

**REPORT**  
**OF THE**  
**FERTILISER**  
**CREDIT**  
**COMMITTEE**  
**OF THE**  
**FERTILISER**  
**ASSOCIATION**  
**OF INDIA**

1968



REPORT OF THE FERTILISER CREDIT COMMITTEE  
OF THE FERTILISER ASSOCIATION OF INDIA 1968

E R R A T A

<u>Page No., Para and Line</u>	<u>Correction</u>
1. Page (1), para 2, line 6 ✓	Insert (2) after 'and' and before 'introduction'.
2. Page (vii), para 23, line 4	Read '25 to 40 per cent' instead of '60 to 75 per cent'.
3. Page 12, para 28, line 3, 4 & 5 from bottom	Insert asterisk on figures 49,340; 47,415; and 74,000. For asterisk footnote to be added 'Figures relate to 1966-67 full year'.
3A Page 21, para 2.35 ✓	In the fourth line 'promotional' should be 'promotion'.
4. Page 40; para 3.24, line 1 ✓	Read 'Statewise' instead of 'State-wide'
5. Page 106, Table 6.1 ✓	Heading of 2nd column should read as 'Total value of fertilisers distributed in the State' instead of 'by the State'.
6. Page 127, para 7.9, 7th line from bottom	Should read as 'the credit needs will be Rs.266 million'.
7. Page 129, Table 7.1 ✓	In the footnote for table, there should be two asterisks on first line and one asterisk on 2nd line.
8. Page 133, para 7.17 line 11 ✓	Read as '(Statement X)' instead of '(Statement)'.
9. Page 133, para 7.18 line 7 ✓	Read 'K <sub>2</sub> O(Statement X)' instead of 'K <sub>2</sub> O (Statement X1)'.
10. Page 136, para 7.23 last line on the page	Read as 'Rs. 199.6 million' instead of 'Rs.199.5 million'
11. Page 143, para 7.37 line 11	Read 'We also consider' instead of 'We also considered'.
12. Page 163, para 9.9 line 4	<del>Read as 'bank is now linked' instead of 'bank is new link'</del>
13. Page 211, Table 12.2	The last figure in col.4 should be '5,219' instead of '5,211'.

<u>Page No., para &amp; line</u>	<u>Correction</u>
14. Page 21, Table 12.3	Grand Total in col. 1 should be '5,219' instead of '5,229'
15. Page 21, para 12.14	In the ninth line, the sentence 'The estimates thus arrived at are set out in the Statement XIV' should be deleted.
16. Page 217, Table 12.4	In col. 5 in the tenth line in the heading, the word 'be' should be added before 'at'.
17. Page 236, para 13.37, line 8	'Chapter XIII' should read as 'chapter VIII'.
18. Page 244, para 14.8, line 1 and 2	In line one '(Para 9.38)' should read as '(Para 9.36)' and in line two 'Credit line of 1 to 3 months' should read as 'credit line of 1 to 4 months'.
19. Page 297	The second side heading should be 'Aligarh' instead of 'Uttar Pradesh' and the third heading 'Burdwan & Hooghly' instead of 'West Bengal'.
20. Page 307	The heading for appendix 13 should read as 'Representatives of the State Bank of India and of Commercial Banks and Food Corporation of India met by the Committee at different centres'.
21. Page 318, Statement II	In col. 1, No. 1 should read as 'West Godavari', and not as 'West Bengal'.
22. Page 333, Statement IX	In col. 7 heading, in the <del>place of 2 asterisks, there</del> should be a plus and in col. 8 heading in the place of plus, there should be 2 asterisks.
23. Page 334	Footnote second line should read as 'These are derived by' and not 'These are derivedly'.

**Report**  
of the  
**Fertiliser Credit Committee**  
of the  
**Fertiliser Association of India**  
**1968**



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## CONTENTS

		Page
	Summary of Conclusions and Recommendations	i
CHAPTER	I Introduction	1
CHAPTER	II Demand for Fertilisers	10
CHAPTER	III Supply of Fertiliser	29
CHAPTER	IV Distribution Arrangements	44
CHAPTER	V Distribution Arrangements (Continued)	67
CHAPTER	VI Distribution Arrangements (Continued)	94
CHAPTER	VII Distribution Credit Needs	124
CHAPTER	VIII Proposals for Distribution Credit—Co-operatives	145
CHAPTER	IX Proposals for Distribution Credit—Manufacturers and Private Agencies	160
CHAPTER	X Fertiliser Credit Guarantee Corporation	175
CHAPTER	XI Fertiliser Credit to the Farmer—Present Arrangements	180
CHAPTER	XII Fertiliser Credit Needs at Farmer Level	205
CHAPTER	XIII Fertiliser Credit for the Farmer—Proposals A: Cooperative Agencies	221
CHAPTER	XIV Fertiliser Credit for the Farmer—Proposals B: Other Agencies	240
CHAPTER	XV Conclusion	250
	Appendices	253
	Statements	315

## LIST OF TABLES

	<i>Page</i>
Table 2.1 Shortfalls in foodgrain production	10
Table 2.2 Growth in consumption of fertilisers	17
Table 2.3 Consumption targets	18
Table 2.4 Zone-wise consumption targets for H.V.P. in 1970-71	20
Table 2.5 Present consumption levels in relation to targets for 1970-71	22
Table 2.6 Present consumption and targets for 1970-71 in selected districts	23
Table 3.1 Production, imports and consumption	29✓
Table 3.2 Year-wise production and imports upto 1970-71	31
Table 3.3 Anticipated production of N	33
Table 3.4 Anticipated production of P <sub>2</sub> O <sub>5</sub>	34
Table 3.5 Probable pattern of supplies to States in 1970-71	39
Table 4.1 Fertiliser distribution by co-operatives	46
Table 6.1 Distribution by different agencies	106
Table 7.1 Requirements of distribution credit for Pool supplies	128
Table 7.2 Credit needs for distribution by co-operatives assuming a turnover of twice during the year, and margin money requirements at 10 per cent of the distribution finance needs if the co-operatives are to handle (a) minimum supplies, (b) supplies anticipated from the Pool, or (c) the maximum supplies	135
Table 7.3 Probable dependence of co-operatives on non-Pool supplies and of private agencies on Pool supplies in 1970-71	136
Table 7.4 Credit needs for distribution by manufacturers and private agencies, assuming a turnover of 2.4 times during the year and margin money requirements at 10 per cent of distribution finance	140
Table 7.5 Distribution credit needs for the intervening years	142
Table 7.6 Distribution credit needs in the selected districts	142
Table 11.1 Pattern of credit sales	183
Table 11.2 Credit operations of selected central banks	189
Table 11.3 Reserve Bank's credit to selected co-operative banks	190

<b>Table 12.1</b>	<b>Anticipated fertiliser credit needs in 1970-71</b>	<b>209</b>
<b>Table 12.2</b>	<b>Credit needs for intervening years</b>	<b>211</b>
<b>Table 12.3</b>	<b>Quantum of credit needs to be met by sources other than co-operatives</b>	<b>213</b>
<b>Table 12.4</b>	<b>Fertiliser credit needs for selected districts in 1970-71</b>	<b>217</b>



## LIST OF APPENDICES

		<i>Page</i>
Appendix	1. Questionnaire on fertiliser credit for the selected districts	255
Appendix	2. Questionnaire issued to the Project Officer/D.A.O.	260
Appendix	3. Questionnaire issued to the co-operative central bank/Joint/Deputy Registrar of co-operative societies	264
Appendix	4. Questionnaire issued to the wholesaler (co-operative or private)	267
Appendix	5. Questionnaire issued to the retail agency	269
Appendix	6. Questionnaire issued to the State Governments (Departments of Agriculture and Cooperation)	272
Appendix	7. Questionnaire issued to the State co-operrative banks	278
Appendix	8. Some of the officials and representatives of institutions met during field investigations	280
Appendix	9. Names of the Government offices and important institutions visited during field investigations	295
Appendix	10. Names of some of the officials and others met by the Committee	298
Appendix	11. Names of the Ministers met by the Committee	303
Appendix	12. Questionnaire issued to the commercial banks	304
&		
	Questionnaire issued to the Food Corporation of India	305
Appendix	13. Representatives of the State Bank of India and of commercial banks and the Food Corporation of India met by the Committee at different centres	307
Appendix	14. Copy of the letter addressed by the Government of India, Ministry of Food, Agriculture, C.D. & Cooperation to the State Governments	312
Appendix	15. Salient features of the crop loan system	313

## LIST OF ILLUSTRATIONS

	<i>Page facing</i>
1. Per hectare and per capita consumption of plant nutrients	10
2. Zonewise and Statewise consumption of N during 1961-62, 1965-67 in relation to targets of consumption for 1970-71	} 22
3. Zonewise and Statewise consumption of $P_2O_5$ during 1961-62, 1965-67 in relation to targets of consumption for 1970-71	
4. Zonewise and Statewise consumption of $K_2O$ during 1961-62, 1965-67 in relation to targets of consumption for 1970-71	
5. Consumption of N for selected Package Districts during 1961-62, 1965-67 in relation to targets of consumption for 1970-71	} 28
6. Consumption of $P_2O_5$ for selected Package Districts during 1961-62, 1965-67 in relation to targets of consumption for 1970-71	
7. Fertiliser consumption in India 1966-67	50
8. Total fertiliser credit needs and probable availability from cooperatives	220
9. Cooperative distribution structure	252

## LIST OF STATEMENTS

		<i>Page</i>	
Statement	I	Targets and achievement of agricultural inputs and irrigation facilities	317
Statement	II	Intensive Agricultural District Programme—Distribution of fertilisers	318
Statement	III	High-yielding Varieties Programme—targets for coverage and requirements of fertilisers for different crops by 1970-71	319
Statement	IV	Consumption level of fertilisers in the States during 1965-66 and 1966-67 in relation to the consumption target for 1970-71	322
Statement	V	Consumption of fertilisers in 1965-66 and 1966-67 in relation to the level to be reached by 1970-71	326
Statement	VI	Short-term loans sanctioned to State Governments by the Central Government for fertilisers, improved seeds and pesticide during 1964-65 to 1967-68	328
Statement	VII	Stock position of nitrogenous fertilisers held by the State Governments in terms of N	330
Statement	VIII	The value of minimum quantity of fertilisers cooperatives may handle and their distribution credit needs in 1970-71	331
Statement	IX	Distribution credit needs for supplies that the manufacturers/private agencies may handle allowing cooperatives minimum role	333
Statement	X	The maximum quantity of fertilisers that cooperatives may handle in 1970-71	335
Statement	XI	Distribution credit needs for supplies that the manufacturers/private agencies may handle allowing cooperatives maximum role	337

<b>Statement XII</b>	<b>Short-term advances to cooperative banks by the Reserve Bank of India and short-term advances by primary credit societies to farmers</b>	<b>338</b>
<b>Statement XIII</b>	<b>Fertiliser taccavi advances made in some States during 1964-65 to 1966-67</b>	<b>340</b>
<b>Statement XIV</b>	<b>Consumption of fertilisers per unit cropped area 1966-67</b>	<b>341</b>

## SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

### **Demand for fertilisers**

1. There were substantial shortfalls in the production of foodgrains in the country during the III Plan period. As against a target of 439 million tonnes fixed for the Plan period, the actual achievement amounted to 402 million tonnes. This was attributable to shortfalls in a number of individual factors including irrigation, fertiliser consumption and coverage under improved seeds and plant protection. (Paras 2.1 to 2.5).

2. The introduction of the package programme in selected districts during 1960-62 helped to boost consumption of fertilisers in these areas substantially. The new strategy now adopted for increasing foodgrain production rapidly has two main planks: (1) adoption of High-yielding Variety seeds and related package of practices in an aggregate area which will progressively increase to 32.5 million acres by 1970-71; and introduction of short duration crops combined with multiple cropping in 30 million acres. In support of these, a more aggressive programme for exploitation of ground and surface water resources has also been taken in hand. Though there were variations in the performance of H.V.P. during kharif 1966-67 from district to district, available information shows that performance during kharif 1967-68 was encouraging. (Paras 2.8 to 2.21).

3. With the favourable conditions now created for the extension of the H.V.P. the Committee considers that it would not be difficult for the States to reach the targets fixed for 1970-71 if they (a) take adequate preparatory measures before launching the programme in new areas, (b) ensure adequate and timely supply of seed, (c) arrange for timely availability of fertiliser and credit, etc. (Para 2.22).

4. The Committee considers that the fertiliser requirements worked out by the Sivaraman Committee for 1970-71 at 2.4 million tonnes of N, 1.0 million tonnes of  $P_2O_5$  and 0.7 million tonnes of  $K_2O$  represent the minimum requirements to be satisfied by that year. The consumption targets for 1970-71 which are fixed with reference to the distribution of H.V.P. areas

among the States in that year will greatly alter the existing consumption pattern zone-wise as well as State-wise. The fertiliser requirements of H.V.P. areas in 1970-71 will work out to 45 per cent for N, 68 per cent for  $P_2O_5$  and 77 per cent for  $K_2O$  of the respective total consumption targets for that year. As a result, the proportion of supplies to be used for foodgrains, particularly paddy and wheat, will be very much larger than at present. (Paras 2.25 to 2.34).

5. The attainment of the fertiliser consumption targets fixed for each State on the basis of the H.V.P. and other programmes to be implemented will call for special measures in several States. In relation to these targets, the present consumption levels of N have reached 30 to 40 per cent only in a few States. In others they are very much less. In these, and in a majority of States in respect of  $P_2O_5$  and  $K_2O$ , the gaps in consumption to be made up by 1970-71 reflect the magnitude of effort needed in the next few years. A number of factors influence the utilisation of fertilisers. Given the potential for consumption and an adequate policy framework and the requisite promotional endeavour, it is of the utmost importance that measures should be taken towards ensuring the adequacy and timeliness of the supply of inputs, including seed, fertiliser and credit. (Paras 2.35 to 2.49).

#### Supply of fertilisers

6. Shortage of supplies of different types of fertilisers had greatly depressed the consumption of fertilisers during the past few years. The production estimates made by the Ministry of Petroleum & Chemicals show that by 1970-71 nitrogen production in the country might reach 1.7 million tonnes and that of  $P_2O_5$  0.7 million tonnes. The balance of N, and  $P_2O_5$  and the entire requirement of  $K_2O$  will, therefore, have to be imported in order to reach the minimum consumption targets for each year. The Committee considers that agricultural production programmes should not be allowed to suffer on account of shortfalls in internal production of fertilisers. Therefore, import programmes should be so drawn up that due allowance is always made for possible failure of some factories to reach expected production levels and for the emergence of unforeseen circumstances which may delay imports. As a rule, the import programmes for a year should allow for higher imports than originally programmed for the year to the same extent as internal production was lower than anticipated in the previous year. At the same time, suitable measures should be taken to ensure maximum internal production. This includes giving freedom and responsibility to the manufacturers themselves to make their own arrangements for the importation of raw materials. (Paras 3.1 to 3.13).

7. Arising from the Central Government's policy to allow manufacturers freedom to market their products, the future pattern of supplies to States would be very different from what it used to be till 1965-66. Assuming that the Centre would take over 15 per cent of the internal production in 1970-71, the Central Pool might distribute 0.97 million tonnes of N and 0.5 million tonnes of  $P_2O_5$ , as against 1.44 million tonnes of N and 0.5 million tonnes of  $P_2O_5$  likely to be distributed by the manufacturers in that year. If it is assumed that the factories would be interested in marketing their products as near the point of production as possible, it is probable that only a few States will substantially depend on the Pool for the supplies of N in 1970-71. Many States will increasingly depend on the sales made by the factories. This would call for close coordination between those concerned with agricultural programming and those who supply and distribute fertilisers. Further, some measure of advance planning would also be necessary in all programme areas where supplies from the Pool have to be supplemented with supplies from the factories, and vice-versa. The need for the Centre to meet the full fertiliser requirements for special programmes in the States would also largely disappear. (Paras 3.18 to 3.27).

8. There will also be need for much promotional activity in two contexts. One is the further popularisation of fertilisers in certain areas where they are already in use, and the other is the introduction of fertilisers in areas where they are not so far in use. It is obvious that these will require special promotional effort on the part of governments, including possibly a central organisation devoted to promotion. Besides, in order to promote consumption, other problems relating to transport, storage and timely delivery of supplies also need to be tackled. (Paras 3.27 to 3.30).

#### **Distribution arrangements**

9. As a result of the recommendations of several high-level policy committees, as also of the Planning Commission, the cooperative agencies have come to be entrusted with the distribution of nitrogenous fertilisers either on a monopoly or near-monopoly basis in many States. The important considerations which weighed with the policy makers in this regard were the relative scarcity of fertilisers, and the fact that the co-operative institutions provided a framework within which the farmers' needs and efforts, on the one hand, and the Government's objectives, on the other, could be coordinated. In addition, two other factors need specific mention for their influence on the development of distribution arrangements. These are the existence of the Central Fertiliser Pool and the 18-months credit facility for Pool fertilisers available till 1965-66. As a result, the co-opera-

tive agencies handled in 1965-66 nearly 72 per cent of the total value of supplies in the country. However, some of the valid reasons which in the past led to co-operatives being virtually the sole distributors of fertilisers in many States have now ceased to have the same force. A development of some significance is the emergence from a situation of relative scarcity of fertilisers to one of very large increases in supplies during the next few years.

10. A further factor is the Centre's decision to give increasing freedom to the manufacturers to make their own distribution arrangements for their products. Other factors are the decline in the relative importance of the Central Pool as a source of supplies, and the curtailment of credit from the Centre to the States in respect of Pool supplies. (Paras 4.1 to 4.14).

11. On the whole, in areas where they have been entrusted with distribution, the co-operatives have shown enterprise and have done commendable work from the point of view of taking fertiliser to the consumer in advance of assured demand and long before it had become widely acceptable. The co-operatives have had also to operate under severe handicaps, particularly those arising from unsold stocks transferred to them by the State Agriculture Departments, receipt of supplies late for each season, and of supplies much in excess of demand. At the same time, while they were called upon to handle increasing supplies as a matter of State policy, the financial assistance from the governments either for building up of managerial personnel or construction of storage accommodation, purchase of transport vehicles, etc., was not always forthcoming to the required extent. Prolonged delays in adjusting the amounts due to the co-operatives on account of supplies made by them against taccavi permits or on account of transportation costs, etc., had also greatly affected their efficiency of turnover. (Paras 6.70 to 6.72).

12. Fertiliser supply and distribution which have increased in volume over the last few years will increase more rapidly in the next few years. The question, therefore, is whether the ability to undertake those tasks is being built into the system as it now operates. In the States where the Government followed the system of consignment for making supplies to the co-operative agencies, several weaknesses developed. This system made for convenience but not for business efficiency on the part of the agencies. The fact that the co-operative distribution agencies acted merely as agents of the governments with no financial involvement did not make it incumbent on the agencies to strengthen their financial position or improve their organisation. While some benefit has undoubtedly accrued from the consign-



ment system, it is clear that more advantage could have been taken by the agencies to improve their efficiency of operation.

13. As a result, the sudden switch-over from consignment system to institutional finance has given rise, at the outset, to the problem of finances for the co-operative wholesale distribution agencies. In many States (e.g. Andhra Pradesh, Bihar, Haryana, Maharashtra, Mysore, Orissa and Rajasthan) the owned funds of the State/district marketing societies are very inadequate for the purpose. (Paras 6.73 to 6.75).

14. Another major problem which has both a financial and an organisational aspect is the streamlining of their operations so as to enable the co-operatives wholesales to repay in six months credit which they had earlier enjoyed for 15 to 18 months. Clearly much reform is needed in this context, for experience in different States has shown that there has been considerable slackness on the part of the agencies at different levels to collect and remit sale proceeds in respect of supplies made by them on consignment basis. Generally speaking, the gap between these present speed of turnover and what may be considered to be the norms to be maintained for sound commercial operations to be eligible for bank finance varies from State to State but is wide in most States (e.g. Bihar, Rajasthan and Madhya Pradesh). (Para 6.75).

15. Lack of supporting facilities and incentives for undertaking active sales promotion of fertilisers is another deficiency in the working of the co-operative distribution system. The conditions under which the cooperative agencies have been operating in the past have not helped to create a healthy business attitude towards achieving profit—or, conversely, avoiding loss in selling fertiliser. It is necessary, in the interests of sound business, to establish a proper link between the value of supplies made, on the one hand, and the financial and organisational capacity of the agencies, on the other, including their ability to effect rapid turnover of the available funds. In this sphere, more than in any other, there is need for considerable improvement and thorough overhauling of the procedures followed by the co-operative agencies. (Paras 6.76 to 6.77).

16. The difficulties encountered in recovering the sale proceeds and of ensuring effective supervision and control over retailers are responsible for the reluctance of the cooperative wholesaler to increase the number of retailers. Apart from this, the restricted credit or consignment supplies allowed to the retailers in order to minimise the difficulties encountered by them in recovering sale proceeds have resulted in inconvenience, some-

times dislocation of supplies arising from disconnected and uncertain series of small consignments.

17. In areas where the retail societies are required to make cash payment before lifting supplies, only a small proportion of the societies has been in a position to raise the needed resources from the central bank and that too at a cost which they considered relatively high. Moreover, the central bank itself, in several instances, does not have the funds to spare. Further, in not a few areas, the retail society which sells fertiliser is required to wait for the sanction of production credit by the central bank to its members before it can lift fertiliser from the wholesaler. This has led to much uncertainty regarding the availability of supplies to the members (e.g. Mandya, Raipur, Thanjavur, Burdwan). (Paras 6.78 to 6.80).

18. At the retail society level again, on account of delays in sanction of production credit to the farmer for fertiliser, there are serious hurdles in the way of effecting rapid sales to the farmers in the areas studied.

19. If the farmer is to get the fertiliser when he needs it, the retail society must build up its stocks reasonably in advance. All the safeguards at present employed by the distribution agencies, however, have tended not to maximise the possibility of advance stocks, but to minimise financial risks in a system not based on sales promotion. Liberal credit sales to the retail agencies, in this context, are an important requirement. So is the co-ordination between supply and credit arrangements, which is lacking to a significant extent in many areas. Absence of attractive commission, and the high cost of hired storage have also come in the way of the societies taking active interest in sales promotion. These point to the need for evolving appropriate measures to promote advance building of stocks, and procedures to ensure maximum coordination between distribution and credit arrangements. (Para 6.81).

20. In areas where deferred payment system is in operation (e.g. Thanjavur and Burdwan), the availability of finance to the wholesalers for purchasing fertiliser upto the extent of their owned funds which are limited and the difficulties in raising adequate finances otherwise have come in the way of their lifting adequate stocks at a time. The period allowed for deferred payment has been found to be inadequate for making repayment to the State Governments. The central banks have not been able to raise enough finance for the purpose. (Paras 6.83 to 6.87).

21. Among the States, there is general appreciation of the limitations to the ability of cooperatives to adjust themselves to the requirements of

institutional finance immediately, and many of them have expressed the view that it would be very difficult for the cooperatives to raise the required margin money and also satisfy the other conditions which go with institutional finance. Many States urged the desirability of making use of cooperative agencies to the maximum extent possible. In this connection, the need for substantial aid from the Centre for strengthening the owned funds of the cooperative distribution agencies as also of the cooperative banks was stressed.

22. In States where the private distribution agencies have been operating, there is agreement that to the extent that cooperatives are not likely to be in a position to handle all the supplies, and without prejudice to their further growth, all facilities should be given for increased sale of fertilisers through the private agencies. (Paras 6.88 to 6.92).

23. Till very recently the credit needs of the private distributors and wholesalers have not been large because of the sellers' market for fertilisers prevailing. Even so, they could not get the full credit needed by them as they were required to raise margin money varying from ~~60~~ to 75 per cent of the value of stocks hypothecated. The private distributors are now confronted with the need to extend very substantially the network of their sub-distributors and retailers. The risks involved in any speedy expansion of retailers and of extending credit sales to them have been underlined. (Para 6.98).

24. The distributors have also expressed the view that credit sales to cooperatives can be stepped up if the repayments are suitably guaranteed. (Paras 6.93 to 6.100).

#### **Distribution credit needs**

25. One result of the probable pattern of supplies to the States from the Pool and from the manufacturers by 1970-71 is that if cooperatives handle the entire Pool supplies there will be a very considerable strain on the resources both of the Centre and of the States (e.g. Andhra Pradesh, Maharashtra and Uttar Pradesh). Another result is that the credit from the Centre will not be available to the different States in proportion either to their need for such assistance, on the one hand, or their capacity to utilise it as adjudged from the organisational and financial position of the cooperative distribution system (e.g. Andhra Pradesh, Madras and West Bengal). (Paras 7.8 to 7.10).

26. An important implication of the linking of credit from the Centre with the Pool supplies is the divorce of such credit from the total fertiliser

needs of a State which, in 1970-71, will be partly and varyingly met from the Pool. Moreover, if the Centre's credit facilities do not increase beyond the present level, most of the States will be compelled to raise the additional resources required on their own. This would also impose a considerable strain on the cooperatives in finding the requisite finance. (Para 7.11).

27. In view of these, it is necessary to consider (a) the extent to which the cooperative agencies can be reasonably expected to undertake efficient distribution by 1970-71, taking into account the possible improvements in their finances, organisation, etc., and (b) the extent to which the manufacturers will make their own arrangements for distribution. The Committee considers that the production credit for fertilisers estimated to be available from the cooperatives in 1970-71 also sets the minimum level upto which the cooperatives in each State should handle fertilisers. At this level, the cooperatives might handle fertilisers worth Rs. 2,685 million in 1970-71. It is not unlikely that States in which the cooperative marketing societies are not so well advanced might not handle very much more than the minimum. It is possible, however, that in certain other States the marketing societies are so well developed (and financially and organisationally so strong) as to be in a position to handle much larger quantities, i.e., by way of cash sales, which would be over and above their sales against cooperative credit. While the Committee emphasises the desirability of cooperatives endeavouring to reach the maximum levels, it is not hopeful that this can be achieved in more than a few States. (Paras 7.12 to 7.16).

28. On the assumption that credit turnover will be twice during the year and that margin money has to be provided at one-tenth of the total distribution finance needs, the distribution credit and margin money needs of the cooperatives in the event of their handling (a) minimum and (b) maximum levels amount to Rs. 1,208 million and Rs. 134 million and Rs. 1,753 million and Rs. 195 million, respectively.

29. At their minimum level of handling, the cooperative agencies in as many as 9 States will depend partly to almost wholly on the supplies from the manufacturers, as distinct from the Pool, for supplies valued at around Rs. 500 million. At their maximum level of handling, 13 States will depend on the manufacturers' supplies, the value of such supplies being Rs. 1,300 million. While these are the broad limits, the extent to which the cooperatives can actually handle fertiliser depends on a number of factors, such as the improvements in their financial position and efficiency of operations. (Paras 7.18 to 7.24).

30. While allowing for the cooperative agencies the maximum possible role consistent with their capacity, the possibility cannot be ruled out of the manufacturers supplementing these arrangements by undertaking their own distribution or by appointing private agencies. At their minimum level, corresponding to the maximum of cooperative handling, the manufacturers and private agencies may distribute supplies of the value of Rs. 3,244 million and, at their maximum level, of the value of Rs. 4,454 million. Their distribution credit needs, assuming a turnover of 2.4 times during the year and margin money requirements at 10 per cent of distribution finance needs, will be Rs. 1,217 million and Rs. 135 million (minimum), and Rs. 1,669 million or Rs. 186 million (maximum).

31. A broad estimate of the total distribution credit needs (for the 16 States) for the years 1967-68 to 1970-71, will be as follows:

<i>Years</i>	<i>Distribution credit needs (Rs. in million)</i>
1967-68	1,650
1968-69	2,085
1969-70	2,457
1970-71	2,970

(Paras 7.24 to 7.34).

#### **Distribution credit—proposals (co-operatives)**

32. The arrangements to be made to meet the credit needs for distribution have to be such as will fit in with the emerging pattern of distribution of fertilisers in the next few years. So far as the co-operative marketing societies are concerned, it is only appropriate that in due course they should get credit for fertiliser distribution from the banking system on the strength of their financial position and on the basis of stocks held. The financial position of the marketing societies will, therefore, have to be strengthened suitably. It should be prescribed that out of every Rs. 10 of margin money to be provided by the entire structure, the primary marketing and credit societies should together contribute a minimum amount of say, Rs. 3 to Rs. 5, depending on their resources.

33. In the Committee's view, a larger part of the additional share capital needed by the cooperative distribution agencies will have to come from the Government. The Committee, therefore, recommends that the National Cooperative Development Corporation should examine the requirements of each State and, in particular, those of cooperative wholesalers in

the programme areas for handling fertilisers for the next few years and make loans to the States on a more liberal scale than has been the case hitherto. It is also necessary that such loans to the State Governments should be placed outside the ceiling on Central assistance for State plans. In order that this may be properly phased, the financial commitments of the National Cooperative Development Corporation should be reviewed and appropriate provisions made in the Central budget for addition to the resources available to the National Cooperative Development Corporation. (Paras 8.1 to 8.6).

34. The suggested financial strengthening alone, however, would not enable the agencies to raise adequate distribution credit. It would be necessary to relax the existing norms followed by the cooperative banks and the State Bank of India for sanctioning clean cash credit limits to the cooperative marketing societies in order to enable them to make adequate initial purchases of fertilisers. While no uniform relaxation of the existing norms in this regard is considered necessary, in cases where the cooperatives need larger finances, particularly in areas where sudden increase in supplies is anticipated, the Committee recommends that the cooperative wholesalers should be allowed by the banks clean cash credit limits upto three times the owned funds for fertiliser transactions alone. In so doing, however, the organisational competence and operational efficiency of the institutions would be taken into account by the banks. The Committee recommends that this concession should be made available upto 1970-71 and reviewed thereafter. Recognising the risks in reducing the margins, the Committee recommends that the interests of the cooperative banks should be suitably protected by a guarantee arrangement. (Paras 8.7 to 8.13).

35. The Committee considers that so far as credit for fertiliser distribution is concerned, there is scope for more active participation of the State Bank of India. Where cooperative marketing societies are not likely to get adequate accommodation from the cooperative banks, State Governments should give general approval to the marketing societies to approach the State Bank for finance. The Government should also take measures to remove the technical difficulties coming in the way of such societies availing themselves of credit facilities from the State Bank. The Committee considers it also necessary that the commercial banks share with the State Bank the task of financing cooperative marketing societies, and for this purpose recommends that suitable procedures should be evolved not only to enable the marketing societies to raise enough funds, but also to safeguard the interests of the institutions.

36. The Committee also recommends that against the stocks of fertilisers the State Bank of India and other commercial banks should not normally maintain margin of more than 5 per cent of the value in respect of pledge advances or 10 per cent of the value in respect of hypothecation advances. It takes into account that such advances can be covered by the guarantee scheme suggested in the Report. (Paras 8.14 to 8.19).

37. Depending on the rate of increase in the owned funds of the co-operative wholesalers and the steps taken to facilitate a smooth switch-over to institutional credit, the present ceiling of Rs. 50 million fixed by the Reserve Bank for providing distribution credit for fertilisers for each State is likely to prove inadequate in varying degrees. With the steps now in sight for commercial and business-like distribution of fertilisers, it would only be appropriate for the State cooperative banks hereafter to get as liberal refinancing facilities as do the scheduled commercial banks from the Reserve Bank. To bring this about the Committee recommends, that the second signatures of the apex and district cooperative marketing societies, advances to which will be covered by the guarantee organisation recommended, should be considered as good for purposes of granting refinance to the State cooperative banks. (Paras 8.21 and 8.22).

38. The Committee considers that it will be necessary for the Centre to continue for sometime, to the extent necessary, to supplement the resources of the States, especially those in which cooperative agencies are financially weak, by providing distribution credit along with Pool fertilisers. (Para 8.23).

39. The Committee also recommends that the line of credit now available from the State Bank of India and its subsidiaries to the State Governments should continue to be available to them on usual terms and conditions ordinarily for periods not exceeding six months for purchasing and stocking fertiliser before it is passed on to distribution agencies. (Paras 8.24 and 8.25).

40. It also recommends that the extent to which the manufacturers or distributors make supplies to the cooperative distribution agencies on deferred payment basis for a period not exceeding six months should be decided in each individual case by the supplier and the agency by mutual negotiations and such credit supplies should be within the reserve borrowing power of the agency concerned according to its byelaws. In such cases the acceptance of the bills drawn on the cooperative agencies by the suppliers should also be supported by a guarantee of a central or state cooperative bank, as the case may be, in order to en-

sure the bank's interest in the proper working of the agency. The bank in turn could seek the guarantee of the guarantee organisation recommended in the Report. (Paras 8.26 and 8.27).

41. Except in those areas where district or primary marketing societies have substantial resources of their own and can raise the needed bank credit, the State or district marketing societies should accept the system of consignment as the basis for making supplies to the district or primary marketing societies. The supplies to the retail agent societies (i.e. cooperative retailers) should also be, as a rule, on consignment basis. The value of supplies so made at a time need not be limited either to the owned funds or to the reserve borrowing power of the retail society. To the extent that such supplies are made by the wholesalers to the cooperative retailers against the guarantee of the central cooperative bank, the latter can seek the protection of the guarantee organisation.

42. In order to enable the retail agent societies to make timely sales to the farmers, as and when supplies are received in advance of the season, the Committee also recommends that the retailers should receive supplies on consignment basis, for a period of one to four months, and should also be enabled through appropriate changes in the loan policies of the cooperative banks, in turn, to make supplies on credit to the members in advance of the season. (Para 8.32).

#### **Distribution credit—proposals (private agencies)**

43. The Committee considers that unless there are liberal facilities for refinance in the context of the increasing demand for fertiliser credit, the commercial banks will be in no position, especially during the busy season, to meet the credit requirements of fertiliser distribution. These facilities should be available (a) on a priority basis; (b) in adequate measure; (c) at rates of interest applicable to priority sectors; and (d) without technically affecting the net liquidity position of the banks. All these elements are present in the Reserve Bank's current scheme. The Committee recommends their continuance during the next few years, notwithstanding the very substantial increase that is likely to take place in the volume of refinance needed for the distribution of fertilisers. (Para 9.12).

44. In order to facilitate the banks obtaining refinance against bills arising from fertiliser trade, the duration of which would be normally 3 to 6 months, the Committee recommends that the Reserve Bank of India Act may be suitably amended so as to place such bills on the same footing as those arising from export trade for purposes of section 17(2) (a) and 17(4)



(c) of the Act, that is to say, with a maturity which may extend to six months. Since fertiliser stocking and distribution take place throughout the year, the Committee also recommends that the refinance facilities should be available in all seasons. In this connection, the Committee further recommends that the bills signed by the wholesaler and retailer, and covered by the guarantee scheme proposed in the Report should be treated as having two good signatories for purposes of banks obtaining refinance from the Reserve Bank of India. (Paras 9.14 to 9.16).

45. With regard to the limits imposed by the Reserve Bank on the scheduled commercial banks in respect of unsecured advances and unsecured guarantees, the Committee recommends that all types of advances including those against book debts and guarantees issued for fertiliser distribution in respect of which the participating banks seek protection under the proposed guarantee scheme should be exempted from the limits applicable to unsecured advances and unsecured guarantees. (Para 9.18).

46. The Committee considers that distribution credit for fertilisers may become necessary at one or more of the points in the distribution chain. These are (a) manufacturers, (b) distributors; (c) wholesalers, sub-distributors and (d) retailers.

47. The advances to be made would be against one or more of the customary types of securities, i.e., (i) hypothecation or pledge of stocks, (ii) bills or sight drafts representing sale of fertilisers (where necessary supported by bank guarantees or acceptances), or (iii) receivables representing credit sales to the wholesalers, sub-wholesalers or retailers. The Committee recommends that the period for which the banks may extend distribution credit under one or more of the above types may be between 3 and 6 months, care being taken to ensure that credit facilities against bills or sight drafts drawn by the apex or district marketing societies (duly supported by the guarantee of the apex or district central bank) do not exceed six months. (Para 9.22).

48. In order to ensure that the quantum of distribution credit measures upto the needs, the Committee recommends that, at least in the initial stages of building up of the distribution system and subject to certain safeguards, the margins required of the borrowing agencies in the private sector should not exceed 10 per cent of the value of fertilisers hypothecated, or 5 per cent of the value of stocks pledged or 20 per cent in respect of receivables representing sales of fertilisers on credit to the distribution agencies. The safeguard which the Committee suggests is in the form of a guarantee which will be available to the bank. (Paras 9.23 to 9.25).

49. The Committee considers that the provision of liberal credit facilities at the level of the manufacturers, distributors, etc., is only one part of the total effort involved in making supplies adequately and in time to the retail points. The other aspects to be borne in mind are (a) the organisation and location of an adequate number of retailers at appropriate points, and (b) making of arrangements for credit supplies on a liberal basis to the subdistributors and retailers, where that is necessary. In this connection, the Committee recommends that apart from the financial worth and business connections of the parties concerned, a number of other criteria too will become relevant in the selection of retailers. These will be, among others (a) local knowledge and contact with cultivators, (b) salesmanship including a minimum technical knowledge covering soil, water and crops, fertilisers and other inputs, including pesticides, (c) business competence including ability to maintain and render accounts, etc., and (d) possession of storage facilities.

50. The Committee envisages that consistently with the quantum of supplies to be handled by the manufacturers and their distributors in an area, the manufacturers and distributors will themselves have to undertake the responsibility of appointing an adequate number of retailers in a well arranged pattern of distribution, taking into account the agricultural programmes and potentialities as well as the projected volume and phasing of fertiliser supplies. In this connection, in order to ensure appropriate spread of the retail agencies appointed by the cooperative and private sectors, the Committee suggests promotion of suitable informal arrangements for coordination among the different agencies operating in the programme areas in the matter of opening retail points.

51. The Committee considers that as the volume of supplies to be handled grows, it will be increasingly necessary to make credit sales to retailers beyond the levels normally prevalent at present. This, however, is recognised to involve some degree of risk to the distributors or wholesalers who may make credit supplies. The Committee has taken this factor into account in drawing up the guarantee scheme, under which the banks which extend guarantee on behalf of the sub-distributors or retailers can secure a measure of protection from the guarantee organisation. (Para 9.33).

52. In the Committee's view the terms and conditions of credit supplies to retailers should envisage the possibility of the retailer in turn making one to three months' credit available to the farmer. The Committee accordingly recommends that the distribution agency dealing directly with the retailer should, as a rule, extend to the latter credit on supplies for a

period of one to four months on each consignment, depending on the time of supply, such period being included in the total distribution credit period of upto 5 months to be allowed to the manufacturers or distributors by the bank. (Paras 9.33 to 9.36).

53. The Committee emphasises that in the framework of distribution arrangements contemplated in the Report, a considerable degree of responsibility for proper selection, training and supervision of the retailer rests with manufacturers, distributors, etc. They will be expected to provide and operate adequate safeguards for the prevention of the abuse of credit facilities available.

54. The Committee also recommends that the Fertiliser Association of India should draw up a set of instructions for the guidance of the manufacturers and distributors to promote extension of distribution and expansion of credit on sound lines, and to give the agencies a working knowledge of the discipline to be observed by them in the context of massive increase in institutional credit.

#### **Guarantee Corporation**

55. The Committee recommends the setting up under the Companies Act, 1956 of a Fertiliser Credit Guarantee Corporation which should be notified by government as under Section 17(8A) of the Reserve Bank of India Act. Two of its shareholders will be the Government of India and the Reserve Bank of India. The Corporation will operate a scheme to be known as the Fertiliser Credit Guarantee Scheme, the objects of which will include ensuring of availability of larger bank credit for the stocking and distribution of fertilisers, pesticides, and other approved items, by extending to banks and other credit institutions a degree of protection in respect of their advances made or guarantees or acceptances given, by them, to stockists, distributors, wholesalers, sub-wholesalers, and retailers.

56. Since the object of the scheme is to liberalise bank finance in consideration of adequate guarantees and counter-guarantees, it is necessary that the Corporation should stipulate that the margins maintained by the banks should not be above a prescribed maximum. In the case of advances against pledge and hypothecation of stocks, the maximum margin should be 5 per cent and 10 per cent of the value of stocks, respectively. In the case of advances against book debts or bills discounted, where the latter have been accepted by a bank it should be 5 per cent and the bills where have not been so accepted it should be 20 per cent. For purposes of the

guarantee scheme the Committee recommends that the period of credit extended by banks should not exceed six months whether against stocks or book debts or bills discounted.

57. The extent of guarantee cover provided by the Corporation should be decided on merits of each case but should in no case exceed 65% of the amount in default. On the guarantee being invoked the Corporation should make good the agreed proportion of the amount in default, the remainder being borne by the credit institution concerned. As regards the rate of premium to be paid on the guarantee or counter-guarantee the Committee considers that it may vary from  $\frac{1}{2}$  per cent to  $2\frac{1}{2}$  per cent per annum, depending on the assessment by the Guarantee Corporation of the degree of risk involved in different transactions.

58. In the Committee's view the initial paid-up share capital of Rs. 25 million would yield income on its investments which would be adequate to cover the expenses of the Corporation on its management and administration. Besides this, a sum of Rs. 100 million should constitute adequate initial resources for the Corporation. Accordingly, it recommends that the Government of India may extend to the Corporation a loan of Rs. 100 million on the basis of either no interest at all or a nominal interest. To augment its resources the Corporation may be empowered to float bonds guaranteed by the Government on such terms as Government considers appropriate. The Committee recommends that the Guarantee Corporation should be located and administered in such a way that it remains closely associated with the Reserve Bank of India. Reference should be made to Chapter X, for details of the proposed Fertiliser Credit Guarantee Corporation.

#### **Fertiliser credit to the farmer—present arrangements**

59. Since 1961-62 there has been a noticeable change in a number of areas in the pattern of expenditure on current agricultural operations. This is particularly in evidence in the "package" areas. In these areas, and with special reference to food crops, an increasing proportion of total current farm expenditure is incurred on fertilisers and other inputs. As a result, there has been increasing dependence on credit for fertilisers. With the technological change brought about by the introduction of the high-yielding varieties of crops more recently, there has been a substantial increase in the expenditure on fertilisers and pesticides. The studies bring out that a substantial part of the expenditure of farmers on fertiliser has been met by way of borrowings.

60. The Committee's investigations reveal that the dependence on credit facilities for fertilisers varies from 50 per cent of total sales in some

districts to 90 per cent in other districts. In areas where food crops are predominantly grown and land holdings of the size of 5 acres and less account for a large proportion of total holdings, there is evidence of heavier dependence on credit. Broadly speaking, the high consumption of fertilisers is a feature of areas in which credit facilities are available with relative ease. In general, credit sales as well as total sales have been found to be adversely affected in those areas in which fertiliser credit is hard to obtain. Within each district, the pattern of credit sales varied from area to area depending on whether fertilisers and credit were available adequately and in time. (Paras 11.1 to 11.10).

61. The share of co-operative loans to cultivators has increased from about 3.1 per cent in 1951-52, when the All-India Rural Credit Survey conducted its investigations, to about 15.5 per cent in 1961-62, and to an estimated 20 to 25 per cent at present. The improvement in this sphere, however, is by no means uniform.

62. It is difficult to indicate precisely what proportion of the short-term cooperative loans advanced in 1965-66 or in 1966-67 in different States was in the shape of fertilisers, although on the basis of past performance in some of the States, this can be roughly estimated at 15 per cent of the co-operative advances in 1965-66. In the package districts, where attempts have been made to organise credit and supply arrangements more purposefully and to advance loans on the basis of individual production plans, the performance in regard to use of co-operative credit for fertilisers is far better than in other districts.

63. The financial position and general efficiency of the central co-operative banks in the districts studied by us varies from bank to bank, as is reflected by their credit operations in terms of credit limits applied for by societies, limits sanctioned by them and actual disbursements made (vide Table 11.2). In regard to another important aspect, viz., implementation of the crop loan system, most of the central banks visited have been hesitant to put it through lest the resulting credit demand from the societies should increase beyond their ability to raise the resources from the apex cooperative bank or the Reserve Bank. (Paras 11.11 to 11.22).

64. The Committee noticed that in many instances it is not the inadequacy of credit facilities from the Reserve Bank, so much as the operational deficiencies of the co-operative central banks themselves, that are responsible for the failure of the banks to sanction larger credit facilities to the primary societies (vide Table 11.3). This feature was in a number of districts

attributable to high overdues and low operational efficiency. The heavy overdues from the societies to the central banks have led to many non-defaulting members also being denied finance following the societies' disqualification for fresh finance from the central banks. The performance of co-operatives in the matter of timely sanction of credit to members is not satisfactory. Inordinate delays take place as a result of a variety of procedural and organisational drawbacks, particularly those relating to preparation and verification of applications and sanctioning of loans. Among the other restrictive features relating to co-operative credit are the inadequacy of the scale of finance prescribed for fertilisers, the ceiling on the loans that can be obtained against sureties, non-availability of co-operative credit in most areas for the purchase of non-nitrogenous fertilisers, etc. The prevailing high cost of fertilisers is another major obstacle to fuller use of credit and application of larger doses of fertilisers in some districts, particularly with reference to those cultivators with smaller holdings, who are likely to face a higher risk. (Paras 11.23 to 11.38).

65. In areas where the level of overdues is high as a result of repeated crop failures (e.g. Madhya Pradesh, Rajasthan, Bihar, etc.), the present stabilisation arrangements for conversion of short-term loans into medium-term loans are not commensurate with actual needs. Moreover, the inability of co-operative central banks to build up adequate stabilisation funds to the extent of 15 per cent of the amount proposed to be converted, as per existing rules, stand in the way of their making full use of the present arrangements. The Committee is of the view that if the expectations of the co-operatives playing a much bigger role in the future are to materialise, it is necessary that they should be activated and developed into viable units, their procedures and policies streamlined, liberalised and oriented to production needs, and their operational efficiency generally improved, particularly in regard to recoveries so as to facilitate the smooth flow of an increasing volume of production credit. (Paras 11.39 to 11.43).

66. The Committee also examined the present arrangements in regard to the availability of taccavi credit in the different districts visited. Taccavi has played a significant, though varying, role in different districts (vide Table 11.4). However, this line of credit to farmers was not without its limitations both in regard to procedures for obtaining it and the overall adequacy. The multiplicity of officials who undertake scrutiny of applications for taccavi and verification of records connected therewith has in several instances (e.g. Aligarh, Sri Ganganagar, etc.) led to avoid-

able delays in sanctioning the loans. Even after taking into account the resources of the State Governments and those available from the Centre, it is doubtful if the States would be in a position to significantly increase their commitments in regard to taccavi credit for fertilisers. (Paras 11.44 to 11.50).

67. Another important source of credit to the farmer is that provided by private agencies fertilisers. Both manufacturers and distributors realise the need for making available to the farmer much larger credit facilities than at present. Apart from the difficulties of finding larger resources for the purpose, the need is recognised by the Committee of covering the risks that private manufacturers and distributors are likely to face in the context of increasing volume of credit from them. The Fertiliser Credit Guarantee Scheme recommended in this Report will to some extent serve this purpose by enabling both the manufacturer and trader to obtain larger credit facilities from the banks under suitable safeguards.

#### **Fertiliser credit needs of the farmers**

68. Broadly speaking, the consumption of fertilisers in the districts studied during 1965-66 and 1966-67 was better, in relation to the targets fixed, in those areas where arrangements for providing credit to the farmers were more satisfactory. This was also true broadly, of actual application per acre of nitrogen in the I.A.D.P. and H.V.P. areas, in relation to the respective recommendations.

69. With the distribution and credit processes operating effectively and in co-ordination, the rate of increase in application of fertiliser in the H.V. P. areas is likely to increase rapidly. The increase may be horizontal in the sense of including a large number of big and small cultivators, as well as vertical, in the sense of average application per acre being more and more intensive. In this process credit will have to play a major role in sustaining high levels of utilisation where they have already been attained, as well as in promoting consumption in areas where it is low at present. (Paras 12.1 to 12.4).

70. A high degree of promotional effort on the part of the governments and the distribution agencies, and credit service for promoting sales will be especially needed in those States and districts in which the present level of fertiliser consumption in relation to the minimum level to be reached by 1970-71 is low. Such credit effort and supporting measures needed may be said to be broadly proportionate to the gap which exists between the present

level of consumption of fertiliser and the level to be reached in 1970-71. Further, insofar as the average farmer of H.V.P. areas is concerned, and with specific reference to fertiliser, the Committee assumes, purely for the purpose of making a broad estimate of credit needs, that these equal the value of fertiliser supplied. The Committee also assumes here that the actual consumption of fertiliser per acre will be several times what it is now, and that there will be many other items which will make a demand on the farmer's own resources. (Paras 12.5 to 12.7).

71. The Committee broadly estimates that the proportion of credit sales to total sales for the 16 States would be 73 per cent while the volume of credit needs would be Rs. 5,200 million in 1970-71. For the other three years, they are estimated as follows:

Year	(Rs. in million)	
	<i>Estimated proportion of credit sales</i>	<i>Estimated quantum of credit needs</i>
1967-68	65%	2,519
1968-69	68%	3,381
1969-70	70%	4,153

Of the requirements of fertiliser credit at the farmer's level estimated at Rs. 5,200 million, the Committee assumes that, under favourable conditions, cooperative credit of the order of Rs. 2,672 million would be available from the co-operatives for fertiliser, leaving the balance to be met by other agencies. (Paras 12.9 to 12.12).

72. In some of the districts studied, the fertiliser credit requirements in 1970-71 would amount to 10 to 15 times the level of co-operative fertiliser credit provided in 1966-67. (Paras 12.13 to 12.17).

#### **Proposals for fertiliser credit for the farmer (cooperatives)**

73. It is the Committee's opinion that unless radical steps are taken to strengthen and reorganize co-operative credit institutions, they will be unable to dispense adequate fertiliser credit by 1970-71. Immediate measures, therefore, have to be taken to improve (a) the financial position of the co-operatives; (b) their organisational arrangements; and (c) the quality of their operations, *i.e.*, loaning policies, supervision, recovery arrangements, etc. If it is envisaged that the total short-term loan operations of the co-operatives at the primary level would be roughly at least three times the



fertiliser credit needs they are assumed to provide in 1970-71, their financial base should be adequate to sustain loans of the order of Rs. 6,500 million to Rs. 7,000 million, as against approximately Rs. 3,000 million in 1965-66.

74. In respect of areas where H.V.P. has been introduced, the Reserve Bank has generally adopted a liberal scale of loans to the State Governments for making share capital contribution to cooperative credit institutions on their part. In some of the districts where substantial areas are proposed to be covered under the H.V.P., the need for agricultural credit, and more particularly fertiliser credit, will increase several times in the short span of three or four years. It may well happen in some of these cases that if the financial base of the cooperative banks increases at the same rate as during the past two or three years, the quantum of credit they can provide will be far less than the total requirements. The Committee considers that in selected instances, and on the basis of an overall review of the performance of the apex and central banks, the existing norms for making loans to State Governments for share capital contribution can be reasonably relaxed. It recommends that such a review might be made now by the Reserve Bank with reference to the districts in which intensive programmes such as H.V.P. are in progress, and loans to the State Governments for share capital participation stepped up, wherever it is justified. A review of this kind might thereafter be repeated at appropriate intervals. (Paras 13.5 to 13.7).

75. The Committee emphasises the crucial importance of a sufficiently strong capital base at the primary level in the context of the increasing responsibilities entrusted to the agricultural credit societies and recommends that the present norms for State contribution to their share capital should be reviewed from time to time from this point of view. It also recommends that since the State contribution towards share capital at the primary level would be confined to only viable or potentially viable societies, the State Governments should give priority to the re-organisation of primary credit societies into viable and potentially viable units particularly in the programme areas, in order to ensure adequacy of credit support to the agricultural programmes. (Paras 13.8 and 13.9).

76. The Committee considers that to the extent that cooperative credit institutions put themselves in a position to absorb and productively use larger volume of credit facilities from the Reserve Bank of India, it would be in accordance with the sound financial principles observed by the Reserve Bank to sanction larger credit limits to the cooperative central banks. At the same time, where the existing conditions such as non-overdue cover or the norms for fixing credit limits come in the way of the central cooperative

banks making larger use of credit for productive purposes, the possibilities of selective relaxation of these conditions in individual cases or categories of cases should, in the Committee's view, be kept in view, and the norms re-examined with reference to old and well-proven principles as well as the new context of greatly intensified agricultural production. More specifically, the Committee recommends that the Reserve Bank may examine if the condition of non-overdue cover cannot be relaxed, in appropriate circumstances and subject to the necessary safeguards in the H.V.P. and other programme areas, for facilitating the financing of the supply of fertilisers and other inputs. This may well imply that a part of the credit limit from the Reserve Bank—at different points all along the line—will be exclusively allotted for the supply of inputs on credit to the cultivators. The Committee also recommends that, in order to strengthen the resources of the central cooperative banks to absorb the temporary impact of large overdues, particularly in areas susceptible to drought or floods, special medium-term deposits might be provided to the banks by the State Governments with a view to enabling them to absorb overdues. (Paras 13.10 to 13.16).

77. The Committee further recommends that in the special programme areas, on the Reserve Bank being satisfied that the utilisation of its credit facilities for inputs is satisfactory, the existing norms for sanctioning short-term credit limits to the 'A', 'B' and 'C' class central banks may be selectively relaxed, where appropriate, on the assurance that steps have been initiated and will shortly be taken by the central bank concerned for increasing its owned funds through State contribution to share capital. In so doing, due consideration should be given to the progress of agricultural programmes in the area and the need for supporting the programme to the maximum extent possible through cooperative credit. (Para 13.17).

78. As regards arrangements to restore the eligibility of the farmer for fresh credit facilities from the co-operative credit societies where default in repayment of the previous dues has arisen on account of factors beyond his control, the Committee recommends that the relevant arrangements for granting extension or conversion into medium-term loans should be reviewed and improved so that relief in terms of eligibility for fresh finance comes to the cultivator without avoidable delay. More specifically, the Committee recommends that in the H.V.P. and other intensive areas (a) stabilisation facilities should be reviewed so as to make the operation more flexible and quick moving; and (b) in all cases of default by the farmer for reasons beyond his control, it should be permissible for the co-operative bank and the society to provide him with fresh finance when they are convinced that the failure to repay has resulted from reasons beyond his control. Further, pending in-

vestigation with a view to granting extension in draught effected areas, a society may be refinanced even if it has repaid only 20 per cent of its dues. Moreover, the affected members may be given fresh finance provided they have repaid their dues for the previous kharif season, and, in all, have repaid not less than 50 per cent of the outstanding dues. It recommends that, as a rule, defaulting society should be eligible for fresh refinance provided it has repaid at least 50 per cent of its dues and that this principle should be enforced in all the the central banks areas. (Paras 13.18 to 13.24).

79. The Committee considers that certainty of availability of credit is crucial, particularly in H.V.P. areas, where dependence on credit is expected to be extremely high. To facilitate timely availability of credit limits from the Reserve Bank of India to the central banks operating in the H.V.P. and other programme areas, the Committee considers that it is essential that the Reserve Bank should call for advance applications from the Central cooperative banks in respect of their credit requirements for inputs based on the programme for coverage under the H.V.P., as early as January/February (instead of May or June as at present), and advise each central bank its approximate credit eligibility for inputs. In the same way, the central co-operative bank should make advance sanction of credit for fertiliser and other inputs to the societies so as to facilitate supply of fertilisers to the members on credit well before the season. (Paras 13.32 to 13.37)

80. Recognising the problems that would arise in areas where the co-operative distribution system has not adequately developed and distribution is mainly done by private agencies, suitable coordination will have to be effected between cooperative credit institutions and private distribution agencies in order to ensure that advantage is taken of available credit to the fullest extent to promote fertiliser consumption. One way of ensuring this is that the co-operative credit institutions should issue authorisation—in the form of fertiliser cards—on the basis of which the members could obtain supplies from dealers, the payment being made by the bank directly to the dealer. (Para 13.38)

81. To facilitate prompt recovery of loans from the members, the Committee recommends that, in all cases where a farmer gets credit facilities for fertiliser and other inputs, either from the cooperative agencies or other agencies, he should be bound by a legally enforceable agreement to sell his produce through the co-operative marketing society or through agents appointed for the purpose by the Food Corporation of India or the Government, and repay the loan out of the sale proceeds. The Committee also recommends that the co-operative or other credit institutions concerned should be enabled to have

a statutory charge on the crop raised by the borrower with the help of the loan, wherever a provision for the purpose does not already exist. (Paras 13.42 to 13.45).

### **Proposals for fertiliser credit for the farmer (other agencies)**

82. Even if the cooperatives perform as satisfactorily as assumed there would still be a gap—in terms of total fertiliser credit needs,—which should be filled to the extent possible by other institutional agencies; and the size of this gap might be placed at around Rs. 2,500 million. Among the States where the gap is likely to be relatively large are Bihar, Andhra Pradesh, Orissa, Maharashtra, U.P. and Punjab. In view of the urgency of the need for taking measures to supplement the credit available from cooperatives, the Committee recommends that decisions concerning the establishment of Agricultural Credit Corporations in some of the States should be expedited. (Paras 14.1 to 14.3).

83. The Committee considers that the context in which the commercial banks can play an important role is in the case of farmers of large and even medium holdings coming under the H.V. Programme and, in particular, those engaged in growing hybrid seeds whose credit needs for inputs would be much larger than the cooperatives can normally provide. The task of catering to such farmers in the H.V.P. areas and elsewhere should receive the special attention of the small and medium-sized commercial banks operating in those areas as well as those of bigger banks which have an adequate number of branches in the areas concerned. (Paras 14.4 to 14.9).

84. An important way in which the commercial banks can finance the farmers for purchase of inputs is through intermediaries, such as manufacturers of fertilisers or their distributors or processing units. Considering the knowledge which the private wholesalers and their retailers have of their clients, and the wide net-work of distribution agencies which they have already established in some areas and are likely to build up in other areas, the Committee considers that many banks may find it appropriate to make use of these agencies in stepping up credit facilities for fertilisers and other inputs to borrowers. In other words, the retail dealer should himself, wherever necessary and practicable, supply fertilisers on credit as he is already doing in a limited way in certain areas. The Committee underlines that the arrangements for distribution finance recommended by it, including the period of one to four months credit to the retailer as also the guarantee scheme, introduce an important element in the character of operations of distribution agencies. In other words the distributors will be required to ensure proper selection of dealers and also to introduce and enforce measures of control and

supervision over their operations. Only then will they be eligible for liberal financing from the banks coming under the guarantee scheme. On a pragmatic view, therefore, the Committee considers that commercial banks should find it both convenient and practicable in many areas to undertake indirect financing to the farmer through the distribution agencies. (Paras 14.10 to 14.11).

85. So far as State Bank of India and its subsidiaries are concerned, the Committee suggests that they should individually examine the credit needs for inputs in H.V.P. and analogous areas and after ascertaining the extent to which such credit needs are likely to be met by cooperatives, explore the possibilities of granting advances directly to large farmers, seed growers, etc., or indirectly through private distributors in appropriate instances. It also urges the need for expeditious action on the part of the Bank and its subsidiaries in pursuance of the scheme of Rural Pilot Centres which had been formulated in 1964 and received the general approval of the Informal Group of the Reserve Bank of India. (Paras 14.12 to 14.19).

86. In regard to taccavi fertiliser credit, the Committee recommends that necessary steps should be taken by the States to simplify the procedures governing the issue of taccavi insofar as they come in the way of timely availability of credit.

## CHAPTER I

### INTRODUCTION

1.1 The Report of the Committee on Fertilisers (commonly referred to as the Sivaraman Committee), which was published towards the end of 1965, made recommendations both as regards the targets of plant food consumption and the policies required for achieving those targets in the spheres of distribution, marketing, pricing, extension and promotion. The Report also dealt, in broad terms, with the problem of credit and made several useful suggestions. The Board of Directors of the Fertiliser Association of India considered these recommendations as a whole and felt that, in regard to credit, a more detailed survey should be undertaken in order to supplement the valuable work of the Committee. Fertiliser credit is part of general agricultural credit, but in view of its growing proportion in the total volume of such credit and the key role of fertilisers in increasing yield, the Board thought it would be useful to give it separate consideration.

1.2 Accordingly, the Fertiliser Association of India invited Mr. B. Venkatappiah to head a Committee to examine further and make specific proposals in respect of the credit required at all the different stages subsequent to the manufacture of fertilisers, including distribution by the wholesaler and the retailer and purchase by the cultivator in order to ensure, as far as possible, that the arrangements are adequate in regard to :

- 1) the amount of credit available both in the aggregate and at different stages;
- 2) the procedures followed, including the securities demanded by the different agencies of credit; and
- 3) the operation of the system as a whole including the implementation of different parts of the programme by those to whom the responsibility is allocated.

## Composition of the Committee

### 1.3 The Committee consisted of:—

- |   |   |          |
|---|---|----------|
| 1. Mr. B. Venkatappiah  | : | Chairman |
| 2. Mr. M. K. K. Nayar<br>Managing Director<br>Fertilisers and Chemicals,<br>Travancore Ltd., Alwaye | : | Member   |
| 3. Mr. A. D. Mango<br>Managing Director<br>Rallis India Ltd.<br>Bombay                              | : |          |
| 4. Mr. John K. John<br>Joint Managing Director<br>E.I.D. — Parry Ltd.<br>Madras                     | : | ..       |
| 5. Mr. D. R. Morarji<br>Director<br>Dharamsi Morarji<br>Chemical Co. Ltd.<br>Bombay                 | : | ..       |
| 6. Mr. C. M. A. Bathurst<br>Chairman<br>Shaw Wallace & Co. Ltd.<br>Calcutta                         | : | ..       |
| 7. Mr. C. R. Ranganathan<br>Executive Director<br>Fertiliser Association of India<br>New Delhi      | : | ..       |
| 8. Mr. N. C. Mehta<br>Agricultural Consultant<br>The Syndicate Bank<br>Bangalore                    | : | ..       |
| 9. Mr. Myron G. Smith<br>USAID Fertiliser<br>Salesmanship Adviser                                   | : | ..       |

Mr. Myron G. Smith ceased to be a member on his departure from India in June 1966 and his place was taken by Mr. Delbert L. Rucker of

USAID. Mr. N. C. Mehta resigned his membership for personal reasons in August 1967. Mr. Charat Ram, Managing Director, Shriram Fertilisers & Chemicals, and Mr. K. R. Srivatsa, Managing Director, Gujarat State Fertilizers Co., Ltd., participated in the discussions at several meetings of the Committee.

1.4 The Committee first met on 11th March, 1966 and thereafter held 9 meetings, the last being on February 22, 1968. At the first meeting, the Committee decided to request the Ministry of Food, Agriculture, Community Development & Cooperation (Department of Agriculture), to depute Mr. M. Subramanian, IAS, Deputy Secretary, (who had been the Member-Secretary of the Sivaraman Committee), the National Cooperative Development Corporation to depute its Secretary, Mr. S. S. Puri, IAS and the Planning Commission to depute Mr. K. Madhava Das, Director (Co-operation), to assist the Committee as special invitees i.e. to participate in its deliberations without, however, assuming responsibility for the final recommendations. Following the concurrence of their organisations, Mr. S. S. Puri and Mr. M. Subramanian attended the subsequent meetings of the Committee. (Mr. Madhava Das could not attend any of them as he left the Planning Commission shortly thereafter).

1.5 In July 1966, the All India Rural Credit Review Committee was set up by the Governor of the Reserve Bank with Mr. B. Venkatappiah as Chairman. The Committee had comprehensive terms of reference including some which had an intimate bearing on fertiliser credit. At the invitation of the Fertiliser Credit Committee, Mr. C. G. Ramasubhu, Secretary of the Rural Credit Review Committee, participated in the deliberations of the Committee, as one of the special invitees, in order to ensure close coordination between the two Committees.

### **Lines of Enquiry**

1.6 After considering the broad approach to the investigations, the Committee decided at its meeting held in April 1966, that in addition to the overall assessment of the credit needs for fertilisers for the country as a whole, certain selected districts where the High-Yielding Variety Programmes or Intensive Agricultural Programmes were in operation should be the subjects of special study on behalf of the Committee. It was agreed that investigations need not involve detailed statistical work but should broadly bring out both the quantitative and qualitative aspects of the performance of the distribution and credit agencies.



1.7 In order to assist the Committee in its task, the Fertiliser Association obtained on loan from the Reserve Bank of India, the services of Mr. B. Venkata Rao, Assistant Chief Officer in the Agricultural Credit Department of the Bank, to work as its Secretary.

1.8 Subsequently, the Committee selected 13 districts for the special studies mentioned above. These were districts in which the High-Yielding Variety Programme for Paddy, Wheat, and Millets was proposed to be implemented during 1966-67. Intensive Agricultural Programmes had already been in operation in many of them. The following districts were selected :—

### Paddy

State	District/s
Andhra Pradesh	1. West Godavari
Kerala	2. Palghat
Madhya Pradesh	3. Raipur
Madras	4. Thanjavur
Maharashtra	5. Kolaba
Mysore	6. Mandya
Orissa	7. Sambalpur
West Bengal	8. Burdwan & 9. Hooghly

### Wheat

Punjab	10. Ludhiana
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### Wheat and Millets

Rajasthan	11. Sri Ganganagar
Uttar Pradesh	12. Aligarh

### Paddy and Millets

Bihar	13. Muzaffarpur
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1.9 Prior to the field investigations in the selected districts, the manufacturer members of the Committee collected basic information and data regarding the existing arrangements for fertiliser distribution and provision of credit in respect of the districts falling within their jurisdiction, according to a detailed proforma drawn up for the purpose (Appendix No. 1). The information was collected by E.I.D. — Parry Ltd, for

Thanjavur and West Godavari districts; by FACT for Palghat and Mandya districts; by Dharamsi Morarji Chemical Co., Ltd., for Kolaba, Raipur and Sambalpur districts; by Shaw Wallace & Co., Ltd., for Burdwan and Hooghly districts; and by Rallis India, Ltd., for Ludhiana, Aligarh, Sri Ganganagar and Muzaffarpur districts. DCM Chemicals also supplemented the information in respect of a few northern districts. The detailed information so collected from the State Agriculture and Cooperation Departments, Cooperative Central Banks, and cooperative as well as private distribution agencies formed the basis for the detailed investigations which followed. In all but three districts, viz., Sambalpur, Palghat and Hooghly, it was decided that the investigations should be undertaken by the Secretary of the Committee, and in others by the member-manufacturers, i.e. by Dharamsi Morarji Chemical Co., Ltd., (for Sambalpur), FACT (for Palghat) and Shaw Wallace & Co., Ltd. (for Hooghly).

1.10 In advance of the detailed investigations in the selected districts, which commenced in September 1966, questionnaires were issued to all the district level institutions concerned, as also to selected institutions at the wholesale and retail levels, Government Departments and cooperative banks. This was in order to elicit information in sufficient detail for each district in regard to the current arrangements for distribution and credit, including their speed, efficacy and adequacy. The questionnaires are reproduced in Appendices 2 to 5.

1.11 At the same time, questionnaires were issued to the Agriculture & Cooperation Departments of each State (Appendix 6) seeking information for the entire State in regard to Intensive (including High-Yielding Variety) Programmes, and also the phased requirements of fertiliser credit upto 1970-71. The State Cooperative Banks were also addressed (Appendix 7). Information was also collected from the State Cooperative Marketing Societies.

1.12 In each district 4 to 6 cooperative wholesalers, 6 to 12 cooperative retailers and a corresponding number of private wholesalers and retailers, considered to be fairly representative, were selected for furnishing information both in answer to the questionnaires issued and in personal interviews with the Secretary when he visited the district. As far as possible the selection was done in consultation with the district officials of the Agriculture and Cooperation Departments.

1.13 The investigations in the districts were directed mainly to ascertaining (1) the progress of agricultural programmes, the adequacy and

timeliness of fertiliser supplies, the adequacy of the current distribution arrangements and credit facilities and the requirements of fertiliser supplies and credit needs during the next few years (from the officials in charge of agricultural programmes at different levels in the district); (2) the problems in connection with the provision of adequate cooperative credit for fertilisers (from the representatives of cooperative central banks and credit societies); (3) the difficulties in ensuring timely distribution of fertilisers and obtaining adequate distribution credit (from the wholesalers and retailers); and finally (4) the impediments that came in the way of timely and adequate supply of fertiliser and credit (from the point of view of the farmers). Towards this end, meetings were held at the district and block levels with officials of the Agriculture and Cooperation Departments, members of cooperative banks, societies and other institutions, and representatives of wholesalers and retailers, besides different groups of farmers gathered at the institutions visited (Appendices 8 and 9).

1.14 Following the investigations at the district level in each State, the Secretary held preliminary discussions with the Director of Agriculture and his colleagues, the Registrar of Cooperative Societies and his colleagues, the Secretary, Agriculture and Cooperation Departments, and, wherever possible, the Development Commissioner, in order to obtain their views. These discussions helped to throw light on the measures in force or proposals under consideration for improving the distribution arrangements and credit facilities in the context of the High-Yielding Programmes taken up for implementation. Similar discussions were also held on the problems of distribution with the officers of the State Marketing Federations and those of the State Cooperative Banks, as also representatives of private distributors. On the basis of the views and data thus obtained, the Secretary prepared a series of valuable district reports which brought out for each area the specific problems which obtained in the sphere of distribution and credit.

1.15 The field investigations in all the 13 districts were completed by June 1967. In the light of the district reports and other available material, the Chairman, such of the members as could attend, and the Secretary held discussions with the representatives of State Governments in 9 States viz., Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Madras, Maharashtra, Punjab, Uttar Pradesh and West Bengal. The Government representatives included the Secretaries in charge of Agriculture and Cooperation, Secretaries in charge of Finance,

Directors of Agriculture and Registrars of Cooperative Societies. There were also representatives of State Marketing Federations and State Co-operative Banks (Appendix 10). The Committee also met some of the Chief Ministers, Agriculture Ministers, and Ministers in charge of Co-operation in the States (Appendix 11).

1.16 The Committee sent out questionnaires to the State Bank of India and the commercial banks (Appendix 12) and held discussions with the Chairman of the State Bank of India at Bombay and representatives of commercial banks at Hyderabad, Calcutta, Madras, New Delhi and Bombay (Appendix 13). The Committee also met the Chairman and the Managing Director of the Food Corporation of India. In addition, the Committee met some of the manufacturers of fertilisers at Hyderabad, Madras and New Delhi.

1.17 The Chairman kept himself in touch with the Reserve Bank of India in regard to credit arrangements for distribution of fertilisers and related matters.

### **Sources of Data and Information**

1.18 Apart from the data collected and information and views obtained by the Committee from the various distribution agencies and credit institutions, it received on request much statistical information and data from the Ministry of Food, Agriculture, Community Development and Cooperation, (Departments of Aericulture and Cooperation), the Ministry of Petroleum and Chemicals, the Planning Commission, the National Co-operative Development Corporation, the Reserve Bank of India, State Governments, the Fertiliser Association of India, and leading fertiliser manufacturers. We may, in particular, mention here that the Secretariat of the All India Rural Credit Review Committee of the Reserve Bank of India and our Secretariat have worked in close coordination and some of the field investigations as well as many of the discussions of the Committee with State representatives were conducted conjointly. Our Committee has also had the privilege of access to other relevant information collected by or for the Rural Credit Review Committee. We would mention, in particular, the field studies in 8 selected IADP districts which were conducted for the Rural Credit Review Committee by the Rural Economics Division of the Economic Department of the Reserve Bank, and those conducted in the same context for the Directorate of Economics and Statistics, Ministry of Food, Agriculture, Community Development and Cooperation, by different Agro-economic centres as well as the Indian

Institute of Management at Ahmedabad. We have freely drawn on some of the findings of these studies, the detailed results of some of which are yet to be released.

### **General Remarks**

1.19 Though our terms of reference are primarily concerned with credit in its bearing on the distribution and consumption of fertiliser, it is clear that the farmers' need of fertiliser cannot be isolated from his need of other inputs such as seed and pesticide. Nor indeed are his credit needs confined to inputs. While specifically dealing with fertiliser, we have assumed that the totality of credit needs from the point of the farmer will be kept in mind by the authorities concerned in formulating policies. Moreover, in so far as they are concerned with credit for distribution, we would add that our recommendations in respect of fertilisers are generally applicable to pesticides as well.

1.20 When the Committee started asking for data and estimates, it did so with reference to 1970-71 which was the last year of the Fourth Plan as then envisaged. The commencement of the Plan has since been postponed and, to that extent, the year 1970-71 has lost its original significance. The Committee, however, is making recommendations not for the Fourth Five Year Plan as for immediate adoption. For this reason, as well as on practical considerations, the Committee has decided to adhere to 1970-71 as the year to which, for the limited purpose in view, both targets and estimates will be related in this report.

### **Framework of the Report**

1.21 Excluding the summary and including the introductory and concluding sections, this report consists of 15 chapters. Chapter II deals with "demand" and discusses trends in the consumption of fertilisers with particular reference to the Intensive and High-Yielding Variety Programmes as also schemes of multiple cropping and the policy of bringing in an increasingly large area under irrigation.

1.22 Chapter III is concerned with the programmes and priorities in respect of the "supply" of fertilisers. It reviews the trends of the last few years with reference to different types of fertilisers and attempts to project the figures of internal production upto 1970-71. It also makes certain assumptions regarding imports and the "Central Fertiliser Pool". Starting from these figures and assumptions, it then concerns itself with

the pattern of supply (from both indigenous and imported sources) to different States. The implications of this pattern are thereafter discussed with reference to distribution and credit.

1.23 In the next three Chapters (IV to VI) are taken up 13 individual States and with reference to each of them are discussed the arrangements which now obtain for distribution of the fertiliser as also the credit for such distribution. Existing problems are discussed as well as the order of future needs.

1.24 In Chapter VII are indicated the probable needs of distribution credit on the basis of the pattern of distribution likely to emerge by 1970-71. We have indicated in that chapter and elsewhere, and would like to say at the outset very clearly, that the various estimates we have attempted of "Distribution Credit" (and other types of credit, e.g. production credit for farmers) were not designed to achieve any statistical approximation based on independent data, but are intended to bring out the broad magnitudes involved, along with the attendant institutional and other problems. Except where otherwise specified, we have not, for our data, gone beyond the facts and figures set out in published documents including the Report of the Committee on Fertilisers.

1.25 In the next two Chapters (VIII and IX) we set out our proposals in regard to distribution credit in so far as it relates to (a) cooperatives and (b) private agencies. Chapter X contains recommendations for the establishment of a Fertiliser Credit Guarantee Corporation with the object of ensuring more liberal credit for cooperatives as well as private agencies in the context of distribution of fertiliser.

1.26 We discuss in Chapter XI the present arrangements for providing fertiliser credit to the farmers in different States and, more particularly, in the districts studied. This is followed in Chapter XII by a broad estimation of the farmers' credit in respect of fertiliser. The recommendations which we make in the context of these needs are set out in Chapter XIII for cooperatives and in Chapter XIV for other agencies.

1.27 It is not possible to acknowledge our thanks individually to all those who have assisted us at various stages in the investigation of the problems and the preparation of this report. We record in the final section (Chapter XV) our appreciation of the valuable help we have received from some of the many to whom we are thus beholden.

CHAPTER II  
DEMAND FOR FERTILISERS

I. OUTLOOK FOR AGRICULTURAL PROGRAMMES

**Review**

2.1 At the close of 1965-66, the last year of the Third Five-Year Plan, a major problem facing the country was shortage of foodgrains. The year witnessed severe drought conditions, followed by a sharp decline in agricultural production in many parts of the country. The production of foodgrains for the year was estimated at 72.3 million tonnes. As compared with the actual production (88.4 million tonnes) in 1964-65 which was admittedly a good year, this represented a fall of 18.8 per cent. The decline was highest in respect of rice, from 39 million tonnes to 30.6 million tonnes. For wheat it was from 12.3 million tonnes to 10.7 million tonnes, and for other cereals from 25.2 million tonnes to 21 million tonnes. The production of pulses fell from 12.4 million tonnes to 10 million tonnes during the same period.

2.2 It may also be noted that the figure for 1965-66 represents a shortfall of over 21 per cent, in relation to the revised target for that year. Details are furnished in Table 2.1 below.

TABLE 2.1  
**Shortfalls in foodgrain production**

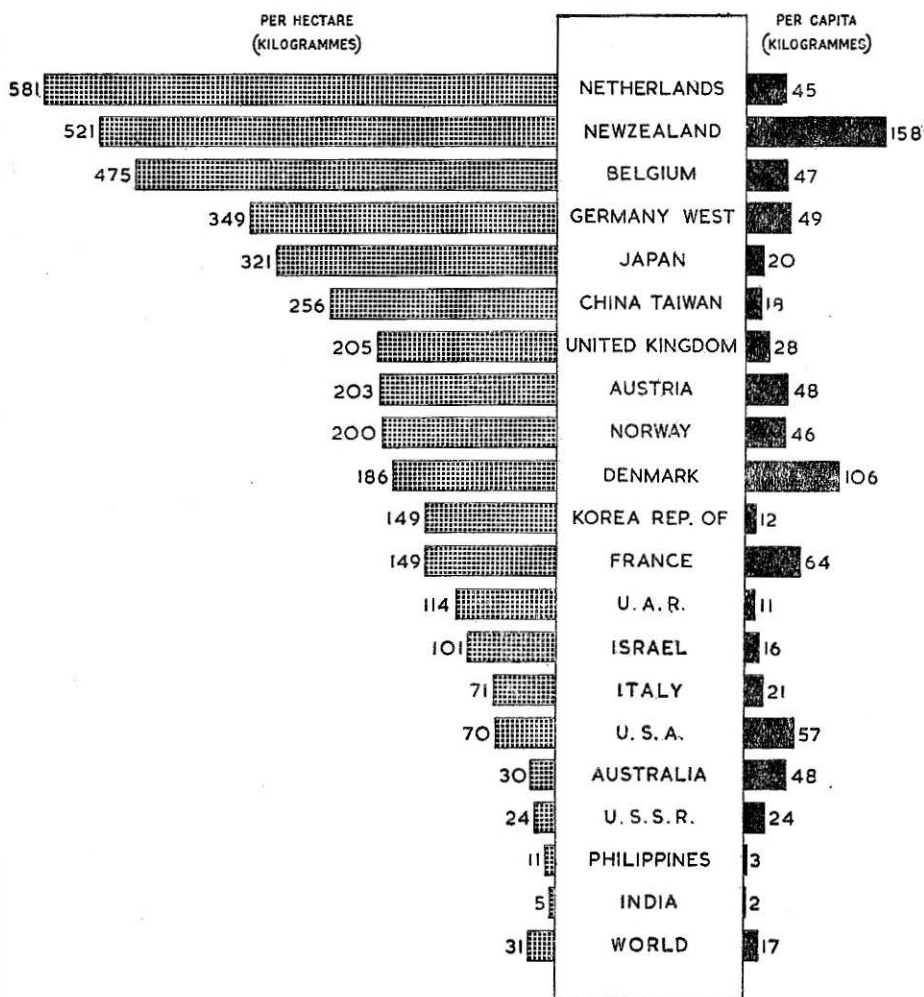
Year	Actual production (Million tonnes)	Trend line production for achieving the targets of production 1965-66		Percentage decrease (—) in column 2	
		101.6 (Million tonnes)*	92.0 (Million tonnes)**	Over Col. 3	Over Col. 4
1	2	3	4	5	6
1961-62	82.71	85.42	83.76	(—) 3.17	(—) 1.25
1962-63	78.45	89.21	85.74	(—) 12.06	(—) 8.50
1963-64	80.24	93.16	87.78	(—) 13.87	(—) 8.59
1964-65	88.40	97.29	89.86	(—) 9.14	(—) 1.62
1965-66	72.30	101.60	92.00	(—) 28.85	(—) 21.42

Source : Report of the Foodgrains Policy Committee, 1967

\*Original target

\*\*Revised target.

# PER HECTARE\* AND PER CAPITA CONSUMPTION OF PLANT NUTRIENTS (1965-66)



\* OF ARABLE LAND

SOURCE: BASED ON F.A.O. YEAR BOOK 1966



2.3 It will be seen that the total production during the Plan period was 402.10 million tonnes, as against a target of 439.14 million tonnes. The actual increase could also be expressed as 2.93 per cent per year as against a targeted increase of 4 per cent per year.\* As a result of the sizeable shortfalls, imports had to be stepped up. They amounted to 10.36 million tonnes of foodgrains in 1966, as against 7.46 million tonnes in 1965. During 1967, they were of the order of 10 to 11 million tonnes. If the 1970-71 target of 120 million tonnes is to be reached, it would involve, according to the Foodgrains Policy Committee, an annual rate of increase of 5.92 per cent from 1965-66.

2.4 The shortfall in production witnessed in 1965-66 was the result of a number of factors, of which the most important was of course drought. Some of these components—e.g., lower consumption of fertiliser and smaller availability of water for irrigation—are themselves wholly or partly relatable to drought conditions. This may be illustrated by shortfalls in some of the individual targets. Thus, as against an area of 12.8 million acres proposed to be brought under major irrigation by 1965-66, the achievement was 5.5 million acres (Statement I). While an area of 203 million acres was to be brought under improved seeds, only 120 million acres were covered. In respect of plant protection the shortfall was somewhat less at 19 per cent in relation to the target. It was more significant in the sphere of fertiliser consumption. As against a target of 1.02 million tonnes of nitrogen to be consumed in 1965-66, the estimated consumption was 0.6 million tonnes representing a shortfall of 41 per cent. For phosphoric acid, the consumption was 0.15 million tonnes, which showed a shortfall of 63 per cent.

2.5 The year 1966-67 was hardly better from the point of view of seasonal conditions. In some areas it was definitely worse. The southern States and parts of Maharashtra and Punjab, had, on the whole, experienced slightly better conditions than in 1965-66. Elsewhere the monsoon was extremely unfavourable and there was acute famine in Bihar and other areas. The provisional estimates for the year put the production of foodgrains at 76 million tonnes.

### Pattern of Area Under Crops and Irrigation

2.6 At the end of the III Plan (1965-66), of the total area under food crops at 275.75 million acres, an area of 85.50 million acres was under

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\*In relation to the original target of 101.6 million tonnes to be reached by 1965-66.

paddy, 31.62 million acres under wheat, 42.08 million acres under jowar and 39.79 million acres under bajra and maize, the remaining acreage being under minor grains and millets. Cash crops accounted for 72.12 million acres.

2.7 The gross irrigated area in 1964-65 was nearly 77.04 million acres of which paddy alone accounted for 33.17 million acres and wheat for 12.00 million acres. The irrigated area under jowar was 1.68 million acres and that under other cereals accounted for 6.28 million acres. Among the others, 5.56 million acres under pulses, 3.11 million acres under cotton received irrigation facilities. By the end of III Plan, the total irrigated area is estimated to have increased to 80 million acres. This is expected to increase further to 100 million acres, by 1970-71.

### Recent Attempts at Increasing Production

2.8 During the past few years, measures to step up agricultural, and more particularly, food production have been deliberately concentrated in the areas with assured irrigation facilities and rainfall. The first major attempt in this direction was the launching of the well-known 'Package Programme' (Intensive Agricultural District Programme) in 15 selected districts in 14 different States during 1960-62. Introduced in 661 villages in an area of 1.4 million acres in seven districts in 1960-61, the programme covered 29,000 villages and 7.3 million acres by 1966-67. The main feature of the programme is the application of improved agricultural practices including improved seed, fertilisers, pesticides, etc., according to soil and crop needs, and popularisation of better implements and simple farm management techniques in the areas most favourable for rapid increase of productivity. Auxiliary to this is the Intensive Agricultural Areas Programme, where a somewhat lower level of application of the package of practices is attempted. In terms of cultivated area, the latter programme covered 32.9 million acres by 1965-66. Thanks to the special measures taken in the districts covered by these programmes, there has been an impressive increase in the consumption of chemical fertilisers over the past few years (Statement II). In Thanjavur, for instance, the consumption of nitrogenous fertilisers increased from 17,500 tonnes in 1960-61 to over 74,000<sup>x</sup> tonnes in 1966-67. In West Godavari it increased from 18,600 tonnes to 47,415<sup>x</sup> tonnes; and in Ludhiana from about 5,000 tonnes to 49,340<sup>x</sup> tonnes, during the same period. By 1970-71 the area under I.A.D.P is proposed to be raised to 8.4 million acres in the selected districts, and that under the I.A.A.P is also expected to increase significantly.

X Figures relate to 1966-67 fully <sup>12</sup>

## New Strategy

2.9 What is referred to as the New Strategy has been made possible, first, by the responsive attitude of the farmers towards the adoption of improved techniques and application of chemical fertilisers, and second, by the availability of high-yielding exotic, hybrid varieties of seeds responsive to intensive application of fertiliser. The new strategy has two main planks: (a) adoption of the package of practices comprising water management, high-yielding variety seeds, fertiliser in sufficient quantities, pesticides and appropriate cultural practices; (this programme is to be extended over an area of 32.5 million acres by 1970-71); and (b) introduction of short-duration crops in major cereals to facilitate the growing of a major second crop in irrigated areas. An area of 30 million acres is proposed to be covered under this programme.

2.10 The High-Yielding Varieties Programme (H.V.P.), so called because it is based on new strains of high-yielding seeds of paddy (e.g. Taichung Native I, Taichung Native 64, Tainan 3, I.R.8, A.D.T. 27, etc.), of Mexican wheat (e.g. Sonara-64, Lerma Rojo) and of maize, jowar and bajra (e.g. Ganga-101, B.H.115, etc.) developed either indigenously or imported, depends for its success on various factors including highly intensive application of fertilisers. For Taichung Native I, and Mexican wheat, for instance, the recommended dose is 40, 25 and 20 kgs. per acre of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O respectively, which is two to three times the dose normally recommended for ordinary paddy or wheat.

2.11 The H.V.P. was introduced in an area of 1.82 million acres under conditions of assured water supply during Kharif 1966. The main crops covered were paddy, maize, bajra and jowar. For Rabi (Summer) Season, the target of coverage was 4.4 million acres. In 1967-68, an area of 15 million acres was proposed to be brought under the programme. Data available from the Ministry of Food & Agriculture show that of the 32.5 million acres to be covered under the H.V.P. by 1970-71, paddy accounts for 12.5 million acres followed by wheat with 8 million acres, and jowar, maize and bajra with 4 million acres each. Some of the major States where H.V.P. is being implemented are, in the order of proposed coverage : Uttar Pradesh (5.45 million acres), Maharashtra (5 million acres), Andhra Pradesh (2.9 million acres), Punjab (2.75 million acres), Bihar (2.45 million acres), West Bengal (2.22 million acres), Madras (2.04 million acres), and Gujarat (1.8 million acres). Statement III gives State-wise and crop-wise targets of coverage).

## **Multiple Cropping**

2.12 Alongside the implementation of the High-Yielding Varieties Programme in the selected areas, the New Strategy, as mentioned earlier, aims at increasing the area under multiple cropping from about 15 per cent of the irrigated area at present to a little more than 30 per cent, or about 30 million acres by 1970-71. The development of local varieties of short-duration, high-yielding seeds and the appreciably shorter period necessary for the growth of the exotic H.V.P. crop as a main crop, have opened up wide possibilities for developing multiple cropping in the areas devoted to H.V.P.

## **Irrigation Facilities**

2.13 Recent official reports have placed great stress on irrigation for intensive cultivation and multiple cropping rather than on irrigation for protection against drought. In tune with this, a more aggressive programme for the exploitation of ground and surface water has been taken on hand. During 1966-67, an additional area of about 3 to 3.5 million acres is stated to have received irrigation facilities under this programme. A similar area is expected to benefit during 1967-68.

2.14 A number of other programmes are being pursued simultaneously so as to increase the benefits derived from irrigation. These include schemes of soil conservation and projects of ayacut development and water management. The cumulative effect of all these measures should be greatly to expand the scope for adopting improved methods of agriculture including the application of chemical fertilisers.

## **Performance During 1966-67 in Regard to Coverage**

2.15 As against a target of 6.4 million acres for H.V.P. during 1966-67, of which 2.65 million acres was for Kharif the achievement during Kharif is estimated to be low at 1.82 million acres in respect of paddy, jowar, bajra and maize.

2.16 Our studies in the districts, supplemented by other data, show that there were wide variations in performance from district to district in 1966-67. In Aligarh, for instance, as against 80,000 acres proposed, the actual coverage was 45,000 acres under all the H.V.P. crops. In Kolaba, as against 60,000 acres proposed for Taichung Native I, the achievement, (i.e. the area for which seed was distributed) was shown at 25,800 acres. In Ludhiana, out of 19,000 acres for hybrid maize only 13,000 acres were covered; and out of 31,000 acres for Mexican wheat only 18,000 acres were covered. In Mandya, 4,625 acres were proposed for Taichung 65,

of which only 1,300 acres were covered. In other districts also, similar shortfalls were noticed. The performance also varied from State to State.

2.17 The reasons for this inadequate and uneven achievement have to be found in a number of factors some of which are local and some common to all areas. For instance, in some districts, (e.g. Kolaba, Sambalpur and Raipur) the preparatory work done before introducing the programme was not wholly adequate. In these and a few other districts it was reported that a sufficient quantity of seed was not available in time. In some districts (e.g. West Godavari) the farmers preferred the local varieties because of the better market which the local paddy commanded. The late arrival of rains, as in Kolaba and Raipur, had also done much damage to the general enthusiasm. Where water-logging was common, it was not sufficiently publicised that the exotic seeds were not suitable. More important, the supply of fertilisers was very much delayed in many of the areas studied, and there was shortage of non-nitrogenous fertilisers. Further, delays in the availability of credit were reported almost uniformly; and the problem acquired new dimensions where the farmers lacked eligibility for credit because of earlier crop failure (e.g. Kolaba, Raipur, Burdwan, Aligarh and Sambalpur). In many parts of the country the programme was taken up, not as had been hoped by a large number of small farmers, but, for only part of their holdings, by a small number of large farmers. It thus lacked, in varying degrees, compactness of approach, concentration of attention and convenience of supervision and administration.

### Coverage Under Intensive Programme

2.18 In relation to the targets for 1966-67 there were varying shortfalls in achievement in all the I.A.D.P. districts studied. Only Ludhiana fulfilled the target. Thanjavur reported a coverage of 1.00 million acres as against 1.3 million acres targeted. In Kolaba, 96,000 acres out of a targeted 0.19 million acres were brought under the programme. In Mandya, the coverage under production plans was 0.26 million acres as against a target of 0.53 million acres. In Aligarh, about two-thirds of the target was achieved in terms of the number of production plans for that district.

2.19 The area covered under the intensive programmes is not, however, the same as the area which received fertiliser application. Here again, the position varied from district to district, as has been brought out by

a recent official document, viz., the Second Report\* (1960-65) of the Expert Committee on Assessment and Evaluation on Intensive Agricultural District Programme. In West Godavari, according to the Report, 55 per cent of the area under first crop paddy and 83 per cent of the area under second crop paddy received fertiliser application in 1963-64. In Ludhiana 81 per cent of the area under wheat was benefited by fertilisers in the same year. In Aligarh, for wheat, it was 35 per cent, in Raipur, for paddy 24 per cent, and in Thanjavur, for paddy, 56 per cent. For the third crop in Thanjavur 60 per cent of the target area was covered under fertiliser application. The application was not necessarily upto the extent of recommended levels in all these cases.

### Performance of H.V.P. During 1967 Kharif

2.20 The provisional crop reports from the various States relating to the performance of the H.V.P. during Kharif 1967, however, speak encouragingly for the future prospects of the H.V.P. The important factor was the much more favourable monsoon of 1967. Besides, in the light of experience gained, better arrangements were made by the authorities for supply of seed, fertilisers, and credit. The incentive of a more favourable price is also said to have stimulated better response from the farmers. Fertiliser supplies were stepped up from 0.6 million tonnes of N in 1965-66 to 0.96 million tonnes in 1966-67. The figure for 1967-68 is put at 1.35 million tonnes of N. Andhra Pradesh which has programmed to bring under the H.V.P. during 1967-68, 1.6 million acres, as against 0.8 million acres in 1966-67, is reported to have shown good results during Kharif 1967. The anticipated production of foodgrains for 1967-68 is 8 to 8.5 million tonnes as against 7.5 million tonnes last year.

2.21 In Maharashtra, an estimated 1 million acres are said to have been covered during Kharif 1967. In Gujarat, which has programmed to bring under the H.V.P. 0.59 million acres, the foodgrain production is tentatively estimated at 2.8 million tonnes for Kharif 1967, as compared with 2.2 million tonnes for Kharif 1966. In Kerala, similarly paddy production is expected to reach 1.3 million tonnes as compared with 0.97 million tonnes last year. In Madras the area under A.D.T. 27, the H.V. seed, during Kharif 1967 increased to 1.20 million acres from 0.23 million acres in 1966-67. The production of foodgrains is expected to reach 7.5 million tonnes for the complete year as against 5.9 million tonnes in 1966-67. For the country as a whole, the current provisional estimates

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\*Published by Ministry of Food and Agriculture, Community Development and Cooperation (Department of Agriculture), 1966.

put the production for 1967-68 at about 95 million tonnes, as against 72 million tonnes for 1956-66.

### Assumption Regarding Fulfilment of Targets for H.V.P. Areas

2.22 With the favourable conditions now created for the extension of the H.V.P., we assume that it would not be difficult for the States to reach the targets fixed for 1970-71 for the H.V.P. and other intensive or special programmes. However, it is necessary that the States should: (a) take adequate preparatory steps before launching the programmes in new areas, (b) extend the area under the H.V.P. in a compact manner so as to permit better arrangements all round, including more efficient administration and supervision, (c) ensure adequate and timely supply of seed, (d) arrange for timely availability of fertilisers of all types in adequate quantities, (e) make proper arrangements for credit, cooperative and other, and (f) provide for more effective co-ordination between the Agriculture Department and the supply agencies and between the supply and the credit agencies.

## II. AGRICULTURAL PROGRAMMES AND DEMAND FOR FERTILISERS

### Trend in Consumption

2.23 The scope for growth of consumption of fertilisers in India is considerable. We may compare the present levels of application in India with those obtaining in agriculturally advanced countries. The application of fertilisers in India per acre of arable land was 2 kgs. in 1965-66 as against 235 kgs. in the Netherlands, 203 kgs. in Belgium, 133 kgs. in West Germany, 123 kgs. in Japan, 96 kgs. in Taiwan and 68 kgs. in the Republic of Korea, to mention only a few instances (Chart I).

2.24 The growth in consumption of fertilisers in the country since the beginning of the II Plan, and during 1966-67 is set out in Table 2.2.

TABLE 2.2

### Growth in consumption of fertilisers

(Figures in 000 metric tonnes of nutrients)

Year		N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
1		2	3	4
1955-56	.. ..	107	13	10
1960-61	.. ..	212	53	29
1965-66	.. ..	582	134	90
1966-67	.. ..	830	275	134

2.25 The increase has been faster during the III Plan, and especially in 1966-67, following the launching of the H.V.P. Thus the annual rate of growth of consumption of N which was 22 per cent for the 5-year period from 1960-61 to 1965-66 steeply rose to 42 per cent between 1965-66 and 1966-67. The corresponding jump for  $P_2O_5$  was from 30 per cent to 105 per cent. The rate of increase in consumption would have been faster, particularly for superphosphate, had it not been for the shortage of supplies.

2.26 Side by side with the overall increase, the proportion of  $P_2O_5$  and  $K_2O$  in relation to N has also improved. Thus while the ratio of  $P_2O_5$  consumed was 1/8 of the N consumed in 1955-56, it improved to 1/4 in 1960-61 and 1/3 in 1966-67.

### Consumption Targets for 1970-71

2.27 The consumption targets for fertiliser nutrients for 1970-71 have been set by the Government at 2.4 million tonnes of N, 1.0 million tonnes of  $P_2O_5$  and 0.7 million tonnes of  $K_2O$ . The year-wise consumption targets are shown in Table 2.3.

TABLE 2.3  
Consumption targets

			(In million tonnes of nutrients)		
Year	..	..	N	$P_2O_5$	$K_2O$
1			2	3	4
1966-67	..	..	1.00	0.37	0.20
1967-68	..	..	1.35	0.50	0.30
1968-69	..	..	1.70	0.65	0.45
1969-70	..	..	2.00	0.80	0.55
1970-71	..	..	2.40	1.00	0.70

(Source : Ministry of Food and Agriculture)

2.28 In relation to the target fixed for consumption for 1970-71 the average annual increase in consumption to be attained during the five years works out to 35 per cent for N and 43 per cent for  $P_2O_5$ . In both cases, it is very much higher than the annual increase registered during the III Plan. As for  $K_2O$ , the annual increase during 1966-67 to 1970-71 will have to be 62 per cent as against 42 per cent during the III Plan period.



2.29 The consumption targets given above have been worked out by the Sivaraman Committee in the light of the estimates made by Dr. Roy L. Donahue and Dr. D. D. Brown and also by a Working Group of the Planning Commission, and after taking into account the requirements of the High-Yielding Varieties Programmes, intensive programmes, and other special programmes for commercial crops. It will be found in fact, if the estimates of requirements worked out separately for individual programmes by States are added up, that the resultant figures are appreciably higher than the consumption targets given above. This is apparently due to the fact that allowance has been made by the Sivaraman Committee for the actual application of fertilisers being somewhat less than the current official recommendations for each crop. On a careful consideration of the various estimates presented to us by the States, we consider that the estimates made by the Sivaraman Committee represent the minimum requirements to be satisfied by 1970-71, if the present agricultural strategy is to succeed.

### The New Orientation in the Fertiliser Consumption

2.30 The consumption targets, worked out substantially on the basis of the requirements of fertilisers for the H.V.P. areas, will appreciably alter the existing consumption pattern, zone-wise\* as well as State-wise, and, at the same time, further intensify a new crop-wise consumption pattern already in evidence in some States.

2.31 It may be mentioned that the requirements for H.V.P. areas alone, worked out at the current doses officially recommended represent 56 per cent of the total nutrient consumption envisaged for 1970-71. To no small extent, therefore, the consumption pattern is related to the H.V.P. area distribution among the different States. Taking H.V.P. alone the north zone becomes the largest consumer of fertilisers by 1970-71 followed, at some distance, by the south, west and east zones, as the figures in Table 2.4 show.

*South Zone	West Zone	North Zone	East Zone
Andhra Pradesh	Gujarat	Haryana	Assam
Kerala	Madhya Pradesh	Punjab	Bihar
Madras	Maharashtra	Rajasthan	Orissa
Mysore	Goa	Uttar Pradesh	West Bengal
Pondicherry	Dadra and Nagar Haveli	Himachal Pradesh	Manipur
		Delhi	Tripura
		Jammu & Kashmir	Andamans and Nagaland.

**TABLE 2.4**  
**Zone-wise consumption targets for H.V.P. 1970-71**

(Nutrients in 000 metric tonnes)

Zone	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
1	2	3	4
North .. .. .	380	240	190
West .. .. .	222	147	111
South .. .. .	251	160	126
East .. .. .	219	136	110
<b>Total:</b> .. .. .	<b>1,072</b>	<b>683</b>	<b>537</b>

It will be seen that the north zone together with the east zone accounts for about 600,000 tonnes of N, as against about 470,000 tonnes of N of the south and west zones. It may be added that in 1966-67, the south zone accounted for more than 44 per cent of the country's consumption of N and 38 per cent of its consumption of P<sub>2</sub>O<sub>5</sub>.

2.32 Data are not readily available for a study of the present crop-wise consumption of fertilisers in different States. But such data\* as we have been able to get for the package districts for 1963-64 go to show that in these districts foodgrain crops accounted for a major part of the consumption of fertilisers. In Thanjavur and Raipur almost 100 per cent of the fertilisers was used for paddy. In West Godavari, 70 per cent of nitrogen and 87 per cent of phosphoric acid were applied for paddy. In Ludhiana also, 75 per cent to 81 per cent of the available supplies were used for food crops, and the balance for cash crops. In Aligarh, 78 per cent of nitrogenous fertilisers and 72 per cent of phosphatic fertilisers were used for food crops and the rest for cash crops.

2.33 It is clear that more concentrated attention will hereafter be paid not only to food crops generally, but, among them, to paddy, wheat, jowar, bajra, and maize, which are being brought under the H.V.P. Of significance is the fact that the H.V.P. requirements of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O work out to 44.7 per cent, 68.3 per cent, and 76.5 per cent respectively of the total minimum consumption requirements for 1970-71 indicated earlier. With the addition of the requirements of I.A.D.P. and I.A.A.P. areas, the proportion of supplies to be used for food crops will be still larger.

\*Second Evaluation Report on Intensive Agricultural District Programme, Ministry of Food, Agriculture, Community Development and Co-operation, (Department of Agriculture), 1966.

2.34 Among the five H.V.P. crops, again, paddy (12.5 million acres) accounts for a major proportion of the consumption needs, which work out to 454,000 tonnes of N (42.3 per cent of H.V.P. needs), 284,000 tonnes of  $P_2O_5$  (41.6 per cent) and 2,27,000 tonnes of  $K_2O$  (42.3 per cent). The areas proposed to be brought under wheat being 8 million acres, the requirements of this crop are correspondingly less. For the other crops, which account for 12 million acres, the consumption requirements are less than for paddy. It is important to remember from the point of view of supply and credit arrangements for fertilisers that, during the next few years, upto 1970-71, fertiliser consumption will be increasingly oriented to food crops, more particularly, paddy and wheat.

### State-wise Consumption Trends

2.35 As a result of the notional fertiliser consumption targets fixed by the Central Agricultural Ministry for each State, on the basis of the H.V.P. and other programmes drawn up, a new element has been introduced in the planning and promotion of fertiliser consumption. Much more than before, the accent now is on promotion of consumption. Circumstances have imparted a new urgency to the promotional efforts. An attempt has been made to ascertain the magnitude of effort needed in each State during the next few years with reference to the notional allocation of supplies among the States in 1970-71 made by the Department of Agriculture, Government of India. As the Table 2.5 shows, (for details see Statement IV) the magnitude of promotional effort needed to reach the proposed consumption levels by 1970-71 differs from State to State. Even so, considerable effort is called for in each and every State if the proposed levels are to be reached.

2.36 It will be seen that in six States, namely, Madras, Mysore, Andhra Pradesh, Punjab, Jammu & Kashmir and West Bengal the present consumption level in respect of N, exceed 30 per cent of the targeted consumption in 1970-71. In four of these and in Gujarat and Madhya Pradesh, the consumption levels of  $P_2O_5$  are significantly higher than in other States because of the promotional work done by the manufacturers. In three States, viz., Bihar, Kerala and Uttar Pradesh, the present consumption levels of N are less than 30, but more than 20 per cent of the level to be reached by 1970-71. In all these, the position of  $P_2O_5$ , and  $K_2O$  is even less satisfactory. In the rest, the consumption levels, for N as well as for  $P_2O_5$  are less than 20 per cent generally, in relation to the targets for 1970-71. In this last category are Bihar, Haryana, Madhya Pradesh, Maharashtra, Orissa and Rajasthan. For some of the States the present

TABLE 2.5

## Present consumption levels in relation to targets for 1970-71

(Figures in thousand tonnes of nutrients)

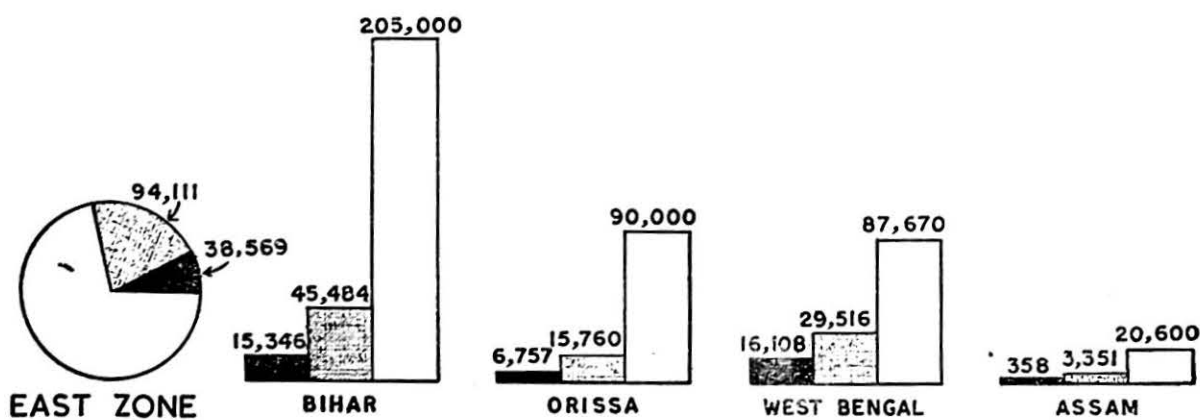
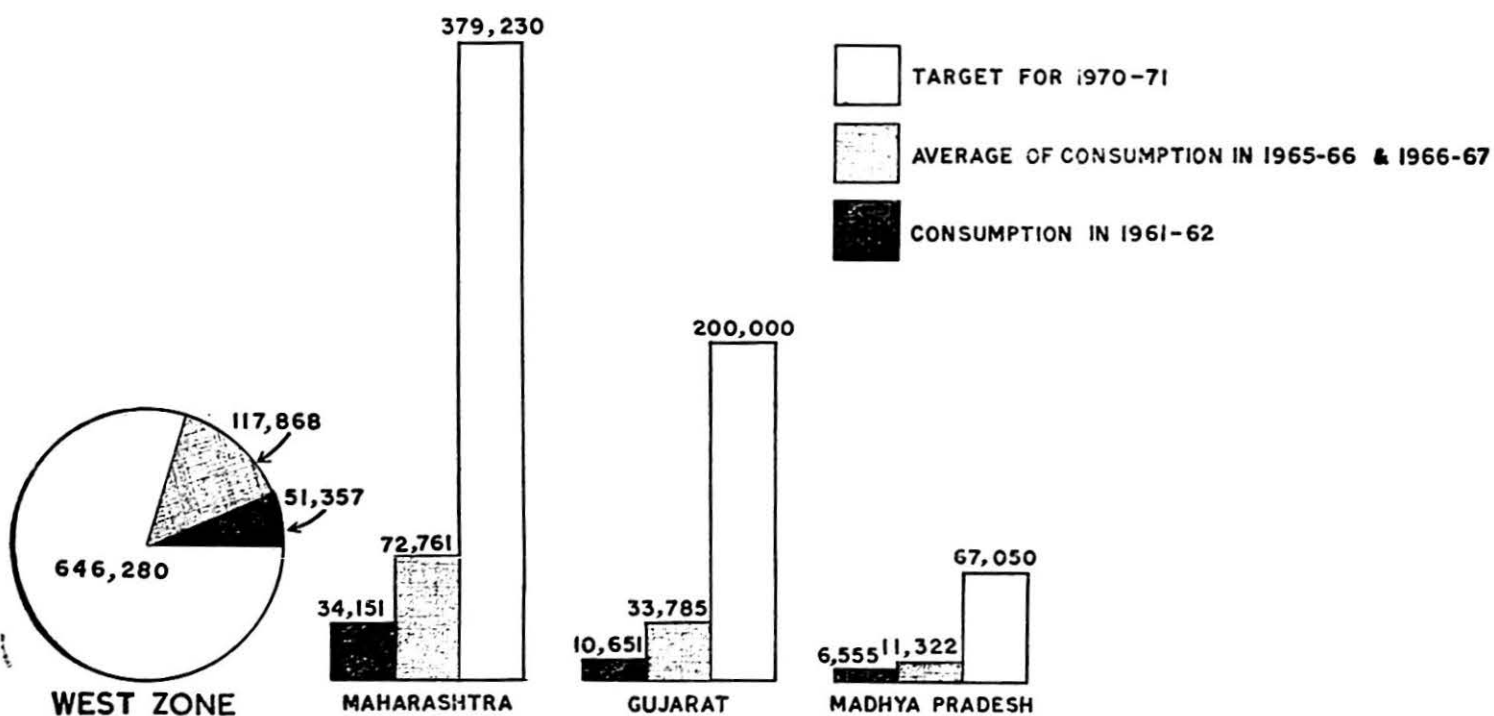
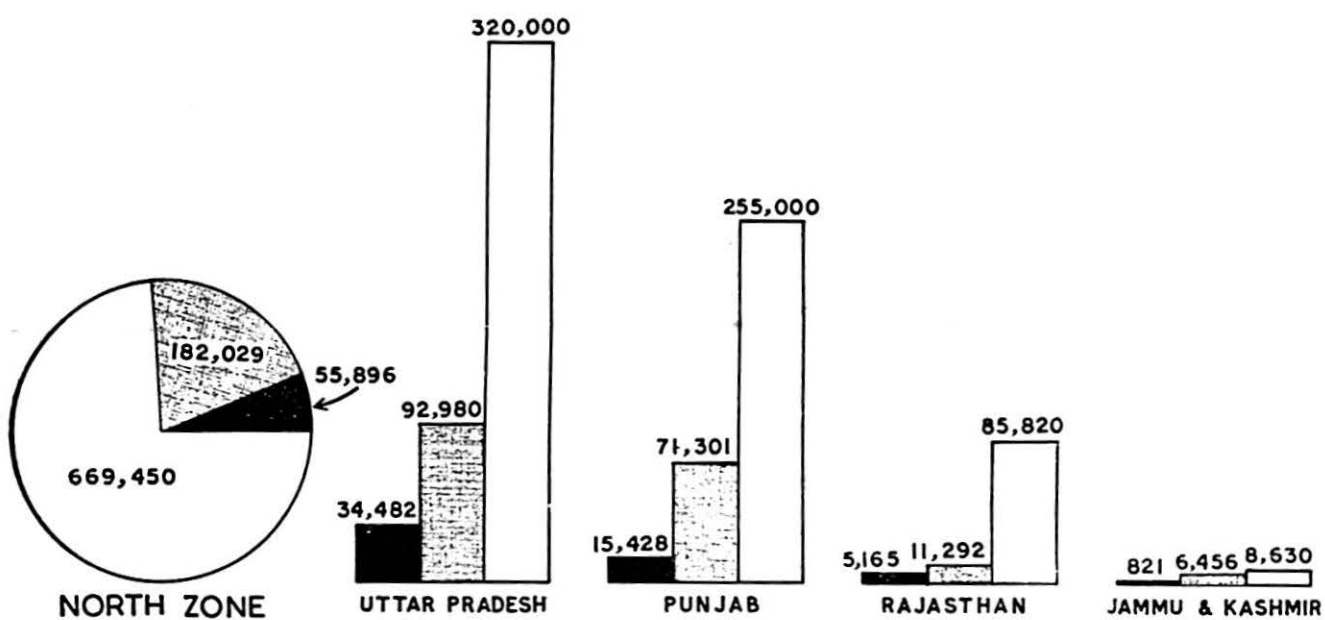
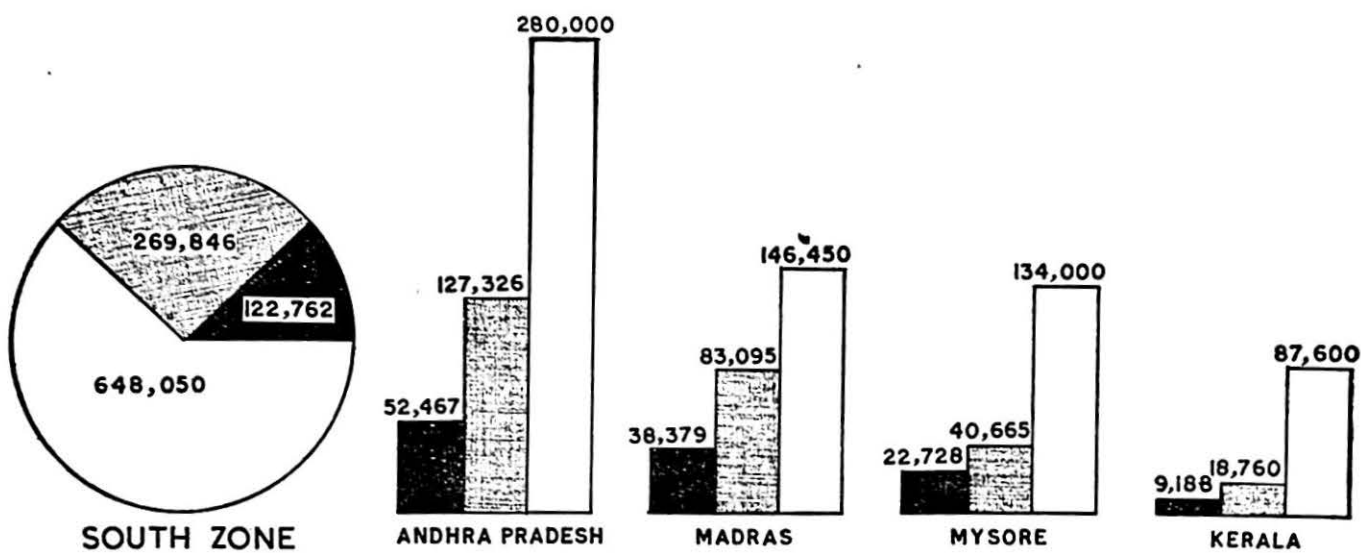
State	Level of consumption to be reached in 1970-71			Present (average for 1965-66 and 1966-67) consumption as percentage of the consumption target to be reached by 70-71		
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
I	2	3	4	5	6	7
<b>North Zone</b>						
Haryana	80	16	15	17.7	6.0	1.2
Jammu & Kashmir	9	2	7	74.8	80.6	20.9
Punjab	175	70	50	32.6	9.7	6.9
Rajasthan	86	24	10	13.2	13.2	9.6
Uttar Pradesh	320	100	50	29.1	19.2	15.6
<b>West Zone</b>						
Gujarat	200	33	6	16.9	59.1	48.3
Madhya Pradesh	67	41	9	16.9	22.1	18.9
Maharashtra	379	187	137	19.2	13.1	11.9
<b>South Zone</b>						
Andhra Pradesh	280	140	76	45.5	23.7	10.7
Kerala	88	50	65	21.4	12.0	31.4
Madras	146	88	91	56.7	30.1	26.0
Mysore	134	91	47	30.3	16.3	22.5
<b>East Zone</b>						
Assam	21	7	20	16.3	34.0	3.6
Bihar	205	94	60	22.2	12.9	3.7
Orissa	90	32	25	17.5	16.8	5.3
West Bengal	88	17	24	33.7	48.2	42.2

Note: Union Territories in respective Zones are excluded

consumption may stand better comparison with the 1970-71 level, if the 1966-67 figures alone are taken into account, and not the average of 1965-66 and 1966-67. On the whole, however, Madras, Andhra Pradesh, West Bengal, Jammu & Kashmir, Mysore and Gujarat in respect of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O and Punjab in respect of N, have reached a fairly high level of consumption, and, while continued promotional efforts are indicated, the accent here would have to be more on ensuring adequacy of supplies and other supporting arrangements like credit. In other States, on the

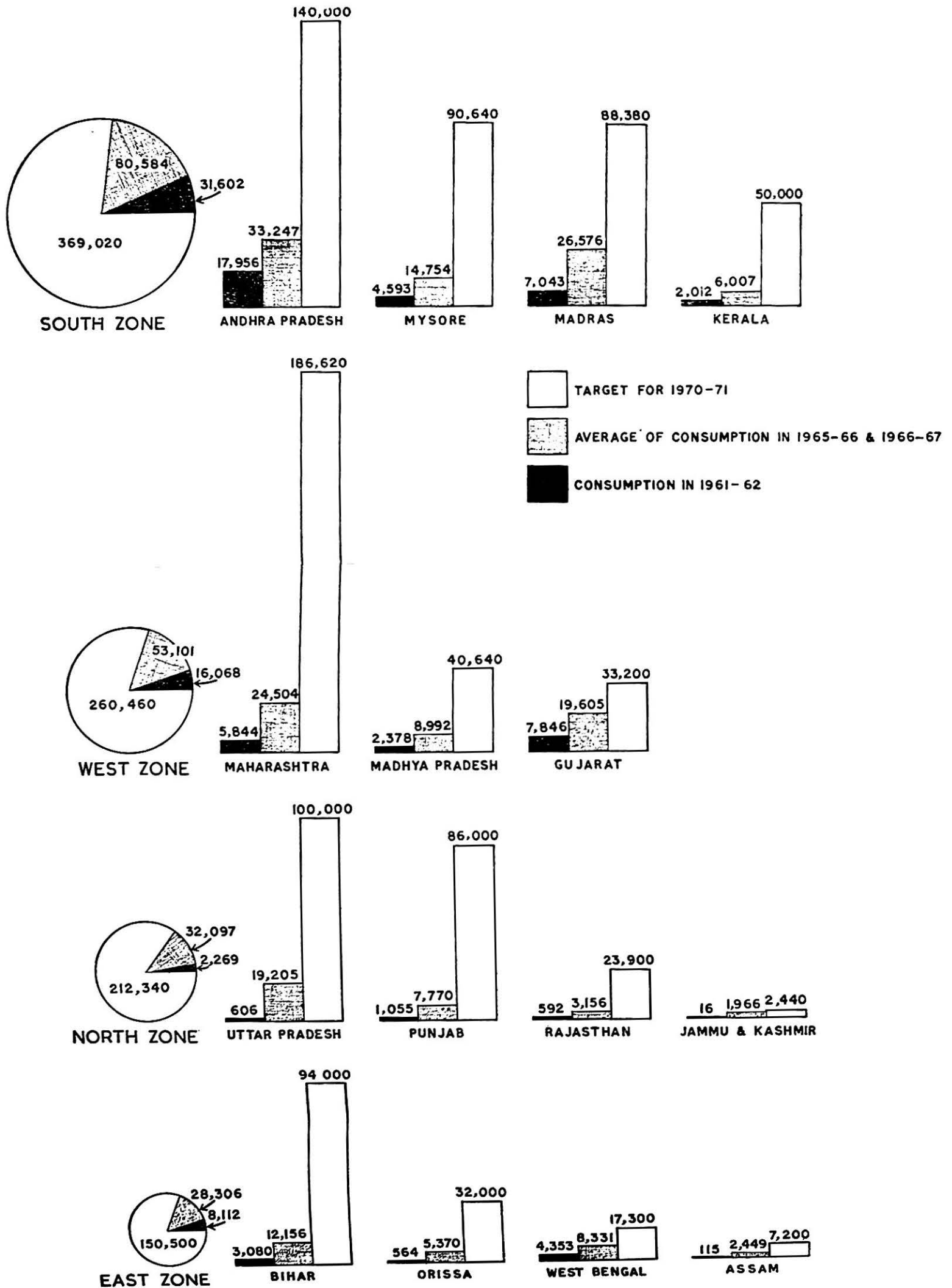
# Zonewise and Statewise Consumption of N during 1961-62, 1965-67 in Relation to Targets of Consumption for 1970-71

(in tonnes)



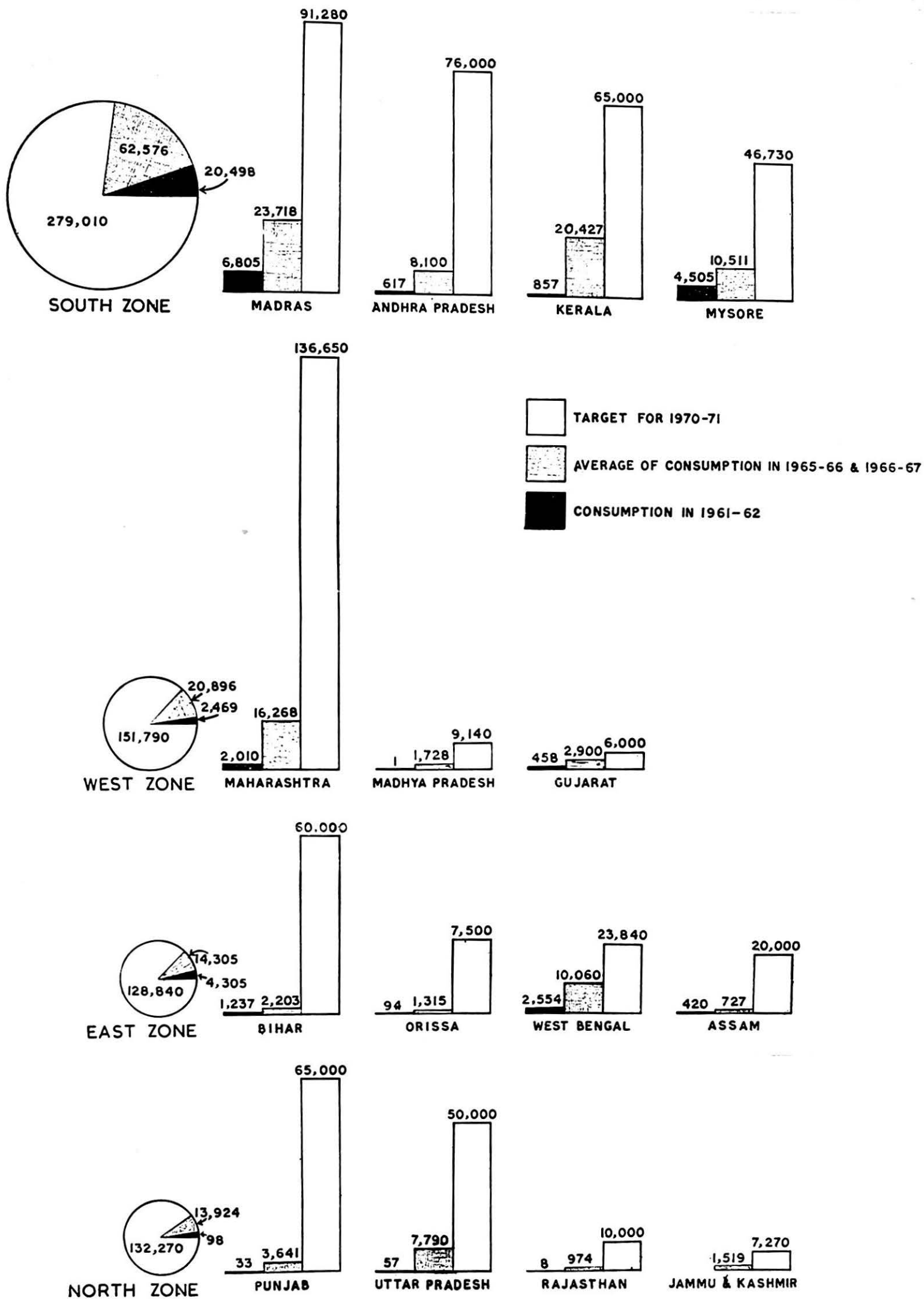
TARGET FOR 1970-71  
 AVERAGE OF CONSUMPTION IN 1965-66 & 1966-67  
 CONSUMPTION IN 1961-62

**Zonewise and Statewise Consumption of  $P_2O_5$  during 1961-62, 1965-67 in Relation to Targets of Consumption for 1970-71**  
(in tonnes)



# Zonewise and Statewise Consumption of K<sub>2</sub>O during 1961-62, 1965-67 in Relation to Targets of Consumption for 1970-71

(in tonnes)



other hand, we consider a very much higher level of allround effort, combined with adequacy of timely supplies and supporting arrangements will be required to reach the targets of consumption contemplated for 1970-71.

### The Effort Needed in the Programme Areas

2.37 As a major part of the supplies intended for each State will be for the intensified special programmes, it is obviously in the areas concerned that vigorous action to increase consumption of fertilisers will have to be concentrated. An examination of the present levels of consumption in some districts in relation to the district-wise consumption targets tentatively worked out for the programme areas (Statement V) shows that, as an index of the effort still to be made, the annual increase in consumption which has to be attained in the next few years, as shown below, is highest in the case of Sambalpur (23 to 25 per cent), Kolaba (23 to 25 per cent) and Raipur (22 to 25 per cent) for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O. In all these cases, the present consumption levels for N (average for 1965-66 and 1966-67) work out to less than 10 per cent of the consumption target for 1970-71. Table 2.6 summarises the position for some of the districts.

TABLE 2.6

#### Present consumption and targets for 1970-71 in selected districts

District	Percentage of present (1965-67) consumption to 1970-71 target level			Annual increase (%) necessary to reach 1970-71 level		
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
1	2	3	4	5	6	7
1. West Godavari	34.5	6.1	0.5	16.4	23.5	24.9
2. Raipur	10.5	8.0	0.4	22.4	23.0	24.9
3. Thanjavur	35.0	21.0	4.7	16.2	19.8	23.8
4. Kolaba	8.6	1.7	—	22.9	24.6	25.0
5. Mandya	90.8	26.6	13.6	2.3	18.4	21.6
6. Sambalpur	6.7	2.6	1.9	23.3	24.4	24.5
7. Ludhiana	68.0	19.7	5.7	8.0	20.1	23.6
8. Aligarh	25.3	4.2	1.3	18.7	24.0	24.7
9. Burdwan	13.9	7.5	4.2	21.5	23.1	24.0
10. Palghat	28.1	13.8	11.5	18.0	21.5	22.1

2.38 It will be seen that in Burdwan, the annual increase to be attained is 21 to 24 per cent for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O and for Palghat and



Aligarh, somewhat less at 18 to 25 per cent. On the other hand, Mandya, Ludhiana, Thanjavur, and West Godavari, have reached relatively high levels of consumption already in respect of N, though in respect of  $P_2O_5$  and  $K_2O$  the gap to be made up is fairly big. Only four districts have shown average consumption during 1965-66 and 1966-67 of more than 10 per cent of the anticipated level for 1970-71 in respect of  $P_2O_5$ . As regards  $K_2O$ , the position is still worse.

### Factors Influencing Application of Fertilisers

2.39 While the present levels of consumption in these districts in relation to the targets are relatively low, the level of application of fertiliser per acre achieved in relation to the currently recommended doses varies in different areas. A number of factors influence the utilisation of fertilisers. Broadly speaking, the most important of the factors are: the price of fertiliser, the net return anticipated as a result of using a particular dose, the assurance of irrigation facilities or rainfall, the adequacy of transport and storage arrangements and timely availability of adequate fertiliser and credit. While the recommended dose for the H.V.P. paddy, wheat and jowar is 40 kgs. N, 25 kgs.  $P_2O_5$  and 20 kgs.  $K_2O$  per acre, (for bajra and maize these are somewhat less), the actual application of fertilisers ranged from 50 to 60 per cent of the prescribed standards in many districts. In some individual cases of progressive farmers adopting the H.V.P. in small areas, it was reported to have reached 100 per cent of the recommended dosage. By and large, however, in view of the relatively high doses recommended under the H.V.P. crops, there was natural reluctance, initially, to undertake a large outlay on fertilisers and other inputs, without being assured of adequate returns. ...

#### Ludhiana

2.40 In some districts, because of the operation of the package programme therein for five or six years in the past and availability of assured irrigation facilities and other supporting arrangements, the actual application of fertilisers in relation to the recommended levels has already reached satisfactory levels. In Ludhiana, for instance, the level of application under the H.V.P. during 1966-67 in relation to the recommended dose has reached around 60-70 per cent on an average, for wheat. The favourable factors in Ludhiana were the fairly satisfactory arrangements for distribution of fertilisers, the ready availability of taccavi as a supplementary source of credit, and the extra yields and monetary return accruing to the farmers. The fact that holdings of less

than 5 acres each account for only 50 per cent of the total holdings and not more, as in some other districts, may be another contributory cause.

### West Godavari

2.41 In West Godavari, another package district which is similar to Ludhiana in some important respects, the levels of consumption per acre had even in 1965-66 exceeded 60 per cent for the first crop and were still higher for the second crop in relation to the recommended doses for the I.A.D.P. For the H.V.P., in 1966-67, the actual application reached 80 to 100 per cent for N, and about 50 per cent each for  $P_2O_5$  and  $K_2O$  in the limited areas where these had been tried. In fact, over the years, the demand for fertilisers for food crops as well as cash crops (sugarcane, chillies and bananas) has been increasingly outstripping the supplies. The adoption of a popular local high-yielding variety of paddy, which brought better return at smaller cost for inputs than Taichung Native I, also helped to boost fertiliser demand. It is significant that the high level of demand has tended to conceal the deficiencies in the distribution arrangements.

### Thanjavur

2.42 In Thanjavur, the average consumption per acre has reached about 65 per cent for N and 40 per cent for  $P_2O_5$  in the intensive programme area and a similar level for H.V.P., in relation to the respective recommended doses during 1966-67 Kharif. With 1.43 million acres out of 1.88 million acres under irrigation, the district is ideally suited for high fertiliser application. The extremely popular high-yielding seed known as A.D.T. 27 has created conditions favourable to the exploitation of this potential. While some of the exotic varieties of the H.V.P. paddy respond well to doses of 40 kgs. of N, and 25 kgs. of  $P_2O_5$  per acre the dose recommended for A.D.T. 27 is 28 kgs. of N and 14 kgs. of  $P_2O_5$  and attaining of which has not been found difficult in an area which is already highly fertiliser-conscious. The emergence of short-duration variety seed in the form of C.O. 25 has also contributed to high consumption of fertiliser. The relatively large quantities of supplies to be handled in the district undoubtedly placed a severe strain even on the fairly well-organised distribution machinery and credit agencies of this district. The resulting financial, physical and procedural bottlenecks would have been even more serious if supply of fertiliser and production of foodgrains had been as large as originally estimated.

## **Aligarh**

2.43 In Aligarh, which is another important package district studied, the level of application per acre under the I.A.D.P. has been relatively low. Though in operation for six years, the package programme in the district has not helped popularisation of fertilisers to the same extent as in some other districts. The consumption expressed as percentage of the quantity required for saturation in terms of the recommended doses for 1964-65, was 24.2 per cent for wheat, 18.5 per cent for sugarcane, 17 per cent for bajra, etc. In the limited area selected for H.V.P. the level of application is reported to be, on an average, 50 to 60 per cent of the recommended dose for H.V.P. Official studies show that the percentages pertaining to the area benefited by nitrogenous fertilisers and the cultivators applying nitrogenous fertilisers increased proportionately with the size of the holding. It was also noticed that for wheat, as distinguished from other crops, these percentages rose even more significantly in proportion to the size of the holding. For instance, for very small cultivators the area benefited was 8 per cent, while it was 42 per cent for large cultivators during the year 1963-64.

2.44 Though about 58 per cent of the area under crops is irrigated, our study has revealed that the inadequacy of the administrative and institutional arrangements for supply, distribution, credit and co-ordination, as also the high price of fertiliser, account for the slow rate of the growth of consumption of fertiliser in this district.

## **Sri Ganganagar**

2.45 In Sri Ganganagar where an appreciable part of the area is irrigated (1.1 million acres out of 2.7 million acres), the level of consumption of fertilisers per acre is substantially higher than in the other districts of Rajasthan. Though this is not a package area, the use of fertiliser has tended to be widespread on account of many factors among which may be mentioned, assured irrigation, economic size of the average holding, progressiveness of the farmers, and reasonably easy availability of credit in the form of taccavi.

## **Other Districts**

2.46 At the other extreme are Raipur, Muzaffarpur, Sambalpur and Kolaba. In Raipur, a package district, the consumption of fertiliser has remained more or less stagnant over the past few years. This may in some

measure be attributed to drought conditions. A large proportion of the farmers, i.e. about 70 per cent, cultivate holdings of less than 2.5 acres each. Cultivators with holdings of more than 2.5 acres and less than 7.5 acres each account for another 22 per cent. On account of the low average holding and high cost of fertilisers, there is considerable dependence on credit for obtaining inputs. At the same time, credit channels have often remained choked on account of heavy overdues. Thus crop failures and indebtedness act as obstacle to wider and larger use of fertiliser. In Muzaffarpur too, drought conditions, lack of irrigation facilities, high cost of fertilisers and inadequate arrangements for distribution and credit have adversely affected the consumption of fertilisers.

2.47 In Sambalpur, which, again, is a package district, the application of fertiliser per acre in package areas would appear to be less than 50 per cent of the recommended doses. For the H.V.P. which was implemented in an area of 15,000 acres, against a target of 40,000 acres, the application is reported to have been about the same, viz., 50 per cent. Out of the total area of about 1.7 million acres under crop only 0.2 million acres are under irrigation. Dependence on rainfall, high cost of fertilisers, large overdues to cooperative credit societies and the related difficulties in obtaining adequate and timely credit are the features which may account for the low level of consumption of fertiliser. There is a general reluctance on the part of the farmers to adopt higher levels of application on account of uncertainties of return. There is also less readiness to take risks because of the smallness of the average holding which is less than 4 acres.

### Conclusion

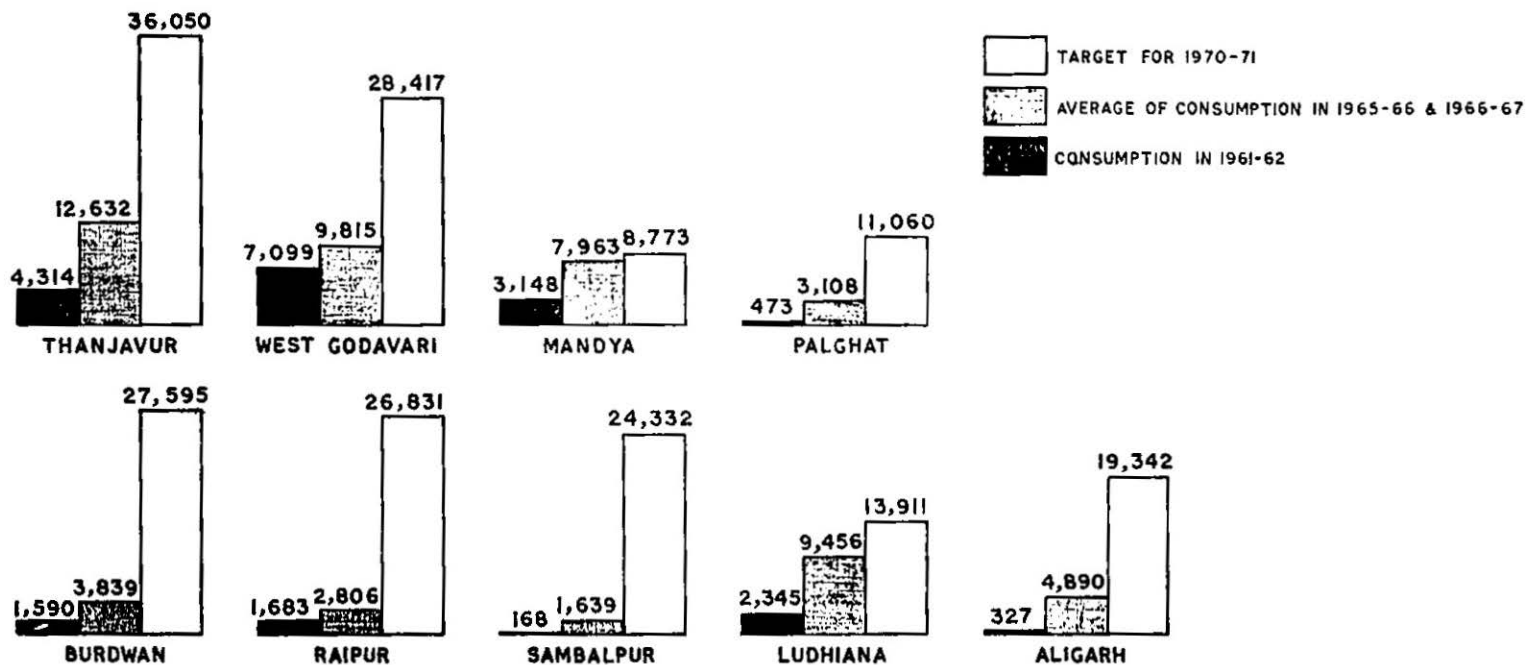
2.48 To sum up, the gap between the present consumption levels of fertiliser and the target for 1970-71 is quite large in many States. Only in a few instances, has the present consumption of N reached 30 to 40 per cent of the level to be attained from now on in less than three years. The gap is still larger for  $P_2O_5$  and  $K_2O$ . These gaps point to the magnitude of the effort needed, as well as to its urgency.

2.49 In the programme areas, to which the intensive supplies of fertiliser are mainly directed, a number of factors are found to influence consumption. While the extent of assured rainfall or irrigation and the nature of crops grown, generally determine the potentialities for consumption in an area, there are a number of other factors which greatly help in exploiting the potential. These include (a) the pattern of distri-

bution of the holdings according to size, (b) the preparatory work done for the introduction of the programmes, (c) the arrangements for timely and adequate supplies, distribution and credit, (d) the cost of inputs, (e) the intensity of promotional work, and the availability of technical advice, (f) the gap between present usage and recommended doses, (g) the expected net return per acre, and (h) the degree of progressiveness of the farmers. All these factors, in varying combinations, have influenced the levels of consumption of fertilisers. It is clear that, given the potential for consumption, an adequate policy framework and the requisite promotional endeavour, it is also of the utmost importance that measures should be taken towards ensuring the adequacy and timeliness of the supply of various inputs, including seed, fertiliser and credit.

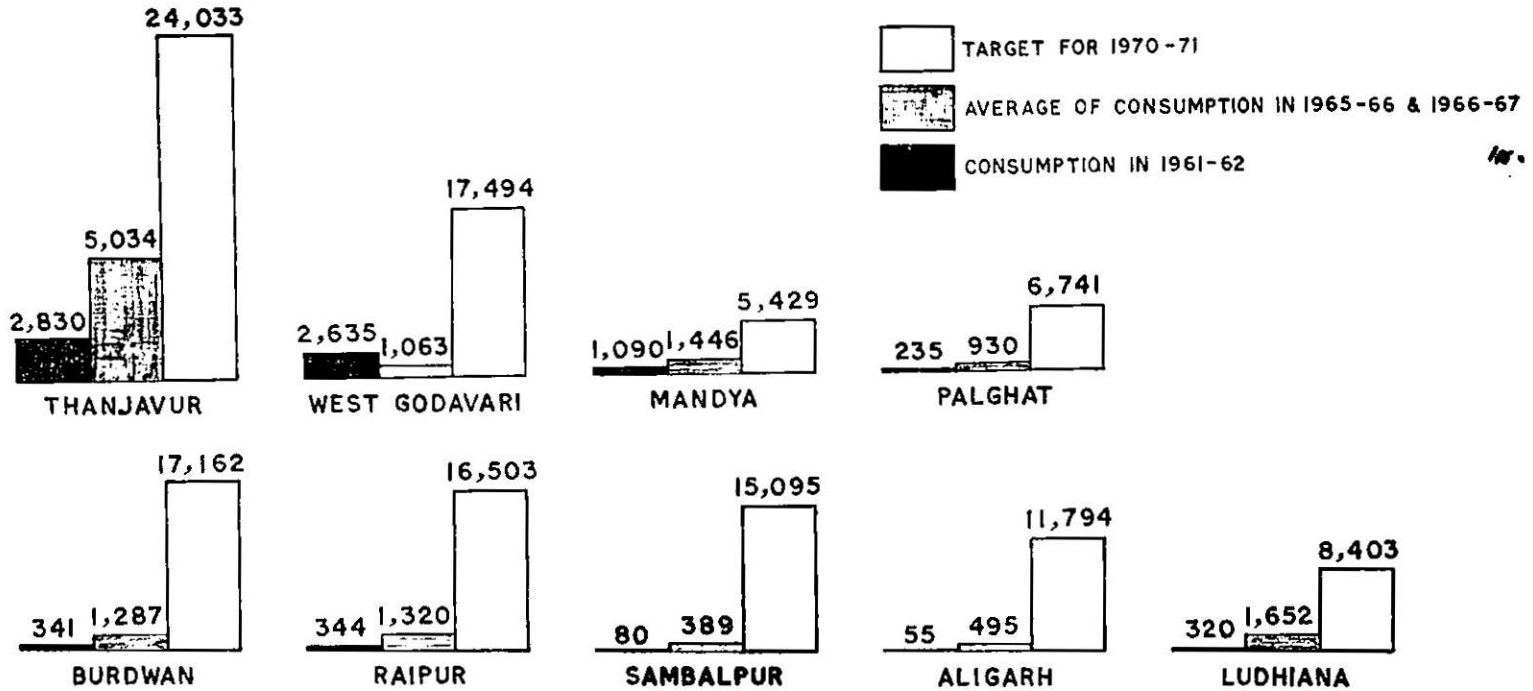
## Consumption of N for Selected Package Districts during 1961-62, 1965-67 in Relation to Targets of Consumption for 1970-71

(in tonnes)



## Consumption of $P_2O_5$ for Selected Package Districts during 1961-62, 1965-67 in Relation to Targets of Consumption for 1970-71

(in tonnes)



CHAPTER III  
SUPPLY OF FERTILISER

Review

3.1 Shortfalls of supplies, and therefore of consumption, relative to targets have been a feature of the fertiliser position during the past few years. Thus, as already noticed, the actual consumption fell short of the targets by 27.1 per cent, 46.4 per cent, and 40 per cent, respectively, for N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O for the III Plan, i.e. at the end of 1965-66. The shortfalls occurred both in indigenous production and imports from abroad. Table 3.1 shows the position of consumption, production and imports from 1961-62 to 1966-67.

TABLE 3.1  
Production, imports and consumption

(In million tonnes)

Year	Target	Consumption	Production	Imports	Total of cols. 3 and 4
..	1	2	3	4	5
N					
1961-62 .. ..	0.400	0.307	0.154	0.138	0.292
1962-63 .. ..	0.525	0.328	0.194	2.285	0.479
1963-64 .. ..	0.650	0.426	0.219	0.223	0.442
1964-65 .. ..	0.800	0.492	0.243	0.235	0.478
1965-66 .. ..	0.800*	0.582	0.238	0.376	0.614
1966-67 .. ..	1.000	0.830	0.309	0.575	0.884
P <sub>2</sub> O <sub>5</sub>					
1961-62 .. ..	0.100	0.640	0.065	—	0.065
1962-63 .. ..	0.150	0.191	0.088	0.010	0.098
1963-64 .. ..	0.225	0.121	0.108	0.011	0.119
1964-65 .. ..	0.300	0.149	0.131	0.012	0.143
1965-66 .. ..	0.250*	0.134	0.119	0.022	0.141
1966-67 .. ..	0.370	0.275	0.146	0.129	0.265

(Continued)



	1	2	3	4	5
	K <sub>2</sub> O				
1961-62 .. ..	0.082	0.030	—	0.028	
1962-63 .. ..	0.100	0.040	—	0.047	
1963-64 .. ..	0.130	0.051	—	0.062	
1964-65 .. ..	0.160	0.075	—	0.060	
1965-66 .. ..	0.150*	0.090	—	0.094	
1966-67 .. ..	0.200	0.134	—	0.143	

\*Revised targets following mid-term appraisal

Source: Report of the Committee on Fertiliser.

3.2 It will be seen that in the case of nitrogen, internal production accounted for about half the consumption during each of the first four years, and very much less than half in 1965-66 and 1966-67. The position was somewhat better for P<sub>2</sub>O<sub>5</sub> while almost the entire requirements of K<sub>2</sub>O were imported. There was a spurt in consumption of both nitrogen and phosphoric acid in 1966-67 as compared with the previous year, mainly on account of the new strategy adopted for stepping up food production. Sizeable shortfalls of supplies were reported from many States. Even so, the increase in consumption of N was 42.5 per cent between 1956-66 and 1966-67 as compared with the annual increase of 22.4 per cent between 1961-62 and 1965-66. The increase in indigenous production, however, was 29.8 per cent during 1966-67, as compared with the annual increase of 20.1 per cent during the III Plan period.

3.3 While during the preceding years the internal production of N had not registered the increase anticipated, the year 1965-66 witnessed an actual decline by 2.1 per cent for N and 9.2 per cent for P<sub>2</sub>O<sub>5</sub>, as compared with 1964-65. This was mainly attributable to difficulties in importing spare parts for machinery, failures in power supply and labour problems. It is worth noting that the creation of additional urea capacities at the Fertilizer Corporation's Trombay Unit, and at Neyveli and the expansion of Fertilisers and Chemicals, Travancore Ltd. (FACT), for the production of ammonium sulphate, ammonium phosphate sulphate, etc., during 1965-66, did not help to make up the substantial shortfall in production.

3.4 As for P<sub>2</sub>O<sub>5</sub> it may be noted that, while consumption of 1965-66 was 10 per cent less than that of 1964-65, the figures for 1966-67 recorded

a 100 per cent jump over the 1965-66 level. The decline in 1965-66 is attributed to lower production of superphosphate and the improvement in 1966-67 to a sharp increase in the import of high analysis complex fertilisers.

### Supply Arrangements upto 1970-71

3.5 We may recall here that the Sivaraman Committee had estimated that, in relation to the minimum requirement of 2.4 million tonnes of nitrogen by 1970-71, the internal production might go up to 1.7 million tonnes, and the balance of 0.7 million tonnes would be imported. As for  $P_2O_5$ , as against the corresponding requirement of 1 million tonnes, the anticipated indigenous production was put at 0.737 million tonnes. The entire requirement of 0.7 million tonnes of  $K_2O$  was expected to be met by imports. Table 3.2 gives the year-wise position of internal production and imports of N,  $P_2O_5$  and  $K_2O$  envisaged by the Committee.

TABLE 3.2

#### Year-wise production and imports upto 1970-71

(In million tonnes)

Year	N			$P_2O_5$			$K_2O$
	Minimum requirements	Indigenous production	Import requirements	Minimum requirements	Indigenous production	Import requirements	Import requirements
1	2	3	4	5	6	7	8
1966-67	1.000	0.400	0.600	0.370	0.238	0.132	0.200
1967-68	1.350	0.525	0.825	0.500	0.269	0.231	0.300
1968-69	1.700	1.100	0.600	0.650	0.506	0.144	0.450
1969-70	2.000	1.400	0.600	0.800	0.629	0.171	0.550
1970-71	2.400	1.700	0.700	1.000	0.737	0.263	0.700

Source : Committee on Fertilisers 1965

3.6 In regard to indigenous production, an important assumption made by the Sivaraman Committee was that production would reach a level of 80 per cent of installed capacity by the end of the III Plan, and that, in addition, 75 per cent of the additional capacity thereafter installed would be utilised for production by 1970-71.

3.7 It is as difficult now as it was then to say whether the assumptions mentioned above concerning internal production are likely to prove correct in 1970-71. So far as 1966-67 is concerned, as indicated earlier, the internal production of N amounted to 0.31 million tonnes as against the original estimate of 0.4 million tonnes, while total consumption amounted to 0.83 million tonnes as against 1 million tonnes targeted. As for  $P_2O_5$  while the minimum consumption needs for 1966-67 were put at 0.37 million tonnes, the actual consumption was 0.275 million tonnes, representing a shortfall of 25.7 per cent. This was mainly due to lower internal production, viz., 0.146 million tonnes, as against a target of 0.238 million tonnes.

### Anticipated Nitrogen Capacity and Production

3.8 We understand that, according to a recent review of the internal production prospects made by the Ministry of Petroleum and Chemicals, the present (1966-67) installed capacity of 0.681 million tonnes of N is expected to jump to 2.164 million tonnes by 1970-71, constituting an increase of 1.483 million tonnes. Of this increase, the plants due to go on stream in 1967-68 at Namrup, Gorakhpur and Visakapatnam, and the expansion of the Ennore Factory, are expected together to account for 0.213 million tonnes. The projects due for completion in 1969-70 at Durgapur, Cochin, Kota and the fourth stage expansion of FACT, together with the expansion of the Gujarat State Fertilizers are estimated to provide a capacity of 0.576 million tonnes. The other firm projects due for completion in 1970-71 including Madras Fertilisers, Namrup Stage II, Barauni and Kanpur factories are expected to give a total capacity of 0.694 million tonnes. Excluded from these estimates is a further capacity of 0.629 million tonnes anticipated to arise around 1970-71 from approved projects of which, however, the prospects are not quite clear from the point of view of a time schedule. These are the Goa Factory, the Mangalore Factory, and a scheme of further expansion at Trombay. Moreover, two other new factories which are expected to be completed by 1970-71 or 1971-72, namely, those at Ghaziabad and Kandla (the place tentatively proposed for a factory in the co-operative sector) with a combined capacity of 0.375 million tonnes are also excluded from the assessment of the capacity likely to materialise by 1970-71. There are indications that two more major projects, one at Mithapur, and the other near Bombay, both in the private sector, with a combined capacity of 0.630 million tonnes may be considered for approval in the near future. It is assumed that, in any case, these will not go into production by 1970-71. A summary of the proposed

installed capacities and the anticipated production upto 1970-71 is furnished in the Table 3.3.

TABLE 3.3

**Anticipated production**

(Position as on 15.10.1967)

(Figures in '000 metric tonnes of nitrogen)

Category	Installed capacity by 1971-72	Estimated production in - year			
		67-68	69-69	69-70	70-71
1. Plants under production and firm projects	2,164	360	650	976	1,569
2. Projects awaiting final clearance	160	—	—	—	54
3. Projects not yet started —Prospects not clear@	469	—	—	—	81
4. Projects under consideration*	375	—	—	—	—
	3,168	360	650	976	1,704

\*Do not include the proposed projects near Bombay and at Mithapur.  
@Haldia excluded.

As against the above-mentioned capacities, the anticipated production is expected to be of the order of 1.704 million tonnes consisting of 1.569 million tonnes of N in respect of plants under production and firm projects and 0.135 million tonnes, in respect of projects awaiting final clearance or those not yet started but likely to produce by 1970-71. The Petroleum and Chemicals Ministry, however, is understood to anticipate a production of only 1.509 million tonnes of N if there is shortage of sulphur.

**Phosphatic Fertiliser Production**

3.9 Table 3.4 summarises the probable year by year position of  $P_2O_5$  upto 1970-71.

**TABLE 3.4**  
**Anticipated production**

Position as on 15.10.1967  
(Figures in '000 metric tonnes of  $P_2O_5$ )

Category	Installed capacity 1971-72	Estimated production in-year			
		67-68	68-69	69-70	70-71
1. Plants under production and firm projects*	550	200	331	381	467
2. Projects awaiting final clearance**	156	—	—	—	78
3. Projects not yet started — Prospects not clear	214	—	—	—	58
4. Direct application of rock phosphate	100	30	50	75	100
	1020	230	381	456	703

\*Includes superphosphate plants, FACT, Trombay, Madras, Ennore, Vizag, Gujarat and Kota (DCM).

\*\*Includes Sindri rationalisation scheme.

3.10 The plants under production and firm projects include the present capacity which amounts to 0.287 million tonnes of  $P_2O_5$  and the expected increase during 1967-68 of the order of 0.132 million tonnes, on account of the triple superphosphate plant of DMC Chemicals, Coromandel, the Kota Factory of DCM, the IV Stage expansion of FACT, the superphosphate plant of the Agro-Industries Corporation of Maharashtra, and Madras Fertilisers. If the Trombay expansion and the Mangalore factory, with a combined installed capacity of 0.214 million tonnes, are also taken into account, the total firm capacity of  $P_2O_5$  will be 0.764 million tonnes. The likelihood of the Sindri rationalisation scheme (which involves the installation of a triple superphosphate plant of the capacity of 0.156 million tonnes of  $P_2O_5$ ) starting production by 1970-71 is also not ruled out if the necessary formalities are cleared expeditiously. Further, these projects will account for a total capacity of 0.920 million tonnes of  $P_2O_5$  to which may be added 100,000 tonnes of  $P_2O_5$  by direct application, making a total of 1.020 million tonnes. This may further increase if the Kandla (Co-operative Sector) and the Mithapur (Tatas) and Bombay (DMC) projects also materialise by then.

3.11 As indicated in the table above, the year-wise production of  $P_2O_5$  is expected to be 0.266 million tonnes in 1967-68 increasing to 0.703 million tonnes in 1970-71, assuming that adequate supplies of sulphur will be available. Of this, the plants under production and firm projects are expected to contribute 0.467 million tonnes, the projects awaiting final clearance are likely to contribute 0.076 million tonnes while some of them not yet started may contribute 0.054 million tonnes. If, however, sulphur is in short supply, the production is likely to be only 0.527 million tonnes by 1970-71.

### Ensuring Adequacy of Supplies

3.12 We recognise that the object of any exercise in this regard is to help plan sufficiently in advance the import programme for the next few years, so as to ensure that the supplies measure upto the proposed targets of consumption. While we do not question the validity of the estimates of internal production or minimise the importance of the steps to be taken to attain the anticipated levels, we consider that the vital agricultural programmes now taken on hand should not be allowed to suffer, as has happened in the past, on account of shortfalls in internal fertiliser production. We consider, therefore, that import programmes should be so drawn up that due allowance is always made for (a) the failure of some factories in the country to reach expected production levels and (b) the emergence of unforeseen circumstances which may delay imports. As a rule, the import programme for a year should allow for higher imports than programmed for that year, at least to the same extent as internal production was lower than anticipated in the previous year. Over and above this, it would be desirable to make allowance for unexpected developments in the international markets.

3.13 At the same time, it would be necessary to take suitable measures on a priority basis to ensure maximum internal production. We understand that the import of spares for machinery has already been placed on the priority list for the purpose of foreign exchange allocation. It is necessary that the import of rock-phosphate and sulphur which are needed for the manufacture of phosphatic fertiliser should be placed on a proper basis. To the extent possible, under the present difficult conditions relating to foreign exchange, we consider it desirable that manufacturers should be given the freedom and the responsibility to make their own arrangements for the importation of these raw materials.

3.14 We assume that, whether through internal production or

imports, the year-wise availability of supplies in the country and the levels worked out by the Sivaraman Committee will, by and large, be sought to be ensured by Government and that the targets aimed at would be those indicated by that Committee, viz., 2.4 million tonnes of N, 1.00 million tonnes of  $P_2O_5$  and 0.7 million tonnes of  $K_2O$  by 1970-71.

### **The Present Supply Pattern**

3.15 An important aspect of the pattern of supplies prior to October 1966 was that the Central Fertiliser Pool accounted for the entire supplies of nitrogenous fertilisers. Set up in 1943-44 in the Ministry of Food and Agriculture as a Government Trading Scheme, the Central Pool had been procuring the entire internal production of nitrogenous fertilisers (excluding complex fertilisers) till 1-10-1966. The object of the arrangement was planned distribution at uniform prices in all parts of the country. The Pool has also been in charge of assessing the import requirements for nitrogenous or complex fertilisers and arranging for their imports and distribution. In pursuance of the recommendations of the Sivaraman Committee, the Central Government\* decided progressively to allow manufacturers freedom to market their products at prices to be fixed by them and correspondingly reduce the procurement from them of fertilisers to be distributed by the Central Pool. This freedom which applied to 30 per cent of production with effect from 1-10-1966, has been raised to cover 50 per cent of internal production with effect from 1.10.1967. It will be further raised to 100 per cent from 1.10.1968, subject to Government's option to take up 30 per cent of the total production in each case at negotiated prices. The concession of free marketing and pricing will be available to factories licenced upto 31 December 1967, for a period of seven years from the date they go into commercial production. It is understood that these concessions are likely to be given in individual cases, on merits, even in respect of factories licenced after December 31, 1967. The Central Pool will continue to handle all the imported fertilisers and such portion of the internal production as might be procured from the factories.

### **The Present Commitments of the Pool**

3.16 Whether the Central Government will exercise the option or not beyond 1.10.1968, and if so to what extent, will depend on various

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\*Circular No. 2-8/66-MPR dated 20th September, 1966 issued by the Ministry of Food and Agriculture, Government of India.

factors, including its ability to satisfy the needs of the States for their special agricultural programmes. For 1966-67, the Centre agreed to meet fully the fertiliser requirements of (a) approved High-Yielding Varieties Programmes, (b) the Intensive Agricultural District Programmes, and (c) Intensive Cultivation Programmes in selected areas for export-oriented commercial crops. Any balance available in the Pool was to be allotted to the States on a pro-rata basis for meeting the requirements of the intensive agricultural area programme and allied schemes.

3.17 For 1967-68, the principles followed for making allocations to the States have remained more or less the same, with the difference that the requirements for I.A.D.P areas are proposed to be met to the same extent as in 1966-67. Besides, the requirements for the multiple cropping areas are to be met in full. The Government has also indicated this year that the States in which fertiliser factories are located should make attempts to meet the requirements of the normal programmes by making direct purchases from the factories out of their 'free sale' part and that allocations from the Central Pool will be made for meeting the requirement, normal as well as special, of States where there are no factories.

### **The Probable Pattern of Future Supplies**

3.18 The future pattern of supplies of fertilisers in the country will be influenced by (a) the composition of the Pool, and (b) the manner in which the production of the factories located in different States is likely to be distributed. We assume on the basis of the recent estimates of production made by the Ministry of Petroleum and Chemicals that the Central Pool will in 1970-71 comprise 0.7 million tonnes of N, 0.3 million tonnes of  $P_2O_5$ . However, if the Centre exercises fully the option to take over 30 per cent of the internal production, it may include 1.2 million tonnes of N and 0.51 million tonnes of  $P_2O_5$ , or 50 per cent of N and about 50 per cent of  $P_2O_5$ . But if, as is likely, the Government only partly exercises its option (say, to the extent of taking over 15 per cent of the internal production by 1970-71) the N and  $P_2O_5$  that will be available from the Pool would be 0.96 million tonnes and 0.40 million tonnes, respectively.

### **Pattern of Distribution From the Factories**

3.19 Certain considerations seem clear in regard to the distribution of fertiliser which is indigenously produced. For example, factories located in a State will, other things being equal, be interested in marketing their



products as near the point of production as possible; in other words, if only for this reason, there is likely to be preference for distribution in the same States or nearby areas of other States. Conversely, States which have factories within their boundaries are likely to increasingly depend on them rather than on the Pool. Certain States, e.g., Andhra Pradesh with reference to Coromandel, Madras with reference to Madras Fertilisers, Kerala with reference to FACT, and Gujarat with reference to the Gujarat State Fertilizers, have definite locational advantages, of which they would understandably avail themselves. The factories, for their part, would of course take into account, normally, the consideration of distance and transport and also other factors such as sales potential, facilities for distribution and availability of credit.

3.20 In the light of these general considerations, including the economics of transport, it is possible to attempt, purely for the purpose of identifying the problems of distribution and credit, a tentative, State-wise, allocation of the anticipated production of the factories by 1970-71. It is broadly assumed that the production of the small factories will be consumed within the State and that of the anticipated production of major factories, only, say, 15 per cent\* may be taken over by the Centre, and the balance will be moved into the same State or other States in the manner already discussed. In the result, the dependence of each State on the manufacturers and the Pool for nitrogen and phosphoric acid, by 1970-71, is likely to be as indicated in the Table 3.5.

3.21 Some points may be noted in relation to individual States, remembering all the time that the figures represent projections which in turn are based, on the one hand, on the best available data but also, on the other, on a series of correlated assumptions concerning past production and distribution. In the allocation thus carried out for the year 1970-71 Andhra Pradesh gets somewhat less than 50 per cent of its supplies from the factories and the balance from the Pool. Bihar obtains slightly more than 50 per cent (111,000 tonnes) from the factories and about 94,000 tonnes from the Pool. Madras and West Bengal are in the

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\*This is based on the expectation that the Centre may exercise its right under the present policy to acquire the full limit of 30% of production in the case of some units while in respect of others it may acquire very much less. On the whole we have assumed that on an average the Centre may not acquire more than 15% of the production of major factories.

TABLE 3.5

## Probable pattern of supplies to States in 1970-71

(Figures in '000 tonnes of nutrients)

State	Consumption target by 1970-71		Probable supplies from the factories*		Probable supplies from the Pool	
	N	P <sub>2</sub> O <sub>5</sub>	N	P <sub>2</sub> O <sub>5</sub>	N	P <sub>2</sub> O <sub>5</sub>
<b>North Zone</b>						
Delhi	6	1	—	8	6	(7)
Haryana	80	16	42	5	38	11
Himachal Pradesh	20	4	7	—	13	4
Jammu & Kashmir	9	2	8	—	1	2
Punjab	175	70	137	26	38	44
Rajasthan	86	24	32	12	54	12
Uttar Pradesh	320	100	225	43	95	57
	<u>636</u>	<u>217</u>	<u>451</u>	<u>94</u>	<u>245</u>	<u>123</u>
<b>West Zone</b>						
Gujarat	200	33	64	18	136	15
Madhya Pradesh	67	41	47	14	20	27
Maharashtra	380	187	178	87	202	100
	<u>647</u>	<u>261</u>	<u>289</u>	<u>119</u>	<u>358</u>	<u>142</u>
<b>South Zone</b>						
Andhra Pradesh	280	140	131	92	149	48
Kerala	88	50	65	20	23	30
Madras	146	88	159	63	(13)	25
Mysore	134	91	87	34	47	57
	<u>648</u>	<u>369</u>	<u>442</u>	<u>209</u>	<u>206</u>	<u>160</u>
<b>East Zone</b>						
Assam	21	7	14	4	7	3
Bihar	205	94	111	38	94	56
Orissa	90	32	39	17	51	15
West Bengal	88	17	89	14	(1)	3
	<u>404</u>	<u>150</u>	<u>253</u>	<u>73</u>	<u>151</u>	<u>77</u>
<b>Total</b>	<b>2,395</b>	<b>997</b>	<b>1,435</b>	<b>495</b>	<b>960</b>	<b>502</b>
<b>All India</b>	<b>2,400</b>	<b>1,000</b>	<b>1,435</b>	<b>495</b>	<b>965</b>	<b>505</b>

Figures rounded off to the nearest thousand.

(Figures in bracket indicate the surplus available of N or P<sub>2</sub>O<sub>5</sub> from factories in relation to targeted consumption).

\*This is based mainly on the studies done by the Joint Technical Group for Transport Planning of the Planning Commission.

position of their entire needs being met from the factories. In Punjab the factories will supply a major share, i.e. 137,000 tonnes, as against 38,000 tonnes from the Pool. For Uttar Pradesh, the factories supply more than two-thirds of the needs by 1970-71. Mysore gets a little less than two-thirds, Madhya Pradesh somewhat more than two-thirds and Kerala slightly less than three-fourths of its supplies from the factories. For Maharashtra the indications are that about 200,000 tonnes of N may come from the Pool and the balance (178,000 tonnes) from the factories. Among States which may depend more or less equally on the Pool and on factories for N are Haryana, Orissa and Rajasthan.

3.22 If the same principles are applied to the anticipated production and distribution of  $P_2O_5$  by 1970-71, it will be seen that the factories satisfy practically the whole demand of West Bengal, and a major or substantial part of it as regards Andhra Pradesh, Madras, Gujarat, Maharashtra, Orissa, Rajasthan, and Uttar Pradesh. The other States depend very largely on Pool supplies.

### Implications of the Emerging Supply Pattern

3.23 One important object of the above exercise is to ascertain the probable pattern of dependence by 1970-71 of each State on the Pool and on the factories respectively. This is relevant for understanding the emerging distribution arrangements and distribution credit needs in each State. One point which emerges is that, in dimension as in direction, the role of the Central Pool will by 1970-71 be vastly different from what it has been so far. In the first place, the distribution of supplies from the Pool cannot possibly be according to the broad formula which at present obtains. This is evident from the fact that the States' requirements of fertilisers for the High-Yielding Varieties Programme alone work out to 1.07 million tonnes of N (44.7 per cent of the total for 1970-71) and 0.68 million tonnes of  $P_2O_5$  (68.3 per cent of the total). If those of the export-oriented crops, multiple cropping schemes, and intensive programmes are added, the total needs would far exceed the supplies which even under the most optimistic assumptions, are likely to be with the Pool.

3.24 Secondly, as the State-wide examination reveals, it is probable that only a few States will continue to depend substantially on the Pool for supplies of N and  $P_2O_5$ . Many States will increasingly depend on the sales made by factories from their own expanding 'free' quota. For example, while Andhra, Maharashtra and Gujarat are likely to draw sub-

stantially from the Pool in addition to supplies from factories located in their own State, Madras and West Bengal are likely to draw little or not at all from the Pool but preponderantly on supplies anticipated from the factories.

### **Co-ordination Between Agricultural Programmes and Distribution**

3.25 This brings us to the question of co-ordination of the different agencies involved in agricultural programming and implementation on the one hand and fertiliser supply and distribution on the other. We may consider this from the point of view of the manufacturers, the Central Pool and the State Governments. As far as manufacturers are concerned, it seems to us inevitable that they should hereafter play a very active part in promoting their sales and, if only for that reason, be involved in distribution to a much greater extent than at present. In such a situation, the States would have to make arrangements for the closest co-ordination between the distributors, on the one hand and the Agriculture Department on the other, for it is the latter that would be in charge of special schemes such as the H.V.P. and multiple cropping, besides the many other programmes of agricultural development.

3.26 Moreover, some measure of advance planning and co-ordination is necessary with reference to those areas where supplies from the Pool have to be supplemented with supplies from the factories, and vice-versa. At the same time, the need would largely disappear for the Centre to meet, as it does at present, the full fertiliser requirements of the special programmes of different States, for the requirements would be met by new factories as they begin production.

### **The Promotional Function**

3.27 The scope for much greater promotional activity than at present, on the part of one or more organisations, existing or new, arises from two types of growing needs, namely, the further popularisation in certain areas of fertilisers already in use and the introduction in one or more areas of fertilisers not so far in use in those areas. Many difficulties that have been experienced in this context have been brought to our notice by officials at the district and State levels, as well as by different institutions. Thus, while calcium ammonium nitrate to which cultivators were used to was in great demand in Sri Ganganagar (and Ludhiana), large quantities of urea for which no promotional work has been done were supplied, but remained unsold for long periods. Similarly, while there

was good demand for ammonium sulphate, difficulty was experienced in selling the large quantities of urea supplied in Muzaffarpur district. In varying degrees this phenomenon was reported in almost all the areas studied, barring high consumption areas like Mandya, West Godavari and Thanjavur. In the non-programme areas where no special efforts are being made to promote consumption, the levels of fertiliser consciousness can be considered to be much lower than in the programme districts. There is undoubtedly much need for continued popularisation of fertilisers even in respect of the varieties in use for some years.

3.28 The other aspect is the emergence of new fertilisers. With the new factories mainly producing urea and complex fertilisers a major change in the pattern of use and availability may be expected. Whereas ammonium sulphate accounted for 40.4 per cent of the total supplies of N in 1963-64 it formed about 29.1 per cent of production in 1966-67. On the other hand the proportion of N produced in the form of urea increased from 3.8 per cent in 1963-64 to 18.7 per cent in 1966-67. Besides, complex fertilisers like ammonium phosphate sulphate, and nitrophosphate, which hardly accounted for 2.2 per cent earlier, i.e. in 1963-64, accounted for more than 8 per cent in 1966-67. The proportion of calcium ammonium nitrate declined from about 46 per cent to about 37 per cent during the same period.

3.29 By 1970-71, ammonium sulphate is likely to account for 8.0 per cent, urea may account for 60.0 per cent, complex fertilisers for 15.2 per cent and calcium ammonium nitrate for 8.7 per cent of the total internal production of N. The products from the new factories, besides being largely of the complex variety, are also of high analysis. It is clear that popularisation of some of the other fertilisers and introduction of new fertilisers will require considerable promotional effort on the part of Governments, firms and institutions, including possibly a Central organisation devoted to promotion. It is also obvious that no promotional endeavour is likely to be successful unless it is based on sound local knowledge and scientific soil analysis and further, is supported by a well trained and efficient extension organisation.

### **Problems of Supplies**

3.30 In all the areas visited by us and in the evidence tendered by the State officials, an important difficulty mentioned was delay in receipt of nitrogenous fertilisers whether from factories or from ports. It was urged that the consumption could be stepped up sizeably if timely sup-

plies could be ensured. In some of the districts studied, a substantial proportion—in some cases upto 50 to 70 per cent of the supplies—were received too late for the Kharif of 1966. A similar position prevailed during the earlier years. The delays have been attributed to (a) arrival of supplies behind schedule at ports, (b) long distances over which the supplies have to be moved by rail or road, (c) difficulties in securing an adequate number of wagons or lorries, (d) problems of transshipment at junctions of two different gauges, and (e) lack of buffer stocks. Some of these issues have engaged the attention of the Joint Technical Group on Transport Planning, constituted by the Planning Commission.

## CHAPTER IV

# DISTRIBUTION ARRANGEMENTS

### Introductory

4.1 In this chapter and the next two we propose to set out in some detail the arrangements for distribution of fertilisers as they obtained in different States during the period of our investigations (1966-67). A mere account of such arrangements brings to light various deficiencies for which remedies have to be found without delay if the supply of the fertilisers is going to be much larger and the distribution much more purposeful as indicated in the previous chapter. A discussion of the problems which thus emerge has to take into account not only the system of distribution which operates in a particular State but also various interrelated features such as sources of supply, transport, storage and credit. Moreover, the policies of the State Government, especially in their bearing on the agencies selected for distribution and the arrangements made for credit, are of great importance. Finally, while considering State-wise data, it is necessary to bear in mind the intimate relationship that must subsist between distribution on the one hand and programmes of production on the other. Nor should it be forgotten that the successful execution of these programmes depends not so much on Government, in the last analysis, as on the cultivators.

### Background

4.2 The arrangements for distribution in the different States as they have evolved over the past two decades are the result of many factors. We may recall that, as far back as 1945, the Bengal Famine Commission emphasised the need for distribution of agricultural inputs through the co-operative agencies. Thereafter, a number of high-level policy committees, as also the Planning Commission recommended that co-operative agencies should be entrusted with distribution of fertilisers and other inputs. One may turn, by way of illustration, to the Second Food-grains Policy Committee (1947), the First Five-Year Plan (1951),

and the Second Five-Year Plan (1956), the report of the Agricultural Administration Committee (1958), the recommendations of the National Development Council (1958) and the report of the Working Group on Co-operative Policy (1959).

4.3 The reasons which weighed with policy makers in choosing co-operatives as the main, though not the sole, agency for the distribution of fertilisers are fairly obvious. It being the object to take fertiliser within easy reach of the farmer a very important consideration was the existence of a widespread instrumentality in the form of primary village co-operatives. The cooperatives were not only large in number but were fitted into an institutional structure at the village, district and State levels, which was guided and controlled by the Co-operative Department of State Governments. There was thus a framework within which the farmer's needs and efforts on the one hand and the Governments objectives on the other could be co-ordinated. This fact was particularly important in a context of relative scarcity of fertiliser when considerable importance had to be attached to equitable distribution of the commodity at reasonable prices. The availability of co-operative credit with which co-operative supplies were to be linked was also intended to be used with advantage both for giving credit in kind, and for promoting sales.

4.4 In addition to the long-standing policy in respect of co-operatives, two factors need specific mention for their influence on the development of distribution arrangements. One is the Central Fertiliser Pool. The other is the 18-month credit facility which, largely in conjunction with the Pool, has till recently been available to the States. Till 1965-66, the entire supplies of nitrogenous fertilisers came from the Pool. In 1966-67 about 92 per cent of such supplies came from the same source. The 18-month credit was a facility initiated under the Grow More Food Scheme for promoting the distribution and use of fertiliser and other inputs. In its application to Pool fertilisers it was in force till as recently as April 1966. It has helped to supplement the State Governments' own resources employed for this purpose. The total amount of credit from the Centre amounted to Rs. 300 million in 1964-65 and to Rs. 400 million in 1965-66. It covered fertiliser, seed and pesticides (Statement VI). Each drawal under this credit was repayable in 18 months, and carried an interest of  $3\frac{1}{2}$  per cent in 1964-65 and  $4\frac{1}{2}$  per cent in 1965-66. The credit provided for fertiliser distribution during 1966-67 amounted to Rs 256.4 million. (This was under the revised policy according to which credit was available for 50 per cent of the value of the consignment,



each drawal being repayable in six months). The credit facilities thus provided have undoubtedly enabled many States to plan and execute relatively large programmes of distribution through a system of supplying fertiliser to cooperative distributors on the basis of consignment. On the whole, co-operatives have till recently not only maintained but increased their share in the total business as the Table 4.1 below shows :

**TABLE 4.1**  
**Fertiliser distribution by cooperatives**

(Rs. in million)			
Co-operative year	Total value of fertilisers sold in the country	Value of fertilisers sold by the co-operatives	Percentage of (3) to (2)
1	2	3	4
1961-62	595.3	322.7	54.2
1962-63	719.5	395.2	55.0
1963-64	835.3	573.0	68.6
1964-65	919.6	728.4	79.2
1965-66	1,115.6	801.1	71.8
1966-67	2,015.1*	1,140.2	56.6

**Source :** National Co-operative Development Corporation.

\*Value calculated according to retail sale prices prevailing during 1966-67, for the quantities of different types of fertilisers distributed as given in the Fertiliser Statistics for 1966-67, of the Fertiliser Association of India.

But it is in terms of the whole country that the co-operatives handled 71.8 per cent of the total supplies during 1965-66. In 1966-67, however, the proportion of supplies handled by them declined to 56.6 per cent as a result of the changes in Government's policy discussed separately. From State to State, however, the position varies very greatly according as co-operatives have been given monopoly for all the fertilisers or for only nitrogenous fertilisers, or have been given no monopoly at all.

4.5 In some States, however, the Agriculture Department had played a major role in the past in the distribution of fertilisers before the co-operative agencies took over. In a few States, e.g., Assam and U.P., the Agriculture Department continues to play a prominent part. In not a few States private agencies had in the past undertaken distribu-

tion in a significant way, (e.g. Maharashtra, Madras, West Bengal and Andhra); and in some of them they continue to play important roles.

### **Main Characteristics of the System**

4.6 Depending on the terms and conditions on which the Government in each State had appointed the co-operatives or private agencies, as the case may be, for the distribution of Pool fertilisers, there were three main systems of distribution in vogue during the period of our investigations. These are: consignment system, consignment-cum-credit system and the deferred payment system.

4.7 Under the consignment system, the State Government retains ownership in the stocks until they are sold by the agencies to whom they are supplied for distribution. No period for the sale of stocks is fixed. The agencies are required to remit the proceeds of sales to the Government within a given period after sale, failing which penal interest is charged. The volume of supplies made is usually unrelated to the financial strength of the agency. Moreover, the distributor does not put any part of his own resources into the business. He gets a prescribed commission on sales. If the sale is unduly delayed the distributor's commission stands reduced on account of interest charges, and, in addition, the balance may be more than wiped out by the additional expenditure on storage. There is no other in-built feature of this system which acts as an incentive for special effort on the part of the distributor to dispose of stocks. Examples of States which come under this system of distribution are Bihar, Madhya Pradesh and Maharashtra.

4.8 In the consignment-cum-credit system, the distribution agencies are required to settle the cost of fertilisers together with interest thereon at the end of a stipulated period, (say, 15 months) during which they are required to pay interest at a given rate. The mode of calculating the value of stocks on which interest is levied varies from State to State. Proceeds of all sales during the period are to be passed on to the Government within a prescribed period after sale, failing which penal interest is charged. Here also, the distribution agency's resources are not involved for the period of credit, and the volume of supplies is usually unrelated to the financial base of the distributors. However, the fact that interest charges are to be paid on stocks unsold and that the entire value is to be settled within a certain time, makes a difference. But the interest charges to be paid are relatively low, and the agencies do not usually feel the urge to make special efforts for promoting and accelerating sales.

In so far, however, as they are unaccustomed to sales effort they drift into heavy losses when the stocks they have undertaken to distribute are unduly heavy. The systems in Andhra and Uttar Pradesh come under this category.

4.9 Under the 'deferred payment' arrangement, on the other hand, the ownership in the stock may, (e.g. W. Bengal and Madras) stand transferred to the distributors, along with the possession, sometimes on payment of a portion of the value and sometimes without. A specified period is allowed for the payment of either the whole amount or the balance, as the case may be, sometimes against a bank's guarantee. Interest, usually at a low rate, is charged for the period of the deferred payment. Whether or not sales take place within the period of deferred payment, the agency or the guaranteeing bank will have to meet the commitments to the suppliers. It follows that where the agency holds large unsold stocks, it may incur heavy losses; in other words, under this system, unless the quantity supplied bears some relationship to what the agency can reasonably sell, it runs into difficulty. The value of supplies made under deferred payment, however, is usually related to the financial base of the agencies.

4.10 As between the wholesaler and the co-operative retailer, the system of cash-and-carry is in vogue in two States, namely Mysore and Kerala. Under this arrangement, the primary agricultural credit societies appointed as the retail distributors are sanctioned credit limits by the co-operative central bank to enable them to undertake cash purchase of fertilisers.

### The Changed Situation

4.11 Some of the extremely valid reasons which in the past led to co-operatives being virtually the sole distributors of fertilisers in many States have now ceased to have the same force or have changed in content. This is so without in any way reducing the opportunities available to co-operatives or minimising their importance as the agency most closely associated with the cultivator. A development of great significance is the emergence from a situation of relative scarcity of fertiliser to one of very large increase in supplies during the next few years. A second factor of importance is the Government's decision, partly in recognition of the need for more aggressive salesmanship, to give increasing freedom to the manufacturers to make their own arrangements for the distribution of their products. Thirdly, along with the

anticipated increase in indigenous production, enlarged freedom of sale, and the diminishing share of imports in the total supply, there has already set in a progressive change in the predominant position of the Central Fertiliser Pool. In other words, both at the Centre and in the States, Governments as such will play a diminishing role as channels of supply of fertiliser and to that extent, subject of course to over-all State control, the agencies of distribution will be increasingly linked to the sources of supply rather than to the departments of Government. A fourth factor to be taken into account is the transition that is taking place in the sphere of credit. In the light of the increasingly large quantities of fertilisers to be marketed, Government finance will clearly no longer be adequate to support the range of credit transactions from manufacturer and wholesaler to retailer and farmer. This is so whether Government finance takes the shape of consignment credit from the Centre or of provision for marketing and other finance in the State budgets. The transition which is taking place is, in the direction of much greater dependence on banks and other organisations of institutional credit. The shift to institutional finance will have wide repercussions on the present arrangements. For, much more than has been the case hitherto, the credit for supplies made available to the agencies of distribution will be based on their financial strength and the efficiency of their operations. This is a consideration which will present both an opportunity and a challenge to all distributors including co-operatives.

4.12 In the rest of this chapter and the two chapters which follow, we shall discuss with reference to some of the States the arrangements for distribution and credit as they obtained during the period of our investigations, and the problems which emerge from the working of those arrangements.

## 1. ANDHRA PRADESH

### Introductory

4.13 With the average fertiliser application per acre of cropped area reaching a level of 6.95 kgs. the consumption in Andhra Pradesh is much higher than the all-India average. In 1966-67, it was 5.58 kgs. of N, 1.14 kgs. of  $P_2O_5$  and 0.33 kgs. of  $P_5O_5$  as compared with the all-India average of 2.14 kgs., 0.68 kgs. and 0.34 kgs., respectively. The total quantity consumed in the year at 0.176 million tonnes of N, 0.036 million tonnes of  $P_2O_5$  and 0.011 million tonnes of  $K_2O$  works out to 62.8 per cent,

25.6 per cent, and 13.9 per cent, respectively, of the provisional consumption targets\* indicated by the Ministry of Agriculture.

### Supplies

4.14 The State receives nitrogenous fertilisers from the Central Pool, the value\* of these during 1965-66 and 1966-67 being Rs. 116.9 million and Rs. 263.5 million respectively. The manufacturers themselves supplied nitrogenous fertilisers worth Rs. 6.2 million in 1966-67. They also supply through their distribution agencies, as well as co-operatives, ammonium phosphate and certain other non-nitrogenous fertilisers. The value of these amounted, during the two years, to Rs. 43.2 million and Rs. 61 million respectively.

4.15 For some years now, the distribution of nitrogenous fertilisers in the State has been effected through the agency of district co-operative marketing societies at the wholesale level. They distributed, in 1966-67, 93 per cent of such fertilisers, the balance having been supplied by the State Agriculture Department for certain special programmes (e.g. Intensive Manuring Scheme).

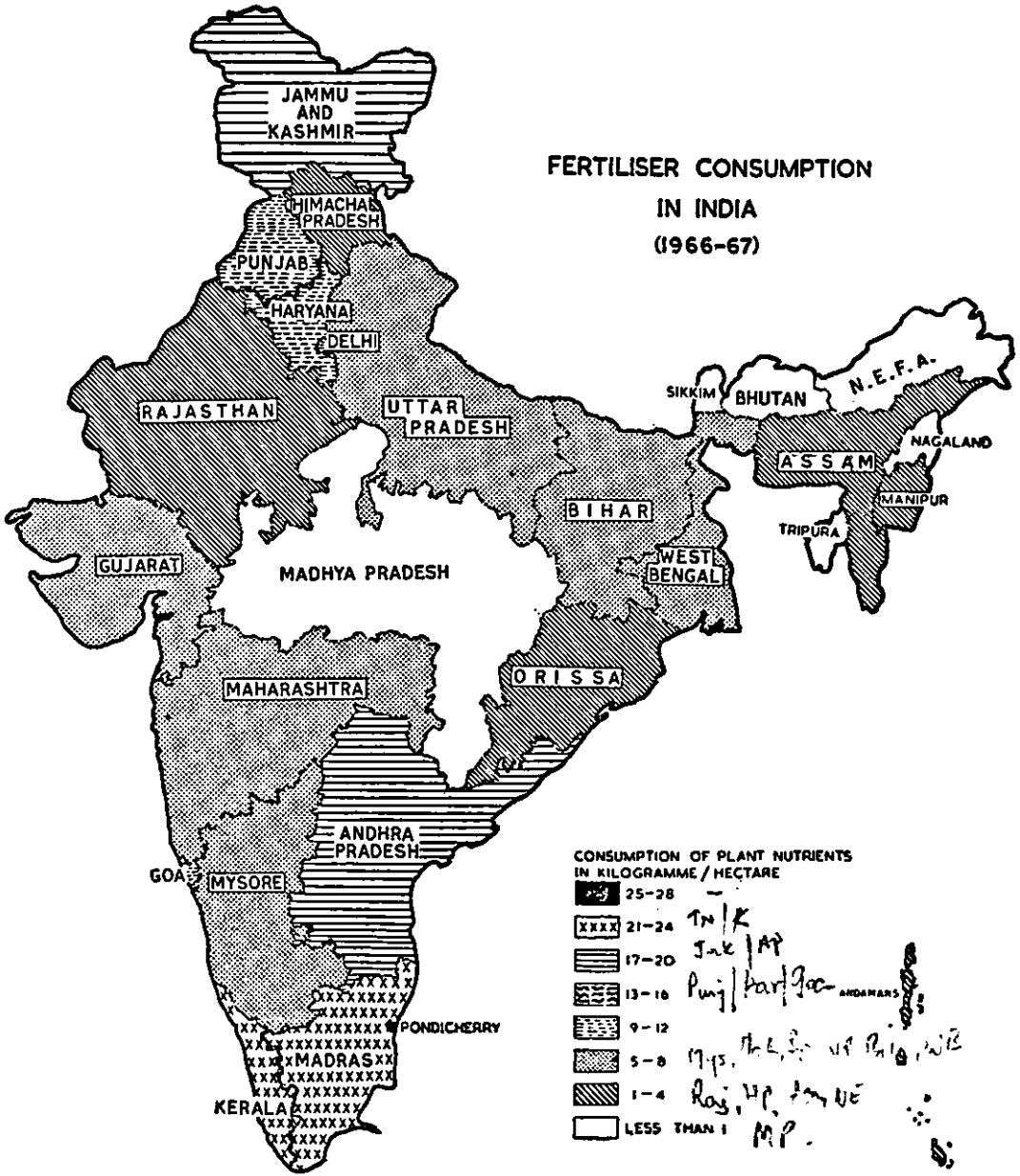
4.16 At the time of our investigations, the procedure in vogue was that on receipt of advice from the Centre, the Director of Agriculture made the allocation of nitrogenous fertilisers to the manure mixing firms and bulk consumers like sugar factories upto a maximum of 30 per cent of the total supplies which were to be lifted against cash payment. The balance was allocated district-wise to the district cooperative marketing societies. At the district level, the Collector in consultation with the Chairman of the Zila Parishad made the block-wise and society-wise allocations for each season and crop, according to the acreages. The distribution to the cultivator was made on the strength of permits issued by the village level workers on a pro-rata basis according to the acreage under each crop of the applicants. For farmers coming under the High-Yielding Varieties Programme, the Extension Officers issued permits, and for others the panchayat samitis issued permits. Following the release for free sale upto 30 per cent of the internal production of nitrogenous fertilisers, 70 per cent of the allotments to the State by the Centre are distributed through the co-operative agencies, and the balance through

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\*In all cases, this corresponds to the State-wise notional allocation referred to in para 2.35.

@ Values are calculated on the basis of Pool supplies, and the prices in force during 1965-66 and 1966-67, as the case may be. Source: Fertiliser Statistics—1965-66 & 1966-67.

## FERTILISER CONSUMPTION IN INDIA (1966-67)



## Co-operative—Distribution Set-up

4.17 The cooperative distribution system in the State consists of 20 district marketing societies (district whole-salers) and 4,110 cooperative retail agencies which are mainly agricultural credit societies but include some primary marketing and large-sized credit societies. No financial criteria seem to have been laid down for the selection of the wholesalers. However, for selecting a cooperative as a retailer, its record of management and working should be satisfactory (e.g. it should have worked on profit for two or three years prior to the selection, and should have loan transactions of at least Rs 20,000).

### Terms and Conditions

4.18 Till 1962, the district wholesalers received supplies of Pool fertilisers against cash payment, the resources for which were provided by the cooperative central banks. However, this arrangement was given up in favour of the consignment-cum-credit system when the volume of supplies to be handled far exceeded the ability of the district agencies to raise resources, or of the banks to provide credit. The terms of this arrangement which had been in force till the middle of 1966 included the following: (a) the district society would get supplies on 15 months' credit from the Government, at the end of which it had to settle the value together with interest, (b) the society would have to pay interest at 3½ per cent per annum on the value of supplies until sales were effected. The rate was raised by ½ per cent above that charged by the Centre on its loans, with effect from November, 1965, (c) sale proceeds would have to be remitted within 15 days of sale, failing which a penal interest of 7½ per cent (later raised) to 8 per cent) would be charged. Following the introduction of the new pattern of granting short-term loans by the Central Government to the State Governments in 1966-67, for the procurement and distribution of inputs, the State Government reviewed the procedure and imposed revised terms and conditions. As a result, the District Cooperative Marketing Societies now receive supplies on consignment-cum-credit basis for 4 months from the date of taking delivery of stocks (instead of 15 months allowed to them earlier); and all supplies to the sugar factories for their home farms and for distribution to cane-growers are made on cash-and-carry basis. As in the past,

## **Distribution Margin**

4.19 Under the arrangements in force during 1966-67, out of the total distribution margin varying from Rs 50 to Rs 70 per tonne on different nitrogenous fertilisers, it has been provided (a) that the State Government retains Rs 2.20 to Rs 4.60 per tonne towards administrative charges, on different types of fertilisers and Risk Cover Fund, (b) the district wholesaler gets Rs 35 to Rs 53.80 per tonne, and (c) the retailer gets a gross Rs 11.80 and a net Rs 9.00 per tonne, (prior to 1.2.1966, when the rates were revised, the retailer was given only Rs 3 per tonne). The district wholesaler is required to provide for transport upto the retail point, as well as for loading, unloading, storage, interest, etc.

### **Resources Provided by the State Government**

4.20 The State Government has been depending to a large extent on the credit facilities provided by the Centre in respect of Pool fertilisers. As against fertilisers valued at nearly Rs. 90 million the State received in 1965-66 credit facilities to the extent of Rs. 51.25 million each drawal being repayable in 18 months and carrying an interest of 4½ per cent per annum. For 1966-67, the State raised credit of Rs 69.16 million at 4 per cent each drawal being repayable in 6 months, as against the total supplies valued at Rs 223.52 million. It has employed its own resources to the extent of Rs 208.4 million during 1966-67, as against Rs 137.5 million during 1965-66.

4.21 We have been informed that the curtailment of credit from the Centre has placed the State in a difficult position in regard to payment for the Pool fertilisers. The locking up of large funds for long periods also presents difficulties. The crop pattern in the State requires that supplies of fertiliser stocks are built up for more than three-fifths of the total demand for 6 to 8 months and the balance for 3 to 4 months.

### **Resources Position of the Cooperatives**

4.22 We have noted that the co-operatives themselves are not in a position to raise adequate resources for handling fertiliser business on their own. Their total owned funds on 30 June 1966 amounted to about Rs 8.6 million. A large part of these stands committed to other activities.



The Reserve Bank of India sanctioned a credit limit of Rs 50 million for 1967 to finance the distribution of fertiliser by cooperatives in the State. Nevertheless the cooperatives availed themselves of only part of the sanctioned amount as they were unable to mobilise adequate resources of their own as margin money. There were also operational and procedural deficiencies which prevented their making full use of the credit limit. If the cooperatives in the State are to handle the entire nitrogenous supplies indicated as available by 1970-71 they would need distribution finance of Rs 220 million, besides margin money of nearly Rs 25 million.

### **Other Problems of Distribution**

4.23 The main difficulties in the distribution arrangements as placed before us stem from deficiencies in organisation, inefficiency in operation and procedural delays. These, in the past, have tended to impede the rapid movement and sales of stocks. Starting with late receipt of supplies in the district, they include delays in moving stocks to the retailers, followed by further delays in disposal of stocks. Delays also occur in the recovery of sale proceeds from the agencies or from the banks. As a result, it has often happened that the district agencies have failed to pay the value of stocks even within the period of 15 months allowed. Under the consignment-cum-credit arrangement, some agencies (e.g. West Godavari district society) are reported to have run into heavy losses on account of 'unsold' stocks arising from excess stocks indented by Agriculture Department. The officials and agencies have expressed apprehension regarding the much greater difficulties involved in switching over to a 6 month credit. They pointed out that bank finance would be costlier than the present arrangements under the consignment-cum-credit arrangement. Further, an important condition of bank finance is that the borrowings are to be adequately covered by the value of stocks held by all the agencies at 4,110 centres. This in turn involves the submission of monthly returns for which the agencies are obviously ill-equipped.

### **Problems in West Godavari District—Organisation**

4.24 These issues have been studied by us with reference to West Godavari, which is a 'package district'. The wholesaler for purpose of distribution of fertiliser is the district marketing society. There are 275 co-operative retail agencies covering about 900 villages and consisting of : 188 primary credit societies, 10 primary marketing societies, 61 large-seized societies and 16 rural banks. The appointment of these agencies is made on the basis of financial soundness. One result is that not all

the retail points are evenly distributed and some villages are at a long distance from their retail depots.

4.25 Since many of the primary societies have no wholetime paid employees, the wholesaler, viz., the district marketing society, is generally reluctant to appoint them as retailers. The fact is that such societies find it difficult to collect sale proceeds, maintain regular accounts and fill in and submit returns. As a consequence more responsibility is thrown on the wholesalers. The wholesale society, for its part, has little desire to undertake such a responsibility because of the already heavy losses (about Rs. 900,000) sustained by it on the distribution of fertiliser over the past few years.

### **Restricted Consignment Supplies to the Retailers**

4.26 In the light of the financial position of individual societies, the wholesaler has fixed limits varying from Rs 8,000 to Rs 10,000, upto which consignment supplies at a time are allowed to the retail agencies. This restriction, however desirable in itself, has operated as a bottleneck in the rapid movement of supplies to the retailers. The stocks arrive in dribbles and, in order to replenish his stocks, the retailer has to make frequent visits to one or more rail-head centres of the wholesaler. Consequently, there is considerable delay and expense. We have been informed that this has often resulted in supplies being available to the farmers too late to be of any use. These delays far exceed the delay in arrival in the district itself.

### **Delayed Receipt of Supplies and Transportation**

4.27 We were told that quite a substantial proportion of the stocks had been received late in Kharif 1966. Further, on account of the inadequate transport arrangements made by the wholesaler, coupled with its reluctance to allow the retailers to make their own arrangements for this purpose, inordinate delays have taken place in moving the stocks to the retailers. A study undertaken by the project authorities for the period from 1.7.1962 to 30.6.1965 showed that the average time taken by the wholesaler to move supplies to the retailers was 55 days.

### **Facilities for Advance Stocking**

4.28 No facilities exist for advance stocking and advance sales. The absence of advance sales even in areas where there are carry-over

stocks meant considerable pressure on the limited space available for storage. The difficulty was accentuated by lack of synchronisation between the availability of co-operative credit and the supply of fertilisers with the co-operative retailers. On account of delays in sanction and disbursement of co-operative credit there has been a general reluctance on the part of retailers to build up stocks much in advance of the season. At the same time, because of delays in supplies when credit is available, co-operatives have been unwilling to swait the arrival of supplies in order to extend loans in kind. As a result, the advancing of loans in kind which is so very important under the crop loan system has become difficult in the district.

4.29 The low margin allowed to the retailers till 1965-66 (Rs 3/- per tonne) and the high cost incurred by them on storage did not leave much incentive to them to undertake sales promotion on a significant scale.

#### **Financial Position of the Wholesaler.**

4.30 The financial position of the district wholesaler needs considerable improvement if it is to handle larger quantities of fertilisers. On a rough estimate, we find that if the co-operatives are to handle the entire nitrogenous fertilisers indicated as required for the district by 1970-71, the wholesaler will require Rs. 3 to Rs. 4 million as margin money for fertilisers alone, as against its total owned funds of Rs. 0.8 million on 30.6.66.

#### **Evidence and Views of the State Representatives**

4.31 We have indicated earlier that the curtailment of the Centre's credit has imposed a strain on the State's finances. It has been urged before us by the State Government that until a long-term arrangement is made the present six months credit facilities might be continued and that, eventually, arrangements should be made to place fertiliser finance purely on a commercial basis. Concern has been expressed that sudden institutionalisation of credit arrangements would greatly disorganise the distribution arrangements as the co-operatives are not ready, financially, operationally and organisationally, to raise all the finance needed from the banks and to fulfil the conditions laid down in relation thereto. Understandably, the State Government would welcome any arrangements under which its own resources are not unduly strained. For example, if the manufacturers themselves arrange for distribution, the burden on the State Government would to that extent be reduced.

## **Distribution by Private Agencies—Organisation**

4.32 The private agencies also play an important role in distribution. Some of the private distributors are well-known and established firms. They have their own net-work of retail agencies for the distribution of superphosphate, mixtures and ammonium phosphate. The retailers are appointed on the basis of their financial standing, business connections and so forth. A sum of about Rs. 2,500 is collected as security deposit from each agent. These are said to number 2,500 during 1966-67. The private distributors have also appointed some of the co-operative marketing societies and primary credit societies as their agents. We understand that, in 1966-67, upto 30 per cent of the ammonium phosphate sold in Andhra Pradesh on behalf of Coromandels by E.I.D. Parry Ltd., was channelled through co-operative agencies.

4.33 The Coromandel Fertilisers Ltd., Visakhapatnam, (installed capacity of 80,000 tonnes of N), has started production in December 1967. The manufacturers as well as their distributors have undertaken a comprehensive programme of selection of retail distributors in the coastal districts of the State. The distributors have also appointed their salesmen with technical qualifications and background in order to promote the sale of their products.

### **Performance in West Godavari**

4.34 In West Godavari, there are 23 wholesalers, including 9 co-operatives, operating on behalf of private distributors, for distribution of superphosphate, ammonium phosphate, potash and mixtures. According to unofficial figures collected, the private agencies distributed during 1964-65 about half the quantity, and during 1965-66 about three-fourths the quantity, handled by the co-operatives.

### **Pattern of Sales by Private Agencies**

4.35 On occasions in the past, the private distributors had given supplies on 30 to 90 days' credit to the retailers, both co-operative and private. The credit supplies so made were estimated at 25 to 40 per cent of the private distribution sales. During 1966-67, owing to the heavy demand, the sales were mainly against cash.

4.36 In a situation of shortage of supplies as at present it might seem there is no need for credit facilities at the retail level. This, however,

it has been pointed out, would be a very incomplete picture. First, in the absence of credit to the retailers the points of distribution would be uneven, being restricted to those with ready resources. This may create a heavy bias in favour of the affluent areas, especially areas of commercial crops as distinguished from those of food crops. Moreover, the supplies of fertilisers are increasing fairly rapidly, and an adequate number of retailers might not be forthcoming unless offered some facilities of credit. It has also been urged that the larger availability of bank credit to wholesale distributors would enable them, in turn, to extend more adequate credit facilities to the retailers.

### Supplies to Co-operatives

4.37 The private distributors make sizable supplies to the co-operative retail agents. This, at present, is on a cash-and-carry basis. The distributors point out that they would be in a much better position to make use of the cooperative net-work if they could be enabled, by a suitable system of guarantee of repayment, to make supplies to the co-operatives on the basis of credit for 90 days.

### Views of the District-level Officials and Others

4.38 Each distributing firm has its own salesmen whose business is to promote sales, book orders and be in touch with the retail distributors. There is, however, little effort and organised co-ordination with reference to the agricultural programmes of the particular district, either between the distributor, his salesmen and his retailers or between the different distributors and the State or district authorities in charge of the Agriculture or Co-operative departments in the area. The view has been expressed in the district by responsible officials and non-officials that the interests of the farmer would be better served, particularly when the supply position improves, if the private agencies are also brought within the framework of a programme-oriented effort and are given such financial and other facilities as they might need, subject to safeguards and disciplines similar to those imposed on the co-operatives. As part of such co-ordinated effort, it has been urged for example that where a co-operative marketing society or the village co-operative has no supply of a particular fertiliser, the cultivator should be permitted to make use of the credit line he already has from his co-operative for the purpose of purchasing fertiliser from a private source.

## 2. BIHAR

### Introductory

4.39 The consumption of fertiliser is fast growing in Bihar. For each acre of cropped area in 1966-67, the consumption was 2.16 kgs. of N (all India average 2.14 kgs.), 0.77 kg. of  $P_2O_5$  (all India, 0.68), and 0.11 kg. of  $K_2O$  (all India 0.34). In relation to the provisional consumption targets indicated for the State at 205,000 tonnes of N, 94,000 tonnes of  $P_2O_5$  and 60,000 tonnes of  $K_2O$  the consumption in 1966-67 was 59,000 tonnes of N (i.e. 29 per cent of target), 21,000 tonnes of  $P_2O_5$  (i.e. 22 per cent of target) and 3,000 tonnes of  $K_2O$  (i.e. 5 per cent of target). The consumption in 1966-67, as compared with the previous year represented an increase of nearly twice for N and  $C_2O$  and about 6 times for

### Distribution

4.40 The State Marketing Union has been appointed by the State as the sole agent for the distribution of all types of fertilisers. The structure of co-operative distribution consists of: the State co-operative marketing union; 152 wholesale depots (called Agricoles) each serving 4 to 5 blocks, and 5,255 retail depots of which 4,244 are primary credit societies, 739 are individuals, and 272 are Vyapar Mandals. During 1965-66 sixty-five Vyapar Mandals were appointed as the wholesale agents of the marketing union. Eventually it is proposed to appoint all the Vyapar Mandals as block level wholesalers and withdraw agricole depots from distribution. The Vyapar Mandals similarly appoint the primary credit societies as their retail agents. Where there are no eligible co-operative societies, individuals are appointed as retail agents.

### Terms and Conditions of Supplies

4.41 The State marketing union is given supplies of nitrogenous fertilisers by the State on 18 months' consignment basis. Though the Central Government had reduced the period of credit to the State Government from 18 months to 6 months with effect from 1966-67, the State Government continued to make supplies on consignment basis to the apex society during the year. The apex agency, in turn, provides supplies on a consignment basis to Vyapar Mandals where these are appointed as wholesalers and against cash payment to others. The primary credit societies appointed as retail agents are given supplies on a credit basis subject to this being within their maximum borrowing power. The latter

is fixed at ten times the share capital less liabilities. The loans are made against the security of pronotes. The societies are also required under the agreement to maintain proper accounts of purchases, sales, etc. Till 31st March 1967, they were exempted from payment of interest in respect of Pool fertilisers when the sale proceeds were remitted within 3 months; where the proceeds were paid after 3 months but within 6 months, an interest of 5 per cent was charged. The interest payable increased to 12 per cent for payment made beyond 9 months. However, from April 1, 1967, under the new scheme, there is no interest-free period, and an interest of 7 per cent is charged if the value is paid within 60 days; where it is paid after 60 days but within 180 days an interest of 9 per cent is charged and for payment beyond 180 days 12 per cent is charged. For non-Pool fertilisers, the retailers are required to pay cash and take delivery. Individuals appointed as retailers are required to pay 90 per cent of the value in advance.

### **Finance for Supplies**

4.42 For nitrogenous fertilisers the normal source of supply for the State has been the Central Pool. In 1966-67, however, 3,000 tonnes out of 61,400 tonnes of N were obtained direct from the manufacturers. In terms of value the Pool accounted for Rs. 93.4 million and non-Pool sources for Rs. 26 million of N received in 1966-67. During the same year, the State drew credit amounting to Rs. 26.4 million (for six months) as against Rs. 10.1 million in 1965-66 (for 18 months) from the Centre. The balance was provided out of its own resources.

4.43 In respect of non-nitrogenous fertilisers, though the State co-operative union has been purchasing against cash payment, the money was found by diverting for the purpose, with Government's approval, the sale proceeds pertaining to Pool fertilisers. The purchases so made amounted to Rs. 7.85 million for 1963-64, Rs. 1.4 million for 1965-66 and Rs. 8.63 million for 1966-67 (upto the middle of March 1967).

### **Financial Structure of the Co-operative Agencies**

4.44 A major hurdle in switching over to institutional credit is the weak financial position of the State co-operative marketing union. Its accounts have not been audited since 1962. The owned funds, which stood at about Rs. 1.4 million at the end of June 1966, would be much less if allowance was made for accumulated losses. Overdues in respect of fertilisers amounted to Rs. 45.9 million, including Rs. 20 million to be

recovered from the retail agencies and Rs. 6 million from the co-operative banks. Part of this (Rs. 30 million) is attributable to unadjusted outstandings in respect of supplies made against Government taccavi on account of undue procedural delays. If the co-operative marketing agency in the State is to handle the entire supplies likely to be received in the State it would, as against the present owned funds of only Rs. 1.4 million, require distribution finance of the order of Rs. 300 million (assuming the supply is turned over twice during the year) and margin money of Rs. 30 million (on the basis of 10 per cent of the value of supplies at any given time).

### **Organisational Problems**

4.45 From the organisational point of view the State Union's main weakness arises from the absence of an adequate machinery to exercise supervision and control over its own depots as also over its wholesale and retail agencies, as illustrated by the failure to recover large amounts from the retailers. Its difficulties and responsibilities are accentuated by the absence of trained whole-time personnel at the retail level. It has had to make various compromises such as relaxing to some extent the condition that no fresh supplies on credit would be made to a retailer from whom more than 20 per cent of payment for previous orders is outstanding. Even so, many retailers continue to be ineligible for supplies and the farmers in those areas have been put to considerable hardship. On account of the difficulties in effecting prompt recoveries, the Union is naturally hesitant about extending its credit sales liberally in spite of the need for an aggressive sales approach. In illustration, it may be mentioned that the Union is reluctant to extend credit sales to the sugar factories since these, in the past, had failed to make prompt repayments.

4.46 Nor is it practicable, as things stand at present, for the Union to delegate its responsibilities substantially to the Vyapar Mandals which are its wholesalers at the block level. These Mandals are manned by inadequately trained staff on loan from the Co-operative Department. With a few exceptions, the Mandals are not only ill-managed but are unpunctual in the submission of returns of sales, stocks, etc., to the Union. There is a genuine apprehension on the part of the State Union that the recovery of sale proceeds will be even a more serious problem than at present when, in pursuance of the current policy, all the Vyapar Mandals are eventually appointed as agents.

### **Problems of Unsold Stocks**

4.47 There are reported to be large unsold stocks with the co-opera-



tives at the end of the year 1966-67, the nitrogenous fertiliser stocks on 1.4.1967 being slightly more than the total sales during the previous year. Drought conditions, low sales and lack of finance, led the State Marketing Union to decline to take delivery of superphosphate stocks from some suppliers in 1966-67.

### **Problems in the District : Muzaffarpur Study**

4.48 Muzaffarpur district, of which an intensive study has been conducted by us, is not a package area, but is nevertheless important from the point of view of fertiliser consumption. While the conditions created by drought have no doubt retarded the sales in the district, as in the rest of the State, there are other and more chronic impediments, particularly at the retail level.

### **Organisation at the Retail Level**

4.49 The sale points in some blocks are considered inadequate by the officials. Out of 1,400 primary credit societies in the district, 330 were considered qualified for appointment as retailers. In addition, 200 individuals also were appointed as retail agents.

4.50 The timely building up of stocks at the retail level requires both space and credit. But there is considerable inadequacy of storage facilities. At the same time, there are long delays in the sanction and issue of short-term credit by the co-operatives and of taccavi permits by the block officials. Advance stocking of supplies is nevertheless recognised by all concerned to be very important for various reasons including the fact that during the monsoon, many places are cut off by floods from the sources of supply.

### **Credit Sales to the Retailers**

4.51 The co-operative retail agency is allowed credit supplies upto a limit, which varies from Rs. 1,000 to Rs. 10,000 according to its reserve borrowing power. On credit supplies heavy interest is levied (7 per cent for the first 60 days, 9 per cent if payment is made after 60 days but within 180 days, and 12 per cent thereafter). As a result, the retailer is not interested in lifting any more than is absolutely necessary to meet the immediate demand of the farmers. At the same time, it is inconvenient to him to have to visit the wholesaler at a distance of 10 to 15 miles, two or three times during the season. Further the net commission a retailer

gets is only Rs. 4.70 per tonne; and this is almost always wiped out by any extra transport charges he has to incur. It seems clear that, in these circumstances, the retailer (whether primary society or individual) has hardly any incentive to promote fertiliser sales. The situation is aggravated so far as the societies are concerned, by the absence of trained stipendiary staff.

### **Sales to Credit Societies which Are Not Retailers**

4.52 As each society appointed as retail agent serves four to five credit societies situated within a radius of 5 to 10 miles, non-availability of supplies with the retail society occasioned by limited credit extended by the wholesaler, is a source of much hardship to the (non-agent) credit societies, since those concerned have to make repeated visits to the retailer for fertilisers. There is also general reluctance on the part of such credit societies to lift stocks on account of the extra inconvenience and transport charges involved.

4.53 According to the loaning practice followed by the co-operative central bank, each credit society is issued a fertiliser permit in respect of the short-term credit sanctioned to it on behalf of its members. The fertiliser off-take is delayed or neglected because of the delay in sanction of credit by the central bank to the credit societies. The denial of production credit by the central bank to a large number of credit societies (viz. those with overdues exceeding 20 per cent of their demand) is another major obstacle in the way of larger and more rapid fertiliser sales. Out of 1,400 credit societies in the Muzaffarpur district, only 700 were sanctioned credit during 1965-66.

### **Cash Purchases by Retailers**

4.54 Since the introduction of the revised policy from 1.4.1967, the retailers are also required to pay cash for the nitrogenous and other fertilisers bought by the State Union from the 'free' market. Many societies which are retail agents are known to be uneconomic units, with little or no resources of their own. The central co-operative banks, on their part, are short of funds and find it difficult, in these circumstances, to provide adequate finance to the societies for payment of cash for such purchases.

### **Evidence and Views of the State Representatives**

4.55 The limitations under which the co-operative distribution system

is operating at present are generally recognised by the State officials. While the possibility of increasing the share capital of the State Union by making a contribution of Rs. 10 million is not ruled out, the Government officials consider that this step alone will not solve the problem. In particular, it is stressed that it will take some time before the co-operative system is sufficiently equipped to repay bank loans for fertilisers within six months. It is also recognised that there is a serious bottleneck at the retail level, and that the increasing need for credit at that level is an important factor to be reckoned with. Larger credit has to be extended but larger credit is also attended with risks. The officials are generally of the view that co-operatives should be encouraged in this context to the maximum extent possible, consistently with the objectives of fertiliser distribution and agricultural production. At the same time, to the extent the co-operatives are not in a position to undertake the job, the private agencies should be given facilities to handle it.

### 3. GUJARAT

#### Introductory

4.56 The present average consumption per acre of cropped area in Gujarat is 1.51 kgs. of N, 1.09 kgs. of  $P_2O_5$  and 0.13 kgs. of  $K_2O$  which, in respect of N and  $K_2O$  is somewhat lower than the all-India average. The total quantities consumed in the State during 1966-67 were 37,000 tonnes of N, 27,000 tonnes of  $P_2O_5$  and 3,000 tons of  $K_2O$ . These work out to 18.4 per cent, 80.3 per cent and 51.3 per cent respectively, of the tentative consumption targets indicated for 1970-71.

#### Supplies for the State

4.57 The State received 42,000 tonnes of N (value at Rs. 64.5 million), of which 1,000 tonnes (Rs. 1.6 million) were from sources other than the Pool and the rest from the Pool during 1966-67. During 1965-66, however, the State had received the entire supplies of 30,000 tonnes from the Pool. The State's dependence on the Centre's credit facilities for Pool supplies has not been appreciable. Thus, in 1965-66, the State invested its own resources of Rs. 60.9 million and did not borrow from the Centre. In 1966-67, its resources were involved to the extent of Rs. 82.5 million, but there were also borrowings from the Centre amounting to Rs. 14.6 million. Fertilisers purchased by the State direct from the manufacturers cost Rs. 14 million in 1965-66 and Rs. 17.5 million in 1966-67.

4.58 The Gujarat State Co-operative Marketing Society was appointed in 1966 by the Government as the sole distributor for nitrogenous fertilisers received from the Pool. The Apex Society has appointed 18 district purchase and sale unions (in some cases taluka unions) as sub-wholesalers, and 2,800 primary credit societies as retailers. During 196-67, the co-operatives distributed, in all, Rs. 138 million worth of fertilisers constituting 95.8 per cent of the total supplies in the State. Of this, they handled 100 per cent of nitrogenous, 81.5 per cent of phosphatic and 37 per cent of potassic fertilisers. During the previous year also, the co-operatives handled nearly 90 per cent of the total supplies. Apart from the district and taluka marketing societies which themselves make direct purchases of phosphatic and potassic fertilisers, private agencies also handle these fertilisers in the State.

#### **Terms and Conditions of Supplies till 1966-67**

4.59 Till 1966-67, the apex marketing society has been receiving supplies of nitrogenous fertilisers from the State, on consignment basis against bank guarantee. Similarly, it has been making supplies to the sub-wholesalers and through them to the retailers on consignment basis. Bank guarantee at such level is a pre-condition. An agency unable to furnish the bank guarantee has to make cash purchases.

4.60 Under the revised arrangements which have come into force during 1966-67 it has been provided that the apex society should secure fertilisers from the Gujarat State Fertilisers Company against cash payment for which finance from the State Co-operative Bank would be available. We understand that it has been agreed that the GSFC would appoint the apex society as its sole distributor and supply 83 per cent of its production on 1 month's credit, during which the society would make arrangements for finance. The apex society, however, will continue to make supplies on consignment basis to the sub-wholesalers i.e., the district sale and purchase unions and through them to the selected retail agent societies.

#### **Finances for the Apex Society**

4.61 The total owned funds of the apex society, employed in all its activities, amounted to Rs. 6.4 million on 30.6.1967, of which Rs. 5 million are said to be available as margin money for borrowings for fertiliser distribution. For 1967, the Reserve Bank has sanctioned a fertiliser distribution credit limit of Rs. 50 million to the State Co-opera-

tive Bank to finance the apex society. If it is assumed that the State marketing society will handle by 1970-71 the same proportion of total fertilisers as it handled in 1966-67 (in all Rs. 453 million at current prices) the society would need about Rs. 200 million working capital for distribution (assuming that stock turns over twice a year) and Rs. 22.5 million as margin money.

### **Evidence and Views of the State Representatives**

4.62 The Apex Society has gained considerable experience in the distribution of fertilisers and the State representatives have no doubt that, given adequate funds, it will be able to handle the targeted fertilisers. A special advantage in the State is the large proportion of cash sales, (which are put varyingly at 70 to 80 per cent ) as a result of which it is easier to effect quicker turnover than in some other States.

## **4. KERALA**

### **Introductory**

4.63 With a consumption of 4.82 kgs. of N, 1.26 kgs. of  $P_2O_5$  and 3.20 kgs. of  $K_2O$  per acre, Kerala, largely because of plantation and cash crops, ranks first among the States in the consumption of fertilisers per acre of cropped area. While in respect of N, and  $P_2O_5$  its consumption per acre is very much more than the twice that of all-India average, in the case of  $K_2O$  it is nearly ten times. The total consumption during 1966-67 was 29,000 tones of N, 8,000 tonnes of  $P_2O_5$  and 19,000 tonnes of  $K_2O$  which works out to 33.4 per cent, 15.3 per cent and 29.9 per cent respectively of the tentative consumption targets indicated for 1970-71.

### **Source of Supplies**

4.64 As in other States, Kerala has been getting supplies of nitrogenous fertilisers from the Pool allotments, a large part of it being met by the Fertilisers and Chemicals Travancore Ltd., which is located within the State. During 1965-66, 5,000 tonnes of N valued at Rs. 7.8 million were received and during 1966-67, 26,000 tonnes valued at Rs. 40.5 million were received from the Pool. Besides, it also received 4,000 tonnes from sources outside the Pool in 1966-67.

## **Distribution Arrangements**

4.65 The State Government has appointed FACT, a public-sector undertaking, as the sole agent for distribution of nitrogenous fertilisers in the State, and supplies are made to it on consignment basis for straight sales. Allotments are also made for FACT and 19 other manure mixing firms in the State for preparation and sale of mixtures.

4.66 The FACT has a wide net-work of buffer stock godowns, 54 wholesale central depots, and 2,247 retail depots in the State. The central depots, which are run by the FACT get stocks on consignment basis. The retail depots, however, get supplies against cash payment. There are about 1,200 co-operative depots and nearly 600 private depots which are appointed as retailers in areas where co-operatives are not functioning. The co-operative depots are sanctioned cash credits upto the extent of their owned funds by the central co-operative bank in order to facilitate their making payment for fertilisers.

4.67 In Palghat district where a study was undertaken on behalf of the Committee, there are 9 central depots, 171 sub-depots, of which 140 are co-operative societies, and 31 are private dealers. During 1966-67, the co-operative bank obtained credit limits from the State Bank to the tune of Rs. 406,000 to finance the retailers for fertiliser business. These limits are sanctioned against hypothecation of stocks for a period of 6 months, and carried an interest of 9 per cent in 1966-67.

4.68 The FACT undertakes regular supervision of retail societies through their offices located at the 54 central depots. It also sells its own products such as superphosphate, ammonium phosphate and NPK mixtures. Other manufacturers such as Shaw Wallace, EID Parry, Rallis India and Mysore Fertilisers, also operate in the district, but only to a limited extent.

4.69 Apart from the effective promotional measures of FACT the subsidy allowed by the Government on superphosphate in the past also gave a fillip to consumption of phosphates in the State. The problems which are said to impede larger sales in the district are delays in supplies, the high cost of fertilisers and heavy overdues of co-operatives. An appreciable number of societies are also said to be dormant. Besides, credit societies with overdues in excess of 25 per cent of demand are not eligible for fresh credit facilities from the central banks, which affects the availability of credit for inputs to the farmers. The procedures for obtaining co-operative loans are considered time-consuming and have been frequently mentioned as creating difficulties for speedy distribution to the cultivators.

## CHAPTER V

# DISTRIBUTION ARRANGEMENTS (CONTINUED)

## 5. MADHYA PRADESH

### Introductory

5.1 The consumption of fertilisers is relatively low in Madhya Pradesh. For each acre of the area under crop, it was 0.10 kg. of N, 0.20 kg. of P<sub>2</sub>O<sub>5</sub> and 0.02 kg. of K<sub>2</sub>O during 1966-67. In relation to the consumption targets for 1970-71 provisionally indicated for Madhya Pradesh at 67,000 tonnes of N, 41,000 tonnes of P<sub>2</sub>O<sub>5</sub> and 9,000 tonnes of K<sub>2</sub>O, the consumption level in 1966-67, amounted to barely 6.3 per cent, 22.5 per cent, and 10.2 per cent, respectively. These figures, however, reflect the drought conditions of that year. More normal conditions are indicated by the corresponding percentages of the previous year, viz., 1965-66. These were 27.4 per cent for N, 21.8 per cent for P<sub>2</sub>O<sub>5</sub> and 27.6 per cent for K<sub>2</sub>O. The consumption of phosphatic fertilisers in the State is comparatively good. It is largely attributable to the location of a superphosphate factory in the State almost the entire supplies of which were being purchased by the State Government.

### Supplies from the Pool and Finances for the Same

5.2 The State has received its entire nitrogenous fertiliser needs from the Pool. They were valued at Rs. 16 million in 1966-67, and Rs. 33.8 million in 1965-66, the low level of supplies in 1966-67 being due to accumulated stocks with the State. For non-nitrogenous fertilisers, particularly superphosphate, it has made direct purchases from the factories during the two years, the total amounts employed for its fertiliser purchases being Rs. 42.2 million and Rs. 37.7 million respectively. The State's dependence on the Centre's credit has been quite considerable in the past. Thus, in 1965-66, it drew Rs. 66.6 million, of which Rs. 36 million was for 18 months and represented almost the full extent of the value of supplies. For 1966-67, with the curtailment of credit, it drew only Rs. 7.9

million (as against supplies of the value of Rs. 16 million) for six months. For superphosphate, 30 days' credit is allowed by the suppliers to the State.

### **Distribution Arrangements**

5.3 Appointed as sole distributor for the State in 1957, the Madhya Pradesh State Co-operative Marketing Federation has been in charge of distribution of all types of fertilisers in the State. The present organisational pattern, consisting of the apex federation, 206 primary marketing societies at the taluka level, and 3,495 retail agencies (consisting of selected primary credit societies at the village level) has evolved over a period of years. At one time, the apex federation undertook distribution through the agency of central co-operative banks in a part of the State, and through the primary marketing societies in the rest, and through individual retail agents at the primary level. The Government agencies also distributed fertilisers in some areas. Till 1965-66, fertiliser permits were issued to the farmers by a number of functionaries, including co-operative and agriculture officials. This had led to indiscriminate issue of permits without adequate scrutiny and to persons ineligible for credit, resulting in large unrecovered and unadjusted amounts. Gradually, distribution had been transferred to co-operatives, and taccavi also came to be distributed through co-operative banks, and taccavi permits, too, came to be issued by them. But the responsibility for collection of the permits, for their scrutiny at different levels, and, thereafter, for making adjustments between the co-operative banks and the co-operative wholesalers, was placed, respectively, on the samiti sevaks, i.e., the part-time employees of the village distribution centres, co-operative supervisors, and the marketing societies and the central bank.

5.4 Till 1966-67, the State federation had been getting supplies of all types of fertilisers from the State Government on consignment basis and the same facility was allowed right upto the retail level, the sale proceeds being remitted to the Government as and when sales took place, failing which penal interest was charged. The finances of either the State federation or the primary marketing societies or the retail agents were not involved in the business.

### **Commission to the Agencies**

5.5 For 1965-66, the village societies were paid a net commission of Rs. 7.50 per tonne and Rs. 3.50 for other incidental charges. The pri-



mary marketing societies were allowed Rs. 10.50, of which Rs. 2.50 per tonne was net commission. The apex society retained Rs. 26 for meeting all other expenses including transport and commission of Re. 1.00 per tonne. These have since been revised under the new arrangements which came into force in 1967-68. Out of the total margin of Rs. 50 to Rs. 70 available on different types of fertilisers during 1967-68, the primary marketing society and the retailer are allowed, on direct supplies from the apex federation, Rs. 18 to Rs. 32 per tonne (including a net commission of Rs. 7.50 to Rs. 15 per tonne).

### **Major Distribution Problems**

5.6 The major hindrances in the State to speedy distribution of fertiliser and smooth transition to bank finance include the following features of the current system of distribution:

#### **(i) Recovery of Sale Proceeds**

In regard to permits against which fertilisers were supplied by the distributors, there were inordinate delays on the part of the different agencies at almost every stage including (a) collection of the permits, (b) their scrutiny and verification, and (c) making necessary credits and debits. Further delays took place in the process of effecting adjustments because the supplies made on credit were often without proper authority or eligibility. Even after the adjustments were finally made, the funds did not always reach the apex federation as, in many cases, the primary marketing societies misapplied the funds credited to their accounts. Similarly, the distribution centres were also found to have misapplied the sale proceeds of cash sales on a large scale.

#### **(ii) Unsold Stocks**

The accumulation of stocks year after year had led, on the one hand, to problems of transportation and storage and on the other to physical shortage and financial losses. This was partly attributed to excessive indenting by the Agriculture Department. Figures furnished for 1961-62 onwards show that actual consumption of nitrogenous and phosphatic fertilisers in the State was about half of the targets fixed for each year by the Agriculture Department. At the close of 1965-66 and 1966-67 the carry-over stocks were quite heavy. For example, at the end of 1966-67 the stock of nitrogenous fertilisers, viz., 17,300 tonnes, was more than had been distributed during that year. Again the stock of phosphatic

fertilisers viz., 37,000 tonnes, at the close of 1964-65 was much more than the supplies distributed during that year. As a result, the storage problem has grown in dimension, particularly at the retail level. The State authorities estimated that they would need 580 fertiliser godowns to handle stocks through 1970-71, while the provision proposed by the Government would not be adequate to build even 50 per cent of that number.

Because of the long distances over which the stocks had to be moved, the cost of transportation per tonne worked out to Rs. 17 as against Rs. 15 provided by way of margin. The overwhelming dependence on hired accommodation for storage was found to be uneconomical. (The cost of storage is reported to work out to Rs. 9.60 per tonne as against Rs. 5.60 included for it in the margin). The loss from deterioration caused by kutchra storage worked out to 0.94 per cent in 1964-65 as against 0.50 per cent provided in the margin for the element of deterioration.

### (iii) Size of the Retail Centre

The unit turnover at retail centres was uneconomic. The data available for 1964-65 show that only in 11 out of 43 districts, did the sales per centre exceed 20 tonnes; they were below 10 tonnes per centre in as many as 21 districts. In this situation, the centres could not afford to employ regular paid staff; nor in the absence of regular returns were proper control and supervision possible.

### Problems Posed in Raipur District—Delays in Operating the Permit System

5.7 In Raipur district where the distribution problems have been studied with special reference to the agricultural programmes, a major procedural bottleneck lies in the system evolved for the issue of permits by co-operatives on the basis of which farmers are to obtain their fertiliser on credit. The full cycle of the operation ran somewhat as follows for Kharif 1966. The permits were to be issued by the co-operative central bank and its branches in the light of farmer-wise lists of requirements prepared by the Project Office. The lists were drawn up somewhat late for the kharif crop, which is the only crop for the area. They were not properly prepared, and many names of farmers not eligible for credit were also included. As such names ran into several thousands (the defaulting members of co-operatives in Raipur district were as many as 115,000 at the end of 1965-66), the scrutiny by the central bank took a long time. The issue of permits was further delayed because the bank

staff was busy with recovery work. The farmer anxious to get his permit had to visit first agriculture department and then the bank, not once but repeatedly. In the ordinary course this would have resulted—as in fact it did to some extent—in large quantities of unsold fertiliser and a large number of unfulfilled farm programmes. To mitigate these effects resort was had to another device, namely that of supplying fertiliser to an appreciable number of farmers on credit but without permits, immediately after the rains, when there was a demand for fertilisers. This, it was feared, would lead to defaults, on the one hand, and, on the other, to long delays in effecting adjustments between the wholesaler and the central bank.

### **Staffing Arrangements at the Centres**

5.8 The absence of stipendiary and whole-time employees at the distribution centres is another serious handicap. This has retarded the prompt supply of fertilisers against permits as well as the proper maintenance of records relating to fertiliser transactions. The adjustments of accounts has, therefore, been rendered all the more difficult. In addition, the poor staffing of some of the wholesale marketing societies has not infrequently, led to further delays at that level in the proper scrutiny of the permits. It has also resulted in ineffective control and supervision over the retail centres.

### **Overdues to the Credit Societies**

5.9 An important feature is the heavy overdues of the members of co-operatives. This results in a large number of societies becoming ineligible for short-term credit from the central bank and in turn leads to the accumulation of stocks at the centres and at the marketing societies. As on 30.6.66, the overdues to the central bank in Raipur amounted to Rs. 7.46 million, or 69 per cent of the demand; and, from the members to the societies, they amounted to Rs. 16.5 million or 81 per cent. Taking into account the successive years of drought, the State Government allowed fertiliser credit during kharif 1966, as a special case, to all those who had not defaulted in the repayment of their loans for more than two years. But the uncertainties in the financing policies of the bank in regard to defaulting societies and defaulters had led to restricted lifting of fertilisers during the kharif season of 1966.

### **Revised Arrangements for Distribution Since 1967-68**

5.10 The consignment arrangement between the State Government

and the State Federation ceased to operate from the beginning of 1967-68. Accordingly, the ownership in stocks was transferred on the effective date to the federation on payment of the requisite amount. To make this payment, the federation obtained a loan of Rs. 10 million from the State Government; it also obtained from the Reserve Bank of India, through State Co-operative Bank, a credit limit for six months of Rs. 25 million.

5.11 As a result of the new arrangement, certain changes have been introduced in the procedure for distribution in the State. It is only on cash payment that the fertilisers are to be made available by the federation to the distribution centres. Since the latter have no cash, they are expected to borrow for this purpose from the central co-operative banks which will sanction them cash credit limits upto 90 per cent of the value of one or two truck loads of fertilisers at a time. Before taking delivery of a further truck load, the distribution centre is required to remit to the bank the proceeds of cash sales (and the permits in respect of sales against co-operative loans), covering the previous delivery. A non-member may enrol himself as a member, or tender cash in advance to the credit society. An interesting feature of the new scheme is that suitable rebates are provided on account of godown rent and interest charges in respect of stocks moved two or three months before the kharif or rabi season, as the case may be.

#### **Problem of Finance under the New Arrangement**

5.12 However, one of the problems will be of distribution finance under the new scheme. If, by 1970-71, all the supplies are to be handled by the co-operatives, the apex federation might need distribution credit of about Rs. 110 million and margin money (at 10 per cent of distribution finance) for fertiliser business along of the order of Rs. 12 million, if the credit is assumed to be turned over twice a year. However, it is too early to expect a turnover of once every six months considering the present level of efficiency of operations and the fact that many districts of the State are more or less mono-crop areas, and fertiliser will have to be stocked upto 9 months. On this reckoning, the credit needed for distribution might be about Rs. 160 million instead of Rs. 110 million and the provision for margin might have to be correspondingly large. The apex federation's present total owned funds, partly employed in its other activities amount to about Rs. 13 million.

5.13 It seems clear that, apart from the financial limitations of the federation, a major financial bottleneck will be at the level of the

retailers, since these are now required to take supplies against cash payment. The smooth functioning of the new system hinges on three factors: (a) the availability of funds with the central banks to sanction cash credits to a large number of distribution centres all of which will require funds about the same time; (b) the timely sanction of short-term credit by the central banks to the societies for fertiliser and other inputs, since without such sanction, truck loads of supplies will remain unlifted and (c) arrangements for adequate cash credits to those centres in which advance stocking arrangements are essential. Unless there is certainty that the requisite funds will be available to the central banks, there is little chance of the new system operating smoothly. The new procedure provides for appointment of private individuals as retailers in areas not served by co-operatives. But it does not contemplate any credit supplies to them. Besides, the farmers who are to get supplies from such private retailers will not be eligible for co-operative credit. It has to be noted in this connection that a large number of farmers is outside the co-operative fold in this State. This represents a further difficulty which the new system has to reckon with.

### Evidence and Views of State Representatives

5.14 The State Government has expressed the view that the ability of the co-operatives to handle fertilisers in the next few years depends not so much on organisation as on finance. It has been argued that co-operatives have been building up their strength organisationally. Seven divisional and 44 district offices have been opened by the apex federation. The number of distribution centres is proposed to be reduced to 2,500. A cadre of trained persons is being built up. There will also be other reforms in procedure. The Government expects that, as a result, there will be greater speed of movement and better supervision over the operations of the retailers.

## 6. MADRAS

### Introductory

5.15 With an average consumption per acre of cropped area at 5.37 kgs. of N, 2.03 kgs. of  $P_2O_5$  and 1.64 kgs. of  $K_2O$  in 1966-67, Madras is one of the few States where the consumption of fertilisers has reached relatively high levels. The State consumed during the year 95,000 tonnes of N, 36,000 tonnes of  $P_2O_5$  and 29,000 tonnes of  $K_2O$  Expressed as percentages of the minimum consumption levels to be reached by 1970-71,

these work out to 65 per cent for N, 41 per cent for  $P_2O_5$  and 32 per cent for  $K_2O$ .

5.16 The district-wise allocation of the Pool fertilisers is done by the Board of Revenue at the State level, and, within the district, the Collectors are authorised to make block-wise and society-wise allocations. There is a three-tier co-operative distribution system in each district consisting of the district marketing society, appointed as Government stockist for nitrogenous fertilisers, the taluka marketing societies at wholesale level and the primary credit societies at retail level. During 1964-65, there were 3,573 retail depots in the co-operative sector. There are at present a large number of private distributors and retailers numbering 1,151.

### **Sources of Supplies and Finance**

5.17 The main source of supply of nitrogenous fertilisers is the Central Pool. The State received about Rs. 98.9 million worth of fertilisers in 1965-66 and Rs. 117.4 million worth in 1966-67. During the latter, the 'free' supplies to the State amounted to Rs. 13 million. Non-nitrogenous fertilisers of the value of Rs. 61.7 million during the year were supplied mainly by the factories. A substantial share of the burden of repayment to the Pool is borne by the State itself, though it availed itself of the Centre's credit facilities to the extent of Rs. 42.6 million in 1965-66 (each drawal repayable in 18 months) and of Rs. 44.8 million (each drawal repayable in 6 months) in 1966-67.

### **Arrangement for Distribution**

5.18 The nitrogenous fertilisers are handled under the State Trading Scheme (started in 1954) solely by the co-operative distribution system consisting of the district supply and marketing societies acting as stockists for the Government, and the district societies as well as taluka marketing societies operating as wholesalers, and selected primary credit societies as retailers, in all but four districts. Non-nitrogenous fertilisers are mainly handled by private agencies at the wholesale level. At the retail level, they employ co-operative agencies also. In the districts of Thanjavur, Chengleput, Coimbatore and Tiruchirapally, private agencies have also been allotted, since 1963-64, on an experimental basis, straight nitrogen to be sold at the retail level.

5.19 Prior to 1965-66, the wholesalers were required to lift ferti-

lisers from the stockists against cash payment. To facilitate this they were sanctioned cash credit by the co-operative credit structure out of a credit line obtained from the State Bank of India. In 1965-66, the 'Letter of Credit System' was introduced under which wholesalers are required to lift the stocks from the stockists as per allotments made by the Collector on payment of 15 to 25 per cent of the value of the consignment, depending upon whether it is for H.V.P. or for other crops. In respect of the balance they are required to open letters of credit with the co-operative bank for four months in favour of the respective Collectors. While at the wholesale level there is a deferred credit arrangement, the retailers are to receive supplies on consignment basis. In respect of sales to private agencies for preparation of mixtures, about 40 per cent of the total nitrogenous fertilisers consumed in the State was allotted to them. Payment is received in advance, in respect of such allotments, or the agencies open letters of credit with the scheduled banks in favour of the Government.

### Performance in Thanjavur

5.20 The cooperative distribution system in the district during 1965-66 consisted of 18 wholesalers including the District Marketing Federation, (Government Stockist) 15 taluka marketing societies, and 579 retailers. It was found that the taluka marketing societies were not in a position to raise enough finances from central banks to lift the required quantity of nitrogenous fertilisers from the stockist. Further, they were not also able to exercise effective control and supervision over the large number of retail points. The district authorities consequently appointed 20 agricultural banks and a few rural banks as wholesalers during 1966-67.

5.21 Under the letter of credit system, each wholesaler was required to lift the quantity allotted to it, as and when supplies were received by the stockists, by paying 15 or 25 per cent of the value, depending on whether the supplies were for H.V.P. or non-H.V.P., and by opening a letter of credit with the central cooperative bank in favour of the Collector for the balance for 60 days. To do so, the central cooperative bank sanctioned clean cash credit limit to each wholesaler upto the extent of its owned funds and a letter of credit was opened in favour of the Collector, the limit for which was fixed at 4 to 6 times the owned funds. During 1966-67 Kharif season, the two central banks in the district had sanctioned Rs 2.71 million by way of cash credits (i.e. upto the extent of their owned funds), and opened letters of credit to the extent of Rs 7.86 million.

## **Limitations of the Letter of Credit System**

5.22 The officials and the wholesalers brought to our notice a number of difficulties under the present system. First, the cash credit limit fixed for each wholesaler was not adequate for making the initial cash payment, particularly when a number of consignments arrived at the same time. The cash credit, once drawn, was not available for being drawn again, unless repayments were made. This took considerable time, as it depended on the speed of moving the supplies to retailers, sanction of short-term credit by the banks to credit societies, verification of particulars of credit supplies to farmers by the field staff and, thereafter adjustment of accounts at the bank. Correspondingly, the limits fixed for letters of credit also were found to be inadequate. The movement of supplies from the stockist to retailers could not, therefore, be as fast as was necessary.

5.23 Secondly, the central banks were not in a position to find the resources to sanction cash credits in the first instance, and later to honour the letters of credit to the Collector on due dates. This arose because, on the one hand, the sale of fertiliser covered by the letter of credit could not always be completed before expiry of the period, which meant much pressure on their resources and, on the other, the banks were not eligible for refinance from the Reserve Bank of India under the existing provisions in respect of cash credit limits sanctioned to agricultural and rural banks.

5.24 Thirdly, the cash credit limits available to wholesalers from central banks, being limited to their owned funds, were not adequate even for nitrogenous fertilisers. They found it difficult to raise funds for non-nitrogenous fertilisers, namely, superphosphate and mixtures, and depended on consignment supplies from the district agency. The restrictions imposed by the Reserve Bank on the banks in the matter of sanctioning clean limits or hypothecation limits to marketing societies (the limits were to be related to their 'disposable' resources) had also led to a drastic curtailment of funds available to the district federation, as a result of which it was not in a position to purchase the required quantities of phosphatic fertilisers and supply them to wholesalers on consignment basis. Procedural delays in recovering the value of supplies made on consignment to cooperative wholesalers, further reduced the turn-over of available funds available to it.

### **Problems at the Retail Level**

5.25 Fourthly, when making supplies of nitrogenous fertilisers to



cooperative retailers on consignment basis, in order to minimise the difficulties involved in collecting the sale proceeds from a large number of small societies, they were allowed to lift, at a time, five to ten tonnes, after remitting the proceeds of cash sales, or cooperative vouchers in respect of credit sales to members of cooperatives. Advance stocking of fertiliser was not possible under this arrangement, and retailers had to wait, usually for long periods, until short-term credit was sanctioned by central banks for their members, which would enable stocks to be lifted from wholesalers.

5.26 The sanction of credit by central banks, however, was very much delayed during 1965-66 and Kharif 1966, mainly as a result of delays in the preparation of applications by the field staff. In the case of the Kumbakonam Central Bank, the loans disbursed during August 1966 were Rs. 3 million as against Rs. 0.7 million during the previous months. There was also uncertainty regarding availability of cooperative credit from central banks, because of heavy overdues from the societies and their disqualification for fresh loans wherever overdues exceeded 25 per cent of demand (Kumbakonam bank).

5.27 While such factors made it difficult for retailers to build up stocks in advance, two other considerations had seriously affected the ability of the retail agencies to meet the requirements of cultivators. One was the non-availability of non-nitrogenous fertilisers with cooperative depots, and the other was the absence of wholetime employees at most retail points. The low commission allowed to the retailer at Rs 7 per tonne did not provide the needed incentive.

### **Distribution by Private Agencies**

5.28 There were ten established private distributors in the district at the wholesale level. At the retail level, there were 490 agencies. During 1965-66, they distributed according to unofficial figures, 82 per cent of superphosphate and 80 per cent of mixtures.

5.29 During 1965-66, private agencies received allotment of nitrogenous fertilisers for distribution direct to farmers on the same terms as for cooperatives, upto 1/3 of the supplies made to cooperatives, and during 1966-67 (for the first two quarters) upto 1/10 of the allotments made to cooperatives. The private distributors, many of whom were manufacturers, met their distribution credit needs out of their overall business funds and by way of key loans from commercial banks, for three

months, upto 70-80 per cent of the value of stocks in the case of well established firms, and 60 per cent of the value in the case of smaller firms at 9 per cent interest. They were, however, not able to raise finance either in adequate degree or when needed.

5.30. The private agencies also appointed cooperatives as their retailers for distribution of non-nitrogenous fertilisers, particularly super-phosphate and mixtures and extended credit facilities for one to three months during 1963-64. Subsequently, however, credit was restricted as repayments were not prompt. Supplies to private retailers during 1965-66 and 1966-67 were made mostly against cash payment. They obtained key loans in some cases from the banks at rates varying from 9 to 12 per cent per annum.

5.31 In their evidence, representatives of private agencies submitted that in areas like Thanjavur where consumption of fertilisers would go up substantially, there was considerable scope for private agencies playing a larger role than at present, consistently with the objective of the maximum role being reserved for cooperatives. To make distribution efficient, they pleaded that they should be allowed to distribute nitrogenous fertilisers also in the same way as cooperatives. Suitable repayment guarantees would enable private distributors make supplies to cooperatives on credit basis. More liberal credit facilities from banks would, it was stressed, further enlarge the scope of credit supplies.

### Conclusion

5.32 In their evidence the State Government officials pointed out that the ways and means position of the State Government had been under considerable strain as a result of curtailment of the Centre's credit to 50 per cent of the Pool supplies and reduction in the period of credit from 18 to 6 months. They urged that credit facilities should be made available for the entire Pool supplies, and for a longer period. They also suggested that full credit facilities should be provided by the banking system for stocks held by the State Government.

5.33 Assuming that the turnover would be twice during the year, the requirements of distribution finance for the entire supplies envisaged for the State by 1970-71, works out to Rs. 240 million and margin money at 10 per cent of the distribution finance would be Rs. 26.5 million. Though the present total owned funds of cooperative marketing societies at the district and primary levels amounted, on 30-6-1966, to Rs. 34.9 million, they were employed in other activities including processing.

5.34 Inadequacy of margin money resources to facilitate larger borrowings at the wholesale level, and the restrictions on credit facilities, affected the consignment supplies to cooperative retail agencies. The difficulties were accentuated by lack of coordination between cooperative credit and fertiliser supplies as a result of delays in the despatch of supplies, sanction and disbursement of credit and procedural bottlenecks at different stages in making prompt adjustment in respect of sales on cooperative credit. Besides, arrangements were not made to provide all types of fertilisers to farmers from the same agency.

5.35 While the presence of a net-work of private agencies, in our view, has greatly helped to cover gaps in the cooperative system, and thereby give an impetus to sales, their operations were retarded to some extent, by lack of liberal credit arrangements as well as of facilities to open a large number of retail points. The State Government's view is that the fullest use should be made of cooperative agencies, though, so long as this is understood, there is no objection to the cooperatives being supplemented where necessary by other agencies.

5.36 Apart from financial problems, the State officials have also been exercised over the adequacy of nitrogen supplies from the free quota. They have urged the need for a central agency to ensure adequate supplies to cooperatives out of the free quota to the extent that they can handle such supplies efficiently. Otherwise, it is pointed out, the programme taken in hand any suffer.

## 7. MAHARASHTRA

### Introductory

5.37 Maharashtra consumed in 1966-67 88,000 tonnes of N, 32,000 tonnes of  $P_2O_5$  and 21,000 tonnes of  $K_2O$  as against 58,000 tonnes, 17,000 tonnes and 12,000 tonnes, respectively in 1965-66. The average consumption of nutrients per acre of cropped area during the year was 1.86 kgs. of N, 0.69 kg of  $P_2O_5$  and 0.44 kg. of  $K_2O$  which came close to all-India averages in respect of  $P_2O_5$  and  $K_2O$ . The figure for N, however, was somewhat less than the average. Compared to the minimum consumption targets indicated for the State, the off-take in 1966-67 worked out only to 23.2 per cent, 17 per cent and 15.2 per cent for N,  $P_2O_5$  and  $K_2O$  respectively.

## **Supplies of Fertilisers to the State and Finances therefor**

5.38 In 1965-66, the State received Rs 78.3 million worth of nitrogenous fertilisers from the Pool. In 1966-67 the Pool supplies were much higher, being Rs 144.2 million. The total nitrogenous fertilisers purchased were of the order of Rs 153.5 million. The value of non-nitrogenous fertilisers purchased during the year was about Rs 50 million.

5.39 Maharashtra has not been depending much on credit from the Centre for paying for Pool supplies. The credit obtained was of the order of Rs 5.3 million in 1966-67, repayable in 6 months. There were no credit transactions with the Centre during the previous year. The State made a budgetary allocation of Rs 290 million for the purpose in 1967-68.

### **Distribution**

5.40 The distribution of all types of fertilisers in the State, except mixtures, and a minor proportion of  $P_2O_5$  has been entrusted to co-operatives. Prior to 1958, distribution was done largely by private agencies. The distribution of nitrogenous and phosphatic fertilisers was entrusted to cooperatives in 1958 on account of anticipated shortage of fertilisers. Except for a short spell early in the III Plan period, cooperatives continued to have monopoly for distribution of all types of straight fertilisers.

5.41 The distribution system consists of 38 cooperative wholesalers (mainly district cooperative marketing societies), 1,200 sub-agents, which are taluka marketing societies, some large-sized societies, and 8,000 service societies appointed as retailers. The State Government makes supplies to its wholesalers, on consignment basis against guarantee of the respective central cooperative banks up to 10 per cent of the value of stocks. The wholesalers are required to make payment to the State Government within a stipulated period after effecting sales. The wholesale agencies, in turn, transfer the stocks to their sub-agents, again on consignment basis. The supplies to retail agencies, however, are made either on agency basis or against cash. The wholesalers are expected to prepare indents for their areas, provide storage accommodation, open an adequate number of depots, maintain proper accounts of stocks received and sold, collect and remit sale proceeds, and submit periodical returns to the State Government.

### **Commission on Sales**

5.42 Under the arrangements in force in 1965-66, the wholesaler was

given a commission of Rs 35 per tonne on all fertilisers, of which Rs 5.20 was allowed to the sub-agent to be shared with the retailer.

### **Distribution Arrangements in Kolaba District**

5.43 The distribution system in Kolaba district consists of the District Purchase and Sale Union at the wholesale level and 425 retail agents (primary credit societies). The Agricultural Committee of the Zila Parishad makes taluka-wise and distribution centre-wise allocations of the available supplies according to the agricultural programmes.

5.44 Late arrival of stocks at the sale points has been a serious impediment to their smooth disposal. In the last few years some 60 per cent of the stocks were received at the sale points during the monsoon period (June-September) and later. The district receives heavy rainfall during the monsoon and it is necessary to ensure that fertiliser stocks are in position before June. The movement of stocks according to the requirements worked out by the Agriculture Department, irrespective of the seasonal conditions, has led to accumulation of stocks at the sale points as well as with the district agency.

5.45 During 1966-67 kharif season, the off-take of fertilisers was both slow and of small dimension for the following reasons :

(a) Consequent on the heavy overdues to the central bank (arising from crop failures during 1965-66), as many as 254 societies (with overdues exceeding 30 per cent of the demand) were found ineligible for short-term production credit aggregating Rs 5.4 million from the Central Bank. Relaxation of this condition, though somewhat belated, in order to make more societies eligible for credit, helped to promote sales. However, the sales position would have been much worse, had not the Zila Parishad decided to make credit supplies to defaulter members under the H.V.P. As a result, Rs 1.4 million worth of fertilisers were supplied by the Zila Parishad on credit basis to the defaulters as against Rs 300,000 of fertiliser credit provided by the Central Bank for H.V.P. members.

(b) The staff and organizational arrangements were inadequate for handling the allotted supplies. This is reflected in poor supervision over the retailers, and failure to ensure the collection of sale proceeds, submission of returns and inspection of stocks. The wholesaler pleads inability to maintain adequate staff with the net commission of Rs 5 per tonne allowed. The absence of whole-time employees at the retail centres

made it difficult to run retail depots, maintain accounts, remit sale proceeds etc. These lapses resulted in the failure of the wholesaler to pay the value of the fertiliser to the Government. As against Rs. 6.73 million worth of fertilisers received in 1964-65 to July 1966, the wholesaler was able to pay to the Government Rs 4.2 million only (upto July 1966).

(c) Facilities to undertake advance stocking of supplies to sell the available stocks well in advance of the season are not adequate. Many societies suffer from inadequacy of storage accommodation. The commission of Rs 5.20 per tonne allowed to the sub-agent and retailer does not provide them an adequate incentive to promote sales. The delay of two or three years in settling claims of commission is a further disincentive.

5.46 The quantity of fertilisers distributed in Kolaba in 1966-67 expressed as percentage of anticipated consumption by 1970-71 works out to a meagre 8.4 per cent and 0.8 per cent for N and  $P_2O_5$  respectively. This indicates the magnitude of effort needed to realise the targets. The owned funds of the District Purchase and Sale Unions on 31-5-66 amounted to Rs 420,000 and were employed in its activities other than fertiliser distribution. The value of fertilisers to be distributed in 1970-71 is estimated at current prices to be Rs 38 million. The corresponding distribution finance which the District Union would need amounts to Rs. 17 million, margin money requirement being Rs. 1.9 million, assuming the turnover to be twice during the year.

### Proposed New System in the State

5.47 The State Government proposes to introduce a new system of distribution in the State. Under this, the wholesalers will hold stocks in the central godowns on behalf of the State and draw supplies therefrom against cash payment to the Government, but not on consignment. To facilitate this, the wholesalers are expected to be sanctioned cash credit limits by the central cooperative banks out of the fertiliser credit limits sanctioned by the Reserve Bank of India. For 1967, the Reserve Bank sanctioned a credit limit of Rs 50 million for the purpose to the State Cooperative Bank against the State Government's guarantee.

5.48 Under the scheme the State Government will purchase fertilisers from the Pool and from the manufacturers, and hold the stocks till such time as the wholesalers are in a position to lift supplies against cash. This would entail the State investing appreciable sums either by

borrowing from the banks or otherwise for four to five months for kharif and for a somewhat shorter period for Rabi. The maximum investment for the purpose is put approximately by the State officials at Rs 300 million by 1970-71, to be suitably rotated as between the State and the wholesalers, after making allowance for cash sales for manure mixing firms and bulk sales at one third the total quantity to be handled.

5.49 The expectation seems to be that the wholesaler would be in a position to draw supplies from the Government godowns during the peak months of demand as many times as might be needed, initially by drawing upon the cash credit sanctioned by the central banks. It is further expected that, subsequently, the cash credits would be replenished by encashment of the cheques drawn on the central bank in favour of the wholesaler by the retail agent societies in payment for the fertiliser supplies received by them. The ability of the wholesaler to rotate the cash credit as many times as may be necessary will depend on (a) the point of time when the short-term production credit is sanctioned by the central banks to the societies for fertilisers, (b) the number of societies receiving such sanction, and the quantum of credit so sanctioned, (c) the speed with which payments are made by the credit societies by cheques to pay for fertiliser supplies; and (d) the arrangements at the banks for prompt credits being given to the wholesaler for the cheques presented.

5.50 The success of the proposed system will thus depend on the smooth functioning of a number of factors. To the extent that any of the above conditions is not fulfilled, the holding of stocks in the State godowns on Government account will inevitably be prolonged. Experience of a similar arrangement in Thanjavur or Burdwan is hardly encouraging. In these districts cash credits were fixed for the wholesalers in relation to their owned funds, and they were required to rotate the resources during the season a number of times. They failed to do so

5.51 The financial implication of this scheme may now be considered. If the State Government holds stocks for four to five months for kharif and for a shorter period for rabi, the wholesalers might need distribution credit for two to three months each season upto almost the value of fertilisers they are to distribute during the period, minus the margin money. Assuming broadly that the kharif and rabi requirements will be in the proportion of 60 : 40 and one third of the stocks will be for mixing firms and cash crops, the State will have to find

finances to hold stocks of Rs 500 million for kharif or Rs 300 million for rabi. The distribution finance needs of the wholesalers by 1970-71 for the entire anticipated consumption for the State will also be of the same order for the two seasons which would mean margin money requirements of Rs 50 million for them. The total owned funds of the district cooperative marketing societies amounted, on 30-6-1966 to Rs. 13.3 million the requirements will be less if the turnover is twice during each seasason at the wholesale level.

5.52 It seems unrealistic to us to base estimates of the probable distribution finance and margin money requirements of the cooperatives in the State on a turnover of three times in a year. Further, the State Government would have to hold stocks until they were lifted by the wholesalers, the period during which the Government would have to do so might turn out to be much longer than has been assumed, and to that extent, the State finances would remain locked up for a longer period.

5.53 In our view, it is not unlikely for similar problems to arise at the retail agency level as well, if the agencies are required to make purchases against cash. It is not clear whether all the retail agencies will be eligible for cash credits from the central cooperative banks for making payment initially for fertilisers and whether the banks will be in a position to find necessary resources to sanction cash credits for the purpose.

## 8. MYSORE

### Introductory

5.54 With the consumption of N,  $P_2O_5$  and  $K_2O$  reaching a level of 50,000 tonnes, 19,000 tonnes and 13,000 tonnes, respectively, in 1966-67, Mysore is among the States where fertiliser consumption has been making rapid advances. As compared to the minimum consumption levels for the State indicated by the Centre, for 1970-71, the State's consumption in 1966-67 was 37.5 per cent, 21.3 per cent and 28.3 per cent respectively for N,  $P_2O_5$  and  $K_2O$ , while for 1965-66 it was 23.5 per cent, 11.3 per cent and 16.7 per cent in the same order. The average consumption per acre of cropped area in 1966-67 was 1.87 kgs of N, 0.72 kg of  $P_2O_5$  and 0.49 kg of  $K_2O$ .



## Supplies to the State

5.55 The State's total nitrogenous fertiliser supplies during 1966-67 were valued at Rs 78.4 million of which Rs 73.3 million worth of supplies came from the Pool and the balance from non-Pool resources. The State obtained a credit of only Rs 5 million from the Centre during the year (for six months) while in the previous year, it had obtained credit to the extent of Rs 10 million. Further, during 1966-67, the State invested its resources in non-nitrogenous fertilisers to the extent of Rs 31 million.

## Distribution Arrangements

5.56 In 1960-61, the Mysore State Cooperative Marketing Society took over the distribution of fertilisers from the State Agriculture Department. Since then it has been the sole distributor for nitrogenous fertilisers in the entire State and for non-nitrogenous straight fertilisers in all but two districts. There has been a progressive increase in the quantities handled by it, the quantity procured in 1965-66 being 133,000 tonnes of Pool fertilisers as against 77,000 tonnes in 1960-61. At the wholesale (taluka) level the society operates through 120 (out of 173) taluka marketing societies appointed as agents. It is proposed to appoint the rest of the taluka societies also as agents in the next few years. At the retail level the cooperatives have a net-work of 3,000 selected primary credit societies.

## Terms and Conditions of Supply

5.57 The State Marketing Society gets supplies of nitrogenous fertilisers from the Government on consignment basis. The supplies to the agent taluka marketing societies by the apex society are on consignment basis, while to the non-agent societies they are made on cash payment. On the other hand, the retail agent societies are required to lift the supplies against cash. Though the Central Government has reduced the period of credit for fertiliser marketing to six months since 1966-67, the State Government has not, in turn, reduced the period of consignment to the State marketing society because of the latter's inability to raise funds on its own.

5.58 According to the practice in force in 1966-67, the State society retained Rs 10 to Rs 15 per tonne on different fertilisers distributed, while the taluka society was given Rs 11 to Rs 16 per tonne

and the retailer Rs. 9 to Rs. 13.50 per tonne, including incidental expenses and net commission. Out of the total commission a sum of Rs 20 to Rs 25 was taken to the special reserve fund.

### **Finances for Distribution**

5.59 The increased supplies to be handled in future, and the reduced credit from the Centre will mean that either the State Government or the State marketing society will have to find additional resources for handling the business. If all fertilisers indicated to be available for the State from the Centre in 1970-71 are taken into account, the distribution finance needs, on the assumption of a turnover of twice during the year, would be Rs 213.8 million and margin money needs of Rs 23.8 million.

5.60 A major handicap of the cooperative distribution structure in the State is the weak financial position of the apex society. Its owned funds on 30-6-1966 consisted of Rs. 0.56 million of share capital and Rs 0.74 million of reserves which are fully employed in other activities. Organisationally, too, the agency is weak. It has encountered difficulty in exercising control over its agent societies numbering 120, ensuring periodical returns and collection of sale proceeds from them, and physical verification of stocks, etc. With the proposed increase in the number of agent societies to 173, the task may become more difficult.

5.61 The apex society's overdues to the State have been heavy in respect of fertilisers supplied on consignment to it and to agent societies in the past. The apex society anticipated difficulties in operating its distribution by raising resources from banks, as such borrowings would be costlier, and would need to be repaid in six months.

### **Financing by the State Cooperative Bank**

5.62 For the State cooperative bank the problem is one of raising enough resources to finance (a) the State Marketing Society for its operations when the present consignment facilities are discontinued, (b) the taluka marketing societies (through the central banks) to enable them to purchase non-nitrogenous fertilisers, and (c) the retail agent societies (through the central banks) for making cash payment for fertilisers. During 1966-67, the State cooperative bank was sanctioned a cash credit limit of Rs 20 million by the State Bank of India for its fertiliser operations. If the present system of the cooperative credit structure financing the marketing structure at all the three tiers is to continue, the State

cooperative bank fears that it will not be in a position to raise adequate resources, unless larger resources become available from the Reserve Bank and unless the Reserve Bank credit for fertilisers can be used for financing credit societies also.

### **Specific Problems in Mandya District**

5.63 In Mandya district, there are seven taluka marketing societies, and 318 primary credit societies appointed as retail agents. Of the seven, two have been appointed as agents by the apex society. The central bank had sanctioned during 1966-67 cash credits of the order of Rs 4 million to all the seven societies for making purchases of non-nitrogenous fertilisers. There was reluctance to utilise the cash credit facility on account of the high rate of interest (9½ per cent) charged. The taluka societies preferred credit facilities from the manufacturers for 90 days.

### **Problems in Regard to Finance to Retailers**

5.64 The cash-and-carry system between the taluka societies and the retail agents was introduced in order to overcome the chronic difficulty in effecting prompt recovery of sale proceeds. Out of the 318 retail points, no more than 64 societies were found eligible for cash credits by the central bank, and they were sanctioned Rs 800,000. But these limits were availed of only in cases of absolute need, and not for building up stocks in advance, in view of the high interest charges. Normally, the societies would wait for the sanction of short-term production credit by the central bank for their members.

5.65 While not many primary credit societies may be eligible for cash credits, one problem facing the central bank is to find even the limited resources required for the purpose, in respect of which no reimbursement facilities are available from the Reserve Bank of India under existing provisions.

5.66 While the limitations of cash-and-carry arrangements at the retail level are recognised by the State officials, they are apprehensive nonetheless of reverting to the consignment system at that level because of the heavy overdues which still remain unadjusted.

### **Difficulties Caused by the Ineligibility of Societies for Credit**

5.67 A further hurdle at the retail level in the way of rapid sales

was the ineligibility of some societies for production credit from the central bank. In Mandya out of the 191 defaulting societies as on 30-6-1966, 76 societies were totally denied fresh short-term credit, as their overdues exceeded 35 per cent of the demand. Where the fertiliser portion of the credit works out to 50 to 60 per cent of the total short-term loans, the magnitude of the resources to be raised by the primary credit societies (retail agents) for purchasing fertilisers against cash would be considerable.

### **Other Problems**

5.68 The speed of turnover is also affected by delays in receipt of stocks, and non-availability of certain types of fertilisers. In the case of the Mandya Taluka Society, 62 per cent of stocks were received late during 1966-67. Other centres also experienced similar difficulties.

5.69 While nitrogenous fertilisers are available from the apex society, non-nitrogenous fertilisers are purchased by taluka societies from the manufacturers directly. This involved an element of competition among the different cooperatives. There was considerable shortage of superphosphate in the district during 1966-67, and this in turn affected the off-take of nitrogenous fertilisers as well. The societies argue that the apex society itself should supply all types of fertilisers needed in the required proportions.

### **Evidence and Views of State Representatives**

5.70 The need for ensuring adequate supplies of all types of fertilisers through the same agencies has been stressed by Government officials. They feel that Government itself should take the responsibility to purchase the required quantities of fertilisers from the Pool or from the manufacturers as the case may be, and hold the stocks until cooperatives are in a position to lift them against cash payment even if it should mean the State Government employing its resources for longer periods.

5.71 There is also a view that the organisational efficiency of the apex society would improve if it opened its own offices in the districts where taluka societies were weak, and made supplies to retail societies on the basis of either consignment or credit (and not on cash basis as at present). This would mean the apex societies exercising supervision and control over their operations and ensuring prompt recovery of sale proceeds.

## 9. ORISSA

### Introductory

5.72 Orissa is among the States which have considerable potential for agricultural growth, but its present level of fertiliser consumption is low. In terms of nutrient the consumption per acre of cropped area in 1966-67 was 0.87 kg of N, 0.54 kg of  $P_2O_5$  and 0.49 kg of  $K_2O$ . The total consumption of N,  $P_2O_5$  and  $K_2O$  in 1966-67 stood at 16,000 tonnes, 10,000 tonnes and 2,000 tonnes respectively, which represents 17.3 per cent, 30.1 per cent and 6.7 per cent of the minimum consumption targets set for 1970-71.

### Financing of Supplies to the State

5.73 The State received Pool fertilisers valued at Rs 21 million in 1965-66 and Rs 27.6 million in 1966-67. The borrowings of the State from the Centre for making payment for the Pool supplies amounted to Rs 6.2 million in 1965-66, each drawal being repayable in 18 months. Such borrowings in 1966-67 amounted to Rs 11.6 million at 4 per cent interest, each drawal being repayable in 6 months. The value of non-nitrogenous fertilisers purchased during 1966-67 was around Rs 12.2 million. Assuming a turnover of twice during the year, the distribution credit needs for the State would work out to nearly Rs 120 million by 1970-71 for the entire anticipated supplies.

### Distribution Arrangements

5.74 Appointed as the sole distributor for nitrogenous fertilisers by the State Government in 1958, the State Marketing Society operates through 45 regional cooperative marketing societies, i.e., sub-wholesalers, and 3,000 distribution centres which are primary credit societies. The Pool fertilisers which are received by the apex society on consignment basis, are in turn passed on to the agencies at the retail level again on consignment basis.

5.75 It is reported that, following the curtailment of credit from the Centre, arrangements are afoot to enable the apex marketing society to purchase part of the Pool fertilisers not available to it against the Centre's credit, and other non-Pool supplies by borrowing from the State cooperative bank for which a line of credit from the Reserve Bank of India will be sought.

## **Main Problems for the Apex Agency**

5.76 However, one difficulty of the apex society will be to find margin money for this purpose. Its owned funds on 30.6.1966 amounted to Rs. 1.79 million, consisting of Rs. 0.46 million by way of share capital and Rs 1.33 million by way of reserves, which are apparently employed in its other activities. Further, the apex society may experience difficulty in making effective use of bank finance, whether from the Reserve Bank or from the State Bank of India, by ensuring rapid turnover of funds. Serious misgivings have also been expressed on this account.

5.77 Previous experience in regard to collection of sale proceeds from wholesalers and retailers has not been satisfactory. This is attributable to inadequate organizational arrangements, ineffective control and supervision over wholesalers by the apex society, and by wholesalers over retailers, and the frequent lapses in submission of returns and statements from the agencies at different levels, indicating stock position, sales, etc. Large accumulation of stocks at the distribution centres is also reported on account of excess indenting by the Agriculture Department, particularly of the types of fertilisers not in demand and of insufficient sales effort on the part of the distribution centres. The staffing arrangements are inadequate at the wholesale and retail levels. As a result, sales promotion is ineffective and the functioning of distribution centres inefficient in varying degrees. Lack of storage accommodation, excessive storage charges for hired godowns and high transportation expenses are some of the serious disincentives to undertake advance stocking. Denial of commission for long periods (in Sambalpur district it is understood that no commission was paid in some cases for the period 1957 to 1966) has tended further to dampen the interest of cooperative marketing societies in sales promotion.

### **Conditions in the Sambalpur District for Speedy Distribution**

5.78 In Sambalpur, (where a study was undertaken on behalf of our Committee) there are 6 regional marketing societies (wholesalers), and 174 primary credit societies (retailers). Apart from the problems mentioned above, the following difficulties were also found to exist :

#### **Advance Stocking**

5.79 Conditions are not favourable to advance build up of stocks which is so essential in areas inaccessible during the monsoon season.

Apart from shortage of storage accommodation, coordination between delivery of supplies and credit arrangements to the farmer is also lacking. Where a regional marketing society allowed farmers to lift fertilisers well in advance of the season without waiting for credit formalities to be completed, better sales were reported.

5.80 Before introduction of the crop loan system, fertilisers were made available against Government taccavi credit on deferred payment basis at low rates of interest which cultivators have found convenient. For taccavi, they were not required to enrol themselves as regular members of co-operatives who subscribed to the share capital of the society at 12.5 per cent of their loans, carrying an interest of 7 to 8 per cent. With the stopping of taccavi, however, farmers are required to comply with all the regulations of cooperatives, and this has led to poor fertiliser sales.

5.81 The existence of a large number of defaulting societies with overdues in excess of 20 per cent of the demand and their consequent inability to borrow from central banks also affected the offtake of fertilisers at the retail level.

## CHAPTER VI

# DISTRIBUTION ARRANGEMENTS

*(Continued)*

## 10. PUNJAB

### Introductory

6.1 Punjab is in the forefront in regard to consumption of fertilisers. The level of application per acre of cropped area in the State (*viz.*, the erstwhile Punjab) in 1966-67 was 3.41 kg of N, 0.47 kg of  $P_2O_5$  and 0.24 kg of  $K_2O$ . In respect of N, consumption is much higher than the all-India average. During 1966-67, the reorganised State of Punjab consumed 68,000 tonnes of N, 10,000 tonnes of  $P_2O_5$  and 6,000 tonnes of  $K_2O$  representing 38.9 per cent, 14.8 per cent and 11.4 per cent respectively, of the minimum consumption targets indicated for 1970-71 for the State.

### Arrangements for Supplies & Finance

6.2 The value of nitrogenous fertilisers received from the Pool by the composite Punjab in 1965-66 was Rs. 89.9 million. The value of fertilisers received by the new Punjab State in 1966-67 was Rs. 82.3 million. In addition, the new Punjab State received nitrogenous fertilisers valued at Rs. 12.5 million from sources outside the Pool. The State Government (composite Punjab) obtained short-term credit from the Centre of Rs. 55.8 million for payment for the Pool supplies in 1965-66. But the borrowings were less at Rs. 21.2 million in 1966-67.

6.3 Thus, a major part of the cost was borne by the State itself. The composite State made a budgetary provision of Rs. 95.5 million for 1965-66 for purchasing fertilisers, while for the composite State upto October and thereafter for the new Punjab, a provision of Rs. 100 million was made for 1966-67. Out of this, relatively small sums were used for purchasing non-nitrogenous fertilisers, which amounted to Rs. 7.4 million and Rs. 3.9 million, respectively. The State Marketing Federation being the sole distributor, also invested during 1966-67 Rs. 16.2 million towards purchases of non-nitrogenous fertilisers on its own.



## **Distribution Arrangements**

6.4 In April 1960, the Punjab State Cooperative Marketing Federation was appointed as the sole agent for the distribution of all types of fertilisers in the entire State of composite Punjab. This position continues even today in Punjab (and Haryana). In composite Punjab, there were 196 marketing/rail-head agencies in 1966-67. The retail points now at 6,050 represent a threefold increase since 1960-61. Of these, about 4,000 retail points are in the new Punjab. The quantity handled by the Federation increased from 63,000 tonnes in 1961-62 to 307,000 tonnes in 1965-66. For the new Punjab, it was 240,000 tonnes during 1966-67 which, in terms of value, amounted to Rs. 87.6 million.

6.5 The apex federation receives the supply of nitrogenous fertilisers on consignment basis and transfers them to the district marketing societies, primary marketing society/railhead agencies at the taluka level and primary credit societies which are retail points, the transactions all along the line taking place on consignment basis. The State federation proposes to continue the present arrangements, except in respect of nitrogenous fertilisers purchased from the 'free' quota by it from the Nangal factory for which the marketing societies may have to pay cash before taking delivery. It is reported that the primary marketing societies did not find it difficult to take delivery of the 'free' quota supplies from the apex federation in this manner during 1966-67, because of the substantial resources they could raise from retailers.

### **Arrangements for Sharing of Commission**

6.6 It is understood that the arrangement for sharing of the margin among different agencies in vogue in 1966-67 was one of the reasons for the retailers taking interest in sales. The State federation keeps a margin of Re. 1 to Rs. 1.50 per tonne, the district wholesaler, Rs. 2.50 per tonne and the primary marketing societies/railhead agency, Rs. 8 per tonne on ammonium sulphate, and Rs. 4.50 on superphosphate and muriate of potash on sales directly made by them to farmers. In the case of sales through retail depots they are allowed Rs 1.50 on ammonium sulphate, and Re. 1 on superphosphate. The retail agency is allowed a commission of Rs. 24 per tonne on urea, Rs. 15 per tonne on CAN and ammonium sulphate and Rs. 8 per tonne on muriate of potash and superphosphate. Admittedly, in the matter of sharing the margin among the different agencies involved, Punjab shows a better arrangement than most other States studied.

## **Performance in Ludhiana District—The Favourable Conditions**

6.7 Ludhiana is a package district and the consumption of fertilisers is fairly high. Apart from the district marketing society, there are 8 marketing societies (which receive supplies direct from manufacturers or ports as per indents placed by the State Federation) and 450 retail agent societies, out of 1,300 primary credit societies.

6.8 The district fertiliser committee makes allocations to various rail-head agencies or marketing societies, which in turn, move the stocks to retail depots directly from railheads to avoid double transportation, loading, unloading, etc. By and large, this has helped promote prompt delivery to the retailer. However, whenever several consignments arrive at the same time, difficulties are experienced in unloading and handling the material at retail points.

6.9 Certain other healthy features of the distribution system which facilitate rapid movement of fertilisers to retail points and ultimately to farmers are set out here. The foremost factor appears to be the ready availability of credit. Under the system in operation in 1966-67 and earlier fertilisers are supplied by distribution centres against permits issued by officials of the Agriculture Department. The village level worker (VLW) can issue permits for loans upto Rs. 150, extension officer upto Rs. 400, Block Development Officer upto Rs. 1,000 and District Agriculture Officer upto Rs 2,500.

6.10 Permits can usually be obtained by any farmer, whether a member of a cooperative society or a non-member, or even a defaulter upto almost any extent. Though members of cooperatives look upon taccavi credit as being supplementary to cooperative credit, taccavi is accorded a definite preference because of the lower rate of interest (7%). Cooperative credit was not disbursed in kind till 1965-66, but a small beginning was made in 1966 kharif. However, conditions were not favourable for a sudden shift towards complete dependence on cooperative credit for fertilisers because (a) the societies having overdues in excess of 33 per cent of the demand were debarred from fresh credit and there was no certainty of credit being available, and (b) there was delay in the submission of applications to the cooperative bank, and sanction of credit by it. In addition, the shares to be purchased at 10 per cent of the loan, which brought in little dividend was another disincentive to borrow from cooperatives.

6.11 In Ludhiana alone, during 1965-66, Rs 11.3 million were made available by way of taccavi credit for fertilisers, against Rs 3.5 million of

cooperative credit intended for fertilisers. For a while, during 1966-67 taccavi was stopped but on account of the fall in sale of fertilisers, it was quickly revived, and credit (taccavi) of the order of Rs 6 million was advanced. Cooperative credit continued to be advanced in cash mainly because of the difficulties in coordinating the arrangements for the supply of fertilisers and of credit. Above all, the availability of fertilisers to retail centres without any limits, on consignment basis, enabled rapid movement of stocks and quick sales.

6.12 Another significant factor, in our view, is the make-shift arrangement made in order to obviate the problems arising from lack of full-time employees at the societies appointed as retail agents. We understand that, in many cases, a member of the Committee is entrusted with the work of fertiliser distribution, for which he is allowed 75 per cent of the net commission earned by the Centre on fertiliser sales, the other 25 per cent being retained by it. This system is reported to have produced satisfactory results.

### Present Arrangements

6.13 Following the Central Government's decision to curtail credit facilities, the State proceeded to strengthen the State Marketing Federation by contributing Rs 4 million to its share capital in order to make it eligible for distribution credit from the Reserve Bank. Its present owned funds amount to Rs 9.1 million of which Rs 5.5 million are available towards margin money. The Reserve Bank had sanctioned a credit limit of Rs. 50 million as against Rs. 80 million applied for on behalf of the federation for 1967.

6.14 The federation has estimated its total requirements of fertiliser finance at Rs 172 million in 1967-68, Rs 220 million during 1968-69, progressively increasing to Rs 250 million in 1970-71. If we assume a credit turnover of twice during the year, the distribution credit requirements for supplies envisaged by 1970-71 would be about Rs 280 million at the federation level. It is important to note that the State's present assumption is that almost the entire finance would flow from the Reserve Bank. Thus it is assumed that Rs. 100 million in 1967-68, Rs 200 million in 1968-69, a similar amount in 1969-70 and Rs. 220 million in 1970-71 would come from the Reserve Bank of India and, the balance would be made up by either the State Government or the Central Government.

6.15 It has also been stated that in order to be eligible for borrowings from the Reserve Bank, the federation would need, during the four years,

a further contribution of Rs 21.9 million to its share capital. In addition, the State cooperative bank, through which the funds are channelled, would also need, according to the federation's calculations, a share capital contribution of Rs 12 million for meeting the increased fertiliser credit needs. Its maximum borrowing power also needs to be enlarged beyond 15 times its owned funds. The State Government is of the view that the federation is organizationally equipped to undertake distribution of fertilisers during the next few years without any difficulty, provided the required finance is made available, from the Reserve Bank, the State Bank or commercial banks.

## 11. RAJASTHAN

### Introductory

6.16 In Rajasthan the present consumption of chemical fertilisers per acre of cropped area is considerably below the all-India average. It amounted in 1966-67 to 0.38 kg of N, 0.14 kg of  $P_2O_5$  and 0.02 kg of  $K_2O$  per acre. The total consumption in 1966-67 in the entire State was 14,000 tonnes of N, 5,000 tonnes of  $P_2O_5$  and 1,000 tonnes of  $K_2O$ , which works out to 15.8 per cent, 21.2 per cent and 7.3 per cent respectively of even the modest consumption targets for 1970-71. Much effort is needed during the next few years to raise consumption to target levels.

### Supply to the State

6.17 During 1965-66, the State received nitrogenous fertilisers worth Rs. 14.1 million, the corresponding figure for 1966-67 being Rs. 24.9 million. The State depended on Central Government credit to the tune of Rs. 15.9 million (for 18 months) and Rs 16.8 million (for 6 months) during 1965-66 and 1966-67, respectively. In contrast to other States, the Centre waived the 50 per cent blanket cut on credit supplies from the Pool as a special case. The State makes purchases of phosphatic fertilisers from manufacturers, directly, and potassic fertilisers from the State Trading Corporation. These were valued at Rs. 7.4 million in 1966-67.

### Distribution Arrangements

6.18 Since 1963, fertiliser distribution in the State has been done by the State Marketing Society (Rajasthan Rajya Sahakari Kraya Vikraya Sangh Ltd.), in 11 districts out of 26 through taluka marketing and primary credit societies, and in 15 districts by the Agriculture Department through panchayat samitis, and cooperative agencies wherever they exist. The total coopera-

tive retail depots numbered 1,450 in 1965-66. We understand that it has now been decided that in all districts the distribution of all types of fertilisers should be done through cooperatives only. To undertake this task, the apex society has decided to open six divisional offices in the State for holding buffer stocks and for stationing supervisory staff. At the retail level, primary credit societies located at points where village level workers are stationed will be appointed as agents. Where there are no suitable credit societies, it is proposed that either the apex society or primary marketing society will open its depots.

### **Arrangements for Sharing of Commission**

6.19 Out of the total commission of Rs. 50 to Rs. 70 allowed on various fertilisers, the apex marketing society takes Rs. 7 to Rs. 10 per tonne according to the arrangements in force in 1966-67. The district level wholesalers are allowed gross commission varying between Rs. 31 and Rs. 40 per tonne. Out of this, provision for interest accounts for Rs. 8 to Rs. 14 per tonne and transportation charges Rs. 14 per tonne; and the net commission works out to Rs. 4 to Rs. 6.50 per tonne. At the retail level, apart from incidental charges, the net commission accounts for Rs. 7.0 to Rs. 12.50 per tonne, but there is no provision for interest charges.

### **Problem of Finance**

6.20 The immediate problem at the State level following the decision by the Centre to curtail credit is that of finding adequate finance for purchase of nitrogenous as well as non-nitrogenous fertilisers. Requirements of distribution finance for the apex society were estimated by it at Rs. 76.5 million for 1967-68, progressively increasing to Rs. 202.1 million by 1970-71.

6.21 The share capital and reserves of the apex society amounted only to Rs 600,000 at the end of June 1966. To enable the society to avail itself of the distribution credit facility from the Reserve Bank, the State Government contributed Rs 4 million by borrowing from the National Cooperative Development Corporation. By 1970-71, the society would need margin money of Rs. 20 million for fertiliser business alone, to be able to raise distribution finance of Rs. 200 million.

### **Problems Feared Under Cooperative Distribution**

6.22 Several problems are apprehended in connection with ensuring speedy and satisfactory distribution of fertilisers by cooperatives, and in

connection with the apex society being able to raise and make effective use of institutional finance. It has, for instance, been pointed out that the number of primary credit societies in the State which might qualify for retailership is small, and if retailership is restricted to only cooperatives, cultivators would be required to go long distances to get their supplies of fertilisers. In the absence of whole-time employees to run the retail agencies, difficulties are also feared in connection with ensuring prompt remittance of sale proceeds, submission of returns regarding sales, and maintenance of records relating to sales on taccavi permits.

#### **Incentives to Retailers Not Adequate**

6.23 It has also been pointed out that the procedures in vogue and the other conditions under which retailers operate are not conducive to their taking active interest in sales promotion. For instance, retail societies are required to pay 9 per cent interest on the value of supplies made to them beginning from the second month after the date of supply. In view of this, the societies hardly lift anything more than they can immediately sell. The net commission allowed to them is also considered to be relatively low and not attractive enough.

#### **Recovery of Sale Proceeds**

6.24 The major problem for the cooperatives is the recovery of sale proceeds. Arrears in this regard from the apex society to the State Government amounted to Rs. 17.8 million by April 1967, out of which about Rs. 9 million relate to the years 1964-65 and 1965-66. This is attributed to organisational deficiencies and inadequacy of control and supervision at all levels, and slackness in efforts to ensure prompt recovery.

#### **Difficulties at the Taluka Level**

6.25 Some difficulties of the taluka marketing societies arise from the fact that supplies are made to them not according to their ability to sell but according to the requirements worked out by the Agriculture Department. Besides certain types of fertilisers for which there is not much demand have also been supplied to the societies which have not found it a profitable business, as they are required to pay interest at 6 per cent on the supplies from the date of despatch. Low profits and frequent losses have put heavy limitations in employing enough staff to exercise the needed supervision over retailers. Storage facilities are also generally inadequate. Though the wholesaler is required to provide door delivery to the retailer, it is frequently not done, because of lack of transport arrangements.

## **Problems Observed in Sri Ganganagar**

6.26 In Sri Ganganagar district out of 768 credit societies, only 64 have been considered eligible by the authorities for appointment as retail agents. Apart from the inadequacy of retail points, the other drawbacks are also observed to vitiate the efficiency of cooperatives mentioned earlier. For instance, as the number of retail agencies which failed to remit sale proceeds and thus became ineligible for fresh supplies increased, there was a consequent reduction in fertiliser supplies to areas served by them. New societies or individuals appointed as distributors were also noticed to go the same way after an initial period of good performance.

6.27 A major part of the sales in the district was against taccavi permits issued by panchayat samitis to farmers, as the cooperatives covered only about 30 per cent of the agricultural population and cooperative credit was largely advanced in cash, and was limited. But taccavi credit was not satisfactory. In the first place, the entire procedure for issuing permits appeared to be dilatory and cumbersome. Secondly, a large number of farmers who had not received any fertiliser were reportedly served demand notices which showed that there was scope for issuing bogus permits.

6.28 According to the procedure laid down in respect of fertilisers made available against permits, the Government gives credit to the apex society, after the Block Development Officers (BDOs) concurred acknowledge the liability of the panchayat samiti for the permits issued, since the total value of such permits is treated as a loan to the samiti. In view of the large number of bogus permits reportedly issued, the BDOs were said to be reluctant to issue acknowledgments in some cases. In one block, no verification had been done by the BDO since 1963-64. According to figures collected, permits still to be certified by BDOs amounted to about Rs 1 million in April 1967 for the entire State. The indiscriminate issue of taccavi permits has also given rise to the problem of recoveries, which are at a standstill.

## **Evidence and Views of State Representatives**

6.29 Being generally aware of the inadequacy of the cooperative distribution arrangements, the State officials have urged the need for opening an adequate number of distribution centres at the rate of one per village level worker circle. Where there are no viable societies which can function as wholesalers, either the apex society should open its own depots, or appoint private agencies. The impediments to speedy disposal of stocks and prompt

return of money have been indentified to be restricted credit sales to the retailers, the high cost of credit, and lack of adequate arrangements to effect prompt recovery of sale proceeds. The high overdues from the members and the credit societies are serious hurdles in the way of promoting sales. It also emerged from the discussions with the State officials that in areas where cooperatives are unable to handle the entire supplies, manufacturers might appoint their own agencies. In such situation, the operation of the latter would have to be coordinated with the agricultural programme of the State.

## 12. UTTAR PRADESH

### Introductory

6.30 Uttar Pradesh is one of the States where the present fertiliser consumption is less than the all-India average. Consumption of fertilisers per acre of cropped area during 1966-67 in the State was 1.80 kg. of N, 0.61 kg. of  $P_2O_5$  and 0.20 kg. of  $K_2O$ . The off-take of fertilisers in 1966-67 which was 98,000 tonnes of N, 33,000 tonnes of  $P_2O_5$  and 11,000 tonnes of  $K_2O$  works out to 30.6 per cent, 33.3 per cent and 21.2 per cent, respectively, of the minimum consumption targets indicated for the State for 1970-71. The State Government's estimate of fertiliser requirements by 1970-71 is more than twice the Central Government's targets based on likely availability.

### Sources of Supply and of Finance

6.31 Upto 1966-67, the source of supply for nitrogenous fertilisers had been the Central Pool. The value of Pool fertilisers received during 1965-66 was Rs. 131.4 million and during 1966-67 Rs. 142.8 million. For part of the Pool supplies, the State availed itself of credit from the Centre, which amounted to Rs. 45 million in 1965-66 and only Rs. 19.6 million in 1966-67, the latter being for a shorter period of six months. The State makes purchases of phosphatic and potassic fertilisers directly from manufacturers, such purchases during the past two years being Rs. 7.5 million and Rs. 40.5 million. To a small extent (Rs. 1.06 million in 1966-67) non-nitrogenous fertilisers are also purchased by the Provincial Cooperative Federation. The State invested sizeable finances in fertiliser business which in 1966-67 amounted to Rs. 130 million, as against Rs. 112.5 million in 1965-66. The provision for 1967-68 is put at Rs. 240 million.

### Distribution Arrangements

6.32 Two non-official agencies, namely, the Provincial Cooperative Federation and the Cane Unions Federation and an official agency, i.e.,



the Agricultural Supplies Organisation of the State Agriculture Department undertake distribution of fertilisers in the State. As the Government's agent since 1963-64, the Provincial Federation accounted for, roughly, 44 per cent of the distribution, while the Cane Federation is estimated to have handled about 10 per cent. The balance was distributed by the Agricultural Supplies Organisation during 1966-67. Prior to July 1963, the supplies to cooperative federations were made on consignment basis. Subsequently, however, what is called deferred payment was introduced, under which payment would have to be made to the Government, whether or not stocks are sold, within 14 months, the effective rate of interest for timely payment being 5 per cent per annum.

6.33 The U.P. Cooperative Federation operates through the district cooperative development federations which receive supplies on 12 months' credit at reasonable interest. The district agencies in turn distribute the fertiliser on consignment basis through primary marketing societies, large-sized societies and other cooperative unions affiliated to them. Reportedly, in 1965-66, there were 10,000 cooperative depots. The district federations are expected to collect indents from other agencies, arrange for the supply of fertilisers, collect sale proceeds and make remittances to the U.P. Cooperative Federation. Ensuring proper supervision over the operations of retailers is also one of their functions.

#### Arrangements for Margin

6.34 Out of a total margin of Rs. 50 to Rs. 80 allowed on different types of fertilisers during 1966-67, the apex federation retained Rs. 31 to Rs. 54, out of which it got a net commission of Rs. 2 to Rs. 4.50. The district level agency was allowed Rs. 18.25 to Rs. 20.15 per tonne out of which the net commission ranged between Rs. 4 to Rs. 6.50 per tonne. At the retail level, apart from other expenses, a net commission of Rs. 8.76 to Rs. 13.00 per tonne was allowed. Where retail agencies have godown facilities, delivery of supplies is taken at rail-heads. In the alternative, they are initially stocked in godowns of district federations.

6.35 The other agency is the U.P. Cooperative Cane Unions Federation which is an apex body of the cane unions of the State. Appointed as an agent of the Department of Agriculture since 1963-64, it makes supplies to areas covered by cane unions. The Unions have sub-depots in rural areas for distributing fertilisers to sugarcane growers.

6.36 The third agency is the Agricultural Supplies Organisation. Started in 1963 for supplying fertilisers directly to non-members

of cooperatives, it issues fertilisers mainly against taccavi credit. For a time, this organisation made use of cooperative sale points in villages where these were in existence and satisfied the criteria laid down by it. However, the system did not seem to have worked satisfactorily, and the distribution had to be done mainly through village level workers and block development officers, and, in Aligarh, through 'package depots'.

### **Operations of the Cooperative Federation**

6.37 The Provincial Cooperative Federation handled fertilisers worth Rs. 70.6 million (sale price) during 1966-67 as against Rs. 68.6 million during 1964-65. The federation's owned funds at present amount to about Rs. 11 million, which are utilised for a number of activities undertaken by it.

6.38 The evidence placed before us by officials and non-officials, and information collected with special reference to Aligarh District, a package area, go to show that there is considerable scope for improvement in the efficiency of operations, and general administration of the U.P. Cooperative Federation in respect of fertiliser business. Quite a few of the district federations are reported to have failed in remitting sale proceeds. The failure is attributed to lack of control and adequate supervision over them. Failure to submit information regularly about sales, stocks, sale proceeds, etc., delays in adjustments of cash sale proceeds and of sales against taccavi permits and cooperative 'adhikar patras', due to procedural bottlenecks and lack of proper coordination are reported to be very common.

### **Arrangements in Aligarh District**

6.39 There are two parallel distribution agencies in Aligarh. The District Cooperative Wholesale Federation operates through forty block unions, each having about twenty villages under its jurisdiction, fourteen large-sized societies, each similarly having a somewhat large area of operation, two cooperative marketing societies each covering a taluka or so, and one service society. Out of the 418 service societies and 72 multi-purpose societies, only one society was appointed as retailer. In a bid to overcome the inadequacy of retail points, the Agricultural Supplies Organisation has opened 136 package stores in the interior, and appointed whole-time supervisors to manage them, and supply fertilisers to members of cooperatives against 'adhikar patras' issued by the cooperatives, or taccavi permits issued by agricultural officials. Even so, the arrangements do not seem to be adequate. Sixty to seventy per cent of sales of the block unions and marketing societies continue to take place at the headquarters village, even though the agencies are required to sell them in the interior through package depots.

6.40 The distribution arrangements are rendered all the more difficult by delays in the receipt of supplies. During 1966-67, about 60 per cent of the supplies were delivered late in the district. Communications in the district are poor. A large proportion of retail depots is said to be inaccessible by trucks and stocks have to be moved by bullock carts or on mules' back. This has increased transport costs (by at least Rs. 3 per tonne over what was allowed during 1966-67). Lack of storage facilities at distribution centres and high cost of hired storage have been repeatedly mentioned as serious handicaps for building stocks in advance. The low commission allowed to retailers till 1965-66 did not provide sufficient incentive to them to take special efforts in promoting sales. Also, intermediaries who received a higher commission on their sales to farmers directly, were generally disinclined to release stocks to retailers. Under these circumstances, conditions do not seem to be favourable for retailers stocking fertilisers in advance.

#### **Delays in Issuing Taccavi Permits**

6.41 The turnover of stocks is not rapid in the district because of delays in effecting sales to farmers. The scope for improvement in the off-take of fertilisers by farmers is limited by two factors: (a) delays in moving stocks to retailers in advance of the season, and (b) delays or uncertainties in providing production credit. For instance, the procedure for issuing permits for taccavi loans by village level workers or other functionaries is complicated and time-consuming. The verification of disbursements by block development officers, marketing societies, and, thereafter, by district agricultural officers, is reported to take several months. Again, in the case of cooperative credit against which a substantial part of fertilisers is supplied, delays are not uncommon in the preparation of loan cases. This has often resulted in fertiliser being supplied before preparing the loan cases, leading to difficulties in making proper adjustments at the cooperative bank level. The present procedures have led to a situation where the value of fertilisers eventually reached the Provincial Federation only after 14 months.

6.42 The efficiency of distribution arrangements in the district also seem to have suffered in no small measure by the lack of healthy leadership and control by the district federation. Burdened by sizeable unsold stocks received earlier from the Agriculture Department and losses arising therefrom and subsequently, it has not been able to maintain the requisite staff to carry out its functions efficiently. Recently, it has been listed among the societies which have consistently failed to remit sale proceeds and its management has been superseded.

## **The Proposed New Arrangements**

6.43 The State Government's present thinking is to apportion responsibility for distribution, by 1970-71, among three agencies, namely, the U.P. Cooperative Federation, Cane Federation and the Supplies Organisation respectively, in the ratio of 40:20:40. Some important organisational reforms are under way to make the Provincial Federation and its network of agencies function more efficiently. We understand that the Federation will maintain its own godowns in 48 districts with requisite staff for making supplies to retail points, thereby bypassing district wholesalers whose performance has not been satisfactory. At the village level it is learnt that, by 1970-71, there will be 19,000 viable credit societies, 200 marketing societies and 1,300 block unions which would be used as retail points.

### **Possible Limitations**

6.44 The first limitation is likely to arise in regard to finance. The State Government has expressed the view that it would find it difficult to raise increased resources for fertiliser transactions. With effect from July 15, 1967, the State is understood to have discontinued deferred payment facilities to the two Federations compelling them thereby to raise resources from the banking system to pay for the supplies. If funds can be rotated twice a year, it is possible that cooperatives may be in a position to manage with about Rs. 230 million for 60 per cent of the supplies they are supposed to handle by 1970-71. It is highly unlikely however that the turnover of finance would take place twice a year as anticipated against 14 months at present. Their requirements for the 60 per cent supplies may reasonably be put at around Rs. 250 to 300 million for which margin money of Rs. 25 to 30 million will have to be found by them. Even so, given the margin money, a part of the distribution finance may come from the Reserve Bank, but a major part will still have to be provided by the banking system.

6.45 As for supplies to be handled by the Supplies Organisation, no indication of the source of funds was available. However, the possibility of depending on short-term credit from the Central Government, if such credit facilities continue to be given, was mentioned. In this connection, it has also been suggested by the State Government that the period of 6 months for which the Central Government now extends credit to the State should be increased to one year.

### **Operational Limitations**

6.46 Finance from either the Reserve Bank or the banking system would obviously call for more efficient operation of the distributions system on

commercial lines. Thus the funds raised from the banks would perhaps have to be repaid in less than six months. Here, however, serious misgivings have been expressed. For example, the cost of borrowings from the banking system will be two to three per cent higher than that on credit hitherto from the State, and this will make it difficult for cooperatives to operate economically. The major hurdle will however be in respect of organisation and efficiency of operation and effective coordination between the supply and credit agencies.

6.47 While the contemplated reorganisation of the cooperative distribution system is a right step, the difficulties involved in establishing 48 district branches and godowns with requisite supervisory staff and sales personnel and in similarly reorganising and staffing all retail points within a short period cannot be minimised. We have learnt, in this connection, that the reorganisation of primary credit societies into viable units as suggested by the Reserve Bank and the Central Government during the past few years is yet to make rapid progress in the State.

6.48 The State Government recognises the financial, organisational and other limitations that have to be reckoned with if cooperatives and government agencies together are to handle all supplies by 1970-71. It does not, therefore, rule out the need for fresh thinking on the efficient organisation of distribution.

### 13. WEST BENGAL

#### Introductory

6.49 In West Bengal, the consumption per acre of cropped area reached a level of 1.69 kg. of N, 0.58 kg. of  $P_2O_5$  and 0.74 kg. of  $K_2O$  during 1966-67. Consumption was higher than the all India average in respect of  $K_2O$  and somewhat lower for N and  $P_2O_5$ . The actual consumption in 1966-67 amounted to 27,000 tonnes of N, 9,000 tonnes of  $P_2O_5$  and 12,000 tonnes of  $K_2O$ , amounting to 30.4 per cent, 53 per cent, and 48.9 per cent, respectively of the minimum consumption targets indicated for the State for 1970-71.

#### Sources of Supply and of Finance

6.50 The State received nitrogenous fertilisers from the Central Pool of the value of Rs. 45.8 million in 1965-66 and Rs. 49.8 million in 1966-67. The State Government has not been availing itself of credit from the Centre to any significant extent for Pool supplies received. During the year 1965-66, the State availed itself of credit to the tune of Rs. 4.4 million and during

1966-67 Rs. 4.1 million. Its own budgetary allocations for the purpose amounted to Rs. 40.8 million in 1965-66 and Rs. 50.2 million in 1966-67. In regard to non-nitrogenous fertilisers, distributors themselves directly receive the supplies by making payments to the manufacturers.

### Distribution

6.51 The distribution of fertilisers in the State is mainly done by private agencies. The figures relating to the value of fertilisers distributed by co-operatives and private agencies are set out in Table 6.1 below.

TABLE 6.1  
Distribution by different agencies

Year	Total value of fertilisers distributed by the State in	Of which by cooperatives (Per cent)		Of which by private agencies (Per cent)	
1964-65	63.9	11.4	(17.8)	52.9	(82)
1965-66	65.3	12.8	(19.6)	52.5	(80)
1966-67	71.2	11.4	(16.0)	59.8	(84)

Thus, cooperatives handled 16 per cent of the supplies in 1966-67, as against 19.6 per cent in 1965-66. It is also observed that the cooperative handling of nitrogenous, phosphatic and potassic fertilisers during 1966-67 was 16.2 per cent, 15.7 per cent, and 6.5 per cent respectively, the balance having been handled by the private agencies except for small quantities distributed by the State Agriculture Department in some areas.

6.52 The State Government has appointed 30 distributors, including the State Cooperative Marketing Society and the State Warehousing Corporation for distribution of Pool fertilisers. The apex marketing society, however, has been given monopoly since 1963-64 for distribution of all fertilisers in the Burdwan district, which is a package area. In this and other districts, it operates through the district/thana marketing societies at the intermediate level and primary credit societies appointed as retail agents at the retail level. There were as many as 1,543 cooperative retailers during 1965-66. The private distributors operate through their sub-distributors appointed at the district/thana level, and private retailers at the village level. In Hooghly district alone, there were 2,000 private distributors at different levels during 1966-67.

## **Terms of Supply**

6.53 The distributors, including the apex cooperative societies, are allowed 120 days' credit against sight drafts drawn by them in favour of the State Government and supported by bank guarantees. The Provincial Co-operative Bank on which the apex marketing society draws the hundis is permitted to stand guarantee upto Rs. 5 million. As security for accepting the hundis, the apex bank obtains within 10 days of its acceptance 100 days' hundis drawn by zonal marketing societies, if stocks are sent to Burdwan district (or thana marketing societies if they are despatched to Hooghly district), on the respective central banks, together with guarantees by the banks for payment.

### **Arrangements for Cooperative Distribution**

6.54 The distribution of Pool fertilisers by co-operatives is largely confined to Burdwan district where they are given monopoly position. The two zonal marketing societies at the district level are appointed as agents by the apex society, and they receive Pool fertilisers under the sight draft system on 100 days' credit. They operate through 29 thana marketing societies and 425 primary credit societies (out of 1,300) at the retail level.

6.55 The apex society supplied on sight draft arrangement stocks valued at Rs. 9 million during 1965-66 to Burdwan district. The arrangement is not in operation in other districts (except partly in Hooghly), on account of practical difficulties e.g., marketing societies being weak, and the co-operative banks not being in a position to guarantee the hundis. During 1965-66, the apex society supplied in the other districts stocks worth Rs. 2.4 million, mainly on cash basis. However, when stocks were received late as in 1966-67, it had to offer substantial credit facilities through resort to overdrafts from the apex bank at a relatively high cost. While in districts where the sight draft system is not in force, the system of cash sales seems to have stood in the way of rapid turnover of stocks, several bottlenecks were noticed in Burdwan, and partly in Hooghly, where the former system is in operation.

### **Limitations of Sight Draft Arrangement**

6.56 In operating the sight draft system, the difficulty, in the first place arises at the apex society level. The apex bank is allowed to guarantee payment of hundis drawn by the apex society upto an overall limit of Rs. 5 million. But, when stocks arrive late, or many consignments to be stocked at the same time, the limit is found inadequate. The problem is similar for the two central banks in Burdwan for which the overall

limit for guaranteeing hundis drawn by the two zonal societies is fixed at Rs. 3.5 million. When the zonal societies and primary marketing societies fail to meet their commitments to the apex society before the expiry of 100 days, the apex bank as the guarantor had to honour the commitments to the Government and it does so by sanctioning overdrafts to the apex society.

6.57 Within the district, the sight draft system has not fully succeeded in facilitating smooth and speedy movement of fertilisers to the consuming points. In the first place, non-availability of credit supplies to the thana marketing societies and others lower down has created difficulties for the movement of stocks to retail points. Except for a few societies which are sanctioned limited credit by zonal societies, the thana societies are required to pay cash before taking delivery of supplies for which they are unable to raise adequate resources. An important source of funds for the purpose is the short-term production credit for fertilisers sanctioned to the societies, which is expected to be passed on to them in time. Arising from delays in sanction and uncertainties, however, this source has often proved undependable.

6.58 At the expiry of the period of 100 days' credit allowed to district (zonal) societies, all unsold stocks are transferred by them to thana societies for which payment is made by the latter by borrowing from the cooperative banks upto 80 per cent of the value of stocks. The cooperative banks also sanction clean limits to the district societies up to the balance of the value, in order to put them in a position to meet their commitments to the apex society. This arrangement is found to give rise to two difficulties. (a) The central banks are not in a position to find the resources of the magnitude needed for the purpose. Besides, the funds remain locked up till the next season. Not having refinance facilities for the credit so sanctioned, the central banks are driven to deny credit for production purposes, (b) the interest charges on the cash credits being  $7\frac{1}{2}$  per cent, the thana marketing societies find the arrangement uneconomical.

#### **Lack of Adequate Facilities to the Retail Level**

6.59 The off-take by retail agent societies during the season is restricted mainly because they are required, in a majority of cases, to lift supplies against cash payment, for which they depend mainly on fertiliser credit sanctioned by central banks, which is inadequate and often delayed. For lifting stocks from thana societies to meet the needs of non-members as well as members, they depend on temporary deposits and their own re-



sources which do not measure upto the needs. In any case, the arrangement is found to result in the retail agencies making repeated visits to the wholesaler during the same season for supplies, rotating the limited sources. Apart from the increased transport costs and the inconvenience to the retailers, the supplies could not be distributed in time to farmers.

6.60 The absence of full consignment arrangements or adequate credit supplies to the retailers and of facilities for advance credit to farmers, and insufficient storage accommodation and incentives to the retailer, combine to make advance stocking, which is so necessary, almost impossible. Thus, even during off-season, there is little scope for lifting available stocks from the thana societies.

6.61 There has been a substantial increase in the number of retailers during the past few years. There is, however scope for a further increase. As the retail agent societies are selected on the basis of their financial position they are not uniformly distributed in the district, leading to inadequacy of distribution points in some areas. There is reluctance to extend co-operative sale points further in view of the poor financial position of the societies, and difficulties in recovering sale proceeds from them.

#### **Arrangements for Non-Nitrogenous Fertilisers in the District**

6.62 In regard to non-nitrogenous fertilisers there are similar handicaps. They are not covered by sight draft arrangements, and district marketing societies are required to make cash purchases and sell them against cash to the thana marketing societies and so on. The Burdwan zonal society, for instance, had obtained 22 per cent of its total supplies on cash payment, and 12 per cent on 30 days' credit, in 1966-67 (upto December 1966). Its needs for cash were not fully met, though the central bank sanctioned cash credit of Rs. 2 million for the purpose. The first limitation is the financial base of the zonal societies and the other is that of resources with the central banks, which have already been committed to finance stocking of nitrogenous fertilisers.

#### **Distribution Through Private Agencies**

6.63 The 29 other distributors in the State include the State Warehousing Corporation. The State Government allows them supplies of Pool fertilisers on the same terms as for the apex cooperative society, i.e., sight draft arrangement. Out of the 29, 10 are major distributors, most of whom are big manufacturers who have furnished bank guarantees.

In the case of smaller distributors, the Government has waived the condition of guarantee.

6.64 The private agencies make their own arrangements for non-nitrogenous fertilisers. We have been informed that they have not expressed any difficulty to the Government in regard to finance for handling fertilisers. The evidence given by the distributors themselves goes to show that while some of them draw from their own overall business funds, others depend on bank finance which, of late, has been restricted because of Reserve Bank's credit control measures. The distributors requirements of finance so far are also limited because of their making, generally, cash sales to their agencies.

6.65 The difficulty is more at the level of sub-distributors and retailers through whom the distributors operate in the districts. Barring individual cases where 30 days' credit is given, they are required to make cash purchases. In view of this condition, the sub-distributors' are selected according to their financial position and business connections, and are, therefore, largely confined to areas where the supplies can be disposed of with relative ease and speed.

### **Problems of the Private Agencies**

6.66 The private distributors appoint their sub-distributors in the district in which they are allowed to operate, who in turn, appoint their own sub agents or depot holders in the interior areas. Government sources have pointed out that the private distributors are reluctant to go into the interior and open fertiliser sale points there. In particular, districts in north Bengal are neglected as distributors avoid entering into risky areas (i.e. areas where sales are not quick, communications difficult, etc.). They appear to feel that the distributors, who are concentrated in Calcutta do not make adequate efforts to reach the interior. The private distributors, however, contend that willing persons of standing with credit-worthiness to be appointed as sub-distributors or depot holders are not available in many parts and not many are in a position to take supplies on cash basis, and that communications in the northern districts are very poor. It has also been pointed out that under the present arrangements, there is not sufficient coordination in the estimation of demand and supply of fertilisers.

6.67 Our study in the Hooghly district where private distributors predominate, has also brought into focus certain important issues. With supplies increasing, there will be need for credit supplies to the sub-distri-

butors and to retail depot holders as well. The distributors would not be inclined to extend credit facilities to the sub-depot holders, etc., unless they are assured of the recovery of the value and are also enabled to raise the needed finance. At present, they are not exercising much control and supervision over the sub-distributors and depot holders, as the sales are by and large on cash basis. They recognise that if arrangements for institutional credit are made, it would involve responsibility on them to ensure the needed supervision over the depot holders and their conforming to certain disciplines which institutional finance would impose. They have pointed out that extension of retail depots to areas which are not well served and remote, and extension of credit facilities to depots in such areas, can be promoted by offering suitable incentives, including, a cover against risk.

### **Evidence and Views of State Representatives**

6.68 So far as the State Government is concerned, it does not consider that any change is called for in the existing arrangements for distribution, as the private agencies at present have been able to raise the needed finance by themselves. If, at this stage, the role of co-operatives is extended, it is maintained, that this might lead to the Government taking over additional financial burdens. The State is also prepared to encourage the private agencies to open more depots in remote areas, by suitable incentives such as bonus schemes. The Government will not, however, have any hard and fast approach in regard to the manner of distribution and the private agencies will be allowed to use co-operatives as their agencies wherever possible. It has also been indicated that the Government would review the present sight draft arrangements in order to facilitate smooth flow of supplies. It will also consider the question of suitably strengthening finances of the apex society to make it eligible for fertiliser finance from the Reserve Bank.

### **General Observations**

6.69 Some observations may now be made with regard to the States generally in the light of the data set out in the foregoing pages. Fertiliser supply and fertiliser distribution have increased in volume over the last few years. But this gradient of increase will be much steeper in the next few years. Not only will physical supplies be much larger but also the financial requirements which they postulate. At the same time the range of distribution will be incomparably wider and the complexity correspondingly greater. The real question is whether the ability to undertake these tasks is being built into the system as it now operates. The answer must

cover both the financial and organizational aspects of the problem; it must take into account distribution as well as credit; and it must be related to each of the main components of the system, namely, Governments, the Cooperatives and the private agencies. We address ourselves to some of these aspects in the following paragraphs.

6.70 Some general observations may first be made about the record of the co-operatives which formed perhaps the most important part of the distribution system, before we turn to the various deficiencies of the existing arrangements and problems thrown up from experience. In some States where cooperative agencies have been entrusted with distribution, they have shown enterprise and done commendable work over the years, from the point of view of taking fertilisers to a point near enough to the consumer in advance of assured demand for an input, which had not yet become widely accepted. For the country as a whole, the number of co-operative sale depots increased from 31,790 in 1961-62 to 52,675 in 1965-66. They have also built up storage accommodation for fertilisers and other items which at the end of 1965-66 measured 0.8 million tonnes. In addition to this, their hired storage accommodation worked out to 1.6 million tonnes. Besides, they have made rapid advances in installing manure mixing units. They have also taken steps to build up managerial personnel in some States to handle the fertiliser business. To have done all this in the difficult period when fertiliser consciousness was yet to be built up in many areas makes the contribution of the co-operatives in this field particularly significant.

6.71 We have, however, come across many instances where the co-operative agencies had to operate under severe handicaps. Appreciable quantities of unsold stocks were sometimes transferred to the co-operatives by the State Agriculture Departments when co-operatives were appointed as sole distributors. In some other cases, substantial quantities of stocks were supplied late for each season and this in turn gave rise to problems of storage, shortages and extra expenses. Being burdened with the supply of fertilisers of a type for which no demand existed in the area on account of poor extension work done by the Government agencies was another type of difficulty which the co-operatives had sometimes to face. Moreover, while co-operatives have been called upon to handle increasing supplies as a matter of State Policy, the financial assistance from the Government either for building up of their managerial personnel or for construction of storage accommodation and purchase of transport vehicles has not always been forthcoming to the required extent.

6.72 As discussed earlier, with particular reference to Bihar, Rajasthan and Uttar Pradesh, prolonged delays in adjusting dues to the co-operatives in respect of the value of fertilisers supplied by them against taccavi permits issued by the Government officials have greatly affected the turnover of funds and the ability of cooperatives to make prompt payments to the Governments. The co-operatives have also suffered on account of distribution margins being inadequate, particularly at the retail level, partly on account of the high administrative costs retained by the State Governments and their failure to settle promptly the dues to the cooperatives in respect of margins, transportation costs and other expenses. These are some of the factors which while being beyond the control of co-operatives, did have an important bearing on the manner in which the distribution arrangements through them worked, and as such, have to be taken into account in any assessment of their performance.

6.73 The basis of consignment hitherto adopted has made for convenience but not for business efficiency on the part of the distributing agency. A feature of the system was that cooperatives, for example, merely acted as agencies of the Government with no financial involvement. The ownership of stocks remained with the Government and there was no relationship between the volume of supplies on the one hand and on the other, the financial strength and operational efficiency of the agencies concerned. Supplies increased from year to year but there was nothing in the arrangement itself to make it incumbent on the agencies to strengthen their capital or improve their organisation. While some progress has undoubtedly been made under the consignment system, it is clear that more advantage could have been taken by the agencies concerned to improve their efficiency of operation in terms of turnover or personnel and procedures.

### Finances for the Cooperatives

6.74 An important problem concerns the finances of the cooperatives. In relation to the funds that have to be borrowed for handling supplies at the current level the owned funds of the apex co-operative marketing organisations are very inadequate in many States (e.g. Andhra, Bihar, Haryana, Maharashtra, Mysore, Orissa and Rajasthan). In terms of the level of supply estimated for 1970-71, the present position of owned funds is even more disquieting. For all the States together and assuming (a) that stocks will be turned over twice during the year and (b) that co-operatives would handle 75% of the stocks, it is estimated that owned funds earmarked *for this purpose alone* would have to be of the order of Rs. 270

million by 1970-71 as against their present *total* owned funds of Rs. 89.27\* million. It may be remembered that all their present resources (1965-66) are fully employed in activities other than fertilisers. Moreover, the marketing organisations, will also need large resources for their other operations including the distribution of other inputs and of agricultural implements, the procurement of foodgrains on behalf of governments of some States as also the marketing of agricultural produce generally.

### Organisation and Operations

6.75 Another major problem, which has both a financial and an organisational aspect is confronted today by the co-operatives in the urgent need so to streamline their operations as to be able to repay in 6 months credit which they have hitherto had from 15 to 18 months. This is linked to their overall efficiency, including arrangements for movement of supplies from the State level to the retail agencies, for recovery of sale proceeds and for supervision over the sub-wholesalers and retailers. Clearly much reform is needed in this context. For the general picture hitherto has been one of 'slackness on the part of the co-operative distribution agencies at different levels to collect and remit sale proceeds of fertilisers received on consignment basis, and in turn, the apex society falling in arrears to the State Governments for large sums for years together. The gap between the present speed of turnover and what may be called the minimum norms for sound commercial operations to be maintained to be eligible for bank finance varies from State to State but is wide enough in most of them. It is of course particularly so where the cooperative marketing system is itself relatively weak, e.g., Bihar, Rajasthan and Madhya Pradesh. A few States such as Punjab and Gujarat are appreciably ahead of the others in this respect.

### Sales Promotion

6.76 Yet another deficiency in the current working of the co-operative distribution system is the lack of supporting facilities and incentives for undertaking active sales promotion of the fertilisers. Under the consignment arrangement, the State Governments normally insist on passing on supplies according to their own estimates of requirements rather than according to the ability of the co-operative agencies to sell. Also, in so

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\*Owned funds of District societies in three States, viz., Madras, Maharashtra and Andhra Pradesh and those of Apex Societies in other States. The total owned funds of the primary, district and apex marketing societies for the sixteen States and Union Territories were Rs. 363 million at the end of 1965-66.

doing, the preferences indicated for certain types of fertilisers are not taken into account. This, coupled with absence of conditions which encourage quick disposal, or discourage delayed sales, has led to accumulation of stocks and lack of effort to promote sales. The extent of the unsold stocks at the end of the past two years in respect of nitrogenous fertilisers with the States (Statement VII) serves to illustrate the magnitude of the problem faced by some of the States, more particularly in areas not noted for high demand for fertilisers. Though the sales efforts for certain types of fertilisers (e.g. superphosphate) received support for a time through price subsidies provided in some areas, the withdrawal of these subsidies, and later the appreciable increase in the prices, added to the difficulties of the agencies in the effort to sell their stocks.

6.77 Profit based on efficiency is usually a strong motive behind measures of sales promotion. The conditions under which the co-operative distribution agencies have been operating in the past have not helped to create a healthy business attitude towards achieving profit—or conversely avoiding loss—in the matter of selling fertiliser. State Governments have often felt inclined to take a lenient view of apex and other wholesale co-operative agencies which had incurred losses or failed to repay over long periods. There are also several instances of cooperatives which had sustained losses year after year in their distribution operations but which have not been audited at all for years and continue to receive supplies of fertilisers. As emphasised earlier, it is necessary in the interests of sound-business, to establish a proper link between the value of the supplies made on the one hand and the financial and organisational capacity of the agencies on the other, including their ability to effect a rapid turnover of available funds. In this sphere, more than in any other, there is need for considerable improvement and thorough overhauling of the procedures followed by the co-operative agencies.

#### **Problems Arising from Inadequacy of Sale Points and Credit Sales**

6.78 The points at which fertiliser is sold to the farmer must obviously be within easy reach for him, and in any given area, adequate in number as well as evenly distributed. At these points, both fertilisers and, where needed, credit must be available in time. There have also to be supporting arrangements such as trained staff and adequate storage. All these aspects are important; but one or more of them, in varying degrees and different combinations, have proved bottlenecks in the process of distribution, the inadequacies being sometimes localised and sometimes widespread. As regards the number and distribution of retail points, for example, the deficiencies vary according to the cause. Thus the inadequacy is some-

times caused by the absence of co-operative societies qualified for appointment as retail agencies in small pockets of a district otherwise satisfactorily served by co-operatives (e.g. West Godavari and Burdwan). In other instances, there are entire districts in which only a few societies can be selected for appointment as retail agents (e.g. Muzaffarpur and Sri Ganganagar). On the other hand, in some areas the retail points of sale have in the past increased to such an extent that the problem now is one of reducing the number and making each individual unit economically viable.

6.79 The difficulty of recovering sale proceeds and of ensuring effective supervision and control over retailers has been one of the main reasons for the reluctance of the co-operative wholesalers to appoint more agencies. Even where standards have been laid down and caution is exercised in selecting the retail agents, numerous lapses have occurred, including retention or misuse of sale proceeds. Supervision has been found difficult. The co-operative apex organisations are understandably reluctant to increase the number of retailers and in particular to appoint societies which are *prima facie* not financially or organisationally sound. There is clear need for creating conditions in which the cooperative wholesalers would be actually interested in bringing about in their areas a system of distribution which is adequate both in the number and the location of its points of retail sale.

### **Restricted Credit Sales to Retailers**

6.80 The difficulties encountered in effecting recoveries and enforcing conditions have prompted different States to devise different remedies. Not all these have been successful. In some areas, the consignment at any one time made to the retail society is subject to a limit relating to the owned funds or the maximum borrowing power of the particular society. But as in West Godavari and Thanjavur, this has resulted in inconvenience, some times dislocation, which is consequent on a disconnected and uncertain series of small consignments. Elsewhere, relatively high rates of interest are charged on supplies to the retail society so as to discourage accumulations. This arrangement has led to the retailers seeking to draw on each occasion only such quantity as they can immediately sell, and their complaining about the difficulty of making repeated visits to the district or other town for receiving supplies (e.g. Muzaffarpur and Sri Ganganagar). In certain other districts (e.g. Mandya) the retail societies are required to make cash payment before lifting supplies; but only a small proportion of societies has been in a position to raise the needed resources from the central bank and that too at a cost which they considered relatively



high. Moreover, the central bank itself, in several instances, does not have funds to spare. An additional factor is one relating to the credit which the farmer must have from his credit society—the society itself drawing from the central bank—before he can lift the fertilisers. Thus in not a few areas, the retail society which sells fertiliser is required to wait for the sanction of production credit by the central bank to the members of its societies (e.g. Mandya, Thanjavur, Raipur and Burdwan). Needless to add that this has led to much uncertainty regarding the availability of supplies to the members. Further, apart from the members, the eligibility of the society itself is dependent on its repayment performance; and where it does not qualify itself in the eyes of the central bank, the difficulty is even more widespread, for it affects all members of the society; those who have paid their dues no less than those who have been chronic defaulters.

### **Advance Building of Stocks**

6.81 If the farmer is to get his fertiliser when he needs it, the retail source must build up its stock reasonably in advance. All the safeguards described above and the procedures hitherto adopted have tended, not to maximise the possibility of advance stocks, but minimise financial risks in a system not based on sales promotion. Liberal credit sales to the retail agencies is, in this context, an important requirement. But apart from that, as already pointed out, there has to be co-ordination between the co-operative credit agencies (or those issuing taccavi permits) on the one hand, and the supply agencies on the other. This is lacking to a significant extent in many areas. In addition, the absence of attractive commission on the sales effected by retail agencies and the high cost of hired storage have also in many cases come in the way of the retail societies taking active interest in sales promotion. These point to the need for evolving appropriate procedures and operations to ensure maximum coordination between distribution and credit arrangements. Insofar as cooperative distribution and cooperative credit are linked—as normally they have to be for good reasons—it is clear that the weaknesses of the one will be multiplied by the weaknesses of the other and both reflected at the all-important retail point of sale of fertiliser. A solution has to be found which, without harming the principles of either good cooperation or good business, ensures that the fertiliser reaches the farmer in time.

### **Sales to the Farmers**

6.82 The stocks, then, must be received at the retail level reasonably in advance and in adequate quantities and then turned over as rapidly as

possible. At this stage there are serious bottlenecks in almost all the areas studied. For example, where the farmer's purchases depend mainly on the fertiliser permits issued by the Agriculture Department or the co-operative institutions, the offtake is often seriously affected by defects in procedures and delays in action. The delays take place at practically every stage, e.g., verification of particulars about the farmer, acceptance by the BDO or other authority, and the issue of the permit itself. The procedures cause much inconvenience to the farmers because of the multiplicity of officials, offices, societies and depots to be approached for the consideration of the application, the sanction and issue of the permit and the sale of the fertiliser.

### **Financial Bottlenecks at the Wholesale/Sub-Wholesale Level in other States**

6.83 The inadequacies so far discussed relate, in the main, though not exclusively, to States in which fertiliser is received on the basis of consignment or some analogous arrangement. There are other deficiencies and bottlenecks too to be considered. These pertain largely to the States in which cooperatives receive nitrogenous fertilisers on the basis of deferred payment in one or another of its different forms.

6.84 In Thanjavur (Madras), under the letter of credit system, the extent of cash credit available to the cooperative wholesalers for making the initial cash payment, and the extent of credit available from the Government on each allotment, are related to the owned funds of the agencies. The owned funds being inadequate, it has not always been possible to lift consignments as they arrived, especially when two or more came together or at short intervals. The period of deferred payment allowed (60 days) did not always suffice. For example, the retail society to which supplies were made on consignment, usually failed to pay back in time. This in turn was due to the restricted credit facilities, limited consignments and delays in recoveries—all affecting off-take and payment at the farmer level—which have been described already.

6.85 The policy of fixing clean limits and hypothecation limits, with reference to the disposable or 'free' resources of the agencies also considerably restricted the funds available to the marketing societies for making purchases of non-nitrogenous fertilisers. Further, the central banks were not able to raise enough resources to make advances to the wholesalers for their operations in nitrogenous and non-nitrogenous fertilisers.

6.86 In the Burdwan district (West Bengal), where the co-operatives have been given monopoly for distribution of all fertilisers and where

the "sight draft" system is in force, similar constraints vitiated the availability of credit to the distribution agencies. The period of credit allowed (100 days) to the district agency was not adequate for the sale of the entire consignment to the sub-wholesalers. The latter were required, by and large, to make cash payment for the supplies they had received. But they did not have enough resources, or the requisite owned funds to raise the resources. They received cash credit accommodation from the co-operative banks, but this could not be rotated frequently because of the slow off-take of supplies by the retailers. The retailers, in turn, were required to make immediate cash payment; for this they had usually to wait for the sanction of the short-term production credit by the central banks and get cash, by way of adjustment from the cultivator. The lack of adequate resources on the part of the central co-operative banks prevented them from extending the credit needed by the sub-wholesalers and the retailers. The financial limits under which apex bank and the central co-operative banks had to operate in this process of guaranteeing hundis drawn also came in the way of rapid turnover. As in the States, the conditions here too are not such as to be conducive either to sales promotion or advance stocking at the retail level.

6.87 As commented earlier, the introduction of cash payment at the wholesale level in Maharashtra and at the retail level in Madhya Pradesh under the new schemes evolved for those States is likely to create bottlenecks similar to those in Thanjavur and Burdwan.

#### **Evidence and Views of the State Representatives**

6.88 The curtailment by the Centre of the credit facilities it has hitherto extended for Pool fertilisers has, in varying degrees, imposed strains on the States' ways and means position. Much larger provisions for fertilisers have had to be made in the State budget for 1966-67. The budgetary as well as ways and means difficulty was all the greater for those States, which, in their turn, were passing on fertiliser on a consignment basis to cooperative marketing agencies for distribution in the State. This was because, as already described, those agencies were almost entirely dependent on the credit extended from the Centre or State downwards and wholly unprepared to switch over to institutional credit.

6.89 Many of the State Governments we have met, including Andhra Pradesh, Bihar, Mysore, Haryana, and Uttar Pradesh, have expressed apprehensions about their being in a position to find the increasing resources for the purchase and distribution of fertilisers. They have expressed

the hope that at least the present limited credit facilities (6 months) offered by the Central Government would continue for some more time. Some States, notably Andhra, Haryana, Punjab and Madras have indicated that a line of credit from the State Bank of India should be made available to the State Governments to enable them to hold fertiliser stocks initially before they are passed on for distribution to the co-operatives.

6.90 There is, however, general appreciation of the limitations to the ability of the co-operatives to adjust themselves to the requirements of institutional finance immediately, and many States have expressed the view that it would be very difficult for the co-operatives to raise the required margin money and at the same time satisfy the other conditions which go with institutional finance. But this apart, many of the States have impressed upon us the desirability of making use of co-operative agencies to the maximum extent possible.

6.91 In this connection, the need for substantial aid from the Centre for strengthening the owned funds of the co-operative apex banks, central banks and district marketing societies has been stressed by many of the States. In addition, some of the States—for example, Uttar Pradesh, Punjab and Rajasthan—have urged that the entire distribution finance required by the co-operatives should come from the Reserve Bank of India on the basis of the augmented owned funds.

6.92 In States where the private agencies have for some time been operating in a large way in the distribution of fertilisers—e.g., Madras, Andhra, and West Bengal—there is agreement first of all that cooperatives should be enabled to participate to the maximum possible extent, and secondly that, without prejudice to this, all appropriate facilities for increased sale of fertilisers should be given to the private agencies. The latter course, though supplementary, is recognized as both inevitable and desirable if only because of the search for somebody who would share the financial burden and contribute operational efficiency. In the other States too, the possibility is being considered of manufacturers or their agencies entering the distribution field to the extent the co-operatives are not likely to be in a position to handle all the supplies.

### **Private Distribution**

6.93 The phrase 'private distribution' is used here as on the one hand, excluding cooperative or departmental distribution of fertilisers (co-operative marketing societies, BDO's and so forth) but, on the other hand

including all other distribution not only by wholesalers, semi-wholesalers and retailers but also by manufacturers, whether or not these latter are in the private sector or the public or cooperative sectors (Fertilizer Corporation, F.A.C.T., Gujarat State Fertilisers, etc.) Both manufacturers and wholesalers may, for this purpose, be called distributors. In some States (e.g. West Bengal) there are distributors, sub-distributors and retailers, whereas in others (e.g. Andhra and Madras) there are only distributors and retailers. The selection of both sub-distributors and retailers is normally restricted to those who are financially sound and have established business connections.

6.94 The extent of credit facilities provided by manufacturers to wholesalers, and wholesalers to retailers varies from manufacturer to manufacturer and from wholesaler to wholesaler. The F.A.C.T., for instance, makes supplies on credit for one to three months to its wholesalers and retailers; it did this upto 60 per cent of its total sales in 1964-65. Shaw Wallace & Co. gave credit facilities to its wholesalers upto 30 per cent of the sales in the same year. Coromandel Company gives 60 days credit to the sale distributors.

6.95 As for the credit extended by the wholesalers, Rallis India Ltd., for instance, extends credit to the retailers upto 10 to 15 per cent of the total sales for one to three months. Out of the sales of E.I.D. Parry during 1964-65, those constituting 13 per cent were on the basis of credit extended to retailers for fertilisers varying from 30 days to 180 days. The Fertilizer Corporation of India is reported to have given credit facilities upto 90 days on its supplies to the private distributors in the four Southern States. Its sales to the Maharashtra State Government which formed the major part of its production were on 15 days credit. Among other important suppliers on credit are the Indian Potash Supply Agency (29 per cent of sales in 1965-66 upto 30 days), and some medium-sized manufacturers and manure mixing firms in Madras and Andhra.

### **Credit Arrangements to Private Agencies**

6.96 The manufacturers who extend short-term credit do so from their working capital. Though precise figures are not available the credit requirements of distributors (both manufacturers and wholesalers) are at present not very large in relation to the total quantity of fertilisers handled by them. This is because the market has been a sellers' market hitherto. Even so, the distributors had to raise fairly substantial funds from the banks. The latter usually restrict their credit to a percentage varying from 60 to

75 of the value of the stocks hypothecated. The distributors had to find the rest themselves as margin money. The rate of interest charged by the banks on the advances to the bigger distributors varied from 9 to 10 per cent, while for others it went upto 12 per cent per annum. Even so, we have been told that accommodation to the full extent needed by the distributors could not always be raised from the banks because of the credit control measures adopted by the Reserve Bank.

9.97 It has been emphasised by distributors generally and manufacturers in particular that there is every sign of the present sellers' market turning into a buyers' market in the near future. As a concomitant, there would be larger credit sales than at present to subdistributors, retailers and cultivators. But finance would therefore be needed in much larger measure than at present. Further, according to the manufacturers, wholesalers and the distributors, a way would have to be found whereby the margin money required by banks is not as large, proportionately, as at present.

#### **Increasing the Number of Retailers**

6.98 As supply and distribution increase, the distributors are confronted with the need to extend very substantially the net work of their sub-distributors and retailers. Any speedy enlargement of the network such as the situation calls for in several areas, is fraught with some risk for the distributor, for meticulous standards cannot always be enforced in the selection of a very large number of retailers. At the same time, sales cannot be stepped up adequately unless credit supplies are made on a much larger scale than at present. It has, therefore, been urged before us that suitable arrangements should be devised for covering part of the risks inherent in making credit sales to the sub-distributors and retailers.

#### **Credit to the Cooperative Agencies**

6.99 It has also been urged that the private distributors' experience of credit supplies made in the past to the co-operative wholesalers and retailers has not been altogether happy. Repayment has been delayed to such an extent that there is hesitation to make large credit sales.

6.100 There is agreement that the effectiveness of a retail depot whether co-operative or private, largely depends on whether it is in a position to cater, in turn, for all the fertiliser requirements of the farmer. In the cooperative sphere, the sale is by a retail society; but there is also a credit organisation to extend credit simultaneously. It has been urged that,

in the course of private distribution as well, it would be of great help if, when needed, the farmer got his fertiliser on 2 or 3 months' credit so far as the retailer was concerned. This would give the farmer breathing time to get production credit—of 8 or 9 months if need be—from elsewhere and, with its help, pay off the temporary accommodation he has obtained from the retailer. The distributors, realise that any credit arrangements on an organised basis to the sub-depot holders and retailers would mean certain responsibilities on the part of the distributors themselves. This would be by way of exercising supervision and control over the retailers and generally ensuring proper distribution of fertiliser and use of credit facilities.

## CHAPTER VII

### DISTRIBUTION CREDIT NEEDS

#### Present Distribution Credit Arrang-----

7.1 In Chapters IV to VI some indication has been given of the dimensions and nature of the credit facilities which till 1965-66, were made available by the Centre to the States in respect of fertiliser supplied from the Pool. The total credit extended during that year was of the order of Rs. 400 million, each drawal being repayable in 18 months, and carrying an interest of  $4\frac{1}{2}$  per cent per annum. Subsequently, in pursuance of certain recommendations of the Committee on Fertilisers which found acceptance with the Government of India, the States were told that the period of repayment would be curtailed to 6 months with effect from April 1966. At the same time, the rate of interest was reduced to 4 per cent. The States were also advised that short-term credit for fertiliser distribution would be allowed to the extent of only 50 per cent of the value of consignments despatched from the Central Pool. The 6-month period, it was indicated, would be in addition to the period of 60 days manufacturers' credit applicable to all the supplies received from the Pool by the States. The Centre expressed\* the hope that, within the 8 months period thus available, the State Governments would be able to effect full recovery of the value of fertilisers sold. The Centre also indicated that the States would have to make their own financial arrangements in regard to the other 50 per cent of the supplies from the Pool.

#### Line of Credit from the Reserve Bank

7.2 The supplementary financial arrangement which emerged was the line of credit which the Reserve Bank of India agreed to sanction\*\* to the State co-operative banks. This credit was to be channelled to either the apex marketing societies or the primary marketing societies and was meant to cover 50 per cent of the supplies not included in the Central Government's

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\* Govt. of India, Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture), Circular No. 19-55/65-M dated 27th July, 1966-1967.

\*\*Reserve Bank Circular No. ACD. OPR. 1220/B. 1-66/67 dated 6th September, 1966.



new arrangements. The credit limits are sanctioned against the State Government's guarantee and at the Bank Rate, each drawal from the limit being repayable within six months.

7.3 Among the other conditions attached to these facilities of refinance from the Reserve Bank to the co-operative banks are the following: (i) the distribution agency should provide a margin of at least 10 per cent in respect of each drawal, i.e. the accommodation from the bank to the marketing agency should not exceed 90 per cent of the aggregate value of stocks held by it and by its agencies in its name; (ii) the distribution agency should call for and in turn submit to the co-operative bank returns which show that there is adequate cover for the loan comprising stocks of fertilisers held in the depot of the distributors, agents and sub-agents, as also stocks in transit, sale proceeds, etc.; (iii) if a part of the stocks are received by the apex marketing society on consignment basis from the State Government, the State Government should agree either to waive its claim against the goods in favour of the banks or to guarantee the entire accommodation provided by the co-operative banks to the marketing societies.

#### **Further Changes in the Centre's Credit Arrangements**

7.4 The next development was in January 1967. The Centre advised\* the States that, as its financial resources were limited in relation to the requirements for fertiliser distribution credit, it would not be in a position to sanction short-term loans even upto 50 per cent of the Pool fertilisers as had been expected earlier. States were, therefore, advised to make maximum use of the line of credit made available by the Reserve Bank of India to the co-operative distribution system. It was also indicated that no short-term loans would be given from 1.4.1967 for the co-operative distribution system in the States where co-operatives were distributing fertilisers on a monopoly basis, except to the extent that it was not possible to make use of the line of credit made available by the Reserve Bank of India. In other cases, where Pool fertilisers were not distributed by the co-operative societies on a monopoly basis, the short-term loans from the Centre would be limited to the extent of 50 per cent of the value of those supplies which was routed by the State Governments through agencies other than the co-operatives.

7.5 In essence, the idea was that the co-operative sector, strengthened and reorganised where necessary, would be in a position to meet the bulk

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\* Govt. of India, Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture), Circular No. 8-2/67-Exp. Coord. dated 21st January, 1967.

of its requirements for Pool fertilisers by drawing upon the Reserve Bank's line of credit. For the residual needs, which it was thought would be relatively small, resort could be had to the credit facilities from the Centre. Further the Reserve Bank agreed\* to allow the State co-operative banks to avail themselves of its refinancing facilities for the purchase and distribution of fertilisers from the Pool as well as out of the free sale quota, subject to the terms and conditions already mentioned. Insofar as part of the stocks would be had from Government on a consignment basis, and these could not be readily separated by the distribution agencies from the other stocks on which they obtain bank finance, it was stipulated that, as an alternative to detailed segregation of the two types of stocks, it would suffice if the Government waived its claim on the total stocks to the extent of Rs. 110 for every sum of Rs. 100 of loans outstanding against societies from the financing bank.

7.6 It was soon realised that, in view of the financial and administrative difficulties besetting the co-operatives in many States, the credit limits which the Reserve Bank might fix would not suffice for handling, at different stages of distribution, the large quantities of fertilisers involved. Accordingly, while advising† the States to improve the share capital structure of the co-operatives, the Centre also indicated to them that it was "willing to consider requests for short-term loans to fill such a gap even for supplies distributed through the co-operative system". It added, however, that "such a request must indicate the arrangements made by the State to fully utilise the line of credit available from the Reserve Bank of India in the first instance....". The State Governments were also advised to provide in their budgets sufficient funds for the purchase and distribution of fertilisers which, together with the credit available from the Reserve Bank and the Centre, would be adequate to meet the total needs of the distribution system. In order to relieve the pressure on their ways and means position, the States were also advised to avail themselves of the credit facilities from the State Bank of India, which it was understood had agreed to sanction limits upto an aggregate Rs. 300 million against the stocks held by the State Governments.

7.7 In accordance with these arrangements, the Reserve Bank of India agreed to sanction limits upto Rs. 500 million to the various State co-operative banks to facilitate their financing of the co-operative distri-

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\*Reserve Bank of India Circular No. ACD. OPR. 7737/B. 55-66/67 dated 5th May 1967.

†Govt. of India, Ministry of Food, Agriculture, Community Development and Cooperation, (Department of Agriculture, Circular No. 8-2/67-Exp. Coord. dated 3rd July 1967.

bution agencies during 1967. As against actual sanctions amounting to Rs. 220 million on 30.6.1967 and to Rs. 330 million on 31.12.1967, the total drawals during the first six months were nil and amounted to Rs. 276.5 million during the second half of 1967. The outstandings on 29 December 1967 were Rs. 154.9 million. As discussed in the previous chapter, the absence of adequate owned funds for providing the margin, the lack of organisational capacity to assemble monthly returns of stocks, and the delays in recovering sale proceeds which made it difficult to repay loans within six months of drawing were some of the reasons which prevented full use being made of the Reserve Bank credit facilities. As a result, a number of States, including Andhra Pradesh, Bihar, Orissa, Madhya Pradesh and Mysore, continued to raise credit from the Centre, along with the supplies obtained from the Pool, and pass on the same on a consignment basis to the co-operatives. In 1966-67, the States borrowed for this purpose Rs. 256.4 million from the Centre and drew Rs. 276.5 million from the Reserve Bank of India. In addition, Andhra Pradesh was sanctioned a credit line of Rs. 50 million by the State Bank of India.

### **The Future Pattern of Distribution Credit Needs**

7.8 We have discussed in Chapter III what the pattern of supplies to the States from the Pool and the manufacturers is likely to be by 1970-71. The Table 7.1 seeks to illustrate the implications of that pattern in terms of credit on the hypothesis that the co-operatives handle the entire Pool supplies. It will be seen that, on the assumptions made, there will be very considerable strain on the resources both of the Centre and of the States.

7.9 It may be observed that if the turnover is uniformly assumed to be twice during the year, and the distribution credit requirements are estimated at 90 per cent of the value of stocks, Andhra Pradesh will need Rs. 175 million in 1970-71 for the anticipated Pool supplies as against a credit of Rs. 69 million raised from the Centre during 1966-67. If, however, allowance is made for the full utilisation of Reserve Bank credit of Rs. 50 million by the co-operatives, there will still be a gap of Rs. 125 million to be met by the Centre and/or State Governments. To take another example, viz., Maharashtra, the credit needs will be Rs. ~~26~~ 6 million as against only Rs. 5 million received from the Centre in 1966-67; and, if the existing practice is to be continued, the entire finance will have to be provided by the State itself. In Uttar Pradesh also, the requirement will be considerably larger, being nearly Rs. 134 million, as compared with credit upto Rs. 45 million received from the Centre in 1965-66 and Rs. 20 million in 1966-67. The total distribution credit needs for the Pool supplies will be

TABLE 7.1

## Requirements of distribution credit for Pool supplies

(Rupees in million)

State	Distribution credit drawn from the Centre during		Distribution credit limit sanctioned by the R.B.I. for 1967	Distribution credit * requirements for the value of Pool supplies likely to be received in 1970-71, assuming a turnover of twice during the year	Margin money requirement of co-operative agencies to raise the distribution credit in col. 4 at 10% of the distribution finance needs
	1965-66	1966-67			
1	2		3	4	5
<b>North</b>					
1. Haryana	—	—	20.0	44.1	4.9
2. Jammu & Kashmir	—	—	—	2.8	0.3
3. Punjab	55.8**	21.2**	50.0	72.1	8.0
4. Rajasthan	15.9	16.8	25.0	58.7	6.5
5. Uttar Pradesh	45.0	19.6	50.0	133.5	14.8
	116.7	57.6	145.0	311.2	34.5
<b>West</b>					
6. Gujarat	—	14.6	50.0	135.5	15.1
7. Madhya Pradesh	36.0	7.9	25.0	40.6	4.5
8. Maharashtra	—	5.3	—	266.5	29.6
	36.0	27.8	75.0	442.6	49.2
<b>South</b>					
9. Andhra Pradesh	51.2	69.2	50.0	174.7	19.4
10. Kerala	2.8	10.1	—	46.4	5.2

(Continued)

1	2	3	4	5	
11. Madras	42.6	44.8	50.0	21.5	2.4
12. Mysore	10.0	5.0	—	91.4	10.2
	106.6	129.1	100.00	334.0	37.2
<b>East</b>					
13. Assam	2.6	—	—	9.2	1.0
14. Bihar	10.1	26.4	—	132.5	14.7
15. Orissa	6.2	11.6	10.0	58.9	6.5
16. West Bengal	4.4	4.1	—	2.4	0.3
	23.3	42.1	10.0	203.0	22.5
Grand Total	282.6	256.6	330.0	1,290.6	143.4

\*\*Relates to old Punjab.

\*Distribution finance : Value of fertilisers/turnover.

Distribution credit = Distribution finance minus Margin money

Rs. 1,291 million, as compared with Rs. 257 million of the Centre's credit and Rs. 276 million of Reserve Bank credit in 1966-67.

7.10 Another result of the anticipated supply pattern is that the credit from the Centre for fertiliser will not be available to the different States in proportion either to their need for such assistance, on the one hand, or their capacity to utilise it as adjudged from the organisational and financial position of their co-operative distribution system. Thus, Madhya Pradesh is one of the co-operatively undeveloped States which, for that reason, would ordinarily have to obtain credit from the Centre rather than from the banking system; nevertheless, in view of the relatively smaller proportion of supplies that it will receive from the Pool by 1970-71 in relation to the total supplies (30 per cent for N, and 66 per cent for  $P_2O_5$ ), the maximum credit from the Centre for which it will be eligible will be only Rs. 40.58 million as compared with Rs. 36 million and Rs. 7.94 million drawn by it in 1965-66 and 1966-67 respectively. An instance of another kind, *viz.*, of a cooperatively developed State, is Madras which will get from the Centre Rs. 21.53 million in respect of  $P_2O_5$  (the only fertiliser it would obtain from the Pool in 1970-71), while it drew from the Centre Rs. 42.55 million in 1965-66 and Rs. 44.77 million in 1966-67, for nitrogenous fertilisers (paragraph 3.21). West Bengal may not get any credit at all for supplies from the Pool.

7.11 Thus, an important implication of the linking of credit from the

Centre with Pool supplies is the divorce of such credit from the total needs of a State which, in 1970-71, will be only partly and varyingly met from the Pool. Moreover, if the Centre's credit facilities do not increase beyond the present level, most of the States will find themselves compelled to raise the additional resources on their own. This would, for one thing, impose considerable strain on the co-operatives in finding the requisite finance, while at the same time compelling them to improve their efficiency.

### **Distribution Credit Arrangements to Follow Distribution Arrangements**

7.12 At this stage, however, we do not propose to examine whether the Centre or the Reserve Bank or both should increase their provision for distribution credit so as to reduce the burden on the States or the co-operatives. For, in the light of what has been explained above, the requirements of distribution credit for each State and for the country as a whole will now have to be considered with reference to the type of distribution agency in each State, rather than with reference to the source of supplies, Pool or other. In other words, it is necessary to consider (a) the extent to which the co-operative agencies can reasonably be expected to undertake efficient distribution by 1970-71, taking into account the possible improvements in their financial structure, organisational and operational efficiency, etc., and (b) the extent to which the manufacturers will make their own arrangements for sale of fertilisers. It may be recalled in this connection that while, under the new fertiliser policy of the Central Government, the manufacturers have been given freedom, subject to certain conditions, to arrange their own distribution, it has been emphasised\* by the Government of India that the co-operative agencies which continue to play an important role in fertiliser distribution should be made use of to the fullest extent possible and that "in a situation in which fertiliser requirements are much larger than the capacity of the co-operative institutions to handle them, distribution arrangements will have to be strengthened and extended by bringing in agencies other than co-operatives into the system".

### **Linking Distribution to Production Credit from Co-operatives**

7.13 An important reason as to why the co-operative agencies played the main role in distributing nitrogenous fertilisers, which have hitherto formed the bulk of the total supplies, is undoubtedly the fact that virtually the only institutional credit for agricultural production (e.g. for inputs)

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\*Govt. of India, Ministry of Food, Agriculture, Community Development and Co-operation (Department of Agriculture), Circular No. 19-64/65-M dated 7th May 1967.

available to-day is co-operative credit. At the same time, it has to be recognised that the linking of distribution of inputs to co-operative credit has not made much headway. Two of the main reasons for this are the inadequacy of supplies and the lack of co-ordination between credit and supply agencies. Our studies in different districts have shown that in some of them, e.g. West Godavari, Burdwan, Ludhiana and Sri Ganganagar, co-operative credit continues to be disbursed mainly in cash, while in others, e.g. Thanjavur, Raipur and Aligarh, disbursement of credit in kind has been practised imperfectly and only for a few years. While, for the package areas the portion of the short-term co-operative credit advanced in kind can be said to be on an average slightly more than 15 per cent of the total short-term credit provided, for the particular areas in which high-yielding variety crops are grown, the corresponding figure is about 40 to 50 per cent. For the country as a whole, however, the percentages may be said broadly to be 15 per cent in kind and 85 per cent in cash, though precise information is not available. With the insistence now placed by the Reserve Bank and the Central Government on the crop loan system, and the vigorous efforts which are being made by some of the State Governments to implement this system, especially in the H.V.P. and I.A.D.P. areas, it is possible to hope, that about one-third of the total short-term co-operative credit for production for the country as a whole will, by 1970-71, be advanced in the shape of fertilisers.

7.14 Before proceeding to make certain provisional estimates of distribution credit for fertilisers in the ensuing paragraphs we would like to state very clearly the following reservations:

- 1) The estimates are attempted, not with a view to achieving any statistical approximation, but solely in order to indicate very broadly in each case the order of the credit involved and, in that context, highlight the problems which emerge therefrom.
- 2) We have not considered it necessary, for the limited purpose in view, to initiate independent investigations—other than the district enquiries, which were partly in the nature of opinion surveys and were not statistically designed—for the purpose of checking the major quantitative assumptions of the Sivaraman Committee's Report in so far as they have a bearing on our enquiry. While treating those assumptions as the starting point, we have, however, made use of other available information including (as we have elsewhere indicated) some of the data obtained in connection with other enquiries, both past and contemporaneous.

- 3) Some of the estimates which are given in this chapter and those that follow cover the 16 States, and in that sense may be taken as more or less indicative of all-India magnitudes. Specifically, however, they do not cover the Union Territories, for which data in adequate detail were not available with us.

7.15 We consider that the production credit for fertilisers estimated to be advanced by the cooperatives in 1970-71 also sets the minimum level upto which the cooperatives in each State should handle fertilisers. In order to arrive at the relevant quantum of cooperative credit we have to make certain assumptions. To start with, there are the provisional targets fixed for short-term cooperative advances in 1970-71, for each State, and for the country as a whole, in connection with the earlier IV Plan estimates. The all-India target was indicated at around Rs. 5,800 million. On the basis of past trends and future expectations, the probable proportion of cooperative credit that would be available in the shape of fertilisers has to be worked out separately for each State. For the 16 States, this works out to around 33 per cent of the total of the provisional short-term cooperative credit target indicated for 1970-71. The quantum of credit so worked out corresponds to just under 40 per cent of the quantity of fertilisers proposed to be sold in 1970-71, at the prices prevailing at the time the targets were worked out, the total value being Rs. 5,220 million. We assume that cooperative credit for the same quantity of fertilisers (viz. in physical terms) would be available in 1970-71 (even though the value, because of increase in prices, would be higher by 38 per cent as explained in para 12.12). On this basis, for the 16 States the cooperative credit that would be available for fertilisers, at the prices of 1970-71, works out to Rs. 2,685 million. This gives a broad indication of the minimum value of fertilisers to be handled by the cooperatives in 1970-71. In some States, e.g., Punjab, Gujarat, Madras and Maharashtra, the cooperatives should be in a position to handle much larger quantities than implied in the minimum figure. (Statement VIII)

7.16 An important consequence of this arrangement would be that in order to enable them to take up the minimum distribution envisaged, the co-operative agencies in certain States should be put in a position to supplement Pool supplies by direct supplies from the manufacturers. This applies, for example, to co-operatives in West Bengal, Madras, Uttar Pradesh, Punjab and Madhya Pradesh. The total estimated value of such supplies in 1970-71 is Rs 510 million (Statement VIII). Correspondingly, if what the co-operatives can handle in some States is not expected to be much more



than the minimum handling indicated by us, the Pool supplies intended for them over and above what they can handle efficiently will have to be distributed through other agencies. The value of supplies that might thus be diverted works out at Rs. 694 million (Statement IX). At the minimum level of handling, the total distribution credit needs of the co-operatives in 16 States will be about Rs. 1,208 million; and margin money, will be Rs. 134.2 million (at 10 per cent of distribution finance needs assuming a turn over of twice a year).

7.17 It is possible that States in which co-operative marketing societies are not so well advanced might not handle very much more than the minimum; it is, however, probable that in certain other States the marketing societies are so well-developed as to be in a position to handle much larger quantities. These would be instances in which the marketing societies are financially and operationally strong, have a relatively extensive network of retail centres and, through these centres sell fertilisers on cash to a much larger number of farmers than would be covered by the credit arrangements of the primary credit societies. In other words, there would be a substantial percentage of cash sales, though the ratio of credit sales to total sales would, of course, vary from State to State (Statement X and district to district (para 8 of Chapter 11). In projecting this ratio for future years one would have to go on past experience and relevant trends for the future. If due allowance is made for such cash sales also in each State, the total of credit sales and all cash sales broadly represents the maximum that the co-operatives might handle by 1970-71. While we emphasise the desirability of co-operatives endeavouring to reach the maximum levels, we are not hopeful that this can be achieved in more than a few States. These would be States which have already established a satisfactory record of operational efficiency for their marketing co-operatives.

7.18 At the maximum level of their handling, the co-operatives may undertake distribution of Rs. 3,894 million (or 54 per cent) of the supplies. This would imply that in many States co-operatives would be given direct supplies from the manufacturers in addition to supplies from the Pool. The total value of supplies from the manufacturers would in these instances be Rs. 1,299 million, including N,  $P_2O_5$  and corresponding quantities of  $K_2O$  (Statement XI). The States requiring such supplies from the manufacturers will include Madras, West Bengal, Uttar Pradesh, Mysore, Madhya Pradesh, Kerala and Punjab. The total distribution credit needs of the co-operatives would in that case be Rs. 1,753 million; and the corresponding figure for meeting margin requirements would be Rs. 195 million (Statement

X). It may be stated that, at the maximum level of handling, the quantity for distribution by the co-operatives would be substantially more than that available from the Pool, the proportion of Pool supplies to the total supplies by 1970-71 being 39.7 per cent.

7.19. On the assumption that credit turnover will be twice during the year, and that margin money has to be provided at one tenth of the total distribution finance requirements, the distribution credit needs of cooperatives in the event of their handling (a) minimum supplies related to the anticipated production credit for fertilisers to be distributed by the co-operatives by 1970-71, or (b) only the supplies anticipated from the Pool or (c) the maximum supplies, i.e to the extent of (a) plus a reasonable proportion of cash sales, are worked out, which are presented in Table 7.2.

7.20 It will be seen that the distribution credit needs of the co-operatives for the 16 States for which they are worked out separately will be Rs. 1,208 million at the minimum handling and Rs. 1,752.6 million at the maximum handling. The margin money needs will be Rs. 134.1 million and Rs. 194.7 million, respectively.

#### **Supplies from the Manufacturers to Support Minimum/Maximum Handling by Co-operatives**

7.21 The table also reveals that while for some States the Pool supplies far exceed the minimum handling, for the others, there are not enough Pool supplies. The gap in the availability of supplies from the Pool is larger still at the maximum level of handling by the co-operatives, it being inclusive of N,  $P_2O_5$  and a corresponding level of  $K_2O$  (in relation to the N for each State). The extent to which the co-operative distribution in each State will move towards the level of maximum handling depends on the measures adopted to improve their efficiency and broaden their financial base. On the other hand, if the capacity of the co-operatives to build themselves up further does not measure up to the expected supplies from the Pool, there will have to be diversion of such supplies to private agencies. At the minimum and maximum levels of handling of the co-operatives indicated above, the supplies from the manufacturers to the co-operatives and those from the Pool to the private distribution agencies can be visualised as in Table 7.3.

7.22 It will thus be seen that in at least 9 out of the 16 States, the co-operatives will be required to depend partly or almost wholly on the supplies from the manufacturers if they are to operate at the minimum levels indicated by us, the total value of such supplies being as high as Rs 510.1

TABLE 7.2

**Credit needs for distribution by co-operatives assuming a turnover of twice during the year and margin money requirements at 10 per cent of the distribution finance needs if the co-operatives are to handle (a) minimum supplies, (b) supplies anticipated from the Pool or (c) the maximum supplies**

(Rs. in million)

State	Value of supplies to be handled			Distribution credit needs for			Margin money needs for		
	Minimum (a)	Pool (b)	Maximum (c)	(a)	(b)	(c)	(a)	(b)	(c)
Andhra Pradesh	217.8	388.3	435.6	98.0	174.7	196.1	10.9	19.4	21.8
Assam	16.6	20.4	23.7	7.5	9.2	10.7	0.8	1.0	1.2
Bihar	66.4	294.4	94.8	29.9	132.5	42.7	3.3	14.7	4.7
Gujarat	240.7	301.2	401.1	108.3	135.5	180.5	12.0	15.1	20.1
Haryana	107.9	98.1	134.9	48.5	44.1	60.7	5.4	4.9	6.7
Jammu & Kashmir	16.6	6.2	23.7	7.5	2.8	10.7	0.8	0.3	1.2
Kerala	127.2	103.1	212.0	57.2	46.4	95.4	6.4	5.2	10.6
Madhya Pradesh	138.3	90.2	172.9	62.2	40.6	77.8	6.9	4.5	8.6
Madras	280.8	47.8	351.0	126.4	21.5	157.9	14.0	2.4	17.6
Maharashtra	481.3	592.2	687.6	216.6	266.5	309.4	24.1	29.6	34.4
Mysore	226.8	203.0	378.0	102.1	91.4	170.1	11.3	10.1	18.9
Orissa	74.7	130.8	93.4	33.6	58.9	42.0	3.7	6.5	4.7
Punjab	183.3	160.2	229.1	82.5	72.1	103.1	9.2	8.0	11.5
Rajasthan	66.4	130.4	94.9	29.9	58.7	42.7	3.3	6.5	4.7
Uttar Pradesh	373.4	296.7	466.8	168.0	133.5	210.1	18.7	14.8	23.3
West Bengal	66.4	5.3	94.8	29.9	2.4	42.7	3.3	0.3	4.7
<b>Total :</b>	<b>2,684.6</b>	<b>2,868.3</b>	<b>3,894.3</b>	<b>1,208.1</b>	<b>1,290.8</b>	<b>1,752.6</b>	<b>134.1</b>	<b>143.3</b>	<b>194.7</b>

Distribution Finance : Value of supplies/times turnover.

Distribution Credit : Distribution finance minus margin money.

TABLE 7.3

**Probable dependence of cooperatives on non-Pool supplies and of private agencies on Pool supplies in 1970/71**

State	Supplies to the co-operatives from the manufacturers at their		Supplies from the Pool to the private agencies at the	
	Minimum handling	Maximum handling	Minimum handling by coops.	Maximum handling by coops.
1. Andhra Pradesh	—	47.4	170.4	—
2. Assam	—	3.3	3.8	—
3. Bihar	—	—	228.0	199.6
4. Gujarat	—	99.9	60.5	—
5. Haryana	9.8	36.8	—	—
6. Jammu & Kashmir	10.4	17.5	—	—
7. Kerala	24.2	109.0	—	—
8. Madhya Pradesh	48.1	82.7	—	—
9. Madras	232.9	303.1	—	—
10. Maharashtra	—	95.4	110.9	—
11. Mysore	23.8	175.0	—	—
12. Orissa	—	—	56.1	37.5
13. Punjab	23.1	68.9	—	—
14. Rajasthan	—	—	64.0	35.5
15. Uttar Pradesh	76.7	170.1	—	—
16. West Bengal	61.1	89.6	—	—
<b>Total :</b>	<b>510.1</b>	<b>1,298.7</b>	<b>693.7</b>	<b>272.6</b>

million. The States which will get the largest volume of supplies will be Madras, Uttar Pradesh and West Bengal. At their maximum level of handling, on the other hand, the value of supplies which might come from the manufacturers will be no less than Rs 1,298.7 million, the States involved being Madras, Uttar Pradesh, Mysore, Kerala, Gujarat, Maharashtra and West Bengal.

7.23 It is important to note that even when the co-operatives have reached what we have described as the maximum level of handling, the volume of Pool supplies of some States will be such that a sizeable part of those supplies will have to be diverted to the other agencies, (e.g. Bihar, Rs 199.6 million; Orissa, Rs 37.46 million, and Rajasthan Rs 35.5 million).

However, where the co-operative agencies are content to handle the minimum supplies only, the Pool supplies will have to be diverted to a large extent to agencies other than co-operatives. This will happen in a number of States including Andhra (Rs 170.4 million), Bihar (Rs 228 million), Maharashtra (Rs 110.9 million) and Rajasthan (Rs 64.0 million).

7.24 This then is the broad picture of supplies from the Pool on the one hand and the manufacturers on the other to the co-operatives and the private agencies. It is on this basis that a suitable pattern of distribution credit will have to be evolved for both co-operatives and private agencies. While broad limits for distribution by co-operatives have been indicated above, the actual extent to which co-operatives can actually handle the job in particular States will depend upon various factors such as the improvements effected in finances, operations and organisation, as also the extent to which the arrangements for distribution are found satisfactory by the manufacturers.

#### Storage Accommodation

7.25 Apart from the financial and organisational arrangements which might impose a limitation, the storage accommodation for handling fertilisers would also influence greatly the capacity of the co-operatives to undertake distribution of larger supplies. For the country as a whole, and as at the end of the III Plan, the total owned storage capacity of the co-operatives was 2.47 million tonnes, while the total hired capacity was 3.05 million tonnes. This storage is for all types of commodities including fertilisers. In some States there is poor utilisation of even available storage. But in others and in particular during peak periods at the marketing society level in the intensive or package areas of different States, there is considerable pressure on available accommodation. This is especially felt at the marketing society level in those instances in which procurement work has been entrusted to the co-operatives. On the basis of available information, we have assumed that in many States the accommodation used for fertiliser storage in 1965-66 was about 25 per cent of the total storage available to them during the year. The effective utilisation of even this limited storage accommodation, expressed in terms of turnover of stocks during 1965-66 varied from as low as 0.6 times in Bihar—the low turnover being the result of accumulation of stocks on account of drought conditions—to 2.5 times in Punjab. The average turnover for 16 States works out to 1.6.

7.26 We have been informed by the National Cooperative Development Corporation that the owned storage which will be available to the co-operative marketing societies and village societies by 1970-71 will be 1.70

million tonnes, and 2.33 million tonnes, respectively. We assume that other storage accommodation, including that of the central and state warehousing corporations, will increase at the same rate as owned storage during the period 1965-66 to 1970-71. In view of the efforts which are being made to improve the utilisation of the available storage, we further assume that 30 per cent of the storage in the case of marketing societies, and 50 per cent in the case of rural godowns will be available for effective utilisation for fertiliser stocking by the co-operatives by 1970-71. Under conditions of satisfactory operation, the turnover of stocks can also be improved to at least twice a year on an average. On this reckoning, it should not be difficult for the co-operatives to handle around 6.5 million tonnes of fertiliser material in the country, which may range between 50 to 60 per cent of total supplies in 1970-71, if otherwise steps are taken to improve their handling capacity.

### **Distribution by the Manufacturers and Private Agencies**

7.27 It would seem clear that, while every effort should be made to enlarge the financial, organisational and storage capacity of co-operatives, there is a limit beyond which these improvements cannot take place. It would also seem clear that co-operative agencies should not at any stage be required to handle supplies beyond the capacity for which, at that stage, they have equipped themselves.

7.28 In some of the States which will draw their supplies mainly from the manufacturers, as distinct from the Pool, it is possible that the manufacturers will distribute through co-operative agencies a sizeable part of their production, as has already been agreed to by the factories in the Punjab (Nangal Unit of Fertilizer Corporation of India) and Gujarat (Gujarat State Fertilisers). In such cases the manufacturer is obviously satisfied that the co-operative distribution agencies are strong enough to raise the needed resources either to pay cash on cash sales or repay loans on credit sales. They might also, on suitable guarantee, be prepared to extend larger credit and for longer periods than at present. This will be particularly necessary in the States where the co-operatives show signs of development but are not yet adequately strong in the financial and organisational aspects. In big States like Uttar Pradesh, Maharashtra and Andhra Pradesh, the pattern is likely to be that the co-operatives will be in a position to handle, besides Pool supplies, a sizeable part of the supplies coming into the State from the manufacturers situated inside or outside the State. Even so, the possibility cannot be ruled out of the manufacturers supplementing these arrangements by undertaking their own distribution or by appointing private agencies. This is so, not only on account of the magnitude of the total

supplies, but also because new complex fertilisers which require special promotional efforts will be produced in increasing quantities.

### Credit Needs for Distribution by the Manufacturers and the Private Agencies

7.29 We assume that appropriate facilities will be provided for manufacturers appointing co-operatives as their agents in different States to an extent ranging between the minimum and maximum capacities for handling which we have indicated, and that the manufacturers will appoint private agencies or make other arrangements for the distribution of the balance of the supplies. The value of fertilisers that the manufacturers and their private agencies might handle will vary between Rs. 4,454 million and Rs. 3,244 million at their maximum and minimum values respectively, forming 62.4 per cent and 45.4 per cent of the total supplies.

7.30 Assuming that the speed of turnover of funds in the case of private distribution, which is usually somewhat quicker than that in the case of co-operatives, is 2.4 times (as against two in the case of co-operatives) and that the margin for bank finance remains the same as for co-operatives, viz., 10 per cent of the requirements of finance, the distribution credit requirements will be as in the Table 7.4. It will be seen that the distribution credit requirements of the manufacturers and their private agencies at their maximum handling (corresponding to the minimum handling by co-operatives) will be Rs 1,669.2 million and at their minimum handling (corresponding to the maximum handling by co-operatives) Rs 1,217.3 million. It may be mentioned that if they are to distribute the entire non-Pool supplies by 1970-71, the credit needs will be Rs 1,627.1 million. The corresponding margin money requirements will be Rs 185.8 million, Rs 135.3 million and Rs 180.7 million, respectively.

7.31 For the two sectors together, the total distribution credit needs for the 16 States will be as under:

	(Rs. in million)	
Category of distributor	At the minimum level of handling by co-operatives	At the maximum level of handling by co-operatives
Co-operative agencies	1,208.1	1,752.6
Manufacturers/Private agencies	1,669.2	1,217.3
	2,877.3	2,969.9

TABLE 7.4

**Credit needs for distribution by manufacturers and private agencies, assuming a turnover of 2.4 times during the year and margin money requirements at 10 per cent of distribution finance needs**

(Rs. in million)

State	Value of supplies to be handled by manufacturers /private agencies			Distribution credit needs			Margin money needs		
	Minimum (a)	Non-Pool (b)	Maximum (c)	For (a)	For (b)	For (c)	For (a)	For (b)	For (c)
1. Andhra Pradesh	447.3	494.7	665.1	167.9	185.7	249.4	18.7	20.6	27.7
2. Assam	46.2	49.5	53.3	17.3	18.6	20.0	1.9	2.1	2.2
3. Bihar	538.8	339.2	567.2	202.2	127.3	212.9	22.5	14.1	23.7
4. Gujarat	66.5	166.4	226.9	24.9	62.4	85.2	2.8	6.9	9.5
5. Haryana	66.8	103.6	93.8	25.1	38.9	35.2	2.8	4.3	3.9
6. Jammu & Kashmir	3.6	21.1	10.7	1.3	7.9	4.0	0.2	0.9	0.4
7. Kerala	106.9	215.9	191.7	40.1	96.0	71.9	4.5	10.7	8.0
8. Madhya Pradesh	45.3	128.0	79.9	17.0	48.0	30.0	1.9	5.3	3.3
9. Madras	178.3	507.0	248.5	66.9	190.3	93.2	7.4	21.1	10.4
10. Maharashtra	527.9	623.3	734.2	198.1	233.9	275.5	22.0	26.0	30.6
11. Mysore	97.1	272.2	248.4	36.4	102.2	93.2	4.0	11.4	10.4
12. Orissa	166.2	128.7	184.8	62.4	48.3	69.4	6.9	5.4	7.7
13. Punjab	291.4	360.3	337.2	109.4	135.2	126.6	12.1	15.0	14.1
14. Rajasthan	129.7	94.2	158.2	48.7	35.4	57.4	5.4	3.9	6.6
15. Uttar Pradesh	400.7	570.8	494.1	150.4	214.2	185.4	16.7	23.8	20.6
16. West Bengal	131.2	220.8	159.7	49.2	82.2	59.9	5.5	9.2	6.7
<b>Total:</b>	<b>3,243.9</b>	<b>4,295.7</b>	<b>4,453.7</b>	<b>1,217.3</b>	<b>1,627.1</b>	<b>1,669.2</b>	<b>135.3</b>	<b>180.7</b>	<b>185.8</b>

Distribution Finance : Value of supplies/times turnover  
 Distribution Credit : Distribution finance minus margin money.



In round figures, the distribution credit needs by 1970-71 for the fertilisers to be distributed in the 16 States may be placed at Rs 3,000 million, at the prices assumed.

7.32 Though for the purpose of estimating the distribution credit needs of the co-operatives we have indicated the minimum and maximum handling by the co-operative distribution agencies in different States, we do not suggest any hard and fast approach in this context. Conditions vary from State to State. The proposed establishment of Agricultural Credit Corporations in certain States may also make a difference to the availability of institutional credit in those States. It is possible that the co-operative distribution agencies in some States will continue to receive a part of their total supplies on consignment basis from the State Governments for one reason or another (e.g. availability of credit facilities from the Centre). It is also contemplated that these agencies will eventually build up their financial strength and organisation in such a way as to be able to utilise fully the distribution credit facilities available from the Reserve Bank of India. Even so, depending on the conditions in the particular State, it may sometimes be necessary for the manufacturers or suppliers themselves to extend credit to the co-operative agencies on suitable terms. This situation, we imagine, will present itself in quite a few States.

#### **Distribution Credit Needs for the Intervening Years**

7.33 We may now attempt some broad estimates of the distribution credit needs in respect of Pool and non-Pool supplies for the years between 1967-68 and 1969-70.

7.34 In arriving at the quantum of Pool supplies, it has been assumed that 50 per cent of the internal production of nitrogenous fertilisers will go into the Pool in 1967-68, 30 per cent in 1968-69 and 20 per cent in 1969-70. (We have already assumed earlier that in 1970-71, 15 per cent of the internal production will go into the Pool). With internal production of N and  $P_2O_5$  as discussed earlier (Chapter III) and imports (including  $K_2O$ ) at the level needed to maintain the minimum consumption targets, the position of Pool and non - Pool supplies and the distribution credit needs therefore will be as in Table 7.5 for the country as a whole. Thus, while the credit needs for the Pool supplies will increase from Rs 1,181 million in 1967-68 to Rs 1,391 million in 1969-70, those for non-Pool supplies will increase from Rs 469 million to Rs. 1,066 million during the same period. These, however, will undergo changes to the extent non-Pool supplies are distributed through the co-operatives or Pool supplies through agencies other than co-operatives.

TABLE 7.5

## Distribution credit needs for the intervening years

(Rs. in million)

Year	Value of Pool supplies	Value of non-Pool supplies	Distribution credit needs for Pool supplies*	Distribution credit needs for non-Pool supplies**	Total
1	2	3	4	5	6
1967-68	2,624.6	1,250.4	1,181.1	469.3	1,650.4
1968-69	2,933.1	2,039.4	1,319.9	765.4	2,085.3
1969-70	3,091.6	2,840.9	1,391.2	1,066.2	2,457.4

\*A turnover of twice during the year is assumed

\*\*A turnover of 2.4 times during the year is assumed

## Credit Needs for Fertiliser Distribution in Selected Districts

7.35 It follows from the probable gravitation of fertiliser supplies to the high-yielding variety and other programme areas, that the requirements of credit needs for distribution will be larger in certain programme districts than in others. This inevitably will place some strains on the existing distribution machinery in the districts, financially, organisationally and otherwise. We give in Table 7.6 below the requirements of distribution credit and of margin money in ten of the districts studied by us and the present (1965-66) position of share capital of the co-operatives.

TABLE 7.6

## Distribution credit needs in the selected districts

(Rs. in million)

District	Total value of fertilisers likely to be supplied in the district in 1970-71	Estimated distribution credit needs, assuming a turnover of 2.4 times	Margin money required to be maintained at 10% of the distribution finance	Share capital of primary marketing societies as on 30.6.1966
1	2	3	4	5
1. West Godavari	100.4	36.6	4.2	0.8*
2. Palghat	38.9	14.6	1.6	0.7
3. Raipur	94.5	35.4	3.9	4.2
4. Thanjavur	131.0	49.1	5.5	1.3
5. Kolaba	38.1	14.3	1.6	0.4**

(Continued)

	1	2	3	4	5
6. Mandya		30.9	11.6	1.3	6.6*
7. Sambalpur		86.3	32.4	3.6	1.3
8. Ludhiana		48.6	18.2	2.0	1.0
9. Aligarh		67.9	25.5	2.8	0.9
10. Burdwan		98.1	36.8	4.1	0.6

\*Share capital of the District Federation.

\*\*Owned funds of the District Purchase & Sale Union.

\*Owned funds of 7 Wholesale Marketing Societies.

7.36 On the assumption that the period for which finance will be needed from the time the stocks have arrived in the district till the sale proceeds are received does not exceed five months, it will be noticed that the distribution credit needs in West Godavari will be nearly Rs 37 million. At ten per cent of the value of stocks given as security, the margin money needs of the distribution agencies will be Rs 4.2 million, which is a little more than five times the co-operative wholesaler's present share capital. The requirements of distribution finance and of margin money are high also in Thanjavur, Sambalpur, Burdwan and Aligarh.

#### Period of Distribution Credit — for Cooperatives

7.37 In considering the appropriate duration for the credit to be extended to co-operative distribution agencies, we have to take into account both the situation as it is at present and the efforts proposed for improving it. At present, for example, the sales efficiency of co-operatives leaves much room for improvement and the turnover is not as quick as it ought to be. But much improvement can be effected and, to this end, we suggest various measures elsewhere in this report. We are of the view, for example, that recognised retail agents, co-operative as well as private, should, as a rule, be enabled to get their supplies of fertilisers, on credit or consignment, to the full extent of the requirements estimated for the season. This would vary from 1 to 4 months. We also considered, for reasons, already discussed in the previous Chapters that the period of credit allowed to the retailer should include, according to the time of his lifting stocks from the wholesaler, a period of 1 to 3 months' credit to be extended to the cultivator, pending his making arrangements for production credit from the appropriate agency.

7.38 We have been told that if stocks are received at the wholesale level in the district well before the season and there is an arrangement for

making consignment or credit supplies to the retailers as mentioned above, the district or taluka level co-operatives may not be required to hold stocks for more than one month normally or two months in exceptional circumstances. In any case, allowing for the time taken for the movement of stocks to the district which may be normally less than one month, but in exceptional cases upto two months, a total period of 4 to 8 months from the time of despatch of fertilisers will be needed in the case of distribution by co-operatives for the recovery of the value of the consignment. It may, therefore, be assumed that the co-operatives would need distribution credit on each consignment for a period upto 6 months, on the average, in addition to which the manufacturer's credit of one month, normally, or two months if they are Pool supplies, will be available.

### **Period of Credit for Private Agencies**

7.39 In the case of distribution by the private agencies, however, a period of 4 to 6 months is considered adequate after allowing for a credit period of 1 to 4 months to the retailers. The fewer number of tiers is one reason for the shorter duration. We assume that distribution credit will be needed by the private agencies on each consignment for a period of 5 months on the average, in addition to which in, some cases, the manufacturer's credit of one to two months, depending on the source of supplies, will be available.

## CHAPTER VIII

# PROPOSALS FOR DISTRIBUTION CREDIT

## CO-OPERATIVES

### Introductory

8.1 In this and the following Chapters, we proceed to put forward our proposals for the provision of institutional credit for the distribution of fertilisers. The magnitude of the credit requirements has been discussed in the previous Chapter. The arrangements to be made in fulfilment of these requirements have to be such as will fit in with the emerging pattern of distribution of fertilisers in the next four or five years. To recapitulate, the following are the important elements of this pattern.

- (a) The two major sources of fertiliser supplies are the Central Fertiliser Pool and the manufacturers; besides these, the Indian Potash of Supply Agency is important for the distribution of potassic fertilisers.
- (b) It may be expected that the States will draw on the Central Fertiliser Pool only to the extent that the requirements are not met by the manufacturers and their agents (including the cooperatives) through sales organisations directly in touch with the farmers.
- (c) The volume of fertilisers handled by the cooperatives, in their own right or as agents of Government or the private distributors will in each State vary between a minimum level relatable to the normal growth in the capacities of the cooperative structure of the State and a maximum level dependent upon schemes for the effective reorganisation of the structure in regard to the financial base, operational efficiency, storage capacity, etc.

8.2 The proposals for distribution credit, therefore, must be considered agency-wise for the cooperatives and the private distributors. In this Chapter we deal with the cooperatives and in the next with the private agencies. Credit arrangements for the co-operative sector will have to be considered in relation to (a) Pool supplies and (b) supplies from the manufacturers—the relative proportion of which will vary from State to State. Having regard to their

minimum and maximum levels of handling, the cooperative agencies in the 16 States will, by 1970-71, need distribution credit varying between Rs. 980 million and Rs. 1,170 million for their Pool supplies, and between Rs. 230 million and Rs. 580 million for their non-Pool supplies. In addition, as margin money at 10 per cent of the value of stocks given as security (in respect of both Pool and non-Pool supplies), they will need resources ranging between Rs. 130 million and Rs. 200 million.

### **Strengthening the Financial Position of the Cooperative Wholesalers**

8.3 It is only appropriate that in due course the cooperatives which distribute fertiliser should get trade credit for distribution from the banking system on the basis of stocks held, financial strength and operational efficiency. But, while the process of strengthening proceeds, dependence on Government finance, as in the consignment system, will be unavoidable in almost all cases, though the degree of such dependence will vary from State to State. The first step in reducing the dependence, is to increase the owned funds of the relevant cooperatives at State, district and other levels.

8.4 It may be reasonably assumed that all the owned resources required in this context as "margin money" for borrowing would have to come from fresh additions to share capital. This is because the present owned funds (as on 30-6-1966) are, for all practical purposes, committed to activities other than fertiliser distribution. Building up additional resources of the order mentioned earlier will undoubtedly involve a determined programme on the part of the agencies themselves as also of the State Governments. Certain efforts in this direction are indeed being made in different States : such as, for example, (a) the enrolling of individual members of credit societies as members of the primary marketing societies, (b) the affiliation of primary credit societies to the appropriate primary marketing societies together with investment of part of their owned funds in such marketing societies, and (c) the investments by primary marketing societies of part of their share capital in the district and apex marketing societies. But even all these measures together, unless supported by very considerable contribution from Government, cannot result in an adequate enlargement of the share capital base of apex and district marketing societies.

8.5 We have mentioned Government contributions to share capital. These are usually matched with the efforts made by the societies themselves. We recommend that the requirements for margin money of the cooperative distribution agencies at the State and district levels should be worked out in advance, with reference to the volume of fertiliser expected to be handled

by the cooperatives over the succeeding years, and, in relation to this, steps taken to increase to the maximum extent possible the owned funds of the marketing cooperatives at the wholesale level. This should be done by asking for suitable contributions from the primary agencies which receive supplies from the wholesaler on the basis of either consignment or credit. Considering that for a given borrowing against stocks the margin prescribed is not more than 10 per cent of their value, and assuming that the wholesaler (apex or district society) makes supplies to the primary marketing societies and through them to the primary credit societies mainly on consignment basis, it should be prescribed that out of every Rs. 10 of margin money to be provided by the entire structure, the primary marketing and credit agencies should together contribute a minimum amount, say Rs. 3 to Rs. 5, depending on their resources.

### **Government Contributions to the Share Capital**

8.6 In our view, however, the larger part of the additional share capital needed by the cooperative distribution agencies will have to come, in the next few years, through Government contributions. The National Co-operative Development Corporation, it may be noted, makes long-term loans to the State Governments to enable them to subscribe to the share capital of the cooperative marketing societies. The ratio between Government contribution and the members' contribution may be as high as 3:1 or as low as 1:1 depending on the stage of development of the marketing agencies. With a view to broadening the financial base of the marketing societies and enabling them to undertake large scale foodgrain operations, it has also been decided\* that the Government might participate in the share capital of the primary marketing societies to the extent of Rs. 100,000 as against the earlier limit of Rs. 25,000. The context of fertiliser distribution is not less important. We recommend that the National Co-operative Development Corporation should examine the requirements of each State and, in particular, those of the cooperative wholesalers in the programme areas, for handling fertilisers in the next few years and make loans to the States on a much more liberal scale than has been the case hitherto, so that the State Governments in turn may contribute to the share capital of the cooperative marketing agencies at the wholesale level. It is also necessary that such loans to the State Governments should be placed outside the ceiling on Central assistance for State plans; in other words the amounts should be in the nature of a net addition to the State Plan so that the

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\*National Co-operative Development Corporation, letter No. 4-30/64-M dated 3rd February 1966.

State governments can, without hesitation, pass them on to the marketing organisations as additional share capital. In order that this may be properly phased, it is necessary that the financial commitments of the N.C.D.C. for the next few years should be reviewed and appropriate provisions included in the Central budget for addition to the resources available to the N.C.D.C.

### **Norms for Financing Marketing Societies**

8.7 The augmentation of the owned funds of the cooperative marketing societies, however substantial, will not by itself suffice to enable the co-operatives to raise the requisite finance for distribution. It has to be considered if the norms according to which finance is made available to the societies at present by the cooperative banking structure and the State Bank of India can not be suitably modified. For example, in pursuance of certain guide-lines indicated by the Reserve Bank of India, the cooperative banks and the State Bank of India are expected\* to maintain normally a margin of 25 to 40 per cent of the value of stocks, in respect of pledge or hypothecation advances made to the marketing societies. Further, the sanctioning of clean cash credit limits alongside the pledge or hypothecation limits is discouraged; and, where clean limits are in fact sanctioned, it is laid down that they should not exceed the owned funds of the borrowing agency. A bank might, however, sanction clean limits alongside a pledge or hypothecation limit to a marketing society provided the pledge or hypothecation limits do not exceed 3 times or  $1\frac{1}{2}$  times, respectively, of the disposable part of the owned funds of the institution. Further, if a clean limit exceeding the owned funds of the agency is sanctioned along with other types of limits, it should not exceed twice the owned funds of the borrowing institution, provided the limit is guaranteed by the State Government. Also if the cooperative bank's advances against pledge or hypothecation are guaranteed in full by the Government, or the business of the borrowing society is solely on Government account (as in the case of procurement work) the margins to be kept by the bank have been temporarily reduced to 5 per cent in respect of the pledge and 15 per cent in respect of hypothecation advances.

8.8 It has been urged before us by the cooperative marketing agencies at the State, district and primary levels in different States that, particularly in those districts in which fertiliser consumption has been increasing steeply (e.g. Thanjavur, Ludhiana, West Godavari), the restrictions imposed by the Reserve Bank have resulted in considerable curtailment of the finances

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\*Reserve Bank Circular No. ACD. OPR. 4971/B. 1-64/65 dated 18th March 1965.



available to the marketing societies for stocking and distribution of fertilisers. This curtailment has been particularly serious for such marketing societies at the district or taluka levels as are required to pay for the fertiliser supplies received by them either immediately, or within a month or two after receipt. (e.g. under the deferred payment arrangements).

8.9 We understand that at various high level conferences held from time to time during the past two years [All-India Seminar of Apex Marketing Societies (1965), Meeting of the Chief Executives of the Apex Marketing Societies and of the Cooperative Departmental Officials (1965) and Conference of State Ministers of Cooperation (1965)], the need has been emphasised for relaxation of the present norms laid down by the Reserve Bank for financing the cooperative marketing societies. For instance, it was urged that (a) where the marketing societies were able to provide appropriate margins, no limits should be imposed on the pledge or hypothecation advances to be sanctioned to them by the cooperative banks; (b) that the limits laid down for clean advances should be waived where finance was required for special schemes like procurement and where the State Government concerned was willing to give guarantee to the cooperative banks; (c) that the Government guarantee should be against defaults and not against losses; (d) that the State Bank of India should, like the cooperative banks, be permitted to make larger clean advances; and (e) that for chemical fertilisers and other inputs in respect of which there was not much risk of fluctuation of prices, the minimum requirements of margin should be reduced to 5 per cent for pledge and 10 per cent for hypothecation advances.

8.10 At the Annual Conference of State Ministers of Cooperation (1965), which more or less endorsed the above suggestions and recommendations, it was also urged that the margins for pledge and hypothecation might be reduced to 5 and 15 per cent respectively, against foodgrains procured by marketing societies as agents of the Government or the Food Corporation of India and that marketing societies might be provided clean limits against Government guarantee in excess of the ceiling laid down by the Reserve Bank.

8.11 Following these recommendations, the Reserve Bank agreed in December 1965, for a period of one year (subsequently extended by another year), to reduce the margin requirements to 5 per cent for pledge and 15 per cent for hypothecation advances made to marketing societies by the cooperative banks and State Bank of India. This was in respect of foodgrain procurement; and there was a provision that the produce should be held on Government account or that, alternatively, the entire accommoda-

tion for procurement should be guaranteed by the Government. The question of relaxation of the restrictions in respect of sanctioning clean cash credit limits to the marketing societies continued to be raised in various discussions. The Working Group, on Co-operation in I.A.D.P. areas, set up by the Department of Cooperation in the Ministry of Food, Agriculture, C.D. & Cooperation recommended a review of this policy to ensure the smooth flow of finance for meeting the requirements of the expanding programme of co-operative marketing.

8.12 More recently, the Dantwala Committee on Cooperative Marketing (1966) recommended as a transitional measure upto 1970-71 that, (a) where Government guarantee is available, there need not be any specific upper limit with reference to owned funds as long as the cooperative bank is satisfied of the need for such funds, and (b) the central cooperative bank might be given the discretion to grant, on the recommendation of the Registrars of Cooperative societies, clean credit limits upto twice the owned funds of the marketing societies (including share capital and reserves, but excluding unrealisable assets and accumulated losses) on the merits of each case with reference to the actual needs for both marketing and supply activities without insisting on Government guarantee. The Committee further recommended that State Governments might assist deserving societies by standing guarantee for their borrowings and that the guarantee should be against defaults and not against losses. The protection extended under the guarantee, according to that Committee, might be limited, in suitable cases, to the extent the banks maintain reduced margin so as to sanction advances on pledge upto 80/90 per cent of the value of the stocks.

8.13 We do not consider that there is need for uniform relaxation of the existing norms for providing distribution finance, as the level of owned funds and the requirements of finance vary from State to State and agency to agency. While clean cash credit limits sanctioned upto the extent of the owned funds to the cooperative wholesalers might be adequate for making initial purchases of fertilisers in some cases, in others they might need larger finances, particularly in areas where a sudden increase in supplies is anticipated. In such cases, depending on the assessment by the co-operative banks of the organisational competence and operational efficiency of the agency concerned and assuming that there are no other borrowings for the same purpose from the State Bank of India, we recommend that the cooperative wholesaler should be allowed clean cash credit limits upto three times the owned funds for its fertiliser transactions alone. Where pledge or hypothecation limits are sanctioned we consider that it will be enough if a margin of 5 per cent for pledge and 10 per cent for hypothecation is maintained

by the cooperative banks on such advances. These concessions should be made available upto 1970-71 and the position reviewed thereafter. In view, however, of the recognised risks in reducing the margins or sanctioning larger clean limits, we recommend that the interest of the cooperative banks should be suitably protected by a guarantee arrangement such as is discussed later.

### **Distribution Finance from the State Bank of India to Cooperatives**

8.14 The State Bank of India has been extending credit facilities to the cooperative marketing societies, processing societies, etc., during the past many years. Prior to March 1965,\* when certain guidelines in regard to the financing of cooperatives were laid down by the Reserve Bank, the State Bank was advancing loans to the cooperative marketing societies directly, as also indirectly through the cooperative banks, at margins varying from 25 to 40 per cent depending on the nature of the stocks. Where the stocks were kept in inaccessible areas, the bank was sanctioning clean accommodation upto the extent of owned funds on the guarantee of either the apex or the central cooperative bank. The advances so made were independent of the borrowings of the institutions from the cooperative banking structure.

8.15 Apart from the restrictions imposed by the Reserve Bank, the State Bank's ability to assist cooperatives is affected by certain factors. It is often insisted, for example, that the State Bank's role in financing marketing societies should be strictly supplementary to that of cooperative banks. In practice, it has been found difficult to work out for individual cooperative banks the extent to which the requirements of marketing societies affiliated to them could be met by those banks out of their resources. Further, the Registrars of Cooperative Societies have sometimes been reluctant to accord permission to the cooperative marketing societies to approach the State Bank of India for finance.

8.16 Nor has the utilisation of the limits sanctioned by the State Bank to the cooperative societies been particularly encouraging. As against limits of Rs. 48.4 million sanctioned as on 31-12-1967, the outstandings amounted to Rs. 3.45 million. We understand that an important reason for failure on the part of the marketing societies to avail themselves of the limits was the inadequacy of their own resources for providing margin money. Other reasons were (a) absence of suitable provisions in the bye-laws of the marketing societies to borrow from the State Bank, (b) absence of a pro-

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\*Reserve Bank Circular No. ACD. OPR. 4971/B. 1-64/65 dated 18th March 1965.

vision in the bye-law of certain cooperative banks permitting them to stand guarantee for such borrowings, and (c) the State Government's insistence in certain cases on having a first charge on the entire assets of the society as security for its loans.

8.17 We consider that, so far as credit for fertiliser distribution is concerned, there is scope for more active participation of the State Bank of India. Where cooperative marketing societies are not likely to get adequate accommodation from the cooperative banks, the State Government should (as recommended by the Dantwala Committee) give general approval to the marketing societies to approach the State Bank of India for distribution finance. At the same time, suitable measures should be taken to remove the technical difficulties which come in the way of such societies availing themselves of the credit facilities available from the State Bank of India.

8.18 Moreover, in the context of expanding fertiliser distribution, we feel that it is both necessary and appropriate for other commercial banks also to share with the State Bank of India, the task of financing the cooperative marketing societies. For this purpose, it will be necessary to evolve procedures which ensure not only that the marketing societies are enabled to borrow from commercial banks, but also that the interests of all the lending institutions are sufficiently protected by suitable safeguards.

8.19 The inadequacy of owned resources in relation to the requirements of margin money has been regarded as the main cause of the cooperative's inability to avail themselves of the State Bank's finance. We recommend that against stocks of fertilisers, the State Bank of India and other commercial banks should not normally maintain a margin of more than 5 per cent of the value in respect of pledge advances or 10 per cent in respect of hypothecation advances. In making this recommendation (on the same lines as for cooperative banks) we take it into account that such advances can be covered by the guarantee scheme proposed by us elsewhere.

8.20 So far as the choice between direct and indirect financing of the cooperative marketing societies is concerned, we do not think there should be any hard and fast approach. The manner of financing may vary from State to State, or even district to district, depending on the efficiency of the individual State or Central cooperative bank. Where indirect financing is likely to add to the delay in operations, without there being any additional advantage, there is no good reason for routing the finance through the cooperative banks. The State Bank may as well lend direct. The decision should, in each case, be left primarily to the bank with due regard to the

convenience of the borrowing agencies. At the same time, it has to be ensured that the entire financial requirements of a marketing society are provided either by a cooperative bank or by the State Bank but not by both in conjunction.

### **Credit from the Reserve Bank of India**

8.21 It is difficult to estimate with any degree of precision at this stage the extent of the additional resources from the banking system (including both cooperative and commercial banks) which the cooperative wholesalers would be able to obtain by 1970-71 as a result of measures such as increase of share capital and improvement of operational efficiency. However much the effort to strengthen and reorganise the distribution system and clearly this should be the maximum possible—the results would not be satisfactory unless the banks for their part have larger resources as well as more liberal refinancing facilities from the Reserve Bank. Thus the State cooperative banks will require from the Reserve Bank much higher credit limits than at present for the distribution of fertiliser by apex and wholesale societies. It is understood that in 1967, the credit limits sanctioned for the purpose by the Reserve Bank aggregated Rs. 330 million for 9 States. Indeed for all the States together, and with a ceiling of Rs. 50 million for any one State, the Reserve Bank had indicated its readiness to sanction credit limits upto a total of Rs. 500 million. Depending on the rate of increase in owned funds of the cooperative wholesalers and the steps taken to facilitate smooth switch-over to institutional credit in each State, the present ceiling of Rs. 50 million fixed by the Reserve Bank is likely to prove inadequate in varying degrees. With the steps now in sight for the commercial and business-like distribution of fertiliser, it would be only appropriate for cooperative banks hereafter to get as liberal refinancing facilities in this context as do the scheduled commercial banks.

8.22 To bring this about, it will be necessary to enable the Reserve Bank to regard the signatures of State or district marketing societies as 'good' second signatures for purposes of Section 17(2) (a) and 17(4)(c) of the Reserve Bank of India Act. If we may anticipate the guarantee organisation later recommended in this report, it appears to us that, to the extent that the cooperative bank has the backing of this organisation, the signatures of the apex and district marketing societies should be considered as 'good' for purposes of Reserve Bank of India Act, for granting refinance to the State Cooperative Banks.

### **Credit from the Centre**

8.23 The 18-month credit facilities from the Centre amounted in the aggregate in 1965-66 to as much as Rs. 282.6 million in respect of total Pool supplies of the value of Rs. 782.6 million. The balance of resources was found by the States. During 1966-67, the volume of Central credit declined to Rs. 256.4 million; besides, the period of credit was reduced to six months, while the total value of supplies made by the Pool increased to Rs. 1,159.6 million. During 1967-68, upto 7th November 1967, the total credit sanctioned by the Centre amounted to Rs. 277.2 million for 6 months, upto a maximum of 50 per cent of the value of supplies, with the exception of Bihar, which received credit facilities for the entire supplies for 6 months. The total provision for short-term credit made by the Centre for 1967-68 for fertiliser distribution, fertiliser taccavi, pesticides and seed was approximately Rs. 1,050 million of which actual disbursements were Rs. 572.4 million. The accent hereafter will be on progressive institutionalisation of credit arrangements for the cooperatives. Even so, it will be necessary for the Centre to continue to supplement for this purpose, to the extent necessary, the resources of the States concerned, especially those in which the cooperative agencies are financially weak. Only then can it be hoped that the cooperative agencies will be able to handle the supplies of fertiliser at least upto the minimum levels elsewhere indicated.

### **Credit from the State Bank of India to the State Governments**

8.24 However, the total credit thus available from the Centre for Pool supplies or raised by cooperatives on their own—will still be inadequate in some States (e.g. Maharashtra and Andhra) for meeting the relevant requirements. Moreover, there are other States which may not get the Centre's credit at all, but will still have to finance the distribution by the co-operatives (e.g. Madras and West Bengal). In these States, the gaps in distribution credit so far as cooperatives are concerned will have to be filled by the State Governments. The latter will effect the initial purchases of fertiliser and pass it on to the cooperative wholesalers on the basis of either consignment or credit. Here again, the State Bank of India, and the commercial banks can help fill the gap in distribution finance, by sanctioning advances to the States against the security of fertiliser stocks. Though the State Bank of India has indicated its readiness to finance the State Governments against hypothecation of fertiliser stocks upto Rs. 300 million, only one State is stated to have availed itself of this facility in 1967 upto Rs. 30 million. But with the larger supplies to be received from the Pool against cash payment or within a short period after delivery, more States are bound to feel the

need for such a facility. It is difficult to indicate precisely at this stage the magnitude of the needs of the State Governments for accommodation from the State Bank as it will depend, in each case, on the extent to which co-operative distribution agencies are strengthened to raise finances on their own.

8.25 We recommend that the line of credit now available from the State Bank of India and its subsidiaries to the State Governments should continue to be available to them on the usual terms and conditions, ordinarily for periods not exceeding six months, for purchasing and stocking of fertilisers initially. The fertilisers will then be supplied to the cooperatives on a consignment basis or on credit, for an appropriate period. In certain contexts, the distribution may be made through the agency of one of the Departments of Government. All arrangements for purchase and distribution by State Governments and their Departments, however, could be regarded as transitional, pending completion of a programme of institutionalisation of both distribution and credit.

#### **Manufacturers' Credit**

8.26 We have stated in the previous Chapter that during 1970-71, at the minimum and maximum levels of handling indicated, the cooperative distribution agencies might require directly from the manufacturers supplies valued at around Rs. 540 million and Rs. 1,300 million, respectively. Where such supplies are made on credit to the cooperatives, this will help fill the gap in distribution credit to an appreciable extent. These supplies will be in addition to what the cooperative agencies may be in a position to purchase from the manufacturers by raising funds from the banking system. The States where the supplies from the manufacturers will need to be on credit include Madras, West Bengal, Mysore, Uttar Pradesh, Gujarat Madhya Pradesh and Punjab. In some of these States, the cooperative agencies are fairly efficient, but not so in the others. We believe that to the extent the cooperative agencies are not in a position to raise all their credit needs from the banks in the transitional period of switching over to institutional finance, the manufacturers would not be unwilling to make supplies on a deferred payment basis for about six months without requiring the cooperatives to put in any margin money, if suitable arrangements are made to cover part of the risk involved in making such credit supplies.

8.27 We recommend that the extent to which the manufacturers or distributors may make supplies to the cooperative distribution agencies on deferred payment basis for periods not exceeding six months should

be decided in each individual case for each year by the supplier and the agency through mutual negotiations, and such credit supplies should be within the reserve borrowing power of the agency concerned according to its bye-laws. The credit supplies so made will be in addition to the financial accommodation the agencies might raise from the banks for purchasing fertilisers. The acceptance of the bills drawn on the cooperative distribution agencies by the manufacturers or distributors should also be supported by a guarantee of the State or Central cooperative bank, as the case may be, in order to ensure the bank's interest in the proper working of the agency. To enable the banks to stand guarantee, where necessary, their bye-laws may be suitably amended. The State or Central cooperative bank could, in turn, seek the guarantee of the Fertiliser Credit Guarantee Corporation which we elsewhere recommend. In practice, the Guarantee Corporation would have to be consulted in advance by the cooperative bank.

#### **Arrangements for Supplies by the Cooperative Apex/District Societies**

8.28 Whether the finance for distribution is available from the Reserve Bank of India, State Bank of India, or commercial banks, or whether the supplies are received on credit from the manufacturers, an important aspect of the changed arrangements is that the cooperative distribution system should be so reorganised that funds borrowed for stocking and distribution are repaid normally within 4 months, but, in any case, not later than 6 months, from the date of borrowing. To the extent, therefore, that the hindrances to speedy movement of supplies to the retail level are attributable to lack of finance or inadequate credit or consignment arrangements, the aim would be to remove them by means of a financially adequate and procedurally flexible system of distribution credit. For instance, the inadequacies under the sight draft system in force in Burdwan and the letter of credit system in Thanjavur are traceable to the meagre financial position of the district and retail agencies, the lack of adequate credit supplies and the insistence on these agencies making cash payment before taking delivery.

8.29 There are also organisational defects which account for poor distribution. In our view, the intermediate agencies, viz., the district or the primary marketing societies should be charged not only with the function of distributing fertilisers to the retail societies but also with that of administrative and operational supervision over the societies, e.g. to consolidate indents, ensure punctual submission of returns and bring about adequate coordination between production credit on the one hand and supply arrangements on the other from the point of view of the farmers.



8.30 Considering the inadequate finances of the intermediate agencies in many areas, any stipulation such as that they should take supplies against cash payments will prove to be a serious hindrance to smooth operation. Where, however, as in Mandya district, the intermediate agencies, i.e. the taluka marketing societies, have substantial resources of their own, there should be no bar to their procuring supplies by raising the needed credit from the banking system. We recommend that, with the exception of those areas where district or primary marketing societies have substantial resources of their own on the basis of which they can raise bank credit, the apex or district marketing society should accept consignment as the basis for making supplies to the intermediate agencies such as primary marketing societies.

### Supplies to the Retailers

8.31 In the Chapters on Distribution Arrangements we have indicated some of the inadequacies which not only prevent cooperative retail agencies from building up stocks reasonably in advance of the season but also deny them timely and adequate supplies. Our recommendations in this context are as follows: (a) In many instances, a cooperative credit society which is appointed as retail agent for supply of fertiliser has, for reasons unconnected with the latter function, ceased to qualify itself for further credit from its Central cooperative bank. This fact by itself, however, should not lead to the termination of its appointment as retailer. Such termination, unless otherwise justifiable, results in considerable dislocation of existing arrangements for distribution of fertiliser. (b) The total supplies required for each agency should be realistically worked out on the basis of previous performance and anticipated needs, and should be made available to the agency in suitable instalments on consignment basis for one to four months, commencing from the month of March or earlier for the Kharif season, or a corresponding period for the Rabi season, the object being to encourage advance building of stocks by the agency and offtake by the farmers in advance of the season. (c) The value of supplies to be made at a time should not be limited to either the owned funds, or the reserve borrowing power of the society. Each instalment of supply should be related to the needs of the society to have stocks and its ability to dispose of them. The exercise of appropriate supervisory control in respect of the distribution activities on the one hand and the existence of the proposed guarantee arrangements on the other would serve to reduce to some extent elements of financial risk and dislocation involved. In actual practice, such arrangements in so far as they are related to the marketing societies, wholesale or retail, would have to be brought about by a suitable agreement with the central co-operative

bank; for under the scheme elsewhere recommended it is the bank—and not the society — which can directly seek the guarantee of the Fertiliser Credit Guarantee Corporation.

8.32 Our study of the experience in the different districts clearly indicates that it will be not suffice merely to move supplies to the retail points on a consignment basis as and when supplies are received at the railhead. The retail agency has to be correspondingly enabled to make timely sales to the farmers for the supplies received from the whole-saler or sub-wholesalers. This would be possible only if the period of one to four months of consignment supplies allowed to the retail agent of the marketing society is utilised to make immediate supplies to the members of the credit societies according to the credit limits sanctioned to them by the societies in March/April (and not two or three months later as is usually the case). We recommend that the retail societies should be enabled, through appropriate changes in the loan policies of the central cooperative banks, to make supplies on credit to the members in March or April itself for the Kharif season (and correspondingly for the Rabi season), to the extent of the fertiliser credit sanctioned to the members of cooperatives as part of short-term production credit limit for the season. We understand that where the crop loan system is being implemented it is normally possible to fix the credit limits to the members of the societies in February/March itself, thus facilitating advance supplies to the retailers. Where, however, the crop loan system has not come into force, the arrangements should provide for the primary credit societies themselves (retail agents or otherwise) sanctioning credit limits for fertilisers to the eligible members of the society well in advance of the season, pending final sanction of credit limits to the society by the central bank.

### **Organising of Distribution Agencies**

8.33 A serious hindrance to speedy sales of fertilisers and prompt recovery of sale proceeds is to be found in the lack of whole-time trained personnel at the points of retail sale. It may be noted that under the scheme of reorganisation of the primary credit societies into viable units in different States each reorganised society will be provided with the services of a whole-time trained employee. To the extent that this programme is implemented expeditiously it will greatly improve the levels of operational efficiency in handling fertiliser and other inputs. It will also facilitate quicker arrangements for adjustment of credit sales, maintenance of books and submission of returns. We would, therefore, emphasise the need for implementing this programme with vigour and without delay. However, it is possible

that in some areas the implementation of the programme is delayed for one reason or another or even after implementation, the number of retail points consisting largely of village credit societies is not wholly adequate. This will be particularly so in cooperatively backward States on the one hand and, on the other, in areas where targets for use of fertiliser are fixed high because of intensive programmes of production. In such cases, we recommend that either the cooperative wholesale society should open its own depot or if, for some reason, this is not practicable in certain instances, that there should be no hesitation in appointing private individuals as retailers under the society as a temporary measure and subject to the same discipline as is applicable to cooperative retailers. Such a course has in fact been decided upon in Madhya Pradesh.

8.34 We have also come across situations in which the cooperative retailers are financially and otherwise suitable, but the district or primary marketing societies are not fully equipped for the task. While all measures should be taken to activate and strengthen the latter in such cases, alternative approaches also should be kept in view. One of these would be for the cooperative apex marketing society itself to open its branch so as to ensure effective distribution. If even this is not possible, arrangements could be made with one or more private wholesalers of the locality to make the requisite supplies to the cooperative retailers.

### **Supervision and Procedures**

8.35 The provision of guarantee against risk is by no means a substitute for the effective supervision that has to be exercised over the retailers by the apex and district marketing societies. Under the arrangement we have recommended, a great deal of responsibility rests on the sub-wholesalers for ensuring speedy movement of stocks, prompt recovery of sale proceeds, regular inspection of stocks, proper accounting of sales, etc. While this calls for the strengthening of staff, it also underlines the need for improvement in its quality. It is quite certain that even in the States in which the cooperative system is best developed, it will not be able to handle the very large volume of transactions here envisaged unless it launches a bold and well thought out programme of recruitment and training. We trust that the National Cooperative Development Corporation which is seized of the matter, will pursue it for different States with a sense of urgency.

## CHAPTER IX

# PROPOSALS FOR DISTRIBUTION CREDIT

## MANUFACTURERS AND PRIVATE AGENCIES

9.1 We have indicated in Chapter VII that the distribution credit requirements of the manufacturers and the private distribution agencies will be of the order of Rs. 1,200 million at the minimum level and of Rs. 1,650 million at the maximum level in 1970-71. The main source of credit for these is obviously the commercial banking system including the State Bank of India and its Subsidiaries and other scheduled (commercial) banks. These had a total number of 6,596 branches\* as at the end of June 1966. Of these, the branches of the scheduled commercial banks number 4,210 and those of the State Bank of India and subsidiaries 2,073. The total deposit resources of the commercial banks amounted to about Rs. 37,860 million on 30.6.1966\*\*, of which about Rs. 10,450 million pertained to the State Bank of India and its subsidiaries. The areas where commercial banks may be expected to play a major role would be obviously those in which distribution is the largest and mainly in the hands of the manufacturers or their agents. Such areas included West Bengal, Madras, Maharashtra, Uttar Pradesh, Andhra Pradesh, and Punjab.

### Present Role of the Commercial Banks

9.2 The commercial banks have hitherto played a relatively small part in financing fertiliser distribution. Their operations have been mainly in the nature of providing supplementary working capital to manufacturers and secondarily by way of financing distribution. Though precise figures are not readily available, the magnitude of the working capital and other short-term finance thus provided by the banking system during 1966-67 was around Rs. 130 million.

9.3 In their discussions with us the representatives of several commercial banks have drawn our attention to certain policy and procedural impediments in the way of their providing larger credit for distribution of fertilisers. The general trend of the Reserve Bank's credit policy in recent years has been, it is pointed out, to direct bank credit to productive activities,

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\*In India. \*\* Total business.

to restrict to the minimum the dependence of the banking system on Reserve Bank credit, to make credit costly beyond what has been described as the 'Bank Rate Entitlement', and to promote expansion of credit facilities to certain priority sectors, of which fertiliser trade at the time of discussion was not one. Conditioned by a general paucity of resources and ineligibility for refinance at Bank Rate—a facility restricted to priority sector advances, over and above the normal 'entitlement'—the banks did not take much interest, in financing fertiliser trade. The directive\* issued in October 1966 by The Reserve Bank of India to the effect that trade advances should not exceed 20 per cent of the total increase in their advances during the busy season of 1966-67 operated for a time against diversion of resources to trading. Arising from this there was a natural tendency on the part of banks to employ their resources, to the maximum extent possible, in those sectors in respect of which refinance from the Reserve Bank was available at Bank Rate without, at the same time, affecting their net liquidity position. Where, however, they did give trading loans in respect of fertiliser, the rate of interest reportedly varied from 9 to 10 per cent in the case of scheduled commercial banks and 9 to 12 per cent in the case of others. While this reflected the cost of borrowing of the banks, it also meant that a higher price had to be paid by the ultimate consumer of fertiliser.

9.4 The Reserve Bank "sought to balance the claims of credit expansion with the overall availability of savings in the economy".\*\* One object of the policy was to restrain "the aggravation of inflationary pressures on the economy by keeping to the minimum, in extent and duration, Central Bank credit to commercial banks"\*\*. The other was to ensure "better distribution of credit in line with set priorities"\*\*. In other words, to see that genuine productive activity got adequate finance. Two important tools employed by the Reserve Bank to attain these objectives have been the regulation of refinance facilities to the scheduled commercial banks, and the selective credit controls supported by a system of "preferential rediscounts"\*\*. Though we do not consider it necessary for us to delve deep into the evolution of the Reserve Bank's policy in this regard, a brief historical account may serve as a useful background for appreciating the recommendation that follow.

9.5 From a quota-cum-slab-interest-rate system followed prior to September 1964 which was found to be not sufficiently elastic, the Bank changed over to a system of linking refinance 'entitlement' of the banks, (i.e. at Bank Rate) to their respective net liquidity ratio. Under this system,

\*Reserve Bank of India Circular No. DBOD No. Seb. 1538/C. 96-66 dated<sup>2</sup> 28.10.66.

\*\*Reserve Bank of India Annual Report year ended June 1967, p. 8.

in the first place, a bank was considered entitled for refinance from the Reserve Bank at the Bank Rate if it maintained a minimum prescribed liquidity ratio.\* Secondly, the extent of its entitlement at Bank Rate is determined by the excess liquidity ratio maintained by it over the minimum prescribed ratio, all its borrowings from the Reserve Bank, State Bank and Industrial Development Bank being taken into account for computation of the net liquidity ratio. Thus, those banks which maintained a good liquid position stood to gain under this formula, and those whose liquidity dipped below the minimum level, or which borrowed more than their Bank Rate entitlement, were required to pay penal interest rates.

9.6 While this system was intended to restrain "heavy and prolonged dependence on the Reserve Bank credit", its one disadvantage seemed to be that the Bank could not ensure that the cost of refinance for important sectors, (e.g. foodgrain procurement) remained relatively low. Recognising the need for this, the Reserve Bank indicated in November 1965 that for three priority sectors (in addition to Rupee Export Bills), namely, finance for food procurement and allied matters, defence supply finance, and export packing credit, refinance could be sought by the scheduled commercial banks at Bank Rate, but that such borrowings would be taken into account for computing the net liquidity ratio.

9.7 For the subsequent busy season (1966-67), the Reserve Bank further liberalised its refinancing facilities. The Bank agreed to provide to all the scheduled commercial banks an additional tranche of refinance at Bank Rate upto 10 per cent of the net liquidity ratio they maintained at the

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\*The 'net liquidity ratio' is a ratio of the *net liquid assets* of a bank, i.e. cash in hand + balances with the Reserve Bank of India + balances with other banks in current accounts + investments in Government and other approved securities *minus* borrowings from (a) the Reserve Bank of India, (b) the Industrial Development Bank of India (excluding bills and promissory notes in the nature of contingent liabilities) and (c) from the the State Bank of India, to its *aggregate liabilities* consisting of (a) aggregate demand and time deposits, (b) inter-bank deposits, (c) inter-bank borrowings and (d) other liabilities. The 'modus operandi' of this aspect of the Reserve Bank's credit policy is that the extent to which a bank can borrow from the Reserve Bank at Bank Rate is determined in relation to the prescribed liquidity ratio, any excess borrowing being charged a higher or a penal rate. With a view to encouraging the flow of bank credit to priority sectors as determined from time to time, borrowings from the Reserve Bank for financing such sectors are given suitable exemptions either by insulating such borrowings from the operation of net liquidity formula or by ensuring that such borrowings would not impair the bank's net liquidity ratio or both.

end of the slack season immediately preceding. An attractive feature of this liberalisation was that the refinance facility was in addition to what the banks were eligible for at Bank Rate under the formula in force during the earlier busy season, and was available to each scheduled commercial bank irrespective of its net liquidity ratio. Moreover, the Reserve Bank agreed to allow refinance at Bank Rate in respect of the additional advances i.e., over and above the October 1966 level—made by commercial banks to State Governments and approved agencies for food procurement and allied activities. At the same time, the Bank laid down that not less than 80 per cent of credit expansion of the commercial banks during the busy season should be in respect of industries or against Export/Import Bills, and only the balance should be used for financing trading activities.

### **Changes in Reserve Bank's Credit Policy During 1967-68**

9.8 In pursuance of its policy of ensuring adequate finance at relatively low cost to the priority sectors, the Reserve Bank, in August 1967, effected further liberalisation in the scheme for extending refinance to the scheduled banks. The most significant modification was that, for the purpose of computing the net liquidity ratio in each case for allowing refinance facilities, the Bank agreed not to take into account the increase in a commercial bank's advances for the "preferential sectors" (and those in respect of small-scale industries which are guaranteed by the Credit Guarantee Organisation) over the average of such advances during the previous slack and busy seasons. At the same time, the Reserve Bank also withdrew the stipulation that not less than 80 per cent of the incremental advances in the busy season should be to industries or against Export or Import Bills, thus removing one of the difficulties experienced by the banks in extending credit for fertiliser distribution.

9.9 The Bank has introduced further refinements in its refinance policy for the current busy season (1967-68) to make it more need-oriented, while keeping it liquidity-based. The additional Bank Rate refinance entitlement of a bank is now linked to its advances to the preferred sectors, in order to promote credit expansion on a selective basis. This 'additional entitlement' on a selective basis replaced the additional Bank Rate tranche allowed during the earlier busy season to all the scheduled commercial bank without reference to their net liquidity ratio. The Reserve Bank has announced that it would allow refinance at Bank Rate in respect of advances made by scheduled banks to the State Governments or their agencies or the Food Corporation of India for purposes of procurement, distribution

or storage. It may be noted that the entire increase in such refinance over the level of October 27, 1967, is to be excluded from the total borrowings from the Reserve Bank for purposes of computing the net liquidity ratio of banks. This is a very important concession. From the point of view of the commercial banks it virtually ensures that their liquidity remains unaffected by progressive levels of lending for fertiliser.

9.10 Simultaneously, the Bank has also made an important announcement that advances made by the banks for distribution of fertiliser and pesticides would be treated, for purposes of refinance, on a par with those for foodgrain procurement. This decision was a sequel to the recommendations of a Working Group appointed by the Governor of the Bank earlier to examine the subject. Further, under the policy for the current (1967-68) busy season, the scheduled commercial banks would be entitled to refinance at the Bank Rate in respect of the full excess of their net liquidity ratio over the basic minimum of 30 per cent, in addition to such refinance at that rate as they might get against advances for priority sectors. It remains to add that on 29th January, 1968, the Reserve Bank has announced its decision to charge a concessional rate of  $4\frac{1}{2}$  per cent to commercial banks in respect of the increase in advances made by the banks for fertiliser and pesticides over the base period.

#### Requirements of Refinance—Policy Considerations

9.11 Thus, the credit policy of the Reserve Bank as it now stands incorporates two important features. Firstly, refinance at the Bank Rate is available to a scheduled bank in respect of its advances for fertiliser stocking and distribution. Secondly, the refinance can be availed of without affecting the net liquidity ratio of the bank concerned.

9.12 All the available data indicate that the increase in the deposits of the banking system is not, in the next few years, likely to keep pace with the growth in demand for credit in the economy and that the pressure on banks for credit will, therefore, continue. The credit-deposit ratio of the scheduled banks is significantly higher now than five or six years ago (e.g. 69.6% in 1961 as compared with 72.9% in 1965 and 74.9% in 1966-67.) There has been substantial borrowing\* from the Reserve Bank, the short fall in 1965-66 and 1966-67 being partly attributable to the low tempo of

	Rs. in million
*Busy season	Borrowing from RBI
1964-65	1,245
1965-66	285
1966-67	408



the economy itself as a consequence of two successive droughts. It may be assumed that the demand for credit will be much larger in the next few years as a result of both increased agricultural production and general revival of the economy. Unless there are liberal facilities for refinance in this context from the Central Bank of the country, the commercial banks will be in no position, especially during the busy season, to meet even the basic credit requirements of fertiliser distribution. These facilities should be available (a) on a priority basis, (b) in adequate measures, (c) at rates of interest applicable to priority sectors and (d) without technically affecting the net liquidity position of the banks. All these elements are present in the Reserve Bank's current scheme. We recommend their continuance in the next few years notwithstanding the very substantial increase that is likely to take place in the volume of refinance needed for the distribution of fertilisers.

#### **Procedure for Refinance—Bill Market Scheme—Modifications**

9.13 Under the Bill Market Scheme, scheduled banks present to the Reserve Bank bills which conform to the requirements of Section 17(2)(a) and 17(4)(c) of the Reserve Bank of India Act and are supported by usance promissory notes drawn in their favour by their constituents. In order to be eligible for rediscount the bills should (a) arise from 'bonafide commercial or trade transactions', and should have a maturity of ninety days, except in the case of bills arising from export of goods from India, for which the maturity may be upto 180 days; and (b) bear two or more "good signatures" one of which should be that of a scheduled bank.

9.14 As indicated elsewhere in this Report the period during which the distributor or distributors may have to hold fertilisers before its disposal to the consumer normally varies from 3 months to as long as 6 months, and is even longer in exceptional circumstances. We, therefore, recommend that the Reserve Bank of India Act may be suitably amended so as to place the bills arising from fertiliser trade on the same footing as those arising from export trade for purposes of section 17(2) (a) and 17(4)(c) of the Act, that is to say with a maturity which may extend to 6 months.

9.15 The Bill Market Scheme is normally operative only from November to June, since its object is to ease the pressure on the liquidity of banks during the busy season. In certain special circumstances (e.g. for food procurement, or food distribution) the Scheme is kept open beyond June. It has been pointed out to us that if the banking system is to finance the fertiliser trade on a liberal scale it should be made possible for it to present

the bills arising therefrom for refinance to the Reserve Bank as and when the need arises. Since fertiliser stocking and distribution take place throughout the year, the refinance facilities should in our view also be available in all seasons.

### **“Good Signatures” and Guarantee**

9.16 Some of the points urged before us by the representatives of banks relate to the condition that the bills to be presented for refinance should bear two or more “good signatures” in all cases. Where the signature of the borrower is not considered ‘good’ according to the norms in force at present, or where he is a new entrant to fertiliser distribution difficulties are apprehended. It seems to us inevitable that, at the retail stage in particular, a very large and progressively increasing number of new entrants to the trade should in fact seek credit facilities either from the wholesaler or, on the strength of the wholesalers’ standing, from a commercial bank. It is only normal that in the latter case the bank should seek to protect itself against undue risk. To provide the necessary protection to the commercial bank in this context, we elsewhere propose a Guarantee Scheme. We would here recommend that bills signed by wholesaler and retailer and covered by the Guarantee Scheme should be treated as having two ‘good’ signatures.

9.17 The minimum amount of advance to qualify for rediscount under the Bill Market Scheme is Rs. 50,000. It has been represented to us that this will be rather high in this context for some areas and for some classes of distributors. We recommend that the amount should be reduced to Rs. 10,000 to suit the requirements of fertiliser financing.

### **Unsecured Advances and Unsecured Guarantees**

9.18 The Reserve Bank stipulates that the unsecured advances and unsecured guarantees of a scheduled bank should not exceed 15 per cent of the total of its outstanding advances. This too acts as a limitation on the extension of liberal credit facilities for fertiliser distribution. We note in this connection that, in pursuance of the recommendations of a Working Group on Unsecured Advances appointed by the Governor of the Reserve Bank about the middle of 1967 the Bank has decided to exclude certain types of unsecured advances from the category of unsecured guarantees and unsecured advances for purposes of calculating the total of unsecured advances. The exempted advances include, (a) those backed by guarantees of the Central and State Governments, public sector financial institutions,

insurance companies, banks and, in respect of advances to small industries, those backed by Credit Guarantee Organisation; (b) those against inland D.A. bills drawn under letters of credit; (c) those against lorry/truck receipts issued by operators approved by the Indian Banks' Association; and (d) advances to farmer against hypothecation of crops. We recommend that all types of advances, including those against book-debts and guarantees issued for fertiliser distribution in respect of which the participating banks seek protection under the guarantee scheme (which we propose elsewhere) should be exempted from the limit applicable to unsecured guarantees and unsecured advances.

### **Types of Finance and Levels at which Finance from the Banks will be Needed**

9.19 Distribution credit from commercial banks may become necessary at one or more of the following points in the distribution chain: (a) manufacturers; (b) distributors; (c) wholesalers/sub-distributors; and (d) retailers. At the first of these points, such credit will be necessary where (as in Kerala) the manufacturer himself undertakes distribution through his depots at the wholesale levels, and through cooperative or private retailers at the retail stage. In this case, the type of finance needed may be clean advances or cash credits or overdraft against pledge or hypothecation of stocks or against book-debts representing credit sales. The manufacturer will also need resources against bills or sight drafts which are drawn on the wholesalers (cooperative or private) and represent sales on credit or deferred payment basis for periods varying from 3 to 6 months.

9.20 In not a few cases, the manufacturers operating through their sole distributors are known to be extending to the latter a period of credit upto one to two months, during which the distributors/wholesalers have to make their own arrangements for finance. In such cases also, the manufacturers will have to look to the banks for finance against stocks kept in their godowns or against bills or sight drafts drawn on and accepted by the sub-distributors or retailers, or against receivables representing credit sales made to the sub-distributors or retailers. In these cases, again, the period of credit may vary from 3 to 5 months, depending on whether it is intended for holding buffer stocks, or for extending credit sales.

### **Credit to Retailers**

9.21 While retailers of established standing and satisfactory past dealings with the banks will no doubt be in a position to raise credit on their own for their business in fertiliser, the commercial banks may in a number

of instances find it difficult to finance retailers. It would appear that in practice the wholesalers or sub-distributors would in a majority of cases have to raise finance from the commercial banks in one of the ways mentioned above, and themselves offer a line of credit to the retailers (in some instances on the guarantee of bank) by providing time from one to (say) four months for the payment of dues on fertilisers supplied. We have also been informed that in some areas the banks themselves may find it convenient to extend credit facilities to the retailers either on a clean basis or on hypothecation, provided the wholesaler concerned stands guarantee. These will be areas where the wholesaler has better knowledge of the retailers than the bank, which may be new to the area. Where direct credit to the retailer is extended by the bank against stocks the period will have to be one to three months.

9.22 To sum up, we envisage that credit facilities will be required at one or more of the following levels, namely (1) the manufacturers, distributors or wholesalers, (2) sub-distributors or sub-wholesalers and (3) retailers and that the loan advance, or cash credit provided would be against one or more of the customary types of securities, including (i) hypothecation or pledge of fertiliser stocks, (ii) bills or sight drafts representing sale of fertilisers (where necessary supported by banks guarantee) or (iii) receivables representing credit sales to the wholesalers, sub-wholesalers or retailers. We recommend that the period for which the banks may extend distribution credit under one or more of the above types may be between 3 to 6 months, care being taken to ensure that credit facilities against bills or sight drafts drawn by the apex or district cooperative marketing societies duly supported by the guarantee of the apex or district cooperative banks do not exceed 6 months. Similarly the period allowed to the wholesaler or sub-wholesaler in respect of credit sales to the retailer should not normally exceed three to four months, while that in respect of credit for holding stocks in buffer godowns should not exceed three months.

### **Margin Requirements for Distributors**

9.23 The norms now in force for bank margins on different types of advances have tended to strain the resources of the borrowers. Thus, for advances on hypothecation, the margin is normally as high as 40 per cent ranging between that figure and 20 per cent. In other words the distributor can usually get an advance of only 60 per cent of the value of the fertilisers he holds; he has to find the remaining 40 per cent himself. In special cases he may be able to get from the bank 75 per cent or even 80 per cent of the value, but find the balance himself. On receivables, again,

he can borrow only 60 per cent and often much less. It should, however, be added that in view of the prevailing seller's market in fertiliser, it has not usually been necessary for the distributor either to hold stocks for long periods, or to extend substantial credit facilities to the retailer. For every unit of 10 per cent as margin, the amount which the fertiliser trade would have to find as its own resources has been estimated at Rs. 135 million at the minimum, and Rs. 185 million at the maximum level of handling in 1970-71 on the assumptions made in the previous chapter. Since the average margin is needed at 30 per cent, the relevant magnitudes would range between Rs. 405 million and Rs. 555 million at the stage indicated. This has led us to consider the practicability of arrangements whereby the burden on the distributor can be reduced, while he continues to have a reasonable financial involvement in the transactions, for otherwise the inadequacy of resources on the part of the borrower would obviously have been a serious constraint on the speedy movement of fertilisers to the retail points.

9.24 Indeed an analogous need has already been recognised for reduction of margins in respect of advances for foodgrain procurement, distribution etc., in respect of State Governments and the Food Corporation of India.\* Moreover, in the context of the fertiliser trade itself, the Reserve Bank has stipulated a margin of only 10 per cent in respect of the credit limits allowed to cooperative agencies, this arrangement being subject to various safeguards including guarantees by the State Governments. We have earlier recommended that credit for fertiliser stocking and distribution should be treated on a priority basis, in the same way as finance for foodgrain procurement is now treated. At the same time, to make sure that the quantum of credit available measures up to the needs, we recommend that, at least in the initial stages of building up of the distribution system and subject to the safeguards we indicate, the margins required in the part of the borrowing agencies in the private sector should not exceed 10 per cent of the value of fertilisers hypothecated or 5 per cent of the value of stocks pledged or 20 per cent in respect of receivables representing sales of fertilisers on credit to the distribution agencies.

9.25 The safeguard which we suggest is in the form of a guarantee which will be available to the bank as part of the scheme which we elaborate in Chapter X. It may be noted that the principle of State or institutional guarantee for the purpose of attracting more liberal credit to certain priority sectors is one which has already found acceptance as exemplified in the operations of the Export Credit Guarantee Corporation and the

\*Report on Currency and Finance for 1966-67 — page 65.

borrowings of cooperative wholesale stores\* whether at the State level or at that of the National Federation of consumers stores.

### **Credit Facilities to Wholesalers Who Are not of Known Standing**

9.26 As already indicated, the next few years are likely to witness a large and expanding network of sub-distributors and retailers of fertiliser in different districts. To start with in any case, the banks would in many instances, prefer to deal directly with a limited number of wholesalers of known standing rather than with an indefinite number of retailers, except of course where the bank has personal knowledge of the retailer and is satisfied with his credit worthiness. In considering this aspect we have in particular, taken into account the urgent need for manufacturers and distributors making an immediate start in many areas with the required distribution of fertiliser. This process will undoubtedly be facilitated if the banks can cover their risk fully or in part of it by being permitted to have resort to the guarantee organization.

### **Organizing of Distribution Points**

9.27 Provision of liberal credit facilities at the level of manufacturers, distributors and wholesalers is only one part of the total effort involved in moving supplies adequately and in time to the retail points. The other aspects to be borne in mind are (a) the organization and location of an adequate number of retailers at appropriate points supported where necessary by other intermediate agencies, i.e., sub-distributors, or sub-wholesalers, and (b) the making of arrangements for credit supplies on a liberal basis to the sub-distributors and retailers, where that is necessary.

9.28 So far as the organisation of distribution points at the retail and intermediate levels is concerned, this is now mainly the function of the manufacturers and distributors themselves. The responsibility involved is all the greater where : (a) supplies are largely from the factories as distinguished from the Pool, (b) the present organisation of distribution points is not adequate, even with reference to the present level of supplies, and (c) the manufacturers/distributors are entering the field in a big way for the first time.

### **Selection of Retailers**

9.29 Selection of the right kind of sub-distributors, and more importantly, the retailers who will be in direct touch with the farmers is an extre-

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\*Government of India, Ministry of F.A.,C.D. &C. Department of Cooperation, Circular No. 1-25/65.CC, dated 27.5.1966

mely important aspect of the responsibility of the manufacturers and distributors. Hitherto, the selection of the retailers has been largely governed by considerations of the financial worth and business connections of the parties concerned. This of course will remain for otherwise the retailer will not, for example, be able to extend credit facilities—by way of credit sales—to cultivators. But a number of other criteria too will become relevant such as : (a) local knowledge and contact with cultivators; (b) salesmanship including a minimum technical know-how covering soil, water and crops, fertilisers and other inputs, as well as pesticides etc; (c) business competence including ability to maintain and render proper accounts, manage credit transactions in kind or in cash, and generally operate as agent of wholesaler for, e.g., Food Corporation; and (d) possession of storage facilities.

9.30 We envisage that, consistently with the quantum of supplies to be handled by the manufacturers and their distributors in any area, the manufacturers and distributors will themselves undertake the responsibility of appointing an adequate number of retailers in a well arranged pattern of distribution which takes into account the agricultural programmes and potentialities of the areas as well as the projected volume and phasing of fertiliser supplies. We further envisage that in appointing the retailer or sub-distributor the manufacturers and distributors will keep in mind considerations and criteria such as those we have mentioned above. This will ensure that in their actual working, private agencies—no less than co-operatives, Government staff will function within the framework of large public policy.

### Coordination Among Different Agencies

9.31 We have indicated earlier the likelihood of certain States receiving their supplies mainly from the factories and not from the Pool. This development in particular and the current policies in regard to free distribution of fertiliser generally, will mean that, more than ever before, cooperative, private and Government retailers are likely to operate side by side in the same areas. The normal business considerations of having economic units and exploiting potential demand in insufficiently covered areas will themselves perhaps lead, in due course, to the emergence of a satisfactory and appropriately widespread network of retail depots serving all the parts of the rural areas in due course. In the immediate future and particularly in the programme areas, however, some informal arrangements for co-ordination among the different agencies in this respect may be usefully promoted, even though the opening of retail centres by any agency is not sought to be regulated.

9.32 As pointed out in an earlier chapter, the present distribution arrangements, whether of cooperatives or of private agencies, are inadequate to the extent that all the types of fertiliser needed and the related services are not available at one convenient place. In choosing points of distribution and equipping the centres it is important to remember that each depot should, if possible, be able to supply all the different types of fertilisers which are in demand in the particular area.

### **Credit Supplies to Retailers**

9.33 It has been urged before us that, in the context of the large number of retail distributors who have to be appointed in order to serve areas of large potential consumption, not all the retailers so appointed—barring a few substantial ones—will be in a position invariably to pay cash before taking delivery. In other words, as the area and volume of distribution progress, it will be increasingly necessary to make credit sales to retailers beyond the levels normally prevalent at present. For only then can it be ensured that the supplies are moved to the retail points well in time. This of course does not preclude an arrangement such as that each retailer should pay, on delivery, a minimum proportion of the value of each consignment. At the same time, the absence of adequate security and the difficulties in effecting recoveries when credit sales are made, are mentioned by the distributors as serious disincentives to their extending credit sales. It has, therefore, been urged that some degree of protection against possible risks arising from credit sales should be extended to distributors and wholesalers. As will be seen later, we have taken this consideration into account in drawing up the Guarantee Scheme, under which the banks which extend guarantees on behalf of the sub-distributors or retailers receiving credit supplies can seek a degree of protection from the Guarantee Corporation.

### **Margins to be Maintained by Retailers**

9.34 In thus recommending suitable cover for the risks involved in making enlarged credit sales we are not unmindful of the need for agencies at each level investing their own resources upto a reasonable extent in the fertiliser trade. We have, for example, recommended that the commercial banks should advance loans to the distribution agencies upto 95 per cent of the value of the stocks pledged, 90 per cent of the value of stocks hypothecated and 80 per cent of the receivables representing credit sales. We recommend that, in the case of credit sales to the sub-distributors or retailers, as the case may be, the manufacturers and distributors should insist on the latter paying at least ten per cent of the value of supplies made to them on credit, so as to be eligible for protection under the guarantee scheme.



## **Period of Credit to Retailers**

9.35 In the chapters on Distribution Arrangements, we have discussed the serious bottlenecks created in effecting rapid sales of fertilisers to the farmers because of (a) the difficulties experienced by the farmers in getting timely production credit from cooperatives and other sources, (b) lack of arrangements in certain areas to ensure adequate supplies to retailers on either credit or on consignment so as to enable them, in their turn, to supply fertiliser in time, but on credit, to the farmers, pending sanction and disbursement of production credit to the farmers by a cooperative or other agency. Insufficiency of own resources has also adversely affected the capacity of the retailers to procure supplies in advance to make them available to the large number of farmers who would normally prefer to assure themselves of the supplies well before the season. In our view, the terms and conditions of credit supplies to retailers should be such as envisage the possibility of the retailer in turn making one to three months' credit available to the farmers. We consider that such an arrangement insofar as it provides a breathing space for the farmer, will considerably help increase the sale of fertiliser and, what is particularly important, ensure its being bought in time by the farmer.

9.36 Thus, supplies made by the wholesalers to the retailer in the month of April will carry a credit period of 3 months, those made in May will carry a credit period of 2 months and those made in June will carry a credit period of one month. We, therefore, recommend that the manufacturers, distributors or sub-distributors dealing directly with the retailers should, as a rule, allow them credit supplies or a period of one to four months on each consignment, depending on the time of supply, such period being included in the total distribution credit period of 3 to 5 months allowed to the manufacturers or distributors by the banking system. We also recommend that as the cost of extending credit for the short period of one to four months will be included in the cost of fertiliser reaching the farmer, no interest should ordinarily be charged to the farmer on the credit supplies.

## **Credit Supplies to the Cooperatives**

9.37 We have elsewhere indicated that an important way of making full use of the cooperative distribution agencies in different States will be for the manufacturers to make supplies on the basis of deferred payment to cooperative wholesalers at the State and district levels. Since however, it is with the Central and apex cooperative banks or the State Bank of India or other commercial banks that the cooperative wholesalers have their

borrowing arrangements, it is clear that these financing banks should be a party to any credit allowed to cooperative wholesalers by private manufacturers and distributors. This appears to us one of the types of transactions which ought to be covered by the guarantee scheme envisaged. We take this into account in formulating the scheme.

### **Supervision Over the Retailers**

9.38 It hardly needs to be emphasized that, in the framework of distribution arrangements contemplated here a considerable degree of responsibility—for proper selection, training and supervision of the retailer—vests in the manufacturers, distributors and wholesalers. It will be expected of them to provide and operate adequate safeguards for the prevention of abuse of the credit facilities available. The distributors etc. have to exercise effective control and supervision, by calling for periodical returns from the retailers recovering dues punctually where cash sales are involved, and arranging for prompt adjustment in respect of sales effected against bank credit, cooperative or commercial. The responsibility of the distributor and wholesaler will include submission of the lists of retailers selected by them to the Guarantee corporation for its approval, and submitting such returns as it may call for from time to time regarding the operations of the retailers.

9.39 We recommend that the Fertiliser Association of India draw up a set of instructions for the guidance of the manufacturers and distributors in the context of the measures here contemplated both for the extension of distribution and the expansion of credit, whether private or institutional, cooperative or commercial, on sound lines and to give the agencies a working knowledge of the discipline to be observed by them in the context of the massive institutional credit involved in the programmes.

## CHAPTER X

# FERTILISER CREDIT GUARANTEE CORPORATION

In this chapter we propose to set out very briefly the main features of the Fertiliser Credit Guarantee Corporation which we recommend should be established as early as possible. We have already specified, in different chapters, the contexts in which the setting up of such a Corporation is likely to promote a much larger volume of bank credit for fertiliser distribution than would otherwise seem possible. Our earlier observations are taken into account in the scheme outlined below.

### 10.1 Incorporation

The Corporation may be set up as a company under the Companies Act, 1956, with a paid up capital of Rs. 25 million and an authorised capital of Rs. 50 million. Two of the shareholders may be the Government of India and the Reserve Bank of India, the latter holding the majority of the shares. In order to enable the Reserve Bank to take up the shares, it will be necessary for the Central Government to issue a notification under Section 17(8A) of the Reserve Bank of India Act declaring the new company to be a financial institution for this purpose.

### 10.2 Objects

The Corporation will operate a scheme to be known as the Fertiliser Credit Guarantee Scheme. In general terms, the objects of the Corporation will be:

- (i) to ensure availability of larger bank credit for the stocking and distribution of fertiliser, pesticide and other items [see 3 (iii) below] by extending to banks and other credit institutions:
  - (a) guarantees against advances made, or
  - (b) counter-guarantees against guarantees or acceptances given,by banks to stockists, distributors, wholesalers, sub-wholesalers and retailers; and
- (ii) to supplement in other ways the credit available for fertiliser, pesticide and other approved items.

In connection with object (ii), an eventual possibility could be that of the Corporation assuming re-financing functions *vis-a-vis* banks and other credit institutions insofar as loans for fertiliser, pesticide and other approved items are concerned. We do not, however, pursue the point here beyond suggesting that the Reserve Bank examine it in due course.

### **10.3 Items covered**

- (i) manufactured chemical fertilisers;
- (ii) agricultural pesticides and portable equipment for the application thereof; and
- (iii) such other items of importance for agriculture as may be approved from time to time by the Reserve Bank of India.

### **10.4 Distribution agencies covered**

- (i) Manufacturers (or importers) of fertiliser, pesticide, or other approved items who undertake distribution on their own or supply, on credit, to distribution agencies in the cooperative, private or public sectors;
- (ii) Distributors, whether (a) joint stock companies, partnerships or individuals or (b) wholesalers, sub-wholesalers or retailers;
- (iii) Cooperative distribution agencies at the State, district, taluka, village or other levels; and
- (iv) such other distribution agencies as the Guarantee Corporation may approve from time to time.

### **10.5 Eligible Credit Institutions**

- (i) (a) all scheduled commercial banks, including the State Bank of India and its subsidiaries;
- (b) such non-scheduled banks as may be approved from time to time by the Reserve Bank of India;
- (ii) (a) all State cooperative banks;
- (b) such Central cooperative banks as may be approved from time to time by the Reserve Bank of India; and
- (iii) such other credit institutions as may be approved from time to time by the Reserve Bank of India.

### **10.6 Parties and Transactions covered by the Guarantees and counter-Guarantees**

The parties to the transactions may be any of the distribution agencies mentioned in item 4 above, either private or cooperative, and at any of the

levels mentioned, viz., distributor, wholesaler, sub-wholesaler or retailer. Subject to this, the types of transactions covered would be as indicated below:—

(i) Transactions covered by guarantees

Advances of banks or credit institutions against:

- (a) hypothecated or pledged stocks; or
- (b) book debts or bills discounted, representing supply, on credit, of fertiliser, pesticide or other approved items.

(ii) Transactions covered by counter-guarantees

Guarantees or acceptances extended by banks or credit institutions on behalf of their clients in respect of supplies of fertiliser, pesticide or other approved items made to the clients by the suppliers.

We consider (ii) above to be particularly important from the point of view of retailers, whether private or cooperative. If these can obtain suitable guarantees from their banks (in order that adequate credit/consignment supplies may be made to them by the wholesaler) the banks in turn can cover part of their risk with the Guarantee Corporation.

### 10.7 Margins to be maintained

Since the object of the scheme is to liberalise bank finance in consideration of adequate guarantees and counter guarantees, it is necessary that the Corporation should stipulate that the margins maintained by the banks should not be above a prescribed maximum. The *maxima* should, in our view, be as follows:

	<i>Maximum Margin</i>
(i) Advances against stocks:	
(a) pledge	5%
(b) hypothecation	10%
(ii) Advances against book debts or bills discounted:	
(a) where the bills have been accepted by a bank	5%
(b) where they have not been accepted	20%
(iii) In all other cases	As prescribed by the Guarantee Corporation.

## **10.8 Period of credit**

For purposes of the Guarantee Scheme, we consider that the period of credit should not exceed 6 months (whether against stocks, book debts or bills discounted). We believe that this period is long enough to enable a retailer, in appropriate cases, to give temporary accommodation of reasonable duration to the farmer to whom he has supplied fertiliser. We have elsewhere recommended that the Reserve Bank of India Act be so amended as to place bills arising from the fertiliser trade on the same footing as those connected with export of goods from India for purposes of re-finance from the Reserve Bank of India, i.e., be eligible for a maturity of 180 days instead of the normal 90 days.

## **10.9 Extent of Guarantee**

The Guarantee Scheme should provide for the credit institutions invoking the protection of the Guarantee Corporation within a stipulated period, say, within one month of the date of default. The extent of the guarantee cover provided by the Corporation should be decided on the merits of each case, but should in no case exceed 65% of the amount in default. On the guarantee being validly invoked, the Corporation should make good the agreed proportion of the amount in default, the remainder being borne by the credit institution concerned. The recoveries made after the payment of the claim should be shared between the Corporation and the bank in the same proportion. The detailed scheme may spell out the respective rights of the Guarantee Corporation and the credit institution in this regard.

## **10.10 Premium**

It is difficult, at this stage, to assess the magnitude of the risks involved from the point of view of the banks, but there is no reason to think either that these will be very great or that they cannot be substantially reduced as the banks gain experience. To some extent, the risk will vary from party to party and transaction to transaction. A scale can be laid down in the light of experience. The Corporation will conduct its operations on commercial principles, but this will be subject to its main aim of bringing about a liberalisation of bank finance for fertiliser stocking and distribution. In broad terms, we consider that the rate of premium to be paid on the guarantee or counter-guarantee may vary from  $\frac{1}{2}$  per cent per annum to  $2\frac{1}{2}$  per cent per annum, depending on the assessment by the Guarantee Corporation of the degree of risk involved in different transactions, either individually or by categories.

### **10.11 Funds**

The initial paid-up share capital of Rs. 25 million would yield income on its investment which should, in our opinion, be adequate to cover the expenses of the Corporation on its management and administration. Besides this, we consider that a sum of Rs. 100 million should constitute adequate initial resources for the Corporation. We accordingly recommend that the Government of India may extend to the Corporation a loan of Rs. 100 million on the basis of either no interest at all or a nominal interest, so as to constitute the corpus of a Guarantee Fund. Further, the Government should be prepared to convert a portion of the loan into a grant in due course, if so required depending on the magnitude of the liabilities which may arise from the operations of the Corporation as guarantor. To augment its resources, the Corporation may be empowered to float bonds guaranteed by the Government on such terms as the Government considers appropriate.

### **10.12 Other Matters**

It is obvious that the Reserve Bank of India is intimately concerned with all the functions of the proposed Corporation. Indeed, without active coordination with the machinery of the Reserve Bank, it would hardly be possible for the Guarantee Corporation to operate effectively. We recommend, therefore, that the Fertiliser Credit Guarantee Corporation should be located and administered in such a way that it remains closely associated with the Reserve Bank of India.

## CHAPTER XI

# FERTILISER CREDIT TO THE FARMER

## PRESENT ARRANGEMENTS

### Fertiliser in Current Farm Operations

11.1 A little more than fifteen years ago (1951-52), when the All-India Rural Credit Survey Committee examined how the current farm expenditure of the Indian farmer was being met, the expenditure on chemical fertilisers and the corresponding borrowings accounted for a relatively small proportion of his total current farm expenditure. The level of application of fertilisers was low, even according to the present Indian standards, and was largely confined to cash crops on the one hand and to the bigger farmers on the other.

11.2 Ten years later (1961-62), when the Reserve Bank of India conducted the All-India Rural Debt and Investment Survey, no appreciable increase was reported in the borrowings of the cultivator families for either current farm expenses generally or for chemical fertilisers in particular. There had, in the intervening decade, been no very significant advance in the technique, practices and pattern of inputs adopted by the majority of the farmers in the majority of the States.

11.3 Since 1961-62, however, there has been a noticeable change in a number of areas in the pattern of expenditure on current agricultural operations. This is particularly in evidence in the "package" areas. In these areas, and with special reference to food crops, an increasing proportion of total current farm expenditure is incurred on fertilisers and other inputs. There is also evidence that, as a result, there has been increasing dependence on credit for fertilisers. For example, in terms of the scale prescribed by the co-operative banks for short-term loans for paddy under the package programme, fertiliser accounted for 74 per cent in Palghat, 41 per cent in Sambalpur, 27 per cent in Thanjavur, 26 per cent in Raipur, and 20 per cent in Burdwan. For wheat, it amounted to 25 per cent in Aligarh. Since the actual application of fertiliser in these



instances was almost invariably less than the recommended doses, it may be presumed that the actual borrowings on this account were lower than the prescribed percentages. More recently, there has been a very substantial increase in the expenditure on fertilisers and pesticides. This is attributable to the technological change brought about by the introduction, and in due course widespread acceptance, of the high-yielding varieties of paddy, wheat, jowar and other food crops. According to the studies conducted by the Directorate of Economics and Statistics\*, the expenditure per acre on fertilisers and pesticides accounted for 65 per cent in Karnal, 51 per cent in Cuttack, 47 per cent in Thanjavur, and 40 per cent in Ernakulam, of the total current farm expenditure for the participants in High-Yielding Varieties Programme, even though the application of fertilisers per acre was not to the full extent of the doses recommended.

11.4 Moreover, a substantial part of the expenditure of the farmers on fertilisers (and pesticides) has been met by way of borrowings as has been brought out by our studies in the 13 districts and those of the Directorate of Economics and Statistics with reference to the High-Yielding Varieties Programme during Kharif 1966. The borrowings for fertilisers and pesticides from co-operatives alone, in relation to the expenditure on the items, were found, in the case studies for Kharif 1966, to be as high as 100 per cent in Kolaba, 86 per cent in Cuttack, and 75 per cent in Mehsana, while they were lower, but still substantial, at 50 per cent in Krishna, and 29 per cent in Thanjavur. In Aligarh, where taccavi credit was predominant, fertilisers accounted for 73 per cent of the borrowings from that source.

### **The Emerging Pattern of Fertiliser Consumption**

11.5 The investigations conducted by the Reserve Bank of India for the All-India Rural Credit Review Committee in two selected villages from each of eight package districts confirm some of the observations made in the foregoing paragraphs. One of these is that the proportion of farmers using fertilisers increased with the size of holdings. Thus, during 1965-66, while about 77 per cent of the large cultivators in the two villages studied reported using fertilisers in Aligarh, about 11 per cent of the small cultivators in one village and 55 per cent of the small cultivators in another village reported using them. In Ludhiana, Mandya, Thanjavur and Shaha-

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\*Report on the High-Yielding Varieties Programme, Directorate of Economics and Statistics, Ministry of Food, Agriculture, Community Development and Co-operation, Government of India, 1967.

bad almost 100 per cent of the large cultivators (in the villages studied) reported using fertilisers, while the proportion of the small cultivators using them was very much less. In contrast with these districts, in Raipur and Pali which are largely unirrigated, 77 per cent to 84 per cent of the large cultivators reported use of fertilisers, while among the small cultivators it ranged from nil to 50 per cent. During Kharif 1966, a more or less similar trend was seen.

11.6 Secondly, even those farmers who used fertilisers did not apply them in their entire holding. In 1965-66, in Ludhiana, Mandya and Thanjavur, all of which are known for a fairly high level of fertiliser application, the proportion of area of the large farmers covered by fertiliser application ranged from 48.5 per cent in one village of Shahabad to 84.6 per cent in one village of Thanjavur. In Aligarh, it was about 45 per cent of the area whereas in Raipur it ranged from 27 to 48 per cent. In the two villages of Pali it ranged from 0.8 per cent to 7.4 per cent. It may be noted that the proportion of area brought under fertiliser application showed appreciable decline in the case of small cultivators in the two villages of Aligarh and Ludhiana, one village of Raipur, and one village of Shahabad. In Thanjavur, the corresponding proportion showed some decline, but was higher than 50 per cent. It is important to note that under the High-Yielding Varieties Programme in Kharif 1966 the position has shown substantial improvement in some areas, notably Thanjavur, where the proportion of area covered under fertilisers increased upto even about 94 per cent of the area in the case of large cultivators, and to about 82 to 86 per cent in the case of small cultivators. While in Mandya too the position on the whole showed some improvement, Aligarh, Raipur, Pali and Shahabad, showed varying degrees of deterioration during Kharif 1966 mainly on account of the widespread failure of rains during the previous year. Other contributory causes were lack of irrigation facilities, unwillingness of the farmers to take risks of extending their area without assurance of irrigation, high cost of fertilisers and lack of eligibility for credit because of overdues. Our studies in the selected districts revealed that the actual application of fertilisers showed wide variations, ranging generally from 25 per cent to 75 per cent of the official recommendations for High-Yielding Varieties Programme in different districts.

11.7 With the High-Yielding Variety and other programmes gaining momentum, the trend is fairly obvious that, given better irrigation facilities and other supporting arrangements, more and more of the large, medium and small farmers, in that order, would take to application of

fertiliser, first in small doses, and in small areas, but later in larger doses in larger areas, and that this in turn, would lead to higher borrowings for fertilisers.

### Pattern of Dependence on Credit for Fertilisers

11.8 In the Table below the pattern of credit sales of fertilisers is illustrated with reference to eleven districts for the years 1965-66 and 1966-67.

TABLE 11.1

#### Pattern of credit sales

Name of the District	Percentage of credit sales (in value) to total sales through cooperatives or Government depots in	
	1965-66	1966-67
Muzaffarpur (Bihar)	45	45
Palghat (Kerala)	58	60
Raipur (M.P.)	85	89
Thanjavur (Madras)	48	73
Kolaba (Maharashtra)	91	82.4
Mandya (Mysore)	NA	50
Sambalpur (Orissa)	70	75
Ludhiana (Punjab)	80	NA
Sri Ganganagar (Rajasthan)	54	45
Aligarh (U.P.)	94	92
Burdwan (W.B.)	45	50

Except in the case of part of Burdwan, the above figures reflect the actual credit sales against co-operative and taccavi credit together. It will be seen that the districts where the value of credit sales ranged from 70 to about 90 per cent of total sales through cooperatives (with Government depots where these were also operating), in 1965-66 and/or 1966-67, include Ludhiana, Thanjavur, Kolaba, Raipur, Sambalpur and Aligarh. The high proportion of credit sales is attributable to many factors. In the districts concerned, more than 70 per cent of the area consists of individual holdings of less than 5 to 6 acres each. In some of the districts, for instance, Raipur, Kolaba and Sambalpur, the present level of application of fertilisers is rather low in relation to the current official recommendations; and if the consumption in the district as a whole is

considered, it is less than ten per cent of the consumption targets indicated for 1970-71. In these circumstances, the credit tool is apparently being used to induce farmers to step up the rate of fertiliser application. In a few other districts (e.g. Thanjavur, Ludhiana, etc.) the present application of fertilisers has already reached a relatively high level (i.e. 50 to 60 per cent of the current official recommendations) and is further increasing, so that a larger proportion of supplies on credit has been used as an instrument to sustain the trend towards higher consumption of fertilisers. Above all, these are also areas where production credit for fertilisers is available on a somewhat liberal scale from the co-operatives and Government.

11.9 In Mandya, an important reason for the relatively low level of credit sales is the high proportion of area under cash crops. Muzaffarpur (Bihar), Sri Ganganagar (Rajasthan) and Burdwan (West Bengal) are three other districts where the credit sales are reported to be around only 50 per cent of total sales through co-operatives. In Mazaffarpur (a non-package district), the chief contributory factor for the low credit sales is the inadequacy and high cost of credit arrangements, both co-operative and taccavi. In Burdwan, which is a package district, where taccavi credit plays a limited role, the reason for the relatively low level of credit sales is the inability of the co-operative credit structure to meet the full requirements in time. In Sri Ganganagar, where the performance of co-operative credit agencies has been totally disappointing, taccavi credit alone, though subject to several limitations and open to abuses, is reported to have accounted for 50 per cent of the sales. It seems fairly clear that, with more efficient distribution, larger credit, and better co-ordination between distribution and credit, there is scope in these districts for a substantial increase in the volume of credit sales of fertilisers.

11.10 Within each district, again, the pattern of credit sales varied from area to area, depending on whether fertilisers and credit were available adequately and in time. For instance, the proportion of credit sales was higher in the area served by the Tanjore Central Bank where overdues from the members and societies were much less than in that covered by the Kumbakonam Central Bank. Had it not been for the uniform delays in the disbursement of credit by the co-operatives, the credit sales in the area of both the banks would have been higher still. In Aligarh as well as in Raipur, where credit from the co-operatives was important, heavy overdues from the societies stifled their credit sales as well as total sales. Credit sales were also higher in respect of nitrogenous fertilisers than others in Thanjavur and Burdwan where the co-operative credit

was mainly confined to these fertilisers. In Ludhiana, during 1965-66, where taccavi credit was readily available to supplement co-operative credit, credit sales were uniformly high. However, when the taccavi credit was stopped during early Kharif 1966, there was a sudden drop in credit sales as well as total sales, with the result that taccavi credit for fertilisers was quickly revived by the State Government.

### Role of Co-operatives in Providing Fertiliser Credit

11.11 In quantitative terms, the performance of the co-operatives has vastly improved during the past thirteen or fourteen years. Much of this progress, especially in the sphere of credit, may be justly attributed to the acceptance and implementation of the far-reaching recommendations made by the All-India Rural Credit Survey Committee towards the end of 1954. Unfortunately, the acceptance has not always been whole-hearted and the implementation thorough-going. Thus some States still seem to think that a sound co-operative superstructure can be reared on a base which consists largely of unsound, non-viable primary societies. Nevertheless, programmes such as the strengthening of the share capital structure, the training of personnel at different levels and above all the availability of massive, even if increasingly purposive and selective, support from the Reserve Bank have resulted in a substantial improvement in the share of co-operatives in the credit provided for agriculture. At the time the Committee conducted its investigations i.e. in 1951-52, the co-operatives accounted for hardly 3.1 per cent of total estimated borrowings of the cultivators. A major part of the cultivators' credit needs was met by the agricultural moneylenders (24.9 per cent) and professional moneylenders (44.8 per cent). The Government and commercial banks provided 3.3 per cent and 0.9 per cent, respectively. Ten years later, the All-India Rural Debt and Investment Survey\* revealed that in 1961-62 the borrowings from co-operatives had increased to 15.5 per cent. There are data which indicate that this proportion may now be placed at between 20 per cent and 25 per cent. The improvement, however, is by no means uniform all over India. In certain States e.g., Assam, Bihar, West Bengal, Orissa, and Rajasthan, it is decidedly low. In certain others—Maharashtra, Gujarat, and Madras, for example—it is markedly high.

11.12 As at the end of June 1966, there were 22 State co-operative

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\*All-India Rural Debt and Investment Survey 1961-62, Reserve Bank of India Bulletin, September 1965.

banks, 348 central co-operative banks and 197,000@ primary agricultural credit societies in the country, covering 90@ per cent of villages and 45@ per cent of agricultural population. The primary agricultural credit societies made advances for short term agricultural purposes amounting to Rs. 3,090 million in 1965-66 (provisional) as compared with Rs. 2,054 million in 1961-62. A substantial part of the short-term funds of the co-operative credit structure has been derived from the Reserve Bank (Statement XII).

### Utilisation of Co-operative Credit for Fertilisers

11.13 It is difficult to indicate precisely what proportion of the short-term co-operative loans advanced in 1965-66 or in 1966-67 in different States was in the shape of fertilisers. The disbursement of co-operative credit in kind has been prevalent only in a few areas, particularly the package districts. Our studies reveal that in these areas an increasing proportion of credit is now made available in kind. In certain States such as Maharashtra, Andhra Pradesh, and West Bengal, the State Government has prescribed the proportion of short-term co-operative credit to be advanced in the shape of fertilisers. This varies from 20 per cent in Andhra Pradesh to 33 per cent in West Bengal. In practice, however, because of the shortage of supplies, the general reluctance to take loans in kind, and the lack of co-ordination between credit and supply agencies, the loans have not been advanced in the shape of fertiliser to any appreciable extent. On the basis of past performance in some of the States, it may be estimated that roughly upto 15 per cent of the co-operative advances was employed for fertiliser purchases in 1965-66.

11.14 In the package districts, where attempts have been made to organise credit and supply arrangements more purposefully and to advance loans on the basis of individual production plans, the performance in advancing loans in kind (i.e. fertiliser) is far better than in other districts. In Thanjavur, for instance, about 38 per cent of the loans was advanced in kind, which accounted for the entire credit sales (73 per cent of the value of sales through co-operatives) in 1966-67. In Mandya, nearly 60 per cent of loans in 1965-66 and 46 per cent in 1966-67 was advanced in kind, which accounted for 50 per cent of the value of sales of fertilisers through co-operatives. In Aligarh, on the other hand, 30 per cent of co-operative credit advanced in the shape of fertilisers accounted for slightly less than one third of the value of credit sales, which amounted to 92 per cent of the value of total sales. In Raipur nearly 50 per cent

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@Source: Ministry of Food-Agriculture, Community Development & Co-operation, figures provisional.

of the co-operative credit advanced in kind (a major part derived from taccavi funds) accounted for the entire credit sales (90 per cent of total sales).

### Position of Primary Co-operative Credit Structure

11.15 The financial strength and efficiency of operation of the primary credit societies have considerable bearing on the overall capability of the co-operative structure to provide credit for fertilisers and other current farm expenses. The data available\* to us do show that in the recent past, the financial position and operations of the primary credit societies have registered some improvement in a certain number of States. The proportion of the agricultural population covered increased from 30 per cent in 1960-61 to 45 per cent in 1965-66, and the average loans advanced rose from Rs. 9,558 per individual society to Rs. 17,574 per individual society during the same period.

11.16 Even so, the primary co-operative credit societies remain on the whole ill-equipped for the tasks ahead of them, though the degree of inadequacy is different in different States. Thus, to take up one aspect, the proportion of the agricultural population covered as on 30-6-1966 is estimated to be 100 per cent in Madras, 87 per cent in Punjab, 62 per cent in Maharashtra and 55 per cent in Mysore. But in a number of States it is less than 50 per cent. It is 48 per cent in Kerala, 47 per cent each in Gujarat and Orissa, 45 per cent in Andhra Pradesh, and as low as 33 per cent in Madhya Pradesh, 32 per cent in Uttar Pradesh, 30 per cent in Rajasthan, and 22 per cent in West Bengal.

11.17 To no small degree, the ability of the institutions to raise funds, administer timely credit and effect prompt recovery, is dependent on their ability to employ trained and competent staff. In this regard, again, the position is generally not satisfactory. In Gujarat and Kerala, the average share capital per society is about Rs. 20,000 whereas in Maharashtra it is Rs. 14,000, in Mysore Rs. 10,000, in Madras Rs. 8,700 and in other cases less than Rs. 5,000. The average amount of loans advanced per society exceeds Rs. 50,000 only in two States. These are Gujarat and Kerala. In two others, viz., Maharashtra and Madras, the average loan advanced exceeds Rs. 25,000 per society. In Punjab, Mysore, Orissa, Andhra Pradesh and Uttar Pradesh, the average loan advanced varies from Rs. 10,000 to Rs. 20,000 and the rest below Rs. 10,000 per society. Of interest in this connection is the wide variation from State to State

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\* Source : Ministry of Food, Agriculture, C.D. and Cooperation, (Deptt. of Co-operation).

in the number of societies actually advancing loans. While for the country as a whole, the proportion of active societies is 77 per cent as at the end of June 1966, the proportion is as low as 15 per cent for Assam and as high as 97 per cent for Maharashtra. In the majority of States it varies from 60 per cent to 80 per cent. In West Bengal, Orissa, Rajasthan and Bihar, it is less than 60 per cent.

11.18 Because of the heavy overdues from members, among other reasons, the proportion of borrowing members to total membership in many States is relatively low. There are only two States where the proportion is higher than 60 per cent, while in two others it is between 50 and 60 per cent. The percentage of overdues to outstanding loans is as high as 90 per cent in Assam. It exceeds 30 per cent (but is less than 40 per cent) in four States, viz., Mysore, Maharashtra, Madras and Bihar. It exceeds 20 per cent, but is less than 30 per cent in six States, including Andhra Pradesh, Madhya Pradesh, West Bengal and Orissa.

11.19 It is understood that under the guidance of the Reserve Bank of India and the Ministry of Food, Agriculture, Community Development and Co-operation (Department of Co-operation), concrete measures are being taken in different States to reorganise the primary credit societies as viable units. But, generally speaking, the progress in this regard has been extremely halting hitherto.

### Performance of Co-operatives in the Selected Districts

#### Central Co-operative Banks—Operations

11.20 The financial position and general efficiency of the central co-operative banks in the districts studied by us varies from bank to bank. Some of the co-operative central banks e.g., those in West Godavari, Thanjavur, Ludhiana, Raipur and Mandya districts are financially in a better position than others. The banks in other districts particularly in Mazaffarpur, Sri Ganganagar, Burdwan and Aligarh are, in varying degrees, financially weak. The efficiency of operations and adequacy of performance also vary. The Table 11.2 set out below broadly indicates for some central banks the limits applied for by the affiliated societies, limits sanctioned to them and credit actually disbursed during the past two years:

11.21 We have mentioned earlier that a sizeable number of societies affiliated to the co-operative central banks are ineligible for short-term



TABLE 11.2

## Credit operations of selected central banks

(Rs. in million)

Name of the central bank	Limits applied for by societies		Limits sanctioned		Credit disbursed to societies	
	1965-66	1966-67	1965-66	1966-67	1965-66	1966-67
Eluru (West Godavari)	21.08	65.83	19.52	32.49	17.84	11.40
Palghat	8.87	7.95	8.87	7.94	4.42	5.78
Thanjavur (Two banks)	N.A.	33.20	16.31	31.54	15.05	28.35
Kolaba	12.03	5.87	9.43	4.23	2.67	4.13
Sri Ganganagar	10.24	2.22	10.15	2.22	4.67	1.01
Aligarh	54.65	43.22	54.65	43.22	13.56	9.69
Burdwan	14.13	N.A.	12.87	N.A.	12.45	N.A.

N.A. = Not available.

production credit. It will be observed from the above table that, in some of the districts, the banks have either not sanctioned the credit limits applied for, or having sanctioned them, have not disbursed the entire limits sanctioned. In a few cases there was also a substantial decline in the limits sanctioned in 1966-67 as compared with 1965-66 (e.g. Kolaba, Aligarh and Sri Ganganagar). An important reason for the gap between limits applied for and sanctions given, or sanctions given and loans actually disbursed was the inadequacy of resources with the central banks. For instance, it was explained that the failure of the Burdwan Central Bank to maintain non-overdue cover in respect of borrowings from the Reserve Bank of India impaired its ability to draw on the credit limits and finance the societies to the full extent. During 1966-67, its involvement in the financing of procurement operations to an appreciable extent came in the way of its extending larger credit facilities to the societies. In the case of the Aligarh Central Bank, on the other hand, the main reasons for a low level of operations were: first, the fact that many of the societies were disqualified from drawing on the credit limits sanctioned to them on account of their overdues being in excess of the prescribed limits and, second, the banks' own inability to raise the needed resources through deposits or borrowings. In Kolaba district, again, as against Rs. 9.40 million sanctioned to the societies during 1965-66, the actual disbursements were only Rs. 2.66 million. In Thanjavur, the ability

of the Kumbakonam Central Bank to meet the full credit needs of the credit societies was impaired because of its unsatisfactory operations and its consequent ineligibility for drawing on the Reserve Bank's accommodation in 1966-67.

11.22 Most of the central banks visited have been hesitant to implement the crop loan system suggested by the Reserve Bank of India (Appendix 15), lest the resulting credit demand from the societies should increase beyond their ability to raise the resources from the apex co-operative bank or the Reserve Bank. Even in cases where the banks are relatively strong there is obvious hesitation to implement the crop loan system.

### Support from the Reserve Bank

11.23 The point has, however, to be made that it is not the inadequacy of credit facilities from the Reserve Bank, so much as the operational deficiencies of the cooperative central banks themselves, that are responsible for the failure of the banks to sanction larger credit facilities to the primary credit societies. For instance, the central banks in twelve of the districts studied by us were sanctioned by the Reserve Bank, in 1965-66 and 1966-67, short-term credit limits aggregating to Rs. 106.3 million and Rs. 153.2 million as against which Rs. 71.9 million and Rs. 92.8 million were the highest outstandings in the two years, respectively. The Table 11.3 set out below gives the relevant data :

TABLE 11.3  
Reserve Banks' credit to selected cooperative banks

(Rs. in million)

Name of the bank	Short-term credit limits for seasonal agricultural operations, etc. sanctioned by Reserve Bank of India in		Highest outstandings under the limit during the years	
	1965-66	1966-67	1965-66	1966-67
1	2	3	4	5
1. Eluru (West Godavari)	18.6	18.7	10.3	9.8
2. Muzaffarpur (Bihar)	—	1.5	—	1.5
3. Palghat (Kerala)	4.0	4.0	3.9	1.3

(Continued)

	1	2	3	4	5
4. Raipur (Madhya Pradesh)		10.0	15.0	9.9	9.4
5. Tanjore (Madras)		13.5	18.7	8.5	13.5
6. Kumbakonam (Madras)		10.0	13.0	3.1	8.3
7. Kolaba (Maharashtra)		6.0	12.0	5.9	6.2
8. Mandya (Mysore)		10.0	13.0	10.0	11.9
9. Sambalpur (Orissa)		4.0	5.0	4.0	4.6
10. Ludhiana (Punjab)		10.0	15.5	10.0	12.0
11. Sri Ganganagar (Rajasthan)		4.0	2.0	2.6	1.2
12. Aligarh (Uttar Pradesh)		8.0	8.0	7.2	7.9
13. Burdwan (West Bengal)		8.2	8.6	6.6	5.3

Figures rounded off to first decimal

Source : Reserve Bank of India (Agricultural Credit Dept.)

11.24 What is noticeable is the low utilisation of the credit available from the Reserve Bank for current agricultural operations. This feature was in a number of districts attributable to high overdues and low operational efficiency. Examples of such districts are Raipur, Thanjavur (Tanjore and Kumbakonam banks), Kolaba, Mandya, Sri Ganganagar and Burdwan.

### Coverage of Agricultural Families

11.25 The extent to which co-operative credit for fertiliser is available varied from area to area, depending on the coverage by co-operatives of agricultural families, the proportion of members borrowing and other factors. The proportion of agricultural families covered by co-operatives in some of the districts studied by us was fairly high. It was reported to be 90 per cent in Thanjavur and Ludhiana, and 60 per cent in West Godavari and Aligarh. In other districts it was very much less; for instance, it was 40 per cent in Mazaffarpur, 37 per cent in Burdwan, and 30 per cent in Sri Ganganagar.

### Borrowing Members and Defaulting Societies

11.26 The poor performance noted in the foregoing paragraphs is due to the combined effect of a number of factors operating at different

levels. One of them, as already stated, is the high level of overdues resulting in a sizeable number of agricultural credit societies and members becoming ineligible for credit. The proportion of borrowing members to the total number of membership of societies was, for instance, about 58 per cent in Thanjavur, 50 per cent in West Godavari, 62 per cent in Ludhiana and 60 per cent in Aligarh as on 30.6.1966. In Muzaffarpur, it was 50 per cent (the proportion of the agricultural families covered by societies was hardly 40 per cent). In Sri Ganganagar, the proportion of borrowing members was almost negligible (and the coverage of agricultural families was 30 per cent). The borrowing membership in all districts with the exception of Ludhiana and West Godavari declined significantly during Kharif 1966 on account of a further increase in overdues by 30.6.1966.

11.27 The heavy overdues from the societies to the central banks have resulted in many non-defaulting members also being denied finance following the societies' disqualification for fresh finance from the central banks if the overdues exceeded a certain level (varying from 20 to 35 per cent of demand in different districts). To cite a few examples, in Kolaba, during Kharif 1966, 254 societies out of 528 were reported to have been debarred from credit and, to save the high-yielding varieties programme, the Zila Parishad provided fertiliser on credit to defaulting members upto Rs. 1.9 million. In Sri Ganganagar, the overdues amounted to Rs. 7.6 million on 30.6.1966, forming 62 per cent of demand, and, for the following Kharif, only 77 out of 768 societies were financed, as against 245 during the previous year. In Muzaffarpur, 50 per cent of the 1,400 societies received credit during 1965-66, and only about 500 in Kharif 1966. The overdues in Burdwan increased from Rs. 1.00 million on 30th June 1965 to Rs. 5.5 million on 30th June 1966, and as many as 225 societies in the area of the Burdwan Central Bank were reported to have been denied credit for Kharif 1966. With overdues of Rs. 5.7 million (forming 47 per cent of demand) on 30th June 1966, as many as 76 societies in Mandya district were rendered ineligible for credit for 1966 Kharif even though Rs. 1.8 million, out of the overdues, were converted into medium-term loans. In Aligarh, a sum of Rs. 7.2 million overdue from members (on 30th June 1966) and Rs. 4.7 million from the societies to the central bank led to the debarring of as many as 550 societies for fresh finance. Though the Aligarh Central Bank sanctioned to the societies credit limits upto Rs. 43.2 million for 1966-67, the draws by the societies for Kharif were only Rs. 9.7 million. In Thanjavur, about Rs. 7.6 million were overdue to the Kumbakonam Central Bank which worked out to somewhat more than 40 per cent of the demand on

30.6.1966. This resulted in a sizeable number of societies being disqualified for credit during 1966-67. The position was perhaps the worst in Raipur; for here an amount of Rs. 16.5 million, which was overdue as on 30.6.1966, formed as much as 81 per cent of the demand. In the last instance, if the condition regarding the financing of the defaulting societies had not been relaxed by the Government, a major proportion of societies in Raipur would have become ineligible for production credit.

### **Sanction and Disbursement of Credit**

11.28 In another important respect, namely timely sanction of credit to the eligible societies, the performance of the co-operative leaves much to be desired. While, by and large, the need for credit for purchasing fertilisers arises in May or early June, the credit facilities from the central banks are usually available in July or August. In Aligarh, though the credit limits are sanctioned to the societies fairly early, the scrutiny regarding the overdues of the societies, etc. takes place at the time of allowing drawals by the societies. The examination of a large number of applications pouring in at the same time leads to much delay. Further, a condition imposed by the central bank that, at the time of each drawal, the societies should furnish particulars of the entire loan disbursed to all the members out of the earlier drawal caused considerable delay, since not many societies could fulfil the condition.

11.29 Though credit facilities are needed before the middle of June, more than 50 per cent of applications were received by the Tanjore Central Bank during July 1966. Loans disbursed during the second half of July 1966 amounted to Rs. 1.9 million, as against a little less than Rs. 1.0 million in June 1966. The Kumbakonam Central Bank disbursed Rs. 3.00 million in July and August 1966, as against Rs. 0.7 million during the previous months.

11.30 It was explained in the Burdwan district that if the societies were to get credit in time, they should submit their applications by about the middle of April. It was found that during 1965-66, applications for Rs. 5.7 million were received upto 15th April, and for Rs. 4.2 million thereafter. For 1966-67, the corresponding figures were Rs. 5.9 million and Rs. 3.6 million, respectively. The Katwa-Kalna Central Bank in the same district disbursed Rs. 2.6 million after June, as against Rs. 1.5 million before June 1966. Similar delays were noticed in almost all the districts studied. Where the number of overdue societies was particularly large as e.g., in Raipur, Kolaba, Kumbakonam and Sri Ganganagar,

what was noticeable was delay in the sanction of credit as well as uncertainty in regard to its eventual availability.

### Reasons for Delayed Credit

11.31 The causes of delay in the sanction or disbursement of credit are organisational as well as procedural. In some districts like Sri Ganganagar and Muzaffarpur, each supervisor is required to attend to the preparation of loan applications for say, 25 to 30 societies, which is much larger than can be expected to be handled by him in the given time. In Thanjavur, the supervisors have to busy themselves with a number of other items of work as well in the very season when loan applications have to be prepared. In Burdwan and Raipur the applications pass through a number of channels before they reach the central bank. In some cases, the Executive Committee of the central bank is required under the bye-laws to meet and sanction even small loans. All this leads to delay.

### Restrictive Features

11.32 A variety of restrictive policies and procedures relating to co-operative credit in different districts also tended to make credit inadequate for fertilisers. The fixation of credit eligibility of the members for current farm operations on the basis of the security offered by them, instead of on the basis of the crop requirements, continued to be in vogue in many districts (e.g. Burdwan, Sri Ganganagar and Mazaffarpur). The limits fixed for short-term agricultural loans against personal sureties at Rs. 750 per member in certain areas of West Godavari, at Rs. 500 in Sri Ganganagar and Muzaffarpur, at Rs. 1,000 in Mandya, and in certain parts of Thanjavur, serve to illustrate the limited availability of co-operative credit in certain areas. Considering that loans for larger amounts should be secured by mortgage—a process which is time-consuming and cumbersome in all States and almost impracticable in those States and areas in which land records are not kept or are not up-to-date—farmers, it will be appreciated, were by no means too keen to obtain mortgage loans. Irrespective of their credit needs, therefore, the farmers restricted their borrowings to the extent of the limit available against sureties. The scale of finance per acre accepted by the banks under the High Yielding Varieties Programme being Rs. 200 and above per acre in different districts the existing surety limits were found to be inadequate in varying degrees even for small cultivators. We may add, however, that in some H.V.P. areas these limits are being raised suitably, subject to the availability of funds to the co-operatives.

11.33 Similarly, the individual maximum borrowing limits of Rs. 1,500 in Aligarh and in Mazaffarpur, Rs. 2,000 in Raipur (beyond this limit the Deputy Registrar is required to sanction the loan), Rs. 2,000 in Burdwan and Rs. 4,000 in West Godavari, could be said to be inadequate for meeting the expenditure on current farm operations and inputs including fertiliser even for some of the medium cultivators.

11.34 Finally, the provision made in the scale of finance per acre, prescribed by the central co-operative banks, for purchasing fertilisers was not infrequently less than the value of the recommended dose of N,  $P_2O_5$  and  $K_2O$  per acre. For instance, the total value of N,  $P_2O_5$  and  $K_2O$ , recommended per acre for H.V.P. in West Godavari was Rs. 143, while the fertiliser component in the scale of finance per acre was Rs. 100. Similar, but varying, gaps between available finance and prescribed dosage were observed in Mandya, Raipur, Thanjavur and Palghat. However, in these districts no difficulty was apparently felt by the majority of farmers during 1966-67 as the actual levels of application were still very much less than the official recommendations. Besides, the members of co-operative societies also preferred to limit their borrowings to the extent of surety loan permissible, and raise further funds by way of taccavi or otherwise, to meet the balance of the requirements. The co-operative central banks also did not appear to be too keen to increase the limits lest they should be confronted with a demand for credit which they would not be in a position to satisfy.

#### Utilisation of Credit

11.35 Other restrictive features also operate to limit the utilisation of co-operative credit. For instance, in Thanjavur, members can use co-operative credit only for purchasing nitrogenous fertilisers and not other fertilisers. The same condition is reported to obtain in certain areas (e.g. Mandya, West Godavari and Burdwan) where co-operatives enjoy monopoly for distribution of nitrogenous fertilisers. The practice of advancing in cash rather in kind that part of the loan which is intended for fertilisers has, in certain areas—notably West Godavari, Burdwan Range I, Sri Ganganagar and Muzaffarpur—affected the full utilisation of available credit for fertilisers. With reference to these and other areas, it has been urged before us that short-term loans intended for fertilisers should be advanced in kind, separately for the kharif and rabi seasons.

#### Other Causes for Shortfalls in Use of Credit

11.36 Broadly speaking, the low level of fertiliser application per

acre, untimely arrival of fertilisers at the depots, delayed credit, and inadequate supply of the type of fertilisers most popular with the farmers, have resulted in reduced utilisation of available co-operative credit in many of the areas studied. In Raipur, Kolaba, Burdwan, Mazaffarpur, Sri Ganganagar, and Aligarh, full use was not made of available credit facilities during 1966-67 because of the generally low level of application of fertilisers. A more important reason lay in the delayed availability of credit or of supplies. In areas where advance building of stocks was absolutely necessary at the retailers' level on account of the difficulties in moving the fertilisers after the onset of the monsoon, the impediment was usually the want of timely credit facilities from the co-operative central banks.

11.37 The requirement of share capital contribution to be made by the members to the societies at 10 to 20 per cent of the loan on which, in many cases, little or no dividend is paid was mentioned in certain areas as a disincentive to the farmers borrowing from the co-operatives. This appears to have been particularly true of districts like Ludhiana, Sambalpur, Sri Ganganagar, Aligarh and Muzaffarpur where the taccavi line of credit was available, without any similar obligation and at a lower rate of interest.

11.38 The prevailing high cost of fertilisers is indicated as a major obstacle to the fuller use of credit and application of larger dose of fertilisers in some districts, particularly those where there are no assured irrigation facilities. Farmers with smaller holdings are less keen to depart from traditional practices than those with larger holdings; they are still less keen to do so if in the process they are likely to find themselves steeped in debt. The need for suitable safeguards to cover the risks involved in increased application of fertilisers has been urged before us in areas where the average holding is very small and the rainfall or irrigation facilities are not assured.

### **Availability of Co-operative Fertiliser Credit**

11.39 In the light of the various difficulties discussed above, it will be seen that while co-operative credit accounts for a very large proportion of credit sales, it is nevertheless available for only a relatively minor proportion of the area under crops, and even so, in most cases, to support only a degree of application of fertiliser which falls short of what is recommended. For instance, according to information collected by us, the area under crops which thus benefited from co-operative credit was



roughly 40 per cent in Ludhiana, 33 per cent in Aligarh, about 30 per cent in West Godavari, 25 per cent (of the area under paddy) in Thanjavur, 25 per cent in Raipur and in Mandya, 10 per cent in Burdwan and less than 10 per cent in Mazaffarpur. Apart from the low coverage of area under fertiliser credit, it is also observed that the actual availability of fertiliser credit per acre is, for various reasons, very much less than the scale of co-operative credit prescribed for fertilisers. It works out to 80 per cent of the scale fixed for the high-yielding variety paddy in Thanjavur, about 60 per cent of the scale of finance prescribed in Mandya, 33½ per cent to 50 per cent of the scale for I.A.D.P. in Aligarh, less than 50 per cent of the scale in Raipur, 25 per cent of the scale prescribed in Burdwan, and about 25 per cent in Sri Ganganagar, Sambalpur, Muzaffarpur and Kolaba. This reflected, in part, the fact that the actual levels of application, as stated earlier, fell short of the recommended doses and, in part, the inability of the co-operatives to supply the required scale of credit.

### Overdues

11.40 The reluctance of co-operative central banks to increase the volume of lending is particularly pronounced where the level of overdues is already high. One reason for the heavy overdues, as in Raipur district, is repeated crop failure. The Reserve Bank has a National Agricultural Credit (Stabilisation) Fund on the lines recommended by the Rural Credit Survey Committee (1954). The purpose of this Fund is to facilitate the conversion of short-term agricultural loans advanced by the central co-operative banks into medium-term loans when the recovery of such short-term loans is affected in any particular area by serious failure of crops. Though such failure did in fact occur in different States—for example in Madhya Pradesh, Rajasthan, and Bihar—during 1965-66 and 1966-67, the extent of conversion of short-term into medium-term loans was not commensurate with the need which had arisen. We understand that this is attributable, in some cases, to the inability of the cooperative central banks to build up adequate stabilisation funds of their own so as to fulfill the requirement of finding, out of local resources 15 per cent of the amount proposed to be converted.

11.41 It may be mentioned that in 1966-67 the Central Government made\* a contribution of Rs. 67.8 million to eight States to strengthen the stabilisation funds of the State co-operative banks in order to enable them to avail themselves of the conversion facilities from the

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\*Reserve Bank of India Annual Report 1966-67.

Reserve Bank. During the same year, the total amount advanced by the Reserve Bank for conversion of short-term into medium-term loans in respect of 79 central co-operative banks at  $1\frac{1}{2}$  per cent below the Bank Rate was Rs. 74.5 million\*. While in general terms this was substantial, the fact remains that, on account of many bottlenecks indicated, the specific needs of certain districts affected by crop failure were not adequately met by the extant arrangements.

11.42 In certain other districts, however, such as Sri Ganganagar, Aligarh, Kolaba, and Burdwan as well as that area of the Thanjavur district which is covered by the Kumbakonam bank, the overdues are largely attributable, not to crop failures, but to varying degrees of laxity in recovery of dues, inefficiency of the field staff, and delays both in the filing of cases for arbitration and in the execution of awards. The persistence of overdues affects the performance of co-operative credit agencies in two ways. Firstly, from the point of view of the individual member, the defaulter to a co-operative will not, as a rule, be eligible for fresh credit for fertiliser or any other input from the co-operative agency. Secondly, from the point of view of the co-operative credit society, if its overdues to the financing central bank exceed a certain level, say 25 to 35 per cent of demand, the society itself becomes ineligible for further credit, thus affecting not only defaulting members but also those who have newly joined or not defaulted at all. This, broadly is the position of a large number of societies in districts with heavy overdues such as Aligarh, Raipur, etc. Such a situation can of course seriously affect both fertiliser sales and agricultural development.

### Co-operative Credit—Concluding Observations

11.43 From what has been stated in the foregoing paragraphs, it will be clear that cooperative agricultural credit in India has made significant progress in recent years, though it continues to suffer from several weaknesses in structure and working. It is obvious that this agency will have to play a significant role in any future pattern of arrangements for fertiliser distribution and credit. The cooperative structure has built up a widespread net work of units which are within easy reach of the farmer and is the only institutional credit agency which combines the functions of credit and supply. An equally important development is that attempts are being made to ensure that cooperative credit is increasingly production-oriented, through the adoption of the crop loan system and other means. Increasingly, credit for farm production is sought to be provided as far as possible in kind and with reference to seasonality. The results

achieved by cooperative credit in States such as Maharashtra and Gujarat on the basis of effort on these lines are sufficiently encouraging to suggest the possibility of much greater progress in the future in most parts of the country. If these expectations are to be fulfilled, however, it is necessary that the cooperatives should be activated and developed into viable units, their procedures and policies streamlined, liberalised and oriented to production needs, and their operational efficiency generally improved, particularly in regard to recoveries so as to facilitate the smooth flow of an increasing volume of production credit.

#### Taccavi—Present Pattern of Supply

11.44 Another important source of fertiliser credit is the taccavi advanced by State Governments either departmentally or through co-operatives. Among the States which have reported appreciable taccavi advances are Andhra Pradesh, Bihar, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh, Maharashtra, West Bengal, and Madras. The advances made by these in 1965-66 and 1966-67 amount respectively to Rs. 165 and Rs. 101 million (Statement XIII). In Madhya Pradesh, the taccavi loans for fertiliser were channelled through the co-operatives.

11.45 The Table 11.4 below shows the quantum of taccavi fertiliser credit advanced in some of the districts studied by us and its proportion to total credit sales of fertilisers.

TABLE 11.4  
Taccavi credit in selected districts

(Rs. in million)

Name of the District	Quantum of taccavi		Per cent to total credit sales through coops.	
	65-66	66-67	65-66	66-67
Aligarh	4.9	5.5	64.7	82.3
Ludhiana	11.3	4.9	76.3	40.0
Kolaba	1.2	2.0	56.9	93.1
Raipur	4.2	6.0	75.5	89.6
Muzaffarpur	—	0.1	—	—
Burdwan	—	0.1	—	8.7
West Godavari	0.2	0.2	5.3	—

11.46 It will be seen that taccavi has played a significant, though varying, role in different districts. In Aligarh, the increasing overdues of the co-operatives are said to have led to larger dependence on taccavi on the part of farmers. Nearly two-thirds of the credit sales of fertiliser in this district were correlated to the grant of taccavi. In Ludhiana, taccavi credit was of the order of Rs 11.3 million in 1965-66 and accounted for about 76.3 per cent of the total credit sales of fertilisers. In Raipur, the taccavi channelled through the co-operatives accounted for almost 80 per cent of the total credit sales in 1965-66 and 90 per cent in 1966-67. In Sri Ganganagar, for which complete figures are not available, taccavi seems to have accounted for the entire credit sales of fertilisers. At the prevailing level of application of fertiliser, taccavi can be said to have accounted for 30 per cent of the acreage in Ludhiana and 40 to 50 per cent of the acreage in Aligarh.

11.47 Though fertiliser taccavi is in principle intended for those who are not members of co-operatives, it is in practice, advanced to members as well in many districts. For instance, in Ludhiana, where co-operative credit was advanced in cash and was limited to Rs 2,500 per member, most members were known to have supplemented cash loans from co-operatives for other purposes with taccavi loans for meeting their fertiliser requirements. This was because fertiliser taccavi was available at a relatively low rate of interest (7 per cent per annum) and without the farmer having to subscribe to share capital. In Aligarh too, members were reported to be obtaining taccavi credit (which till recently was available at 6 per cent) in addition to co-operative loans. In Sri Ganganagar, as in Ludhiana, any farmer whether member or non-member can obtain taccavi credit. In Burdwan it is available upto Rs 100 per farmer for ordinary crops (at Rs 28 per acre) and upto Rs 800 for H.V.P. (at Rs 100 per acre).

### **Procedures for Taccavi Sanction**

11.48 Varying degrees of difficulties are reported to have been experienced in obtaining taccavi credit in the districts studied. In Aligarh, to take one instance, each of the officials, namely, the BDO, the District Planning Officer, and the District Magistrate can sanction taccavi credit upto Rs 250, Rs 500 and Rs 10,000, respectively. The scrutiny of applications is done by the village level worker for area under crops, by the Patwari for previous dues, and by the Tehasildar for prior encumbrances.

All this results in delay and considerable inconvenience to the farmer even for small loans.

11.49 In Sri Ganganagar, where the taccavi credit is advanced through panchayat samitis, the limits for issuing permits are fixed for different functionaries varying from Rs 100 in the case of VLW, to Rs 500 or more in the case of BDO. Apart from difficulties of the type experienced in Aligarh, there has, reportedly, been scope for the use of taccavi as an instrument of patronage. This is facilitated by an acute shortage of certain fertilisers including calcium ammonium nitrate. In Muzaffarpur too, the verification of particulars by different officials is reported to take a long time; the cultivator has to make repeated visits to the offices and is put to great inconvenience. The BDOs are reported to be not particularly keen on issuing permits because of the responsibility of recovery placed on them.

11.50 In Raipur where permits for fertiliser are issued by the co-operatives, the conditions do not seem to be any better. The permits are issued by the central co-operative bank on the basis of the lists submitted by the project authorities indicating the fertiliser requirements of the farmers. The various defects in the procedure followed and the resultant delays and inconvenience have been discussed in detail, with reference to this district, in an earlier part of this Report (Chapter IV).

#### Other Restrictive Aspects of Taccavi Credit

11.51 Apart from these qualitative limitations of taccavi credit for fertilisers, the quantitative restrictions are themselves considerable. Till 1965-66, the 18 months' credit facilities made available by the Centre to the States enabled the latter to extend taccavi credit to the farmers on a relatively liberal scale. Under the Central Government's revised policy,\* taccavi credit facilities are limited to one sixth of the fertilisers distributed in the State during each half year. The period of credit has also been reduced to 6 months from 18 months since 1966-67. Thus, while the entire credit of Rs 282.63 million obtained in 1965-66 for fertiliser distribution was available for fertiliser taccavi, the amount specifically available to the States for the purpose in 1966-67 was Rs 119.50 million only. The States have correspondingly, attempted to reduce their commitments in regard to taccavi. Thus, it is reported that in Rajasthan fertiliser taccavi will now be restricted to the high-yielding varieties,

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\*No. 3-5/66-GRF (S) GOI. Ministry of Food, Agriculture, Community Development & Cooperation, dated May 31, 1966.

while in the Punjab and Haryana the Governments propose to stop fertiliser taccavi altogether. On the whole, after considering their own resources and those available from the Centre, the States are generally doubtful of their ability to continue their present commitments in regard to taccavi credit for fertilisers.

### Private Credit — Dealers

11.52 According to the latest all-India survey\* (1961-62) conducted by the Reserve Bank, private credit agencies including money-lenders, both agricultural and professional, and traders continue to play a predominant role in meeting the credit requirements of rural families. It is difficult to assess, however, what part of the borrowings are accounted for by private fertiliser dealers and represent credit sales of fertiliser and other agricultural inputs. On all available data, including the information collected during our studies, it is obvious that private agencies are in certain districts, not only an important factor in the distribution of fertilisers, but also, specifically, important source of credit for the farmer who wants three or four months' time and sometimes even more, to pay for his fertilisers. In relative terms, the quantum of credit sales made by private dealers varies from district to district. It is about 20 per cent of total sales in Thanjavur, and between 10 to 15 per cent in West Godavari district. Some characteristics of such credit seem to be common to most dealers, though any generalisation would have to be accompanied by many qualifications. The interest charged is around 12 per cent; and promissory notes are only in some cases, and by no means invariably, obtained as security. In both Thanjavur and West Godavari, there are a number of instances in which the members of the cooperatives too avail themselves of the facilities including credit provided by private agencies, in order to tide over delays on the part of the cooperatives or make up for the inadequate quantities of credit or fertiliser supplied.

### Manufacturers' Credit

11.53 The manufacturers themselves sometimes extend significant credit facilities to their distributors and even to farmers. The F.A.C.T., for example, in 1964-65 provided substantial credit through its agencies to the cultivators. The loans carried an interest rate of 10 per cent per annum. Shaw Wallace & Co. also lent to the farmers through its distri-

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\*All-India Rural Debt and Investment Survey, Reserve Bank of India Bulletin Sept. 1965.

butors. In South Arcot district, for instance, it provided credit to the extent of 26 per cent of the total sales in the district at an interest rate of 10 to 12 per cent in 1964-65. The E.I.D. Parry Ltd. was another manufacturer and major distributor which offered credit facilities to the farmers through its net-work of agencies. The total amount of credit thus extended was, in the case of potato growers alone, of the order of Rs. 1.6 million in 1965-66, or 2 per cent of the total sales of fertiliser and insecticides to this group of cultivators during that year. In addition, a few medium-sized factories and manure-mixing firms also reported credit sales to the farmers through their agencies.

11.54 Both manufacturers and distributors realise the need for making available to the farmer much larger credit facilities than are available at present. This will be more and more necessary as the supply position improves and the current sellers' market is gradually transformed into a buyers' one. The two problems faced by these agencies in this regard, are that they have to find all the resources and bear all the risks involved. That does not, however mean that measures cannot be devised for enabling both manufacturer and dealer to play a much larger part than at present in the provision of credit, along with fertilisers, to the farmer. We believe that the Fertiliser Credit Guarantee Scheme will to some extent serve this purpose by enabling both the manufacturer and trader to obtain larger credit facilities from the banks.

### **The Increasing Fertiliser Credit Needs**

11.55 It is clear that, with the technological changes in farming that are now taking place, Indian agriculture has entered a new era. An immediate result of the change is that the total outlay of the cultivator on current farm operations, particularly on inputs like fertilisers and pesticides, has been on the increase and will grow still further. Available evidence also shows that the proportion of expenditure on fertiliser in relation to the total expenditure on current farm operations has risen substantially in the H.V.P. areas, and that an increasing part of such outlay is likely to be met through borrowings, as the Programme is extended to cover an increasing area and all sections of the cultivators.

11.56 Our investigations reveal that the dependence on credit facilities for fertilisers varies from about 50 per cent of total sales in some districts to 90 per cent in other districts. In areas where food crops are predominantly grown and land holdings of the size of 5 acres and less account for a large proportion of the total holdings, there is

evidence of heavy dependence on credit. Further, in areas where the level of application of fertilisers per acre recommended under the H.V.P. or intensive programmes is considerably more than the present dosage, applied by farmers, and in those where irrigation facilities or rainfall are not assured, availability of supplies on credit on a large scale has helped to boost the sale of fertilisers.

11.57 Broadly speaking, the high consumption of fertilisers, whether in terms of the district as a whole or of average application per acre, is a feature of areas in which credit facilities are available with relative ease. For instance, in Ludhiana, the ready availability of taccavi credit has helped to bring about large credit sales and high consumption levels of fertiliser. Another instance is West Godavari where co-operative credit, in cash though not in kind, is fairly liberally provided. In general, credit sales as well as total sales have been found to be adversely affected in those areas in which fertiliser credit is hard to obtain either from the co-operatives or Government. The procedural difficulties, delays and uncertainties in getting co-operative credit in some areas e.g., Aligarh, Burdwan, and Sri Ganganagar, have led to increased dependence on alternatives to co-operative credit such as Government taccavi. It is obvious that with the increase in supplies of fertilisers mainly intended for high-yielding varieties and other types of intensive crops, the need for credit facilities at the level of the farmer will be much more pronounced than at present, and that to the extent the need is not met one way or another, the consumption of fertiliser, and along with it the production of food crops, will receive a set back.



## CHAPTER XII

# FERTILISER CREDIT NEEDS OF THE FARMER

### Credit and Consumption

12.1 While credit is important, the impact of credit on sales cannot, obviously, be inferred merely from the ratio which credit sales bear to total sales of fertilisers. Indeed, in stated circumstances, a low proportion of credit sales may go with high fertiliser consumption and a high proportion with low consumption. A more detailed study of local conditions—especially of the supply, distribution and credit facilities as they operate at the farmer's end—is necessary in order to appreciate each particular situation. To illustrate, in Mandya district, where co-operative credit arrangements were generally satisfactory and no less than 50 to 60 per cent of the co-operative credit for agricultural operations was given in kind, the ratio of fertiliser distributed to estimated requirements for the district was 115 per cent for 1965-66 and 86 per cent in 1966-67 (upto January 1967) for nitrogenous fertilisers. For phosphatic and other fertilisers the proportions were low on account of shortage of supplies. They were 34 per cent in 1965-66 and 27 per cent in 1966-67. In Ludhiana, where taccavi was available with relative ease in addition to co-operative credit, the consumption level reached in 1965-66, as a proportion of estimated needs, for the district was 90 per cent for nitrogenous fertilisers, 54 per cent for phosphatic fertilisers and 76 per cent for potassic fertilisers. During 1966-67 the proportions were lower, being 61 per cent for nitrogenous and 25 to 35 per cent for other fertilisers. In quantitative terms, the actual consumption in Ludhiana in 1966-67 was expected to be substantially higher than in 1965-66. Yet, it was only marginally so. The principal reason for this as noted earlier, was the stoppage of taccavi credit with nothing to substitute during Kharif 1966. In West Godavari, on the other hand, the availability of liberal short-term credit through the co-operatives, in cash though not in kind, was one of the contributory factors for the relatively high level of consumption of fertilisers in relation to the target. In Aligarh too the availability of taccavi had significant effect. The nitrogenous fertiliser distributed worked out to 82 per cent of the requirements in 1965-66 and 50 per cent in 1966-67. In other districts, where credit arrangements were not so satisfactory, the proportion of consumption to

estimated requirements was very much less. In Thanjavur, the overall fertiliser consumption of 74,000 tonnes of ammonium sulphate in 1966-67 worked out to only 50 per cent of estimated requirements of N. Though this was partly due to the fact that the estimate was somewhat on the high side, an important reason, as already discussed, was the lack of effective co-ordination between supplies and credit and the delays in disbursement of both. For  $P_2O_5$  the consumption in Thanjavur for 1965-66 was 18.5 per cent. This was to no small extent due to the fact that supplies were inadequate. When however, the supply position somewhat improved, the proportion increased to 40 per cent in 1966-67. In terms of N, the fertiliser sold bore to estimated requirements the proportion of 49 per cent in Burdwan, 37 per cent in Raipur and 20 per cent in Kolaba district in 1965-66. In 1966-67 (upto December 1967) it was less than 30 per cent in all the three districts. In all these districts the channels of co-operative credit were clogged in varying degrees on account of overdues; and taccavi supplemented to some extent the loans available from co-operative societies.

12.2 The relationship between credit and consumption is more evident from a study of the pattern of application of fertilisers per acre in different districts. In the districts where the credit arrangements to the farmers are relatively satisfactory, the average application per acre in relation to the recommended dose is better than in other cases. For instance, in Mandya district, the level of application per acre reached 100 per cent of the recommended dose for N under the I.A.D. Programme. In West Godavari, Ludhiana and Thanjavur districts it reached 60 to 75 per cent of the recommended dose per acre for N under the I.A.D.P. Correspondingly higher levels of application per acre were registered in those districts in relation to the recommended dose for H.V.P. In certain other districts i.e., Aligarh, Burdwan and Raipur, both in respect of I.A.D.P. and H.V.P. areas, the actual application per acre was about 50 per cent of the respective recommended doses.

12.3 The preferential treatment, for purposes of supply of credit and other inputs which was accorded to the H.V.P. farmers (including defaulting members of co-operative societies), was undoubtedly a contributory factor for the higher level of application of fertiliser in these districts. As compared with the average application per acre in the I.A.D.P. areas of certain districts, the fertiliser used in the HVP areas is more than twice in Thanjavur, nearly three times in West Godavari, three-and-half times in Ludhiana and more than six times in Raipur. Special credit arrangements made for H.V.P. farmers had a significant effect even in districts like Kolaba and Muzaffarpur where the normal consumption levels are very low.

12.4 With the distribution and credit processes operating effectively and in co-ordination, the rate of increase in application of fertilisers in the H.V.P. areas is likely to increase rapidly and steadily. The increase is likely to be both horizontal, in the sense of progressively including a large number of big, medium and small farmers, and vertical in the sense of the average application per acre being more and more intensive in its approximation to the recommended dosage. Though, in all the districts studied, the official agencies are optimistic that the actual application might go up to 100 per cent of the prescribed doses by 1970-71 our own assessment is that this may happen only in West Godavari and Thanjavur and perhaps Ludhiana. In other districts, however, it might vary, on an average, from 60 per cent in Sambalpur to 75 per cent to 80 per cent in Burdwan. Better results, however, are not unattainable provided better supporting arrangements are provided. In this process, credit will have to play a major role in sustaining high levels of utilisation where they have already been attained as well as in promoting consumption in areas where it is low at present.

#### Assessment of Credit Needs

12.5 Our assessment of future credit needs, in the specific context of fertilisers, is based on the estimated pace of agricultural development which we assume to be faster than at present generally in all areas, but specially accelerated in those covered by H.V.P. and other programmes of intensive agricultural operations. In either case we assume that the very high degree of promotional effort needed will in fact be forthcoming on the part of Government departments, co-operatives and private agencies. Such effort, so far as the country as a whole is concerned will be especially needed in those areas in which the present level of consumption of fertiliser in relation to the minimum level to be reached by 1970-71 is appreciably low. These include States such as Bihar, Haryana, Madhya Pradesh, Maharashtra, Orissa and Rajasthan (see paras 2.35 and 2.36). Within each State, again, there are districts where more effort will be called for than in others. Among the districts studied, those that fall in this category include Raipur, Kolaba and Sambalpur. The same principle, applied to individual cases, will involve more vigorous extension work and credit service in the case of those farmers whose consumption levels are relatively low in relation to the recommendations for H.V.P. (or I.A.D.P.) and who, at the same time, represent greater credit risk than the more substantial farmers. In all these cases the credit effort and other supporting measures needed may be said to be broadly proportionate to the gap which exists.

between the present level of consumption of fertiliser and the level to be reached in 1970-71.

12.6 Though in a different context, the effort has to be equally great—and the dimension of credit much greater—in the intensive areas. Here the reason is, not that consumption of fertiliser is lagging behind, but that it is forging very rapidly ahead. Instances can be cited of areas where H.V.P. is operating or multiple cropping has been anticipated or new facilities of irrigation have been created, in all of which the requirements of credit have far outstripped its availability. With reference to such areas we have already noticed elsewhere the trend towards a larger proportion of current farm expenditure being devoted to fertiliser inputs, such expenditure being met significantly from borrowings. It has to be remembered that, with the extension of the H.V. Programme as scheduled—of which, in our view, there is a very reasonable prospect—the consumption of fertilisers will rise not only for the larger farmers but for an increasingly greater number of the medium and small farmers as well. And, for all these, the actual consumption per acre will be several times what it is now. There will be many other items—such as seed, machinery and labour—which will make a demand on the farmer's own resources. As in other types of viable and expanding business, there will be need to borrow a substantial part of the working capital. Insofar as the average farmer of H.V.P. areas is concerned, and with specific reference to fertiliser, we assume purely for the purpose of making a broad estimate of credit needs that these equal the value of fertiliser supplied.

12.7 On the other hand, in the case of I.A.D.P. and I.A.A.P. areas, the position is somewhat different in two respects. First, the programmes do not involve as high levels of application as the H.V.P. Secondly, in many areas the actual application has already reached 50 per cent or more of the recommended dose for I.A.D.P./ I.A.A.P., as these programmes have already been in operation for 5 to 6 years and have covered a major part of the areas under crops in the selected districts. The I.A.D.P. area itself will become reduced with the extension of H.V.P. in several districts, (e.g. Thanjavur). In such of the other areas as have assured irrigation facilities, further increases in application of fertiliser may be expected to take place on the basis of the progress already made, provided the adequacy of supplies is ensured (e.g. West Godavari). In areas like Raipur, which are subject to crop failures, credit support, perhaps to the same extent as in H.V.P. areas, may become necessary. However, taking the country as a whole, we estimate that 50 per cent of the fertiliser supplies intended for I.A.D.P. and I.A.A.P. (exclusive of H.V.P. coverage in these areas) might be needed

TABLE 12.1

## Anticipated fertiliser credit needs in 1970/71

(Rs. in million)

State	Value of probable sales of fertilisers by 1970-71	On the assumption the lower the present consumption of fertilisers in relation to the 1970-71 level, the higher will be the proportion of credit needs		On the basis of 100 per cent credit needs of H.V.P. supplies and 50 per cent credit sales of I.A.D.P. and I.A.A.P. supplies		The percentage of credit sales in 1970-71 assumed for purpose of this Report	Volume of credit needs
		Per cent	Amount	Per cent	Amount		
		1	2	3	4		
1. Andhra Pradesh	883	55	486	50	441	55	486
2. Assam	70	85	59	68	48	85	59
3. Bihar	634	80	507	65	412	80	507
4. Gujarat	468	40	187	40	187	40	187
5. Haryana	202	80	161	95	192	95	192
6. Jammu & Kashmir	27	20	6	75	20	75	20
7. Kerala	319	70	223	50	160	70	223
8. Madhya Pradesh	218	85	186	80	175	85	186
9. Madras	529	45	238	60	318	60	318
10. Maharashtra	1,216	80	972	60	729	80	972
11. Mysore	475	70	333	40	190	70	333
12. Orissa	260	80	208	80	208	80	208
13. Punjab	520	65	338	85	442	85	442
14. Rajasthan	225	85	191	70	157	85	191
15. Uttar Pradesh	867	70	607	85	737	85	737
16. West Bengal	226	50	113	70	158	70	158
	7,139	67.5	4,815	66.8	4,574	73	5,219

on credit. It may be assumed, for the purpose of these broad estimates, that instances of H.V.P. areas with credit requirements of less than 100 per cent of the supplies on the one hand, and those of I.A.D.P. and I.A.A.P. areas with credit requirements of more than 50 per cent of the supplies, on the other, would cancel one another out and, therefore, not affect, in the aggregate, the averages mentioned. A point to be added concerns cash crops. The areas in which such crops are preponderant are also predominantly those of cash sales of fertilisers (e.g. Gujarat, Mysore, parts of Andhra Pradesh etc). Moreover, within the boundaries of the districts studied (e.g. West Godavari and Mandya) cash sales of fertiliser are significantly larger in extent than credit sales in exactly those tracts in which cash crops prevail over other crops. In making the present broad assessment of credit needs, therefore, we have assumed that the credit requirements in respect of fertiliser for cash crops are on the whole negligible. Table 12.1 is based on the foregoing assumptions. It gives estimates for the sixteen states. It will be seen that on the estimates thus made the proportion of credit sales to total sales of fertilisers in 1970-71 works out to about 67 per cent (or two-thirds) whether generally for all areas (cols. 3 and 5) or specifically for areas in which H.V.P. and other programmes are operative.

12.8 The main purpose of this exercise is not so much to furnish a credit estimate which will provide a basis for meticulous credit planning, as broadly to throw up the magnitude of farmers' credit needs for fertilisers by 1970-71, and to examine whether the existing institutional arrangements would be adequate to provide the needed credit, and, if not what additional arrangements would be called for to fill the gaps in each State. In the light of this, we consider that the fertiliser credit needs for each State can be broadly assumed to correspond to the higher of the two proportions worked out in the table and indicated in the last column. On this basis, the proportion of credit sales to total sales for the 16 States would be 73 per cent, while the volume of credit needs would be Rs. 5,219 million in 1970-71. For the three years, 1967-68 to 1969-70, the credit needs might be taken to increase from 65 per cent to 70 per cent of total sales in view of the progress in the acreage proposed to be brought under the H.V.P. and other intensive programmes. The year-wise fertiliser credit needs would be as in Table 12.2. It will be seen that the fertiliser credit needs at the farmer's level would be of the order of Rs. 2,500 million in 1967-68, and increase to more than twice that level in 1970-71. While these figures are for the 16 States mentioned in the table, they may be taken to be broadly indicative of all-India requirements.

TABLE 12.2

## Credit needs for intervening years

(Rs. in million)

Year	Value of total sales of fertilisers	Estimated proportion of credit sales(%)	Estimated quantum of credit needs
1	2	3	4
1967-68	3,875	65	2,519
1968-69	4,973	68	3,381
1969-70	5,933	70	4,153
1970-71	7,139	73	<del>5,211</del> 5,219

## Extent of Co-operative Credit

12.9 If fertiliser credit of this magnitude is to be provided, it is clear that even greater responsibilities than at present will devolve on the co-operative structure, which has played an important role during the past 15 years. We have noted that a Working Group appointed sometime ago, by the Central Government (in connection with the earlier IV Plan projections) indicated that short-term co-operative credit might be assumed to be of the order of Rs. 5,800 million in 1970-71 (including for the composite Punjab), as compared with Rs. 3,090 million (provisional) in 1965-66.\* It was obviously assumed that the requisite steps would be taken to effect improvements in the financial position, resources and operational efficiency of co-operatives. Even so, co-operatives would meet only half the total credit needs of agriculture which the Working Group placed at Rs. 11,000 million by 1970-71. Of this total, about one-third or about Rs. 3,650 million would be accounted for by fertiliser credit. If the same ratio could be assumed for co-operatives it might be assumed that out of an estimated short-term co-operative credit of Rs. 5,800 million in 1970-71, about Rs. 1,930 million would be for fertiliser. It may, however, be noted that the estimate of Rs. 1,930 million is relatable to the Sivaraman Committee's figure of Rs. 5,220 million as total value of fertiliser to be distributed in the country in 1970-71. As, however, we have adopted a value of Rs. 7,220 million for the same quantity of fertilisers, for purposes of this Report, the

\*These figures pertain only to loans advanced by agricultural credit societies but not to production credit, provided in a few cases, by cooperative marketing and processing societies.

quantum of fertiliser credit for the farmers available from co-operatives in 1970-71 would be about Rs. 2,700 million (and not Rs. 1,930 million) on the various assumptions made.

12.10 One of these assumptions is that the scale of co-operative credit for inputs under the crop loan system will be fixed, from time to time in relation to the price of the fertiliser and other inputs recommended per acre. Another is that credit for inputs, which is the 'b' component under the crop loan system will be available to the extent needed subject to the availability of resources to the co-operatives. Further, it is also assumed that the resources of the co-operatives themselves will increase at a faster rate in the next few years than originally assumed at the time the earlier IV Plan estimates had been made, and that the co-operatives, under favourable conditions, would be in a position to undertake a larger programme of loaning than was envisaged earlier (ie. Rs. 5,800 million). This appears to be justified on the basis of data on cooperative credit for the period from 1962-63 to 1965-66 which have become available since the earlier estimates were prepared.

12.11 The question arises whether it can be assumed that 33 per cent or even more of the co-operative credit for agricultural operations, for the country as a whole, would be available in 1970-71 in the shape of fertilisers. The data available are not conclusive. But they indicate that, in 1965-66, the proportion accounted for by fertilisers in the total disbursement of co-operative credit varied from 6 per cent in Rajasthan to about 20 per cent in Punjab, Mysore and Andhra Pradesh. In Orissa, Bihar, Uttar Pradesh, Maharashtra and Kerala, the corresponding proportion would seem to have varied from 11 to 15 per cent. For the country as a whole, it might be put at not more than 15 per cent. In accordance with the scales of finance in H.V.P. areas prescribed by the co-operatives, the fertiliser component works out to between 33 per cent and 50 per cent. In Kerala, it constitutes about 75 per cent of the scale of finance. With the effective implementation of this Programme and the progressive adoption of the crop loan system which requires that co-operative loans should be increasingly in kind, it is possible that a larger proportion of co-operative credit will hereafter be advanced in the shape of fertilisers. This again will vary from State to State, if only for the reason that the progress in implementing the system of extending loans in kind itself varies from State to State. In States such as Bihar, Rajasthan, West Bengal and Orissa, the proportion of fertiliser is unlikely to exceed 20 to 30 per cent of the co-operative loan. In Mysore, Maharashtra and Madras, it may be about 40 per cent, in the Punjab about 50 per cent, and in others between 30 and 40 per cent. Thus worked out for the country as a whole, the fertiliser



TABLE 12.3

## Quantum of credit needs to be met by sources other than cooperatives

(Rs. in million)

State	Anticipated needs of fertiliser credit for 1970-71		Target for short-term coop. credit as a whole (including fertilisers) 1970-71	Cooperative credit likely to be available for fertilisers			Balance of the estimated value of fertiliser credit needs in 70-71, not met by sources other than co-ops.
	Amount	Percentage to total sales		Percentage to total short-term coop. credit	Amount		
					(3) × (4)	(5) × 138.3	
	(1)	(2)	(3)	(4)	(5)	(6)**	(7)
<b>North zone</b>							
Haryana	192	95%	265	30	80	110	82
Jammu & Kashmir	21	75%	30	30	9	12	9
Punjab	442	85%	265	50	132	183	259
Rajasthan	191	85%	240	20	48	66	125
Uttar Pradesh	737	85%	890	30	267	369	368
	<b>1,583</b>	<b>86%</b>	<b>1,690</b>			<b>740</b>	<b>843</b>
<b>West zone</b>							
Gujarat	187	40%	580	30	174	241	—
Madhya Pradesh	185	85%	500	20	100	138	47
Maharashtra	972	80%	870	40	348	481	491
	<b>1,344</b>	<b>71%</b>	<b>1,950</b>			<b>860</b>	<b>538</b>

(Continued)

	1	2	3	4	5	6	7
<b>South zone</b>							
Andhra Pradesh	486	55%	450	35	158	218	268
Kerala	223	70%	230	40	92	127	96
Madras	318	60%	580	35	203	281	37
Mysore	333	70%	410	40	164	227	106
	<b>1,360</b>	<b>62%</b>	<b>1,670</b>			<b>853</b>	<b>507</b>
<b>East zone</b>							
Assam	59	85%	30	30	9	12	47
Bihar	507	80%	160	30	48	66	441
Orissa	208	80%	180	30	54	75	133
West Bengal	158	70%	160	30	48	66	92
	<b>932</b>	<b>78%</b>	<b>530</b>			<b>219</b>	<b>713</b>
<b>Grand Total</b>	<b>5,279</b>	<b>73%*</b>	<b>5,840@</b>			<b>2,672</b>	<b>2,601</b>
	<b>1</b>					<b>(37%)*</b>	<b>(36%)*</b>

*Note :* Figures rounded off to the nearest million.

*Source :* Reserve Bank of India and State Governments.

\*Percentage in relation to the estimated value of sales in 1970-71.

\*\*The fertiliser credit derived by applying the proportion in the previous column has been increased by 38.3 per cent representing the increase in the total value of fertilisers from Rs. 5,220 million to Rs. 7,220 million.

@ The figure is higher than Rs. 5,800 million because the revised targets fixed for the new Punjab and Haryana work out to more than the target fixed earlier for the composite Punjab.

credit provided by the co-operatives constitutes roughly 37 per cent of the total co-operative credit likely to be extended in 1970-71.

12.12 If we assume that co-operative credit of the order mentioned above (after taking into account the increase in prices) will be available for fertilisers in 1970-71, the volume of credit requirements to be met by sources other than co-operatives would be as indicated in Table 12.3.

12.13 It will be seen from the table that we have assumed varying proportions of co-operative credit as being available for fertilisers in 1970-71 for each State depending on the prospects of implementing the system of advancing loans in kind. Some States might provide a larger volume of co-operative credit than they had originally indicated (in terms of the draft of the earlier IV Plan); and in some others the proportion of short-term credit provided in the shape of fertilisers might be more than assumed by us. For instance, we understand that in respect of both Maharashtra and Gujarat, the original targets fixed will be appreciably raised in view of the level of advances already reached by them in 1966-67. Similarly, there will also be States which might find it difficult to achieve the level indicated by us for fertiliser credit. Making allowance for these variations, we generally assume that, if the programmes for strengthening the co-operative credit structure and improving their operations proceed according to expectations, the contribution of the co-operatives towards fertiliser credit would be in the range of Rs. 2,500 to Rs. 2,800 million. The gap in fertiliser credit which remains to be filled on this reckoning, will be very substantial in Andhra Pradesh, Bihar, Maharashtra, Madras, Uttar Pradesh, and Punjab, the total estimated gap for the 16 States being Rs. 2,600 million. It is evident that in some States, e.g., Gujarat, there will be no gap at all, if fertiliser credit of the order indicated is available from the co-operatives. In a few other States, notably, Madras and Madhya Pradesh, the gap would be low if the targets indicated are reached by 1970-71.

### District-wise Requirements

12.14 A similar exercise made for some of the districts studied brings out their fertiliser credit requirements for 1970-71 on the assumptions made. One estimate is based on the present position of credit sales in the districts surveyed, after making due allowance for a reasonable increase in the proportion of credit sales in those districts in which such sales are now unduly low because of inadequacy of supply or credit or both. For it is obvious that an increasing proportion of medium and small farmers will use fertilisers when it is available in larger quantities and can be had on credit. The

second estimate is arrived at on the basis already referred to in regard to areas other than H.V.P., I.A.D.P. and I.A.A.P., viz., that promotional effort will in fact be forthcoming in the next few years to bridge the gap between the present levels of consumption of fertiliser and those that ought to obtain if the full dosage recommended is in fact applied by the farmer. The third set of estimates is related to the assumptions already referred to in the context of the areas of relatively intensive development, viz., that 100 per cent of the supplies intended for H.V.P. and 50 per cent of those for I.A.D.P. and I.A.A.P. will be on credit. ~~The estimates thus arrived at are set out in the Statement XIV.~~ On a comparison of the proportions arrived at, it is noticed that credit sales of the order of 90 per cent of total sales are indicated for Raipur, Kolaba, and Sambalpur. These also are the districts where the present consumption level is less than 10 per cent of the target for 1970-71.

12.15 Taking, therefore, the higher of the two estimates last mentioned (as we have done earlier with regard to the State-wise estimates), the fertiliser credit needs for Thanjavur will be Rs. 97 million, as against about Rs. 10 million advanced in 1966-67. At the lower level, the requirements will be Rs. 79 million. The higher level of fertiliser credit needs indicated for each district on the above basis, the estimate of co-operative credit for agricultural operations generally and the amount that is likely to be available for fertiliser on certain favourable assumptions, are set out in Table 12.4 for the relevant districts with reference to the year 1970-71.

12.16 It will be seen that in West Godavari the fertiliser credit requirements will be Rs. 80 million as against co-operative advances of Rs. 5 million intended for fertilisers in 1966-67. In Aligarh, they would be about Rs. 54 million as compared with about Rs. 12.5 million advanced for fertilisers by the co-operatives and government during 1966-67. They will be 10 to 15 times the level of the co-operative fertiliser credit provided in 1966-67 in Muzaffarpur. In Ludhiana, they will work out to about Rs. 39 million as against Rs. 15.4 million now. In Kolaba they would be about Rs. 34 million or ten times the credit provided by both the co-operative and Government agencies in 1966-67. For Raipur they work out to Rs. 85 million which is more than 10 times the present level.

12.17 For the districts indicated in the table, many of which are package districts which have now taken up H.V.P. on a large scale, the balance of credit needs to be met (by sources other than co-operatives) will vary from about Rs. 65 million in Sambalpur to almost nil in Mandya. It will be around Rs. 30 million in Thanjavur and Rs. 57 million in West Godavari. Here again, the magnitude of a gap of this kind in each district is dependent

TABLE 12.4

## Fertiliser credit needs for selected districts in 1970/71

(Rs. in million)

1	2	3		4	5	6	7
District	Value of anticipated supplies by 1970-71	Credit sales assumed for 1970-71		Amount of co-operative credit estimated to be available on the assumption that borrowings from the R. B. I. will at 4 times the owned funds** and loaning will be at the same ratio of borrowings to lendings as on 31-3-1967	Amount of co-operative credit estimated to be available for fertilisers alone*	Balance of credit needs to be met, if possible, from sources other than co-operatives	
		Percentage	Amount				
1. West Godavari	100	80	80	58	23 (40%)	57	
2. Muzaffarpur	21	80	17	10	3 (30%)	14	
3. Palghat	39	90	35	60	27 (40%)	8	
4. Raipur	95	90	85	108	54 (50%)	31	

(Continued)

1	2	3	4	5	6	7
5. Thanjavur	131	74	97	137	69 (50%)	28
6. Kolaba	38	90	34	37	15 (40%)	19
7. Mandya	31	80	25	63	31 (50%)	—
8. Sambalpur	86	90	78	31	13 (40%)	65
9. Ludhiana	49	80	39	44	22 (50%)	17
10. Sri Ganganagar	36	70	26	N.A.	N.A.	N.A.
11. Aligarh	68	80	54	26	10 (40%)	44
12. Burdwan	99	85	84	85	34 (40%)	50
	793	82.4	654	667	301	333

N.A. : Not available

*Note:* Figures rounded off to the nearest million.

\*Figures within brackets show proportion of co-operative credit estimated to be available for fertilisers.

\*\*The share capital of the central banks is assumed to increase at the same annual rate as was the case between 1964-65 and 1965-66 and between 1965-66 and 1966-67 (31.3.1967), whichever is higher, upto 1970. Reserves too are also assumed to increase in a similar manner.

on two indeterminable factors: (a) the improvements in the co-operative credit structure, financial and operational, and (b) the proportion of fertiliser credit from co-operatives, in cash or in kind, to total co-operative credit.

12.18 It is also possible that varying degrees of failure to implement the agricultural programmes, for one reason or another, might reduce the demand for credit in each of the districts. However, assuming that efforts will proceed according to expectations, and that supplies will reach the depots in time, it is clear that in many of the districts where H.V.P. is in operation on a large scale, there will be sizeable gaps in the next few years, between fertiliser credit needs and the ability of the co-operative credit structure to meet the requirements. In particular, it would appear necessary in districts such as Thanjavur, Aligarh, Burdwan, Raipur and West Godavari, where the dimension of the gap to be met is much larger than in others, to consider special steps for strengthening cooperative credit and, where necessary for supplementing it. The type of solution that might be considered would vary from district to district insofar as they are related to the local conditions in which fertiliser credit operates in each particular area.

### **Special Characteristics of Fertiliser Credit Needs**

#### **(i) Credit Support to Promote Speedy Disposal**

12.19 There are certain special features of fertiliser credit to which attention may be drawn as they have an important bearing on the proposals we formulate in the next chapter. Just as a sound system of distribution credit should promote speedy movement of fertilisers from the factory to the distribution centre, a satisfactory system of fertiliser credit should facilitate the rapid off-take of available supplies by the farmers as and when they are received at the centres of retail distribution. The relatively large bulk that distinguishes fertiliser from other farm inputs, the problems of storage which consequently arise if it is not sold well in advance of the season, the degree of deterioration to which it is subject (particularly in kutchha godowns) if stored for any length of time and, above all, the cost of raising the distribution finance involved—all underline the need for disposal as quickly as possible of the stocks received at the retail centre. The same considerations also point to the desirability of treating fertiliser credit differently from most other types of agricultural credit. It is indeed argued that, if credit is to support and promote fertiliser sales, the agency entrusted with the distribution of fertilisers to the farmers should also be the agency which extends credit either on its own or on behalf of a co-operative or commercial bank. In addition, it should so extend credit facilities that, as a rule, the loan intended for fertilisers is disbursed in the shape of fertiliser and not in cash.

## **(ii) Advance Credit Facilities**

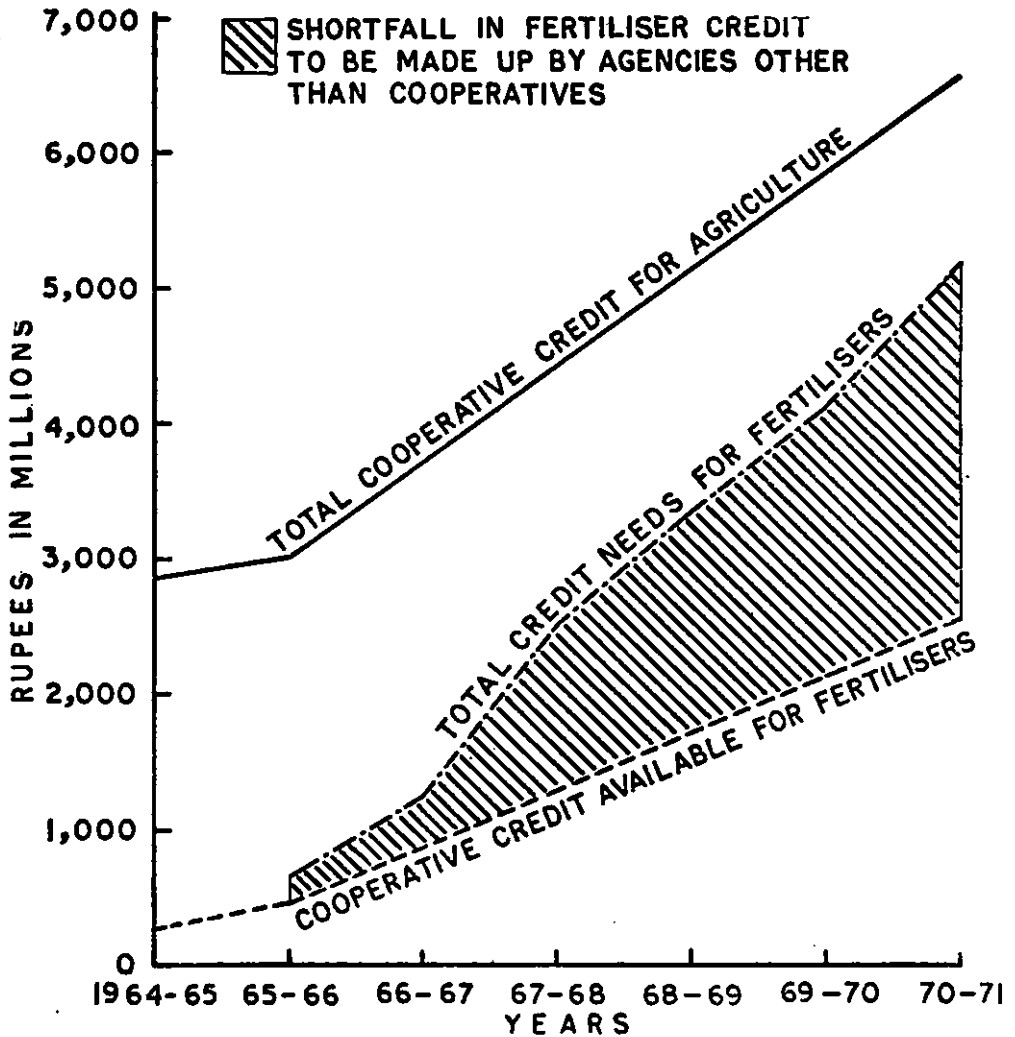
12.20 It has been urged before us that in order to make a success of the H.V.P. and other agricultural programmes, it is necessary that fertiliser supplies are despatched to the retail centres well before the season. A meaningful system of fertiliser credit should similarly promote disposal of stocks received at the centre well in advance of the season. This would obviously call for an arrangement under which credit facilities for fertiliser are available to the farmers well before the season, i.e. at the same time as the fertiliser supply is available.

## **(iii) Credit to be Linked to Production Potential**

12.21 Another distinguishing feature of fertiliser credit stems from the consideration that the use of fertiliser usually generates its own repaying capacity. In other words, given certain conditions such as assured irrigation facilities or adequate rainfall, the increase in production resulting from application of fertiliser is such that, out of it the farmer should ordinarily be in a position to repay the loan raised for fertilisers. It is presumably in recognition of this principle that, in the crop loan system formulated by the Reserve Bank, it has been indicated that the 'b' component of the loan, i.e. for fertiliser and other inputs, need not be within the repaying capacity of the cultivator computed at about half the value of his gross produce under traditional levels of cultivation. It has, therefore, been argued before us that, if credit facilities are to play a promotional role, the denial of fertiliser credit to individual members of co-operative credit societies on the ground that they are defaulters, without going into the merits including the prospects of increased production—of each individual case, will gravely endanger the whole programme of intensive development of agriculture. The need has been stressed for adopting an individualised approach in determining the fertiliser credit eligibility of farmers. In the same way, the denial of credit facilities to new members and non-defaulting members of a large number of credit societies, because of their heavy overdues to central banks, has been considered injurious to the success of the country-wide programmes which have been designed to promote fertiliser use as a means of the development of agricultural production.



## Total Fertiliser Credit Needs and Probable Availability from Cooperatives



- Note :**
1. 'Total Credit Needs for Fertilisers' have been worked out on the basis of targets of fertiliser consumption.
  2. The growth of 'Total Cooperative Credit for Agriculture' as well as of 'Cooperative Credit Available for Fertilisers' has been assumed to be linear.

## CHAPTER XIII

# FERTILISER CREDIT FOR THE FARMER— PROPOSALS

### A : COOPERATIVE AGENCIES

#### Introductory

13.1 In the previous chapter, we have attempted a broad estimate of the fertiliser credit needs of the farmer in 1970-71. Of the requirements amounting to Rs. 5,200 million for the sixteen States, we have also indicated that, under favourable conditions, the co-operatives might be expected to provide a little more than 50 per cent.

13.2 For a long time now, co-operatives have been the principal institutional agency for the provision of agricultural credit to the cultivators. Government's policy has been directed in recent years towards strengthening the co-operative credit structure financially, organisationally and otherwise so as to enable it to meet an increasing proportion of the credit needs of the farmer. We ourselves share the view—which has been widely urged before us by the representatives of State Governments, and by a number of others—that, in the context of rural credit, co-operatives have, in the coming years, an even more important role to play than at present, and that all practicable steps should be taken to ensure that this role is as great and as effective as possible in different parts of the country. In other words, the starting point for considering future credit policies for agriculture, including fertiliser, should be complete agreement on the point that maximum use should be made of the existing structure and potential capacity of the co-operatives.

13.3 Our own studies in different districts have helped to remind us, once again, of the diverse problems that beset agricultural credit. The fact that in certain areas these studies have followed on the heels of major crop failures has served to bring into sharp focus the magnitude of the risks which the credit institutions financing agriculture are exposed to, and the extent to which the credit system can be paralysed by wide-spread drought. Significant institutional safeguards can be devised as in the Agricultural

Credit Stabilization Fund of the co-operatives. But in the context of any large calamity such safeguards will necessarily take a relatively minor place. Any substantial change in the situation can come only with much larger areas coming under irrigation. In other words there must first be assurance of water, which is the basic ingredient. And, along with water, other inputs such as high-yielding seed and fertiliser must be made available both more extensively and in adequate quantities. It is to a dynamic programme of this kind that the system of institutional credit would have to be geared. Two important objectives would then be (a) to link an increasingly large proportion of credit to productive inputs such as fertiliser, and (b) to ensure the overall adequacy of agricultural credit for production programmes.

13.4 The proposals we make in this chapter, therefore, are intended, first, to bring about the maximum development and use of co-operative credit; second, also to ensure that such credit is increasingly production-oriented; and third, in the specific context with which we are concerned, to ensure in particular that the credit facilitates higher fertiliser consumption. In the next chapter are set out certain proposals in respect of agencies other than co-operatives.

#### **Improvement of the Financial Position of Co-operatives**

13.5 It is clear from the brief account given in Chapter XI of the performance of co-operatives in different States that, left to themselves—that is to say without radical steps to strengthen and reorganise them—co-operatives will be unable to provide anywhere near adequate fertiliser credit by 1970-71. Immediate measures have to be taken to improve (a) the financial position of the co-operatives, (b) their organisational arrangements; and (c) the quality of their operations, i.e., loaning policies, supervision, recovery arrangements, etc. If we envisage that the total short-term loan operations of the co-operatives at the primary level would be, roughly, at least three times the fertiliser credit needs they are assumed to provide in 1970-71 their financial base should be adequate to sustain loans of the order of Rs. 6,500 million to Rs. 7,000 million, as against around Rs. 3,000 million in 1965-66. This would call for an appreciable improvement of the capital base of the co-operative structure in some States, and a very large increase in the cooperatively less advanced States.

13.6 The suggested strengthening of the capital base has to be effected in varying degrees at all the three levels, i.e. apex bank, district bank and primary credit society. The traditional way in which the share capital of a co-operative central bank is built up is by requiring the primary credit societies affiliated to it to subscribe to its share capital at a certain ratio of the borrow-

ings of the societies. Similarly, the central banks are asked to subscribe to the share capital of the apex co-operative banks. Since, however, there was need for a very much broader capital base than the co-operatives could build up in this manner, the device of State participation in the share capital of the cooperative credit institutions was put into operation by the Reserve Bank, following the recommendations of the All-India Rural Credit Survey committee (1954). Since then, upto the end of March 1967, the Reserve Bank advanced from its Long-term Operations Fund, loans aggregating Rs. 405.50 million to the State Governments to enable them to participate in the share capital of State co-operative banks (Rs. 77.1 million), central co-operative banks (Rs. 202.6 million) and primary agricultural credit societies (Rs. 128.8 million).

13.7 Among other things, the object of share capital participation by the State Governments in the co-operative credit institutions is to enhance their borrowing power to the requisite extent, as the latter is fixed as a multiple of share capital and reserves. For the apex bank, the State's share capital contribution is normally related to the larger borrowings necessary for providing adequate finance to central co-operative banks and other affiliated agencies. At the central bank level, on the other hand, in determining the magnitude of share capital contribution in individual cases, account is taken of the proposed loan programmes of the bank for the ensuing year and the extent to which the particular central bank might need to borrow from the Reserve Bank and the apex bank in order to be in a position to implement the programmes. In respect of areas where H.V.P. has been introduced, the Reserve Bank has generally adopted a liberal scale of loans to State Governments for share capital contribution on their part. However, as we have indicated in the previous chapter, in some of the districts where a substantial area is proposed to be covered under H.V.P., the needs of agricultural credit, and more particularly fertiliser credit, will increase several times in the short span of three or four years. It is bound to happen in some of these cases that, if the financial base of the co-operative central banks increases at the same rate as during the past two or three years, the quantum of credit they can provide will be far less than the total requirements. This is on the assumption that the Reserve Bank will continue to give full support according to present norms. We believe that, in selected instances and on the basis of an overall review of the performance of apex and central banks, these norms can reasonably be enhanced. Such a review, in order to decide whether State participation on an even larger scale than at present would be possible, is particularly necessary with reference to the districts in which intensive programmes such as H.V.P. are in progress. We recommend that such a review might be made now by the Reserve Bank and, on its basis

loans to State Governments for share capital participation stepped up wherever that is justified in the light of efficiency of credit operations, progress of agricultural programmes, and projection of demand for credit. A review of this kind might thereafter be repeated at appropriate intervals.

### **Share Capital Contribution for the Primary Credit Societies**

13.8 In respect of primary credit societies the main features of recent policy are that, in order to be eligible for State participation, a society should be either already, or potentially, a financially viable unit in accordance with agreed criteria. The quantum of share capital contribution is normally limited to Rs. 5,000/- but in appropriate cases can be raised upto Rs. 10,000/-. At one time, the Reserve Bank insisted that the members' share capital should amount to at least Rs. 1,500/-, in order that a primary credit society could be eligible for Government contribution. But this limitation has now been removed, insofar as share capital contribution is sought to be made upto Rs. 5,000/- per society. Thereafter, any further contribution would be on a matching basis, the maximum limit being Rs. 10,000/- per society. While these measures of liberalisation are welcome, we would only emphasise here the crucial importance of a sufficiently strong capital base at the primary level in the context of the increasing responsibilities entrusted to the agricultural credit societies and recommend that the present norms for State contribution to their share capital be reviewed from time to time from this point of view.

13.9 We have earlier discussed the extent to which the inadequacy of co-operative credit in different States is attributable to the financial and organisational weakness of the primary credit structure in the particular State. The progress of reorganisation of primary agricultural credit societies into viable societies has been unsatisfactory in most States. This is so in spite of the efforts initiated by the Reserve Bank and the Central Government during the past few years, following the recommendations of the V.L. Mehta Committee in 1961 and later the Conference of State Ministers of Cooperation in 1964. The programme of reorganisation aims at reducing the total number of primary credit societies in the country from 200,000 to 128,000 viable (or potentially viable) units by 1970-71. Since it is stipulated by the Reserve Bank that the contribution towards share capital at the primary level should be confined to such societies, any expansion in loaning to the cultivators will be possible, for fertilisers as well as for other operations, only in these pockets which are served by viable or near-viable societies. As discussed earlier, if co-operative credit for fertilisers is to expand to the desired extent, the loaning of the co-operatives will have to

increase several times in the districts and States concerned. We recommend that the State Governments should give priority to the reorganisation of primary credit societies into viable and potentially viable societies, particularly in the programme areas, in order to ensure adequate credit support to the agricultural programmes.

### **Finances to the Co-operative Credit Structure**

13.10 We have had occasion to mention that a major part of the short-term finances for the co-operative credit structure to finance agricultural operations in many States comes from the Reserve Bank of India.

13.11 According to the present norms, which came into force following the recommendations of the Rural Credit Survey Committee (1954) as modified by the Committee on Co-operative Credit (V.L. Mehta Committee, 1961), a central co-operative bank classified as 'A' in audit is eligible for a short-term credit limit for agricultural operations and marketing of crops upto 4 times its owned funds. In addition, it is also eligible for a further credit limit upto twice the owned funds, subject to a matching involvement on its part out of its own resources. Similarly, a central bank classified under 'B' in audit is eligible normally for a credit limit of three times the owned funds for the same purpose and an additional credit limit upto the amount of its owned funds, subject to a matching involvement on the part of the bank. A 'C' class central co-operative bank can obtain credit against its own signature upto twice the owned funds, but upto four times against the State Government guarantee. In addition to these limits which are meant for seasonal agricultural operations, the co-operative banks are also eligible for credit limits for medium-term loans, handloom finance, etc. If these are added up, the position is that an 'A' class central bank operating on sound lines can obtain from the Reserve Bank of India credit limits upto eight times the owned funds for different purposes.

13.12 While recommending financial accommodation on the liberal scale just indicated, the Committee on Co-operative Credit recognised the danger that increased finance from the Reserve Bank unaccompanied by appropriate safeguards might reduce the incentive to build up sound banking practices such as proper scrutiny of loans, prompt recovery of dues and maximum mobilisation of deposits. Accordingly, the Committee recommended that, in respect of both normal and additional credit limits sanctioned by the Reserve Bank to the central co-operative banks, the borrowings outstanding to the Reserve Bank for any particular purpose should be adequately covered by loans outstanding from the societies which had not be-

come overdue and which, moreover, had been granted for the same purpose. Beginning in 1962-63, this condition—which is sometimes referred to as “non-overdue cover”—came to be gradually extended by the Reserve Bank, first to ‘A’ and ‘B’ class banks in the co-operatively advanced States and later to other States and other classes of banks.

13.13 In the evidence placed before us, many State Governments and co-operative credit institutions at the State and district level have pointed out that among the important reasons for the co-operatives not being in a position to extend adequate credit support to agricultural programmes in certain areas are: (a) the inadequacy of the credit limits sanctioned to the co-operative banks in certain instances and (b) the imposition of the condition of “non-overdue cover” as a result of which some banks are not able to avail themselves fully of credit limits. It has, therefore, been suggested that the Reserve Bank should sanction credit limits more liberally, and that the condition of non-overdue cover should be relaxed, at least to the extent that the loans are intended for inputs. We shall discuss these two aspects together, as both of them are related to the efficiency of operation of the credit institutions concerned. The inability of many central co-operative banks to maintain adequate non-overdue cover is attributable, in the first place, to the sudden increase in their overdues and, secondly, to the insufficient growth in their owned resources in order to provide the necessary cushion for the increasing overdues. The incidence of heavy overdues itself is traceable to four important reasons: (a) crop failures, wide-spread or localised, in certain areas during 1965-66 and 1966-67, (b) attempts to introduce seasonality in both loans and recoveries at the central bank and primary credit society levels under the crop loan system, (c) the relatively small extent to which it has been possible to implement the policy of advancing loans, wherever possible, in kind rather than in cash with the object, among other things of preventing misutilisation and (d) the relative ineffectiveness of the arrangements in several States for supervision over the proper utilisation, and recovery of loans.

13.14 There is no doubt that on account of these and other factors, some of them external to the co-operative credit structure, the co-operative credit institutions in each State have been handicapped in varying degrees in utilising to the full extent the credit facilities extended by the Reserve Bank. For the same reasons, these agencies also failed to extend adequate credit for inputs such as fertiliser. Following certain representations made by the banks, the Reserve Bank relaxed during 1965-66 and 1966-67, the application of the condition of non-overdue cover to (1) the ‘C’ class banks which had adopted the crop loan system, or were working in the special project

areas, or were serving in areas affected by drought and scarcity and which had availed themselves of loans from the Reserve Bank's National Agricultural Credit (Stabilization) Fund for conversion of short-term loans into medium-term loans, and (2) the 'A' and 'B' class banks that were affected by drought, provided they had applied for relaxation.

13.15 We have carefully considered the question of relaxation of the present norms applied by the Reserve Bank for sanctioning short-term credit limits to the co-operative banks for agricultural operations, as well as that of the condition of non-overdue cover imposed by the Reserve Bank. We observe that these norms have been evolved by the Bank after careful consideration of the various aspects of development of co-operative credit including the need for building up proper disciplines in regard to productive use and prompt recovery of credit. We are hopeful that through a process of appropriate policy adjustments, toning up of efficiency and procedural simplifications, the quality of operations of the co-operative credit institutions will considerably improve in the next few years, not only generally, but in particular in the special programme areas. When this happens, the ability of the central financing agencies to make use of the credit facilities offered by Reserve Bank, especially where the purpose is productive, should be very much larger than at present. We visualise that this might more or less be the case in certain districts such as Ludhiana, Thanjavur, West Godavari, Mandya, Kolaba, Burdwan and Raipur. The reason is that in these and similarly placed districts, the banks are generally sound and financially strong and, had it not been for the heavy overdues which for various reasons have accumulated, would have been in a position to make full use of the credit limits available from the Reserve Bank. Other things being satisfactory, the maximum extent to which co-operative credit for fertilisers alone can increase in these and similar areas has been indicated by us in the previous chapter; it can be as high as six to ten times the present level of co-operative fertiliser credit in some of them. We consider that to the extent that co-operative credit institutions put themselves in a position to absorb and productively use larger volume of credit facilities from the Reserve Bank of India, it would be in accordance with the sound financial principles observed by Reserve Bank to sanction larger credit limits. At the same time, where the existing conditions such as non-overdue cover, or the norms for fixing credit limits come in the way of central co-operative banks making larger use of credit for productive purposes, the possibilities of selective relaxation of these conditions in individual cases or categories of cases should, in our view, be kept in mind and reexamined with reference to old and well-proven principles as well as the new context of greatly intensified agricultural production. It may be noted, in this connection, that, adopting a similar



approach, the Reserve Bank waived the condition of non-overdue cover in respect of the special credit limits sanctioned for the High-Yielding Varieties Programme for 1966-67.

Our specific recommendation therefore is that the question be examined by the Reserve Bank with a view to considering if the condition of non-overdue cover cannot be relaxed, in appropriate circumstances and subject to the necessary safeguards, in HVP and other programme areas for facilitating the financing of the supply of fertiliser and other inputs. This may well imply, though we would not be dogmatic on this point, that a part of the credit limit from the Reserve Bank—and at different points all along the line—will be exclusively allocated for the supply of inputs on credit to the cultivator. Further, any arrangement of this nature should be such as helps to ensure that non-defaulting and new members of agricultural credit societies, as also those members who have defaulted as a result of factors beyond their control, are enabled to draw the required inputs on credit, even if the co-operative structure in the area as a whole is, for reasons beyond its control, unable to satisfy the condition of non-overdue cover.

13.16 No measures of the kind we have suggested above can be taken unless the central co-operative banks have enough resources of their own to absorb the temporary impact of large overdues or can get the necessary facilities of extension or conversion from the higher financing agencies. So far as stabilisation arrangements are concerned, the existing scheme itself contemplates the availability of these facilities at all stages from the primary society to the Reserve Bank. An important problem here is that of ensuring that the procedures for this purpose are such that the process of stabilisation is initiated early enough and completed well in time for the financing of the following season. But that apart, a great deal depends on the size of the resources of the co-operative central bank as also of the funds specifically earmarked for conversion of short-term loans into medium-term loans. We would suggest that, in areas where the co-operative banks are particularly susceptible to difficulties arising from drought or floods but do not command sizeable deposits of their own, special medium-term deposits might be provided to the banks by the State Government with a view to enabling them to absorb overdues. Further, this consideration may also be kept in view in determining the size of Government contribution to share capital which may be proposed for a central bank. Lastly, where extensions are granted by a central bank in conformity with an appropriate procedure laid down for the purpose, corresponding extension facilities should be forthcoming, with minimum delay and formality from the higher financing agencies.

13.17 We also recommend that in the special programme areas, on the Reserve Bank being satisfied that the utilisation of its credit facilities for inputs is satisfactory, the existing norms for sanctioning short-term credit limits to the 'A', 'B' and 'C' class central banks may be selectively relaxed, where appropriate, on the assurance that steps have been initiated and will shortly be taken by the central bank concerned for increasing its owned funds through State contribution to share capital. This, however, should be done to a very limited extent i.e. by not more than the amount of share capital resources—for an 'A' class bank, and proportionately for others. In taking a decision on this question of selective relaxation in any particular case, however, due consideration should be given to the progress of the intensive agricultural programme in the area and the need for supporting the programme to the maximum extent possible through co-operative credit.

### **Loaning Policies**

#### **(i) Eligibility of a Member for Credit and Facilities for Conversion and Extension**

13.18 Under the present loaning policies followed in different States, a defaulter of a co-operative is not eligible for a fresh loan from the primary credit society for his agricultural operations or inputs. However, in certain districts as indicated earlier, the State Governments decided, for the Kharif of 1966, to provide fertiliser credit in the form of taccavi to defaulters in H.V.P. and other intensive areas. Kolaba is one example and Raipur another, the defaulters in the latter district numbering as many as 113,000 on 30.6.1966. There were also other districts covered by the studies of the Committee, such as Aligarh, Sambalpur and Sri Ganganagar where the denial of taccavi to the large number of those who had defaulted to co-operative societies would have made considerable difference to the consumption of fertiliser and therefore to production.

13.19 Under the crop loan system, short-term loans are to be disbursed in instalments corresponding to the two major seasons, Kharif and Rabi, and failure to repay either of the loans during the year, disqualifies a member for fresh production credit for the ensuing season. To illustrate, a farmer who has drawn a loan in June or July (Kharif) would be required to repay the same after the Kharif harvest, say, in December. However, before the Kharif harvest is due he also raises a loan for Rabi operations, the repayment of which will be due in February or March next i.e. immediately after the Rabi harvest. If he has repaid both his Kharif and Rabi loans he is eligible for a loan to carry on his next Kharif operations. If, on the other hand, he has not repaid either of

the loans, Kharif or Rabi, and has not obtained an extension, he is refused any further loan for the next Kharif season whether for inputs or for cash expenses.

13.20 We recognise that, from the point of view of the sound functioning of institutional credit, it is a valid principle that defaulters should not be given fresh loans. At the same time, it is important that where a default has occurred because of factors beyond the control of the individual cultivator, it should not result in the denial of credit for the following season. It is true that within the co-operative credit system there are already certain accepted ways of dealing with such situations. Where the default has been caused by the fact that the crop is of less than 6 annas, there is expected to be a recourse to stabilisation arrangements under which these short-term dues are converted into medium-term loans repayable within 3 to 5 years. In other cases deserving of special consideration i.e. of non-wifful default, the co-operative credit structure is expected to provide the facility of extension of the period of repayment, in accordance with rules made for the purpose in most States. In actual practice, however, difficulty has been experienced in both these contexts. For various reasons, the stabilization arrangements have not been brought into operation in a number of cases. In the circumstances, neither able to repay the earlier dues nor allowed to convert his loan into a medium-term one, the farmer has often found himself ineligible for fresh finance from his credit society. Similarly, in regard to extension of the period of the loan, experience has ranged from long delays caused by combersome procedures and inadequate resources at one end, to facile extensions granted without investigations and not justified by crop failure or other disability at the other. Thus, the procedures intended for ensuring eligibility for a fresh loan when the cultivators' ability to repay the previous loan has been impaired by factors beyond his control, have not in practice proved satisfactory, simple or expeditious. We recommend that the relevant arrangements be reviewed and improved so that relief in terms of eligibility for fresh finance comes to the cultivator without avoidable delay. Specifically, the following steps are suggested with particular reference to H.V.P. and other intensive areas.

13.21 Firstly, the current rules for obtaining stabilisation facilities should be reviewed so as to make the operation more flexible and quick moving. We have no doubt that the Rural Credit Review Committee will consider why these facilities have been used only to a limited extent in the past despite recurrent crop failure in different parts of the country and suggest ways of ensuring that stabilization operations are carried out in all deserving cases with the necessary speed and in an adequate measure.

13.22 Secondly, there is the case of defaulters who do not qualify for

the conversion facility according to current standards but whose failure to repay has resulted from factors beyond their control. The procedures for indentifying such cultivators and extending their loans should be streamlined, with sufficient discretion being given to the district authorities to take a responsible decision in this regard in accordance with certain agreed principles. These would cover, for example situations in which the crop has failed but not to the extent of its being only a 6 anna crop. Or, the calamity may not be widespread but restricted to a village or a group of villages. In still other cases, the inability to repay may not be connected with crop failure but may be related to individual circumstances, e.g., destruction caused by a village fire. In all such cases, it should be permissible for the co-operative bank and the society to provide a cultivator with fresh finance, when they are convinced that the failure to repay has resulted from factors beyond the control of the cultivator. Pending investigation with a view to extension, a society may be refinanced even if it has repaid only 20 per cent of its dues. Moreover, the affected members may be given fresh finance provided they have repaid their dues for the previous Kharif season, and, in all, have paid not less than 50 per cent of the outstanding dues.

13.23 Thirdly, in view of the fact that any blanket relaxation of the condition in regard to the financing of defaulters may be abused, the facility of fresh finance may be restricted in such cases to that part of the credit entitlement which is to be disbursed in kind, i.e., fertiliser, pesticides, etc. and to programme areas. As the fresh credit is entirely in kind, it may be assumed that the extended dues and the fresh loan (in kind) will together be within the borrower's anticipated repaying capacity.

13.24 Lastly, in regard to sanction of conversions and extensions, there is need to delegate authority to a certain extent, so that decisions are taken expeditiously by the local representatives of the Agriculture and Co-operative Departments, Co-operative Banks, etc. who may be presumed to have first-hand knowledge of the conditions of the area concerned. This is important because it does happen sometimes at present that the rules made at higher levels or enquiries required to be conducted by higher financing agencies not only delay the action required to be taken but also result in insufficient appreciation of local difficulties.

## **(ii) Defaulting Societies**

13.25 We have discussed earlier the extent to which a setback to fertiliser off-take in many areas has been caused on account of denial of short-term credit facilities to the primary credit societies with overdues beyond certain prescribed limits (varying from 25 to 35 per cent of demand). Under

the existing loan policies in many States a member repaying his dues to the society promptly would not know till the very last whether or not he would get a fresh loan. This uncertainty itself is one of the reasons for some members not repaying their dues. The net result of denying credit to societies has been that not only the defaulting members but also non-defaulting members as well as new members have been denied credit for fertilisers. In the evidence placed before us Government officials as well as representatives of farmers and distribution agencies have urged that in the context of the need for promoting fertiliser consumption for H.V.P. and food grain areas the norms fixed for financing defaulting societies should be revised.

13.26 Though the Action Programme of the Government of India for co-operative credit has suggested that a society should ordinarily be eligible for refinance if it has repaid 50 to 75 per cent of its dues, the present norms for financing defaulting societies, which differ from area to area, continue to be unduly restrictive in many cases. Some flexibility was provided for in regard to these norms as the extent to which a central bank could implement the principle, ultimately, depended upon its ability to absorb overdues from its own resources. Even these suggestions in the Action Programme have not been universally adopted. Nor do they, in our view, go far enough. We, therefore, recommend that, as a rule, a defaulting society should be eligible for refinance provided it has repaid at least 50 per cent of its dues and that this principle should be enforced on all the central banks as early as possible.

### (iii) Co-operative Members in Areas of Dormant Societies

13.27 Our attention has been drawn to the difficulties of members of dormant co-operative societies in some of the districts which have been investigated. The number of such societies is appreciable in Muzaffarpur, Sri Ganganagar and Burdwan. Moreover, taking the States as a whole, a sizeable proportion of societies is in fact dormant in many States. The representatives of the apex banks in some areas, notably in West Bengal, have indicated that the central co-operative banks which have branches should provide fertiliser credit to the eligible members of the co-operatives in the areas covered by dormant societies. Pending the proposed re-organisation of the primary co-operative credit societies into viable units, it seems necessary to make arrangements for providing credit facilities for inputs to non-defaulting members and others in need of fertiliser credit, in the areas covered by such societies. We recommend that the central cooperative banks in such areas should deal directly with the credit applications of the farmers for inputs and arrange to advance credit in kind through

the agency of co-operative or private dealers, at the retail level, appointed either by the co-operative or the private wholesalers.

#### (iv) Issue of Loans in Kind-Crop Loan System

13.28 We have discussed in the previous chapter the role that co-operative or other institutional credit will have to play in promoting fertiliser consumption in those areas where it is low at present and to maintain such consumption where it has already reached fairly high levels. We have also referred to the fact that co-operative credit advanced in kind has not been very significant in a majority of States and that the loans are advanced largely in cash. It is clear that if co-operative credit is to support fertiliser consumption, such part of the loan as is intended for inputs should be advanced in kind.

13.29 It is in recognition of this principle that the Reserve Bank of India and the Central Government have been insisting on 'the State Government and the co-operative credit institutions implementing the crop loan system to which we have earlier made a reference. As we understand it, the crop loan system involves three or four important objectives or aims. These are: (a) to relate the quantum of loan advanced to the expected outlay on the crop, and, in that context, to relax the existing limits prescribed for surety loans and individual borrowing limits in order to ensure adequacy of productive finance; (b) to extend a minimum cash loan to those farmers who are not inclined to use fertilisers but intend to follow the traditional method of cultivation, so that their operations are not hindered for want of finance; (c) to provide credit for inputs to the full extent needed to such farmers as might like to adopt improved agricultural practices including use of fertilisers, and, arising from this, to give a further cash loan to meet the resultant expenses and (d) to extend loans according to the requirements for each season in cash as well as in kind and also to recover such loans at the appropriate time from the corresponding harvests.

13.30 It seems to us that the crop loan system falls short in some areas of the requirements of a system of credit adequately geared to the promotional needs discussed in a previous chapter. It no doubt meets a situation where the farmers have not taken to improved practices, but are still largely wedded to the traditional modes of cultivation. Where, however, the cultivators have, in a majority of cases, advanced very much beyond the traditional level of cultivation and are not averse to credit being advanced largely in kind, the crop loan system would seem to need to be improved and made more effective. To illustrate, in Mandya district, the percentage of loans in kind

to the total short-term agricultural loans disbursed by the co-operatives worked out to 61 per cent before the introduction of the crop loan system, i.e., during 1965-66. However, during 1966-67, following the introduction of 'a', 'b' and 'c' components according to the crop loan system, the proportion declined to 46.6 per cent (upto February 1967).

13.31 We note that the crop loan system does provide for the possibility that, in certain States and for certain crops, a stage of intensification might be reached when it would be in order for the scale of finance to consist of only the two components, (b) and (c) without any need for an (a) component to take care of the credit needs at the traditional plane of cultivation. We also note that, where the scales of finance fixed at the annual field workers' conference have to be reduced because of the paucity of resources, it is the cash component and not the kind component that is expected to be cut. There has been opposition to this approach from some co-operative credit institutions, partly because of unsatisfactory supply arrangements and partly because it represents a departure from long standing practice. We, however, consider this to be a wholesome principle which should be effectively enforced, while, along-side, improved arrangements are made for the supply of the required inputs at the right time and in adequate quantity. We recommend that, with the progressive intensification of agriculture in several areas, an increasing part of the scale of finance should be disbursed in kind and that, particularly for the larger and medium-sized cultivators, the cash component should be gradually brought down.

### **Assured Credit Facilities to the Co-operatives**

13.32 In estimating that production credit from cooperatives broadly of the order of Rs. 2,700 million would be available for fertilisers in 1970-71 in the sixteen States, we have made the assumption that all possible steps at all levels would be taken to improve the performance of the co-operative credit structure not only quantitatively but also qualitatively in the next few years. One important direction of improvement relates to the introduction of the crop loan system and the issuing of loans in kind. Despite the emphasis placed on it by the Reserve Bank and the Government, however, many States have hitherto not implemented the crop loan system to any significant extent. The failure to do so is traceable to many factors, including the apprehension that fertiliser, without which a system of issuing loans in kind cannot be operated might not be available in time or in adequate quantities. However, with the expected improvement in the supply position, and the implementation of the recommendations we have made elsewhere in order to facilitate quick movement of stocks to the retail points, one important hurdle in the way of issuing loans in kind will be removed.

13.33 But serious note has to be taken of another misgiving of the co-operative credit institutions, namely that the resources they might raise might not be adequate in relation to the volume of credit required in H.V.P. areas to help reach the full utilisation of fertilisers. It is clearly necessary to take steps to minimise this apprehension. For example, it is legitimate to hope that the pursuit of some of the suggestions earlier made by us, including the widening of the share capital base of the central co-operative banks and the primary credit societies, as also appropriate readjustments in the Reserve Bank's norms for sanction of credit limits would render a much larger number of co-operative banks eligible for a much larger volume of finance from the Reserve Bank. But, we fear that these measures by themselves would not encourage the primary credit societies and through them the central banks to entertain applications from members and sanction the fertiliser loans to them well in advance of the season.

13.34 Experience has shown that in many cases the primary credit societies, as well as, subsequently the central banks, have not been able to sanction credit to the full extent or disburse credit to the extent that sanctions have been made, on account of operational deficiencies.

13.35 As already explained the planning for the movement of fertilisers to the wholesalers in the district, and thereafter to the retailers, has to be done well in advance of the season (often even before the cultivators make applications to the credit societies) on the basis of the requirements for different crops worked out by the agencies. Officials and distribution agencies have particularly emphasised the desirability of so organising the credit arrangements that the primary credit societies would feel sure of credit support to the full extent of their sanctions and disbursements of credit for fertilisers to the farmers. No central co-operative bank, however, would be in a position to underwrite the full credit needs of an affiliated society, other things being equal, unless it is also, in turn, assured of adequate financial support from the apex co-operative bank and the Reserve Bank of India. The problem, therefore, resolves itself into one of removal of uncertainty as regards credit support all along the line, from the Reserve Bank to the primary credit society for a given quantity of fertilisers to be supplied on credit to the members of the co-operatives. Certainty of the availability of credit is crucial, particularly in H.V.P. areas where dependence on credit is expected to be extremely high. We consider that, in respect of central banks serving the H.V.P. areas, it would be justifiable for the Reserve Bank to adopt a basis somewhat different from the one hitherto followed for sanctioning credit limits for agricultural inputs.



13.36 According to the present procedure followed by the Reserve Bank for sanctioning short-term credit limits to the central co-operative banks for agricultural operations, applications are sent by the latter by May or June for the co-operative year beginning in July indicating their loan programme for the year. It is only when the credit limits are sanctioned that the central banks know the quantum of credit available for inputs and other short-term agricultural purposes, even though it is at a much earlier point of time that the fertilisers have to be moved to the retail points and in some instances advance credit sales effected. We, therefore, consider it essential that the Reserve Bank of India should call for advance applications from the central co-operative banks in respect of their credit requirements for inputs, based on the programme for coverage under the H.V.P., the estimated credit requirements of the members of co-operatives for fertilisers, etc., in their respective areas for the ensuing season/year, as early as January/February itself, and advise soon thereafter each central bank its approximate credit eligibility for inputs. Further, in fixing the credit limits, consideration should be given to the suggestions we have made earlier (para 13.17) with a view to ensuring adequacy of credit support to the programmes.

13.37 The advance knowledge thus available to the central bank regarding the quantum of the fertiliser credit which it is likely to get from the Reserve Bank, when similarly translated into advance credit sanctions to the affiliated credit societies, would help bring about the much needed co-ordination between production credit for fertilisers and supply of fertilisers at the co-operative retail depot level and at the same time promote both advance stocking and advance credit sales. It will be remembered that we have recommended in Chapter ~~XIII~~ that the supplies to the co-operative retail agents from the wholesalers should be available on consignment basis, as a rule, for a period of one to three months in order to facilitate advance lifting and building up of stocks and advance sales to the farmers on the basis of credit. As a corollary to this, it becomes necessary that the credit arrangements at that level, to the extent credit is needed, should be such that the supplies received by the primary credit societies as agents on the basis of consignment tend to be immediately passed on to the farmers on the basis of credit, in order to make room for other stocks to follow. In other words, supplies received, say, in March, April or May should be passed on soon thereafter to those farmers who have their own storage accommodation and are desirous of assuring themselves of sufficient supplies for their crops. This obviously, would not be practicable unless the credit society is told in advance of the approximate quantum of credit facilities for fertilisers it would get from the bank on behalf of its members. In view

of this, we recommend that the central co-operative bank—following the receipt of advance sanction of credit limit from the Reserve Bank and on receipt of the normal credit statements (or provisional applications of members) from the affiliated societies in the month of February or March—should authorise advance sanctions of credit for fertilisers and other inputs so as to facilitate supply of fertilisers on credit to members well before the season. An important aspect of thus co-ordinating credit and supplies is that the value of all credit supplies made to the farmers through the agency of the primary credit society should be communicated directly by the central cooperative bank to the concerned agent or district marketing society.

### **Co-ordination with Private Distribution**

13.38 What is envisaged as a general rule is that credit for fertiliser from the co-operative credit structure would be linked with the supply of fertiliser by the co-operative marketing structure. While this will no doubt continue to be a characteristic of the system as a whole, it has to be noted that difficulties have sometimes arisen in certain areas where co-operative distribution does not function as satisfactorily as co-operative credit. As distribution is mainly done by the private agencies in such areas, it seems clear that in such circumstances, and pending improvement of the co-operative structure itself, suitable co-ordination has to be effected between the co-operative credit agencies and the private distributors in order to ensure that the advantages of credit are availed of to the full extent to promote fertiliser consumption. One way of ensuring the proper use of co-operative credit for inputs is to issue authorisation from the credit agency—in the form of fertiliser cards—on the basis of which the members could obtain their supplies from the dealers, the payment being made by the bank directly to dealers. In many instances, however, this would be a merely transitional arrangement.

### **Supervision and Recoveries**

13.39 We enter another and important part of credit operations when we come to the aspect of recovery of loans. Available figures show that co-operative overdues have been on the increase in recent years. Apart from the periodical crop failures on account of drought or floods these are attributable to a number of other reasons. Co-operative loaning itself has increased very considerably over the past 15 years, sometimes without a corresponding improvement in the effectiveness of the machinery to supervise the utilisation of the loan and ensure its prompt recovery. Advancing of loans largely in cash, which has been in vogue for several years, has made

the problem of supervision and recovery more difficult. Scope for misuse of loans, which the loaning in cash has given rise to, has been further widened through untimely and inadequate loaning, not related to crop needs. Attempts to recover the loans from the members when there is no crop to sell have either led to overdues or undesirable methods of concealing overdues.

13.40 During our studies in the districts, knowledgeable non-officials and officials have stressed the need for effective measures in three or four directions to check the increase in overdues. These may be listed as follows: (a) loans should be production-oriented, and should be advanced mainly in kind, cash loans being limited to the barest minimum; (b) the system of giving loans in kind should be followed for both the seasons, i.e., Kharif and Rabi, and for all crops; (c) loans should be adequate and given in time; (d) the responsibility for the recovery of the loan should be placed squarely on one or other of the agencies concerned, e.g., the Government department or the co-operative bank; and (e) the cultivator should be bound legally to repay the loan out of his sale proceeds by selling an adequate portion of his produce through the co-operative or other agency appointed for the the purpose. The crop loan system, the integration of credit with marketing, and the strengthening of the supervisory machinery of the central co-operative banks, recommended by the All India Rural Credit Survey Committee and a number of subsequent Committees are all designed to make co-operative lending more production-oriented and recoveries more prompt. But on the whole, neither the steps taken to implement the recommendations, nor the results of such steps have been upto expectations.

13.41 Conditions seem to be more favourable now for putting these recommendations into effect. The advancing of loans in kind can be enforced more effectively under the arrangements for co-ordination between supplies and credit suggested in the foregoing paragraphs. With such coordination, one major reason for the misutilisation of loans should be minimised. Even so, the need remains for credit institutions establishing and strengthening their own machinery for supervision and prompt recovery of loans.

13.42 We also consider that conditions now are more opportune than in the past for insisting on the farmers paying out of the sale proceeds of their produce for the fertilisers and other inputs received by them on credit. It has generally been the experience in the past that, though borrowing members were required to execute agreements binding them to sell the produce through co-operative agencies and repay their loans out of the sale proceeds, the agreements were hardly ever enforced.

13.43 The position is different now. The Government declares, much in advance of the season, procurement prices which are more favourable than in the past. There is also either compulsory or voluntary procurement in several States through the agency of the Food Corporation of India or through co-operatives. In some States the farmer is free to sell in the open market that part of his produce which is not subject to levy. The Food Corporation of India has also extended its network of offices and agencies and is becoming increasingly active in the sphere of procurement. Further, under the High Yielding Varieties Programme, the input-output ratio has considerably improved because of the improved technology adopted by the farmers. The combined impact of these factors is that the farmer should be much readier to part with a portion of his additional produce in repayment of the loan. We recommend that in all cases where a farmer gets credit facilities for fertilisers and other inputs either through the co-operative agencies or other agencies, he should be bound by a legally enforceable agreement to sell his produce through a co-operative marketing society with which the credit institution is linked or any other marketing or processing institution or an agent appointed for the purpose by the Food Corporation of India or the Government, and repay the loan out of the sale proceeds. Correspondingly, the agencies through which the produce is sold should undertake to recover the relevant loans out of the sale proceeds payable to the farmer. We also recommend that the co-operative or other credit institutions concerned should be enabled to have a statutory charge on the crop raised by the borrower with the help of the loan, wherever a provision for the purpose does not already exist.

## CHAPTER XIV

# FERTILISER CREDIT FOR THE FARMER— PROPOSALS (*Continued*)

## B. OTHER AGENCIES

### Need for Supplementing Cooperative Credit

14.1 In this chapter we propose to deal with the prospects of fertiliser credit becoming available for the farmer from agencies other than the co-operatives. As already noticed there are States such as Gujarat and Madras where the greater part of these requirements is likely to be met by the co-operatives themselves by 1970-71. But the position is likely to be different in a majority of States; and even in those States in which the bulk of the farmer's fertiliser credit needs may be expected to be met by co-operative banks and societies, there will still be individual districts where the co-operative credit structure is weak and other agencies have to play a significant role. Moreover, it is by no means unlikely that assumptions regarding the progress of the co-operative credit structure may in some instances prove incorrect. We have kept these factors in mind while considering the prospects of there being adequate supply of institutional credit—co-operative and other—by 1970-71. In quantitative terms this may be broadly indicated as follows. If the co-operatives do in fact perform as satisfactorily as assumed, there would still be a large gap—in terms of total fertiliser credit needs—which has to be filled partly or wholly by other agencies; and the size of this gap might be placed at Rs. 2,500 million. But if the performance of the co-operatives falls short of expectation, the gap to be so filled would be bigger and might be as large as, say, Rs. 3,000 million. Among the States where this gap is likely to be relatively large are: Bihar, Andhra Pradesh, Orissa, Maharashtra, Uttar Pradesh and Punjab. Moreover, looking at the same problem in terms of individual H.V.P. areas the gap which needs to be filled is likely to be quite considerable as we have elsewhere pointed out, in districts such as Thanjavur, West Godavari, Raipur, Kolaba and Sambalpur, even on the assumption of optimum performance on the part of the co-operatives.

### Proposals to Supplement Co-operative Credit

14.2 So far as Assam, Bihar, Orissa, West Bengal and Rajasthan

are concerned, the proposal to establish Agricultural Credit Corporations to supplement co-operative credit has been under consideration for some time now. In regard to these as well as other States, the need for encouraging the State Bank of India and other commercial banks to undertake financing of agricultural operations, generally, and of inputs, in particular, has been stressed by the State Governments concerned. The recent discussions and proposals concerning a large measure of "social control" over the commercial banks, together with the formation of a National Credit Council, and the proposal of the Commercial banks themselves to establish an Agricultural Finance Corporation are indications that much larger participation in the financing of agriculture may be expected in future on the part of these institutions. Certain suggestions have also been made in regard to the role which may be played by non-banking institutions such as the Food Corporation of India. In the ensuing paragraphs, we discuss these matters in the following order: (a) Agricultural Credit Corporations; (b) commercial banks other than the State Bank; and (c) State Bank of India and its subsidiaries.

#### **(a) Agricultural Credit Corporations**

14.3 The proposal to establish Agricultural Credit Corporations in the five States already mentioned (and the Union Territories of Manipur and Tripura) where the cooperative credit institutions are relatively weak was made by the Informal Group on Institutional Arrangements for Agricultural Credit (1964), set up by the Reserve Bank of India. The proposed legislation is permissive in the sense that it is for the State Government concerned to decide whether or not to set up such an institution. The final intentions of these Governments are not yet known. The Corporations, if set up, will in a sense be transitional; that is to say there is provision for their being wound up if and when the cooperative credit structure develops to a degree which renders their continuance unnecessary. Meanwhile, their function is to supplement cooperative credit in those areas of the State in which the co-operative credit institutions are weak. The proposed corporations will provide agricultural credit in the areas served by them, either through the primary credit societies where these exist, or directly to individual cultivators or groups of cultivators. This is intended to impart a certain degree of flexibility of approach to the operations of the Corporations. It is further understood that the Credit Corporations are expected to follow the crop loan system for advancing agricultural loans, and also collect produce towards recovery of dues. They will arrange for and finance the supply of inputs and implements. In view of the urgency of the need for taking measures to supplement the credit available from co-operatives, we recommend that decisions concerning the establishment of

these Corporations be expedited. We refrain from making detailed recommendations because the All India Rural Credit Review Committee, is fully seized of the subject.

### (b) Commercial Banks

14.4 Since the larger participation of commercial banks in the direct financing of the farmer can now be regarded as a settled policy for the future, both on their part and that of the Government, it appears to us that the most useful approach at the present juncture would be that of seeking to identify the different directions in which such participation is both feasible and likely to be most fruitful. We refer below to the experiments initiated or schemes drawn up by certain banks as illustrative of some of the modes in which the direct financing of agriculture, including fertiliser credit for the farmer, can be undertaken by commercial banks. We also refer to methods of indirect finance whereby credit from the commercial banks reaches the farmer through an intermediary such as a co-operative bank or society, or a sugar mill or other processing unit.

14.5 The experience of the Syndicate Bank for example, shows that it is not altogether difficult for the commercial banks, under certain conditions, to undertake the direct financing of farmers. At the outset, the bank had familiarised itself with the agricultural conditions in the South Kanara district and acquired knowledge of fertiliser application, high-yielding variety seeds, etc., through actual field trials. In other words, before undertaking the financing of agriculture, it had equipped itself suitably for providing technical guidance to the farmers. Its agricultural finance department with the help of the trained field officers attached to it assesses the credit needs and creditworthiness of the applicant farmers by on-the-spot inspection. Normally, in order to be eligible for a loan, the applicant farmer should be an owner-cultivator possessing at least 3 acres of land. Credit is extended to meet his expenses for inputs and other items, the maximum loan for the period of the crop being Rs. 20,000. The repayment date is fixed to correspond to the period of the harvest. The procedure of disbursing the loan in kind is not yet introduced apparently because of the inadequate supply of fertilisers. Loans upto Rs. 5,000/- are secured, in addition to a personal bond, by an acceptable co-obligant, and those beyond this limit are secured by mortgage of land. The bank charges on loans a rate of interest which is 2 per cent above the Bank Rate, subject to a minimum of 7 per cent per annum. The bank has financed in 1966; 669 farmers, mostly from South Kanara district, upto an aggregate amount of Rs. 0.9 million. It has also provided medium-term loans for five

years to cultivators for the purchase of pumpsets and power-tillers, the amount of advance being 75 per cent of the cost and the loan being secured by the hypothecation of the machinery and the personal bond of a co-obligant. The total loans for machinery amounted to Rs. 117.9 million at the end of November 1966.

14.6 Another line of activity of the Syndicate Bank especially in operation in irrigated areas, is the financing of the production of quality seed by registered seed producers who receive the technical guidance of the National Seeds Corporation and the State Agriculture Department. In regard to these, the bank is understood to have stipulated that the borrower must own at least ten acres of land, the minimum size of the loan per borrower being Rs. 2,500 at the rate of Rs. 500 per acre. An experiment of importance in this connection is the financing of selected hybrid seed growers through a processing unit in Coimbatore district which provides to the farmers technical expertise to grow hybrid jowar, bajra and maize and possesses, besides, the necessary organization for supervision. This project which involves an overall outlay of Rs. 1.2 million includes the production, processing and marketing of seed.

14.7 We have discussed in a previous Chapter (No. XI) the practice of manufacturers, distributors and dealers providing fertiliser on credit to selected farmers for either the whole period of the crop or for one to three months. We have also indicated that the funds for the purpose are normally derived from their working capital. The Central Bank of India, in conjunction with a fertiliser manufacturer and distributor, has recently announced a scheme for financing farmers which is relevant in this context. The scheme is intended to cover initially 10,000 farmers to whom credit facilities for fertilisers will be provided both for food and cash crops for the period of the crop, the maximum period of credit for food crops being 180 days. In the case of cash crops like sugarcane, the period of repayment of loans is 11 months. Under the scheme, the Central Bank of India has agreed to give discounting facilities to the distributor to the tune of Rs. 2.5 million against the hundis drawn by the latter on the dealers, stockists and sugar factories, in respect of fertiliser supplies on credit in the State of Maharashtra. These in turn are expected to pass on the credit facilities to selected farmers for the period of the crop. An important element of the scheme is that the list of dealers, etc., on whom the bills are to be drawn by the distributor has to be approved by the bank. In case of default by the dealer, however, the distributor is finally responsible to the bank for payment. As between the dealer and the distributor, the dealer holds himself responsible for recovery from the farmer. The retailers are



expected to exercise their judgement in assessing the creditworthiness of the customers. The amount of fertiliser credit to be made available to each farmer will be upto the dose recommended by the Agriculture Department for each crop. We understand that certain other banks are also considering the introduction of analogous schemes for financing the farmers through the manufacturers or distributors.

14.8 We have, in an earlier Chapter (para 9.3<sup>6</sup>) recommended that the private retailer should be allowed a credit line of 1 to 7 months in order to enable him to pass on the credit facilities to the farmers for a corresponding period. The object is to give the farmer enough time to make his own arrangements (e.g. loan from his cooperative or commercial bank) to pay for the fertilisers. In many cases, the period for which he would at that stage need credit, i.e., until the harvest comes in, would be relatively short, say, two or three months. In other words, the credit facilities from the retailers themselves would take care of part of the fertiliser credit to be provided. Even so, in the case of farmers of large and even medium holdings under the H.V. Programme, and those, in particular, engaged in growing hybrid seeds, whose credit needs for inputs would be much larger than the co-operatives can normally provide substantial dependence on agencies other than co-operatives might become necessary. This is a context in which the commercial banks can play an important role.

14.9 Where the commercial banks finance the farmer directly it is obvious that they should have an intimate knowledge of the areas concerned and possess an adequate number of branches and field officers. From this point of view, direct financing is a practicable proposition not only for small and medium-sized banks (whose operations are normally confined to a district or a few districts), but also for such of the larger banks, including those with all-India coverage, which have a net-work of branches in semi-urban and rural areas and are taking pains to recruit and train an adequate cadre of bank officials who are familiar with rural conditions and the business of agriculture. We consider that the task of catering to the credit needs (in respect of inputs and other related items) of the farmers in the H.V. Programme areas and elsewhere, to the extent they are not met by the co-operatives, should receive the special attention of the small or medium-sized commercial banks, operating in those areas as well as of those bigger banks which have an adequate number of branches in the areas concerned.

14.10 At the same time, an important way in which commercial banks can finance the farmers for purchase of inputs is through intermediaries

such as manufacturers of fertilisers or their distributors and wholesalers, as also sugar factories and other processing units. Two considerations are relevant, first, the intimate knowledge which the private wholesalers and their retailers have of their clients, and second, the wide network of distribution which they have already established in some areas and are likely to build up in other areas. For these reasons, many banks should find it particularly appropriate to make use of these agencies in the context of stepping up credit facilities for fertilisers and other inputs to borrowers scattered over large areas or throughout an entire State. It will be recalled that, in an earlier Chapter (XII), we mentioned certain special characteristics of fertiliser credit at the level of the farmer and argued that, both for promoting the consumption of fertilisers and for the proper use of credit for production, credit and supplies should go together. In the case of a cooperative credit society providing production credit on its own, the co-ordination is expected to be achieved by disbursing credit in the shape of fertilisers which it obtains on an agency basis. In the recommendations we have made, this is sought to be secured by the suggested arrangement of (i) advance supplies being made to the credit society in its capacity as the retail agent of the marketing society and (ii) advance credit intimation being sent to it by the central bank to the extent it is related to fertiliser supplies on credit to the farmers.

14.11 It is clear that close co-ordination is also necessary between private supplies and private credit. In other words, the retail dealer should himself, wherever necessary and practicable, supply fertiliser on credit, as he is already doing in a limited way in certain areas. Indeed, it is partly in recognition of this important consideration that we have earlier recommended that the credit facilities to the private distribution system should include a period of one to three months credit to the retailer which he can pass on to the farmer. It is important to note here that the arrangements for distribution finance, as also the guarantee scheme we have earlier recommended introduce an important element into the character and operations of the distribution agencies. For example, the distributors and the wholesalers will be required to ensure proper selection of dealers and also to introduce and enforce measures of control and supervision over their operations. Only then will they be eligible for liberal financing from the banks coming under the guarantee scheme. Moreover, the financing commercial bank, and through it the Guarantee Organisation, will also have a significant degree of control over the operations of the distributing agencies. On a pragmatic view, therefore, it seems to us that commercial banks would find it both convenient and practicable in many areas especially those in which they are not themselves sufficiently

equipped to undertake direct financing of cultivators to achieve the same result indirectly by channelling finance to the farmers through the distributors, wholesalers and retailers of fertilisers. This of course can only be promoted on a selective basis and subject to appropriate safeguards. These observations also apply to indirect financing by the proposed Agricultural Finance Corporation of the commercial banks.

### (c) State Bank of India and its Subsidiaries

14.12 In terms of the recommendations of the All-India Rural Credit Survey Committee (1954) the State Bank of India has an important role to play in the extension of banking facilities to rural areas. It has accordingly, since its establishment in 1955, opened as many as 800 new branches mostly in semi-urban and rural areas. The total number of its offices was 1,409 on March 31, 1967. The new branches of the bank account for about 25 per cent of the total deposits of the bank, but only 12 per cent of its advances.

14.13 If the State Bank and its subsidiaries are taken together the total number of offices as on March 31, 1967 was 2,121 of which about 57 per cent were located at centres with a population of 25,000 and less.

14.14 It was in 1964 that the State Bank of India formulated what is known as the Rural Pilot Centres Scheme. This envisaged the establishment of pilot branches in selected rural areas with a view to the Bank playing an effective part in the provision of rural credit, both directly to the farmer and indirectly through other institutions. In this sense, the scheme was an attempt to fill the 'gap' in the availability of production credit to the farmers arising from the inadequacies in the working of the existing credit institutions. In view of this, special attention was intended to be paid to the selection of the districts where the Pilot Centres were to be opened. For instance, the district selected should have fair potentialities for agricultural development, while at the same time not adequately served in the matter of co-operative credit. Under the integrated "liberalised policy of agricultural finance", the main role of the Centres was to be the provision of medium-term and long-term investment finance for agriculture as well as short-term production credit, particularly in areas where the co-operative credit societies did not exist or lacked the support of higher financing agencies. It was also intended that the operations of the Rural Pilot Centres would be co-ordinated with those of the co-operative credit institutions where these were also operating in order to ensure that there was no overlapping of financing. Even though the object was to establish 50 to 70 Centres covering about 15 to 20 districts, not much progress has been made according to available information.

14.15 In respect of production credit for agriculture, the State Bank's role on the whole has not been appreciable. The Bank's advances to agriculturists at the end of March 1966 amounted to hardly Rs. 17.3 million. A substantial part of such advances was either against the security of gold ornaments and bullion or against foodgrains and warehouse receipts.

14.16 An example of the State Bank's direct financing of agriculturists, however, is that of providing accommodation for a large seed farm in Amravati district of Maharashtra for production of hybrid seed. During 1966, advances of the order of Rs. 0.32 million were granted, and in 1967 they were expected to increase to Rs. 0.8 million. The experiment has been claimed to be a success.

14.17 More recently, we understand that the State Bank of India has agreed to undertake the financing of agriculture with reference to two projects in Uttar Pradesh, viz., Varanasi and Etah, which are to receive financial assistance from the World Bank. The main object of the scheme is to bring a total area of 320,000 acres in the Varanasi and Etah Districts under a comprehensive programme of agricultural production. One aspect of the programme is the maximum exploitation of ground water resources through an extensive programme of installation of wells. The other aspect is to mount a supporting programme of supplying inputs and other services to the farmers. The total outlay under the scheme during a four-year period is expected to be Rs. 614 million, of which the cost of fertilisers would be Rs. 260 million. We understand that the State Bank of India has agreed to provide short-term credit for inputs as well as medium and long-term credit for investment against the guarantee of the State Government. It is also learnt that the Bank's participation in the scheme of financing will be subject to the State Government amending the tenancy laws to permit mortgage of land by the borrowers in favour of the State Bank of India, and also creating a separate body for the recovery of loans. This experiment on an "area basis", where all other supporting arrangements such as distribution and marketing will be present, should result in the gaining of much useful experience by the State Bank and other banks on varied aspects of agricultural finances.

14.18 Mention has also to be made, if only by way of illustration, of the experience of one of the subsidiaries of the State Bank, namely, the State Bank of Patiala. This bank has long-established contacts with the rural areas through a network of branches operating over many years. For this reason, among others, it has taken an active interest in the financing of agriculturists. The bank has evolved loan policies and procedures under

which finance is available to farmers against warehouse receipts and pledge of foodgrains. When farmers sell foodgrains and purchase fertilisers, they obtain loans against fertiliser stocks. Advances against agricultural implements and tractors are also common. It has also started making advances for the production of hybrid seed. To facilitate quick disbursement of credit, the managers are allowed to sanction loans upto a maximum of Rs. 25,000/-. The bank pays attention to local needs such as credit for purchase of pumpsets and agricultural implements. Among its handicaps are the cumbersome procedures which have to be followed in effecting mortgage of land or creating a charge in its favour. Moreover, all loans granted by the bank against immovable property, are treated as clean loans and, therefore, invite the restrictions imposed by the Reserve Bank in regard to unsecured advances. But even with all these limitations the bank has been able to effect a significant amount of direct financing of the cultivators.

14.19 We are of the view that the State Bank of India and its subsidiaries should individually examine the credit needs for inputs in H.V.P. and analogous areas and, after ascertaining the extent to which such credit needs are likely to be met by the co-operative credit institutions, explore the possibilities of granting advances directly to the large farmers, seed growers etc., or indirectly through the private distributors in appropriate instances. Further, without attempting to anticipate the more detailed recommendations on the issue which may be expected to be made by the All-India Rural Credit Review Committee, we would urge the need for expeditious action on the part of the State Bank and its subsidiaries in pursuance of the scheme of Rural Pilot Centres which had been formulated in 1964 and received the general approval of the Informal Group of the Reserve Bank in the report which they submitted in 1965. Besides contributing in a substantial measure to the filling of the agricultural credit gap in the areas selected, such an effort on the scale originally contemplated would help identify the practical problems involved in any significant extension of the operations not only of the State Bank and its subsidiaries but also of other commercial banks to the increasingly important sphere of agricultural finance.

#### **Taccavi Credit**

14.20 We have discussed in Chapter XI the role of taccavi, in relation to the farmers' need for fertilisers, as either a substantial supplementary source of credit in certain States or in a few instances, as the only source of fertiliser credit. The reduction in the volume of credit available for the purpose from the Central Government has restricted the ability of the State Governments to provide larger loans in this form. In their discussions

with us, the representatives of State Governments have generally emphasised that there will continue to be a significant need for taccavi in the context of the rapidly increasing supply and use of fertilisers. They could not, however, indicate the extent of the resources which they might be able to allot for the purpose. While it is true that if our proposals regarding fertiliser loans for the farmer are implemented, a much larger volume of production credit than at present may be expected to be available both from the co-operatives and the commercial banks, it is not unlikely that in some areas this availability will fall short of the total requirement. To the extent that this gap cannot be met by the proposed agricultural credit corporations or any other arrangements, there may be a limited and transitional need for taccavi, which can be met from the Central assistance expected to continue to be available upto one-sixth of the Pool fertilisers distributed in the States. It would also be necessary to simplify the procedures governing the issue of taccavi permits insofar as they come in the way of timely availability of credit. We recommend that a review of the relevant rules be undertaken by the State Governments in order that simpler and more expeditious procedures may be formulated.

## CONCLUSION

15.1 We have received much assistance from many quarters. In acknowledging all of it with gratitude, we would begin by thanking the Reserve Bank of India and the Government of India (Ministry of Food, Agriculture, Community Development and Cooperation) whose help was of basic importance to the whole project. Both the Ministry and the Bank placed freely at our disposal all the material in their possession, including data obtained in the course of recent surveys. We would like to mention in particular some of the valuable surveys conducted by the Rural Economics Division of the Reserve Bank and the equally valuable information furnished by the Agricultural Credit Department of the Bank. Further, we are grateful to the Ministry for permitting Mr. S.S. Puri and Mr. M. Subramanian, and to the Bank for permitting Mr. C. G. Ramasubbu, to attend our meetings and assist our Committee as special invitees. Each of these officers has brought to bear on the deliberations of the Committee his extensive knowledge of his field of specialisation. The Reserve Bank kindly gave us on loan both personnel and accommodation for our secretariat. In particular, it lent us the services of our Secretary, Mr. B. Venkata Rao.

15.2 The district reports prepared by the Secretary, and the field investigations on which they are based, owe a great deal to the cooperation extended by the State Governments and their departments both at headquarters and in each of the districts surveyed. To the Governments and their officers we extend our grateful thanks. We are similarly indebted to a number of institutions, cooperative and other, as also to very many individuals for the material which they supplied in reply to our questionnaires.

15.3 But for the fullest participation of the manufacturing firms, it would not have been possible for the Committee to conduct the detailed investigations which it launched in different parts of the country. Among those whom we would specially thank in this connection are Dharamsi Morarji Chemical Co. Ltd., Bombay; E.I.D.-Parry Ltd., Madras; F.A.C.T., Always, Rallis India Ltd., Bombay; and Shaw Wallace & Co. Ltd., Calcutta.

15.4 The officers and staff of the Fertiliser Association of India have, from time to time, shared the task of the secretariat of the Committee. To

all these and in particular to Mr. R. Parthasarathy who has laboured hard for the Committee, we would wish to convey our thanks.

15.5 In conclusion, we would place on record our high sense of appreciation of the contribution made by our Secretary, Mr. B. Venkata Rao. We have benefited greatly from his district studies which are painstaking, systematic and informative. Our thanks are due to him for the valuable help he has rendered in the different processes that have gone into the preparation of this Report.

B. VENKATAPPIAH

M. K. K. NAYAR

A. D. MANGO

D. R. MORARJI

JOHN K. JOHN

C.M.A. BATHURST

C. R. RANGANATHAN

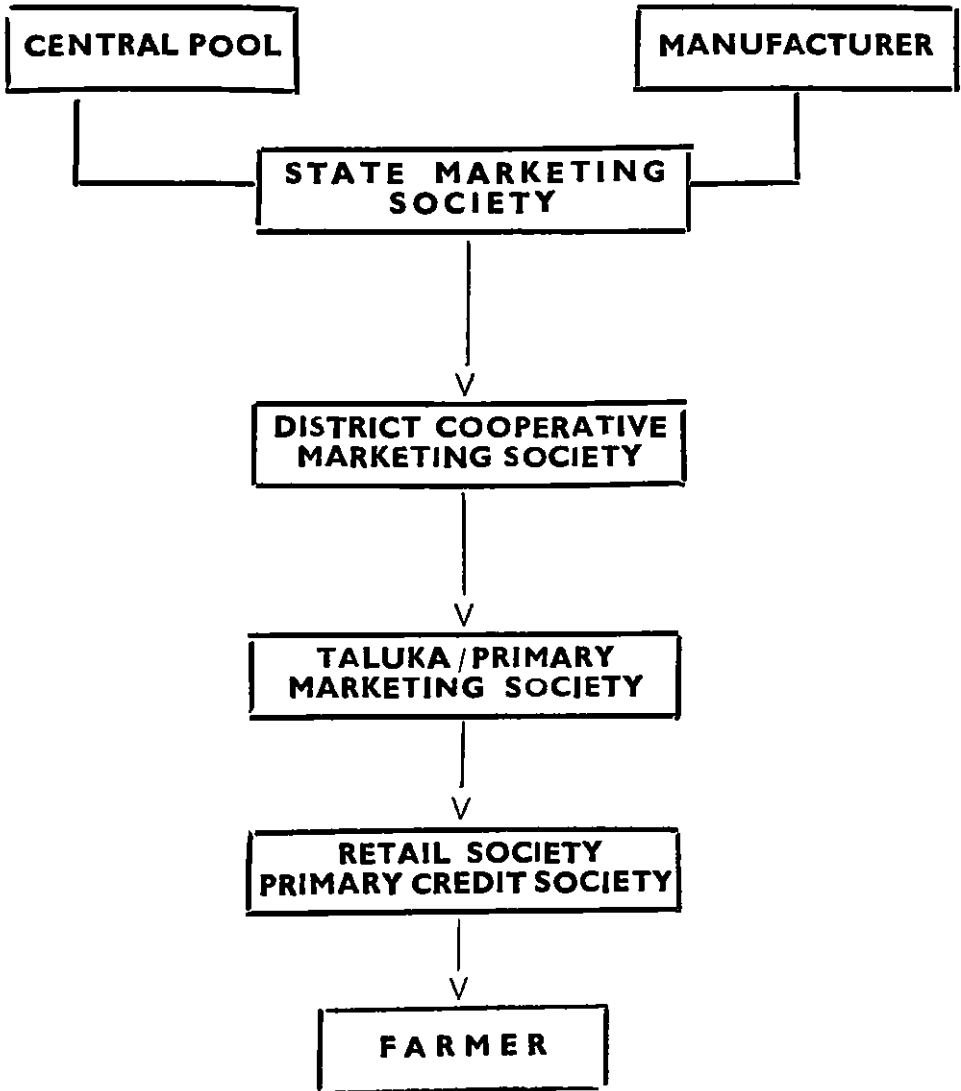
DELBERT L. RUCKER

B. VENKATA RAO  
Secretary

New Delhi:  
Dated 29th February, 1968.



## COOPERATIVE DISTRIBUTION STRUCTURE



**Note** In three States (viz) Andhra Pradesh, Madras and Maharashtra the District Marketing Society receives fertiliser from Pool or manufacturers. In some areas (e.g.) Mandya, the State Marketing Societies effect supplies directly to Taluka Marketing Societies. In some areas District Marketing Societies directly make supplies to the retail agent societies.

## **APPENDICES**

## APPENDIX

### Questionnaire on Fertiliser Credit for the Selected Districts

- Note : (1) The districts selected are from among those which figure in the Intensive Agriculture District Programmes/Intensive Agricultural Area Programmes/High Yielding Varieties Programmes.
- (2) Part I of this questionnaire deals with the existing position and Part II with the position as envisaged during the IV Plan.

Name of the District :

#### Part I

1. Principal crops in the district and the acreage under each

<i>Name of the crop</i>	<i>Area (acres)</i>	<i>Of which irrigated</i>
-------------------------	---------------------	---------------------------

(i)

(ii)

(iii)

(iv)

(v)

2. What are the agencies for distribution of fertilisers at the district/wholesale level? (Specify the type of fertilisers distributed by each agency in terms of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O).

(a) Cooperatives

(b) Private

(Please specify the names)

(c) Government Departments

(d) Panchayat Samitis

3. (i) What are the terms and conditions (period of credit, type of security, rate of interest, price margin, etc.) on which the district agencies obtain fertilisers from ~~the State Government, Apex Co-operative Institutions~~ and manufacturers, as the case may be?

(a) Cooperatives

(b) Private Agencies

(c) Government Departments

(d) Panchayat Samitis

- (ii) Are there any sources other than the ones stated above from which the District Agencies obtain credit for taking delivery of fertilisers? If so, what are the sources and what are the terms and conditions of credit?
4. What portion of the total quantity of fertilisers received by the District Agencies was on credit basis during the past three years?

(Quantity in metric tonnes)

	1963-64		1964-65		1965-66	
	Qty. recd.	% on credit	Qty. recd.	% on credit	Qty. recd.	% on credit

- (a) Cooperatives  
 (b) Private Agencies  
 (c) Government Departments  
 (d) Panchayat Samitis

5. Are the terms of credit at the district/wholesale level satisfactory? If not, why not?
6. Describe briefly the system of retail distribution of fertilisers by the district agencies. What is the number of sale points in the district, such as primary cooperatives, and private sale depots?
7. What are the terms and conditions (including period of credit, type of security, price, margin, rate of interest, etc.) on which fertilisers are supplied to the primaries or depots?
8. Please indicate the total quantity of fertilisers supplied to the primaries/depots, as also what percentage of it was on the basis of credit during the past three years?

(Quantity in metric tonnes)

	1963-64		1964-65		1965-66	
	Total qty.	% on credit	Total qty.	% on credit	Total qty.	% on credit

- (a) Cooperatives  
 (b) Private Agencies  
 (c) Government Departments  
 (d) Panchayat Samitis

9. Do the Primary Agencies obtain credit facilities for fertilisers from any source other than district agencies? If so, what are the sources and terms and conditions of credit (e.g. period, type of security, rate of interest, etc.)?
10. What is the total quantity of fertilisers supplied by the primaries/retail depots to the cultivators during the past three years, and how much of its was on credit?  
(Quantity in metric tonnes)

	1963-64		1964-65		1965-66	
	Qty. supplied	% on credit	Qty. supplied	% on credit	Qty. supplied	% on credit

- (a) Cooperatives  
(b) Private Agencies  
(c) Government Departments  
(d) Panchayat Samitis
11. (i) What are the terms on which fertiliser credit from different sources is available to the cultivator (period, rate of interest, etc.)?  
(ii) Comment on whether the fertiliser credit requirements of the cultivator are satisfactorily met in regard to quantum, timeliness, terms, etc.
12. Is there accumulation of stocks of fertilisers at the district level, retail depot level or primary society level? If so, please give particulars of accumulations, fertiliser-wise, for the past three years? What are the reasons for accumulations?
13. In the light of the above questions, please describe briefly the arrangements for supply, distribution and credit in regard to pesticides.
14. In order to supplement the above, please make any general observations you may consider necessary in respect of the points raised in Part I of the questionnaire.

(Continued)

**APPENDIX 1 (Continued)**

**Part II**

1 Insofar as it can be obtained, please indicate the production programme for the district, including in particular Intensive Agricultural District Programmes/Intensive Agricultural Area Programmes and High Yielding Varieties Programmes. Please give crop-wise, for each year, the acreage to be covered and the estimate of fertilisers.

*(Quantity of fertiliser in metric tonnes)*

Name of the crop	1966-67		1967-68		1968-69		1969-70		1970-71	
	Acreage proposed to be covered (a)	Estimate of fertilisers required (b)	Acreage proposed to be covered (a)	Estimate of fertiliser required (b)	Acreage proposed to be covered (a)	Estimate of fertilisers required (b)	Acreage proposed to be covered (a)	Estimate of fertilisers required (b)	Acreage proposed to be covered (a)	Estimate of fertiliser required (b)
Paddy										
Wheat										
Maize										
Bajra										
Jowar										
Sugarcane										
Groundnut										
Cotton										
Potatoes										

(Continued)

2. Please give an estimate of the quantity of fertilisers likely to be handled, year-wise, by

1966-67    1967-68    1968-69    1969-70    1970-71

- (a) Cooperatives
- (b) Private Agencies
- (c) Government  
Departments
- (d) Panchayat Samitis

3. Please indicate in some detail your estimate of the requirements of fertiliser credit for fulfilling the production programme of the Fourth Plan. The estimates may be year-wise and also take into account the different stages at which credit is required *i.e.*, wholesale, retail and farmer.
4. Corresponding to your replies to question (3) what would be your estimate of the *total* short-term credit requirements at the farmers' level for the production programme, year-wise, during IV Plan?
5. Please give a break-up of the above for fertilisers, seeds and pesticides.
6. In the light of your replies to the above questions, what suggestions would you offer in regard to the making of adequate arrangements for fertiliser credit for the production programme of the district?
7. Please make any other general observations you may consider necessary in respect of the points raised in Part II of the questionnaire.

**APPENDIX 2**  
(Field investigations)

**Questionnaire issued to the Project Officer/D.A.O**

Name of the District:

1. Total number of agricultural families in the district.
2. Please give details of distribution of land holdings by size groups :

No. of holdings	0 to 4.99	5 to 9.99	10 to 24.99	25 to 49.99	50 and above acres	Total
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Area

3. (a) Please indicate the area proposed to be brought under the (a) Intensive Programme and (b) H.V. Programme during the past two years and 1966-67, and the area actually covered.

Year	Proposed for Intensive/H.V. Programme	Actually covered
1964-65		
1965-66		
1966-67		

4. (a) Please indicate the quantities of fertilisers (i) estimated to be required, (ii) actually received, and (iii) distributed, as in the table below :

Year	Fertiliser estimated to be required			Fertilisers received			Fertiliser distributed		
	N	P	K	N	P	K	N	P	K
1964-65									
1965-66									
1966-67									

- (b) What was the quantity of fertilisers distributed for H.V. Programme for 1966-67 for kharif season? Please give details, cropwise, if available.



5. (a) What was the level of application of N, P & K fertilisers per acre per crop, during 1965-66 and 1966-67?
- (b) How does it compare with the recommended dose for different crops under Intensive and H.V. Programmes?
- (c) What is the anticipated level of consumption of fertilisers in relation to recommended doses by 1970-71 per acre per crop?
6. (a) What are the recommended doses of fertilisers for different varieties of crops under H.V. Programmes and under Intensive Programme?
- (b) What are the requirements of different types of fertilisers for different crops under Intensive/H.V. Programme (figures separately for the two programmes) in the district for 1966-67 to 1970-71 (year-wise). How are they estimated?
7. What special measures are being taken to improve the consumption of fertilisers?
8. (i) What are the arrangements for distribution of different types of fertilisers in the district?
- (ii) What are the present sources of distribution credit available to (a) the wholesaler, and (b) the retailer?
9. (i) What arrangements are there for the supply of fertilisers to farmers (a) not within the cooperative fold and (b) defaulters of the cooperative societies?
- (ii) What arrangements are there to provide them credit facilities for fertilisers? What was the amount of credit available to them during 1964-65, 1965-66 and 1966-67 for fertilisers?
10. According to the Project Officer (P.O.) were any farmers unable to apply fertilisers partly or fully because of lack of credit facilities, If so, what would be the extent of such credit needs not satisfied during 1965-66?
11. Does the P.O. think that the existing arrangements for the provision of credit for fertilisers at the three levels are adequate? If not, in what respects do they have to be improved in the context of the agricultural programmes during the IV Plan? (1966-67 to 1970-71).
12. According to the P.O., what proportion of the fertilisers to be supplied during the IV Plan will have to be on credit basis?
13. What are the defective features in the present system of distribution of fertilisers? What steps can be taken to improve the turnover?
14. Any other comments. (Continued)

**APPENDIX 2 (Continued)**

*(Supplementary information to be furnished by the District Agricultural Officer)*

**Distribution of Fertilisers—All Types—District—Block-Wise**

(for three years 1964-65 to 1966-67)

Name of the Block	Opening stock				Quantity received				
	No. of depots	N fertiliser	P fertiliser	K fertiliser mixtures	N fertiliser	P fertiliser	K fertiliser mixtures		
	Total				Sales (Cash)				
		N fertiliser	P fertiliser	K fertiliser mixtures	N fertiliser	P fertiliser	K fertiliser mixtures		
		Sales (Credit)				Sales (Taccavi)			
Name of the Block		N fertiliser	P fertiliser	K fertiliser mixtures	N fertiliser	P fertiliser	K fertiliser mixtures		
	Total		% of credit sales to total sales				Closing stock		
	N fertiliser	P fertiliser	K fertiliser mixtures	N fertiliser	P fertiliser	K fertiliser mixtures	N fertiliser	P fertiliser	K fertiliser mixtures

*(Continued)*

**APPENDIX 2 (Concluded)**

**Fertiliser Distribution—Co-operative Sector—District**

Year	No. of wholesalers	No. of retailers	Opening stock				Quantity received			
			N fertiliser	P fertiliser	K fertiliser	mixtures	N fertiliser	P fertiliser	K fertiliser	mixtures
1964-65										
1965-66										
1966-67										
			Total				Total sales			
			N fertiliser	P fertiliser	K fertiliser	mixtures	N fertiliser	P fertiliser	K fertiliser	mixtures
1964-65										
1965-66										
1966-67										
			Of which credit including Taccavi		% of credit sale to total sales	Closing stock				
			N fertiliser	P fertiliser		K fertiliser	mixtures	N fertiliser	P fertiliser	K fertiliser
1964-65										
1965-66										
1966-67										

(A similar statement for the private sector may also be given)

### APPENDIX 3

(Field Investigations)

**\*Questionnaire issued to the cooperative central bank/Joint/ Deputy Registrar of Cooperative Societies**

Name of the District :

1. Number of agricultural credit societies in the district.
2. What is the proportion of agricultural population covered by primary credit societies ?
  - (a) as on 30-6-1965; and
  - (b) proposed for 1970-71.
3. What is the proportion of borrowing members to the total members of the societies in the area of the bank in 1965-66 ?
4. What was the quantum of credit for fertilisers provided by the central bank to the primary credit societies during the past two years and 1966-67.

Year	Number of societies applied for short term credit			Credit sanctioned by the bank to the societies			Credit actually disbursed by the central bank		
	No.	Total S.T. credit	Of which for fertilisers	No.	Total S.T. credit sanctioned	Of which for fertilisers	No.	Amount disbursed	Of which for fertilisers

1964-65

1965-66

1966-67

5. Were there any societies not sanctioned credit ? If so, what are the reasons for the societies not being sanctioned fertiliser credit to the full extent applied for ?

\*If there are more than one central bank in the district figures may be given for all the central banks together.

6. What is the number of defaulting societies not sanctioned credit in 1965-66? What is the amount outstanding from them ?
7. (i) What is the area (crop-wise) for which fertiliser credit was sanctioned during the two years and 1966-67 ?
  - (ii) What is the average fertiliser credit made available per acre per crop by the central bank ?
  - (iii) Do members of cooperatives obtain loans for purchasing fertilisers from sources other than cooperatives also ? If so, what are the sources ?
  - (iv) What is the maximum extent a member can be sanctioned fertiliser credit as per the loan rules of the bank ? What is the limit fixed for sanctioning loans ?
8. What proportion of the total fertiliser credit needs in the area was met by (a) cooperatives, (b) government taccavi loans, & (c) others (e.g. distributors, money-lenders) during 1964-65, 1965-66 and 1966-67?
9. What are the rates of interest and periods for which credit facilities are made available for fertilisers by (a) cooperatives, (b) government, (c) distributors, (d) money-lenders and (e) others.
10. What would be the total fertiliser credit needs for Intensive/H.V. Programmes in respect of members of cooperatives in the district by 1970-71, taking into account the increased levels of doses of fertilisers under the programmes and the anticipated coverage under these programmes by 1970-71?
11. Of the needs, how much can be met by the cooperatives out of their own resources?
12. What is the procedure for sanctioning fertiliser credit by the central cooperative bank ? What is the time taken by the central bank and the credit society together for sanctioning credit for inputs ?
13. What is the extent of financing by the central cooperatives bank during 1964-65, 1965-66 and 1966-67 for fertiliser business ?
  - (a) at the wholesale level.
  - (b) at the retail level.
14. What are the sources of funds for the central bank for the purpose ? What is the quantum of borrowings from these sources as on 30-6-1964, 30-6-1965 and 30-6-1967 ?
15. To what extent the funds of the central bank were employed in financing fertiliser distribution during 1964-65 and 1965-66 (average of the four quarters may be given) ?

16. Were the funds of the central bank employed for financing distribution of N fertilisers alone or P and K fertilisers and mixtures also? If so, to what extent were they used for different types of fertilisers ?
17. Has the crop loan system been introduced ? If not, what are the reasons?
18. What suggestions would you offer to improve the efficiency of the fertiliser distribution system ?

## APPENDIX 4

(Field Investigations)

### Questionnaire issued to the wholesaler (cooperative or private)

- (a) Name of the district  
 (b) Name of the Agency

1. Please furnish the number of retail depots appointed by the wholesaler. Do the retailers operate on an agency basis or cash-and-carry basis ?
2. What were the resources of the wholesaler employed in fertiliser business as on 30-6-65 and 30-6-1966? What are the expected resources for the purpose by 1970-71?
3. What are the quantities of different types of fertilisers obtained by the wholesaler during the past two years and 1966-67?

(Quantity in metric tonnes)

Year	N		P		K		Mixtures		Total	
	Qty. allotted	Qty. recd.	Qty. allotted	Qty. recd.	Qty. allotted	Qty. recd.	Qty. allotted	Qty. recd.	Qty. allotted	Qty. recd.

1964-65  
 1965-66  
 1966-67

4. Did the wholesaler experience any difficulty in handling the allotted quantity of fertilisers because of shortage of (a) resources available to it and (b) credit facilities ? If so, give particulars.
5. (a) What were the sources from which the fertilisers were obtained ?  
 (b) What were the terms on which they were obtained in respect of N, P, and K fertilisers and mixtures?
6. What portion of the supplies was on
 

1964-65	1965-66	1966-67
---------	---------	---------

  - (a) Cash payment basis
  - (b) Straight credit
  - (c) Consignment-cum-credit
  - (d) Deferred payment basis

7. From what sources other than the State Government and manufacturers were credit facilities available to the wholesaler for fertiliser business ? Give details of such facilities including the source of credit, quantum of credit and the term of the same for 1964-65, 1955-66 and 1966-67.
8. What are the arrangements for distribution of fertilisers ? On what basis the wholesale agency supplies fertilisers to (a) the retail distributor and (b) ultimate consumer ?

(in tonnes of fertilisers)

(a) Year	Total qty. of fertilisers supplied to depots	Of which			
		On credit basis	On consign-ment basis	On deferred payment basis	On cash basis
1964-65					
1965-66					
1966-67					

(in tonnes of fertilisers)

(b) Year	Quantity of fertilisers supplied to farmers	Of which	
		On credit basis	On cash basis
1964-65			
1965-66			
1966-67			

9. What factors inhibited the Agency from obtaining larger volume of credit?
10. (a) What is the turnover of stocks during 1964-65, 1965-66 ?  
(b) What is the period for which fertilisers normally are kept in the godowns?  
(c) What is the period for which stocks are to be stored in godowns to be able to distribute them in time ?
11. What is the storage accommodation available to the agency ? Is it adequate?
12. What is the position of carry-over stocks during the past two years ? What are the reasons for the same ?
13. What steps does the agency suggest to improve the system of distribution ?
14. Any other remarks, e.g. difficulties regarding transportation, margins, allowed etc.



## APPENDIX 5

(Field Investigations)

### Questionnaire issued to the Retail Agency

Date of Visit :

- (a) Name of the district.
  - (b) Name of the retail depot: cooperative or private.
  - (c) Name of the wholesaler providing supplies to the retailer.
  - (d) Total No. of cultivating families in the area of the depot.
  - (e) If it is cooperative, the number of families covered by the cooperatives as on 30-6-1966.
  - (f) The total acreage under paddy/wheat/jowar in the area of the depot.
  - (g) Area cultivated by the members of the cooperatives paddy/wheat/jowar etc. as on 30-6-1966.
1. What is the area (cropwise) targeted for coverage under H.V. Programmes for 1966-67?
  2. What is the area actually covered under the programme for 1966-67 (that is, what is the area for which the High-Yielding Variety seed was supplied)?
  3. (i) What are the quantities of fertilisers obtained by the retail agency from wholesaler during the past two years and during 1966-67? What part was obtained on credit?

—Qty. in quintals of fertilisers.

Year	Quantity Received				On cash basis			
	Total supplies received		On credit (specify if on consignment)		N	P	K	Total
	N	P	K	Total	N	P	K	Total
1964-65								
1965-66								
1966-67								

(ii) Did the agency fail to receive any part of the allotted quantity of fertilisers for want of credit? If so, give particulars for two years?

4. What are the terms and conditions of credit facilities given by the wholesaler? (Period of credit, rates of interest, margin for distribution, etc.)
5. Are there any sources from which retail depot obtains credit facilities for ferti-

lisers other than wholesalers ? If so, please give details of quantum of credit, terms, and conditions thereof for 1964-65, 1965-66 and 1966-67.

6. (i) What are the quantities of different types of fertilisers sold during the past two years and 1966-67 by the depot and what part on credit basis?

(Quantity in quintals of fertilisers)

Year	Quantity sold		Quantity sold		Balance	
			On credit/consignment/cash			
	N P K	Total	NPK	total	N P K	Total
1964-65						
1965-66						
1966-67						

- (ii) Of the above quantities, please furnish the figures of sales to the members for H.V. Programme.

	On credit		on cash		Total
	N P K	Total	N P K	Total	
1966-67					

7. What are the terms on which fertiliser credit was given to the farmers ? To what extent the credit facilities received from the wholesaler were passed on to the farmers ?
8. Were any farmers refused credit facilities ? If so, for what reasons ?
9. If the retail depot is a primary credit society, the following particulars may please be given.

Year	S.T. credit applied for by the society to the central bank for agricultural operations		S.T. credit sanctioned by the central bank		Of which credit for fertilisers		S.T. credit actually disbursed by the society		Remarks
	No. of members	Amt.	No. of members	Amt.	No. of members	Amt.	No. of members	Amt.	
1964-65									
1965-66									
1966-67									

10. What proportion of the farmers in the area of the depot are proposed to be covered by cooperatives by 1970-71.
11. Does the retail depot experience any difficulties in distributing the allotted quantities of fertilisers for want of credit facilities ? If so please, give details.
12. Is there quick turnover of stocks ? Indicate the period for which stocks are generally kept. Give details of accumulation of stock for two years and give reasons therefor ?
13. What is the storage accommodation available to the depot ? Is it adequate?
14. Other problems, if any, faced margins allowed, adequacy of staff, etc.

## APPENDIX 6

### Questionnaire issued to the State Governments (Departments of Agriculture and Cooperation)

- (a) Please indicate on what terms and conditions the State Government received fertilisers from the Central Fertiliser Pool during 1964-65, 1965-66 and 1966-67.
  - (b) Please give the particulars of quantities of different types of fertilisers received by the State Government during the above three years, separately, on cash basis, on credit basis and on consignment basis.
2. (a) Please give particulars of (a) and (b) above in respect of fertiliser supplies obtained by the State Government from the manufacturers (as different from those obtained from the Central Fertiliser Pool).
  3. (a) Please give particulars of quantities of different types of fertilisers made available by the State Government to the distribution system in the State during 1964-65 and 1965-66 and 1966-67 in the following table :

(In metric tonnes of nutrients)

Year	On cash basis	On consignment basis	On credit basis	Remarks : Terms and conditions of credit consignment.
	N P K Total	N P K Total	N P K Total	
1964-65				
1965-66				
1966-67				

4. What are the existing arrangements for the distribution of fertilisers ? How is the distribution system at the State level financed ? What were the resources made available by the following to the distribution system during the past years and 1966-67 ?

Resources made available by

(Rs. in lakhs)

- (a) The State Cooperative Bank (including funds from the State Bank of India)
- (b) State Bank of India (directly, if any)
- (c) Other Commercial Banks
- (d) State Government.

(e) Own resources of the State level distribution agency.

5. Please give particulars of short-term taccavi loans or fertilisers received by the State Government and distributed by the Government to cultivators during the two- years 1964-65 and 1965-66 and 1966-67.

Year	S.T. fertiliser taccavi allotted	Taccavi (fertiliser) advanced to the cultivators	Of the taccavi (fertiliser) distributed, the amount distributed through cooperatives to the members of cooperatives	S.T. taccavi (fertiliser) distributed through agencies other than cooperatives
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1964-65  
1965-66  
1966-67

6. Please give particulars of total short term credit in kind (fertilisers) provided by the cooperatives during the following years (excluding fertiliser taccavi).

1964-65  
1965-66  
1966-67

7. Please give the area proposed to be covered during the IV Plan under (a) High-Yielding Varieties Programme, and (b) other Intensive agricultural Programme yearwise; and crop-wise.

(in '000 acres)

Crop	1966-67	1967-68	1968-69	1969-70	1970-71
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8. Have any estimates been made of the requirements of fertilisers of different types for (a) H.V. Programme, (b) other Intensive Programmes, for the IV Plan period? If so, please give year-wise estimates and indicate how they have been arrived at.

(In tonnes of nutrients)

1966-67		1967-68		1968-69		1969-70		1970-71	
N	P K	Total	N P K	Total	N P K	Total	N P K	Total	N P K

H.V. Programme  
Intensive  
Agricultural  
Programme

(c) Please indicate the dosages of fertiliser recommended under H.V. Programmes and Intensive Agricultural Programme.

9. Have any estimates of fertiliser credit needs at the farmers's level for the IV Plan period been made for

a) H.V. Programme areas and (b) other Intensive Programme areas ? If so, please indicate how they are arrived at, and give the year-wise estimates.

(Rs. in lakhs)

	1966-67	1967-68	1968-69	1969-70	1970-71
--	---------	---------	---------	---------	---------

H.V. Programme  
Other Intensive  
Agricultural  
Programmes

10. Have any estimates been made as to what part of the fertiliser credit needs of of the farmers can be met by the (a) Cooperative credit structure, including the seasonal agricultural operations loans from the Reserve Bank of India, (b) short term Government taccavi loans (c) commercial bank and (d) others? If so, please give year-wise particulars.

(Rs. in lakhs)

	1966-67	1967-68	1968-69	1969-70	1970-71
--	---------	---------	---------	---------	---------

- (a) Cooperatives
- (b) Taccavi
- (c) Commercial banks
- (d) Others

11. In the light of the Government of India Circular letter No. 3-5-66- GFM(S), dated 31-5-66, what are the estimated fertiliser credit requirements for the distribution system during the IV Plan ? How are they proposed to be met ?

	1966-67	1967-68	1968-69	1969-70	1970-71
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- (a) Estimated credit needs of the distribution system.
- (b) Of which the amount that can be provided by the cooperative banks out of their own resources.
- (c) The amount that can be provided by the distribution system.
- (d) The amount that State Govt. is likely to provide.

12. Any other comments.

**APPENDIX 6 (Continued)**  
**(Supplementary information from the State Governments)**

**TABLE I**

Name of the State :

**Pattern of present distribution**

(In metric tonnes of nutrients)

(Rupees in crores)

Year (for 1964-65 to 1966-67)	Total quantity of fertilisers distributed in the State			Value of total	Quantity distributed through the cooperatives			Value of total	Quantity distributed through Govt. agencies			Value of total	Quantity distributed through private agencies.			Value of total
	N	P	K		N	P	K		N	P	K		N	P	K	

**TABLE II**

**State's finances for fertilisers**

Year (for 1964-65 to 1966-67)	Value of pool fertilisers received during the year	Budgetary allocation made for fertiliser	Amount actually drawn	Value of non-nitrogenous fertilisers purchased in the State during the year	Amount drawn by the State out of Budget provision

(Continued)

APPENDIX 6 (Continued)

TABLE III  
Fertiliser distribution & credit

(All figures of quantity in nutrients; Rupees in lakhs)

1. Fertilisers distribution etc. in last three years.

Year (for 1964-65 to 1966-67)	Estimated requirement of fertilisers			From the Pool	From non- pool sources	Quantity received during the year		Quantity distributed to cultivators.		
	N	P	K	N		P	K	N	P	K
						Pool non- pool sources.				

TABLE VI

2. Fertiliser sales

Rupees in lakhs.

Year (for 1964-65 to 1966- 67) for N.P. & K. separat- ely	Type of fertilisers	Value of fertilisers sold during the year.	Of which sold on credit (including cooperative and taccavi credit).

TABLE IV

(for the Cooperative Department)

(Rs. in lakhs)

3. Short-term cooperative credit

Year (for 1964-65 to 1966-67)	Amount of short-term agricultural credit disbursed by the primary credit Societies. Total	(of which for fertilisers)

(Continued)



**APPENDIX 6 (Concluded)**

**TABLE V**

**Taccavi credit**

(Rs. in lakhs)

Year (for 1964-65 to 1966-67)	Allotment of taccavi loans for fertiliser made for the year.	Actual disbursement of taccavi loans for fertilisers.
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**TABLE VII**

**Estimated requirements of fertilisers for all the crops in the State during IV Plan (Year wise)**

Year	N	P	K
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**TABLE VIII**

**Estimate of fertiliser credit available during IV Plan**

Year	Estimate of short-term agricultural credit to be provided by cooperatives during the year	Of which for fertilisers	Estimate of taccavi loans available for fertilisers	Total fertiliser credit, expected to be available
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**TABLE IX**

Name of the State

**Storage capacity for fertilisers**

	Cooperatives		Government	
	Present capacity 1966-67	Capacity programmed for 1970-71	Present capacity	Capacity programmed for 1970-71

- A. Owned
- B. Hired.
- Total

**APPENDIX 6 (Continued)**

**TABLE III**

**Fertiliser distribution & credit**

(All figures of quantity in nutrients; Rupees in lakhs)

**1. Fertilisers distribution etc. in last three years.**

Year (for 1964-65 to 1966-67)	Estimated requirement of fertilisers			From the Pool N	From non- pool sources	Quantity received during the year			Quantity distributed to cultivators.		
	N	P	K			Pool	K	N	P	K	
											Pool non- pool sources.

**TABLE VI**

**2. Fertiliser sales**

Rupees in lakhs.

Year (for 1964-65 to 1966- 67) for N.P. & K. separat- ely	Type of fertilisers	Value of fertilisers sold during the year.	Of which sold on credit (including cooperative and taccavi credit).
--	---------------------	---	--

**TABLE IV**

(for the Cooperative Department)

(Rs. in lakhs)

**3. Short-term cooperative credit**

Year (for 1964-65 to 1966-67)	Amount of short-term agricultural credit Total	disbursed by the primary credit Societies. (of which for fertilisers)
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(Continued)



## APPENDIX 7

### Questionnaire issued to the State Cooperative Banks

Name :

1. Please indicate the particulars of cash credit sanctioned by the State Bank of India to your Bank for the past two years and 1966-67 to finance directly or through central cooperative banks, the marketing societies for the distribution of fertilisers in your State.

Year	Limits sanctioned	Total drawals during the year	Outstandings at the end of the year	Value of stocks of fertilisers shown as cover	Terms and conditions of sanction by the State Bank of India (period, rate of interest, security, etc.)
1964-65					
1965-66					
1966-67					

2. Please give similar particulars of the cash credit limits sanctioned by your bank to the central cooperative banks in your State?
3. Please give particulars of the financial accommodation provided by (a) your bank to the State cooperative marketing society, and (b) by the central cooperative banks in the State to the societies at the district/wholesale level, for the distribution of fertilisers, during the past two years and 1966-67?

(Rs. in lakhs)

	State cooperative marketing society			District/Wholesale marketing society		
	1964-65	65-66	66-67	1964-65	65-66	66-67

- (a) Cash credit limits sanctioned for fertiliser business by the State/Central cooperative banks
- (b) Drawals made during the year from the limit

(c) The outstandings at the end of the year

(d) Value of stocks of fertilisers shown as cover at the end of the year

(e) Type of accommodation, rate of interest, and period of accommodation.

4. On the basis of your experience in the past, what is your estimate of the credit needs of the distribution system for fertilisers during the IV Plan at the State, Wholesale and Retail levels?

5. (a) Please give particulars of loans advanced in kind, (i.e., in the shape of fertilisers) by the cooperative credit societies in your State during the past two years and 1966-67.

(b) Of the above loans so advanced, what part was out of fertiliser taccavi?

(Rs. in lakhs)

Year	Total loans advanced in kind (fertilisers)	Of which taccavi (fertiliser)
1964-65		
1965-66		
1966-67		

(e) What is your estimate of the fertiliser credit needs in the State upto 1970-71 (year-wise)?

## APPENDIX 8

### Some of the Officials and Representatives of Institutions met during field investigations

#### A. WEST GODAVARI

##### *Officials*

1. Mr. K. Subramanian,  
District Collector.
2. Mr. B.R. Venkatram,  
Project Officer.
3. Mr. Satyanarayan Raju,  
District Agricultural Officer.
4. Mr. A. Sriramamurthy,  
Special Deputy Registrar,  
Cooperative Societies.
5. Mr. P. Laxminarayana,  
Deputy Registrar (Fertilisers).
6. Mr. Ram Mohan Rao,  
Farm Management Specialist.
7. Mr. V. Bhaskara Rao,  
Agronomist.
8. Mr. Vasudeva Rao,  
Block Development Officer.
9. Mr. M. Seetharama Rao,  
Agricultural Extension Officer (Agri.)
10. Mr. N. Somayajulu,  
Agricultural Extension Officer (Coopn.)

##### *Central Cooperative Bank*

- |                                       |   |           |
|---------------------------------------|---|-----------|
| 1. Mr. J. Lakshmiah Naidu, President. | } | Directors |
| 2. Mr. S. Suryanarayana Reddy         |   |           |
| 3. Mr. N. Viswanadha Raju             |   |           |
| 4. Mr. Satyanarayana                  |   |           |
| 5. Mr. S. Sambasiva Rao               |   |           |
| 6. Mr. M. Sitaramanarayana Chowdary   |   |           |
| 7. Mr. M. Narayana Rao                |   |           |

8. Mr. G. Sivaramkrishniah,  
Secretary.
9. Mr. B. Dharama Rao,  
Chief Executive Officer.

*District Cooperative Marketing Federation*

1. Mr. Mutyala Naidu,  
Business Manager.
2. Mr. D. Satyanarayana,  
Assistant Manager.

*Pulla Cooperative Rural Bank, Pulla*

1. Mr. V. Pardhasaradhi,  
President.
2. Mr. B. Venkatratnam,  
Secretary.
3. Mr. N. Venkateswar Rao
4. Mr. V. Pullayya
5. Mr. P. Kodandarmaiah
6. Mr. P. Venkateswara Rao
7. Mr. P.P.B. Krishnamurthy

} Directors

*Rangaraya Cooperative Rural Bank, Pasivedala*

1. Mr. N. Suryanarayanamurthy,  
Secretary
2. Mr. A. Rama Rao
3. Mr. V. Veeranna

*Private Distributors at Nidadavole*

1. Mr. Subba Rao,  
Deputy Plant, Manager, V.V.S. Sugars.
2. Mr. M. Krishna Rao,  
President, Panchayat Samiti.
3. Mr. K.V. Ramanna Rao,  
Sales Manager, Andhra Sugars Ltd.
4. Mr. P. Ramakrishna Rao,  
Krishna Industrial Corporation Ltd.
5. Mr. N. Viswanatham  
Distributor of E.I.D. Parry Ltd.
6. Mr. K.V. Subba Rao,  
Distributor of Rallis India.
7. Mr. Venkateswara  
Distributor of Shaw Wallace & Co. Ltd.,

*Progressive Farmers*

1. Mr. Narendrababu
2. Mr. Subba Rao,  
President, Maddur Society

3. Mr. P. Sesharao
4. Mr. P. Suryanarayana
5. Mr. B. Venkateswararao.
6. Mr. N. Viswanatham.
7. Mr. V. Veeranna.
8. Mr. Y. Ramarao.

## B. MUZAFFARPUR DISTRICT

### *Officials*

1. Mr. B.N. Trivedi,  
Deputy Director of Agriculture,  
Tirhut Division.
2. Mr. S. Choudhury,  
District Development Officer.
3. Mr. R.B. Singh,  
District Cooperative Officer.
4. Mr. D.N. Prasad,  
Range Officer.
5. Mr. R.P. Singh  
District Agriculture Officer.

### *Representatives of Institutions*

1. Mr. J. Rai,  
Depot Manager,  
Cooperative Agricole Depot.
2. Mr. Mohammadin,  
Executive Officer, Muzaffarpur-Majipur,  
Central Cooperative Bank.
3. Mr. Satyanarayan Prasad, Wholesaler,
4. Mr. Ram Ekbal Mishra and
5. Mr. Bishambhar Lal—Retailers.

## C. RAIPUR DISTRICT

### *Officials*

1. Mr. D.G. Bhave,  
District Collector, Raipur.
2. Mr. Bhupendra Singh,  
Joint Director of Agriculture.
3. Mr. Vijayabhadur Singh,  
Project Executive Officer.
4. Mr. G.M. Thikekar,  
Deputy Director of Agriculture
5. Mr. P. N. Mishra,  
Plant Protection Specialist.



6. Mr. K.D. Barve,  
Assistant Project Executive Officer.
7. Mr. D.P. Soni,  
Agronomist.
8. Mr. S.S. Lall,  
Deputy Registrar of Cooperative Societies.
9. Mr. B. B. Rai,  
Assistant Registrar of Cooperative Societies.

*District Office of the Apex Marketing Federation*

1. Mr. R. K. Bhattad,  
Zonal Officer.
2. Mr. A.B.L. Verma,  
Accounts Officer.
3. Mr. M.S. Avasthi,  
Divisional Marketing Officer.
4. Mr. B.J. Sinha,  
District Marketing Officer.
5. Mr. M. S. Srivastava,  
District Marketing Officer.
6. Mr. D. K. Rao,  
Fertiliser Inspector.

*Raipur Central Cooperative Bank*

1. Mr. R. K. Choube,  
Vice-President,
2. Mr. R.N. Mukasdar,  
Hon. Secretary,
3. Mr. S. B. Kulkarni,  
Manager.
4. Mr. B. L. Sharma,  
Director.

*Other important Office-bearers and Farmers*

1. Mr. Narayanrao Ambelkar,  
President, Marketing Society, Navapara.
2. Mr. Chandika Prasad Mishra,  
President, Large-sized Society, Navapara.
3. Mr. B. S. Patel,  
Manager, Marketing Society, Navapara.
4. Mr. A.C. Diwan,  
Marketing Inspector, Navapara.
5. Mr. Girdhari Patel,  
President, Village Service Society.
6. Mr. Chaturbhuj,  
Member, Village Service Society, Rakhi.

7. Mr. Ramachandra Sahu,  
Member, Large-sized Society, Manikchouri.
8. Mr. Sita Ram,  
Member, Large-sized Society, Manikchouri.
9. Mr. Jai Rakhnial,  
President, Bagbahara Marketing Society.
10. Mr. Rama Nand Panoriya Sulehari Davari,
11. Mr. K.C. Bhoi,  
Manager, Bagbahara Cooperative Marketing Society.
12. Mr. B. M. Sahu,  
Branch Manager, Central Bank, Bagbahara.

#### **D. THANJAVUR DISTRICT**

##### *Officials*

1. Mr. C.G. Rangabhashyam,  
District Collector.
2. Mr. M. Mukundan,  
Jt. Director of Agriculture and his Subject-matter Specialists
3. Mr. G. N. Das,  
Jt. Registrar, Cooperative Societies and his Deputy Registrar.
4. Mr. P. K. Iyyasamy,  
Assistant Project Officer.
5. All B.D.Os and Extension Officers in Development Blocks.

##### *Central Banks*

1. Mr. R. Adiseshulu Naidu,  
Manager, Tanjore Central Bank.
2. Mr. Varadarajan,  
Executive Officer, Kumbakonam Central Bank.

##### *Other Important Officials and Progressive Farmers*

1. Mr. V. S. T. Muthaliar, Chairman  
Thanjavur Cooperative Marketing Federation.
2. Mr. P. Subbiah Mudaliar,  
President, Mannargudi Marketing Society.
3. Mr. Kalyana Sundaram,  
Vice-President,  
Mannargudi Marketing Society.
4. Mr. Natesa Devar,  
President, Vallur Cooperative Society.
5. Mr. G. V. Venkatachala Nattar,  
President,  
Papnasam Taluka Marketing Society.
6. Mr. R. Varadaraja Iyengar,  
President, Thruvaiyaru Cooperative Stores.

7. Mr. R. Srinivasa Iyer,  
Mirasdar, Pattukottai.
8. Mr. P. Arumugham,  
Union Vice Chairman, Tiruvaiyaru.
9. Mr. N. Venkataraman Chettiyar,  
Director, Tiruvaiyaru Rural Bank.
10. Mr. R. Rajagopala Iyengar,  
Secretary, Sarabojirajapuram Society.
11. Mr. V. Duraisamy Iyer,  
Mirasadar.
12. Mr. Gopala Mudaliar.

*Representatives of Private Distributors*

1. Mr. S. Annasami,  
Regional Manager, E.I.D., Parry Ltd.,  
Madurai
2. Mr. B. Swaminathan,  
Rallis India Ltd., Trichy.
3. Mr. M. H. Khan,  
Kothari's Blue Mountain Estates and Industries Ltd.  
Trichy.
4. Mr. Sainath,  
Rallis India Ltd., Thanjavur.
5. Mr. Sivaprakasam,  
Manager, P. Jerome Yagappa Agencies,  
Thanjavur.
6. Mr. D. Krishnadesiken,  
E.I.D. Parry Ltd., Kumbakonam.
7. Mr. S.A. Xavier,  
Shaw Wallace & Co. Ltd., Trichy.
8. Mr. A.E. Daniel,  
Shaw Wallace & Co. Ltd.,  
Trichy.
9. Mr. T. S. Rajagopalachari,  
Sivam & Co., Manure Mixing Firm,  
Tiruvarur.
10. Mr. K. R. Venkataraman,  
Parry's Fertiliser Distributor,  
Thanjavur.
11. Mr. K. A. Ramalingam,  
Parry's Fertiliser Distributor,  
Kumbakonam.

**E. KOLABA DISTRICT**

*Officials*

1. Mr. S.H. Thacker,  
Chief Executive Officer and B.D.Os.

2. Mr. V. T. Tankasale,  
Agriculture Development Officer.
3. Mr. B. M. Mali,  
Dist. Agricultural Officer.,
4. Mr. P.V. Kulkarni,  
Cooperation Officer.
5. Mr. Mukhedkar,  
Dist. Deputy Registrar,  
Cooperation.

*Representatives of Institutions*

1. Mr. M. Atavane,  
Managing Director,  
District Purchase and Sale Union.
2. Mr. V. T. Agnihotri,  
Manager,  
Dist. Central Cooperative Bank Ltd.,
3. Office bearers of the primary credit societies and farmers.

**F. MANDYA DISTRICT**

*Officials*

1. Mr. H.N. Jwalanna,  
Deputy Registrar of Co-operative Societies.
2. Mr. Ghouse Mohideen,  
Deputy Director of Agriculture.
3. Mr. Ranga Mannar,  
Asstt. Director of Agriculture,  
Pandavapura.
4. Mr. L. Sathyanarayan Rao,  
Assistant Director of Agriculture,  
Maddur.
5. Mr. G. Siddaramiah,  
Asstt. Registrar of Co-operative Societies.
6. Mr. K. M. Mahadevaiah,  
Block Development Officer,  
Mandya.
7. Mr. Pocnappa,  
Block Development Officer,  
Mandya.
8. Mr. Gurumullappa,  
Co-operative Extension Officer.
9. Mr. K. Lingaiah,  
Agriculture Extension Officer.
10. Mr. Srikantaiah,  
Cooperative Extension Officer.

*Representatives of Institutions and Progressive Farmers*

1. Mr. Ramegowda,  
Manager,  
District Central Co-operative Bank,  
Mandya.
2. Mr. Javaregowda,  
Secretary,  
Kasaba Service Co-operative Society,  
Srirangapatna.
3. Mr. A. Srinivas,  
President Service Co-operative Society,  
Palahalli.
4. Mr. Kalegowda,  
Secretary,  
Large-Scale Service Co-operative Society,  
Belagola.
5. Mr. S. T. Honnegowda,  
Secretary,  
T. A. P. Cooperative Marketing Society,  
Srirangapatna.
6. Mr. S. Channakeshavaiah,  
Secretary,  
R. M. P. Cooperative Society,  
Mandya.
7. Mr. Dyapaiah,  
Progressive Farmer.
8. Mr. G. K. Kempegowda,  
Progressive Farmer & Director of R.A.P. Cooperative Marketing  
Society.
9. Mr. B. Subbaiah,  
Manager, T.A.P. Cooperative Marketing Society,  
Maddur.
10. Mr. B.K. Puttamadappa,  
Progressive Farmer and Fertiliser Dealer.
11. Mr. B.K. Abdulla Khan,  
Secretary,  
T.A.P. Cooperative Marketing Society.
12. Mr. H. Swamy,  
Progressive Farmer.
13. Mr. M. Chowda Setty,  
Progressive Farmer.
14. Mr. L. Gopalsingh,  
Secretary,  
T.A.P. Cooperative Marketing Society.

15. Mr. Karigowda,  
President,  
Kennali Service Co-operative Society.
16. Mr. Eregowda,  
Director,  
Kennal, Service Cooperative Society
17. Mr. B. Devegowda,  
Progressive Farmer and Director,  
Kasaba,  
L.S.C.O.
18. Mr. K.R. Puttegowda,  
Progressive Farmer.

## G. SAMBALPUR DISTRICT

### *Officials*

1. Mr. S.L. Das,  
D.A.O.,  
Sambalpur.
2. Mr. G.C. Naik,  
D.A.O.,  
Bargarh.
3. Mr. C.V. Subbarao,  
Dy. Registrar of Cooperative Societies.
4. Mr. F.C. Panda,  
Asst. Registrar of Societies,  
Bergarh.

### *Representatives of Institutions and others*

1. Mr. R. N. Dwivedy,  
Secretary,  
Orissa State Cooperative Marketing Society, Ltd.,
2. Mr. B. M. Tripathi,  
Secretary,  
Sambalpur Dist.  
Coop. Bank.
3. Mr. B.C. Hota, M.L.A.,  
President, Regional Cooperative Marketing Society,  
Bargarh, also President, Central Cooperative Bank.
4. Mr. J.R. Prohit,  
President,  
Sambalpur, Regional Coop. Marketing Society.
5. Mr. R. N. Patra,  
President, Regional Coop. Marketing Society,  
Padamapur.

6. Mr. G.P. Patnaik,  
Regional Marketing Officer,  
Bargarh.
7. Mr. B. C. Parija,  
Regional Marketing, Officer,  
Sambalpur.
8. Mr. R.C. Gountia,  
Director,  
R. C. M. S.  
Jharsuguda.

## H. LUDHIANA DISTRICT

### *Official*

1. Mr. B. S. Randhawa,  
District Collector.
2. Mr. R. S. Grewal,  
Dy. Registrar of Co-operative Societies.
3. Mr. Bachan Singh Gill,  
Manager,  
District Co-operative Marketing Society Ltd.
4. Mr. Parmatama Singh,  
District Agricultural Officer.
5. Mr. Amar Singh,  
Manager,  
Central Co-operative Bank.
6. Mr. S.S. Gill,  
Assitant Registrar of Co-operative Societies.
7. Mr. Pritam Singh Hoshiarpuri,  
Pilot Project Officer,  
I.A.D.P.

### *Representatives of Institutions and others*

1. Mr. Harcharan Singh,  
Manager,  
Jagraon Co-operative Marketing Society Ltd.
2. Mr. Harbans Singh,  
Inspector, Agriculture.
3. Mr. Babu Ram,  
Manager, Rampur  
Rural Co-operative Bank Ltd.
4. Mr. Sohan Singh,  
Branch Manager,  
State Co-operative Marketing Federation,  
Branch Office Ludhiana;
5. Mr. Sardul Singh,  
Manager,

District Wholesale Co-operative Supply and Marketing Society Ltd.,  
Ludhiana.

6. Mr. Jagir Singh Grewal,  
Secretary Badowal Co-operative Agricultural Service Society Ltd.,  
Badowal.
7. Mr. Raghbir Singh,  
Inspector,  
Co-operative Marketing.
8. Mr. D.S. Grewal,  
Member Badowal Co-operative Agricultural Service Society Ltd.,  
Badowal.
9. Mr. Jagjit Singh Mangat,  
President,  
Rampur Rural Co-operative Bank.
10. Mr. Halnam Singh,  
Member, Managing Committee,  
Rampur Rural Co-operative Bank.
11. Mr. Pakhal Singh,  
Member, Managing Committee,  
Rampur Rural Co-operative Bank.
12. Mr. Rai Singh,  
Member, Managing Committee,  
Rampur Rural Co-operative Bank.
13. Mr. Balu Ram,  
Manager,  
Rampur Rural Co-operative Bank.
14. Mr. Natha Singh,  
Nambardar.
15. Mr. Bhojan Singh,  
Member,  
Rampur Rural Co-operative Bank.

## **I. SRI GANGANAGAR DISTRICT**

### *Officials and others*

1. Mr. A.V. Ganesan,  
Collector.
2. Mr. K.S. Badal,  
Dy. Director of Agriculture.
3. Mr. K.L. Sharda,  
District Agriculture Officer.
4. Mr. S. N. Modi,  
Dy. District Development Officer.
5. Mr. J.S. Parihar,  
Assistant Registrar of Co-operative Societies.



6. Mr. Yadav,  
Executive Officer,  
Central Cooperative Bank.
7. Mr. Karan Narain Dhingra,  
Manager,  
Central Co-operative Bank.
8. Mr. S. N. Vyas,  
B.D.O.,  
Nohar Block.
9. Mr. R.C. Gupta,  
B.D.O.,  
Ganganagar.
10. Mr. H.S. Rathore,  
B.D.O.,  
Ganganagar.
11. Mr. J.K. Sachdev,  
B.D.O.,  
Padanpur.
12. Mr. Chaman Lal,  
Director,  
Ganganagar Kisan Co-operative Marketing Society.
13. Mr. Shri Ishar Dass,  
Retailer.
14. Mr. Palwan Chand & Other Progressive Farmers.

## **J. BURDWAN DISTRICT**

### *Officials*

1. Mr. B. K. Chatterjee, I.A.S.,  
District Magistrate,  
Burdwan.
2. Mr. M.N. Thakur,  
Deputy Registrar of Cooperative Societies.
3. Mr. J. Banerjee,  
Deputy Registrar of Co-operative Societies.
4. Mr. S.P. Patro,  
Assistant Registrar of Co-operative Societies.
5. Mr. A. Majumdar,  
Assistant Registrar of Co-operative Societies.
6. Mr. N.B. Roy Choudhuri,  
Project Officer.
7. Mr. B. Mandal,  
Principal Agriculture Officer.
8. Dr. T. Sen Gupta,  
Subject Matter Specialist,  
(Seeds and Fertilisers).

9. Mr. G. K. Chakravarti,  
Evaluation Officer,
10. Mr. D. V. Kar,  
Subject Matter Specialist,  
Agronomy.
11. Mr. J. Choudhuri,  
Assistant Agriculture Officer.
12. Dr. A. L. Mukherjee,  
Subject Matter Specialist.
13. Mr. S. Das Gupta,  
Assistant Seed Development Officer.
14. Mr. B. V. Chakravarti.
15. Mr. S. Saha,  
Asstt. Seed Development Officer.

*Representatives of Institutions and others*

1. Mr. Goswami,  
Manager,  
Burdwan Central Bank.
2. Mr. Harprasad Jash,  
Vice-Chairman,  
Kalna Katwa Central Bank.
3. Mr. Anil Kumar Banerjee,  
Manager,  
Kalna Katwa Central Bank.
4. Mr. Sambhu Charan Guha,  
Vice-Chairman,  
Zonal Co-operative Multipurpose Marketing Society.
5. Mr. Makhanlal Bose,  
Secretary,  
Zonal Co-operative Multipurpose Marketing Society.
6. Mr. Bijoy Gobind Bose,  
Zonal Co-operative Multipurpose Marketing Society.
7. Mr. Mayabati Chakravarty,  
Secretary,  
Mangalkote Thana Marketing Society.
8. Mr. Narayan Chandra Pal,  
Manager,  
Paharhati Marketing Society.
9. Mr. Sakti Bandapadhaya,  
Chairman,  
Paharhati Marketing Society.

*Representatives of private distributors (Calcutta)*

1. Mr. S. C. Mitter,  
R. C. Mittar & Sons.

2. Mr. P. Choudhari,  
F. C. I.,  
Durgapur Division.
3. Dr. S. K. Mukherjee,  
F. C. I.  
Durgapur Division.
4. Mr. N. K. S. Mahapatra,  
Indian Potash Supply Agency Ltd.
5. Mr. A. K. Banerjee,  
Rallis India Ltd.
5. Mr. D. S. Kumar,  
R. N. Chatterjee & Co.
7. Mr. V. K. Lamba,  
Jardine Henderson Ltd.
8. Mr. D. Roy,  
Jardine Henderson Ltd.
9. Mr. U. K. Talukdar,  
A. Talukdar & Co. (F) P., Ltd.
10. Mr. N. B. Roy Choudhry,  
Bhagirathi Fertiliser Co.
11. Dr. D. F. Strohbush,  
N P K Study Centre,  
Zurich.
12. Mr. J. I. Forrester,  
Shaw Wallace & Co., Ltd.
13. Mr. K. K. Roy Choudhury,  
Phosphate Co., Ltd.
14. Mr. J. K. Chetlajia,  
Phosphate Co., Ltd.
15. Mr. S. Roy,  
Jayshree Chemical and Fertiliser.
16. Mr. S. Roy.  
The Fertiliser Association of India,  
Eastern Regional Office.

## **K. HOOGHLY DISTRICT**

### *Officials and others*

1. Mr. N. G. Mukherjee,  
Principal Agricultural Officer.
2. Mr. A. K. Ray,  
B. D. O.,  
Tarakeshwar.
3. Mr. J. J. Bhattacharji,  
B. D. O.,  
Singur.

4. Mr. K. Bhattacharyya,  
B.D.O.,  
Chinsurah.
5. Mr. M. R. Chatterjee,  
B. D. O.,  
Dhaniakhali.
6. Mr. P. K. Sen,  
B. D. O.  
Arambagh.
7. Mr. A. K. De.  
S.D.O.
8. Mr. P. K. Mukherjee,  
A. S. D.
9. Mr. K. B. Choudhury,  
A. S. D.  
Tarakeshwar.
10. Mr. S. K. Chatterji,  
A. E. O.  
Balagarh.
11. Mr. N. Nandi Roy,  
A. E. O.  
Singur,
12. Mr. U.K. Pathak,  
A. E. O.  
Arambagh.
13. Mr. A. K. Nag,  
A. E. O.  
Dhaniakhali.

*Representatives of Institutions*

14. Mr. D. N. Sen Gupta,  
Manager,  
Hooghly District Central Bank.
15. Mr. S. C. Sen,  
Co-operative Development Officer.
16. Mr. A. Paul,  
Inspector of Co-operative Development.
17. Mr. B. Chakravarty,  
Inspector of Co-operative Development.

## APPENDIX 9

### Names of the Government offices and important institutions visited during field investigations

#### WEST GODAVARI

1. Directorate of Agriculture, Hyderabad.
2. Registrar of Co-operative Societies, Hyderabad.
3. Project Office, Eluru.
4. District Co-operative Office, Eluru.
5. West Godavari Distt. Co-operative Marketing Federation, Eluru.
6. Central Co-operative Bank, Eluru.
7. Pulla Cooperative Rural Bank.
8. Rangaraya Cooperative Rural Bank, Pasivedala.

#### MUZAFFARPUR

1. Directorate of Agriculture.
2. Registrar Co-operative Societies.
3. Cane Development Commissioner's Office.
4. Bihar State Co-op. Union.
5. Deputy Director of Agriculture, Muzaffarpur.
6. Muzaffarpur Hajipur Central Co-operative Bank.

#### PALGHAT

1. District Agricultural Office.
2. District Co-operative Office.
3. Central Co-operative Bank.
4. Central Depots and Retailers.

#### RAIPUR

1. Central Cooperative Bank, Raipur.
2. Co-operative Deputy Registrar.
3. Madhya Pradesh State Cooperative Marketing Federation Zonal Office, Raipur.
4. Jt. Director of Agriculture, Raipur.
5. Kurud Co-operative Marketing Society.
6. Athanpur Co-operative Marketing Society.
7. Arang Cooperative Marketing Society.
8. Pilhora Co-operative Marketing Society.
9. Arunodaya Co-operative Marketing Society.

## THANJAVUR

1. Registrar of Co-operative Societies, Madras.
2. Directorate of Agriculture, Madras.
3. Board of Revenue, Madras.
4. Madras State Co-operative Bank, Madras.
5. E.I.D. Parrys, Madras.
6. Shaw Wallace & Co., Madras.
7. Tanjore Central Co-operative Bank, Thanjavur.
8. Kumbakonam Central Co-operative Bank, Thanjavur.
9. Tanjore Co-operative Marketing Federation, Thanjavur.
10. Mannargudi Marketing Society, Mannargudi.
11. Vellur Co-operative Society, Thanjavur (Distt.)
12. Papanasam Taluka Marketing Society -do-
13. Sarabojirapuram Society. -do-
14. Tiruvaiyaru Rural Bank. -do-

## KOLABA

1. Zila Parishad, Kolaba.
2. District Purchase and Sale Union, Panvel.
3. Kolaba Central Co-operative Bank, Pen.
4. District Cooperative Registrar.
5. Maharashtra State Co-operative Bank.

## MANDYA

1. Directorate of Agriculture, Bangalore.
2. Registrar of Co-operative Societies, Bangalore.
3. Mysore State Cooperative Apex Bank, -do-
4. Mysore State Coop. Marketing Society, -do-
5. District Central Coop. Bank, Mandya
6. Taluka Marketing Societies at Maddur, Malavalli, Mandya, Srirangapatna and Pandvapura, and representative primary credit societies.

## SAMBALPUR

1. Directorate of Agriculture.
2. Orissa State Cooperative Marketing Society.
3. Central Co-operative Bank, Bargar.
4. District Project Office, Sambalpur.
5. Regional Marketing Society.
6. Dy. Registrar Co-operative Societies.

## LUDHIANA

1. Directorate of Agriculture, Chandigarh.
2. Registrar of Co-operative Societies, Chandigarh.
3. Punjab State Co-operative Bank Ltd., Chandigarh.

4. Punjab State Co-operative Supply and Marketing Federation, Chandigarh.
5. Ludhiana Marketing Society, Ludhiana.
6. Co-operative District Wholesale Society, Ludhiana.
7. District Central Cooperative Bank, Ludhiana.

### **SRI GANGANAGAR**

1. Directorate of Agriculture, Jaipur.
2. Registrar of Co-operatives, Jaipur.
3. Rajasthan Rajya Sahkari Kraya Vikraya Sangh, Jaipur.
4. Rajasthan State Cooperative Bank, Jaipur.
5. District Central Cooperative Bank, Sri Ganganagar.
6. District Planning Office. -do-
7. District Agricultural Office. -do-

### **UTTAR PRADESH** *Aligarh*

1. Directorate of Agriculture, Lucknow.
2. Registrar of Co-operative Societies, Lucknow.
3. U.P. Cooperative Bank, Lucknow.
4. Uttar Pradesh Cooperative Federation Lucknow.
5. Central Cooperative Bank, Aligarh.
6. District Co-operative Development Federation, Aligarh.
7. Project Office, Aligarh.
8. Primary Marketing Societies and Primary Credit Societies at Sasni and Gabhana.

### ~~WEST BENGAL~~ *Burdwan & Hooghly*

1. Directorate of Agriculture, Calcutta.
2. Registrar of Co-operative Societies, Calcutta.
3. West Bengal Apex Cooperative Agricultural Marketing Society, Calcutta.
4. West Bengal Provincial Cooperative Bank, Calcutta.
5. Project Office, Burdwan.
6. Burdwan Central Cooperative Bank, Burdwan.
7. Kalna-Katva Central Cooperative Bank, Katwa.
8. Burdwan Zonal Cooperative Multipurpose & Marketing Society, Burdwan.
9. Burdwan Central Co-operative Agricultural Production and Marketing Society, Mewari, Burdwan Distt.
10. Mangalkote Thana Marketing Society, Burdwan District.
11. Paharhati Marketing Society, -do-
12. Co-operative Agricultural Society, Orgram.
13. Gopa Ganthar L.S. Union.

## APPENDIX 10

### Names some of the officials and others, met by the committee

#### ANDHRA PRADESH

##### *Officials*

1. Mr. M. A. Abbasi, Secretary to Govt., Finance Dept.
2. „ S.A. Quader, Special Secretary to Govt., Agriculture Deptt.
3. „ Syed Gulam Rasool, Dy. Secretary to Govt., Food and Agriculture.
4. „ K. N. Kapur, Financial Adviser, Food & Agri., Dept.
5. Dr. T. V. Reddy, Director of Agriculture.
6. Mr. D. Satyanarayanan, Chief Inspector of Fertilisers.
7. „ A. V. Rami Reddy, Registrar, Co-op. Societies.
8. „ B. Ranganatha Rao, Asst. Registrar, Co-op. Societies.

##### *Others*

1. Mr. V.P. Malhotra, Managing Director, Andhra State Coop. Bank.
2. „ S. N. Dey, Dy Chief Officer, Reserve Bank of India, Hyderabad.
3. „ M. Dattatreylu, Managing Director, Andhra State Land Mortgage Bank.
4. „ V. C. Hill, Managing Director, Coromandel Fertilisers.
5. „ Ali Khan,
6. „ D. M. Rao,

#### BIHAR

##### *Officials*

1. Mr. C. R. Vaidyanathan, Secretary to Govt., Agriculture & Cooperation.
2. „ Jitendra Prasad, Cane Development Commissioner.
3. „ B. N. Sharma, Director of Agriculture.
4. Dr. H. P. Srivastava, Director, I. A. D. P.
5. Mr. K. K. Ambast, Special Officer (Ferts.), Co-operatives.
6. „ R. B. Mishra, Bihar State Co-operative Marketing Union.
7. „ M. K. Singh, Jt. Registrar, co-operative Societies, (Marketing.)

#### GUJARAT

##### *Officials*

1. Mr. F. J. Heredia, Secretary to Govt., Agriculture & Co-operation Dept.
2. Dr. G. A. Patel, Director of Agriculture.
3. Mr. H. M. Joshi, Registrar, Co-operative Societies.



## HARYANA

### *Officials*

1. Mr. R. N. Chopra, Commissioner for Agricultural Production & Rural Development.
2. „ Mr. I. S. Sarohia, Jt. Secretary to Govt., Development Dept.
3. „ J. R. Dhingra, Dy. Secretary, Finance.
4. „ D. D. Sharma, Registrar, Co-operative Societies.
5. „ J. S. Chauhan, Joint Registrar, Co-operative Societies.
6. „ Gurmel Singh Sindhu, Director of Agriculture.

### *Others*

1. Mr. Maharaj Singh, Chairman, Haryana State Cooperative Bank.
2. „ Dharam Singh, Manager, „ „ „
3. „ H. L. Souda, Additional Secretary, Haryana State Co-operative Supply and Marketing Federation.
4. „ O. P. Bhardwaj, Chief Executive Officer, Haryana, State Co-operative Supply & Marketing Federation.

## MADHYA PRADESH

### *Officials*

1. Mr. R. P. Mishra, Secretary to Govt., Agriculture & Co-operation Dept.
2. Dr. P.S. Lamba, Director of Agriculture.
3. Mr. R. L. Gargava, Registrar of Co-operative Societies.

### *Others*

1. Mr. R. G. Tiwari, President M.P. State Cooperative Marketing Federation.
2. Mr. S. S. Patel, President, M. P. State Cooperative Land Development Bank

## MADRAS

### *Officials*

1. Mr. G. Ramachandran, Secretary to Govt., Finance Dept.
2. „ M. G. Balasubramanian, Secretary to Govt., Agriculture Dept.
3. „ V. Karthikeyan, Secretary to the Govt. of Madras.
4. „ S. M. Sulaiman, Secretary, Board of Revenue.
5. „ V. K. C. Natarajan, Registrar, Co-operative Societies.
6. „ K. Diraviam, Director of Agriculture.
7. „ K. V. Ramanathan, Director of Agriculture.
8. „ E. G. Sivasamy, Jt. Director of Agriculture.
9. „ P. Santhanakrishnan, -do-
10. „ T. S. Francis, -do-
11. „ V. Srinivasan, Chief Inspector of Fertilisers.
12. „ R. Pasupathi, Registrar, Cooperative Societies.
13. „ M. Abdul Hafeez, Jt. Registrar, Co-operative Societies.
14. „ T. V. Srinivasan, Asst. Secretary, Board of Revenue.

*Others*

1. Mr. R. Kanakasabai, Madras State Co-operative Bank.
2. Dr. P. Natesan, -do-
3. Mr. K. S. Subramania Gounder, -do-
4. Mr. V. Alagappan, -do-
5. „ P. S. Rajagopal Naidu, -do-
6. „ D. Varthamanan, Secretary, Madras State Co-operative Bank.

**MAHARASHTRA**

*Officials*

1. Dr. A. U. Shaikh, Secretary to Govt.. Agriculture & Cooperation Dept.
2. „ V G. Vaidya, Director of Agriculture.
3. Mr. G. H. Lalwani, Dy. Secretary, Finance Dept.
4. „ N. Ranganathan, Dy. Secy, Finance Dept.
5. „ B. K. Chougale, Jt. Registrar of Cooperatives (Marketing).
6. „ M. B. Ghorpade, Jt. Registrar of Co-operatives and Financial Adviser, Co-operative Dept.

*Others*

1. Mr. V.M. Joglekar, General Manager, Maharashtra State Cooperatives Bank Ltd.
2. „ K. Subba Reddy, Dy. Chief Officer, A. C. D., Reserve Bank of India, Bombay.
3. Mr. N. S. Kulkarni, Managing Director, Maharashtra State Co-operative Marketing Federation.

**MYSORE**

*Officials*

1. Mr. G. V. K. Rao, Development Commissioner & Special Secretary.
2. „ C. A. Jamkhandimath, Registrar of Co-operatives.
3. Dr. H. R. Arakeri, Director of Agriculture.

*Others*

1. Mr. C. J. Padmanabhan, Managing Director, Mysore State Co-operative Marketing Society.
2. Mr. A. Krishnamurthy, Managing Director, Mysore State Co-operation Bank Ltd.,

**PUNJAB**

*Officials*

1. Mr. S. S. Grewal, Development Commissioner.
2. „ R. S. Phoolka, Registrar of Co-operative Societies.
3. „ Hardial Singh, Dy. Secretary to Agricultural Dept.

4. Mr. K. S. Minhas, Under Secretary to Govt. Co-operation Dept.
6. Dr. Gursham Singh, Director of Agriculture.
6. „ G. S. Kalkat, Dy. Director of Agriculture.

*Others*

1. Mr. Gurcharan Singh, Manager, Punjab State Co-operative Bank.
2. „ Sohan Singh, Secretary, Punjab State Co-op. Supply and Marketing Federation Ltd.
3. „ K. N. Chopra, Jt. Secretary, -do-
4. „ P. N. Bahl, Marketing Expert, -do-
5. „ B. Dutt, Asst. Secretary, -do-
6. „ Daljit Singh, Secretary, Punjab State Co-operative Land Mortgage Bank.
7. „ Mohinder Singh, Jt. Registrar of Co-operative Societies.

**RAJASTHAN**

*Officials*

1. Mr. R. D. Mathur, Agricultural Production Commissioner.
2. „ M. M. K. Wali, Additional Secretary, Dept. of Cooperation.
3. „ Raja Niranjana Singh, Registrar of Co-operatives.
4. „ Kala, Director of Agriculture.
5. „ Pooran Singh, Secretary Rajasthan Rajya Sahkari Kraya Vikraya Sangh.

**UTTAR PRADESH**

*Officials*

1. Mr. M. A. Qureshi, Agricultural Production Commissioner.
2. „ B. N. Maheshwari, Secretary, Finance Dept.
3. „ A. Das, Special Secretary, Agriculture Dept.
4. „ N. S. P. Yadav, Dy. Secretary, Agriculture Dept.
5. „ M. H. Haq, Jt. Secretary, Cooperation Dept.
6. „ A. P. Singh, Registrar of Co-operatives.
7. „ G. C. Chaturvedi, Cane Commissioner.
8. „ B. R. Chaturvedi, Secretary, Cane Unions Federation.
9. „ Iftikhar Hussain, Addl. Registrar of Co-operatives.
10. „ D.S. Varma, -do-
11. „ Ram Krishan, Director of Agriculture.
12. „ P. Mukherjee, Dy. Director, Fertilisers & Manures.
13. „ T. C. Sharma, Dy. Director, Agricultural Supplies Organisation.

*Others*

1. Mr. Mr. O. P. Tyagi, Secretary, Provincial cooperative Federation.
2. „ Nihal Singh, Jt. Secretary, -do-
3. „ A. R. Khan, General Manager, U.P. Co-operative Bank.
4. „ Tirlok Chand, Dy. General Manager, -do-
5. „ Fateh Singh Rana, Director, Provincial Cooperative Federation.

6. Mr. Ram Valabh Singh, Director, Provincial Cooperative Federation.
7. „ R.K. Sahi, State Co-op. Cane Unions Federations.

## **UTTAR PRADESH**

### *Others*

8. Mr. Surendra Varma, State Cooperative Cane Unions Federation
9. „ F. A. Khan, -do-

## **WEST BENGAL**

### *Officials*

1. Mr. R. Ghosh, Agricultural Production Commissioner.
2. „ G. D. Goswami, -do-
3. „ S. R. Das, Jt. Secretary to Govt., Finance Dept.
4. „ A.T. Sanyal, Director of Agriculture.
5. Dr. K. Sengupta, Addl. Director of Agriculture (Extension)
6. Mr. C. R. Guha Majumdar, Addl. Registrar of Co-operative Societies.
7. „ S. Mukherjee, Dy. Secretary to Cooperative Dept.
8. „ H. Gupta, Secretary, Apex Co-operative Marketing Society.
9. „ C. R. Bhattacharjee, Dy. Secretary to Agriculture Dept.
10. „ M. N. Thakur, Dy. Registrar, (Marketing)

### *Others*

1. Mr. B. Majumdar, Chairman Provincial Cooperative Bank.
2. „ N. Sen Gupta, Secretary, -do-
3. „ A. Choudhary, Manager, West Bengal Provincial Co-op. Bank Ltd.

## APPENDIX 11

### Names of the Ministers met by the Committee

#### ANDHRA PRADESH

1. Mr. Thimma Reddy, Minister for Agriculture.

#### HARYANA

1. Mr. Rao Birendra Singh, Chief Minister.
2. Mr. Moolchand Jain, Finance Minister.

#### MADRAS

1. Mr. C. N. Annadurai, Chief Minister.
2. Mr. A. Govindswami, Minister for Agriculture.
3. Mr. S. Madhavan, Minister for Co-operation.

#### PUNJAB

1. Mr. Balu Ram, Minister for Co-operation

#### UTTAR PRADESH

1. Mr. Jai Ram Verma, Minister for Agriculture.
2. Mr. Ganga Bhakt Singh, Minister for Co-operation.

#### WEST BENGAL

1. Dr. P. C. Ghosh, Minister for Food and Agriculture.

## APPENDIX 12

### Questionnaire issued to the Commercial Banks

#### A. PRODUCTION CREDIT

Name of the Bank :

1. Please give a brief account of the activities of the bank in the field of short-term agricultural finance.
2. Please give in the (Proforma enclosed) the particulars of the short-term production credit for agriculture advanced by the bank during the past two years and current year.
3. What is the proportion of short-term advances of the bank for agriculture to its total advances for all purposes during the past two years ? What is the proportion of credit for fertiliser to total production credit for agriculture ?
4. What are the States in which the bank has been providing short-term loans to the farmers for fertilisers.
5. What is the procedure followed by your bank for sanctioning and disbursing short-term credit for inputs, including fertilisers, to the farmers ? What are the arrangements for the supervision over utilisation of loans and their recovery?
6. What is the organisational set up of the bank to deal with agricultural financing and problems connected therewith ?
7. What are the various problems faced by your bank in providing fertiliser credit to the farmers ? What are the prospects for expansion of its role in the field in future ? Have any schemes been drawn up in this regard ? If so, please furnish details ?
8. What are your suggestions to promote the bank's larger participation in agricultural financing?

#### B. DISTRIBUTION CREDIT

9. Please give below the quantum of finance made available by your bank to the distribution agencies for the distribution of fertilisers during the past three years.

Year	Quantum of finance made available			
	Cooperatives		Private agencies	
	Limits sanctioned	Maximum amount drawn	Limits sanctioned	Maximum amount drawn

10. What are the terms and conditions on which credit is made available to the above agencies for distribution of fertilisers ? Which are the months in which the drawals are the highest ?
11. What are the problems encountered by the bank in providing distribution credit for fertilisers ? Was the bank at any time unable to meet the requirements in this regard ? If so, please furnish details and the reasons therefor.
12. What is the scope for further expansion in the bank's credit facilities for fertilisers distribution?
  - (a) to cooperative agencies and
  - (b) private agencies ?
13. Please indicate your suggestions, if any, to promote larger participation of the commercial banks in the provision of (a) short-term credit to the farmers, and (b) credit for the distribution of fertilisers to the distribution agencies during the Fourth Plan ?

#### **Questionnaire issued to The Food Corporation of India**

1. Please give a brief account of the schemes, if any, taken up on hand by the Food Corporation of India for providing short-term agricultural credit, including credit for fertilisers to, farmers in the country. The account may include (i) the States where the scheme is taken up, (ii) the crops being financed, (iii) the extent of the area financed under different crops, so far, and the quantum of finance provided (a) for fertilisers, (b) other inputs, and (c) cash, as in the enclosed proforma.
2. Please indicate the agencies through which credit for fertiliser and other inputs to the agriculturists is provided by the Food Corporation of India in different States. Also please indicate the arrangements made for the recovery of the loans from the farmers, the position of recoveries in relation to demand during the past two years.
3. What is the procedure followed by the FCI and what are the terms and conditions laid down for sanctioning short-term production credit for fertilisers?

4. What are the problems encountered by the FCI in different States in providing short-term credit for fertilisers ?
5. Has the FCI drawn up any scheme for the extension of credit facilities provided by it to the farmers for fertilisers and other inputs in future ? If so, please, give details of the schemes.
6. Has the FCI worked out any arrangements for coordination between the FCI and other credit agencies operating in the field, such as cooperatives and government agencies ? If so, please furnish details.
7. Has the FCI undertaken distribution of fertilisers to farmers in any area during 1965-66 and 1966-67 ? If so, please, give details of distribution arrangements made, i.e., the agency through which distribution was done and the terms and conditions thereof.
8. Has the FCI provided any distribution credit to the distribution agencies for fertilisers ? If so, please indicate the quantum of credit provided, and the terms and conditions thereof, for 1965-66 and 1966-67.
9. What suggestions, if any, do you offer for improving the system of distribution of fertilisers in the different States on the basis of your experience ?



## APENDIX 13

**Representatives of the State Bank of India and of Commercial Banks met  
by the Committee at different Centres of Food Corporation of India.**

### **BOMBAY**

1. Mr. V. T. Dehejia,  
Chairman, State Bank of India.
2. Mr. J. S. Varshneya,  
Chief Officer, Rural Credit Section,  
State Bank of India.
3. Mr. K. M. D. Thackersey,  
President, Indian Banks' Association, Bombay.
4. Mr. N. M. Chokshi,  
Chairman, Bank of Baroda, Bombay.
5. Mr. D. Rattansey,  
Chairman, Union Bank of India,  
Bombay.
6. Mr. T. D. Kansara,  
General Manager, Bank of India, Bombay.
7. Mr. S. Venkataraman,  
Manager, Loans & Industrial Finance Dept.,  
Bank of India, Bombay.
8. Mr. C. V. Joag,  
General Manager, Bank of Maharashtra,  
Poona.
9. Mr. A. D. Pai,  
Managing Director, Canara Bank,  
Bangalore.
10. Mr. T. A. Pai,  
Managing Director,  
Syndicate Bank,  
Manipal.
11. Mr. V. C. Patel,  
General Manager, Central Bank of India,  
Bombay.

12. Mr. A. A. Norrie,  
Manager, Chartered Bank,  
Bombay.
13. Mr. Haridas K. Swali,  
Deputy Manager, Dena Bank,  
Bombay.
14. Mr. E. L. Williams,  
Chief Manager for India,  
National and Grindlays Bank,  
Calcutta.
15. Mr. V. R. Kulkarni,  
Sangli Bank,  
Sangli.
16. Mr. A. Suryanarayana Rao,  
Asstt. General Manager, Andhra Bank,  
Hyderabad.

#### **CALCUTTA**

1. Mr. J. S. Jaspal,  
Manager, Reserve Bank of India,  
Calcutta.
2. Mr. B. Majumdar,  
Chairman West Bengal Provincial Cooperative Bank,  
Calcutta.
3. Mr. B. K. Dutt,  
Managing Director, United Bank of India, Calcutta.
4. Mr. R. B. Shah,  
General Manager, United Bank of India, Calcutta.
5. Mr. B. N. Kapur,  
Asstt. General Manager, Allahabad Bank, Calcutta.
6. Mr. N. Basu,  
Deputy General Manager,  
United Commercial Bank, Calcutta.
7. Mr. N. Sen Gupta,  
Secretary, West Bengal Provincial Cooperative Bank, Calcutta.

#### **DELHI**

1. M. P. C. Sood,  
Manager, Reserve Bank of India, New Delhi.

2. Mr. S.C. Trikha,  
General Manager, Punjab National Bank,  
New Delhi.
3. Mr. K. Subramanian,  
General Manager,  
State Bank of Patiala,  
Patiala.
4. Mr. M. L. Bhalla,  
Chief Agent, Central Bank of India,  
New Delhi.
5. Mr. T. R. Varadachari,  
Secretary and Treasurer,  
State Bank of India.
6. Mr. R. R. Gupta,  
General Manager, Delhi State Cooperative Bank Ltd., New Delhi.
7. Mr. L. R. Suneja,  
Deputy General Manager,  
United Commercial Bank.
8. Mr. T. R. Tuli,  
General Manager,  
New Bank of India, New Delhi.
9. Mr. M. V. Subbarao,  
Regional Manager, Bank of India, New Delhi.
10. Mr. P. S. Navlakha,  
Regional Manager, Bank of Baroda, New Delhi.
11. Mr. K. S. Chakrapani,  
Deputy Chief Officer,  
Dept. of Banking Operations & Development,  
Reserve Bank of India, New Delhi.
12. Mr. M. A. Chidambaram,  
Deputy Chief Officer, Reserve Bank of India (A.C.D.)  
New Delhi.

## **HYDERABAD**

1. Mr. A. T. Mehra,  
Secretary & Treasurer, State Bank of India.
2. Mr. B. R. Mukherji,  
Deputy Secretary and Treasurer,  
State Bank of India.

3. Mr. Shetty,  
Chief Development Officer,  
State Bank of India.
4. Mr. A. R. Murthy,  
Public Relations Officer, State Bank of India.
5. Mr. Seethapathi Rao,  
General Manager, State Bank of Hyderabad.
6. Mr. M. Dattreyulu,  
Managing Director,  
Andhra State Land Mortgage Bank.
7. Mr. V. P. Malhotra,  
Managing Director,  
Andhra State Cooperative Bank.
8. Mr. S. N. De,  
Deputy Chief Officer, Reserve Bank of India,  
(A.C.D.).
9. Mr. Bhat,  
Dena Bank.

#### **MADRAS**

1. Mr. R. L. Magon,  
Secretary and Treasurer,  
State Bank of India, Madras.
2. Mr. V. S. Natarajan,  
Deputy Secretary and Treasurer,  
State Bank of India, Madras.
3. Mr. O. R. Srinivasan,  
Secretary,  
Indian Bank, Madras.
4. Mr. G. Laxminarayanan,  
General Manager,  
Indian Overseas Bank, Madras.
5. Mr. G. R. Bomba,  
Dist. Manager,  
Punjab National Bank, Madras.
6. Mr. S. Chakravarthy,  
Chief Agent, Central Bank of India, Madras.
7. Mr. S. Mahadevan,  
Agent,  
Karur Vyaya Bank, Madras.

8. Mr. D. Varthamanan,  
Secretary,  
Madras State Cooperative Bank, Madras.
9. Mr. M. S. Krishnamurthy,  
Agent, Bank of Madras, Madras.
10. Mr. P. T. Prabhu,  
Manager, Canara Bank, Madras.
11. Mr. P. B. Menon,  
Manager, Reserve Bank of India.
12. Mr. P. N. T. Chary,  
Deputy Chief Officer,  
Reserve Bank of India.

*Officials of the Food Corporation of India met by the Committee*

1. Dr. K. T. Chandy,  
Chairman.
2. Dr. N. P. Sen,  
Managing Director.

## APPENDIX 14

**Copy of the letter addressed by the Government of India, Ministry of Food, Agriculture, C.D. & Cooperation (Department of Agriculture) to the State Governments in connection with field investigations.**

M. Subramanian, I.A.S.,  
Officer on Special Duty  
(Fertiliser)

D.O. No. 19-8/66-M.  
Government of India,  
Ministry of Food, Agri. C. D. &  
Co-operation,  
(Department of Agriculture)  
New Delhi, August 9, 1966.

Dear Shri

In view of the importance of fertiliser supplies in increased agricultural production, the Fertiliser Association of India have appointed a Fertiliser Credit Committee with Shri B. Venkattapiah, formerly Deputy Governor of the Reserve Bank of India, as the Chairman. As you are aware, the Fertiliser Association is the representative body of the fertiliser producers, including producers of fertiliser mixtures in the country. As larger quantities of fertilisers are planned to be used during the 4th Plan the problem of credit availability for distribution of fertilisers and credit availability to cultivators for purchase of fertilisers has been receiving much attention. The action taken by the Association in establishing the Committee is, therefore, timely and the recommendations of the Committee will be useful to all concerned. We would, therefore, request you to extend your co-operation and assistance to the Committee in its field of work. The Committee have decided that their Secretary will visit certain selected districts in your State. A list of the districts provisionally selected by the Committee in the various States is enclosed. The Secretary of the Committee, Shri B. Venkata Rao, whose services have been obtained by the Committee from the Reserve Bank of India will intimate his programme to the State Government. We shall be grateful if he is afforded all necessary facilities.

The Committee also proposes to issue a questionnaire to elicit information from the States. The information called for in the questionnaire may also kindly be supplied to them as expeditiously as possible.

Yours sincerely,

Sd/-

(M. Subramanian)

Secretary to the Government of Agriculture Department.

## APPENDIX 15

### Salient features of the Crop Loan System

1. The credit needs of the members are to be determined with reference to the scales of production expenditure in respect of different crops and are to be met in cash and kind subject to repaying capacity.
2. As a practical proposition, repaying capacity of a member might be taken at half the estimated gross produce under the traditional system of cultivation.
3. The limit of eligibility of a member for short-term credit should consist of three components :
  - (a) A cash component for traditional cultivation which might not generally exceed 1/3rd of the value of total gross produce under such cultivation. There should be no insistence on the lifting of the kind component before his cash component can be advanced.
  - (b) A kind component representing inputs such as fertilisers and pesticides.
  - (c) An additional cash component upto a limit of 50 per cent. of the use of inputs covered under that item.

The use of components (b) and (c) is assumed to generate corresponding repaying capacity.

A member will be allowed to draw from the limit fixed for him in the above manner provided.

- (i) he is not a defaulter,
  - (ii) he holds shares in the society in the prescribed proportion,
  - (iii) he has furnished the prescribed security,
  - (iv) he has executed the necessary documents, including an agreement to sell his produce through an approved marketing society.
4. All members should be eligible for the first cash component (a) irrespective of whether they use fertilisers or not, but the additional cash component (c) should be allowed to a member only after he lifts the kind components (b).
5. Within the repaying capacity of 50 per cent of the value of the total gross produce assumed as above, about a third, i.e., 30 to 35 per cent of the gross produce may be reckoned for short-term credit and the balance to meet instalments of medium-term loans. The use of components (b) and (c) is assumed to generate corresponding repaying capacity.

6. A scale of finance per acre incorporating the components (a), (b) and (c) should be worked out for each crop in the area of each central cooperative bank.
7. Each central cooperative bank should convene a conference every year of representatives of societies, local officers of agriculture and cooperation departments, field level workers of the bank and the extension staff. On the basis of consensus of opinion in this conference, the central cooperative bank should, after taking into account its resources position as also availability of inputs, determine the scale of finance for various crops. If the resources of the bank do not permit the adoption of the full scale of finance recommended by the conference, reduction should be made only in component (a).
8. Advances should be made to the farmers in separate instalments to correspond to their seasonal requirements, i.e., for kharif and rabi, and not in one lump sum for both the seasons. The due dates for the recovery of advance made for each season should be fixed with reference to the point of time when the majority of cultivators in the area market their produce.
9. In the case of cultivators for whom farm plans are prepared by the extension staff in time, components (b) and (c) might be provided according to such plans. In other cases these components should be disbursed according to the scales of finance approved by the central bank. If a member subsequently requires larger credit on the basis of farm plans, such additional credit might be provided and, for this purpose, the central cooperative bank should sanction additional credit limits to the societies.
10. In fixing the individual maximum borrowing power of the primary credit societies, due regard has to be paid to the ability of the societies and banks to raise the required resources, in order to meet the needs of cultivators for adopting improved practices. The principle that the available resources should not be monopolised by a few big cultivators should also be kept in mind. As a first step, the individual maximum borrowing power in all cases where it is lower than Rs. 2,000 might be raised to Rs. 2,000 and, thereafter it may be raised gradually having regard to the availability of resources over the next few years, to Rs. 5,000 per member in unirrigated areas and Rs. 10,000 per member in irrigated areas. Loans in excess of such individual maximum borrowing power may be sanctioned, provided resources are available and there is justification for a larger loan on the basis of production programme and repaying capacity of the member.
11. To encourage cultivators to sell produce to or through marketing or processing societies, an additional cash loan or incentive finance upto 5%, or even 10% of the loan recovered through such societies in the previous year might be given to cultivators so selling their produce. Such additional credit is to be given preferably, during the period immediately preceding the harvest.



## **STATEMENTS**

**STATEMENT I**

**Targets and achievement of agricultural inputs and irrigation facilities**

Programme	Unit	Target	Achievement	Percentage increase (+) or decrease (-) of Col. 4 over Col. 3
1	2	3	4	5
1. Major and medium irrigation (gross) — additional area benefited	Million acres	12.8	5.5	(-) 57.0
2. Minor irrigation (gross) additional area benefited	,,	12.8	13.1	(+) 2.3
3. Improved seeds of food-grains	,,	203	120	(-) 41.0
4. Consumption of chemical fertilisers:				
(a) Nitrogenous in terms of nitrogen	Million tonnes	1.02	0.6	(-) 41.2
(b) Phosphatic in terms of P <sub>2</sub> O <sub>5</sub>	Thousand tonnes	406	150	(-) 63.1
(c) Potassic in terms of K <sub>2</sub> O	,,	203	90	(-) 55.7
5. Plant protection	Million acres	50.0	40.7	(-) 18.6

Source: Report of the Foodgrains Policy Committee 1966.

## STATEMENT II

## Intensive Agricultural District Programme—Distribution of fertilisers

('00 tonnes)

District	Quantities of nitrogenous fertiliser distributed (in terms of ammonium sulphate)							Quantities of phosphatic fertilisers distributed (in terms of superphosphate)						
	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67*	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67*
1. West Bengal <i>Goalpara</i>	186	345	490	412	648	399	362	46	165	207	191	321	117	20
2. Cachar	—	—	@	1	8	20	1	—	—	@	1	8	25	3
3. Shahabad	82	112	157	109	164	191	247	9	36	52	60	65	56	34
4. Surat	—	100	135	161	241	232	145	—	29	31	42	61	90	44
5. Alleppey	—	48	65	70	80	114	74	—	69	80	95	70	79	69
6. Palghat	—	23	65	83	111	134	171	—	15	24	32	39	37	41
7. Raipur	54	82	74	98	139	129	139	5	22	38	82	83	115	47
8. Thanjavur	175	209	263	290	419	640	620	136	177	284	347	456	339	290
9. Bhandara	—	—	18	30	31	33	54	—	1	6	20	18	23	30
10. Mandya	—	153	271	419	381	461	315	—	68	109	219	123	124	73
11. Sambalpur	—	8	17	28	46	81	147	—	5	18	29	38	33	56
12. Ludhiana	52	114	146	166	404	432	363	4	20	24	56	79	61	101
13. Pali	2	11	14	10	31	34	33	1	6	4	3	12	16	13
14. Aligarh	11	16	45	80	154	214	138	2	3	6	12	31	30	25
15. Burdwan	—	77	100	173	184	235	122	—	21	67	86	109	124	34
Total :	562	1,298	1,860	2,130	3,041	3,349	2,931	203	637	950	1,275	1,513	1,269	880

\* Upto the quarter ended 31st December 1966.

@ Less than or equal to 50 tonnes.

Source : Ministry of Food, Agriculture, C.D. and Cooperation.

### STATEMENT III

**High-Yielding Varieties Programme targets for coverage and requirements of fertilisers for different crops by 1970-71**

(Fertilisers in hundred tonnes of nutrients)

Name of the State	Name of the crop	Area in thousand acres			Nitrogen			Phosphoric acid			Potash
1	2	3	4	5	6	7	8	9	10	11	
1. Andhra Pradesh	Paddy	2,100		764		477		382			
	Wheat	—		—		—		—			
	Maize	100		36		23		18			
	Bajra	200		36		27		18			
	Jowar	500	2,900	136	972	91	618	68	486		
2. Assam	Paddy	150		55		34		27			
	Wheat	2		1		—		—			
	Maize	48	200	17	73	11	45	9	36		
3. Bihar	Paddy	1,000		364		227		182			
	Wheat	746		270		169		135			
	Maize	700	2,446	225	889	159	555	127	444		
4. Gujarat	Paddy	—		—		—		—			
	Wheat	—		—		—		—			
	Maize	100		36		23		18			
	Bajra	1,400		254		191		127			
	Jowar	300	1,800	82	372	54	268	41	186		
5. Haryana	Paddy	200		73		45		36			
	Wheat	900		327		204		163			
	Maize	70		25		16		13			
	Bajra	500	1,670	91	516	68	333	45	257		
6. Jammu & Kashmir	Paddy	25		9		6		5			
	Wheat	30		11		7		5			
	Maize	50	105	18	38	11	24	9	19		
7. Kerala	Paddy		1,200		436		273		218		
8. Madras	Paddy	1,700		618		386		309			
	Wheat	—		—		—		—			
	Maize	35		13		8		7			
	Bajra	100		18		14		9			
	Jowar	200	2,035	55	704	36	444	27	352		

(Continued)

STATEMENT III (Continued)

Name of the State	Name of the crop	Area in thousand acres			Nitrogen			Phosphoric acid			Potash
1	2	3	4	5	6	7	8	9	10	11	
9. Madhya Pradesh	Paddy	100			36			23		18	
	Wheat	200			73			45		36	
	Maize	450			163			102		82	
	Bajra	75			14			10		7	
	Jowar	345	1,170		94	380		63	243	47	190
10. Maharashtra	Paddy	1,000			364			227		182	
	Wheat	400			145			91		73	
	Maize	600			218			136		109	
	Bajra	1,000			182			136		91	
	Jowar	2,000	5,000		545	1,454		364	954	273	728
11. Mysore	Paddy	433			157			98		79	
	Wheat	100			36			23		18	
	Maize	150			55			34		27	
	Bajra	200			36			27		18	
	Jowar	400	1,283		109	393		73	255	55	197
12. Orissa	Paddy	1,000			364			227		182	
	Wheat	10			4			2		2	
	Maize	100			36			23		18	
	Jowar	6	1,116		2	405		1	253	1	203
	13. Punjab	Paddy	300			109			68		53
Wheat		2,000			727			455		364	
Maize		350			127			80		64	
Bajra		100	2,750		18	981		14	617	9	490
14. Rajasthan		Paddy	10			4			2		2
	Wheat	463			168			105		84	
	Maize	150			55			34		27	
	Bajra	100			18			14		9	
	Jowar	100	823		27	272		18	173	14	136
15. Uttar Pradesh	Paddy	1,000			364			227		182	
	Wheat	3,000			1,089			680		544	
	Maize	1,000			364			227		182	
	Bajra	300			55			41		27	
	Jowar	150	5,450		41	1,913		27	1,203	20	955

(Continued)

**STATEMENT III (Concluded)**

Name of the State	Name of the crop	Area in thousand acres	Nitrogen	Phosphoric acid	Potash
1	2	3	4	5	6
16. West Bengal	Paddy	2,126	771	482	386
	Wheat	50	18	11	9
	Maize	40	15	9	7
	Bajra	—	—	—	—
	Jowar	— 2,216	— 804	— 502	— 402
17. Union Territories and Nagaland	Paddy	158	57	36	29
	Wheat	100	36	23	18
	Maize	57	21	13	10
	Bajra	25 340	5 119	3 75	2 59
<b>Total:</b>		<b>32,504</b>	<b>10,721</b>	<b>6,835</b>	<b>5,358</b>

**SUMMARY**

Crop	Area in thousand acres	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Paddy	12,503	4,546	2,839	2,270
Wheat	8,001	2,905	1,816	1,453
Maize	4,000	1,453	908	727
Bajra	4,000	727	545	363
Jowar	4,001	1,090	727	545
	<b>32,504</b>	<b>10,721</b>	<b>6,835</b>	<b>5,358</b>

**Recommended doses (in kg. per acre)**

Crop	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Paddy	36	23	18
Wheat	36	23	18
Maize	36	23	18
Bajra	18	14	19
Jowar	27	18	14

Source : Government of India, Ministry of Food, Agriculture, O.D. & Co-operation (Department of Agriculture)

## STATE

## Consumption level of fertilisers in the States during 1965-66 and 1966-67

State	Consumption of...						
	1965-66			1966-67			Average@
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N
1	2	3	4	5	6	7	8
1. Andhra Pradesh	78,792 (28.1)	30,685 (21.9)	5,648 (7.4)	175,859 (62.8)	35,809 (25.6)	10,553 (13.8)	127,326 (45.5)
2. Assam	5,090 (24.7)	2,398 (33.3)	443 (2.2)	1,612 (7.8)	2,500 (34.7)	991 (5.0)	3,351 (16.3)
3. Bihar	31,893 (15.6)	3,421 (3.6)	1,352 (2.3)	59,075 (28.8)	20,891 (22.2)	3,054 (5.1)	45,484 (22.2)
4. Gujarat	30,702 (15.4)	12,548 (37.8)	2,721 (45.4)	36,867 (18.4)	26,661 (80.3)	3,078 (51.3)	33,785 (16.9)
5. Haryana	—	—	—	14,157 (17.7)	954 (6.0)	185 (1.2)	14,157 (17.7)
6. Jammu & Kashmir	3,472 (40.2)	127 (5.2)	—	9,440 (109.4)	3,806 (156.0)	1,519 (20.9)	6,456 (74.9)
7. Kerala	8,245 (9.4)	4,369 (8.7)	21,409 (32.9)	29,274 (33.4)	7,645 (15.3)	19,445 (29.9)	18,760 (21.4)
8. Madhya Pradesh	18,404 (27.4)	8,845 (21.8)	2,526 (27.6)	4,241 (6.3)	9,139 (22.5)	930 (10.2)	11,322 (16.9)
9. Madras	70,756 (48.3)	17,122 (19.4)	18,213 (20.0)	95,435 (65.2)	36,030 (40.8)	29,224 (32.0)	83,095 (56.7)
10. Maharashtra	57,626 (15.2)	17,113 (9.2)	11,768 (8.6)	87,896 (23.2)	31,895 (17.1)	20,767 (15.2)	72,761 (19.2)
11. Mysore	31,035 (23.2)	10,222 (11.3)	7,793 (16.7)	50,294 (37.5)	19,286 (21.3)	13,229 (28.3)	40,665 (30.3)
12. Orissa	15,973 (17.7)	1,137 (3.5)	963 (3.8)	15,548 (17.3)	9,604 (30.1)	1,668 (6.7)	15,760 (17.5)

**MENT IV**

**in relation to the consumption target for 1970-71**

(metric tonnes)

**fertiliser nutrients**

for 1965-66 & 1966-67		Yearly average increase required during 1967-68 to 1970-71 to reach the target for* 1970-71			Target for 1970-71		
P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
9	10	11	12	13	14	15	16
33,247 (23.7)	8,100 (10.7)	38,169 (13.6)	26,688 (19.1)	16,978 (22.3)	280,000 (100)	140,000 (100)	76,000 (100)
2,449 (34.0)	727 (3.6)	4,312 (20.9)	1,188 (16.5)	4,818 (24.1)	20,600 (100)	7,200 (100)	20,000 (100)
12,156 (12.9)	2,203 (3.7)	39,879 (19.5)	20,461 (21.8)	14,449 (24.1)	205,000 (100)	94,000 (100)	60,000 (100)
19,605 (59.1)	2,900 (48.3)	41,554 (20.8)	3,399 (10.2)	775 (12.9)	200,000 (100)	33,200 (100)	6,000 (100)
945 (6.0)	185 (1.2)	16,461 (20.6)	3,762 (23.5)	3,704 (24.7)	80,000 (100)	16,000 (100)	15,000 (100)
1,966 (80.6)	1,519 (20.9)	544 (6.3)	119 (4.9)	1,438 (19.8)	8,630 (100)	2,440 (100)	7,270 (100)
6,007 (12.0)	20,427 (31.4)	17,210 (19.6)	10,998 (22.0)	11,143 (17.1)	87,600 (100)	50,000 (100)	65,000 (100)
8,992 (22.1)	1,728 (18.9)	13,932 (20.8)	7,912 (19.5)	1,853 (20.3)	67,050 (100)	40,640 (100)	9,140 (100)
26,576 (30.1)	23,718 (26.0)	15,839 (10.8)	15,451 (17.5)	16,890 (18.5)	146,450 (100)	88,380 (100)	91,280 (100)
24,504 (13.1)	16,268 (11.9)	76,617 (20.2)	40,529 (21.7)	30,096 (22.0)	379,230 (100)	1,86,620 (100)	136,650 (100)
14,754 (16.3)	10,511 (22.5)	23,334 (17.4)	18,972 (20.9)	9,055 (19.4)	134,000 (100)	90,640 (100)	46,730 (100)
5,370 (16.8)	1,315 (5.3)	18,560 (20.6)	6,658 (20.8)	5,921 (23.7)	90,000 (100)	32,000 (100)	25,000 (100)

(Continued)



## STATE

1	2	3	4	5	6	7	8
13. Punjab	46,257 (26.4)	3,288 (4.7)	1,210 (2.4)	68,030 (38.9)	10,345 (14.8)	5,702 (11.4)	57,144 (32.6)
14. Rajasthan	9,042 (10.5)	1,241 (5.2)	1,208 (12.0)	13,542 (15.8)	5,072 (21.2)	740 (7.3)	11,292 (13.2)
15. Uttar Pradesh	88,105 (27.5)	5,069 (5.1)	4,986 (10.0)	97,855 (30.6)	33,341 (33.3)	10,595 (21.2)	92,980 (29.1)
16. West Bengal	32,388 (36.9)	7,488 (43.3)	8,452 (35.5)	26,643 (30.4)	9,174 (53.0)	11,669 (48.9)	29,516 (33.7)

Note. Figures in a brackets indicate the percentage consumption in relation to target  
Source: Consumption in 1965-66 and 1966-67 from Fertiliser Statistics published  
@For arriving at these figures the average consumption level reached during 1965-  
of consumption in any one year.

\*Figures relate to the supplies made to the States which are assumed to have been

**MENT IV (Concluded)**

9	10	11	12	13	14	15	16
6,816 (9.7)	3,456 (6.9)	29,464 (16.8)	15,796 (22.6)	11,636 (23.3)	175,000 (100)	70,000 (100)	50,000 (100)
3,156 (13.2)	974 (9.6)	18,632 (21.7)	5,186 (21.7)	2,282 (22.6)	85,820 (100)	23,900 (100)	10,000 (100)
19,205 (19.2)	7,790 (15.6)	56,755 (17.7)	20,199 (20.2)	10,552 (21.1)	320,100 (100)	100,000 (100)	50,000 (100)
8,331 (48.2)	10,060 (42.2)	14,538 (16.6)	2,242 (13.0)	3,445 (14.5)	87,670 (100)	17,300 (100)	23,840 (100)

for 1970-71.

by the Fertiliser Association of India.

66 and 1966-67 has been taken as basis, in order to neutralise the conspicuously low level consumed.

## STATEMENT

## Consumption of fertilisers in 1965-66 and 1966-67 in relation

District	Consumption of						
	1965-66			1966-67			Average
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N
1. West Godavari (Andhra Pradesh)	10,146 (35.7)	1,708 (9.8)	14 (0.1)	9,483 (33.4)	418 (2.4)	130 (0.9)	9,815 (34.5)
2. Muzaffarpur (Bihar)	5,581 (69.8)	2,092 (83.7)	234 (—)	4,527 (56.6)	1,722 (68.9)	188 (—)	5,054 (63.2)
3. Palghat (Kerala)	2,518 (22.8)	995 (14.8)	892 (17)	3,698 (33.4)	865 (12.8)	313 (6)	3,108 (28.1)
4. Raipur (Madhya Pradesh)	2,699 (10.1)	1,862 (11.3)	8 (0.06)	2,913 (10.9)	777 (4.7)	95 (0.8)	2,806 (10.5)
5. Thanjavur (Madras)	10,438 (28.9)	4,640 (19.3)	—	14,825 (41.1)	5,428 (22.6)	843 (4.7)	12,632 (35)
6. Kolaba (Maharashtra)	1,015 (8.8)	171 (2.6)	—	967 (8.4)	54 (0.8)	—	991 (8.6)
7. Mandya (Mysore)	8,656 (98.7)	1,575 (29)	645 (13.9)	7,270 (82.9)	1,317 (24.3)	459 (11.3)	7,963 (90.8)
8. Sambalpur (Orissa)	1,938 (8)	158 (1)	144 (1.2)	1,340 (8.5)	619 (4.1)	302 (2.5)	1,639 (6.7)
9. Ludhiana (Punjab)	9,045 (65.0)	1,334 (15.9)	366 (5.7)	9,868 (70.9)	1,970 (23.4)	317 (518)	9,456 (68)
10. Sri Ganganagar (Rajasthan)	3,720 (28.6)	198 (4.8)	—	3,680 (28.3)	178 (4.3)	93 (2.6)	3,700 (28.5)
11. Aligarh (Uttar Pradesh)	288 (22.2)	499 (4.2)	60 (0.7)	5,492 (28.4)	492 (4.2)	179 (2)	4,890 (25.3)
12. Burdwan (West Bengal)	4,181 (15.1)	1,214 (7.1)	610 (4.5)	3,469 (12.7)	1,360 (7.9)	532 (3.9)	3,839 (13.9)

Note: Figures in brackets indicate percentages consumption in relation to target source: Data relating to consumption in 1965-66 and 1966-67 : District I.A.D.P.L. Data regarding 1970-71 targets of consumption : Ministry of Food & Agriculture, on Joint Technical Group for Transport Planning, Planning Commission 1967. \*For arriving at these figures the average consumption level reached during 1965-level of consumption in any one year.

V

to the level to be reached by 1970-71

(metric tonnes)

fertiliser nutrients

for 1965-66 & 1966-67		Yearly average increase required during 1967-68 to 1970-71 to reach the target for 1970-71*			Target for 1970-71		
P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
1,063 (6.1)	72 (0.3)	4,660 (16.4)	4,111 (23.5)	3,417 (24.9)	28,417 (100)	17,494 (100)	13,723 (100)
1,907 (76.3)	211 (—)	736 (9.2)	148 (5.9)	—	8,000 (100)	2,500 (100)	—
930 (13.8)	603 (11.5)	1,990 (18)	1,450 (21.5)	1,160 (22.1)	11,060 (100)	6,741 (100)	5,252 (100)
1,320 (8.0)	52 (0.4)	1 6,010 (22.4)	3,796 (23)	3,140 (24.9)	26,831 (100)	16,503 (100)	12,610 (100)
5,034 (21.0)	843 (4.7)	5,855 (16.2)	4,758 (19.8)	1 4,195 (23.8)	36,050 (100)	24,033 (100)	17,624 (100)
113 (1.7)	—	2,633 (22.9)	1,599 (24.6)	908 (25)	11,500 (100)	6,500 (100)	3,630 (100)
1,446 (26.6)	552 (13.6)	202 (2.3)	998 (18.4)	879 (21.6)	8,773 (100)	5,429 (100)	4,069 (100)
389 (2.6)	223 (1.9)	5,669 (23.3)	3,683 (24.4)	2,933 (24.5)	24,223 (100)	15,095 (100)	11,972 (100)
1,652 (19.7)	368 (5.7)	1,113 (8)	1,689 (20.1)	1,516 (23.6)	18,911 (100)	8,403 (100)	6,423 (100)
188 (4.6)	93 (2.6)	2,327 (17.9)	980 (23.9)	866 (24.4)	13,000 (100)	4,100 (100)	3,557 (100)
495 (4.2)	120 (1.3)	3,617 (18.7)	2,830 (24)	2,240 (24.7)	19,342 (100)	11,794 (100)	9,070 (100)
1,287 (7.5)	571 (4.2)	5,933 (21.5)	3,964 (23.1)	3,288 (24)	27,595 (100)	17,162 (100)	13,699 (100)

for 1970-71.

Agriculture offices.

for package districts; and for non-package districts (i.e. S. Nos. 2,6,10); the Report

66 and 1966-67 has been taken as the basis, in order to neutralise the conspicuously low

## STATE

Statement showing short-term loans sanctioned to State Governments by the Central Govern-

State	Fertilisers				Improved seeds			
	1964-65	1965-66	1966-67	1967-68	1964-65	1965-66	1966-67	1967-68
1. Andhra Pradesh	74.0	51.2	69.2	59.8	9.5	26.9	8.0	—
2. Assam	1.0	2.6	—	—	—	—	—	—
3. Bihar	3.4	10.1	26.4*	91.4*	+	—	50.5*	47.5*
4. Gujarat	—	—	14.6	14.2	+	—	—	—
5. Haryana	—	—	—	—	—	—	—	4.7
6. Jammu & Kashmir	—	—	—	9.2	—	—	—	—
7. Kerala	3.3	2.8	10.1	8.7	—	—	—	—
8. Madhya Pradesh	20.5	36.0	7.9	1.5	8.8	27.6	21.4	23.8
9. Madras	57.3	42.6	44.8	27.3	—	11.5	0.8	2.3
10. Maharashtra	20.3	—	5.3	—	6.9	—	23.2	—
11. Mysore	1.1	10.0	5.0**	5.0**	—	—	—	—
12. Orissa	3.0	6.2	11.6	14.5	2.5	2.5	—	3.3
13. Punjab	10.3	55.8	21.2£	—	—	3.0	4.1£	—
14. Rajasthan	18.4	15.9	16.8*	—	24.0	15.6	8.1	9.5
15. Uttar Pradesh	20.5	45.0	19.6	35.7	—	—	20.0*	—
16. West Bengal	3.8	4.4	4.1	—	+	9.9@	3.2	10.5
Total :	236.9	282.6	256.6	267.3	51.7	97.0	139.3	101.6

Note: i) Figures rounded off to the first decimal.

ii) Figures of 1967-68 relate to the period upto 7th November 1967.

iii) Loans during 1964-65 and 1965-66 repayable in one instalment of principal and interest within 18 months of the date of drawal of the loan. The interest rates were 3½% and 4½% per annum respectively.

iv) Loans during 1966-67 and 1967-68 are repayable in one instalment of principal and interest within six months of the date of drawal of the loan. The interest rate is 4% per annum.

@ Including that for pesticides.

@@Includes for both pesticides and seeds.

\*These loans were sanctioned on 100% purchases as special case due to drought conditions prevailing in the States.

\*\* For all the three inputs.

£ Relates to old Punjab

+Less than or equal to 0.05.

+Also includes 20.00 million advanced to old Punjab.

Source : Ministry of Food & Agriculture, (Department of Agriculture) Government of India.

**MENT VI**

ment for fertilisers, improved seeds and pesticides during 1964-65 to 1967-68

(Rs. in million)

Pesticides				Taccavi		Total			
1964-65	1965-66	1966-67	1967-68	1966-67	1967-68	1964-65	1965-66	1966-67	1967-68
4.0	9.3	8.9	3.9	14.0	19.3	87.5	87.4	100.1	83.0
—	—	—	—	—	—	1.0	2.6	—	—
2.0	4.0	27.6*	—	—	—	5.4	14.1	104.5	138.9
—	—	—	—	—	—	—	—	14.6	14.2
—	—	—	0.5	8.0	21.8	—	—	8.0	27.0
—	—	—	—	—	—	—	—	—	9.2
—	—	2.0	—	2.1	0.3	3.3	2.8	14.2	9.0
1.4	3.6	10.0*	3.7	10.0	8.3	30.7	66.7	49.3	37.3
—	—	8.0	6.8@@	6.8	13.9	57.3	54.1	60.4	50.3
3.4	—	23.6	—	10.0	30.6	30.0	—	62.1	30.0
—	—	—	4.0@@	—	1.9	1.1	10.0	5.0	10.9
0.6	—	4.0	2.1	10.0	—	6.1	8.7	25.6	19.9
—	4.0	6.0£	—	32.0+	11.2	10.3	62.8	63.3	11.2
—	—	3.3	0.9	6.7	20.0	42.4	31.5	34.7	30.4
—	—	3.3	—	20.0	45.0	20.5	45.0	62.9	80.7
—	—	2.5	5.0	—	6.00	3.8	14.3	9.8	21.5
11.4	20.3	99.2	26.9	119.6	177.7	300.0	399.9	614.7	573.5

## STATEMENT VII

Stock position of nitrogenous fertilisers held by State Governments  
in terms of nitrogen

(Figures in '00 tonnes)

State	Stock as on		
	1.4.1965	1.4.1966	1.4.1967
1. Andhra Pradesh	169	187	418
2. Assam	5	3	26
3. Bihar	91	67	234
4. Gujarat	24	20	183
5. Haryana	—	—	77
6. Jammu & Kashmir	13	16	33
7. Kerala	90	40	115
8. Madhya Pradesh	122	362	173
9. Madras	127	20*	32
10. Maharashtra	185	86	456
11. Mysore	115	111	180
12. Orissa	18	19	71
13. Punjab	164	160	105
14. Rajasthan	5	27	60
15. Uttar Pradesh	253	50*	451
16. West Bengal	24	39	57

\*Figures supplied by the States at the time of Central Team's visit in 1967.

Source: Government of India, Ministry of Food, Agriculture, C.D. & Cooperation  
(Department of Agriculture).

### STATEMENT VIII

**The value of minimum quantity of fertilisers co-operatives may handle  
and their distribution credit needs in 1970-71**

(Rs. in million)

State	Co-operative credit likely to be avail- able for fertilisers in 1970-71*	Value of fertilisers expected to come from the Pool**	Value of fertilisers the manu- facturers may make available to co-ope- ratives	Distribution credit needs at twice the turnover	Margin money@@@ 10% of the distribution finance needs
1	2	3	4	5	6
1. Andhra Pradesh	217.8	217.8@	—	98.0	10.9
2. Assam	16.6	16.6@	—	7.5	0.8
3. Bihar	66.4	66.4@	—	29.9	3.3
4. Gujarat	240.7	240.7@	—	108.3	12.0
5. Haryana	107.9	98.1	9.8	48.5	5.4
6. Jammu & Kashmir	16.6	6.2	10.4	7.5	0.8
7. Kerala	127.2	103.1	24.2	57.2	6.4
8. Madhya Pradesh	138.3	90.2	48.1	62.2	6.9
9. Madras	280.8	47.8	232.9	126.4	14.0
10. Maharashtra	481.3	481.3@	—	216.6	24.1
11. Mysore	226.8	203.0	23.8	102.1	11.3
12. Orissa	74.7	74.7@	—	33.6	3.7
13. Punjab	183.3	160.2	23.1	82.5	9.2
14. Rajasthan	66.4	66.4@	—	29.9	3.3
15. Uttar Pradesh	373.4	296.7	76.7	168.0	18.7
16. West Bengal	66.4	5.3	61.2	29.9	3.3
<b>Total :</b>	<b>2,684.6</b>	<b>2,174.5</b>	<b>510.2</b>	<b>1,208.1</b>	<b>134.1</b>

\*Based on the provisional targets for short-term co-operative credit worked out in connection with earlier IV Plan, for each State, the proportion of credit likely to be advanced for fertiliser is worked out, taking into account the past experience and future prospects of advancing loans for fertiliser. The fertiliser component thus worked out, State-wise, has been inflated by 38.3 per cent representing the difference in the price of fertiliser as assumed in the Sivaraman Committee's Report, and this Report. (See Paragraphs 7.15 and 12.11 of the Report)

(Continued)



### STATEMENT VIII (Concluded)

@ The figures show what the co-operatives might handle. But the value of fertiliser the State might receive from the Pool would be somewhat higher as shown below:

Andhra Pradesh	:	Rs. 388.3 million
Assam	:	Rs. 20.4 „
Bihar	:	Rs. 294.4 „
Gujarat	:	Rs. 301.2 „
Maharashtra	:	Rs. 592.2 „
Orissa	:	Rs. 130.8 „
Rajasthan	:	Rs. 130.4 „

@@ Margin money is calculated at the average rate of 10% of the distribution finance needs, equivalent to *Value of supplies*

times turnover.

Distribution credit needs : Distribution finance minus margin money.

Value calculated at the following prices

N	:	Rs. 2,000/- per tonne
P <sub>2</sub> O <sub>5</sub>	:	Rs. 1,900/- per tonne
K <sub>2</sub> O	:	Rs. 750/- per tonne

STATEMENT IX

Distribution credit needs for supplies that the manufacturers/private agencies may handle allowing co-operatives minimum role

(Rs. in million)

State	Total value of supplies to be distributed in the State in 1970-71	Total value of non-Pool supplies*	Deduct the value of supplies that may be distributed through co-operatives	Add the value of fertilisers that may come from the Pool**	Total value of supplies to be distributed by the manufacturers through agencies other than co-operatives	Distribution credit needs <sup>+</sup> for supplies in Col. (6) assuming a turnover of 2.4 times	Margin money needs at 10% of distribution finance needs <sup>+</sup>
1	2	3	4	5	6	7	8
1. Andhra Pradesh	883.0	494.7	—	170.4	665.1	249.4	27.7
2. Assam	69.9	49.5	—	3.8	53.3	20.0	2.2
3. Bihar	633.6	339.2	—	228.0	567.2	212.9	23.7
4. Gujarat	467.6	166.4	—	60.5	226.9	85.2	9.5
5. Haryana	201.7	103.6	9.8	—	93.8	35.2	3.9
6. Jammu & Kashmir	27.3	21.1	10.4	—	10.7	4.0	0.4
7. Kerala	319.0	215.9	24.2	—	191.7	71.9	8.0
8. Madhya Pradesh	218.2	128.0	48.1	—	79.9	30.0	3.3
9. Madras	529.3	481.4	232.9	—	248.5	93.2	10.4
10. Maharashtra	1,215.5	623.3	—	110.9	734.2	275.5	30.6
11. Mysore	475.3	272.2	23.8	—	248.4	93.2	10.4

(Continued)

**STATEMENT IX (Concluded)**  
**Distribution credit needs for supplies that the manufacturers/private agencies may handle allowing co-operatives minimum role**

1	2	3	4	5	6	7	8
12. Orissa	259.6	128.7	—	56.1	184.8	69.4	7.7
13. Punjab	520.5	360.3	23.1	—	337.2	126.6	14.1
14. Rajasthan	224.6	94.2	—	64.0	158.2	57.4	6.6
15. Uttar Pradesh	867.5	570.8	76.7	—	494.1	185.4	20.6
16. West Bengal	226.1	220.8	61.1	—	159.7	59.9	6.7
<b>Total :</b>	<b>7,138.7</b>	<b>4,270.1</b>	<b>510.1</b>	<b>693.7</b>	<b>4,453.7</b>	<b>1,669.2</b>	<b>185.8</b>

\*Includes the value of non-Pool supplies and of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O.

\*\*These are derived by deducting from the likely supplies to each State from the Pool in 1970-71 the minimum supplies that the co-operatives may distribute.

@@Margin money is calculated at the average rate of 10% of the distribution finance needs equivalent to value of supplies  
times turnover.

†Distribution credit needs : Distribution finance needs minus margin money.

Value is calculated at the following prices.

N : Rs. 2,000/- per tonne  
P<sub>2</sub>O<sub>5</sub> : Rs. 1,900/- tonnes  
K<sub>2</sub>O : Rs. 740/- per tonne

**STATEMENT X**

**The maximum quantity of fertilisers that co-operatives are likely to handle by 1970-71**

(Rs. in million)

State	Co-operative credit likely to be available for fertilisers in 1970-71*	Value of fertilisers co-operatives may handle in 1970-71 taking into account a reasonable proportion of cash sales		Value of fertilisers likely to be received from the Pool	Value of fertilisers that the manufacturers may make available to co-operatives	Distribution of credit needs at twice the turnover for the supplies to be handled (i.e. Col.4)	Margin money@@ at 10% of distribution finance needs
		Ratio of cash sales to total sales assumed for 1970-71	Total sales				
1	2	3	4	5	6	7	8
1. Andhra Pradesh	217.8	50	435.6	388.2	47.4	196.1	21.8
2. Assam	16.6	30	23.7	20.4	3.3	10.7	1.2
3. Bihar	66.4	30	94.8	94.8@	—	42.7	4.7
4. Gujarat	240.7	40	401.1	301.2	99.9	180.5	20.1
5. Haryana	107.9	20	134.9	98.1	36.8	60.7	6.7
6. Jammu & Kashmir	16.6	30	23.7	6.2	17.5	10.7	1.2
7. Kerala	127.2	40	212.0	103.0	109.0	95.4	10.6
8. Madhya Pradesh	138.3	20	172.9	90.2	82.7	77.8	8.6
9. Madras	280.8	20	351.0	47.9	303.1	157.9	17.6
10. Maharashtra	481.3	30	687.6	592.2	95.4	309.4	34.4
11. Mysore	226.8	40	378.0	203.0	175.1	170.1	18.9

(Continued)

**STATEMENT X (Concluded)**

1	2	3	4	5	6	7	8
12. Orissa	74.7	20	93.4	93.4	—	42.0	4.7
13. Punjab	183.3	20	229.1	160.2@	68.9	103.1	11.5
14. Rajasthan	66.4	30	94.9	94.9@	—	42.7	4.7
15. Uttar Pradesh	373.4	20	466.8	296.7	170.1	210.1	23.3
16. West Bengal	66.4	30	94.8	5.2	89.6	42.7	4.7
<b>Total:</b>	<b>2,684.6</b>	<b>31.1</b>	<b>3,894.3</b>	<b>2,595.7</b>	<b>1,298.8</b>	<b>1,752.6</b>	<b>194.7</b>

\*Based on the provisional targets for short-term co-operative credit worked out in connection with earlier IV Plan, for each State the proportion of credit likely to be advanced for fertiliser is worked out, taking into account the past experience and future prospects of advancing loans for fertiliser. The fertiliser component thus worked out, State-wise, has been inflated by 38.3 per cent representing the difference in the price of fertiliser as assumed in the Sivaraman Committee's Report, and this Report. (See Paragraphs 7.15 and 12.11 of the Report)

@The figures show what the co-operatives might handle. But the value of fertilisers that the State might receive from the Pool would be somewhat higher as shown below:

Bihar	:	Rs. 294.4 million
Orissa	:	Rs. 130.8 "
Rajasthan	:	Rs. 130.4 "

@@ Margin money is calculated at the average rate of 10% of the distribution finance needs equivalent to value of supplies times turn over.

†Distribution credit needs : Distribution finance minus margin money.

Value is calculated at the following prices:

N	:	Rs. 2,000/- per tonne
P <sub>2</sub> O <sub>5</sub>	:	Rs. 1,900/- per tonne
K <sub>2</sub> O	:	Rs. 750/- per tonne

## STATEMENT XI

Distribution credit needs for supplies that the manufacturers/private agencies may handle allowing co-operatives maximum role

(Rs. in million)

State	Total value of supplies to be distributed in the State	Total value of probable non-Pool supplies*	Deduct value of supplies that may be distributed through cooperatives	Add value of fertilisers that may come from the Pool**	Balance to be distributed by manufacturers through agencies other than cooperatives	Distribution† credit needs for the supplies in Col. (6) assuming a turnover of 2.4 times	Margin money@@ at 10 % of distribution finance needs
1	2	3	4	5	6	7	8
Andhra Pradesh	883.0	494.7	47.4	—	447.3	167.9	18.7
Assam	69.9	49.5	3.3	—	46.2	17.3	1.9
Bihar	633.6	339.2	—	199.6	538.8	202.2	22.5
Gujarat	467.6	166.4	99.9	—	66.5	24.9	2.8
Haryana	201.7	103.6	36.8	—	66.8	25.1	2.8
Jammu & Kashmir	27.3	21.1	17.5	—	3.6	01.3	0.2
Kerala	319.0	215.9	109.0	—	106.9	40.1	4.5
Madhya Pradesh	218.2	128.0	82.7	—	45.3	17.0	1.9
Madras	529.3	481.4	303.1	—	178.3	66.9	7.4
Maharashtra	1,215.5	623.3	95.4	—	527.9	198.1	22.0
Mysore	475.3	272.2	175.1	—	97.1	36.4	4.0
Orissa	259.6	128.7	—	37.5	166.2	62.4	6.9
Punjab	520.5	360.3	68.9	—	291.4	109.4	12.1
Rajasthan	224.6	94.2	—	35.5	129.7	48.7	5.4
Uttar Pradesh	867.5	570.8	170.1	—	400.7	150.4	16.7
West Bengal	226.1	220.8	89.6	—	131.2	49.2	5.5
<b>Total :</b>	<b>7,138.7</b>	<b>4,270.1</b>	<b>1,298.8</b>	<b>272.6</b>	<b>3,243.9</b>	<b>1,217.3</b>	<b>135.3</b>

\*Includes value of likely non-Pool supplies of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O by 1970-71.

\*\*Derived by deducting from the value of likely Pool supplies in 1970-71 the maximum that the co-operatives may handle as per Statement X.

@@Margin money is calculated at the average rate of 10 per cent of the distribution finance needs, equivalent to :  $\frac{\text{value of supplies}}{\text{times turnover}}$ .

† Distribution credit needs : Distribution finance needs minus margin money.

Value is calculated at the following prices: N : Rs. 2,000/- per tonne, P<sub>2</sub>O<sub>5</sub> : Rs. 1,900/- per tonne, K<sub>2</sub>O : Rs. 750/- per tonne

## STATE-

Short-term advances to cooperative banks by the Reserve Bank of India,  
(July-

State	Short-term loans for seasonal agricultural operations Bank of India to the cooperative banks during				
	1964-1965			1965-66	
	Limits sanctioned	Amount drawn	Amount outstanding	Limits sanctioned	Amount drawn
			As on 30-6-65		
1. Andhra Pradesh	210.2	159.6	126.1	202.2	119.4
2. Assam	—	—	—	—	—
3. Bihar	24.0	14.8	14.3	28.2	27.3
4. Gujarat	242.4	284.0	162.5	260.3	296.8
5. Haryana	—	—	—	—	—
6. Jammu & Kashmir	4.5	4.5	4.5	1.5	—
7. Kerala	45.1	37.0	31.2	42.8	38.3
8. Madhya Pradesh	149.3	134.0	130.8	160.6	186.7
9. Madras	313.7	302.5	196.7	323.2	279.9
10. Maharashtra	386.7	955.7	304.2	461.1	1,018.5
11. Mysore	121.2	115.9	93.6	122.2	129.6
12. Orissa	45.9	50.7	38.9	50.4	58.1
13. Punjab	94.0	101.7	91.4	107.3	108.7
14. Rajasthan	66.8	73.5	56.0	64.8	55.3
15. Uttar Pradesh	235.0	246.5	199.4	236.9	231.3
16. West Bengal	53.0	49.8	49.8	57.8	49.8
	1,991.8	2,530.2	1,499.4	2,119.3	2,599.7
All-India	1,998.6	2,536.4	1,505.4	2,126.6	2,607.2

Figures rounded to the first decimal place.

\*Include loans for seasonal agricultural operations as well as other short-term loans.

\*\*Figures are provisional.

Source: 1. Reserve Bank of India (Agriculture Credit Department)  
2. Statistical Statements relating to Co-operative Movement in India 1964-65.

MENT XII

and short-term advances by Primary Credit Societies to farmers  
(June)

(Rs. in million)

and marketing of crops made by Reserve				Short-term loans and advances by primary agricultural credit societies during*			
1966-67				1964-65		1965-66**	
Amount outstanding	Limits sanctioned	Amount drawn	Amount outstanding	Amount advanced	Amount outstanding	Amount advanced	Amount outstanding
As on 30-6-66			As on 30-6-67		As on 30-6-65		As on 30-6-66
76.4	181.4	128.2	82.9	205.4	225.7	164.3	205.8
—	—	—	—	3.3	13.7	3.4	13.2
22.7	52.8	66.2	48.0	60.3	41.1	91.2	54.7
199.8	295.5	409.4	186.4	397.2	381.9	448.6	456.3
—	52.2	39.0	49.8	—	—	—	—
—	—	—	—	8.7	15.2	5.9	16.5
28.7	45.5	38.7	27.1	78.1	84.0	89.2	94.6
143.8	200.0	132.7	96.4	212.4	264.0	200.7	293.4
129.8	290.5	390.0	93.2	312.7	331.1	271.2	360.7
289.6	507.6	1,037.7	272.2	627.2	733.1	717.9	862.2
93.0	128.5	124.9	89.1	163.8	182.6	172.7	206.8
43.6	59.6	61.5	47.6	48.6	55.3	66.9	82.5
100.1	81.4	95.5	76.3	176.5	224.8	225.0	263.6
51.4	55.8	34.0	34.0	55.0	65.2	67.9	83.0
201.5	238.0	204.9	178.0	433.8	449.2	409.0	457.5
49.8	66.5	60.8	60.8	80.2	84.2	80.5	96.9
1,430.2	2,255.3	2,823.5	1,341.8	2,863.2	3,151.5	3,014.4	3,547.7
1,437.3	2,262.6	2,829.7	1,348.0	2,873.5	3,166.9	3,026.7	3,565.3



### STATEMENT XIII

**Fertiliser Taccavi advances made in some States during 1964-65 to 1966-67**

(Rs. in million)

State	1964-65		1965-66		1966-67	
	Amount	Percentage to total fertiliser distributed*	Amount	Percentage to total fertiliser distributed**	Amount	Percentage to total fertiliser distributed*
1. Andhra Pradesh	50.6	N.A.	27.3	16	1.5	1
2. Madhya Pradesh	22.2	71	14.2	32	4.0	13
3. Madras	6.3	N.A.	3.9	3	5.6	3
4. Maharashtra	4.3	6	11.8	11	1.4	1
5. Punjab@	62.7	70	40.8	43	19.4	19
6. Rajasthan	18.4	N.A.	15.5	100	6.7	21
7. Uttar Pradesh@	49.9	26	48.1	35	59.2	32
8. West Bengal	3.0	5	3.0	5	2.8	4
	217.4		164.6		100.6	

\* Value of actual fertiliser distribution during the year as given by State Governments.

\*\*Supplies made to the States during the year as given by Fertiliser Statistics 1965-66 and 1966-67 of Fertiliser Association of India, which are assumed to have been distributed.

@Actual disbursement.

For the calculation of percentage the values are calculated according to the prices prevailing during the year for different fertilisers as given by Fertiliser Statistics, 1965-66 and 1966-67 of Fertiliser Association of India, New Delhi.

**STATEMENT XIV**

**Consumption of fertilisers per unit of cropped area 1966-67**

Zone & State	Consumption in lb. per acre				Consumption in kg. per hectare			
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Total	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Total
<b>South</b>	<b>9.94</b>	<b>3.65</b>	<b>1.94</b>	<b>14.53</b>	<b>11.15</b>	<b>2.97</b>	<b>2.18</b>	<b>16.30</b>
Andhra Pradesh	12.30	2.51	0.74	15.55	13.79	2.81	0.83	17.43
Kerala	10.61	2.77	7.05	20.43	11.89	3.11	7.90	22.90
Madras	11.84	4.47	3.62	19.93	13.27	5.01	4.06	22.34
Mysore	4.13	1.59	1.09	6.81	4.63	1.78	1.22	7.63
Pondicherry	20.44	3.11	—	23.55	22.91	3.49	—	26.40
<b>West</b>	<b>2.42</b>	<b>1.27</b>	<b>0.46</b>	<b>4.15</b>	<b>2.71</b>	<b>1.42</b>	<b>0.52</b>	<b>4.65</b>
Gujarat	3.33	2.41	0.28	6.02	3.73	2.70	0.31	6.74
Madhya Pradesh	0.21	0.44	0.04	0.69	0.23	0.49	0.05	0.77
Maharashtra	4.09	1.48	0.96	6.53	4.58	1.66	1.08	7.32
Goa	6.99	2.86	1.93	11.78	7.83	3.21	2.16	13.20
<b>North</b>	<b>3.85</b>	<b>1.02</b>	<b>0.35</b>	<b>5.22</b>	<b>4.31</b>	<b>1.14</b>	<b>0.39</b>	<b>5.84</b>
Punjab*	7.52	1.03	0.54	9.09	8.43	1.16	0.60	10.19
Rajasthan	0.84	0.31	0.04	1.19	0.94	0.35	0.05	1.34
Uttar Pradesh	3.96	1.35	0.43	5.74	4.44	1.51	0.48	6.43
Jammu & Kashmir	9.99	4.03	1.61	15.63	11.20	4.52	1.80	17.52
Delhi	6.93	1.83	0.02	8.78	7.77	2.05	0.02	9.84
Himachal Pradesh	3.02	1.03	—	3.97	3.39	1.16	—	4.55
<b>East</b>	<b>3.85</b>	<b>1.35</b>	<b>0.55</b>	<b>5.75</b>	<b>4.32</b>	<b>1.51</b>	<b>0.62</b>	<b>6.45</b>
Assam	0.53	0.81	0.32	1.66	0.59	0.91	0.36	1.86
Bihar	4.77	1.69	0.25	6.71	5.35	1.89	0.28	7.52
Orissa	1.92	1.19	0.21	3.32	2.15	1.33	0.23	3.71
West Bengal	3.72	1.28	1.63	6.63	4.17	1.44	1.83	7.44
Manipur	1.65	—	—	1.65	1.85	—	—	1.85
Tripura	0.19	0.21	—	0.40	0.21	0.23	—	0.44
Nagaland	0.18	0.14	0.28	0.60	0.20	0.16	0.31	0.67
Andamans	—	1.16	—	1.16	—	1.30	—	1.30
<b>All-India</b>	<b>4.71</b>	<b>1.50</b>	<b>0.76</b>	<b>6.97</b>	<b>5.28</b>	<b>1.68</b>	<b>0.85</b>	<b>7.81</b>

\*These figures are for the erstwhile State of Punjab.

Note : Data on arable land refer to that of 1963-64 and include net area sown and area sown more than once.