

## CHAPTER 2

### THE AGRARIAN TRENDS

#### Agricultural Production in 1972-73

2.1 The index of agricultural production (trienium ending 1961-62=100) reached the highest observed peak level of 131.4 in 1970-71. However, in the succeeding two years there was a reversal of the rising trend in agricultural output observed since 1968-69. Agricultural output declined by 0.8 per cent in 1971-72, and this was followed by a further sharp decline of 9.1 per cent in 1972-73.

2.2 In 1971-72, the production of foodgrains declined by 1.7 per cent, while that of commercial crops rose by 1.1 per cent over the previous year's level. Interestingly, the production of both wheat and rice reached new peaks in 1971-72, and the fall in the production of foodgrains was largely a consequence of a major decline in the production of coarse grains. Among commercial crops the output of both raw cotton and raw jute (including mesta) increased significantly, with the production of raw cotton reaching an all-time record. However, the production of sugarcane declined by 10.4 per cent and that of oilseeds by 5.4 per cent. It is well known that seasonal factors have an important influence on the level of agricultural production. While the level of agricultural output reached a new peak in 1970-71 when the weather conditions were highly favourable, there was some decline in 1971-72 due to unfavourable weather conditions in some parts of the country. In contrast to this, a severe and widespread drought in 1972-73 caused a sharp decline in production of both foodgrains and commercial crops. The production of foodgrains in 1972-73, estimated at 95.2 million tonnes, was 10 million tonnes lower than in 1971-72. Barring maize, all foodgrains suffered a setback in output, the sharpest decline being recorded by rice whose output fell by 4.4 million tonnes from the record level of 43.1 million tonnes reached in 1971-72. Although the output of coarse grains declined only by 2.4 million tonnes in 1972-73, its effects on availability and prices were magnified by the fact that this decline came in the wake of an already severe fall of 5.9 million tonnes in 1971-72. To achieve a significant increase in production during the rabi season, an Emergency Agricultural Production Programme based on expansion of irrigation facilities and increased use of inputs was undertaken, but an unbroken spell of drought in rabi jowar growing areas, occurrence of early hot winds (in February-March) and of rust in wheat areas, shortage of power for lift irrigation, and of fertilisers, adversely affected the rabi foodgrains production. In fact, even the production of wheat which had registered a steady increase since 1967-68 after the introduction of high yielding varieties, marked a decline of 1.5 million tonnes over the previous year.

2.3 Among commercial crops, the sharpest decline in output in 1972-73 was in the oilseeds group. The output of groundnuts fell from 6.2 million tonnes in 1971-72 to 3.9 million tonnes in 1972-73. Taking five major oilseeds together, their output, which fell from 9.3 million tonnes in 1970-71 to 8.8 million

tonnes in 1971-72, further declined to 6.7 million tonnes in 1972-73, giving rise to wide-spread shortages. The output of raw cotton fell from the record level of 6.6 million bales reached in 1971-72 to 5.5 million bales in 1972-73. Sugarcane was the only mesta fell from 6.8 million bales in 1971-72 to 6.0 million bales in 1972-73. Sugarcane was the only major commercial crop whose output went up in 1972-73 from 11.6 million tonnes (in terms of gur) in 1971-72 to 12.6 million tonnes in 1972-73.

2.4 The disruptive effects of unsatisfactory performance of agriculture on the overall rate of growth of the economy, industrial production, prices, balance of payments, the budgetary position of the Government, and on the distribution of incomes are amply brought out by the experience of the last two years. These events have served to draw attention to the fact that inadequacy of the rate of growth of agricultural production, and persistence of significant fluctuations in output from year to year, perhaps constitute the most basic challenges in the sound management of the economy. Of course, recent difficulties cannot detract from significant gains in production recorded since the mid-sixties after the launching of the new agricultural strategy. In this connection, it is worth noting that, as a result of the spread of new technology, the most recent peak as well as the trough in food output has occurred at a much higher level than the previous peaks and troughs. Moreover, whereas the production of foodgrains in 1965-66 fell by as much as 17.1 million tonnes as compared to the then peak level of 89.4 million tonnes reached in 1964-65, in 1972-73, even after two successive years of drought, output was only 13.2 million tonnes lower than the all-time peak of 108.4 million tonnes reached in 1970-71. This is an indication of a rising trend as well as of a reduction in the amplitude of fluctuations.

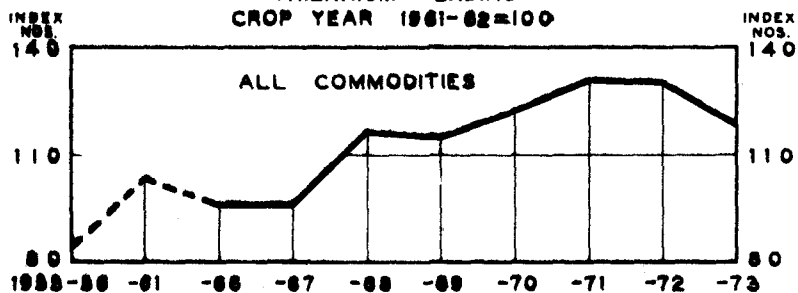
2.5 The events of 1972-73 also bring out the ineffectiveness of crash programmes for increasing agricultural production in the short run. Other things being equal, greater availability of strategic current inputs, such as fertilisers, should make some difference to the crop prospects. However, increased expenditure on capital inputs such as irrigation works, even if organised efficiently, can yield results only after a time lag. In the meantime, such expenditures add to the level of effective demand, thereby intensifying inflationary pressures. Agricultural production programmes are likely to be most effectively organised when conceived in terms of an overall medium-term strategy. The problem of short term instability is best dealt with by organising a viable buffer stock and an effective system of public distribution.

#### Agricultural Production : Prospects for 1973-74

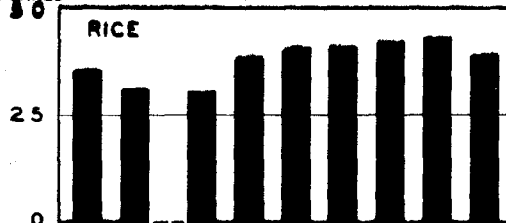
2.6 Fortunately, according to all available indications, agricultural output in 1973-74 is expected to record significant gains. It will be recalled that the last year's Economic Survey had set the likely output

# AGRICULTURAL PRODUCTION

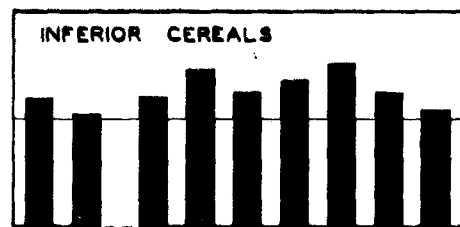
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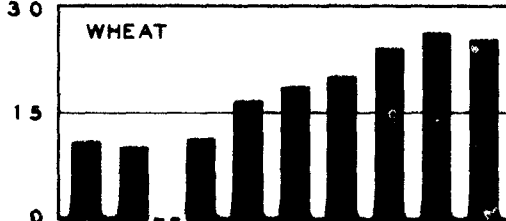
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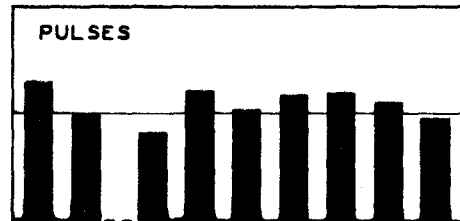
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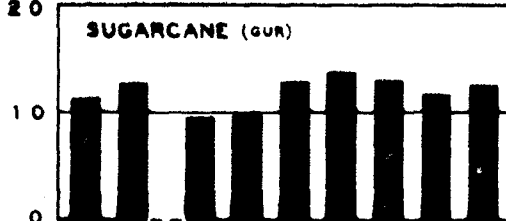
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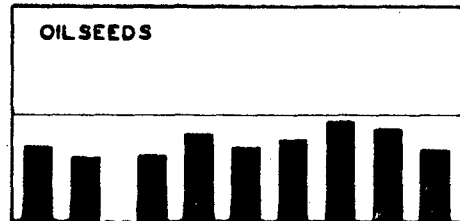
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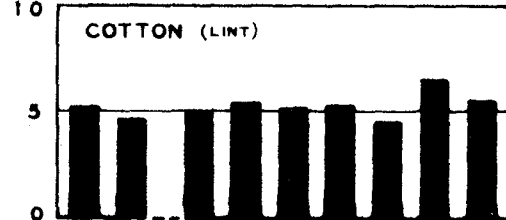
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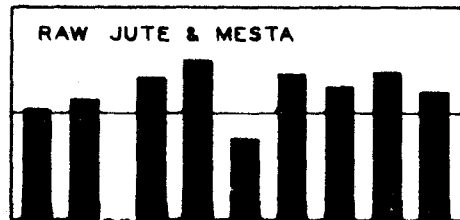
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MINISTRY OF FINANCE, ECONOMIC DIVISION.

of foodgrains in 1973-74 at 112 million tonnes. Subsequently, the Government set a target of 115 million tonnes of which the share of the kharif crop was estimated at 67 million tonnes. Preliminary estimates of output of the kharif crop range between 65 to 68 million tonnes. There are strong indications that the output of rice was close to the target of 40.5 million tonnes (as against 35.9 million tonnes during the kharif crop of 1972). However, some shortfall in the production of coarse grains cannot be ruled out. As for the rabi foodgrains, sowings have taken place under normal conditions, and there are indications that the area under rabi grains may be higher than in 1972-73. It is, of course, true that the targets, at least for summer rice and wheat, involve much higher growth of production in a single year than observed in the past. For example, while the output of summer rice from 1969-70 to 1972-73 has fluctuated between 2.7 to 3.1 million tonnes, the target for 1973-74 is 4.5 million tonnes. Similarly, the wheat target at 30 million tonnes represents an increase of 5.1 million tonnes over the 1972-73 output. In the past six years, it was only in 1967-68 that wheat output in a single year increased by over 5 million tonnes. However, compared to the peak level of 26.4 million tonnes reached in 1971-72, the target would involve an increase of only 3.6 million tonnes. Considering past trends, this order of increase is certainly not over-ambitious, given normal weather conditions and supply of a reasonable proportion of the quantity of fertilisers required. The shortfall in the availability of chemical fertilisers has no doubt introduced an element of uncertainty, even though adequate availability of sub-soil moisture should prevent a significant decline in productivity.

2.7 The target for rabi coarse grains, set at 4.7 million tonnes, involves an increase of 0.9 million tonnes over the output level of rabi in 1972-73. This target cannot be considered unrealistic in view of the fact that the output of rabi coarse grains in each of the three years 1969-70 to 1971-72 was higher than the targetted level for 1973-74 rabi. Similarly, the target for rabi pulses at 8.3 million tonnes is only marginally higher than the average level of output during the three rabi seasons of 1969-70 to 1971-72. Taking all these factors into account, the output of foodgrains in 1973-74 may be about 110 million tonnes. This will represent a significant improvement over the output levels reached in 1971-72 and 1972-73. However, the fact that the output in 1973-74 will still not be significantly different from the past peak level of 1970-71 indicates that the management of India's food economy in the coming year will not be free from difficulties.

2.8 The prospects for commercial crops in 1973-74 are also very good. For example, the output of raw cotton which declined from 6.6 million bales in 1971-72 to 5.5 million bales in 1972-73 is expected to show a significant recovery in 1973-74. Similarly, the output of principal oilseeds which declined drastically in 1972-73 may again reach close to the peak

level of 9.3 million tonnes touched in 1970-71. The output of sugar-cane is also expected to mark a further increase by 5 per cent, although it will still be less than the highest peak level of 13.8 million tonnes achieved in 1969-70. The output of jute and mesta is also expected to register a significant increase as compared to the level of 6.0 million bales attained in 1972-73.

2.9 There are thus indications that the index of agricultural production in 1973-74 will register an increase of 10 to 15 per cent over 1972-73. This should help to reduce the extent of shortages that have prevailed in the economy in the past two years. However, since output levels in most cases are not likely to be significantly different from the peak levels reached in 1970-71 and 1971-72, and also taking into account the large expansion in money supply of the past two years, the strong pressures for improving the terms of trade in favour of agriculture, and the general inflationary psychology that has come to dominate the public mood in the last two years, the task of economic stabilisation in the coming year is not going to be an easy one.

2.10 The year 1973-74 is the last year of the Fourth Plan. If the levels of foodgrains production anticipated above for the current year are achieved, the overall rate of growth for foodgrains in the Fourth Plan will be slightly lower than 3 per cent as against the envisaged growth of 5.6 per cent per annum. Among foodgrains, the Fourth Plan target for wheat production has been exceeded. However, in all other major food crops, the achievements are lagging considerably behind the targets. Similarly, production of major commercial crops is also likely to fall short of the Plan targets. This is not to deny that the agricultural technology centring on high yielding varieties, intensive development of irrigation, increased use of fertilisers and other inputs and infra-structural arrangements for research, extension, credit etc., was essentially sound. However, the fact that most of the Plan targets for agricultural commodities will not be fulfilled indicates significant gaps in the execution of certain development programmes. These gaps will have to be filled if the Fifth Plan targets, which assume much higher rates of growth of agricultural productivity than achieved in the Fourth Plan period, are to be realised.

2.11 The Fourth Plan target for 1973-74 for bringing area under high yielding varieties programmes was 25 million hectares. On present indications, this target will be fulfilled. However, while the area targets for wheat and bajra are going to be exceeded, there will be a shortfall in respect of rice, maize and jowar. In the case of rice, although the area under HYV has expanded from 2.6 million hectares in 1968-69 to about 9.5 million hectares in 1973-74, there has so far been very limited impact on yields and production, except in such non-traditional rice growing States as Punjab and Haryana. A major problem has arisen on account of the fact that the new varieties have not been sufficiently resistant to pests and disease. There have also been significant gaps in the arrangements for extension and water management practices. The susceptibility of available high

yielding varieties of maize and jowar to pests and diseases has held up the expansion of area under these varieties. Considering that the rates of growth of productivity implicit in the production targets for rice and coarse grains in the Fifth Plan are much higher than the observed rates of growth in the past, success in the discovery of new suitable high yielding varieties is an important condition for the realisation of Plan targets. The problem seems to be particularly acute in the case of pulses whose output has shown a declining trend, even though they are the principal source of proteins in the diet of an average Indian. Among commercial crops, new varieties of cotton such as Hybrid-4 and MCU-5 offer a good deal of promise, but little progress has been made with respect to oilseeds. Therefore, great importance attaches to the success of All India Coordinated Research Projects which are now under way to find acceptable technical solutions to the present difficulties. Since a significant proportion of our production of pulses, coarse grains and commercial crops is accounted for by areas lacking an assured supply of water, high priority has to be attached to the evolution of an effective technology for dry farming areas.

2.12 The consumption of chemical fertilisers increased from 17.60 lakh tonnes of NPK in 1968-69 to 27.69 lakh tonnes in 1972-73. In the earlier years of the Fourth Plan, consumption was restricted for want of adequate promotional efforts. However, in the last two years, limited availability has been the principal factor affecting consumption. Considering the uncertainty surrounding imports of fertilisers in the wake of the oil crisis, and the difficulties that a number of domestic plants face in improving their capacity utilisation, it is obvious that the consumption of chemical fertilisers in 1973-74 will fall significantly short of the Fourth Plan target of 5.5 million tonnes which was lowered to 3.9 million tonnes at the time of the mid-term appraisal. From all available indications, there will be a considerable shortage of fertilisers in the world markets in the coming year, and, in any case, prices are expected to further rise as a result of an increase in the price of oil. In these circumstances, it will be necessary to reorient our agricultural production strategy in such a manner as to optimise yields from the use of the available quantity of fertilisers. This would entail, among other things, the adoption of improved agronomic techniques, and other practices. Moreover, since new high yielding varieties are highly fertiliser intensive, the limited availability of chemical fertilisers will necessitate search for other avenues of securing agricultural growth, especially those involving better management of locally available inputs, such as organic manures and supply of improved seeds of local varieties. In the longer run, coal-based fertiliser plants may well provide the best means of reducing our dependence on oil-based fertilisers.

2.13 It is an accepted fact that fertilisers yield best response under conditions of assured water supply. Indeed, if water supply is uncertain, farmers may not have an adequate incentive to use costly inputs such as chemical fertilisers. However, since more irrigation can yield higher output even in the absence of

fertiliser use, a rapid expansion of the area under irrigation may be another means of neutralising the effects of shortages of chemical fertilisers on the level of output. It is therefore heartening that the Fifth Plan envisages an addition of 12.2 million hectares to the country's irrigation potential as compared to the likely addition of 7.8 million hectares during the Fourth Plan. At the same time, in order to make optimum use of the irrigation potential, it is proposed to set up Command Area Development Authorities covering 50 major projects with a total cultivable area of 15 million hectares. These authorities will adopt an integrated area development approach to secure optimum production.

2.14 The availability of credit at reasonable terms is a major condition of transformation of traditional agriculture. The All India Rural Credit Review Committee had estimated the short-term agricultural credit needs in the last year of the Fourth Plan, i.e. 1973-74, to be of the order of Rs. 2,000 crores. Medium-term credit needs for the Plan period as a whole were fixed at Rupees 500 crores. Against this, the Plan target for the cooperatives in respect of short and medium term agricultural advances was Rs. 750 crores. Since, in 1972-73, the cooperative sector's short and medium term advances amounted to about Rs. 700 crores, the Plan target for credit from cooperative sources for 1973-74 is likely to be met, even though there are likely to be considerable disparities in the level of achievement among States. The share of States like Assam, Orissa, Rajasthan and West Bengal in total credit is likely to have declined in the Fourth Plan—largely due to unsatisfactory performance of the cooperative sector in these States.

2.15 The total outstanding direct and indirect advances to agriculture by public sector banks were Rs. 341 crores at the end of June 1971, Rs. 388 crores at the end of June 1972 and Rs. 446 crores at the end of June 1973. Hence, the combined efforts of cooperatives and commercial banks will be able to meet nearly 40 to 50 per cent of the total credit requirements of this sector. However, States in which cooperatives do not seem to have made much headway also happen to be those in which direct commercial bank credit to agriculture has also not expanded rapidly.

2.16 In the case of long-term credit, the total loans issued by central land development banks rose from Rs. 148 crores in 1968-69 to Rs. 190 crores (estimated) in 1972-73. A large part of this was refinanced by the Agricultural Refinance Corporation by subscribing to the debentures of land development banks, which amounted to Rs. 86.13 crores in 1972-73 as against only Rs. 15.95 crores in 1968-69. The accent of the schemes approved by the Corporation continued to be on minor irrigation and preparation of land under the command of major irrigation systems. Refinance is also available from the Corporation for construction of modern storage godowns and for keeping the required deposits with State Electricity Boards for energising wells, etc. The Corporation has decided to refinance the schemes under SFDA (Small Farmers Development Agencies) upto 100 per cent. Since its inception in 1963 upto December 31, 1973, the ARC has approved 1069 schemes

involving a total financial outlay of Rs. 654.5 crores out of which the Corporation's commitment amounted to Rs. 571.6 crores. Total disbursements upto December 31, 1973 amounted to Rs. 242.9 crores.

2.17 Disbursements made by the Corporation during 1972-73 amounted to Rs. 94.1 crores of which refinance by way of subscriptions to special development debentures of land development banks amounted to Rs. 86.1 crores. The balance of disbursements was made through scheduled commercial banks and State Cooperative banks.

2.18 A major weakness in the field of rural credit is its neglect of the weak and small farmers. A number of steps have recently been initiated to fill this gap. One of these is to organise Farmers' Service Societies to provide integrated credit supplies and services. These Societies will have professional management generally under the supervision of commercial banks. Credit organisations have to pay more attention to professionalisation of management, greater attention to the collection of over-dues (which have tended to grow at an alarming rate) by linking of credit to marketing, and greater collaboration between nationalised banks and primary credit societies.

2.19 There is ample evidence all over the world that growth of production by itself is no guarantee of removal of poverty. It is in recognition of this fact that the Fourth Plan included a number of special programmes to help the more vulnerable sections of the rural community. The SFDA, MFAL (Marginal Farmers and Agricultural Labourers programme) the Drought Prone Areas Programmes and the Intensive Rural Employment Projects formed the core of these programmes. A review of SFDA and MFAL programmes has revealed that there have been important gaps in the execution of these programmes, and, as a result, progress has been uneven from area to area. A major problem has been that a proper dovetailing of resources under the State Plans and the funds available under these programmes has not been attempted. In

the Fifth Plan, these deficiencies are sought to be removed. The SFDA and MFAL programmes will be merged into a composite expanded programme consisting of 160 projects costing Rs. 200 crores, and supplemented by suitable outlays in State Plans for extension of infrastructure support which is presently a crucial gap. The emphasis in these programmes will be on crop husbandry by integrated planning of irrigation and rainfed agriculture. In addition, a supplemental programme for animal husbandry will be taken up for the benefit of weaker sections. Similarly, the Drought Prone Areas Programme, which has been in operation since 1970-71 to provide employment in the rural sector largely on public works, is sought to be re-oriented by integrating it into a carefully worked out development strategy for these areas. The principal emphasis in the programme will be on proper ecological balance through development and management of irrigation and soil and moisture conservation and afforestation, restructuring of cropping patterns and live-stock development, etc. It is proposed to constitute coordinating corporate bodies which will have the responsibility of design and coordination of an integrated programme for drought prone areas. As for the Pilot Intensive Rural Employment Programme launched in 1971-72 as an *ad hoc* scheme, it is sought to discontinue it in view of the expanded programme for SFDA and the minimum needs programmes which has a large public works content. The minimum needs programme will involve construction of rural roads with an outlay of Rs. 500 crores, a programme of drinking water supply in rural areas with an outlay of Rs. 500 crores, and large outlay on education, construction of rural households and primary health centres. It is also clear that these programmes will have to be supplemented by vigorous implementation of land reforms relating to tenancy legislation, preparation and maintenance of records of rights, and consolidation of agricultural holdings if worthwhile results are to be obtained.