,272	11,885	18,373
Madras	"	356	456	516	674	672
Maharashtra	"	7,800	9,779	11,272	11,885	1,32,292
Mysore	"	26,800	26,150	29,821	32,626	34,263
Nagaland	"	N.A.	..	..	2,579	2,541
Orissa	"	2,200	1,940	2,949	3,243	2,655
Punjab	"	1,24,600	1,95,421	1,68,285	2,04,585	2,45,049
Rajasthan	"	15,100	45,700	69,300	72,800	78,500
Uttar Pradesh	"	42,100	1,44,600	2,03,800	2,87,300	2,63,700
West Bengal	"	1,800	2,000	2,600	9,500	11,900
Andaman & Nicobar Island.	Nos.	..	8	..	48	13
Delhi	"	3,150	3,674	1,408	498	723
Goa, Daman & Diu . . . . .	"	..	..	..	..	..
Himachal Pradesh	"	170	380	910	552	1,852
Manipur	"	544	527	214	122	..
N.E.F.A.	"	3,540	1,411	..	4,031	3,725
Pondicherry	"	1,127	815	1,570	2,297	1,713
Tripura	"	198	90	103	111	101

These figures have been taken from "Appraisal of Progress 1964-65, State tables" and compiled by the Department of Community Development of the Ministry of Food, Agriculture Community Development and Cooperation, Government of India.

Distribution of Improved iron plough State-wise

States & Union Territories	Units	1960-61	1961-62	1962-63	1963-64	1964-65
Andhra Pradesh	Nos.	28,302	16,044	9,717	9,455	7,942
Assam	"	686	1,282	4,778	2,429	2,872
Bihar	"	..	..	..	..	..
Gujarat	"	2,588	3,219	5,962	7,504	11,156
Jammu & Kashmir	"	..	242	99	73	941
Kerala	"	574	2,141	2,002	2,525	3,170
Madhya Pradesh	"	3,237	9,112	10,342	10,060	16,366
Madras	"	235	304	348	413	312
Maharashtra	"	5,276	7,588	8,238	9,813	10,467
Mysore	"	10,325	7,588	8,238	9,813	20,883
Nagaland	"	N.A.	N.A.	N.A.	2	..
Orissa	"	210	501	465	1,442	1,026
Punjab	"	74,288	86,541	78,656	1,09,054	1,23,256
Rajasthan	"	5,000	8,600	10,700	14,500	14,500
Uttar Pradesh	"	41,200	1,27,300	1,19,300	82,000	1,49,800
West Bengal	"	10,200	37,800	39,700	3,59,800	6,33,600
A.N. Island	Nos.	..	8	..	48	..
Delhi	"	230	1,147	385	107	122
Goa, Daman & Diu	"	..	..	..	..	..
Himachal Pradesh	"	55	52	124	115	365
Manipur	"	496	525	210	122	N.A.
N.E.F.A.	"	20	119	..	..	..
Pondicherry	"	928	682	1,040	1,860	1,404
Tripura	"	86	23	55	56	32

Statement Showing the Important Agricultural implements in use as per census reports

Sl. No.	Name of implements	1951	1956	1961
1.	Mould board iron ploughs	9,30,000	13,66,000	22,98,215
2.	Bullock driven sugarcane crusher	5,04,000	5,44,000	5,90,217
3.	Power driven sugarcane crusher	21,000	23,000	33,300
4.	Centrifugal pumps with oil engines	82,000	1,22,000	2,29,972
5.	Tractors	8,500	21,000	31,016
6.	Electric driven pumps	25,000	55,000	1,60,367

ANNEXURE XI(I)

STATEMENT SHOWING THE DAIRY PLANTS IN OPERATION AND THEIR THROUGHPUT FOR THE MONTH OF JANUARY, 1967

PUBLIC/CO-OPERATIVE SECTOR

S. No.	Location	Capacity in litres	Average daily throughput in litres-Jan. '67
<i>I—Liquid Milk Plants</i>			
1	Ahmedabad	70,000	68,027
2	Agra	6,000	2,391
3	Agartala	2,000	2,808
4	Bombay	4,60,000	3,72,099
5	Bangalore	50,000	25,735
*6	Baroda	50,000	24,511
*7	Bhagalpur	6,000	299
8	Bhopal	10,000	5,127
9	Bhavnagar	6,000	848
*10	Bareilly	6,000	482
11	Calcutta	2,00,000	1,35,076
*12	Coimbatore	13,000	10,300
*13	Calicut	6,000	6,630
14	Cuttack	6,000	5,496
15	Chandigarh	20,000	15,589
16	Delhi	2,55,000	2,11,857
17	Gaya	6,000	1,062
*18	Guntur	4,000	465
19	Hyderabad	50,000	18,724
20	Hissar	4,000	2,394
21	Jaipur	20,000	5,653
22	Jamnagar	6,000	1 217

S. No.	Location	Capacity in litres	Average daily throughput in litres— Jan. '67
*23	Kodaikanal	4,000	517
*24	Kurnool	4,000	1,200
25	Kudigee	4,000	1,751
26	Kolhapur	6,000	6,450
*27	Lucknow	40,000	16,901
28	Madras	75,000	22,445
29	Madurai	50,000	3,000
30	Nasik	6,000	5,036
*31	Naujiddnad	3,200	2,834
32	Poona	70,000	95,343
33	Patna	10,000	2,395
*34	Palghat	6,000	5,480
35	Sundernagar	6,000	578
36	Srinagar	10,000	6,530
*37	Trivandrum	6,000	7,969
*38	Trichinappalli	16,000	12,496

S. No.	Location	Capacity (Ltrs.)
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II—Pilot Milk Scheme (Main schemes under implementation)

1	Akola	5,285
2	Aurangabad	2,535
3	Bhadravati	703
*4	Broach	1,071
5	Belgaum	588
6	Dhullia	36,500
*7	Dehradun	1,000
8	Darangee	800
*9	Ernakulam	643

S. No.	Location	Capacity (Ltrs.)
10	Gauhati	2,650
11	Gwalior	590
12	Amravati	4,721
13	Dharwar	5,851
*14	Indore	160
15	Jabalpur	2,175
16	Jorhat	..
*17	Kanpur	3,500
18	Mangalore	2,012
19	Mandi	1,604
20	Miraj	36,877
21	Mysore	1,220
22	Nagpur	11,388
23	Nahan	413
24	Panjim	2,280
25	Shillong	1,810
26	Sholapur	10,683
*27	Surat	34,251
*28	Tanjore	3,100
29	Gulbarga	561

S. No.	Location	Capacity in litres	Average daily throughput in litres. Jan. '67
<i>III—Milk Product Factories</i>			
1	Anand	5,00,000	2,45,726
2	Amritsar	65,000	21,144
3	Mehsana	1,00,000	81,023
4	Rajkot	45,000	10,000
<i>IV—Creameries</i>			
		Kg. Cream	Kg.
1	Aligarh	2,000	1,554 Fat.
2	Barauni	2,000	98 Fat.
3	Junagadh	2,000	1,184 Milk.

UNDER IMPLEMENTATION/TO BE TAKEN UP FOR IMPLEMENTATION

S. No.	State	Location	Capacity in litres
1	Andhra Pradesh	*1. Chittore	10,000
		*2. Nellore	6,000
		*3. Rajamundry	10,000
		4. Visakhapatnam	6,000
		5. Vijayawada	1,25,000
		*6. Warrangal	6,000
		7. Nizamabad	(Rural Dairy)
		8. Eluru	Do.
		9. Kotah Gurdasal	Do.
		10. Kothapet	Do.
2	Assam	11. Tejpur	Do.
		12. Dibrugarh	Do.
3	Bihar	13. Dhanbad	10,000
		14. Ranchi	6,000
		15. Sahabad	10,000
		16. Jamsedpur	10,000
		17. Bokaro	10,000
4	Gujarat		
5	Haryana	18. Gohana	20,000
		19. Jind	20,000
		20. Faridabad	(Rural Dairy)
		21. Jagadhri	Do.
		22. Ambala	Do.
6	Jammu & Kashmir	23. Jammu	10,000
7	Kerala	24. Trichur	6,000
		25. Quilon	6,000
		26. Allepey	6,000
		27. Cannanore	6,000
		*28. Kottayam	10,000

S.No.	State	Location	Capacity in litres.
8	Madhya Pradesh	29. Ujjain	(Rural Dairy)
		30. Raipur	Do.
		31. Rewa	Do.
		32. Khandwa	Do.
		33. Ratlam	Do.
		34. Bilaspur	Do.
		35. Sagor	Do.
9	Madras	36. Erode	75,000
		*37. Thanjavaur	6,000
10	Mysore	38. Bellary	(Rural Dairy)
		39. Bijapur	Do.
		40. Raichur	Do.
		41. Hospet	Do.
11	Orissa	42. Dhankanal	Do.
		43. Telchur	Do.
		44. Pardeep	Do.
		45. Puri	Do.
		46. Rourkela	Do.
		47. Samblepur	Do.
		48. Sameliguda	Do.
		12	Punjab	49. Ludhiana	75,000
50. Dasuya	20,000		
51. Samana	20,000		
13	Rajasthan	52. Bhilwara	(Rural Dairy)
		53. Jodhpur	Do.
		54. Ajmer	Do.
		55. Udaipur	Do.
		56. Kotah	Do.
		57. Alwar	Do.
		58. Jalore	Do.
59. Barmer	Do.		

S. No.	State	Location	Capacity in liters
14	Uttar Pradesh	*60. Gorakhpur	10,000
		*61. Mathura	10,000
		*62. Moradabad	1,00,000
		*63. Haldwani (expansion)	10,000
		*64. Almora Do.	10,000
		*65. Allahabad Do.	10,000
		*66. Varanasi Do.	10,000
		*67. Meerut Do.	10,000
		68. Hardwar	10,000
15	West Bengal	69. Durgapur	40,000
		70. Siliguri	40,000

*Co-operative

Source.—Ministry of Food, Agriculture, Community Development and Co-operation.

STATEMENT OF ACCOUNT IN RESPECT OF DAIRY PROJECTS

State	Name of Dairy	Government or Municipal or Corporation (Govt. or Private) or Cooperative	Investment Rs.	Losses or Profits (Year-wise)		Remarks
1	2	3	4	5		6
Gujarat	Municipal Dairy, Ahmedabad.	Municipal	85,00,000	<i>Loss</i>		
				1960-61	.. 5,98,913	
				1961-62	.. 11,44,282	/
				1962-63	.. 7,56,840	
				1963-64	.. 1,22,410	
				1964-65	.. 1,66,227	
				1965-66	.. 12,00,000 (Tentative)	
Rajasthan	Jaipur Milk Supply Scheme.	Govt. Under taking	N.A.	<i>Loss</i>		
				1962-63	.. 17,700	
				1963-64	.. 48,900	
				1964-65	.. 2,36,100	
				1965-66	.. 4,94,000	

Mysore	Bangalore Dairy	Government	12,00,000	<i>Loss</i>	
				1-2-65 to 31-3-65 ..	1,57,796
				1-4-65 to 31-3-66 ..	12,39,683
Delhi	Delhi Milk Scheme	Government	2,63,34,538	<i>Loss</i>	
				1959-60 ..	7,51,000
				1961-62 ..	6,36,000
				1962-63 ..	10,60,000
				1963-64 ..	23,09,000
				1964-65 ..	97,80,000
				1965-66 ..	44,40,000
Assam	Gauhati Town Milk Supply Scheme.	Government	22,72,104	<i>Loss</i>	
				1963-64 ..	38,950
				<i>Profit</i>	
				1964-65 ..	52,748
				1965-66 ..	35,130
Bombay	Greater Bombay Milk Scheme.	Government	7,22,63,084	<i>Profit</i>	
				1963-64 ..	11,21,644
				<i>Loss</i>	
				1964-65 ..	70,45,807
Tripura	Agartala Dairy Plant	Government	2,62,049	<i>Loss</i>	
				31-3-62 ...	14,851

1	2	3	4	5	6
Punjab	Punjab Dairy Development Corporation Ltd.	Corporation	1,00,00,000		The Corporation has taken over three plants recently and has yet to complete a year. In preceding years all these plant suffered losses. Figures not available.
				<i>Loss</i>	
Uttar Pradesh	1. Lucknow Producers Cooperative Milk Union Ltd.	1. Cooperative		1. July 63—June 64	47,063
				July 64—June 65	41,15,105
				<i>Profit</i>	
				July 65—June 66	27,239
				July 66—Dec. 66	2,21,842
				<i>Loss</i>	
	2. Agra Dairy Plant	2. The dairy Plant at Agra is State award.	9,03,720	2. April 63—March 64	1,11,387
				April 64—March 65	1,60,829
				April 65—March 66	..
				April 66—Dec. 66	..
				<i>Profit</i>	
Madras	1. Trichy Srirangam Co-operative Central Milk Supply Union Ltd. Tiruchirapalli.	Cooperative	17,20,000	1964 (upto June) ..	5,070

				<i>Loss</i>	
				1965 (up to June)	67,741
				1966 (do.) ..	1,12,893
				<i>Loss</i>	
2. The Tanjore City Co-operative Milk Supply Union Ltd., Thanjavur.	Cooperative	19,68,000		1962 (upto June)	21,587
				1963 (do.)	61,272
				1964 (do.)	62,434
				<i>Loss</i>	
3. Kodaikanal Co-operative Milk Supply Union.	Cooperative	2,04,900		1954 (upto June)	1,620.00
				1962-63 ..	4,75,511
				1963-64 ..	5,57,656
5. The Coimbatore Co-operative Milk Supply Union, Ltd.	Cooperative	21,52,908		1962-63	55,471
				1963-64 ..	40,058
				1964-65 ..	18,013
					(Profits)
				1965-66 ..	Tentative Profit
					20,000

ANNEXURE XI(K)

BREAK-UP OF "NO PROFIT NO LOSS" PRICES OF VARIOUS FERTILISERS FOR 1967-68.

(Rupees per M.T.)

Fertilisers	Average Cost (Import & Indigenous) Rs.	Handling Charges	Departmental Charges & Incidentals	Interest on Capital & Sales Tax	Inland freight	No Profit no loss price	Existing pool price for states	@Distribution allowed to States	Retail Margin price for farmers
Ammonium Sulphate	416.09	10.62	7.24	14.90	30.80	479.65	437.00	55.00	492.00
Urea	661.83	12.60	9.69	22.16	33.00	739.28	760.00	80.00	840.00
Ammonium Sulphate Nitrate	425.75	1.70	4.48	18.86	30.80	481.59	515.00	62.00	577.00
Calcium Amm. Nitrate (Imp.) (26%)	366.99	15.00	7.67	13.58	30.80	434.04	475.00	60.00	535.00
Do. (20.5%)	318.84 B	..	4.00	..	..	322.84	385.00	52.00	437.00
Ammonium Phosphate (IMPORTED)	796.99	15.00	11.97	28.71	33.00	885.67	738.00	80.00	818.00
Di-Amm. Phosphate. (Imported)	783.48	15.00	11.83	28.24	33.00	871.55	1,000.00	95.00	1,095.00
Basic Slag (Imported)	263.48	15.00	6.64	9.98	33.00	328.43	260.00	44.00	304.00
Sulphate of Potash (Imp.)	506.89	15.00	9.07	18.52	33.00	582.48	A	A	A
N. P. K. (14.4.14) Imp.	708.08	15.00	11.08	25.12	33.00	792.28	700.00	75.00	775.00
Ammonium Chloride (Imp.)	375.00	15.00	7.75	13.89	33.00	444.64	450.00	55.00	505.00

B. Including freight, interest & Sales tax etc.

A. Under Consideration.

@ Model break-up enclosed.

ANNEXURE XI(L)

STATEMENT SHOWING THE MODEL BREAK-UP OF THE DISTRIBUTION MARGIN FIXED FOR THE VARIOUS TYPES OF FERTILISERS THE PRICES OF WHICH HAVE BEEN REVISED WITH EFFECT FROM 1-4-1967.

(Rupees per metric tonne)

	Sulphate of Ammonium	Urea	Ammonium Sulphate Nitrate	Ammonium Phosphate	Cal. Ammonium Nitrate 26%	Di-Ammon. Phosphate	N.P.K. Complex	Basic Slag.	Ammonium Chloride	Cal. Ammo. Nitrate (20.5%)
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Commission to dealers :										
(i) Wholesaler	4.40	7.60	5.20	7.40	4.80	10.00	7.00	2.60	4.50	3.90
(ii) Retailer	10.90	19.00	12.90	18.50	11.90	25.00	17.50	6.50	11.30	9.70
2. Incentive Commission (to be funded).										
	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
3. Administrative Charges										
	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
4. Transport Charges :										
(i) Rly. to wholesale godown	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
(ii) Wholesale godown to retail godown	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00

	1	2	3	4	5	6	7	8	9	10	11
5. Loading and Unloading :											
(i) Wholesaler	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
(ii) Retailer	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
6. Godown rent for wholesaler & retailer @ Rs. 0.80 per tonne per month for six months	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80
7. Shortage for wholesaler & retailer	2.20	3.80	2.60	3.70	2.40	5.00	3.50	1.30	2.30	1.90	
8. Interest charges. (4 months on an average)	11.70	20.30	13.70	19.70	12.70	26.70	18.70	6.90	12.00	10.30	
9. Supervision, publicity etc. (Apex Society or wholesaler)	3.00	6.50	4.80	7.90	5.40	5.50	5.50	2.60	2.10	3.40	
10. Misc. Expenses . . . . .	..	..	..	..	..	..	..	1.30	..	..
TOTAL	55.00	80.00	62.00	80.00	60.00	95.00	75.00	44.00	55.00	52.00	

**PERCENTAGE CONSUMPTION OF DIFFERENT FERTILISERS APPLIED TO FOODGRAIN AND
NON-FOODGRAIN CROPS.**

District		Year of survey	Total quantity of nitrogenous fertilisers distributed in terms of ammonium sulphate in tonnes.	Percentage of nitrogenous fertilisers applied to foodgrain crops	Percentage of nitrogenous fertilisers applied to non foodgrain crops	Percentage of phosphatic fertilisers applied to foodgrain crops	Percentage of phosphatic fertilisers applied to non-foodgrain crops
Coimbatore		1961-62	32,816	67	33	86	14
Raipur		1961-62	8,200	97	3	95	5
West Godavari		1961-62	34,500	83	17	92	8
Krishna	Rabi	1961-62	19,757	75	25	95	5
	Kharif	1962-63					
Shahabad		1961-62	11,200	95	5	84	16
Barabanki	Rabi	1962-63	9,030	75	25	72	28
	Kharif	1963-64					
Varanasi		1961-62	3,722	78	22	..	..
Aligarh		1961-62	1,900	92	8	100	..
Ferozepur	Rabi	1957-58	5,801	63	37	100	..
	Kharif	1958-59					
Ludhiana		1961-62	11,400	69	31	91	9
				79.4%	20.6%	90.5%	9.5%

Source : —Institute of Agricultural Research Statistics, ICAR. "Fertiliser Practices followed by the farmers".

ANNEXURE XI(N)

FERTILIZERS

Statement Showing Position of Availabilities of Nitrogen During the Third Five Year Plan

(’000 tonnes Nitrogen)

Year	Plan target of supply	Requirements.	Internal Production.*	Imports	Foreign Exchange		
					Requirements based on targets.	Allotments	
1961-62	400	497	Tar :	140	260	28.60	20.00
			Ach :	147	138		
1962-63	525	625	Tar :	200	325	35.90	25.90
			Ach :	184	245		
1963-64	650	670	Tar :	300	350	38.90	24.75
			Ach :	222	223		
1964-65	800	778		240	235	48.00	33.30
1965-66	1,000	1,331		242	331	†54.22	46.67

*Includes small production of Nitrogen outside the Fertiliser Pool.

†Based on average price of past year.

Abbreviations : Tar : Target
Ach : Achievement

TABLE I

Total foreign exchange requirements for fertilisers and fertiliser raw materials in Fourth Plan at Post-devaluation rates of exchange

(Rs. in crores)

Year	N	P	Sulphur	Rock Phosphate	K		Total
					Target (million tonnes)	Amount	
1	2	3	4	5	6	7	8
1966-67	116.00	22.80	17.27	22.54	0.19	13.49	192.10
1967-68	154.00	29.45	21.95	29.53	0.23	16.33	251.26
1968-69	146.40	38.95	23.68	31.55	0.27	19.17	259.75

TABLE I—*contd.*

1	2	3	4	5	6	7	8
1969-70	143.20	57.00	25.99	34.85	0.31	22.01	283.05
1970-71	19.00	72.20	31.50	42.04	0.35	24.35	189.59
TOTAL	578.60	220.40	120.39	160.51	1.35	95.85	1,175.75

NOTE : 1. For details please see Tables II to V

2. Value of complex fertilisers has been included in Phosphatic fertilisers (Table III).

3. The c.i.f. prices adopted are :

Nitrogen	..	Rs. 2,000 per tonne
P ₂ O ₅ in complex form	..	Rs. 1,900 per tonne
Sulphur	..	Rs. 525 per tonne
Rock Phosphate	..	Rs. 170 per tonne
K ₂ O	..	Rs. 710 per tonne

TABLE II

Foreign exchange requirements for import of Nitrogenous Fertilisers

(’000 tonnes)

(Rs. in crores)

Year	Target N	Indigenous production N	Import of complex	Imports of straight Nitrogen	
				Quantity N	Foreign Exchange Rs.
1966-67	1,050	350	120	580	116.00
1967-68	1,450	525	155	770	154.00
1968-69	1,700	763	205	732	146.40
1969-70	2,000	984	300	716	143.20
1970-71	2,000	1,525	380	95	19.00
TOTAL	8,200	4,147	1,160	2,893	578.60

NOTE.—1. Value of 1 tonne of N— Rs. 2,000.

2. Value of complex fertiliser indicated in col. 4 has been provided for under phosphatic fertilisers.

3. The production in 1967-68 and 1968-69 would be lower than earlier estimates because the Durgapur, Cochin and Madras units have been delayed considerably due to the delays in securing foreign exchange and foreign collaboration.

4. The indigenous production in the last year (1970-71) can be raised to 2 million tonnes N if expeditious steps are taken to implement the Mangalore and Gujarat expansion projects and the new Assam Unit using natural gas.

TABLE III

Foreign exchange requirements for imports of finished phosphatic fertilisers

Year	Target	Indigenous production of Super-phosphate complex	Powdered rock phosphate	Import	
				Quantity	Foreign exchange
1966—67	370	190	60	120	22.80
1967—68	500	275	70	155	29.45
1968—69	650	365	80	205	38.95
1969—70	800	410	90	300	57.00
1970—71	1000	520	100	380	72.20
TOTAL	3520	1760	400	1160	220.40

(000 tonnes P₂O₅)
(Rs. in crores.)

NOTE.—1. The c. i. f. value of finished Phosphatic fertilisers has been assumed to be Rs. 1900 per tonne of P₂O₅ on the basis of current prices of Di-Ammonium Phosphate. This includes 18% N which has been deducted in Table II.

2. The indigenous production figures are those indicated by the Planning Commission and Ministry of Petroleum and Chemicals on the basis of production programme approved so far. The production should be stepped up to reach the level of 1 million tonnes of P₂O₅ by 1970-71 by expanding the capacity of superphosphate factories by import of phosphoric acid for coastal units and by sanctioning the second stage of Durgapur, Cochin and Goa involving production of complex fertilisers.

TABLE IV

Estimated sulphur requirements for fertiliser production in Fourth Plan

Year	Estimated indigenous production (P ₂ O ₅)	Sulphur required for full Capacity Production	
		Quantity	Foreign Exchange
1966-67	190	329	17.27
1967-68	275	418	21.95
1968-69	365	451	23.68
1969-70	410	495	25.99
1970-71	520	600	31.50
TOTAL	1,760	2,293	120.39

(000 tonnes)
(Rs. in crores)

NOTE.—1. Sulphur requirements include quantities required for production of Ammonium Sulphate.

2. It has been assumed that production of 1 tonne of P₂O₅ required 0.95 tonnes of sulphur.

3. C.I.F. cost of sulphur has been assumed to be Rs. 525 per tonne.

TABLE V

Estimates of Rockphosphate Requirement for the Fourth Plan

Year	Quantity required			Foreign Exchange Rs.
	For fertiliser production	For direct use in powder form	Total	
1966-67	1,126	200	1,326	22.54
1967-68	1,504	233	1,737	29.53
1968-69	1,590	266	1,856	31.55
1969-70	1,750	300	2,050	34.85
1970-71	2,140	333	2,473	42.04
TOTAL	8,110	1,332	9,442	160.51

NOTE.—1. Requirements of Rockphosphate for one tonne of P_2O_5 has been taken as 3.5 tonnes.

2. C.I.F. cost of Rockphosphate has been assumed as Rs. 170 per tonne.

Statement showing the Profits Earned by the Central Fertiliser Pool During the Years 1944-45 to 1964-65

Year	Net profit or loss
1	2
	Rs.
1944-45	6,71,583
1945-46	23,64,061
1946-47	(—)4,40,316
1947-48	14,29,857
1948-49	1,42,639
1949-50	19,63,799
1950-51	11,43,466
1951-52	4,44,627
1952-53	3,40,153
1953-54	68,70,760
1954-55	(—) 45,47,472
1955-56	8,75,985

Statement showing the Profits Earned by the Central Fertiliser Pool During the Years 1944-45 to 1964-65—contd.

1	2
1956-57	22,58,216
1957-58	1,54,78,413
1958-59	3,50,50,140
1959-60	6,37,07,000
1960-61	7,44,81,003
1961-62	9,47,19,930
1962-63	8,50,06,580
1963-64	5,14,33,663
1964-65	40,14,300
	(+) 43,76,08,392
1965-66 (Estimate)	(—) 4,00,00,000

Pool Issue Prices of Major Pool Fertilisers During 1961-66

Fertiliser	Price upto 30-11-61	Price from 1-12-61 to 4-10-62	Price from 5-10-62 to 31-12-63	Price from 1-1-64 to 31-1-66	Price from 1-2-66
	Rs.	Rs.	Rs.	Rs.	Rs.
Ammonium Sulphate	344.50	330.00	330.00	330.00	355.00
Urea	684.10	670.00	670.00	570.00	610.00
Amm. Sul. Nitrate	408.50	400.00	400.00	400.00	455.00
Cal. Amm. Nitrate	324.80	310.00	278.00	278.00	315.00

ANNEXURE XI(O)

NOTE ON THE PERCENTAGE OF AGRICULTURAL AND LIVE-STOCK PRODUCTS WHICH PASSED THROUGH ORGANISED MARKETS SUCH AS REGULATED MARKETS, COOPERATIVE MARKETING INSTITUTIONS, ETC.**

(a) Regulated Markets

The States that have so far enacted and enforced the "Agricultural Produce Markets" Act and established regulated markets therein are :

- (i) Andhra Pradesh
- (ii) Bihar
- (iii) Gujarat
- (iv) Maharashtra
- (v) Madhya Pradesh
- (vi) Madras.
- (vii) Mysore
- (viii) Orissa
- (ix) Punjab
- (x) Rajasthan
- (xi) Uttar Pradesh

Besides the above States, the Union Territories of Delhi and Tripura have also enacted and enforced the Agricultural Produce Markets Act. The other two Union Territories, viz., Himachal Pradesh and Manipur though these two territories have adopted the Pepsu and Bihar Acts respectively, have not yet established any regulated market so far. The States that have not yet enacted the marketing legislation are Assam, Kerala (except erstwhile Malabar district), West Bengal and Jammu and Kashmir. The Union Territories of Goa and Pondicherry also have not yet enacted the legislation.

The Government of Assam had prepared the draft Agricultural Produce Markets Bill as early as 1960, but it was subsequently withdrawn from the State Legislature. The Assam Government later requested this Directorate (1961) to draft a suitable Agricultural Produce Markets Bill for their State which was done in the same year. The Government of Assam has not

yet introduced the same in the State Legislature. Similarly, the Government of West Bengal had also drafted the West Bengal Agricultural Produce Markets Bill as early as 1961 and sent the same to the Government of India for conveying the Presidential assent. As the Bill did not provide for certain essentials so very necessary for effective regulation of markets, the Bill was returned by the Government of India to the State Government with a request that the Bill may be suitably modified in the light of the comments made. This has now been done by the Government of West Bengal and the draft Bill, very likely, may be introduced during the next session of the State Legislature. The Government of Kerala has also drafted the relevant Bill but as the State Legislature has not been functioning (President's rule being imposed in the State) it has not been possible to bring forward the necessary legislation. It is understood that the Bill will be introduced soon after the new elections in 1967. As regards the State of Jammu and Kashmir, a Bill has also been drafted by this Directorate at the request of the Registrar of Cooperative Societies of that State. The Bill appears to be under the consideration of the State Government.

Annexure I indicates the number of markets so far regulated (31-3-67) in each State and also the number of markets that are yet to be brought under the regulatory orbit. As will be observed from Annexure I, it is only in States like Uttar Pradesh and Bihar which have passed the Acts only very recently, or in States like Assam, West Bengal and Kerala which have yet to enact the necessary legislation, that a large number of markets remain un-regulated. It is hoped that by the end of the Fourth Five Year Plan, all the remaining markets would be brought under the regulatory orbit.

The definition of 'agricultural produce' given in various Acts includes all produce of agriculture, horticulture and animal husbandry. The specific commodities brought under the purview of the Act are listed in the schedules attached to various Acts (Annexure IV). The number of commodities notified for regulation varies from a minimum of 3 under the Madras Commercial Crops Act (as now applicable to Malabar district of Kerala and also Andhra area of Andhra Pradesh) to 54 in the Telangana area of Andhra Pradesh where the Hyderabad Agricultural Produce Market Act, 1930 is still in force.

Foodgrains are regulated in all the States except in the areas of old Madras State now in Andhra Pradesh and Kerala where the old Madras Commercial Crops Act, 1933 is in force. In these areas only such commodities (9 in Andhra Pradesh and 3 Kerala) which have been declared as commercial crops under the Act have been regulated. Foodgrains have not yet been declared as commercial crops for the purpose of regulation in these areas. In Madras, foodgrains have been recently brought under regulation.

The extension of Markets Acts to special commodities such as fruits and vegetables, livestock and its products and even tobacco has been only to a limited extent. Ahmedabad and Surat in Gujarat and Hyderabad in Andhra Pradesh are the only States where vegetables of all kinds have been regulated. Potatoes and onions and some varieties of beans have been regulated in a few markets in Mysore State. In some States cattle has also been notified for regulation (Maharashtra—55, Gujarat—10, Orissa—11, Mysore—4 and Andhra Pradesh—2). Delhi is the only market where grass and fodder have been regulated. Tobacco, though included in the schedule in the various State Acts is yet another important commodity which has not been regulated except in a few markets in Gujarat and in Guntur district of Andhra Pradesh.

The Directorate has been requesting the market committees all over the country to supply information on total volume of produce handled and the value thereof in their respective markets. The response from the market committees has not been very encouraging as only about 50 to 60 per cent of the market committees have been responding in different years. In view of the above difficulty it has not been possible to correctly assess the volume of produce handled in all the regulated markets in different States. However, based on the information collected from market committees of various States, the data compiled are given in Annexure V and summarised below:

Year	No. of reporting markets	Quantity and value of notified produce handled in the reporting markets		(Quantity in thousand tonnes)		(Value in thousand rupees)		
				Average per market		Quantity	Value	Average value per tonne
				Quantity	Value			
1961-62	496	10,380	62,13,291	21	12,539	599		
1962-63	316	6,146	41,44,109	19	13,114	674		
1963-64	532	10,354	..	19	..	..
1964-65	541	8,480	61,74,189	16	11,413	728		

It will be observed that during 1964-65 there has been some shortfall in arrivals per market as compared to the previous three years. This is due to the fact that some of the States have introduced monopoly procurement of foodgrains and the purchases so made are not channelled through the regulated markets and thus do not figure in the transactions recorded by the market committees. The value of produce per tonne, however has shown a definite increase, rising from Rs. 599 per tonne in 1961-62 to Rs. 728 per tonne in 1964-65.

As regards cattle, very few markets (55 only) have been regulated and that too mostly in the States of Maharashtra, Gujarat, Mysore and Hyderabad. Most of these are weekly markets where the cattle is brought for sale. Usually not more than 50% of the cattle brought for sale is actually sold. The important markets which will be worth mentioning are Baroda and Patan in Gujarat, Shahada in Maharashtra and Narsinghi in Hyderabad.

In Baroda, the arrivals of cattle (bullocks, cows, buffalows) are usually of the order of 45,000 or so heads of cattle annually valued at about 2½ crores of rupees. The other animals viz., sheep and goats are also sold in this market and their total quantum of sales amount to 5 lakhs annually. In Patan, the number of animals that arrive yearly is about between 14 and 15 thousand of which annually 50 to 60% are sold valued at about 12 lakhs of rupees. The Narsinghi market in Hyderabad is more known for sale of sheep and goats for slaughter purposes of which about 25,000 are sold annually. The sale of other types of cattle is about 12,000 heads of cattle.

(b) Other organised markets

This Directorate has compiled a Directory of Wholesale Assembling Markets both major and minor in the country. According to this Directory, there are 3405 markets in the country both major and minor. Of these, there are about 2500 markets which are suited for regulation. Of these 1788 markets have been regulated up to the end of March 1967. There would thus remain 712 markets both major and minor to be regulated. Computing the value of arrivals on the basis of arrivals in the regulated markets (See table on page 190-191) at 1.14 crores annually the total value of arrivals in all the markets both regulated and yet to be regulated would come to 2853 crores annually.

(c) Value of produce handled by cooperatives

According to the information published in the Cooperative News Digest, April 1967, it has been stated that there has been a significant progress in agricultural marketing operations in the cooperatives during 1965-66. The level of operations increased from 300 crores to 360 crores in 1965-66. Taking that the cooperatives handled produce worth 360 crores of rupees in 1965-66, this works out to roughly 10% of the value of produce handled by cooperatives to total market arrivals.

**Prepared and furnished by the Directorate of Marketing & Inspection, Ministry of Food, Agriculture, Community Development and Co-operation, Nagpur.

Arrivals of notified commodities in the regulated markets in different States of India during 1961-62 to 1964-65.

Sl. No.	State	1961-62				1962-63			
		No. of reporting markets	Arrivals	Value	Value per tonne (in Rs.)	No. of reporting markets	Arrivals	Value	Value per tonne (in Rs.)
1	2	3	4	5	6	7	8	9	10
1.	Andhra Pradesh	80	1,330 (17)	7,61,031 (9,513)	572	80	1,287 (16)	7,34,692 (9,184)	671
2.	Bihar	Not available				Not available.			
3.	Delhi	2	25 (12)	12,856 (6,428)	517	2	32 (16)	1,62,301 (81,151)	501
4.	Gujarat	66	2,125 (32)	15,02,726 (22,769)	707	58	1,179 (20)	9,19,706 (15,857)	780
5.	Kerala	2	0.5 (0.2)	868 (434)	1,743	Not available			
6.	Madhya Pradesh	46	590 (13)	3,74,265 (8,136)	624	18	276 (15)	1,79,723 (9,985)	652
7.	Madras	25	140 (6)	1,27,728 (5,109)	912	Not available.			
8.	Maharashtra	131	3,152 (24)	16,72,694 (12,769)	531	86	2,056 (24)	12,41,952 (14,441)	604
9.	Mysore	65	1,346 (21)	9,96,710 (15,334)	740	32	584 (18)	5,20,310 (16,260)	891
10.	Orissa	9	103 (11)	18,592 (2,066)	241	10	126 (12)	54,195 (5,420)	430

1	2	3	4	5	6	7	8	9	10
11. [Punjab		70	1,568 (22)	7,45,821 (10,655)	476	30	605 (20)	3,31,230 (11,041)	546
12. Rajathan			Not available.				Not available.		
	ALL INDIA	496	10,380 (21)	62,13,291 (12,539)	509	316	6,146 (19)	41,44,109 (13,114)	746

Arrivals of notified commodities in the regulated markets in different States of India during 1961-62 to 1964-65.

(Quantity in thousand tonnes)

(Value in thousand rupees)

Sl. No.	State	1963-64		1964-65			
		No. of reporting markets	Arrivals	No. of reporting markets	Arrivals	Value	Value per tonne (in Rs.)
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	79	1,650	105	1,396 (13)	10,59,167 (10,087)	759
2.	Bihar	Not available.		9	240 (27)	1,91,204 (21,245)	798
3.	Delhi	Not available.		2	29 (14)	22,037 (11,018)	762
4.	Gujarat	67	1,216 (18)	36	867 (24)	8,66,357 (24,065)	999
5.	Kerala	Not available.		4	0.3 (0.1)	666 (167)	2,556
6.	Madhya Pradesh	Not available.		36	600 (17)	3,43,900 (9,553)	573
7.	Madras	47	213 (5)	79	145 (2)	181,300 (2,295)	1,252
8.	Maharashtra	135	2,753 (20)	97	1,424 (16)	11,38,173 (11,734)	799

1	2	3	4	5	6	7	8
9. Mysore	.	69	2,094 (30)	86	1,320 (16)	11,10,616 (12,914)	841
10. Orissa	.	15	294 (20)	9	99 (11)	45,620 (50,69)	461
11. Punjab	.	120	2,134 (18)	71	2,287 ¹ (32)	11,45,115 (16,128)	501
12. Rajasthan	.	Not available.		7	73 (10)	70,034 (10,005)	965
	ALL INDIA	532	10,354 (19)	541	8,480 (16)	61,74,189 (11,413)	728

NOTE. 1—Figures in brackets relate to average per market arrivals (quantity and value)

2 Value of arrivals in 1963-64 not available.

ANNEXURE XI(P)

LIST OF VARIOUS TYPES OF AGRO-PROCESSING INDUSTRIES, THEIR ANNUAL OUTTURN AND THE VALUE OF AGRICULTURAL PRODUCTS MARKETED THROUGH THESE INDUSTRIES **

(i) List of various types of agro-processing industries

1. Rice Mills.
2. Cotton Ginning and Pressing factories.
3. Spinning Mills.
4. Rice Bran Oil Units.
5. Oil Mills.
6. Solvent extraction plants.
7. Vanaspati factory.
8. Jute baling units.
9. Jute mills.
10. Fruit processing units.
11. Lac processing.
12. Tobacco processing.
13. Cashew processing units.
14. Sugar mills.

(ii) Annual outturn and the value of agricultural products marketed through these industries.

On the basis of information available in this Directorate the quantities processed in cooperative processing units and those processed in private units have been estimated as follows:

Item	Estimated production (1965-66)		Estimated quantity processed in	
	Unit	Quantity	Cooperative units	Private sector units
1	2	3	4	5
Rice Milling	(million tonnes)	35.02	2.46	32.56
Cotton ginning	(lakh bales)	54.08	4.84	49.24

1	2	3	4	5
Cotton pressing	(lakh bales)	54.08	5.70	48.38
Sugarcane processing	(million tonnes)	12.12	3.15	8.97
Oilseeds processing	(million tonnes)	6.14	0.30	5.84
Cashew processing	('000 tonnes)	136	5.44	130.56
Lac processing	('000 tonnes)	30	Neg.	30
Fruit processing	('000 tonnes)	72.6	70.8	1.8

Information on the value of the commodities processed is not available.

The present position regarding cooperative processing units and the position likely to be by the end of Fourth Plan is as follows :—

	At the end of 1965-66 (estimated)		At the end of 1970-71 (targeted)	
	No. of units likely to be in production	Likely share of Cooperative societies in total pro- duction %	No. of units likely to be in production	Likely share of cooper- ative societies in total production %
Cooperative sugar factories	55	26	103	33
Cotton ginning	220	16	450	27
Cotton spinning mills	32	7	93	12
Paddy processing	485	7	1,100	18
Fruit processing	200	5	650	17

No. of Co-operative Processing Units by the end of 1965-66

Commodity/Type	No. of units
Paddy (i) Rice mills/hullers	783
. . . . (ii) Modern rice mills	6
Cotton (i) Ginning and processing units	227
. . . . (ii) Spinning mills of growers	26
Oilseeds (i) Groundnut decorticators	51
. . . . (ii) Oil mills	178
. . . . (iii) Solvent extraction plants	4
Fruit/vegetable processing	32
Sugar (i) Sugar factories (licensed)	76
. . . . (ii) Sugarcane crushers/open pan crystal sugar units	22

Commodity/Type		No. of units
Plantation crops	(i) Coffee processing units	3
	(ii) Tea processing units	1
	(iii) Copra oil mills	21
Jute	(i) Jute baling units	47
	(ii) Jute mills	1
Pulses	(i) Dal mills	33
Others		13
TOTAL.		1,524

The details regarding cooperative marketing and processing of individual commodities are briefly indicated below :

1. Foodgrains

Year	Value of foodgrains marketed by cooperatives (Rs. in crores)
1963-64	41.01
1964-65	99.14
1965-66	136.75
Total number of rice mills in the country	45,152 (capacity 348 lakh tons)
Total number of cooperative units as on 31st March, 1967	794 (capacity 25 lakh tons)

2. Sugarcane

Year	Value of sugarcane marketed by cooperatives
1963-64	109.03
1964-65	123.00
1965-66	147.00
No. of cooperative sugar factories licensed	76
Annual licensed capacity (in lakh tonnes)	14.09
No. of units in production	52
Annual installed capacity (in lakh tonnes)	7.63
Cane crushed (1965-66) (in lakh tonnes)	90.94
Sugar produced (in lakh tonnes)	9.31

Progress in production of sugar by coop. sugar units

Season	No. of coop. sugar units in production	Sugar produced (lakh tonnes)	Share of coop. sector in total production
1963-64	48	6.0	23.4
1964-65	50	8.1	24.9
1965-66	52	9.3	26.2

3. Cotton

(Quantity in lakh bales)

Year	National production	Cotton ginned		Cotton pressing	
		Qty. ginned	% in total production	Qty. pressed	% in total production
1963-64	54.26	5.22	9.66	6.70	12.43
1964-65	54.08	4.84	8.76	5.88	11.05
1965-66	47.30	6.15	13.00	7.08	15.41

4. Oilseeds

Number of oil mills	(i) Assisted (upto 31-3-66)	178 (capacity 2.43 lakh tonnes of groundnut.)
	(ii) Installed (upto 30-6-66)	76
Number of groundnut decorticators	(i) Assisted (upto 31-3-66)	51
	(ii) Installed (upto 31-8-66)	39

Quantity of oilseeds processed/merketed

1963-64	60,000 tonnes
1964-65	87,000 tonnes
1965-66	90,000 tonnes (mainly groundnut oil).

5. Fruits & Vegetables (Year 1965)*Total quantity and value of products processed*

	Quantity (tonnes)	Value (Rs. lakhs)
(a) All types of fruit products including aerated beverages and synthetic syrups manufactured	90,210	1,471
(b) Synthetic syrups & aerated beverages manufactured	43,815	457
(c) Fruit products excluding aerated beverages & synthetic syrups	46,395	1,014
(d) Approximate quantity of fruits and vegetables used	3,000	30

Co-operative processing of fruits and vegetables (1965-66)

No. of units undertaking processing	12
Quantity of products manufactured (quintals)	30468
Value of products manufactured (lakhs)	37.36

6. Plantation crops

(i) **Arecanut.**—There were 34 cooperative marketing societies dealing the marketing and processing of arecanut and they handled arecanut valued around Rs. 700 lakhs during 1965-66. This accounted for 13 per cent. of marketable surplus of arecanut in the country.

(ii) **Cashew.**—There were in all 5 cooperative cashew processing factories, located in the States of Kerala, Mysore, Maharashtra and Andhra. In 1965-66, these units processed cashewnut worth Rs. 8 lakhs.

(iii) **Tea.**—There are 12 cooperative tea processing units in the country. During 1965-66, these units processed 31.61 lakh kg. of raw tea against 7.76 lakh kg. during 1964-65.

(iv) **Coffee.**—Of the five coffee processing units in the Co-operative sector, 3 units are in production and 2 are presently under installation. The units functioning at present undertake pooling and curing of coffee to the tune of 8000 tonnes annually, which account for about 15 per cent of the total coffee produced in the country.

ANNEXURE XI(Q)

STORAGE CAPACITY PRESENTLY AVAILABLE IN THE COUNTRY, VARIOUS ORGANISATIONS AND INSTITUTIONS OWNING AND MAINTAINING STORAGE STRUCTURES ALONG WITH THEIR CAPACITIES **

Storage accommodation in India is extremely elastic owing primarily to the fact that storage is not localised in any special area or confined to structures exclusively designed for the purpose as in the case of Europe, America, Australia, etc. In these countries, it is usual for warehouses, elevators, etc. at such points of assembling and distribution to be more or less concentrated in the commercial quarters which were often found to have grown up and developed near transport facilities such as railway termines, docks, etc. In India, any kind of covered accommodation (including rooms and dwelling houses) is pressed into service as occasion arises. It is in fact quite common to find from the traders godowns bagged or heaped in his residential quarters. It is only in recent years that organisations like Central and State Warehousing Corporations, Cooperative Marketing Societies and Food Department including Food Corporation of India have taken steps to provide regular storage facilities in the assembling markets or at port points (to provide accommodation for imported foodgrains). The storage accommodation for commercial crops like cotton, jute, etc. is provided by the processing factories like the cotton ginning factories and the jute baling presses.

As regards the private agencies a random survey was conducted by this Directorate in various assembling markets to assess the storage available with private agencies. Based on the random survey it is estimated that the private storage accommodation (except for cotton, jute, tobacco and other plantation crops which was not covered in the survey) is estimated at 21 million tonnes.

It may, however, be mentioned that all this storage accommodation is not exclusively utilised for storage of agricultural commodities and very often the same accommodation is also utilised for storage of fertilisers and other agricultural requisites such as seeds, manure mixtures, etc.

It is not only that the storage accommodation be adequate but it should also be satisfactory. As far as the private storage accommodation is concerned, this is far from satisfactory. Very few private godowns will meet

** NOTE:—Prepared by the Directorate of Marketing & Inspection, Ministry of Food Agriculture, Community Development & Cooperation, Nagpur.

the requirements of scientific storage. In bringing out improvement of storage of agricultural produce, a beginning could be made in regulated markets where all the traders and commission agents are required to take licences for buying and selling of agricultural produce. It should be one of the conditions of licences that the licencees shall properly maintain storage structures and also take such measures that would prevent loss in storage. It has therefore been suggested that the market committees must assume powers under the respective Acts, Rules, and bye-laws to enforce code of storage practices. The market committees should also provide fumigation services which it will not be possible for the individual trader to provide, on its own account.

Apart from the storage space available with the private agencies, the institutions like Food Corporation of India, Central & State Warehousing Corporations, Co-operatives have also built storage structures. Besides above, the Food Department has built storage accommodation particularly at port points to accommodate imported foodgrains and maintenance of buffer stock. The table below gives the storage accommodation available by the various institutions mentioned above at the end of the Third Five Year Plan and also proposed construction during the Fourth Five Year Plan.

Name of institution	No. of centres where godowns have been built	Total storage capacity	
		(in lakh tonnes)	
		At the end of 3rd Plan	Proposed during 4th Plan
1. Food Deptt. & Food Corporation	..	25.00	35.00
2. Central & State Warehousing Corporations.	281	1.69	2.00
3. Co-operatives	15,400	20.35	18.75
		47.04	55.75

It may however be mentioned that except for Food Department and Food Corporation of India, the storage accommodation provided by other institutions is not exclusively for agricultural commodities. These are expected to store, besides agricultural commodities, non-agricultural goods like fertilisers, pesticides, insecticides, implements, manure mixtures and other agricultural requisites like cement and steel.

ANNEXURE XII

AGRICULTURAL FINANCE

A. Cash loans outstanding as on June 30, 1962—the Reserve Bank of India study.

Table V—Classified according to purpose—all-India.

Table VI—Classified according to security—all-India.

Table VII—Classified according to period outstanding.

B. Purpose-wise classification of advances from Central and Land Mortgage Banks.

C. Loans advanced by the Primary Agricultural Credit Societies.

D. Credit advanced by commercial banks to agriculture.

E. Short term loans sanctioned to various State Governments by the Government of India during 1966-67.

F. List of various cooperative institutions which have received financial assistance from the N.C.D.C.

G. Statement showing the State-wise grants made by the Central Government for cooperative farming societies.

H. Account of expenditure—Centre & States—on Agricultural development from 1951-52 to 1953-54.

ANNEXURE XII (A)

CASH LOANS OUTSTANDING AS ON JUNE 30, 1962—CLASSIFIED ACCORDING TO PURPOSE—ALL-INDIA

Purpose	Cultivator			Non-cultivator			All rural households		
	Proportion of household reporting (per cent)	Average per household (Rs.)	Aggregate amount (in crores of rupees)	Proportion of household reporting (per cent)	Average per household (Rs.)	Aggregate amount (in crores of rupees)	Proportion of household reporting per cent	Average per household (Rs.)	Aggregate amount (in crores of rupees.)
1	2	3	4	5	6	7	8	9	10
1. Capital expenditure in farm business	20.9	126.7	637.82 (26.8)	4.3	15.5	28.39 (6.9)	16.5	91.7	666.21 (23.9)
2. Current expenditure in farm business	14.3	43.2	232.67 (9.8)	2.0	4.0	7.36 (1.8)	11.0	35.0	240.03 (6.6)
3. Capital expenditure in non-farm business	0.7	6.8	33.97 (1.4)	1.3	7.7	14.14 (3.5)	0.8	7.0	248.11 (1.7)
4. Current expenditure in non-farm business	1.3	10.0	50.06 (2.1)	3.8	37.3	68.29 (16.7)	2.0	17.2	118.37 (4.2)
5. Household expenditure	50.3	232.5	1,170.68 (48.2)	45.4	142.1	259.95 (63.6)	40.0	208.4	1,430.63 (51.3)
6. Expenditure on litigation	1.3	8.3	41.97 (1.8)	0.5	2.2	3.97 (1.00)	1.1	6.7	45.94 (1.6)

7. Repayment of debts .	4.8	23.8	119.82 (5.0)	2.9	9.9	18.07 (4.4)	4.3	20.1	137.89 (4.9)
8. Financial investment expenditure .	0.2	0.9	4.45 (0.2)	0.1	0.3	0.48 (0.1)	0.2	0.7	4.93 (0.2)
9. Any other Purpose .	0.1	1.4	7.23 (0.3)	0.1	1.2	2.45 (0.5)	0.1	1.4	9.30 (0.3)
10. More than one purpose	2.4	14.0	70.30 (3.0)	0.8	2.6	4.70 (1.2)	2.0	10.9	75.00 (2.7)
11. Purpose not specified .	0.2	2.2	10.95 (0.5)	0.1	0.8	1.47 (0.4)	0.1	1.8	12.42 (0.4)
TOTAL	66.7	472.7	2,379.94 (100.00)	52.0	223.6	408.98 (100.00)	62.8	406.3	1,788.93 (100.00)

ANNEXURE XII(A)

CASH LOANS OUTSTANDING AS ON JUNE 30, 1962—CLASSIFIED ACCORDING TO SECURITY— ALL INDIA

Security	Cultivator			Non-cultivator			All rural households		
	Proportion of household reporting (per cent)	Average per household (Rs.)	Aggregate amount (in crores of rupees)	Proportion of household reporting (per cent)	Average per household (Rs.)	Aggregate amount (in crores of rupees)	Proportion of household reporting (per cent)	Average per household (Rs.)	Aggregate amount (in crores of rupees)
1. Personal security	58.2	329.6	1, 659.45 (69.7)	48.4	179.0	327.39 (80.0)	55.6	289.5	1,986.84 (71.2)
2. Surety Security or guarantee by third party	7.2	20.6	103.65 (4.4)	3.3	7.7	14.09 (3.4)	6.2	17.2	117.74 (4.2)
3. First charge on immovable property	3.5	16.7	84.03 (3.5)	0.4	1.6	2.94 (0.7)	2.6	12.7	86.97 (3.1)
4. Crops	0.6	1.6	8.94 (0.4)	..	0.2	0.34 (0.1)	0.4	1.4	9.28 (0.3)
5. Mortgage of immovable properties	11.7	96.1	483.85 (20.3)	4.1	30.1	55.10 (13.5)	9.7	78.5	538.95 (19.3)
6. Bullion & ornaments	2.3	6.4	32.46 (1.4)	1.8	9.3	6.10 (1.5)	2.2	5.6	38.55 (1.4)
7. Shares of companies Govt. securities and insurance policies	0.1	0.3	1.73 (0.1)	0.1	0.1	0.23 (0.1)	0.1	0.3	1.95 (0.1)
8. Agricultural commodities	..	0.5	2.33 (0.1)	..	..	0.02	..	0.3	2.34 (0.1)
9. Other movable property	0.1	0.2	1.23 (0.1)	0.4	0.2	0.45 (0.1)	0.2	0.2	1.68 (0.1)
10. Any other security	0.2	0.4	2.28 (0.1)	0.1	1.3	2.34 (0.1)	0.2	0.7	4.61 (0.2)
TOTAL	66.7	472.7	2,379.94 (100.00)	52.0	223.6	408.98 (100.00)	62.8	406.3	2,788.93 (100.00)

ANNEXURE XII(A)

CASH LOANS OUTSTANDING AS ON JUNE 30, 1962—CLASSIFIED ACCORDING TO PERIOD OUTSTANDING—
ALL-INDIA

	Cultivators			Non-cultivators			All Rural Households		
	Proportion to household reporting (%)	Average per household (Rs.)	Aggregate amount in crores of Rs.	Proportion to household reporting (%)	Average per household (Rs.)	Aggregate amount in crores of Rupees.	Proportion to household reporting (%)	Average per household (Rs.)	Aggregate amount in crores of Rs.
1. 1 year or less	47.7	179.5	903.84 (38.0)	33.9	84.8	155.12 (37.9)	44.5	154.3	1,058.95 (38.0)
2. 1—2 years	22.6	99.0	501.20 (21.1)	14.6	40.3	73.75 (18.0)	20.5	83.8	574.95 (20.6)
3. 2—3 years	11.3	56.7	285.27 (12.0)	7.3	24.2	44.31 (10.8)	10.2	48.0	329.68 (11.8)
4. 3—4 years	7.7	39.8	200.57 (8.4)	5.1	17.3	31.68 (7.7)	7.0	33.8	232.21 (8.3)
5. 4—5 years	4.6	24.1	121.15 (5.1)	2.9	10.5	19.25 (4.7)	4.2	20.4	140.40 (5.0)
6. 5—10 years	6.6	42.3	213.00 (9.0)	4.2	24.0	43.81 (10.7)	6.0	37.4	256.80 (9.2)
7. Over 10 years	2.6	26.4	133.05 (5.6)	2.0	18.7	34.26 (8.4)	2.4	24.4	167.1 (6.0)
8. Unspecified	0.6	4.3	21.87 (0.9)	0.4	3.7	6.81 (1.7)	0.6	4.2	28.68 (1.00)
TOTAL	66.7	472.7	2,379.94 (100.0)	52.0	223.6	408.98 (100.0)	62.8	406.3	1,788.93 (100.0)

ANNEXURE XII(B)

PURPOSE-WISE CLASSIFICATION OF ADVANCES FROM CENTRAL AND LAND MORTGAGE BANKS

(Rs. in thousands)

	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
1. Advances made for debt redemption	15,988	16,929	18,539	30,763	42,086	34,897	39,276	42,742
2. Advances for purchase of land	1,009	1,012	1,104	912	1,073	1,581	2,595	2,567
3. Advances for land improvements	17,662	27,234	37,230	46,497	66,925	1,33,567	1,52,162	1,93,648
4. Advances for purchase of machinery	7,979	9,996	22,796	34,485	35,346	67,764	85,003	1,15,133
5. Advances for other purposes	4,062	4,819	5,486	3,554	2,112	18,034	15,903	19,952
TOTAL	46,700	59,990	85,128	1,16,211	1,53,452	2,55,843	2,94,939	3,74,042

Source.—Statistical Statements relating to Co-operative movement in India (Data relate to Central Land Mortgage Banks. Primary land mortgage banks are not covered therein).

ANNEXURE XII(B)

CENTRAL LAND MORTGAGE BANKS PURPOSE-WISE CLASSIFICATION OF ADVANCES

(In thousand of Rupees)

	Advances made for Debt Redemptions			Advances made for purchase of Land			Advances made for land improvements			Advances made for purchase of machinery			Advances made for other purposes		
	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60
A.P. Andhra .	..	..	..	80	74	58	6,403	7,252	10,216	193	125	223	318	551	632
Hyderabad .	..	88	274	5	..	..	525	618	1,821	40	99	200	354	632	531
Assam .	222	277	51	24	25	25	150	166	1,154	..	..	..	116	145	174
Bihar .	..	43	140	..	..	..	..	2	6	..	..	2	..	..	..
Bombay .	894	1,004	721	176	131	227	1,343	10,152	12,423	231	137	5,936	345	207	137
Saurashtra .	2,450	884	..	545	535	..	5,910	4,981	..	6,541	8,584	..	1,875	2,858	..
Vidarbha .	600	522	445	34	41	24	40	59	123	3	..	12	..	..	..
Kerala .	811	2,447	1,009	..	..	6	127	144	137	..	..	..	574	..	482
Cochin .	394	3,259	..	..	..	..	..	..	..	..	..	..	..	..	..
M.P. .	494	483	514	5	36	22	28	55	120	..	..	..	..	..	..
Madras .	4,179	3,600	4,815	140	111	..	1,613	2,386	4,406	971	742	..	441	269	2
Mysore .	5,662	6,336	8,064	..	..	..	271	98	175	..	..	..	..	..	..
Orissa .	282	..	378	..	..	..	1,252	937	1,069	..	..	..	39	..	..
Punjab .	..	796	1,275	..	109	285	..	13	61	..	309	833	..	157	18

CENTRAL LAND MORTGAGE BANKS PURPOSE-WISE CLASSIFICATION OF ADVANCES—(Contd).

(In thousand of Rupees)

	Advances made for Debt Redemptions			Advances made for purchase of Land			Advances made for land improvements			Advances made for purchase of machinery			Advances made for other purposes		
	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60
Rajasthan	44	..	..	..	..	..	16	..	..	11	..	..	..
West Bengal	124	109	..	..	3	..	371	717	..	..	..	..	..	4
Gujarat	700	..	..	474	..	..	5,886	..	..	15,552	..	..	3,606
U.P.
TOTAL	15,988	16,929	18,539	1,009	1,012	11,01	17,662	27,234	37,230	7,979	9,996	22,769	4,062	4,819	5,486

Source.—Statistical Statements relating to cooperative Movement in India.

Note.—Data relate to Central Land Mortgage Banks.

Primary Land Mortgage Banks are not covered therein.

ANNEXURE XII(C)
LOANS ADVANCED BY PRIMARY AGRICULTURAL
CREDIT SOCIETIES

Year*	Amount† (Rs. in crores)
1950-51	22.91
1951-52	24.20
1952-53	25.69
1953-54	29.64
1954-55	35.48
1955-56	49.62
1956-57	67.33
1957-58	96.08
1958-59	125.50
1959-60	169.09
1960-61	202.75
1961-62	228.31
1962-63	257.37
1963-64	297.14
1964-65	316.16

* Agricultural Year : -July-June.

† Total of Short-term and Medium Term.

Source .—Statistical Statements relating to Cooperative movement in India.

ANNEXURE XII(D)

LOANS ADVANCED BY SCHEDULED BANKS FOR AGRICULTURE

As on		Amount outstanding (Rs. in lakhs)
End-march	1951	12.39
Do.	1952	15.63
Do.	1953	21.03
Do.	1954	12.08
Do.	1955	8.23
Do.	1956	15.59
End-October	1957	24.18
End-April	1958	18.48
Do.	1959	23.46
Do.	1960	19.36
Do.	1961	5.48
Do.	1962	Not available
End-March	1963	4.09
Do.	1964	8.69
Do.	1965	3.95
Do.	1966	4.65

Source.—Reserve Bank of India Bulletins. Based on Survey of purpose- Wise advances of Scheduled Banks

ANNEXURE XII(E)

STATEMENT SHOWING SHORT TERM LOANS SANCTIONED TO
THE VARIOUS STATE GOVERNMENTS DURING 1966-67.

(Rs. in lakhs)

Name of State	Inputs					Total'
	Fertilisers		Pesticides	Seeds		
	Marketing	Taccavi				
1	2	3	4	5	6	
1. Andhra Pradesh	691.56	140.00	89.00	80.00	1,000.56	
2. Bihar	‡263.51	..	‡276.00	‡504.50	1,044.01	
3. Gujarat	145.72	..	..	..	145.72
4. Haryana . . . . .	..	80.00	..	..	80.00
5. Kerala	191.33	20.71	20.26	..	142.33	
6. Madhya Pradesh	79.40	100.00	†100.00	‡214.00	493.40	
7. Madras	‡447.67	67.68	*79.60	8.48	603.44	
8. Maharashtra	53.00	100.00	236.00	232.00	621.00	
9. Mysore	†50.00	..	..	..	50.00
10. Orissa	115.69	100.00	40.00	..	255.69	
11. Punjab (Old)	212.20	200.00	60.00	41.44	513.64	
12. Punjab (New) . . . . .	..	120.00	..	..	120.00
13. Rajasthan	‡167.71	¶66.53	33.00	80.70	347.94	
14. Uttar Pradesh	195.69	200.00	32.83	200.00	628.52	
15. West Bengal	41.00	..	25.50	32.00	98.50	
TOTAL	2,564.48	1,194.92	992.20	1,393.12	6,144.72	

* Out of this amount a sum of Rs. 836 lakhs is for both pesticides and Seeds.

† For all the three inputs.

‡ These loans have been sanctioned on 100% purchase as special case due to drought conditions prevailing in the States.

§ Out of this amount Rs. 66.00 lakhs for cotton seeds is on 100% basis.

¶ Loan sanction on the basis of 1/3rd of taccavi distributed.

ANNEXURE XII(F)

**EXPENDITURE INCURRED BY THE NATIONAL COOPERATIVE
DEVELOPMENT CORPORATION ON THE SCHEMES OF COOPE-
RATIVE DEVELOPMENT DURING 1965-66.**

In order to discharge its responsibilities, the Corporation continued to maintain a statutory fund called the 'National Cooperative Development Fund, which had an opening balance of Rs. 4,704 crores and was augmented by loans and grants received from the Central Government amounting to Rs. 9.349 crores (Rs. 4.996 crores as loan and Rs. 4.353 crores as subsidy). An amount of Rs. 2.945 crores was also credited to the Fund by way of repayments and refunds from the state governments and miscellaneous receipts. Disbursement from this Fund, on various accounts, amounted to Rs. 15.090 crores. As on 31-3-1966, the closing balance in this Fund was Rs. 1.908 crores.

The expenditure incurred by the Corporation on the schemes of cooperative development during the financial year 1965-66 and upto the end of the year 1965-66 are given below:—

During the Financial year 1965-66

(Rs. in lakhs)

Particulars	Loan	Subsidy	Investment in purchase of deben- tures/ shares	Total
1. Centrally aided plan schemes . . .	282.25	238.86	..	521.11
2. Centrally sponsored schemes . . .	250.05	119.89	..	369.94
3. Corporation's sponsored schemes . . .	408.17	1.24	18.60	428.01
TOTAL . . .	940.47	359.99	18.60	1,319.06*

*In addition to the disbursements from this fund for various schemes of cooperative developments an expenditure of Rs. 190.0 lakhs was incurred towards repayment of loan instalments to the central Government, administrative expenses of the Corporation, income-tax etc.

Upto the end of March, 1966

(Rs. in lakhs)

Particulars	Loan	Subsidy	Investment in purchase of debentures/ shares	Total
1. Centrally aided plan schemes . . .	2,760.52	1,621.11	..	4,386.63
2. Centrally sponsored schemes . . .	944.61	254.81	..	1,249.42
3. Corporation's sponsored schemes . . .	664.48	17.99	95.87	778.34
TOTAL . . .	4,419.61	1,898.91	95.87	6,414.39

During the financial year 1965-66 and up to end of March, 1966, Rs. 5.21 crores (Rs. 2.82 crores as loan and Rs. 2.39 crores as subsidy) and Rs. 43.87 crores (Rs. 27.61 crores as loan and Rs. 16.26 crores as subsidy) was respectively released by the Corporation to the State Governments towards assistance for implementing Centrally aided plan schemes of co-operative development. The break-up of the assistance is as under:—

During the Financial year 1965-66

(Rs. in lakhs)

Particulars	Loan	Subsidy	Total
1. Credit . . . . .	..	128.86	128.86
2. Marketing	132.07	11.10	143.17
3. Processing	42.59	2.30	44.89
4. Sugar factories	49.13	..	49.13
5. Godowns and cold Storages	58.09	7.12	65.21
6. Departmental staff . . . . .	..	88.98	88.98
7. Consumers stores	0.37	0.50	0.87
TOTAL	282.25	238.86	521.11

Upto the end of March, 1966

(Rs. in lakhs)

Particulars	Loan	Subsidy	Total
1. Credit . . . . .	..	957.67	957.67
2. Marketing	605.11	57.86	662.97
3. Processing	404.13	11.16	415.29

Particulars	Loan	Subsidy	Total
4. Sugar Factories	601.68	..	601.68
5. Godowns an cold storages	1,063.83	227.67	1,297.50
6. Consumers stores	8.82	4.39	13.21
7. Departmental staff . . . . .	..	367.36	367.36
8. S. W. Corporations	76.95	..	76.95
TOTAL	2,760.52	1,625.11	4,386.63

Expenditure on Centrally sponsored schemes

During the year under report and upto the end of March, 1966 the Corporation released Rs. 3.70 crores and Rs. 12.49 crores respectively for Centrally sponsored schemes as per details given below:—

During Financial year 1965-66

(Rs. in lakhs)

Particulars	Loan	Subsidy	Total
1. Organisation of consumer stores in urban areas	169.43	59.94	229.37
2. Distribution of consumer articles in rural areas . . . . .	..	13.07	13.07
3. Construction of cooperative godowns under the special development programme (crash promme)	80.62	26.88	107.50
4. Special assistance to eastern State . . . . .	..	20.00	20.00
TOTAL	250.05	119.89	369.94

Upto the end of March 1966

(Rs. in lakhs)

Particulars	Loan	Subsidy	Total
1. Organisation of consumers stores in urban areas	897.55	151.32	1,048.87
2. Distribution of consumer articles in rural areas . . . . .	..	32.31	32.31

Particulars	Loan	Subsidy	Total
3. Construction of Co-operative godowns under the special development programme (crash programme)	80.62	26.88	107.50
4. Special assistance to Eastern States	16.44	44.30	60.74
TOTAL	994.61	254.81	1,249.42

Expenditure on Corporations sponsored schemes.

The National Cooperative Development and Warehousing Board, predecessor of the Corporation, used to receive funds from the Central Government entirely in the form of grants whereas the Board was utilising them both for giving loans as well as subsidies to the State Governments for the schemes of cooperative development. The loans repaid by the State Governments are credited to the 'National Cooperative Development Fund'. In addition, there are receipts in respect of interest on Bank deposits as well as unutilised balance of loans and subsidies refunded by the State Governments. These amounts constitute a corpus of the fund which is used by the Corporation for sponsoring schemes of cooperative development.

From time to time, the Corporation has been approving schemes to be financed from the owned funds of the Corporation. During the year 1965-66, the Corporation incurred an expenditure of Rs. 4.29 crores out of such funds on various schemes. The total expenditure incurred by the Corporation upto the end of the year was of the order of Rs. 7.79 crores. The scheme-wise break-up is given below:—

Particulars	(Rs. in lakhs)	
	During the year 1965-66	Upto the end of March, 1966
1. Loan for cooperative rice mills of conventional type	408.17	577.98
2. Loan and subsidy for modern rice mills	..	103.250
3. Subsidy for promotional and assessment cells in state apex marketing societies and National Agricultural Cooperative Marketing Federation	1.43	1.43
4. Subsidy to National Agricultural Cooperative Marketing Federation	0.19	0.19
5. Subsidy to All India Central Land Development Banks Co-operative Union Ltd.	0.02	0.17
6. Grants to the National Cooperative Union of India	0.20	0.20
7. Share capital contribution to National Agricultural Cooperative Marketing Federation	5.00	5.00
8. Investment in the debentures of Central Land Mortgage Banks	13.60	90.87
TOTAL	428.61	779.09

ANNEXURE XII(G)

**STATEMENT SHOWING THE GRANTS MADE TO THE STATE GOVERNMENTS FOR COOPERATIVE
FARMING SCHEMES DURING THE THIRD PLAN PERIOD.
TOTAL PROVISION 10.094 CRORES.**

(Rupees in Lakhs)

Sl. No.	Name of the State	1961-62		1962-63		1963-64		1964-65		1965-66		1961 to 65-66	
		Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan
1.	Andhra Pradesh	1.22	2.26	2.06	6.30	0.94	6.39	0.491	3.116	1.20	2.58	5.911	20.646
2.	Assam	0.39	0.48	0.60	2.15	0.45	4.28	0.341	1.814	0.50	2.74	2.281	11.464
3.	Bihar	1.36	1.37	1.60	3.17	1.48	4.11	0.40	3.769	1.30	4.20	6.14	16.619
4.	Gujarat	0.88	2.065	1.17	4.46	1.31	5.40	0.802	1.81	1.00	5.87	5.162	19.605
5.	Jammu & Kashmir	..	..	..	..	..	..	..	..	..	..	..	..
6.	Kerala	0.49	1.16	0.74	3.54	0.61	2.64	0.503	2.907	0.76	2.98	3.103	13.227
7.	Madras	1.30	2.19	1.95	13.09	2.20	3.60	0.952	5.304	1.27	6.27	7.672	30.454
8.	Maharashtra	2.00	3.00	4.58	17.91	5.02	13.10	1.175	11.807	3.32	24.00	16.095	69.817
9.	Madhya Pradesh	1.79	2.25	2.71	5.90	3.35	4.10	0.947	6.40	2.00	8.38	10.797	27.03
10.	Mysore	1.20	2.36	2.24	6.99	1.43	11.67	0.691	5.503	1.57	8.60	7.131	35.123
11.	Orissa	0.45	1.32	0.80	3.74	1.03	3.97	0.897	3.80	1.31	1.95	4.487	14.78
12.	Punjab	0.99	2.32	1.11	5.07	1.70	5.02	0.19	4.25	1.38	2.34	5.37	19.00
13.	Rajashtan	1.48	0.51	1.70	2.80	0.79	7.60	1.28	1.05	1.16	2.03	6.41	13.99
14.	Uttar Pradesh	3.24	5.57	4.52	8.14	3.91	20.50	1.11	5.104	0.07	..	12.85	39.314
15.	West Bengal	0.36	0.48	2.01	5.08	1.09	6.50	0.60	1.912	1.48	2.09	5.54	16.062
	TOTAL	17.15	27.335	27.79	88.34	25.31	98.88	10.523	58.546	18.32	74.03	98.949	347.131
		TOTAL (Rs. 446.08)											

ANNEXURE XII(G)

FUNDS SANCTIONED TO THE STATE GOVERNMENT FOR
SCHEMES OF CO-OPERATIVE FARMING DURING 1966-67.

State	Loan	Grant	Total
1. Andhra Pradesh	5.42	1.08	6.50
2. Assam	0.42	0.08	0.50
3. Bihar	0.83	0.17	1.00
4. Gujarat	1.84	0.36	2.20
5. Kerala	0.42	0.08	0.50
6. Madhya Pradesh	10.25	2.05	12.30
7. Maharashtra	7.07	1.43	8.50
8. Mysore	1.83	0.37	2.20
9. Orissa	0.42	0.08	0.50
10. Punjab	0.66	0.22	0.88
11. Haryana	0.68	0.23	0.91
12. Rajasthan	0.25	0.05	0.30
13. Uttar Pradesh	7.50	1.50	9.00
14. West Bengal	1.25	0.25	1.50
	38.84	7.95	46.79
15. Composite State of Punjab (from 1-4-1966 to 31-10-66)	0.56	0.19	0.75
	39.40	8.14	47.54

ANNEXURE XII(H)

ACCOUNT OF EXPENDITURE-CENTRE AND STATES - ON AGRICULTURAL DEVELOPMENT 1951-52 to 1963-64

(Rs. in lakhs)

	Centre	States	Total
I. Agriculture			
(1) Experimental Farms	502.19	1,502.65	2,004.84
(2) Experiments & Research	580.85	5,530.64	6,111.53
(3) Agricultural Education	32.02	1,902.43	1,934.45
(4) I.C.A.R.	288.53	..	288.53
(5) Improvement of Marketing	315.00	139.98	454.88
(6) Fisheries	766.88	1,581.02	2,347.90
(7) Others	7,333.90	28,978.19	36,312.09
TOTAL I	9,819.37	39,634.91	49,454.22
II. Capital Outlay on Agriculture—Improvement & Research			
	2,886.54	4,478.49	7,365.03
III. Animal Husbandry	1,267.43	12,184.59	13,452.02
IV. Cooperation	1,870.79	13,869.00	15,739.79
V. (1) Community Development			
	6,323.49	21,953.11	28,276.60
(2) N.E.S.	2,168.54	13,783.36	15,951.90
(3) L.D. Works	74.53	5,066.41	5,140.94
(4) Others	753.86	1,359.22	2,113.08
TOTAL V	9,320.42	42,162.10	51,482.52
VI. Management & Collection of Forest Revenue			
	3,431.15	21,989.33	25,420.48
VII. Capital Outlay on Forests	142.71	1,047.23	1,189.94
TOTAL—I, II, III & IV	15,845.13	70,166.99	86,011.06

ANNEXURE XIII

A. Statement showing generation of electric energy produced and sold to agriculture and industries.

B. Average rates of electricity supplied, etc.

ANNEXURE XIII(A)

**STATEMENT SHOWING GENERATION, ENERGY SOLD AND PERCENTAGE OF ENERGY SOLD TO
INDUSTRY AND FOR IRRIGATION AND DEWATERING DURING 1965-66.**

(Provisional)

Sl. No.	Name of State	Generation in million kWh.	Energy sales to consumers within the State (MkWh)	Sales to Industries	Sales for irrigation & dewatering (Mk Wh)	%age of col. 5 to 4	% age of col. 6 to 4.
1.	Andhra Pradesh	1,589·303	1,034·911	576·802	172·665	55·73	10·68
2.	Assam	97·575	59·278	22·595	0·107	38·12	0·18
3.	Bihar (+DVC)	3,231·936	2,021·416	1,374·956	29·325	68·02	1·45
4.	Gujarat	2,207·282	1,796·447	1,421·148	100·532	79·11	5·60
5.	Jammu & Kashmir	93·602	102·500	40·150	1·940	39·17	1·89
6.	Kerala	841·938	749·829	602·904	24·042	80·41	3·21
7.	Madhya Pradesh	1,205·925	1,028·417	859·189	11·757	83·54	1·14
8.	Madras	4,209·120	3,216·957	1,793·684	817·650	55·76	25·42
9.	Maharashtra	5,650·814	4,760·652	3,257·781	89·556	68·43	1·88
10.	Mysore	1,875·322	1,381·598	1,035·515	66·015	74·95	4·78
11.	Nagaland	1·013	0·842	0·073	..	8·67	..
12.	Orissa	947·866	976·593	890·989	1·734	91·23	0·18
13.	Punjab	3,415·665	2,306·268	1,906·129	213·059	82·65	9·24
14.	Rajasthan	164·904	325·766	197·837	19·550	60·73	6·00
15.	Uttar Pradesh	3,030·378	2,371·056	1,639·189	315·877	69·13	13·32
16.	West Bengal (+DVC)	3,874·982	4,099·887	3,018·509	2·739	73·62	0·07
17.	Delhi	394·530	598·107	178·425	6·913	29·83	1·16
	The Rest	19·023	84·957	38·972	18·762	45·87	22·08
	ALL INDIA	32,851·178	26,915·476	18,854·847	1,892·223	70·05	7·03

ANNEXURE XIII(A)

AVERAGE RATES OF ELECTRICITY SUPPLY AND OF ELECTRICITY DUTY/TAX FOR AGRICULTURAL AND SMALL SCALE INDUSTRIES IN THE DIFFERENT STATE ELECTRICITY BOARDS (AS ON) 14-7-1967.

Sl. No.	State Electricity Board	Agricultural Supply			Small -scale Industry		
		Rate of Electricity Supply	Rate of Electricity Duty/Tax	Total	Rate of Electricity Supply	Rate of Electricity Duty/Tax	Total
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	12.00	..	12.00	20.54	..	20.54
2.	Assam	14.00	2.00	16.00	16.00	1.00	17.00
3.	Bihar	15.00	1.00	16.00	8.00	1.00	19.00
4.	Gujarat	14.31	1.20	15.51	14.31	0.33	14.64
5.	Jammu & Kashmir (Govt. Electricity Deptt.)						
	(a) Jammu Area	10.90	1.64	12.54	9.67	1.45	9.72
	(b) Kashmir Area	8.90	1.34	10.24	7.67	1.15	7.42
6.	Kerala	8.00	0.80	8.80	12.00	1.20	13.20
7.	Madhya Pradesh—						
	(a) Chambal area	11.00	..	11.00	} 13.00	} 1.00	} 14.00
	(b) Korba-Amarkantak System	11.00	..	11.00			
	(c) Southern Grid	12.00	..	12.00			
	(d) Diesel	19.00	..	19.00			
8.	Madras	8.25	1.65	9.90	13.80	2.76	16.56
9.	Maharashtra	13.80	0.80	14.67	15.31	1.00	16.31
10.	Mysore	10.00	1.00	11.00	10.00	3.00	13.00

1	2	3	4	5	6	7	8
11. Nagaland (Govt. Electricity Department)							
	(a) Kohima, Dimapur & Mokokchung	40.00	..	40.00	40.00	..	40.00
	(b) Rest	50.00	..	50.00	50.00	..	50.00
12.	Orissa : (a) Hydro	8.61	1.29	9.90	11.00	1.65	12.65
	(b) Diesel	22.00	3.30	25.30	22.00	3.30	25.30
13.	Punjab	10.60	..	10.60	10.97	1.65	12.62
14. Rajasthan—							
	(a) Hydro & Steam	13.20	..	13.20	14.38	1.00	15.38
	(b) Diesel	13.20	..	13.20	28.75	1.00	29.75
15. Uttar Pradesh							
	(a) Ganga, Sarda & Matatila grids	12.00	..	12.00	12.00	2.40	14.40
	(b) Rihand grind & Kanpur area	12.50	..	12.50	12.50	2.50	15.00
	(c) Eastern area	18.75	..	18.75	18.75	3.75	22.50
	(d) Diesel	25.60	..	25.60	25.00	5.00	30.00
16.	West Bengal	12.00	1.00	13.00	18.00	1.50	19.50
17.	Delhi (Delhi Electric Supply Undertaking)	10.37	1.00	11.37	10.21	1.00	11.21

Nore.—I. The average rates have been worked out on the following basis :

(i) Agricultural Supply— 10 H.P. 15% load factor 817 units month.

(ii) Small-scale Industry—10kW 20% load factor, 1460 kWh/month

II. Rebate for timely payments of bills where-ever applicable has been taken into account while working out the average rates

AVERAGE RATES OF ELECTRICITY SUPPLY AND OF ELECTRI

Sl. No.	Supplier	Average Rate per kwh					
		Agricultural 10 HP 15% LF (817 kWh/month)			Small Industry 10 kW 20% LF (1460 kWh/month)		
		Rate	Duty Tax	Total	Rate	Duty Tax	Total
1	2	3	4	5	6	7	8
I. State Electricity Boards (Except items 5 & 11, which are state)							
1.	Andhra Pradesh . . .	8.00	..	8.00	19.89	..	19.89
2.	Assam . . .	14.00	2.00	16.00	16.00	1.00	17.00
3.	Bihar . . .	15.00	1.00	16.00	18.00	1.00	19.00
4.	Gujarat . . .	14.31	1.20	15.51	14.31	0.33	14.64
5.	Jammu & Kashmir—						
	(a) Jammu . . .	10.90	..	10.90	9.67	..	9.67
	(b) Kashmir . . .	8.90	..	8.90	7.67	..	7.67
6.	Kerala . . .	8.00	0.80	8.80	12.00	1.20	13.20
7.	Madhya Pradesh—						
	(a) Chambal . . .	11.00	..	11.00	} 13.00	0.80	13.80
	(b) Korba Amarkantak	11.00	..	11.00			
	(c) Southern Grid	12.00	..	12.00			
	(d) Diesel . . .	19.00	..	19.00	19.00	0.80	19.80
8.	Madras—						
	(a) Madras Thermal	} 8.25	0.83	9.08	15.00	1.50	16.50
	(b) Rest . . .						
9.	Maharashtra—						
	(a) Hydro area . . .	} 13.87	0.80	14.67	15.31	1.00	16.31
	(b) Steam area . . .						
	(c) Diesel area . . .						
10.	Mysore . . .	10.00	1.00	11.00	10.00	3.00	13.00

ANNEXURE XIII (B)

CITY DUTY IN INDIA (AS ON 31-10-1966)

Medium Industry 50 kW 30% LF (19,950 kWh/month)			Large Industry I 250 kW 40% LF (73,000 kWh/month)			Large Industry II 1000 kW 50% LF (365,000 kWh/month)		
Rate	Duty/ Tax	Total	Rate	Duty/ Tax	Total	Rate	Duty/ Tax	Total
9	10	11	12	13	14	15	16	17
Government Electricity Departments)								
19.01	..	19.01	14.25	..	14.25	11.50	..	11.50
14.37	1.00	15.37	11.21	0.38	11.59	8.90	0.08	8.98
17.66	1.00	18.66	10.83*	1.00	11.83	9.33*	1.00	10.33
13.42	0.33	13.75	12.90*	1.60	14.50	11.09*	1.60	12.69
8.45	..	8.45	5.84 ^{1,2}	..	5.84	5.47	..	5.47
6.45	..	6.45	4.34	..	4.34	3.97	..	3.97
11.18	1.12	12.30	8.89	1.78	10.67	7.27	1.45	8.72
13.00	0.80	13.80	11.92*	0.80	12.72	11.25*	0.80	12.05
		
			10.80*	0.80	11.60	9.91*	0.80	10.71
			10.24*	0.80	11.04	9.35*	0.80	10.15
19.00	0.80	19.30	..	..	..	..	..	..
13.98	1.40	15.38	16.54*	0.83	17.37	14.99*	0.75	15.74*
			13.34	2.67	16.01	11.01	2.20	13.21
14.97	1.00	15.97	7.55	1.00	8.55	6.66	1.00	7.66
			12.51*	1.00	13.51*	10.94*	1.00	11.94
9.45	3.00	12.45	7.03	1.50	8.53	5.96	1.50	7.46

1	2	3	4	5	6	7	8
11. Nagaland—							
	(a) Kohima, Dimapur & Mokokchung	40.00	..	40.00	40.00	..	40.00
	(b) Rest . . .	50.00	..	50.00	50.00	..	50.00
12. Orissa—							
	(a) Hydro . . .	8.61	1.29	9.90	11.00	1.65	12.65
	(b) Diesel . . .	22.00	3.30	25.30	22.00	3.30	25.30
13. Punjab . . .							
		10.60	1.59	12.19	10.97	1.65	12.62
14. Rajasthan—							
	(a) Hydro & Steam	13.20	..	13.20	14.38	1.00	15.38
	(b) Diesel . . .	13.20	..	13.20	28.75	1.00	29.75
15. Uttar Pradesh—							
	(a) Ganga Badra	} 12.00	..	12.00	12.00	2.40	14.40
	(b) Matatila . . .						
	(c) Rihand . . .	12.50	..	12.50	12.50	2.50	15.00
	(d) Eastern area . . .	18.75	..	18.75	18.75	3.75	22.50
	(e) Kanpur . . .	12.50	..	12.50	12.50	2.50	15.00
	(f) Diesel . . .	25.00	..	25.00	25.00	5.00	30.00
16. West Bengal . . .							
		12.00	1.00	13.00	18.00	1.50	19.50
II. Union Territories' Government Electricity Departments							
17. Andaman & Nicobar Islands . . .							
		31.00	..	31.00	31.00	..	31.00
18. Delhi							
		10.37	0.75	11.12	10.21	0.33	10.54

9	10	11	12	13	14	15	16	17
40.00	..	40.00	..	..	..	..	..	..
50.00	..	50.00	..	..	..	..	..	..
11.00	1.65	12.65	9.00	1.35	10.35	9.00	1.35	10.35
22.00	3.30	25.30	..	..	..	..	..	..
9.20	1.84	11.04	7.62	1.52	9.14	6.59	1.32	7.91
14.38	1.00	15.38	9.83*	1.00	10.83	8.87*	1.00	9.87
28.75	1.00	29.75	..	..	..	..	..	..
10.83	2.17	18.00	{ 9.19	1.84	11.03	7.72	1.54	9.26
			{ 9.10	1.82	10.92	7.63	1.53	9.16
11.37	2.27	13.64	8.14*	1.63	9.77	6.84*	1.37	8.21
18.75	3.75	22.50	8.46	1.69	10.15	6.99*	1.40	8.39
12.50	2.50	15.00	10.85*	2.17	13.02	9.96*	1.99	11.95
25.00	5.00	30.00	..	..	..	..	..	..
16.30	1.50	17.80	13.74*	1.50	15.24	12.77*	1.50	14.27
28.24	..	28.24	..	..	..	..	..	..
11.05	0.33	11.38	11.86	0.75	12.61	10.71*	0.75	11.46

ANNEXURE XIII (B)

**TYPES OF CHARGES MADE BY THE VARIOUS STATE ELECTRICITY BOARDS FOR GIVING
AN AGRICULTURAL CONNECTION**

Sl. No.	State	LINE CHARGES		SERVICE
		H.T.	L.T.	
1	2	3	4	5
1.	Andhra Pradesh	No percentage of annual charges are being collected from the consumers in respect of cost of long HT/LT lines erected by the Board for agricultural connections. If the scheme does not yield 12½% return on the cost of extensions, the scheme is not sanctioned except on special guarantees in very rare and exceptional cases.		Service connection charges are being borne by the Board, provided the cost of service line does not exceed Rs. 60 per HP of connected load.
2.	Assam . . . . .	.....		All irrigation pumps in Assam are owned by the agricultural Department of the State Government which supplies water to the agriculturists. All such question of levying any service charges does not arise.
3.	Bihar . . . . .	.....		Service connection to Irrigation pumps are given free provided the annual revenue is 16% of the capital expenditure.
4.	Gujarat . . . . .	.....		Service connection charges : Single phase Rs. 60 @ Rs. 3.50 meter, two phase Rs. 60 @ Rs. 5.00 meter. Three phase—for 50HP or less Rs. 120. Between 5 BHP to 40 BHP Rs. 245, beyond 40 BHP Rs. 420 plus @ Rs. 7 per meter plus Rs. 100, if terminal pole is required. For agricultural connections 30 metres free service line is allowed free tapping points .
5.	Jammu & Kashmir	Agricultural loads have been integrated with Rural Electrification. The cost of distribution lines is not charged from agricultural consumers.		The cost of service line is charged in full.

6. Kerala

All the L.T. service connections of not more than 15 metres are given free of cost. Over 15 metres the minimum charges are as under :

	<i>Single Phase</i>	<i>Three Phase</i>
(a) Overhead service.	6P/month for every 3 metres	12 P per month for every 3 metres.
(b) Underground cable.	15 P per month for every 3 metres	30 P per month for every 3 metres.

These minimum charges are in addition to metre rent and are payable for a period of 3 years only.

7. Madhya Pradesh

(i) Lines are extended upto wells of consumers at the cost of the Board. However, the consumers are required to give an annual minimum guarantee @ 12% of capital cost.

Service charges @ Rs. 125 point of supply (fixed charges for three phase services).

(ii) *Limit of Capital*

Under normal Development, no limit and under Lift irrigation upto a maximum limit of Rs. 5,000 per pump of 3 HP.

8. Madras

No special guarantee either on percentage basis or the capital cost or any other manner is obtained from the agricultural consumers for laying LT extension lines.

Service lines for bonafide agricultural purposes are laid free provided supply is taken under LT agricultural tariff and the cost of service line does not exceed Rs. 60 / HP of connected load.

9. Maharashtra

In case of L.T. supply the Board provides overhead service line free of cost (i) upto 150 metres for loads less than 2 BHP but not less than 1 BHP (ii) upto 300 metres for the load of 2 BHP and above. Excess length beyond the free length is charged at Rs. 5.56 per metre including the cost of poles other than terminal pole. Terminal poles, when required to be erected for terminating that service line within 7.5 metres from the consumers' premises, will be charged at Rs. 100. Consumer is also required to pay service connection charges at Rs. 75 upto 5 BHP installation and Rs. 125/- for installation having more than 5 BHP. In such cases the consumer will have to execute an agreement for taking supply for a minimum period of three years. If the consumer is not willing to pay the charges for the excess length of

1	2	3	4	5
				<p>service line beyond the free length available to him, he will have to execute an agreement for taking supply for a minimum period of 7 years and guarantee an annual revenue return of 15% of the capital cost involved in giving supply to him or tariff minimum whichever is higher. Where special extension of H.T., L.T. line and sub station are made for giving supply to the group of consumers, each consumer will have to execute an agreement for 7 years and guarantee an annual revenue return assessed prorata on his actual connected load or tariff minimum whichever is higher.</p>
10.	Mysore			<p>A well owner is generally required to pay the service connection charges from the 'Tap Off' pole upto the metre board. The charges are Rs. 100 irrigation pump set.</p>
11.	Orissa			<p>The consumer will have to pay no charge if the length of service connection is upto 100 ft. If the length is more than 100 ft. then for the rest of the line, will have to pay the charges which will include (i) Actual cost (ii) labour cost (iii) 15% labour cost as supervision charges.</p>
12.	Punjab			<p>The consumer has option either to pay cost of service line in full or pay service rent @ 0.08 P per rupee of the estimated cost per month. An estimate is considered to be financially justified if the monthly probable revenue equals or exceeds 1/96th or 1/80th of the capital cost involved in rural/urban areas respectively. For irrigation tube wells/pumping, an expenditure of Rs. 750/-BHP of the connected load is considered to be justified. As for the line rental from irrigation tube-well (consumers) only, a charge of Re. 1 per BHP (of connected load) per month, in the shape of demand charge is recoverable wef 1-4-66 for connected loads upto 20 K N (26 BHP) in each case.</p>
13.	Rajasthan	Cost of distribution lines is not being charged from the agriculturists provided giving connection is remunerative to the Board. In case, there are five	From distribution main upto the meter, the fixed charges are :	

consumers of 5 HP each, line is drawn free of charge. Rs. 200 pump upto 10 HP.
Rs. 300 pump from 10 to 25 HP.
Rs. 500 pump above 25 HP.

14. Uttar Pradesh

1. The cost of constructing first $\frac{1}{4}$ mile of HT/LT line is borne by the Board for each 10 HP load.
2. For additional length or line the consumer will have to pay either the fixed annual charges @10% of the estimated cost of line or the estimated cost of line.
1. *In respect of rural consumers upto 20 KW load only*

Load group	Standardised service connection charges
	Rs.
(i) Load upto 5 HP	250
(ii) Load in excess of 5 HP but not exceeding 10HP	300
(iii) Load exceeding 10 HP but not exceeding 20 O.W.	450

2. *In respect of others*

The cost of service lines for the first 100 ft. is not charged to the consumers. For the line beyond 100 ft. the cost is recovered in lumpsum.

15. West Bengal

- (a) For Govt. tubewell—Rs. 30,000 per tubewell with 25 KVA substation.
- (b) A private consumer will have to pay no charges if the length of service line is upto 100 ft. If length is more than 100 ft. then he will have to pay for the rest of line the charges which will include :
- (i) Actual cost of material
(ii) Labour cost and
(iii) 15% of labour cost as supervision charges.

1	2	3	4	5
---	---	---	---	---

16. Nagaland

UNION TERRITORIES

1. A. & N. Islands

2. Delhi *No direct charge is made for line Extension of HT line and substation.*

The service line charged in accordance with clause VI of the schedule of Indian Electricity Act 1910 from the result terminal point of L.V. mains.

(i) the total cost is divided by 5 i.e. only 1/5th the cost of HT extension and substation shall be taken into account.

(ii) the full cost of L.T. mains upto the terminal poles installed near the pump house is added to (i) above.

(iii) the basis to arrive at the capital investment upto Rs. 600 H.P. shall be the sum of the (i) and (ii) above.

3. Goa, Daman and Diu

In the case of bona fide agricultural pumping loads, the Deptt. provides overhead line free of cost upto 300 metres from the nearest distribution point i.e. from an existing rural transmission substation or from a service line already laid for supply to any other consumer, provided the latter has sufficient carrying capacity. Any length in excess of the free length as detailed above is payable at the rate of Rs. 8 per metre.

The consumer has to pay a fixed charge of Rs. 90 per connection for loads of 5 HP or less/and Rs. 150 per connection for loads of more than 5 HP to cover the cost of that portion of the service line which is laid in G.I. pipe or in conduit on the consumers premises from the terminal point of overhead mains upto the meter installed.

4. Himachal Pradesh

Approximately Rs. 350 charged to Electricity Department if the length of the line is less than 100 ft.

(1) 230 volts service connection of capacity upto 5KW complete with service line, service equipments and meters.

- (a) When the length of service line is 100 ft. or less, monthly charges:
1. Service—Nil, 2. Meter—0.50 P.
- (b) When the length of service line exceed 100 ft. but not 300 ft. monthly charges :
1. Service—75P., 2 Meter—50 P.
- (c) When the length of the service exceeds 200 ft. but not 500 ft:
1. Service—Rs. 2, 2. Meter—50 P.
- (d) When the length of the service exceeds 500 ft.
1. Service upto 500 ft.—Rs. 2, above 500 ft. @ 7 paise for every 10 ft. length.
2. Meter—50 P.
- (2) 400 volts 3 phase overhead service connection irrespective of localities
- (a) When the length of service line is upto 100 ft.
1. Service—Nil.
2. Of meters and equipment @ Rs. 1.50-Rs. 1.25 each upto 15 KW and Rs.2.00 and Rs. 1.50 (each from 15 to 30 KW respectively)
- (b) When the length of service line is more than 100 ft.
1. Service line per foot run exceeding 1st 100 ft.
2.5 P upto 15 KW and Re. 0.03 P from 15 KW to 30 KW of the connected load.
2. Service equipment and meter Rs. 1.25 & Rs. 1.50 (each) upto 15 KW and Rs.1.50 and Rs. 2.00 (each) from 15 to 30 KW of the connected respectively.
-

1	2	3	4	5
				(c) For service line of capacity exceeding 30 KW:
				1. Monthly rent of service line @ 0.08 P per rupee or estimated cost assessed by Electrical Deptt. (excluding departmental charges) of the service line (excluding 100 ft.) and equipment and of installing the same.
				2. Monthly rental of meter at the rate of 1 Paise per rupee of the cost of the meter/meters.
5.	L.M.A.	. . . . .	..	..
6.	Manipur	. . . . .	..	..
7.	N.E.F.A.	. . . . .	..	..
8.	Pondicherry	. . . . .	In the case of bonafide agricultural pump sets the lines are laid free of cost to the consumer upto the well in the first instance, provided supply is taken under low voltage, tariff for agri. purposes.	Service connection is effected free of cost subject to a maximum of Rs. 60/- HP. The cost over and above the rate cited i.e. the excess cost is borne by the consumer.

ANNEXURE XIV

DEVELOPMENT OF SPECIAL AREAS

ANNEXURE XIV

ACTION TAKEN FOR AGRICULTURAL DEVELOPMENT IN SPECIAL AREAS

Hill Development

Originally there was a proposal to take up the intensive development of Districts Tehri Garhwal in U.P. and Darjeeling in West Bengal, but this was at the stage when it was thought that some funds would be kept in the Central Sector for Hill Development. Ultimately when a decision was taken that the entire Hill Development Programme would be in the State Sector the matter was closed with the issue of Guide Lines to the States by the Planning Commission on the development of Hill Areas.

Chambal Valley Development

In respect of Chambal Valley Development it is proposed to have a Pilot Project in Rajasthan with UNICEF Aid and another project in Madhya Pradesh with foreign aid possibly Canadian. A letter of request for a Central Autonomous Body to be called the Rajasthan Canal Authority. This M.P. Govt.

Rajasthan Canal Development

The Rajasthan Canal Development is being handled by the Ministry of Irrigation and Power who have formed a High Power Committee of Direction and also the Rajasthan Canal Board consisting of Officers. There was a proposal at one stage in this Department for the establishment of a Central Autonomous Body to be called the Rajasthan Canal Authority. This proposal has for the present been deferred.

Drought Affected Areas

The immediate task in regard to the development of Chronically Drought Affected Areas is the identification of the hard-core of such Areas, the frequency of drought and the programmes which could be considered for these areas. The question of identification has been taken up by the Ministry of Food & Agriculture, C.D.&C. with the State chiefly affected. In the Draft-Out-line of the 4th Plan it had been mentioned that Rs. 40 crores would be available for surveys, Investigations and Pilot Programmes in these areas. The Planning Commission propose to allocate the larger portion of this outlay in the State Sector. How much of the outlay would be allocated to the Central Sector would be decided after the Sectoral allocation for the State Plan have been finalised.

Special Area Development

A U.S.A.I.D. Team had made certain recommendations for Water use and management in the Cauvery Delta at Tanjore. On examination it was found that the Madras Government had already initiated action on most of the recommendations. The Madras Government however, desired Central assistance in respect of :

- (i) Modernisation of the Delta Irrigation System.
- (ii) Ground Water Investigation,
- (iii) Flood Control and drainage.

The first and third points have been taken up with the Ministry of Irrigation and Power. The requirement of foreign exchange for Rigs for Ground Water Investigation is being dealt with in the Department of Agriculture.

The Development of the Eastern Districts of U.P. is being carried out on the basis of the recommendations made by the Patel Committee.

Desert Area Development

Only a Board has been constituted so far (copy of constitution reproduced below). It is a centrally sponsored scheme.

Malnad Development

Mysore Government has been asked to prepare a pilot project with a view to examine the possibility of getting financial assistance from Agricultural Refinance Corporation.

[To be published in Part I Section I of the Gazette of India]

GOVERNMENT OF INDIA
MINISTRY OF FOOD, AGRICULTURE, COMMUNITY DEVELOPMENT & COOPERATION
(DEPARTMENT OF AGRICULTURE)

No. 6-1/66-SAP

New Delhi — 1, the 18th June, 1966
28th Jyaistha, 1888 (Saka)

RESOLUTION

The question of rapid development of the desert areas of the country has been under the consideration of the Government of India for some time. These areas have not received adequate attention in the past partly because of the large financial outlays required for their development and partly because the results from these investments are not expected to be either

quick or spectacular. The Government of India have, therefore, decided to set up a Central Desert Development Board to ensure a more rapid development of the areas. The Board will consist of the following:—

- | | |
|---|-------------------------|
| 1. Secretary/Special Secretary to the Govt. of India, Department of Agriculture | <i>Chariman</i> |
| 2. One representative of the State Govt. of Rajasthan | <i>Member</i> |
| 3. One representative of the State Government of Punjab | <i>Do.</i> |
| 4. One representative of the State Government of Gujarat | <i>Do.</i> |
| 5. One representative of the Ministry of Health & Family Planning, Government of India | <i>Do.</i> |
| 6. One representative of the Ministry of Education, Government of India | <i>Do.</i> |
| 7. One representative of the Ministry of Irrigation & Power, Government of India. | <i>Do.</i> |
| 8. One representative of the Ministry of Finance, (Deptt. of Expenditure), Government of India. | <i>Do.</i> |
| 9. One representative of the Department of Communications, Government of India. | <i>Do.</i> |
| 10. One representative of the Department of Social Welfare, Government of India. | <i>Do.</i> |
| 11. One representative of the Planning Commission | <i>Do.</i> |
| 12 to 15. Four non-official representatives | <i>Do.</i> |
| 16. Desert Development Commissioner | <i>Member-Secretary</i> |
| 17. Director CAZRI Jodhpur. | |

2. The functions of the Board will be:—

- (i) to keep under constant review the preparation of schemes for the development of the desert areas ;
- (ii) to arrange for the execution of these schemes through the agencies of the State Government ;
- (iii) to remove administrative bottlenecks hindering the progress of the schemes ;
- (iv) to arrange for training of personnel required for these schemes; and in general,
- (v) to ensure that the desert areas of the country receive the attention they deserve.

3. The Board will meet at least once in six months, and may meet as often as may be decided by the Chairman.

4. The Chairman of the Board may invite to its meetings any technical or other officers from the various Ministries of the Government of India or from the State Governments.

(Sd.) B. SIVARAMAN,
Secretary to the Govt. of India.

To

The General Manager,
Government of India Press,
FARIDABAD.

No. F. 6-1/66-SAP

New Delhi-1, the 18th June, 1966.

ORDERED that a copy of the Resolution be communicated to all the Ministries/Departments of the Government of India, Prime Minister's Secretariat, Lok Sabha Secretariat, Rajya Sabha Secretariat, Comptroller and Auditor General of India, all Members of the Desert Development Board, all Attached and Subordinate Offices under the Ministry of Food and Agriculture (Department of Agriculture).

ORDERED also that the Resolution be published in the Gazette of India for general information.

(Sd.) B. SIVARAMAN,
Secretary to the Govt. of India.

ANNEXURE XV

SOME RELEVANT FACTS AND FIGURES PERTAINING TO AGRICULTURE USED BY THE STUDY TEAM DURING ITS DELIBERATIONS

A Selected economic indicators.

B (i) Classification of area in India

(ii) Area irrigated from different sources:

(a) All India

(b) Statewise.

C Area under cultivation and total area under crops:

(a) All India

(b) Statewise.

D. Cultivated area and cultivable area:

(a) All India

(b) Statewise.

E (i) Average size of farms in selected regions.

(ii) Index numbers of agricultural productivity—Statewise.

F Comparative statement of per acre yields of important crops in India and a few other countries.

G (i) Production of Maize and Wheat in India, 1956-57 to 1965-66.

(ii) Imports of Wheat and Maize on Government of India's account.

(iii) Imports of cereals on Government of India's account.

(iv) Exports of foodgrains from India.

(v) Value of imports and exports of important agricultural commodities.

(vi) Value of imports and exports of all agricultural commodities.

H (i) Consumption of nitrogenous fertilisers during 1962-63, Statewise.

(ii) Fertiliser prices paid by farmers 1964-65.

(iii) Relative cost of fertilisers in terms of the quantity of rice and wheat required to buy fertilisers.

- (iv) Imports of fertilisers.
- (v) Imports of nitrogenous, phosphatic, potassic and mixed fertilisers.
- I (i) Manufacture and imports of Plant Protection equipment and chemicals.
- (ii) Prices of Plant Protection Chemicals in India and in a few other countries.
- J (i) Production of Tractors in India.
- (ii) Imports of tractors.
- K Estimates of national income, income from agriculture, and per capita income in India and a few other countries.
- L Fourth Five Year Plan—States.
- M Cost and income per hectare—Farm business.
- N (i) Employment in the Public Sector.
- (ii) Percentage distribution of workers by industrial categories.
- (iii) Classification of workers—1961 and 1951—All India.
- O Facts regarding the economics of sugar production.

ANNEXURE XV (A)

SELECTED ECONOMIC INDICATORS

Item/Unit	1960	1961	1962	1963	1964	1965
1. Population (a) (Million Persons).	432.7 (119.1)	442.7 (121.8)	453.4 (124.8)	464.3 (127.8)	475.5 (130.8)	487.0 (134.0)
2. National income (b) (Rs. hundred crores).	118.6 (134.0)	127.3 (143.8)	130.6 (147.6)	133.1 (150.4)	139.1 (157.5)	149.3 (168.7)
3. National income from Agriculture (Rs. 100 crores).	62.5 (127.8)	68.9 (140.9)	69.6 (142.3)	70.0 (143.1)	102.27 210.0	N.A.
4. Per capita income (b) (Rupees)	279.2 (112.8)	293.2 (118.5)	294.3 (118.9)	293.4 (118.5)	301.1 (121.1)	317.0 (128.1)
5. Money supply with public (c) (Rs. crores).	2,720 (134.9)	2,869 (142.3)	3,046 (151.1)	3,310 (164.2)	3,752 (186.1)	4,080 (202.4)
6. Plan investment total (Rs. in crores) (d).	1,012 (389.2)	1,118 (430.0)	1,128 (433.8)	1,386 (533.1)	1,709 (657.3)	2,031 (781.2)
7. Total cropped area (Million hectares)	68.2 (249.8)	71.0 (260.1)	83.8 (307.0)	97.8 (358.2)	131.01 (480.2)	177.1 (648.7)
8. Net irrigated area (million hectares)	152.8 (115.3)	152.7 (115.7)	156.1 (118.4)	156.8 (118.8)	156.8 (118.9)	158.9 (119.9)
9. Gross irrigated area (million hectares).	24.0 (114.0)	24.6 (118.4)	24.8 (118.6)	25.7 (122.8)	25.9 (123.7)	26.2 (125.1)

ANNEXURE XV(B)(i)

CLASSIFICATION OF AREA IN INDIA

(Area : Thousand hectares)

	1960-61	1961-62	1962-63	1963-64	1964-65
1. Area under forest	55,769 (18.7)	54,542 (18.2)	60,843 (19.9)	60,995 (20.0)	61,170 (20.0)
2. Area not available for cultivation.	49,997 (16.7)	50,471 (16.9)	50,360 (16.5)	50,236 (16.4)	50,172 (16.4)
(i) Land put to non agricultural uses	14,329 (4.8)	14,780 (5.0)	15,110 (4.9)	15,240 (5.0)	15,141 (4.9)
(ii) Barren & unculturable land	35,668 (11.9)	35,691 (11.9)	35,250 (11.6)	34,996 (11.4)	35,031 (11.5)
3. Other uncultivated land excluding fallow land.	37,353 (12.5)	37,255 (12.5)	36,577 (12.0)	36,652 (12.0)	36,389 (11.9)
(i) Permanent pastures and other grazing land.	13,900 (4.6)	14,109 (4.7)	14,106 (4.6)	14,604 (4.8)	14,809 (4.9)
(ii) Land under Misc. tree crops and groves not included in net area shown.	4,363 (1.5)	4,505 (1.5)	4,560 (1.5)	4,389 (1.4)	4,218 (1.4)
(iii) Culturable waste	19,090 (6.4)	18,641 (6.3)	17,911 (5.9)	17,659 (5.8)	17,362 (5.6)
4. Fallow land	22,586 (7.6)	21,655 (7.2)	21,227 (6.9)	21,286 (7.0)	20,300 (6.6)
(i) Fallow land other than current fallows.	11,104 (3.7)	10,487 (3.5)	10,202 (3.3)	10,096 (3.3)	9,168 (3.0)
(ii) Current fallows	11,482 (3.9)	11,168 (3.7)	11,025 (3.6)	11,190 (3.7)	11,132 (3.6)
5. Net area sown	1,33,157 (44.5)	1,35,352 (45.2)	1,36,341 (44.7)	1,36,438 (44.6)	1,37,916 (45.1)
6. Total reporting area	2,98,862 (100.0)	2,99,275 (100.0)	3,05,348 (100.0)	3,05,607 (100.0)	3,06,947 (100.0)
7. Area for which no return exists	27,891 (8.5)	27,478 (8.4)	21,461 (6.6)	21,202 (6.5)	20,862 (6.8)
8. Total geographical area	3,26,809	3,26,809	3,26,809	3,26,809	3,26,809

Source.—Indian Agriculture in brief.

ANNEXURE XV(B)(ii)(a)
AREA IRRIGATED FROM DIFFERENT SOURCES (NET) (ALL INDIA)

(Figures in thousand Hectares)

	Govt. canals	Private canals	Total canals	Tanks	Wells (Minor irrigation only)	Others sources	Total
1950-51	7,158	1,137	8,295	3,613	5,978	2,967	20,853
1951-52	7,490	1,193	8,683	3,489	6,517	2,360	21,049
1952-53	7,511	1,350	8,861	3,303	6,521	2,437	21,122
1953-54	7,545	1,314	8,859	4,228	6,685	2,097	21,869
1954-55	7,832	1,235	9,067	4,025	6,826	2,270	22,088
1955-56	8,025	1,360	9,385	4,423	6,739	2,211	22,758
1956-57	7,916	1,357	9,273	4,492	6,566	2,202	22,533
1957-58	8,303	1,349	9,652	4,536	6,818	2,150	23,156
1958-59	8,391	1,279	9,670	4,759	6,686	2,286	23,401
1959-60	8,809	1,305	10,114	4,631	7,083	2,209	24,037
1960-61	9,159	1,200	10,359	4,555	7,284	2,436	24,634
1961-62	9,338	1,162	10,500	4,613	7,352	2,420	24,885
1962-63	9,687	1,146	10,833	4,781	7,649	2,403	25,666
1963-64	9,849	1,143	10,992	4,598	7,785	2,481	25,856
1964-65(P)	9,879	1,136	11,015	4,792	7,820	2,512	26,139

P = Provisional

Source.—Ministry of Food, Agriculture, CD&C.

ANNEXURE XV(B)(ii)(b)

IRRIGATED AREA—SOURCE-WISE STATE-WISE
1963-64 and 1964-65.

(Figures in thousand Hectares)

State/Union Territory		Canals			Other			
		Govt. canals	Private canals	Total canals	Tanks	Wells	sources	Total
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andhra Pradesh	63-64	1,283	28	1,311	1,227	397	162	3,097
	64-65	1,249	26	1,275	1,341	404	138	3,158
Assam	63-64	72	292	364	..	..	247	611
	64-65	72	292	364	..	..	248	612
Bihar	63-64	607	37	644	257	314	784	1,999
	64-65	583	13	596	200	312	872	1,980
Gujarat	63-64	97	1	98	18	565	29	710
	64-65(c)	97	1	98	18	565	29	710
Jammu & Kashmir (b)	63-64	64	200	264	(a)	1	7	272
	64-65	64	200	264	(a)	1	7	272
Kerala	63-64	156	6	162	51	2	132	347
	64-65	162	8	170	56	4	122	352
Madhya Pradesh	63-64	493	2	495	140	361	38	1,034
	64-65	527	17	544	127	364	42	1,077
Madras	63-64	873	1	874	915	604	41	2,434
	64-65	891	1	892	892	600	41	2,425
Maharashtra (c)	63-64	219	31	250	207	651	42	1,150
	64-65	219	31	250	207	651	42	1,150
Mysore	63-64	273	6	279	377	176	128	960
	64-65(c)	273	6	279	377	176	128	960
Nagaland	63-64	..	..	..	..	..	12	12
	64-65	..	..	..	..	..	12	12
Orissa +	63-64	197	28	225	495	38	219	977
	64-65	197	28	225	495	38	219	977
Punjab (Erstwhile)	63-64	2,199	47	2,246	9	1,043	75	3,393
	64-65	2,227	49	2,276	6	1,057	46	3,385
Rajasthan	63-64	610	..	610	120	1,110	23	1,863
	64-65	614	..	614	295	1,127	44	2,080
Uttar Pradesh	63-64	2,167	9	2,176	441	2,484	277	5,378
	64-65(c)	2,167	9	2,176	441	2,484	277	5,378

1	2	3	4	5	6	7	8	
West Bengal (b)	63-64	514	387	901	329	16	184	1,430
	64-65	514	387	901	329	16	184	1,430
Delhi	63-64	14	..	14	4	15	..	33
	64-65	12	..	12	1	12	..	25
Goa, Daman & Diu@	63-64	..	..	..	..	..	8	8
	64-65	..	..	..	..	..	8	8
Himachal Pradesh Erstwhile.	63-64	(a)	..	(a)	(a)	(a)	40	40
	64-65	(a)	(a)	(a)	(a)	(a)	40	40
Manipur	63-64	..	68	68	..	..	..	68
	64-65	..	68	68	..	..	..	68
Pondicherry	63-64	11	..	11	7	8	(a)	26
	64-65	11	..	11	6	9	(a)	26
Tripura (b)	63-64	..	..	..	1	..	13	14
	64-65	..	..	..	1	..	13	14
All India	63-64	9,849	1,143	10,992	4,598	7,785	2,481	25,856
	64-65	9,879	1,136	11,015	4,792	7,820	2,512	26,139

@ Ad-hoc estimates

(a) Below 500 hectares

(b) Relates to the year 1962-63

(c) Relates to the year 1963-64

+ Relates to the year 1953-54

Source.—Ministry of Food, Agriculture, CD & C.

ANNEXURE XV(C)(a)

**AREA UNDER CULTIVATION AND TOTAL AREA UNDER CROPS
(ALL INDIA)**

(Figures in thousand Hectares)

Year	Net area sown	Current fallows	Area under cultivation (col. 2 & 3)	Total area under crops
1	2	3	4	5
1950-51	118,746	10,678	129,424	131,893
1951-52	119,400	13,808	133,208	133,234
1952-53	123,442	12,899	136,341	137,675
1953-54	126,806	12,025	138,831	142,480
1954-55	127,845	11,963	139,808	144,127
1955-56	129,156	11,583	140,739	147,311
1956-57	130,848	11,359	142,207	149,492
1957-58	129,080	12,700	141,780	145,832
1958-59	131,828	11,452	143,280	151,629
1959-60	132,939	11,076	144,015	152,824
1960-61	133,157	11,482	144,639	152,716
1961-62	135,352	11,169	146,521	156,099
1962-63	136,341	11,024	147,365	156,764
1963-64	136,438	11,190	147,628	156,827
1964-65(P)	137,916	11,132	149,048	158,083

P = Provisional

Source.—Ministry of Food, Agriculture, CD &C.

ANNEXURE XV(C)(b)

**CULTIVATED AREA AND TOTAL AREA SOWN FOR THE YEARS
1963-64 and 1964-65—STATEWISE**

(Figures in thousand hectares)

State/Union Territory	Net area sown	Current fallows	Total cultivated Area]	Total area under crops	
1	2	3	4	5	
Andhra Pradesh	1963-64	11,405	2,212	13,617	12,751
	1964-65	11,484	2,156	13,640	12,756
Assam	1963-64	2,324	118	2,442	2,746
	1964-65	2,302	126	2,428	2,717
Bihar	1963-64	8,546	1,170	9,716	11,049
	1964-65	8,545	1,251	9,796	10,832
Gujarat	1963-64	9,413	641	10,054	9,887
	1964-65	9,593	445	10,038	10,044
Jammu & Kashmir (c)	1963-64	698	81	779	843
	1964-65	698	81	779	843
Kerala	1963-64	2,022	38	2,060	2,462
	1964-65	2,037	36	2,073	2,489
Madhya Pradesh	1963-64	16,522	749	17,271	18,743
	1964-65	16,735	695	17,430	18,943
Madras (d)	1963-64	6,055	933	6,988	7,192
	1964-65	6,032	942	6,974	7,177
Maharashtra	1963-64	18,178	1,081	19,259	19,174
	1964-65	18,232	1,060	19,292	19,214
Mysore	1963-64	10,480	728	11,208	10,852
	1964-65	10,419	802	11,221	10,801
Nagaland †	1963-64	47	..	47	49
	1964-65	47	..	47	49
Orissa	1963-64	5,981	728	6,709	7,221
	1964-65	5,989	724	6,713	7,446
Punjab (Erstwhile)	1963-64	7,609	480	8,089	9,747
	1964-65	7,648	453	8,101	10,121
Rajasthan	1963-64	13,498	2,036	15,534	14,465
	1964-65	14,452	1,537	15,989	15,501
Uttar Pradesh	1963-64	17,285	166	17,451	22,050
	1964-65	17,334	784	18,118	21,517

† Relates to the year 1956-57

(c) Relates to the year 1962-63

(d) Relates to the year 1963-64

ANNEXURE XV (C) (B)—*contd.*

1		2	3	4	5
West Bengal (c)	1963-64	5,443	(b)	5,443	6,391
	1964-65	5,443	(b)	5,443	6,391
Andaman & Nicobar Islands	1963-64	9	1	10	10
	1964-65	10	1	11	10
Delhi	1963-64	87	7	94	118
	1964-65	73	20	93	102
Goa, Daman & Diu	1963-64	133	..	133	139
	1964-65	133	..	133	139
Himachal Pradesh (Erstwhile)	1963-64	277	14	291	447
	1964-65	278	13	291	444
Laccadive, Minicoy & Amindivi Islands.	1963-64	3	(a)	3	3
	1964-65	3	(a)	3	3
Manipur	1963-64	165	(a)	165	174
	1964-65	167	(a)	167	175
Pondicherry	1963-64	31	1	32	47
	1964-65	31	(a)	31	47
Tripura	1963-64	227	6	233	267
	1964-65	231	6	237	322
All-India	1963-64	136,438	11,190	147,628	156,827
	1964-65	137,916	11,132	149,048	158,083

(a) Below 200 hectares

(b) Included under fallow land other than current fallows.

NOTE.—The latest available data in case of West Bengal and Jammu & Kashmir relate to the year 1962-63 and the data in case of Gujarat, Assam, Maharashtra and U.P. have been taken from the Annual Plan Check list.

Source.—Ministry of Food, Agriculture, CD&C

ANNEXURE XV(D)(a)

CULTIVATED AREA AND CULTIVABLE AREA—(ALL INDIA)

(Figures in thousand hectares)

Year	Total cultivated area (net area sown + current fallow)	Fallow land other than current fallow	Culturable waste land	Land under miscellaneous tree crops	Total cultivable area (cols. 2 to 5)	Cultivable land not under cultivation (col. 6-col. 2)
1950-51	129,424	17,445	22,943	19,828	189,640	60,216
1951-52	133,208	15,153	23,929	7,881	180,171	46,963
1952-53	136,341	13,479	23,680	7,757	181,257	44,916
1953-54	138,831	12,750	22,898	5,800	180,279	41,448
1954-55	139,808	13,045	22,805	5,770	181,428	41,620
1955-56	140,739	12,544	21,537	5,885	180,705	39,966
1956-57	142,207	11,968	21,276	5,784	181,235	39,028
1957-58	141,780	12,620	20,602	6,087	181,089	39,309
1958-59	143,280	12,255	20,175	6,006	181,716	38,436
1959-60	144,015	11,925	19,463	5,818	181,221	37,206
1960-61	144,639	11,104	10,090	4,363	179,196	34,557
1961-62	146,521	10,487	18,641	4,505	180,154	33,633
1962-63	147,365	10,203	17,911	4,560	180,039	32,674
1963-64	147,628	10,096	17,663	4,389	179,776	32,148
1964-65 (P)	149,048	9,168	17,362	4,218	179,796	30,521

P=Provisional

Source.—Ministry of Food, Agriculture, CD&C.

ANNEXURE XV(D)(b)

CULTIVATED AREA AND CULTIVABLE AREA IN 1963-64 and 1964-65 (PROVISIONAL)—STATEWISE

(Figures in thousand hectares)

State/Union Territory		Total cultivated area	Fallow land other than current fallow	Culturable waste	Land under misc. tree crops	Total cultivable land
1		2	3	4	5	6
Andhra Pradesh	1963-64	13,617	811	1,395	287	16,110
	1964-65	13,640	811	1,393	283	16,127
Assam	1963-64	2,442	201	197	257	3,097
	1964-65	2,428	176	63	296	2,963
Bihar	1963-64	9,716	731	524	160	11,131
	1964-65	9,796	779	558	195	11,328
Gujarat	1963-64	10,054	228	557	27	10,866
	1964-65	10,038	327	636	29	11,030
Jammu & Kashmir	1963-64	779	22	145	127	1,073
	1964-65	779	22	145	127	1,073
Kerala	1963-64	2,060	42	126	207	2,435
	1964-65	2,073	34	119	209	2,435
Madhya Pradesh	1963-64	17,271	1,211	2,437	366	21,285
	1964-65	17,430	1,085	2,475	108	21,098
Madras	1963-64	6,988	586	696	277	8,541
	1964-65	6,974	609	690	278	8,551
Maharashtra	1963-64	19,259	1,125	890	183	21,457
	1964-65	19,292	1,085	886	183	21,446
Mysore	1963-64	11,208	533	618	364	12,723
	1964-65	11,221	548	619	362	12,750
Nagaland	1963-64	47	..	..	..	47
	1964-65	47	..	..	..	47
Orissa	1963-64	6,709	146	1,282	502	8,639
	1964-65	6,713	127	1,248	522	8,610
Punjab (Erstwhile)	1963-64	8,089	..	376	16	8,481
	1964-65	8,101	..	370	16	8,487
Rajasthan	1963-64	15,534	2,802	6,689	10	25,035
	1964-65	15,989	2,556	6,470	14	25,029

1		2	3	4	5	6
Uttar Pradesh	1963-64	17,451	1,272	1,563	833	21,119
	1964-65	18,118	621	1,522	820	21,081
West Bengal	1963-64	5,443	379	(c)	629	6,451
	1964-65	5,443	379	(c)	629	6,451
Andaman & Nicobar Island.	1963-64	10	..	4	2	16
	1964-65	11	1	8	(a)	20
Delhi	1963-64	94	..	13	..	107
	1964-65	93	..	12	..	105
Goa, Daman & Diu	1963-64	133	..	93	1	227
	1964-65	133	..	93	1	227
Himachal Pradesh (Erstwhile)	1963-64	291	3	50	31	375
	1964-65	291	3	50	31	375
Laccadive, Minicoy & Amindivi Islands.	1963-64	3	..	..	..	3
	1964-65	3	..	..	..	3
Manipur	1963-64	165	(a)	..	24	189
	1964-65	167	(a)	..	23	190
Pondicherry	1963-64	31	(a)	1	3	35
	1964-65	31	1	1	3	36
Tripura	1963-64	234	4	7	89	334
	1964-65	237	4	4	89	334
All-India	1963-64	147,629	10,096	17,663	4,389	179,776
	1964-65	149,048	9,168	17,362	4,218	179,796

(a) Below 200 hectares.

(c) Included under land under miscellaneous tree crops etc. not included in Net Area Sown.

NOTE.—The latest available data in case of West Bengal and Jammu & Kashmir relate to the year 1962-63 and the data in case of Gujarat, Maharashtra, U.P. and Assam have been taken from Annual Plan check list.

2. Due to the inclusion of *ad hoc* estimated figures of Goa, Daman & Diu in 1964-65, these figures show slight variations from the data published earlier.

Source.—Ministry of Food, Agriculture, CD&C.

ANNEXURE XV(E)(i)

AVERAGE SIZE OF FARMS IN SELECTED REGIONS

Centre	Average size (Hectares)
1. Uttar Pradesh (Meerut & Muzaffarnagar) 1954-55 to 1956-57.	4.17
2. Punjab (Amritsar & Ferozepur) 1954-55 to 1956-57	7.10
3. West Bengal (Hooghly & 24 Parganas) 1954-55 to 1956-57	1.23
4. Madras (Coimbatore & Salem) 1954-55 to 1956-57	3.10
5. Maharashtra	
(Ahmednagar) 1954-55 to 1956-57	8.00
(Nasik) 1954-55 to 1956-57	7.38
(Akola & Amraoti) 1955-56 & 1956-57	8.88
6. Andhra Pradesh (West Godavari) 1957-58 to 1959-60	3.35
7. Orissa (Sambalpur) 1957-58 to 1959-60	2.16
8. Bihar	
(Monghyr) North Zone 1957-58 to 1959-60	1.85
Central Zone	2.69
South Zone	4.33
9. Haryana* (Karnal, Rohtak & Jind) 1961-62 & 1962-63	5.93

* As existed in the erstwhile Punjab State.

Source.—Indian Agriculture in brief

INDEX NUMBERS OF AGRICULTURAL PRODUCTION—STATE WISE

State	Foodgrains			Non-foodgrains			All crops		
	1962-63	1963-64	1964-65	1962-63	1963-64	1964-65	1962-63	1963-64	1964-65
Andhra Pradesh	122.5	124.2	126.4	87.9	107.7	113.6	110.5	118.5	122.0
Assam	92.5	106.9	110.6	103.0	103.6	115.1	98.3	105.1	113.9
Bihar	132.0	139.0	139.7	130.8	129.6	141.7	131.9	138.0	139.1
Gujarat	119.4	133.5	149.6	135.4	130.6	155.8	128.9	131.8	153.3
Kerala	122.8	126.6	124.2	111.1	112.5	112.8	114.5	116.6	116.1
Madhya Pradesh	91.8	101.8	112.1	95.4	105.5	123.7	92.2	102.3	113.5
Madras	121.2	118.2	121.4	118.0	127.7	128.7	120.1	121.5	123.9
Maharashtra	108.0	108.5	111.2	116.5	121.9	120.3	110.9	113.1	114.3
Mysore	135.3	129.9	141.0	109.5	112.9	122.2	126.2	123.9	134.4
Orissa	109.2	124.5	127.3	136.7	144.9	158.0	112.9	127.3	131.5
Punjab	122.2	109.7	132.9	139.0	146.7	168.9	126.5	119.2	142.2
Rajasthan	122.2	96.8	127.5	124.7	82.6	101.2	122.8	93.6	121.6
Uttar Pradesh	104.0	91.7	116.7	102.7	102.1	133.1	103.6	95.0	121.8
West Bengal	97.3	116.6	124.6	167.2	159.2	182.3	115.7	127.8	139.8
Himachal Pradesh	107.0	113.1	115.6	115.3	116.6	117.4	107.8	113.4	115.8

Source.—Indian Agriculture in brief.

ANNEXURE XV(F)

AVERAGE YIELD PER HECTARE OF IMPORTANT CROPS IN
INDIA AND OTHER SELECTED COUNTRIES.

Countries	Paddy 00Kgs	Wheat 00Kgs	Maize 00Kgs	Sugar- cane 00Kgs	Cotton Lint 00Kgs	Jute 00Kgs	G. Nut in shell 00Kgs	Tobacco 00Kgs
1	2	3	4	5	6	7	8	9
Argentina	..	18.6	16.8	..	2.5	..	11.6	..
Australia	..	13.8	..	..	..	..	..	..
Brazil	15.2	..	..	437.1	1.6	12.3	..	8.4
Burma	16.4	..	..	..	..	..	6.5	..
Canada	..	13.6	..	..	..	..	..	19.7
China (mainland)	27.0	13.0	..	..	3.7	..	12.2	11.8
India	16.1	9.1	10.1	466.8	1.2	12.9	8.2	8.8
Indonesia	17.4	..	10.8	758.3	..	..	..	4.2
Iraq	..	5.0	..	..	..	..	..	..
Italy	..	19.5	36.6	..	..	..	..	..
France	..	31.5	23.5	..	..	..	..	..
Hungary	..	..	29.0	..	..	..	..	..
Cuba	..	..	..	363.7	..	..	..	..
Congo	..	..	..	..	..	..	6.0	..
Japan	51.5	..	..	..	..	..	20.7	25.9
Pakistan	16.8	8.3	10.8	386.4	2.6	14.4	..	12.2
Phillipines	12.5	..	6.8	..	..	..	..	6.6
Rumania	..	12.9	20.2	..	..	..	..	..
Thailand	16.0	..	..	..	..	..	..	..
Spain	..	9.5	..	..	..	..	..	..
Syria	..	7.5	..	..	..	..	..	..
Turkey	47.7	10.6	14.7	..	4.8	..	..	6.4

1	2	3	4	5	6	7	8	9
U.A.R.	50·4	27·6	27·7	..	7·4	..	..	..
U.S.A.	45·9	17·7	39·3	567·4	5·8	..	17·6	25·5
U.S.S.R.	24·3	10·9	13·2	..	7·3	..	..	15·0
U.K.	..	41·4	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	6·5	..
Mexico	..	..	10·9	..	6·8	..	..	..
Yugoslavia	..	..	28·6	..	..	..	..	..
Puertorico	..	..	..	677·1	..	..	..	..
Sudan	..	..	..	..	3·4	..	..	..
Senegal	..	..	..	..	..	..	9·3	..

ANNEXURE XV(G)(i)

**PRODUCTION OF MAIZE AND WHEAT IN INDIA
1956-57 TO 1965-66**

(Production—Thousand tonnes)

Year	Maize	Wheat
1	2	3
1956-57	3,078	9,403
1957-58	3,150	7,998
1958-59	3,463	9,958
1959-60	4,073	10,324
1960-61	4,080	10,997
1961-62	4,312	12,072
1962-63 †	4,578	10,829
1963-64 †	4,553	9,861
1964-65 †	4,658	12,290
1965-66 ††	4,632	10,720

† — Partially Revised Estimates.

†† —Final estimates.

NOTE.—Due to changes in coverage and the methods of estimation, the absolute figures of production of maize and wheat are not strictly comparable, over-time.

Source.—Ministry of Food, Agriculture, Community Development & Co-operation.

ANNEXURE XV(G)(ii)

IMPORTS OF WHEAT & MAIZE ON GOVERNMENT OF
INDIA'S ACCOUNT.

(Thousand tonnes)

Year	Wheat	Maize
1957	2,898	..
1958	2,716	25
1959	3,553	9
1960	4,386	18
1961	3,092	..
1962	3,250	..
1963	4,073	..
1964	5,621	..
1965	6,583	..
1966	7,784*	13*

*Provisional.

Source.—Ministry of Food, Agriculture, Community Development and Co-operation.

ANNEXURE XV(G)(iii)
IMPORTS OF CEREALS ON GOVT. OF INDIA'S ACCOUNT

(Quantity—thousand tonnes)
(Value—crores of rupees)

Year	Quantity	Value (C&F)**
(1)	(2)	(3)
1946	2,285	76.11
1947	2,371	93.99
1948	2,887	129.72
1949	3,765	144.60
1950	2,159	80.60
1951	4,801	216.79
1952	3,926	209.07
1953	2,035	85.95
1954	843	48.53
1955	711	33.11
1956	1,443	56.34
1957	3,646	162.39
1958	3,224	120.51
1959	3,868	141.41
1960	5,137	192.84
1961	3,495	129.56
1962	3,640	141.09
1963	4,556	183.60
1964	6,266	266.25
1965	7,462	290.32†
1966*	10,358	523.31

* Provisional

**Estimated

†Includes only the freight of 152.4 thousand tonnes of Australian wheat received as gift on F.O.B. basis.

Source.—Ministry of Food, Agriculture, Community Development & Co-operation.

ANNEXURE XV(G)(iv)
EXPORTS OF FOODGRAINS FROM INDIA

Year	Quantity (Tonnes)	Value (Thousand of rupees)
(1)	(2)	(3)
1954	11,371	70,82
1955	197,842	9,05,33
1956	61,888	3,12,65
1957	6,160	35,00
1958	6,531	44,92
1959	6,837	51,56
1960	7,818	50,05
1961	6,848	50,66
1962	9,774	81,29
1963	18,417	1,56,27
1964	14,331	1,22,32
1965	12,887	1,48,65
1966*	83,277	3,55,89

*Provisional and subject to revision.

Source.—Ministry of Food, Agriculture, Community Development & Co-operation.

ANNEXURE XV(G)(v)

VALUE OF IMPORTS AND EXPORTS OF IMPORTANT AGRICULTURAL COMMODITIES—1961-62 to 1965-66

(April—March)

(Thousand rupees)

Commodity	Exports					Imports				
	61-62	62-63	63-64	64-65	65-66	61-62	62-63	63-64	64-65	65-66
1	2	3	4	5	6	7	8	8	10	11
Crude fertilisers	2,227	1,249	549	87	1	27,379	29,776	31,190	39,000	59,232
Animal and Vegetable oils and fats.	64,904	1,36,547	2,06,019	73,807	45,463	86,151	56,314	48,730	56,206	1,53,456
Fertilisers manufactured . . .	10	neg	72	27	6	1,22,183	2,67,344	3,45,221	2,89,646	3,88,994
Agricultural machinery and implements.	298	48	215	300	621	8,634	10,823	14,615	55,430	99,901
Tractors other than steam . .	45	neg	3	N.A.	N.A.	49,100	46,913	52,621	N.A.	N.A.

Neg : Negligible

N.A. : Not Available.

Source.—Indian Agriculture in Brief.

ANNEXURE XV(G)(vi)

**VALUE OF IMPORTS AND EXPORTS OF
ALL AGRICULTURAL COMMODITIES**

(Lakh rupees)

Year (April to March)	Imports (a)	Exports
1	2	3
1950-51	60,804	57,832
1955-56	64,964	58,471
1960-61	112,162	64,232
1961-62	109,006	65,517
1962-63	112,244	67,815
1963-64	126,331	78,928
1964-65	134,903	81,315
1965-66	139,405	80,556

(a) Excludes the value of certain stores imported on Govt. account full particulars of which are not yet available.

Sources.—(i) Accounts relating to the Foreign (Sea, Air and Land) Trade and Navigation of India.

(ii) The Foreign Trade of India, Vols. I and II, March 1966.

CONSUMPTION OF NITROGENOUS FERTILISERS DURING 1965-66-STATEWISE

State/Union Territory	Sulphate of Ammonia (20%N)	Urea (46%N)	Ammonium sulphate Nitrate (26%N)	Calcium Ammonium Nitrate (20.5%N)	Ammonium Phosphate (20% N)	Nitro-phosphate (20%N)	Total Nitrogen
Andhra Pradesh	108,279	59,303	7,575	32,141	65,192	..	71,615
Assam	4,470	277	..	171	..	..	1,101
Bihar	66,345	20,374	5,163	15,648	..	..	28,027
Gujarat	86,631	16,720	2,025	3,653	4,019	..	29,468
Jammu & Kashmir	7,062	79	..	3,008	..	..	2,136
Kerala	11,797	7,586	397	9,849	5,511	6	9,192
Madhya Pradesh	35,716	12,635	89	9,025	367	354	15,305
Madras	146,151	73,255	2,790	13,028	..	..	67,785
Maharashtra	132,590	48,348	55,548	8,836	..	..	53,338
Mysore	64,584	28,871	2,190	17,501	3,845	5,874	32,553
Orissa	7,238	144	180	48,194	2,459	..	12,023
Punjab	56,955	98	..	224,375	..	..	58,003
Rajasthan	23,013	2,915	1,651	17,178	..	..	10,124
U.P.	164,259	21,114	14,264	150,102	..	..	79,735
West Bengal	100,020	14,078	..	3,310	559	..	28,270

Delhi	822	44	..	2,338	..	..	668
Goa	2,620	7	..	115	404	..	669
Himachal Pradesh	456	49	..	5,294	..	..	120
Manipur	23	143	..	775	179	..	265
Pondicherry	1,800	296	40	..	..	..	525
Tripura . . . . .	..	2	..	364	..	..	76
Coffee Board	16,840	3,279	4,116	7,157	..	..	7,595
U.P.A.S.T.	45,290	1,519	..	200	..	..	10,251
Tea (N.E. India)	93,134	796	..	..	..	..	19,924
Rubber Board	6,934	120	415	..	..	..	1,019
TOTAL	1,183,029	312,052	46,493	572,262	82,625	6,339	540,803

Source: Indian Agriculture in brief.

FERTILISER PRICES PAID BY FARMERS 1964-65

(Rs. per metric tonne of nutrient)

Country	Ammonium sulphate	Ammonium nitrate	Calcium nitrate	Urea	Single super-phosphate	Basic slag	Sulphate of Potash	Muriate of Potash
@Austria	1,261	..	1,833	1,238	728	666	576	3,711
@Belgium	1,285**	1,276**	1,652**	1,138**	804**	590**	514	3,801
* France	1,214	962	1,476	..	600	338	533	3,331
* Germany West	1,247	..	1,514	..	1,228	643	466	3,422
* Italy	1,219	1,066	1,533	..	814	776	724	5,243
* Netherlands	1,347	1,247	1,628	..	1,023	757	..	438
United Kingdom (at farm gate)	776	876	..	..	633	472	628	5,381
U.S.A.	1,323	1,233	..	..	1,061	..	..	466
Ceylon	1,195	..	..	843	6,435	..	..	471
China Taiwan	2,094	..	..	1,704	1,123	..	714	595
India	1,747	..	..	1,338	1,471	..	800	624
Japan	1,257	1,138	..	1,152	1,091	..	685	462
Korea Rep. of	1,299	1,399	..	1,066	8,335	..	700	414
* Nepal	2,794	..	..	..	3,441	..	..	1,376
Pakistan	828	..	..	600	600	..	..	286

Philippines	·	·	·	·	·	1,704	..	..	..	1,304	..	..	723
Thailand	·	·	·	·	·	1,328	..	1,933	1,147	990	..	585	428
* U.A.R.	·	·	·	·	·	1,490	..	1,761	..	..	..	547	424
Australia	·	·	·	·	·	1,585	..	..	..	371	..	838	538
Morocco	·	·	·	·	·	1,852	1,171	2,479	1,656	557	1,099	914	628
* Jordan	·	·	·	·	·	1,652	..	..	..	1,185	..	..	652

@Prices at nearest railway station. * No subsidies. 1. 60% K₂O 2. 50% K₂O 3. 50% -52% K₂O 4. Over 45% K₂O

5. 25% P₂O₅ or over. 6. 1962. 7. 1962-63.

Source.—Ministry of Food, Agriculture, Community Development & Cooperation.

FERTILISER PRICES PAID BY FARMERS 1964-65—Contd.

		Per metric tonne	
		Rs.	p.
AUSTRIA	Subsidies on phosphate and potash paid to manufacturers and transport agencies (Nitrogenous fertilisers are unsubsidised.)		
	Single superphosphate	173	74
	Basic slag	318	92
	Sulphate of potash	130	90
	Muriate of potash (60% K ² O)	58	07
UNITED KINGDOM	Ammonium sulphate	442	68
	Ammonium nitrate	433	16
	Single superphosphate	352	24
	Basic slag	247	52
U.S.A.	Prices paid by farmers at varying points of delivery. Under Agricultural conservation programme there is cost sharing arrangement with farmers for fertilisers as well as other requisites but this is not considered as subsidy.		
CEYLON	Prices ex-departmental stores in district. Prices shown reflect a subsidy of 50% for each payment. Subsidy of 33% is allowed to members of Cooperatives on purchase of fertiliser on credit.		
CHINA TAIWAN	Prices at farmers nearest railway station. No subsidy.		
INDIA	No uniform subsidy is given throughout the country. In some States a subsidy of 25% of cost is granted on phosphatic fertilisers.		
NEPAL	Prices at sales depot. No subsidy.		
PAKISTAN	53% subsidy has been deducted from the prices shown. No subsidy allowed to the Pakistan Tea Association, Pakistan Tobacco Co. and Sugar estates.		
THAILAND	Price c.i.f. Bangkok. No subsidies.		
JORDAN	Prices at retail stores. Calendar year. No subsidies.		
AUSTRALIA	Prices are f.o.r. Yarraville. Subsidies paid to manufacturers. Subsidy on ammonium sulphate—Rs. 203·25 per tonne on single superphosphate—Rs. 142·80 per tonne.		
MOROCCO	Prices at factory at Cassablanca. Small scale farmers receive a rebate of Rs. 471·24 per metric tonne of fertilisers. For demonstrations a rebate of 25% of the price is given on nitrogenous and complex fertilisers. Payment is made to farmers through co-operatives.		

Source.—FAO Year Book 1965.

Fertilizers

The import prices of fertilisers, as well as the cost of production of indigenous fertilisers had gone up as a result of devaluation in June, 1966, but fertilisers prices were maintained at pre-devaluation levels in 1966-67. As a result the Central Government had to subsidise to the extent of Rs. 48-

crores. After consulting the Agricultural Price Commission, the subsidy to indigenous manufacturers has been withdrawn and the prices of pooled fertilisers were also raised from 1-4-67 to reduce the amount of subsidy on pool fertilisers. Subsidy also continues on a reduced scale on imported muriate of potash. Fertiliser subsidies will still account for Rs. 19 crores during 1967-68.

2. In the Union Territories of Manipur, Tripura, A&N Islands and Laccadive & Minocoy Islands subsidy of 20% on retail prices of nitrogenous fertilisers and 40% on retail prices of phosphatic fertilisers is given as these are considered to be highly backward areas. It is proposed to reduce these subsidies to 15% on nitrogenous and 25% on phosphatic fertilisers during 1968-69 and to completely withdraw the subsidies from 1969-70 onwards.

3. The distributors are allowed rebate in prices of pooled fertilisers when they lift these during non-manuring months. This helps the distributors to stock fertilisers in advance and make them available to cultivators when required. Non-manuring quarters (3 months) for earning rebate have been fixed for each State. Rates at which rebate is admissible for supplies despatched in different months of the quarter are as follows:—

Name of fertiliser	Amount of rebate per tonne of fertiliser despatched in		
	1st month	2nd month	3rd month
	Rs.	Rs.	Rs.
1. Sulphate of ammonia, Calcium Ammonium nitrate	7.50	5.00	2.50
2. Urea	12.00	8.00	4.00

4. In the case of pooled fertilisers distributed in hilly and inaccessible areas, transport cost is subsidised so that the retail sale price conforms to the all-India level. The excess expenditure on transport is borne by the Centre and the State on 50:50 basis.

5. In the case of Assam, where distribution cost of fertilisers is high on account of its geographical situation, distribution expenses in the case of pooled fertilisers are subsidised. The additional distribution expenses are shared between the Central and the State Governments on 50:50 basis.

6. The Reserve Bank of India provides to the cooperative structure in the States a line of credit for advancing loans to the cultivators for the purchase of inputs, including fertilisers, and for meeting other cultivation costs. The Reserve Bank charges interest on such advances which is only $\frac{1}{2}$ % more than the Bank Rate.

7. The State Governments provide taccavi loans to those cultivators, who are not members of the cooperative societies. In order to assist the State Governments to advance these taccavi loans, the Central Government sanctions short-term loans, to the extent of 1/6th of the value of pooled fertilisers distributed, which are repayable within 6 months.

8. The prices paid by farmers in India at present are as given below :

	Price per tonne N/P ₂ O ₅ /K
1. Nitrogen in sulphate of ammonia	2,343
2. Nitrogen in Urea	1,826
3. P ₂ O ₅ in single superphosphate (16% P ₂ O ₅)	*1,927 (in eastern regions) *1,881 (in other regions)
4. K ₂ O in Muriate of Potash	653 ex-godown

* Ex-factory.

ANNEXURE XV(H)(iii)

**RELATIVE COST OF FERTILISERS IN TERMS OF THE QUANTITY
OF RICE AND WHEAT REQUIRED TO BUY FERTILISERS**

EXTRACT FROM MINISTRY OF FOOD, AGRICULTURE, COMMUNITY DEVELOP-
MENT & COOPERATION LETTER No. DY. 482/67-M (C)

DATED 1-6-67.

The information regarding the number of quintals of wheat/rice required to buy one quintal of Nitrogen/ P_2O_5 / K_2O as in 1966 is given below :

Quintals of wheat required to buy one quintal of :

N	P_2O_5	K_2O
2.68	2.86	2.86

Quintals of rice required to buy one quintal of :

N	P_2O_5	K_2O
3.01	3.21	0.96

The price assumed for nitrogen is based on the retail price of sulphate of ammonia, that for P_2O_5 is based on the average retail price of single superphosphate and that for K_2O is based on the assessed retail price of muriate of potash. In regard to wheat/rice, the prices taken are the average of wholesale prices of wheat at Moga (Punjab) and the controlled price of rice in Andhra Pradesh for common varieties.

ANNEXURE XV(H)(iv)

**STATEMENT SHOWING THE ACTUAL IMPORTS* OF FERTILISERS
IN WEIGHT AND VALUE HANDLED BY THE CENTRAL FERTILISER
POOL FROM FINANCIAL YEAR 1956-57**

Year	Quantity	Value
1956-57	25,663 tons (TCA) 2,30,144 tons (NON-TCA)	Import value not available separately.
1957-58	4,41,106 tons	Do. Rs.
1958-59	3,44,798 „	11,52,42,640
1959-60	6,44,200 „	17,78,20,874
1960-61	5,06,943 tonnes	13,67,44,685
1961-62	5,14,520 „	13,03,59,045
1962-63	9,41,041 „	20,62,11,207
1963-64	7,76,265 „	18,71,39,540
1964-65	6,81,472 „	29,63,75,164
1965-66	11,75,306 „	46,53,47,598

*The figures are those audited by the Proforma Accounts and show the quantities for which payments are made during the corresponding years. As such there may be slight variations between the actual quantities imported and these quantities.

Source.—Ministry of Food, Agriculture, Community Development and Cooperation.

**IMPORTS OF NITROGENOUS, PHOSPHATIC, POTASSIC AND MIXED FERTILISERS MADE FOR
CENTRAL FERTILISER POOL**

(Tonnes)

Year	Sulphate of Ammonia (20·6%N)	Urea	Ammonium sulphate Nitrate (26%N)	Calcium Ammonium Nitrate (20%N)	Nitro- Phosphate (20%N) (20%P ₂ O ₅)	Ammonium Phosphate (20%N) (20%P ₂ O ₅)	Ammonium Triple Super Phosphate (8% N 42% P ₂ O ₅)
1951-52	142,247	..	..	..	..	..	..
1952-53	208,290	1,043	..	..	..	..	..
1953-54	77,220	3,119	..	..	..	..	..
1954-55	69,091	9,305	8,215	..	..	..	..
1955-56	207,274	14,599	16,679	2,070	..	..	..
1956-57	233,692	10,066	14,512	..	..	..	..
1957-58	347,489	60,302	30,390	22,493	..	..	..
1958-59	162,568	90,498	68,296	33,022	..	186	3,075
1959-60	382,035	101,381	75,936	77,404	10,341	11,509	..
1960-61	356,728	55,910	19,521	75,049	994	..	..
1961-62	293,975	129,683	29,076	61,785	..	..	..
1962-63	670,900	219,340	..	..	20,238	30,563	..
1963-64	449,111	261,137	..	..	17,177	48,840	..
1964-65	317,078	293,996	..	..	30,483	39,915	..
1965-66	863,348	269,401	..	..	..	70,797	..

Source.—Indian agriculture in brief.

**IMPORTS OF NITROGENOUS, PHOSPHATIC, POTASSIC, AND MIXED FERTILISERS MADE FOR
CENTRAL FERTILISER POOL**

(Tonnes)

Year	Ammonium Nitrate (33%N)	Triple super phosphate (46%P ₂ O ₅)	Diam. Phosphate (21%N) (53%P ₂ O ₅)	Mixed fertilisers (20%N) (20%P ₂ O ₅)	Muriate of Potash (60%K ₂ O)	Total in terms of		
						N	P ₂ O ₅	K ₂ O
1951-52	29,303	..	..
1952-53	43,377	..	..
1953-54	17,311	..	..
1954-55	20,556	..	..
1955-56	514	54,029	..	308
1956-57	205	56,443	..	123
1957-58	102	111,232	..	61
1958-59	..	1,908	..	178	..	99,042	2,294	..
1959-60	1,414	2,624	315	178	..	163,785	8,786	..
1960-61	119,305	199	..
1961-62	141,615	..	..
1962-63	251,946	10,160	..
1963-64	226,420	11,984	..
1964-65	213,732	11,915	..
1965-66	323,434	14,159	..

Source: --Indian Agriculture in brief.

IMPORT AND MANUFACTURE OF PLANT PROTECTION EQUIPMENT

Year	Imported				Indigenously produced			
	Complete unit of sprayers & dusters		Engines for high & low volume application units		Spare parts Value in lakh Rs.	Total value in lakh Rs.	Units (Nos.)	Value in lakh Rs. (a)
	Quantities (Nos.)	Value in lakh Rs.	Quantity (Nos.)	Value in lakhs Rs.				
1959-60	1,345*	8.08	..	..	0.42	8.50	..	93.0
1960-61	31* & 4 aircraft	11.19*	30@	0.06	0.23	11.48	..	130.5
1961-62	1	0.0075	370 @	0.74	0.19	0.94	..	148.5
1962-63	2,380*	17.28	..	..	1.25	18.53	..	157.5
1963-64	600	5.50	1,572	2.72	0.30	8.52	..	213.0
1964-65	8,200	42.43	..	..	1.35	43.78	..	306.0
1965-66	3,300	21.92	3,083	15.00	..	36.92	..	319.5

* Price of motorised knapsack machine assumed at Rs. 600 per unit.
Included the price of 4 Beaver Aircraft.

@Engine Rs. 200 per unit.

(a) 2/3rd of the value represents indigenous production of equipment in the organised sector while the remaining 1/3rd is presumed as the value of the machines produced in the small scale sector.

Source.—Directorate of Plant Protection, Quarantine & Storage, Ministry of Food, Agriculture, Community Development & Cooperation.

IMPORT OF AND MANUFACTURE OF PESTICIDES

(Quantity in tonnes)
(Value in lakh Rs.)

Year	Imported		Locally manufactured	
	Quantity	Value	Quantity	Value of formulated-pesticides
1956-57 . . . . .	..	..	2,580	190·90
1957-58 . . . . .	..	..	2,864	211·90
1958-59 . . . . .	..	..	5,898	436·45
1959-60 . . . . .	..	..	6,056	448·15
1960-61 . . . . .	..	..	7,486	553·96
1961-62	3,920	140·0	12,842	545·50
1962-63	3,920	140·0	14,521	577·90
1963-64	6,800	243·0	9,562	578·60
1964-65	5,110	182·6	10,774	817·40
1965-66	11,700	278·8	12,235	1021·20
1966-67	15,000	1,329·00	19,220	2,326·00

Source.—Directorate of Plant Protection, Quarantine & Storage, Ministry of Food, Agriculture, Community Development & Cooperation.

**APPROXIMATE RETAIL PRICE OF PEST CONTROL CHEMICALS IN DIFFERENT COUNTRIES
(PRICE IN RUPEES PER TON) (PRE-DEVALUATION)**

Name of pesticide	Japan	Saudi Arabia	Africa	India
BHC 10% dust	467·00 (contain 1·5 gamma)	480·00	..	450·00
BHC 50% WP	1,254·00 (contain 5 gamma)	..	..	2,000·00
DDT 5% dust	578·00	..	..	800·00
DDT 50% WP	2,867·00	..	..	6,320·00
Endrin E.C.	11,775·00	..	..	14,600·00
Parathion E.C.	22,667·00	..	..	31,000·00
Dieldrin E.C.	10,667·00	..	4,480·00 (20% solutin)	8,290·00 (18% E.C.)
Copper compound W.P.	4,507·00	..	..	3,750·00

Approximate value of Pest Control Chemicals (Technical grade) in different countries.

Name of pesticide	U.S.A.	U.K.	France	Germany	Italy	Belgium	India
BHC	—	1,132·00	..	..	2,352·00	1,523·00	1,500·00
DDT*	2,576·00	3,404·00	2,508·00	2,464·00	3,248·00	2,441·00	*4,900·00

*Manufactured by a public sector concern—Hindustan Insecticide Ltd.

Source.—Directorate of Plant Protection, Quarantine and Storage, Ministry of Food, Agriculture, Community Development & Cooperation.

Expected Import of various pesticides from different sources during 1966-67.

Sl. No.	Pesticide	Rs. 4 crores (Rs. in lakhs)										
		Through STC Free Foreign Exchange (Rs. 288.25 lakhs - Rs. 72.17 lakhs)	†Through DGTD Free Foreign Exchange (Rs. 111.75 lakhs Raw Materials)	G.D.R. 42.34 lakhs Rs. 58.34 lakhs	Barter 188.91 lakhs	1.34 crores under USA AID No. 103	U.K. Credit 38 lakhs 2.75 lakhs(\$)	Ad-hoc 1965-66	French Aid	Under Czech trade agreements	Under Rupees payment from Poland/Hungary	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	BHC	1,744	..	..	..	..	..	..	..	..	..	..
2.	Aldrin	55+200	..	..	..	..	..	..	..	..	..	..
3.	Dieldrin	12	..	..	..	..	..	..	..	..	..	..
4.	Heptachlor	70+30	..	..	..	..	..	32	..	..	..	..
5.	Chlordane	65	..	..	..	..	..	52	..	..	..	..
6.	Endrin	380+175	..	..	49	298	..	..	..	..	..	..
7.	Lindane	240	..	160	10	..	..	..	..	..	..	..
8.	Malathion	..	850	..	..	..	..	..	..	..	..	..
9.	Methyl Parathion	} ..	800	..	..	..	..	..	..	..	..	..
10.	Ethyl Parathion											
11.	Methyl demeton	..	..	50	..	..	..	..	..	..	..	..
12.	Rock Sulphur	2,000	..	..	..	2,000	..	..	..	..	..	..
13.	Sulphur Wettable powder.	..	995	..	610	..	..	..	..	..	200	..

14.	Phosphamidon	..	..	..	630 15 56	..	..	..	..	..	..
15.	Phorate	650	..	..	..	29	..	..	..	..	..
16.	Dimethoate	..	Rs. 3.75 lakhs	75	15	..	..	5	..	..	..
17.	Carbaryl	1,400	..	..	..	58	..	58	..	..	..
18.	Trithion	..	..	..	100	..	..	..	..	10	50
19.	Imidan	..	..	..	5	..	..	..	..	..	25
20.	Thiodan	..	..	..	18	..	..	..	..	..	..
21.	Moracide	..	..	..	8	..	..	..	..	..	..
22.	Brassicol	..	..	..	8	..	..	..	..	..	..
23.	Formothion	..	..	..	16.72	..	..	1	..	..	..
24.	Thiometon	..	..	..	64	..	..	6	..	25	..
25.	Thiodemeton	..	..	..	12.2	..	..	..	..	..	..
26.	Thiocarbamates	..	800	..	..	15	..	..	..	..	..
27.	Ziram	..	96	..	100	Rs. 6.875 lakhs for raw material (Ziram & Thiram).	..	..	..	..	..
28.	Organo mercurial	5 (mercury)	70	..	..	..	..	..	..	..	..
29.	Organic seed dresses—										
	(i) Thiram	..	200	..	..	..	..	..	10	..	..

1	2	3	4	5	6	7	8	9	10	11	12	13
	(ii) Ferbam	..	..	85	..	..	..	..	..	..	..	..
	(iii) Captan	..	..	..	100	..	..	20	100	..	100	100 gift from France.
30.	Copper compound	..	1,300	..	..	850	..	..	..	..	..	..
31.	Zinc Phosphide	..	225	..	..	..	..	..	..	..	..	..
32.	Cyanide	..	..	..	..	..	80	30	..	..	..	..
33.	Aluminium phosphide	..	135	60	..	..	..	..	..	..	..	..
34.	DDVP	..	..	..	20	..	..	2 (EC) 5 (Tech)	..	..	..	..
35.	Nemagon	..	..	..	..	..	..	..	..	..	..	..
36.	DD soil fumigant	..	..	..	..	..	..	..	..	..	..	..
37.	Aminotriazol	..	..	..	..	..	..	Rs. 20,000	..	..	..	..
38.	Raw materials for 2, 4, D.	..	..	..	..	..	..	16	..	..	..	..
39.	Monochloro active acide.	..	..	..	..	..	..	10	..	..	..	..
40.	Monobutyl active acide.	..	..	..	..	..	..	2	..	..	..	..
41.	Trialight amine	..	..	..	..	..	..	1	..	..	..	..
42.	2, 4, 5-T (Raw material).	..	..	..	..	..	..	Rs. 5,000	..	..	..	..
43.	Methyl bromide	..	..	..	..	9.5	..	5.5	..	..	..	..

44.	Calcium Arsenate	..	..	..	..	..	..	30	..	..	..
45.	Ostico	..	..	..	..	..	..	2	..	..	..
46.	VC-13	..	..	..	..	..	..	1	..	..	..
47.	Sandolin (A)	..	..	..	..	..	..	10	..	..	..
48.	Kerathane	..	..	..	..	..	..	2	..	..	..
49.	Diazinon	..	..	..	..	..	..	2	..	..	..
50.	2, 4-D	..	..	100	..	150	..	..	..	..	550
51.	Weedicide (Eptam, Tillam, Ordam)	..	..	..	13	..	..	Rs., 10.000 M & B	..	..	10
52.	Thiocron	..	..	..	1	..	..	..	..	..	..
53.	Cotoran	..	..	..	1	..	..	..	..	..	..
54.	Tenoron	..	..	..	1	..	..	..	..	..	..
55.	Dalapon	..	..	..	20	..	50	..	..	..	..
56.	MCPA	..	..	..	..	..	13	2	..	..	..
57.	Simazin and Atrazine	..	..	..	..	..	..	2	..	..	..
58.	Paraquat	..	..	..	..	..	100	..	..	..	..
59.	Menazon	..	..	..	..	..	4	..	..	..	..
60.	Emulsifiers	..	..	..	11.1	..	..	..	..	..	..
61.	Xylene (Solvent)	..	..	..	..	..	150	..	..	..	..
62.	Cyclohexanome (solvent).	..	..	..	..	..	60	..	..	..	..

1	2	3	4	5	6	7	8	9	10	11	12	13
63.	Sulphur	..	..	..	50	..	..	..	..	..	..	..
64.	Phosperous	..	..	..	20 (For dime- thioate)	..	..	..	..	..	..	..
65.	Misc.	..	6.1	..	..	..	..	..	..	..	..	..
66.	Diquat	..	..	..	..	..	..	1	..	..	..	..
TOTAL (in Rs. lakhs)		288.25	111.75	58.34	188.91	134	19.25	21	10.8	5.2	44.04	

Source.—Directorate of Plant Protection, Quarantine & Storage, Ministry of Food, Agriculture, Community Development & Cooperation.

Fluctuation in wholesale prices of imported ready-to-use pesticidal formulation due to devaluation.

Pesticide	Pre-devaluation issue price per tonne in Rs.	Post devaluation issue price per ton in Rs.	% increase
Phorate (10%) STC	5,316	8,395	57.5
Dimecron (100) CIBA	1,21,700	1,81,700	49.3

Source.—Directorate of Plant Protection, Quarantine & Storage, Ministry of Food, Agriculture, Community Development and Cooperation.

Fluctuation in wholesale price of imported ready-to-use pesticidal formulation due to devaluation

	Pre-devaluation			Post devaluation			Percentage increase
	Price of technical material per tonne in rupees	Cost of technical material per tonne of formulated in rupees.	Issue of prices per tonne of formulated in rupees	Price of technical material per tonne in rupees	Cost of technical material	Wholesale price to State Govts.	
1. Endrin 20% EC	25,170.00	5,034.00	12,450.00	44,047.00	8,809.40	16,225.40	30
2. Aldrin 5% dust	9,000.00	450.00	1,350.00	17,074.00	853.70	1,754.00	30
30% EC . . . . .	..	2,700.00	7,100.00	..	5,121.00	9,521.00	34
3. Dieldrin 18% EC	19,210.00	3,842.00	9,500.00	33,012.00	6,602.40	12,260.40	29
4. Chlordane 5% dust	6,120.00	306.00	720.00	11,605.50	580.27	994.27	38
5. Heptachlor 3% dust	8,818.00	267.00	800.00	13,888.00	421.00	954.00	19
6. Lindane 20% EC	19,900.00	3,980.00	11,000.00	36,647.00	7,329.40	14,349.40	30
7. Carbaryl 10% dust	9,830.00	983.00	1,533.00	15,500.00	1,550.00	2,100.00	36
8. BHC 10 % dust	1,300.00	130.00	370.00	2,049.00	204.90	444.90	20
50% WP . . . . .	..	650.00	2,125.00	..	1,024.50	2,499.50	17
9. Parathion . . . . .	..	..	31,000.00	..	..	34,500.00	11

Source.—Directorate of Plant Protection, Quarantine & Storage, Ministry of Food, Agriculture, Community Development and Cooperation.

DIRECTORATE OF PLANT PROTECTION, QUARANTINE & STORAGE

Fluctuations in prices of indigenously produced pesticides (in formulated form) which require imported intermediates/raw materials in production due to devaluation.

	Pre-devaluation			Post devaluation			% increase
	Price of technical material per tonne in rupees	Cost of technical materials per tonne formulated in rupees	Wholesale Issue price of formulated materials in rupees	Price of technical material per tonne in rupees	Cost of technical materials per tonne of formulated in rupees	Wholesale issue price of formulated materials in rupees	
Malathion 50% E.C.	11,000.00	5,500.00	11,000.00	12,000.00	6,000.00	11,500.00	4.5
Zineb 75% W.P.	..	..	6,600.00	..	..	7,450.00	13
Sulphur (dusting)	280.00	280.00	640.00	448.00	448.00	808.00	25
Copper-oxychloride	8,000.00	4,000.00	11,000.00	12,580.00	6,290.00	13,290.00	21
Organo mercurials	90,000.00	900.00	3,822.00	1,35,000.00	1,350.00	4,272.00	12
Zinc phosphide	3,000.00	3,000.00	8,000.00	4,800.00	4,800.00	9,800.00	23

PRODUCTION OF TRACTORS IN INDIA

Five firms have been licensed to manufacture tractors in the country in the 20—50 H.P. range. Since 1962, 23,608 tractors have been manufactured, details of which are given below. Production in the current year 1967-68 is estimated at 13,000. The Government have under consideration a proposal to establish a public sector project with Czech collaboration for the manufacture of 12,000 tractors per annum in the 12—20 H.P. range.

<u>Year</u>	<u>Number</u>
1962	1,627
1963	1,605
1964	3,179
1965	6,196
1966	7,520
1967 (January to May)	3,481
TOTAL	23,608

Source—Ministry of Food, Agriculture, Community Development and Co-operation.

ANNEXURE XV(J)(ii)

IMPORT OF TRACTORS

Year	Numbers	Value (Rs. million)
1964-65	4,152	30.6
1965-66	4,522	52.7
1966-67 (up to February, 1967)	4,148	45.7

Source.—Ministry of Food, Agriculture, Community Development and Co-operation.

ANNEXURE XV(K)

ESTIMATES OF NATIONAL INCOME, INCOME FROM AGRICULTURE AND PER CAPITA INCOME IN INDIA AND A FEW OTHER COUNTRIES.

Estimates of *per capita* income of farmers and of urban people in India are not available. However, national income (total) and *per capita* income from agriculture and percentage of income from agriculture in India and selected foreign countries are indicated below:

Country/Year	National income		Income from agriculture (million rupees)	Percentage of col. 4 to col. 2
	Total (million rupees)	<i>Per capita</i> (rupees)		
1	2	3	4	5
Burma 1963	12,825	485	4,174	32.5
Canada 1963	269,627	14,175	20,582	7.6
Ceylon 1963	10,513	993	4,808	45.7
France 1963	602,000	10,652	52,000	8.7
India 1963	200,100	422	102,700	51.3
Italy 1963	297,000	5,879	46,000	15.5
Japan 1963	371,000	4,462	49,000	13.3
Netherland 1963	8,182	8,182	8,645	8.8
Pakistan 1962	60,000	583	31,000	51.7
Philippines 1963	28,317	962	9,633	34.0
U.K. 1963	5,53,115	10,311	20,552	3.7
U.S.A. 1963	3,572,000	21,137	137,900	3.9

NOTES.—Exchange rates for August/September, 1966 as given in U.N.O. monthly bulletin of Statistics November 1966 issue have been utilised to convert the foreign currency into rupees.

Source.—Compiled and furnished by Ministry of Food, Agriculture, Community Development & Co-operation.

ANNEXURE XV(L)
FOURTH FIVE YEAR PLAN—STATES
STATEMENT I

Fourth Five Year Plan Outlay—States

(Rs. lakhs)

States	Third Plan		Fourth Plan Outlay			
	Approved Outlay	Actual Expenditure	Proposed by States	Recommended by Working Groups	Agreed to	As now reported
1	2	3	4	5	6	7
1. Andhra Pradesh	30,500	34,571	63,478	63,010	52,200	52,200
2. Assam	12,000	12,969	30,000	25,783	18,000	19,000
3. Bihar	33,702	32,833	60,210	57,932	54,500	54,500
4. Gujarat	23,650	23,898	49,895	49,459	44,551	44,600
5. Haryana	*	*	21,015	22,515	16,840	16,840
6. Jammu & Kashmir	7,500	6,362	16,412	13,472	12,600	12,600
7. Kerala	17,000	18,163	31,100	32,332	29,300	29,300
8. Madhya Pradesh	30,000	28,646	50,375	49,692	45,800	45,800
9. Madras	29,088	34,233	58,860	61,908	56,414	56,432
10. Maharashtra	39,020	42,973	1,12,989	1,01,369	95,100	95,100
11. Mysore	25,000	26,410	44,984	47,163	42,100	42,100
12. Orissa	16,000	20,680	39,581	39,085	30,000	30,000
13. Punjab	23,138	24,898	30,638	31,546	28,000	28,000
14. Rajasthan	23,600	21,175	24,000	33,612	31,348	31,348
15. Uttar Pradesh	50,225	55,492	1,05,544	1,06,333	92,584	92,600
16. West Bengal	29,315	29,895	52,851	53,401	49,251+	49,251+
17. Nagaland	725	1,080	3,486	3,377	3,000	3,000
TOTAL	3,90,463	4,14,278	7,95,418	7,91,989	7,02,588	7,02,623

*Included under Punjab.

†Tentative.

STATEMENT II

(States' Fourth Five Year Plan Outlays) (By Heads of Development)

(Rs. lakhs)

Head of Development	Third Plan		Propo- sed by States	Recom- mended by Working Groups	As repor- ted for 14 States	Andhra- Pradesh (adjusted)	Madras (reported)	West Bengal (Tentative)	Total Reported (cols. 6 to 9)	As ag- reed to in dis- cussions	As in the Draft Outline
	Approved Outlay	Actual expenditure									
1	2	3	4	5	6	7	8	9	10	11	12
Agricultural Production .	18,710	16,884	45,196	48,998	33,589	2,247	2,969	3,139	41,944	42,001	53,900
Minor Irrigation	18,174	27,086	55,508	57,954	41,953	4,327	5,077	2,750	54,107	53,255	50,400
Soil Conservation	5,775	6,304	14,777	15,691	12,535	285	597	387	13,804	13,780	19,100
Ayacut Dev. Programme	520	255	3,012	3,413	972	1,335	261	50	2,618	2,558	..
AGRICULTURAL PRODUCTION—TOTAL	42,909	50,529	1,18,493	1,26,056	89,049	8,194	9,804	6,326	1,12,473	1,11,594	1,23,400
Animal Husbandry	4,432	3,717	9,204	11,178	6,586	333	672	516	8,107	8,538	11,900
Dairying & Milk Supply .	3,069	2,927	4,957	5,739	3,825	380	500	366	5,071	4,679	5,300
Forests	4,033	3,795	7,941	8,968	6,409	285	439	393	7,526	7,501	7,100
Fisheries	2,045	1,938	5,976	6,827	4,135	238	788	400	5,561	5,464	7,290
Warehousing & Marketing ALLIED PROGRAMMES . . .	770 14,349	409 12,786	1,018 29,076	898 33,610	604 21,559	66 1,302	47 2,446	106 1,781	823 27,088	788 26,970	1,000 32,500
I. AGRICULTURE & ALLIED PROGRAM- MES.	57,258	63,315	1,47,569	1,59,666	1,10,608	9,496	11,350	8,107	1,39,561	1,38,564	1,55,900

67-3 ARC/ND/67	Cooperation	6,837	5,671	12,007	12,661	9,032	560	947	627	11,166	10,512	13,700
	Community Development	28,813	26,958	17,534	19,821	12,100	1,140	1,500	1,200	15,940	15,834	} 22,200
	Panchayats	2,418	1,135	2,701	1,706	1,002	203	59	186	1,450	1,371	
	II. COOPERATION & COMMUNITY DEV.	38,068	33,764	32,242	34,188	22,134	1,903	2,506	2,013	28,556	27,717	35,900
	Irrigation	57,711	56,563	92,227	91,576	72,453	9,430	3,500	2,210	87,593	81,508	} 91,200
	Flood Control	5,815	7,455	9,873	11,120	7,420	241	300	391	8,352	8,532	
	Power	91,894	1,15,418	2,22,164	1,98,993	1,41,819	14,988	17,556	12,000	1,86,363	1,88,397	1,71,700
	III. IRRIGATION & POWER	1,55,420	1,79,436	3,24,264	3,01,689	2,21,692	24,659	21,356	14,601	2,82,308	2,78,437	2,62,900
	Large & Medium Industries	7,005	9,477	30,026	24,181	16,879	1,235	1,815	1,992	21,821	20,898	} 17,800
	Mineral Development	1,089	1,341	4,891	3,770	3,038	238	70	10	3,356	3,119	
	Village & Small Industries	13,322	9,896	17,092	18,044	10,789	1,187	2,523	975	15,583	15,384	19,100
	IV. INDUSTRY & MINING.	21,416	20,714	52,009	45,995	30,715	2,660	4,408	2,977	40,760	39,401	36,900
Roads	22,658	25,882	47,302	45,821	32,825	2,232	2,065	4,442	41,564	41,546	31,800	
Road Transport	1,995	2,335	8,248	7,147	6,055	309	300	500	7,164	7,149	4,500	
Ports & Harbours	540	381	1,821	1,593	1,550	62	100	..	1,712	1,220	900	
Other Transport	243	198	839	690	615	24	40	..	679	564	400	
Tourism	385	272	1,051	775	621	33	35	100	799	783	400	
V. TRANSPORT & COMMUNICATIONS.	25,821	29,068	59,261	56,026	41,666	2,660	2,540	5,042	51,918	51,262	38,000	

STATEMENT II

(States' Fourth Five Year Plan Outlays) (By Heads of Development)

(Rs. lakhs)

1	2	3	4	5	6	7	8	9	10	11	12
General Education . . .	31,831	35,001	60,144	68,109	41,358	4,286	5,473	6,000	57,117	56,623	} 81,500
Tech. Education . . .	7,071	5,306	12,828	9,611	7,786	489	804	724	9,803	8,960	
Cultural Programmes . .	396	326	970	835	565	31	40	..	636	559	
Health & Family Planning	17,702	19,565	31,779	36,425	21,069	1,773	2,042	2,800	27,684	27,802	30,000
Water supply . . .	9,243	9,313	27,272	40,093	23,149	2,280	3,267	3,073	31,769	30,065	33,500
Urban Development . . .	947	446	2,759	3,083	1,671	95	75	61	1,002	1,540	} 10,500
Housing	8,884	6,148	12,418	12,002	6,093	475	800	1,708	8,073	8,893	
Welfare of Backward classes.	7,171	5,950	9,396	8,342	5,800	400	801	500	7,591	7,897	8,500
Social welfare	1,117	587	1,604	1,652	897	125	65	150	1,237	1,212	1,600
Craftsmen Training & Labour Welfare.	2,537	1,942	6,436	5,312	3,986	285	423	493	5,187	5,063	5,600
Public Cooperation . . .	49	15	110	176	98	14	15	5	132	312	200
VI. SOCIAL SERVICES	87,548	84,599	1,65,716	1,85,640	1,12,472	10,343	13,805	15,511	1,52,131	1,48,746	1,71,400
Statistics	328	251	494	505	301	21	50	53	425	416	} 3900
Information & Publicity	566	383	833	939	611	85	14	53	763	763	
State Capital Projects	2,525	1,734	4,488	4,928	2,913	..	..	..	2,913	2,713	
Hills & Border Areas . .	834	367	6,372	907	557	..	200	150	907	907	
Evaluation	6	7	103	82	80	3	3	6	92	93	

Others	674	641	2,067	1,424	991	370	200	738	2,309	2,485	2,400
VII. MISCELLANEOUS	4,933	3,383	14,357	8,785	5,453	479	467	1,000	7,409	7,377	6,300
GRAND TOTAL	3,90,463	4,14,279	7,95,418	7,91,939	5,44,740	52,200	56,432	49,251	7,02,083	6,91,504	7,07,300

- N.B.— (1) Col. 6 : Includes outlays for Nagaland as agreed to.
- (2) Col. 7 : Andhra Pradesh have not formally communicated break-up of Rs. 522 crores. Programme Adviser's recommendations and break-up of Rs. 16 crores worked out in Planning Commission are adopted.
- (3) Col. 9 : Fourth Plan outlay of Rs. 492.5 crores by heads of development as recommended by the Programme Adviser including only Rs. 32.5 crores; for Calcutta programme (Rs. 17.5 crores included in the Central Plan).
- (4) Col. 11 : Outlay of Rs. 6,915 crores *excludes* the following lumpsum figures :
- (i) *Andhra Pradesh* : Rs. 16 crores
(Distribution worked out in Planning Commission : Agri. programme Rs. 3 crores ; Nagarjunasagar Rs. 3 Crores Power Rs. 7 crores ; & Education Rs. 3 crores).
 - (ii) *Madhya Pradesh* : Rs. 3 crores
(Distribution indicated by State Government : Irrigation Rs. 1.5 crores ; Roads. Rs. 1 crore ; and Health Rs. 0.5 crore).
 - (iii) *Maharashtra* : Rs. 90.8 crores
(Distribution indicated by State Government: Agri. programmes Rs. 9 crores, C.D. & Cooperation Rs. 6 crores, Irrigation Rs.45 crores, Power (—) Rs. 18 crores, Industry Rs. 14 crores, Transport Rs. 3 crores, Education Rs. 2 crores, Health Rs. 15 crores).
 - (iv) *Mysore* : Rs. 1 crore (Agri. programmes).

ANNEXURE XV(M)

COST AND INCOME PER HECTARE—FARM BUSINESS

(in rupees)

Item/State	Gross Income	Total cost (Actual & imputed)	Net Income	Family labour income (Returns to family labour & manage- ments)	Farm business income (Returns to family labour fixed capital owned land and manage- ment)
1	2	3	4	5	6
Uttar Pradesh (Meerut & Muzaffar- nagar).	603	479	124	230	25
Punjab (Ferozepur & Amritsar)	403	408	(-)5	82	195
West Bengal (24-Parganas & Hooghly).	546	472	74	210	287
Madras (Coimbatore & Salem)	319	292	27	62	148
Maharashtra (Ahmednagar & Nasik)	150	146	7	42	64
Madhya Pradesh (Amroati & Akola)	210	166	44	69	106
Andhra Pradesh (West Godavari) 1957-58.	932	944	(-)12	20	324
Orissa (Sambalpur)	302	260	42	106	151
Bihar (Monghyr) 1959-60					
North Zone	433	336	97	121	158
Central Zone	470	393	77	111	168
South Zone	450	339	111	200	277
Haryana (Karnal, Rohtak & Jind)	526	518	8	146	324

Source.—Indian Agriculture in Brief.

ANNEXURE XV(N)(i)

EMPLOYMENT IN THE PUBLIC SECTOR

('000 numbers)

	At the end of			
	March 1956	March 1961	December 1964	December 1965
A. By branch of the Public Sector :				
Central Government	1,858	2,089	2,527	2,613
State Governments	2,265	3,014	3,506	3,679
Quasi-government	368	773	1,178	1,304
Local Bodies	743	1,173	1,578	1,667
TOTAL	5,234	7,049	8,789	9,263
B. By Industrial classification :				
Agriculture, livestock, forestry and fishing	14	180*	203	219
Mining and quarrying	54	129	162	160
Manufacturing	205	369	621	662
Construction	416	602	704	772
Electricity, gas, water & sanitary services	77	224	281	305
Trade and commerce	43	94	140	152
Transport, storage and communication	1,392	1,724	2,016	2,074
Services	3,033	3,727	4,662	4,919
TOTAL	5,234	7,049	8,789	9,263

*The bulk of the increase is due to reclassification of certain categories from "services division to this end.

Source.—India—Pocket book of Economic information

ANNEXURE XV(N)(ii)

PERCENTAGE DISTRIBUTION OF WORKERS BY INDUSTRIAL CATEGORIES

Industrial categories	1901	1911	1921	1931	1951	1961
<i>Agriculture</i>						
Cultivators	50.6	49.7	54.4	45.0	50.1	52.8
Agricultural labourers	17.0	20.6	17.5	24.7	19.7	16.7
Mining, quarrying, livestock, forestry, fishing, hunting and plantations, orchards and allied activities.	4.3	4.8	4.5	5.1	3.1	2.8
<i>Manufacturing</i>						
Household industry	*	*	*	*	*	6.2
Manufacturing other than household industry.	11.8	10.0	9.4	9.0	9.0	4.2
Construction	0.8	1.0	0.8	1.2	1.0	1.2
Trade and commerce	6.0	5.4	5.8	5.5	5.1	4.0
Transport, storage and communications.	1.1	1.0	0.8	1.0	1.5	1.6
Others services	8.4	7.5	6.8	8.5	10.5	10.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

*Included in 'mining, quarrying, livestock, forestry, fishing, hunting and plantations, orchards and allied activities' and 'manufacturing other than household industry'.

Source—India—Pocket book of Economic information..

ANNEXURE XV(N)(iii)

CLASSIFICATION OF WORKERS: 1961 and 1951 - ALL-INDIA

Classes of workers	1961		1951	
	Total workers (millions)	Percentage to total workers	Total workers (millions)	Percentage to total workers
(1)	(2)	(3)	(4)	(5)
Cultivators	99.5	52.8	69.8	50.0
Agricultural labourers	31.5	16.7	27.5	19.7
Total agricultural classes	131.0	69.0	97.3	69.7
Mining, Quarrying, Live-stock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied activities	5.2	2.8	4.1	3.0
House-hold industry	12.0	6.4	N.C.	..
Manufacturing other than house-hold industry	8.0	4.2	12.6	9.0
Construction	2.1	1.1	1.5	1.1
Trade and commerce	7.6	4.0	7.3	5.2
Transport, storage and communications	3.0	1.6	2.1	1.5
Other services	19.5	10.4	14.6	10.5
Total workers	188.4	100.0	139.5	100.0

N.C —Not collected separately.

Source —Indian Agriculture in brief.

ANNEXURE XV(O)

ECONOMICS OF SUGAR PRODUCTION AND MARKETING IN INDIA

The area, production and yield per hectare, State-wise, of sugarcane in India are as follows:—

States	1964-65		
	Area (hectares)	Production (metric ton)	Yield per hectare gur in kgs.
Andhra Pradesh	1,33,000	1,164,000	8,722
Assam	30,000	99,000	3,319
Bihar	166,000	686,000	4,139
Gujarat	35,000	205,000	5,851
Jammu & Kashmir	3,000	2,000	667
Kerala	9,000	44,000	4,632
Madhya Pradesh	65,000	170,000	2,620
Madras	83,000	683,000	8,210
Maharashtra	143,000	1,152,000	8,076
Mysore	77,000	623,000	8,103
Orissa	40,000	200,000	4,958
Punjab	277,000	1,165,000	4,206
Rajasthan	43,000	67,000	1,576
Uttar Pradesh	1,389,000	5,839,000	4,203
West Bengal	41,000	190,000	4,611
Delhi	4,000	1,000	317
Himachal Pradesh	2,000	2,000	1,000
Tripura	3,000	10,000	3,310
Pondicherry	1,000	12,000	12,000
ALL INDIA	2,544,000	12,315,000	4,841

The Southern States, excepting Kerala, have the highest per hectare yields while the U.P. has the highest acreage, total production but low per hectare yields.

The sugar production in the country over the years is as follows:—

Sugar year 1st Novr. to 31st Oct.	Carry over on 1st Nov.	Production during the year	Total availability	Consumption	Export
60-61	6.05	30.29	36.34	21.27	2.47
61-62	12.60	27.14	39.74	25.87	3.61
62-63	10.26	21.52	31.78	24.88	5.14
63-64	1.76	25.69	27.45	23.36	2.50
64-65	1.59	32.58	34.17	24.70	2.62
65-66	6.85	35.00	41.65	28.00	4.30

The financial implications involved in the export of sugar:—

Year	Quantity exported (lakh tons)	Foreign exchange (Rs. crores)	Amount paid by Central Government (Rs. crores)	Amount paid in the financial year
1961	2.68	13.32	5.50	61-62
1962	3.73	14.76	14.20	62-63
1963	4.78	32.32	3.42	63-64
1964	2.34	19.08	2.10	64-65
1965	2.57	11.15	17.50	65-66
TOTAL	16.20	90.63	42.72	..

The sugar exports are handled by the Government of India (since 1964) directly as a commercial venture. Government decides all matters regarding foreign sales and internal procurement of sugar for export from factories. The Indian Sugar Mills Association contracts with the foreign buyers on the terms agreed to by Govt. and also undertakes the work of physical export on payment of actual handling charges. Government is meeting the difference between the f.o.r. port price of the sugar exported and the realisations from the foreign buyers. No subsidy is paid to the sugar industry or to any exporter. Sale price of export sugar is linked to London daily price. International price of sugar has fallen from £ 105 in November 1963 to £ 16 in May 1966. The international price is going down while the internal price is going up.

The price of sugarcane fixed by Government at present is Rs. 52.60 per ton, linked to a recovery of sucrose of 10.4% or below. The Sen Sugar Enquiry Commission has recommended that the minimum price be fixed at Rs. 49.50 per ton for 9.4% recovery or below, but Government was not in favour of it. Recently the sugar price in India is increased by Rs. 150 per ton due to further increase of sugarcane price.

The high cost of sugar in India is due to various factors:—

1. *High cost of cultivation.*—due to high cost of inputs, encouraging through licensing of sugar mills, the cultivation of sugarcane extensively in unremunerative areas, such as U.P. where the production is 10 to 11 tons of cane per acre whereas in the South it is 25 to 30 tons. The average for India is only 14 to 15 tons, one of the lowest in the world.

2. *Low production per acre.*—due to want of irrigation facilities, want of management techniques designed to prevent deterioration in sucrose content, lack of incentives, such as payment for sugarcane not being made everywhere on the basis of sucrose content of the cane, encouragement of the cultivation of sugarcane on lands and in areas not best suited for sugarcane.

3. *High excise duty on sugar.*—It was recently revised from Rs. 28.15 per quintal to Rs. 37 per quintal of sugar. It works out to more than 40% of the ex-factory price of sugar (exclusive of duty). In addition, the State Governments levy cane cess and purchase tax on the quantity of cane crushed.

4. Low margin of profit to the sugar factories due to various factors:—

- (a) Limited number of days of operation controlled by cane supply. The actual number of days differs from 100 to 240 days per season. The all-India average is 167 days while in Madras it is 200 days.
- (b) The cane price not being linked to sucrose recovery.
- (c) The by-products of sugar industry not bringing the potential income. Bagasse can be used for manufacture of paper and board; but currently is used mostly as fuel in the boilers. The bagasse-based industrial projects have not made much headway, and Government should encourage this development by generating the demand and creating suitable incentives.

Molasses are another important product. Its sale is controlled by Government and the price fixed is Rs. 6.75 per ton. Where distilleries, exist the molasses are released to them, otherwise

exported through S.T.C. Since allotments for export are always delayed and not regular, the storage charges are increased.

- (d) Sugar is released monthly as per Government allotment. This results in storage of heavy quantities by the factories till allotments are made, as releases are not proportionate to production, and this holds up the capital and the interest charges add to the burden of the factories.

The economics of sugar production and marketing appears to be very artificially maintained by Government policies. The remedy would be:—

- (i) to decontrol sugar and allow it to find its legitimate place in the market ;
- (ii) to discourage cultivation of sugarcane in unremunerative areas by suitable policies in licensing, etc.;
- (iii) for the Government to buy in the open market for export purposes. This job should be entrusted to the appropriate agencies ;
- (iv) to reduce the cost of inputs by increased production of the same by helping the concerned industries to improve their efficiency and to reduce the cost of production ;
- (v) to reduce the excise duty on sugar ;
- (vi) to encourage industries for utilising the by-products of sugar industry.