

## CHAPTER 2

### AGRICULTURAL PRODUCTION

#### Agricultural Trends in 1974-75

2.1 Indian agriculture showed considerable dynamism during the later half of the 1960s and the index of agricultural production (with the triennium ending 1961-62=100) went up from 116.6 in 1967-68 to 131.4 in 1970-71. However, due to adverse weather conditions the index declined both in 1971-72 and 1972-73. This was followed by a marked recovery in 1973-74 when the index reached an all time peak of 133.4. Unfortunately, during 1974-75, production experienced a setback due to the erratic behaviour of the monsoon during the kharif season. As a result, the index of agricultural production declined by 3.1 per cent to 129.3—a level which is lower than that reached in 1970-71. The behaviour of the index in recent years is an indication of the unsatisfactory performance of the agricultural sector from 1971-72 to 1974-75 which was the most important factor contributing both to the stagnation of national income as well as to the inflationary pressures in the economy.

2.2 The production of foodgrains suffered a severe setback during the kharif season of 1974-75. Although the behaviour of rabi crops was more satisfactory, the overall production of foodgrains during 1974-75 was 3.6 million tonnes lower than the level of 104.7 million tonnes reached in 1973-74. Among commercial crops, raw cotton was the only major crop to have registered a substantial increase in 1974-75—from 63.1 lakh bales of lint (of 170 kgs. each) in 1973-74 to 70.8 lakh bales in 1974-75, or by 12.2 per cent. Almost the entire increase was due to higher productivity since the area under cotton showed only a small increase of 0.6 per cent. By now, there are clear indications of a technological break-through in the production of raw cotton, particularly the long staple varieties. However, the most important effect of technological change has been to stabilise production of raw cotton at a relatively high level. As of now, one cannot assume that a new upward trend has been firmly established. A significant increase in the production of raw cotton during the next few years depends crucially on achieving a technological break-through in the production of medium staple cotton which is often grown under conditions of rainfed agriculture. Although the area under sugarcane registered a marginal increase, production (in terms of gur) at 14.31 million tonnes did not show much change

from the previous year's record level of 14.43 million tonnes. The bulk of the decline in production is accounted for by Tamil Nadu where deficiency of rainfall during the north-east monsoon season of 1974 affected output. Uttar Pradesh has also reported some decline. However, there was a substantial increase in production in States like Maharashtra, Andhra Pradesh, Bihar and Punjab. In the case of sugarcane, a more notable feature of production is that there has been a reduction in the degree of fluctuation in output from year to year. This is partly due to expansion of area under irrigation. Production of five major oilseeds declined from 8.85 million tonnes in 1973-74 to 8.36 million tonnes in 1974-75 which was almost entirely due to lower yield in response to unfavourable weather conditions. Thus far there is no evidence of any significant breakthrough in the production of vegetable oilseeds. Violent fluctuations seem to have been imposed on an otherwise stagnant trend. Production of jute and mesta declined sharply in 1974-75. In this case too, severe fluctuations seem to coexist with a stagnant trend.

2.3 It is well known that adverse weather conditions during the kharif season of 1974 were a major factor in the unsatisfactory performance of the agricultural sector in 1974-75. The States of Tamil Nadu, Orissa, Madhya Pradesh, Gujarat and Rajasthan experienced a severe drought. However, there were a number of other factors also at work. In particular, the consumption of chemical fertilisers declined from 2.8 million tonnes in 1973-74 to 2.6 million tonnes in 1974-75. Although there is a widespread belief that this was largely due to a steep increase in prices of fertilisers, which had to be effected on account of a rise in import costs, it is also possible that unfavourable weather conditions, as well as deficiencies in extension work, also contributed to this outcome. The decline in offtake by 6 per cent during the kharif season of 1974 was probably the outcome of adverse weather conditions. The fact that fertiliser consumption significantly increased in West Bengal and Karnataka where weather conditions during kharif remained favourable, tends to confirm this hypothesis. On the other hand, the fact that offtake during the rabi season of 1975 declined by 12 per cent despite favourable weather conditions suggests that the price factor may also be an important explanatory variable in determining fertiliser use.

2.4 There is also clear evidence that the initial impetus of the green revolution seems to have been exhausted. This is brought out by the fact that the production of wheat, which is generally grown under relatively homogenous agronomic and climatic conditions, has failed to increase after 1971-72. In the case of rice, while the overall trend is still upward, the annual growth rate is much too sluggish, and a considerable proportion of increased output is accounted for either by summer rice or by higher kharif production in non-traditional areas. A breakthrough in the production of rice is clearly dependent on our ability to ensure adequate and regulated supplies of water during the kharif season. The efforts that are now being made to expand the area under major and medium irrigation by 5 million hectares during the remaining period of the Fifth Plan, and the intensification of the programme for the exploration of the vast groundwater resources of the Eastern region, hold the key to a sustained increase in production in the years to come.

### **Agricultural Production in 1975-76**

2.5 Thanks to the normal behaviour of the south-west monsoon, the output of kharif crops recorded a significant increase in 1975. There are indications that the production of foodgrains during the kharif season was close to 70 million tonnes, thereby exceeding, for the first time, the previous peak level of 69 million tonnes reached in 1970. The production of rice in the kharif season is estimated to have exceeded the previous record of 40.7 million tonnes reached in 1973-74. The production of coarse grains also staged a recovery. The production of kharif pulses also seems to have gone up. The output of groundnuts has recorded a substantial increase. Some preliminary data suggest that whereas sugarcane may register an increase in production, the production of raw cotton may stabilise at a level close to the record level reached in 1974-75.

2.6 The rabi sowings have taken place under favourable conditions. In addition, there has been a considerable improvement in the supply position regarding quality seeds, fertilisers, pesticides, power and diesel. All these factors suggest that, barring some unfavourable weather conditions, the rabi crop to be harvested in April, 1976 may also reach a record level of 43-44 million tonnes. Thus, as of now, the prospects of raising production of foodgrains during 1975-76 to 114 million tonnes are quite favourable. Considering that the prospects for the major commercial crops are also favourable, it is likely that the overall index of agricultural production may record an increase of about eight per cent during 1975-76.

2.7 The improved prospects for agricultural production in 1975-76 have greatly helped to control inflationary pressures in the economy. However, higher agricultural production this year must not lull us into any false sense of complacency, particularly since achievements on the production front are still likely to fall short of the original draft Fifth Plan targets by a big margin. Fortunately, there is now much greater awareness than ever before of the bottlenecks that have hampered production in the past, and the fact that determined efforts are being made to remove these bottlenecks gives rise to the hope that the next few years may witness an acceleration in the rate of growth of agricultural production.

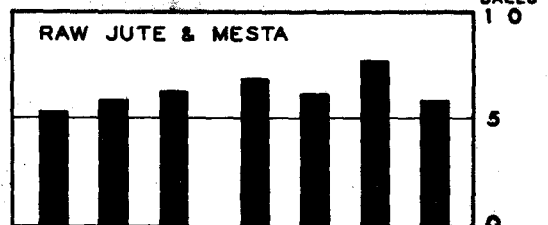
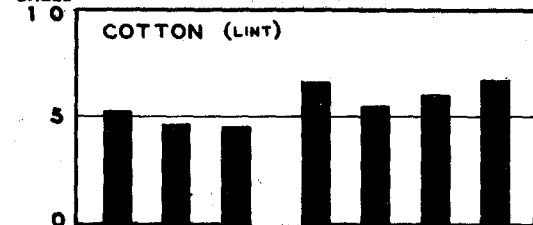
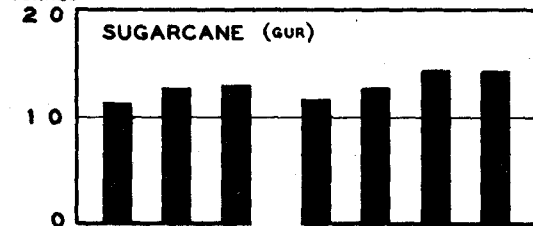
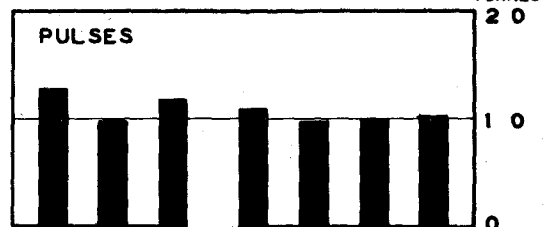
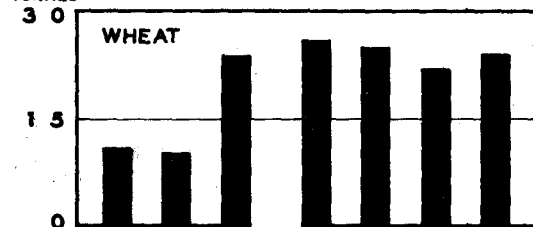
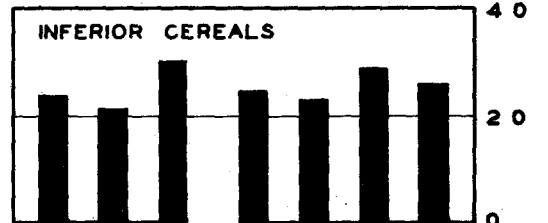
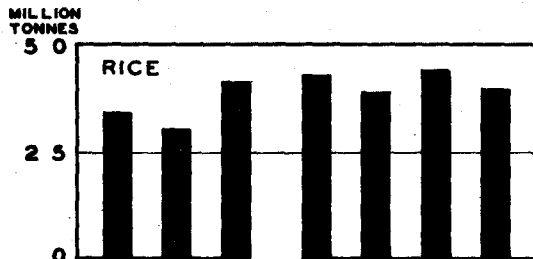
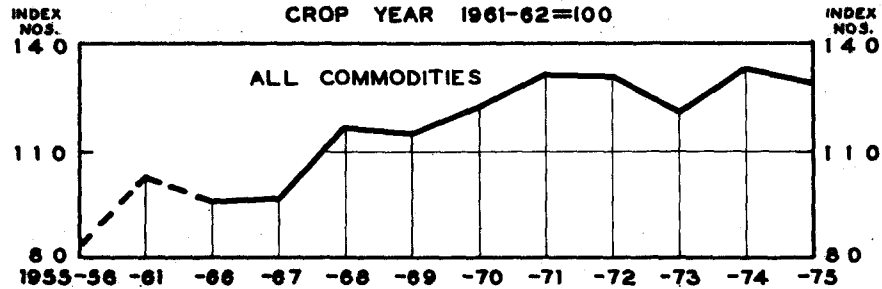
2.8 In any modernisation of Indian agriculture, there has to be a judicious blend of technological progress and institutional reforms. The contribution made by high yielding varieties to increased production of wheat since 1967-68 is well known. However, the experience of the last two years indicates that, in order to ward off the danger of pests and diseases, there is need to add continuously to the existing pool of varieties of high yielding nature, particularly such as are at the same time resistant to pests and diseases. In the case of rice, the new high yielding varieties have had a significant impact only in areas with effective arrangements for water control and management. Thus far there has been no appreciable increase in the productivity of rice in traditional rice growing areas. In order to meet this gap greater emphasis needs to be placed on location-specific breeding research, particularly in States like Bihar and Madhya Pradesh. The plan for strengthening of the Central Rice Research Institute and the All India Coordinated Rice Improvement Project is designed to achieve this objective. Similarly, there is need to review research efforts in the case of bajra where available hybrid varieties have become susceptible to pests and diseases, particularly downy mildew and ergot.

2.9 Production of quality seeds for large scale commercial use is an essential element of the new agricultural technology designed to raise agricultural productivity. Under the newly adopted National Seeds Programme in which the World Bank has evinced keen interest, seed projects in four States have been taken up in the first phase and four more States will be covered in the second phase of the programme.

2.10 Technological progress has many facets. For example, it has been found that the productivity of rice during the kharif season is low in the North-Eastern States partly because of untimely sowing of the crop. To help farmers to take up timely planting of rice, a pilot programme of raising "community

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nurseries", and supply of seedlings to farmers for transplanting at the proper time, has been undertaken as a Centrally sponsored scheme in important rice growing States. Similarly, in order to control pests and diseases, an effective pest surveillance, forecasting and warning service has been set up with the object of collecting data on pest build-up, and to warn farmers for taking timely control measures.

2.11 The critical role of an assured supply of water in increasing productivity is well known. Currently, nearly 25 per cent of the cultivated area is covered by irrigation. However, only about one-half of the area under irrigation can be said to enjoy assured perennial supply of water since in many areas minor irrigation works cease to be operational during drought. The Draft Fifth Plan has for its target an addition of 6.2 million hectares to the area under medium and major irrigation. If the target of 5 million hectares, announced as part of the New Economic Programme, is achieved during the remaining period of the Fifth Plan, the overall performance will be close to the target of the Draft Fifth Plan. However, because of cost escalations, the expenditure on major and medium irrigation will have to be much higher than the Draft Fifth Plan outlay of Rs. 2,400 crores. States like West Bengal, Bihar and the Eastern parts of U.P. and Madhya Pradesh, Orissa, Assam and Andhra, have considerable potential for exploration of ground water resources. It is to be earnestly hoped that the inclusion of the systematic development of the country's ground water resources in the New Economic Programme will impart a fresh sense of urgency to the speedy exploitation of this valuable national resource.

2.12 There is considerable evidence that full use is not being made of the irrigation potential that has already been created through past investments. The Command Area Development programme is designed to remove this deficiency. So far 28 Command Area Authorities have been set up, covering 37 irrigation projects in eleven States. The emphasis of the programme is on modernisation of the infra-structure of irrigation, on farm development works comprising field channels and field drains, land levelling, land shaping operations, and on strengthening of the extension and training programme. The World Bank is providing assistance for three projects—Chambal (Rajasthan), Rajasthan Canal and Chambal Command in Madhya Pradesh. However, it has been noticed that the pace of on-farm development works below the outlets, which are the responsibility of individual farmers, is not keeping pace with the work on the main irrigation system. It has been stated that loan disbursement procedures of banks and other lending institutions, need to be simplified in order to enable farmers to undertake the necessary investments.

2.13 The new agricultural strategy places heavy reliance on the use of chemical fertilisers. In this context, the decline in fertiliser consumption—from 28 lakh tonnes in 1973-74 to 26 lakh tonnes in 1974-75—is a matter of concern. Any sharp decline in the application of P&K can affect soil fertility, and also the efficacy of use of nitrogen, over time. In order to boost consumption, Government have twice, within a period of five months, reduced the prices of fertilisers. The latest data indicate that the declining trend in consumption noticed in 1974-75 is likely to be reversed. However, it appears that total consumption in 1975-76 may not be much higher than the figure of 28 lakh tonnes reached in 1973-74. This serves to emphasise the need for a proper identification of factors affecting fertiliser use so as to devise suitable promotional measures. At the same time, due emphasis has to be placed on the use of organic fertilisers in suitable combination with chemical fertilisers. Under a Centrally sponsored scheme, it is proposed to set up 1 lakh Gobar Gas Plants during the Fifth Plan. A comprehensive programme has been launched to conserve, process and supply rural and urban composts.

2.14 Institutional credit accounts for 35 per cent of short and medium term credit provided to farmers. This is a great improvement over the situation in the early fifties when the share of institutional credit was only 3 per cent of the credit requirements of farmers. In 1975-76, cooperative agencies are expected to provide Rs. 979 crores by way of short term loans, and Rs. 74.94 crores by way of medium term loan. A sum of Rs. 230 crores is likely to be advanced by Cooperative Land Development Banks. Although the cooperative credit movement has played a valuable role in extending credit facilities to rural areas, the movement in the past has suffered from a number of defects such as unbalanced regional development, unsound finances, excessive dominance and control by big farmers and excessive overdues. At one time, it was hoped that the remaining gap could be effectively filled up by the nationalised banks. These banks have, no doubt, made important efforts to expand the scope of their activities in rural areas. The scheduled commercial banks' credit to agriculture went up from Rs. 162.3 crores in June, 1969 to over 785 crores at the end of April, 1975. However, it was felt that the urban bias of their staff, and the high salary structure, warranted a new experiment for meeting the credit needs of small and marginal farmers. It is for this reason that the Government of India decided, in 1975, to set up a chain of regional rural banks in the country, particularly in backward areas and other areas which have not been adequately covered by the cooperatives and commercial banking agencies. These banks are intended to supplement, and not to replace, the existing

agencies in the field, but their orientation will be specially towards meeting the credit needs of the weaker sections. At the same time they will be run on commercial lines. In other words, they are intended to be locally based, rurally oriented and commercially organised. They will have a two-way relationship with commercial banks on the one side and farmers' service societies on the other. Each bank will have an authorised capital of Rs. 1 crore in which the Central Government will contribute 50 per cent. The State Government sponsoring banks, as also the cooperative institutions, will contribute to the rest of the share capital. A beginning has been made from 2nd October, 1975 by setting up of five regional rural banks. Their number will be increased to 15 by the end of the financial year, and to about 50 soon thereafter. Since rural credit, by definition, must involve a considerable exercise of discretionary power, the success of the new banks would greatly depend on the quality of their supervisory staff.

2.15 It appears that, in recent years, the growth of employment in the rural areas has not kept pace with the increase in the labour force. Although a number of special programmes have been devised from time to time to provide opportunities for gainful employment in rural areas, the problem of unemployment still defies solution. In June, 1975, the Government appointed a Study Team on Rural Employment to explore possibilities of providing productive employment as an unskilled labourer, for 250 days in a year, to at least one adult in a family, within a radius of 4-5 kilo-meters of a village, at wage more

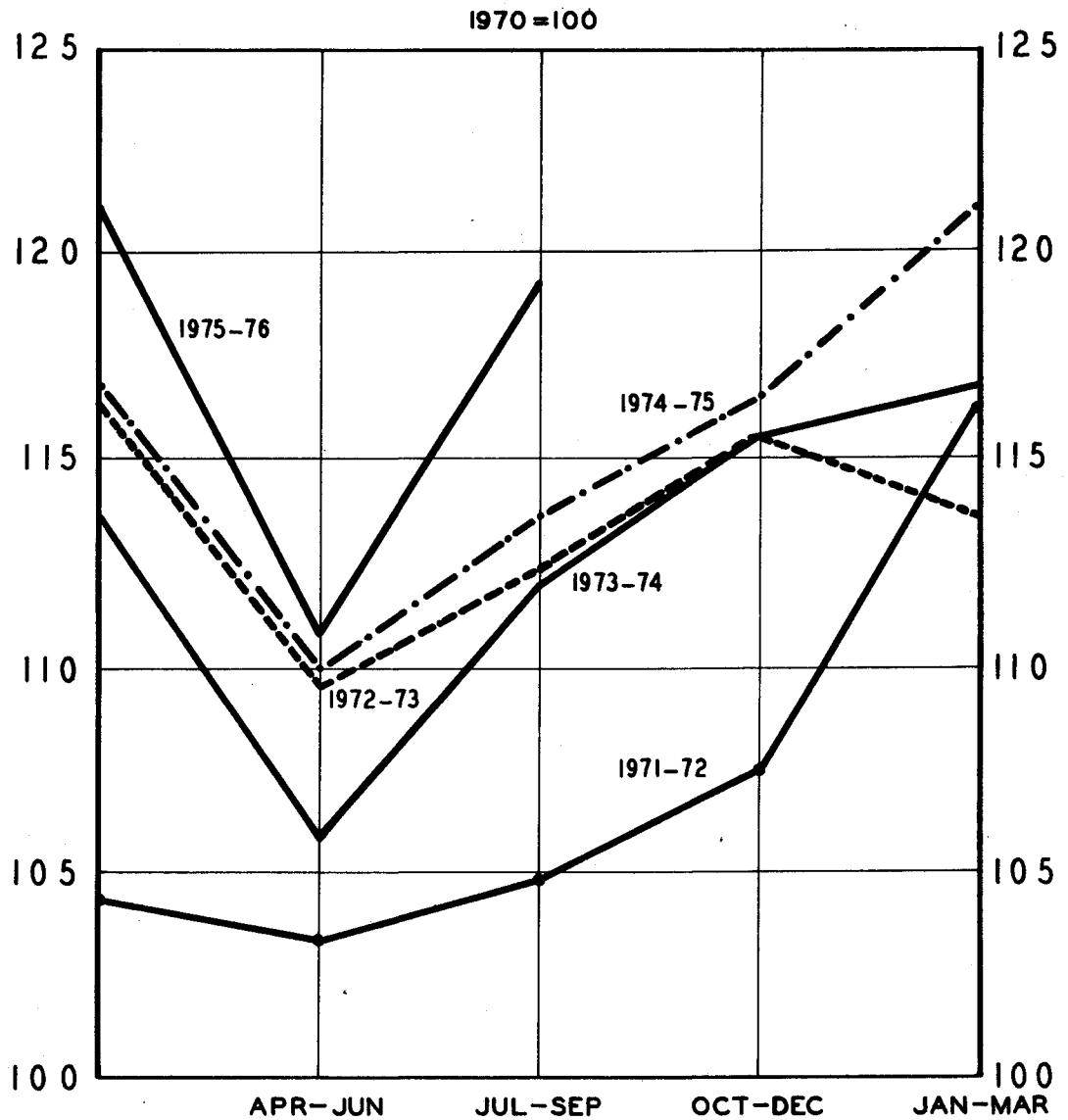
or less equal to the ruling wage rate for unskilled workers. Although a large-scale programme of public works has a considerable attraction for making a dent on unemployment, one must not underestimate the difficulties of non-inflationary financing of such a programme. There is a growing consensus among experts that the problem of unemployment in the rural areas cannot be tackled in isolation but must be dealt with as part of a comprehensive strategy of integrated rural development, paying particular attention to local needs, resources and potentialities.

2.16 Land reforms have always been assigned an important role in our strategy for accelerated growth in a framework of greater social justice. In the past, although laws have been enacted to impose land ceilings, and to grant security of tenure to tenants, their implementation has fallen short of expectations. It is for this reason that the New Economic Programme assigns high priority to speedy implementation of land reforms. Most States have now enacted ceiling legislation in accordance with the national guidelines issued by the Central Government. They are also taking steps to speedily compile the land records, and survey and settlement operations are being completed on a priority basis. The rural poor should also derive some benefit from such measures as revision of minimum wages in agriculture, abolition of bonded labour and moratorium on rural debts. In the final analysis, a lasting solution to the problem of rural poverty can be found only through measures designed to raise the productive capacity of the poor in the framework of an integrated programme of rural development.

# INDEX OF INDUSTRIAL PRODUCTION

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QUARTERLY AVERAGES



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