

II. THE AGRARIAN SCENE

Trends in Agricultural Production

52. The agricultural production in India rose by 6.7 per cent in 1969-70 and by 7.3 per cent in 1970-71. There was, however, a set-back in 1971-72 when production declined by 1.7 per cent. The output in the kharif season was affected by droughts and floods in a number of States. The rabi sowings took place under favourable weather conditions and wheat output in 1971-72 reached the peak level of 26.5 million tonnes. However, the increase in the production of foodgrains during the rabi season was not large enough to off-set completely the loss of kharif output. Thus production of foodgrains declined from 108.4 million tonnes in 1970-71 to 104.7 million tonnes in 1971-72.

53. Among commercial crops, the production of raw cotton (lint) in 1971-72 touched an all time high of 65.3 lakh bales. The production of jute and mesta estimated at 68.4 lakh bales increased by 10.3 per cent over 1970-71. However, the production of five major oilseeds declined from 9.26 million tonnes in 1970-71 to 8.28 million tonnes in 1971-72. The output of sugar-cane also registered a fall.

54. The prospects for agricultural production in 1972-73 have been conditioned by the behaviour of monsoons. On present indications, a decline in the index of agricultural production in 1972-73 cannot be ruled out.

55. As happened in 1971-72, the agricultural production in 1972-73 has been affected by a substantial fall in the kharif production, brought about by a highly erratic behaviour of monsoons. There seems to have been a decline in the kharif production in States like Andhra Pradesh, Bihar, Gujarat, Haryana, Maharashtra, Mysore, Rajasthan and West Bengal. The initial estimates that the production of foodgrains in 1972-73 kharif season might decline by as much as 15 million tonnes have turned out to be highly exaggerated. Although firm estimates are still not available the loss in output may be around 8 million tonnes as compared to the foodgrains production during the 1971-72 kharif season.

56. Faced with highly unfavourable prospects for foodgrains production in the kharif season the Government launched a crash programme for increased production in the rabi season of 1972-73. The objective was to achieve an increase in the rabi production of an order which would more or less fully neutralise the loss of kharif output. The higher rabi output was sought to be achieved by augmenting irrigation facilities,

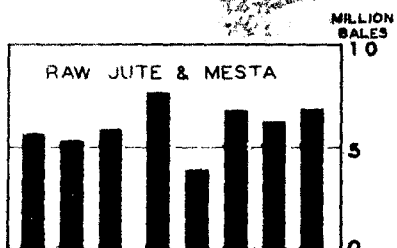
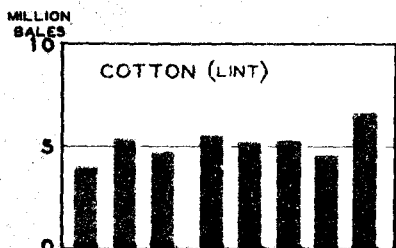
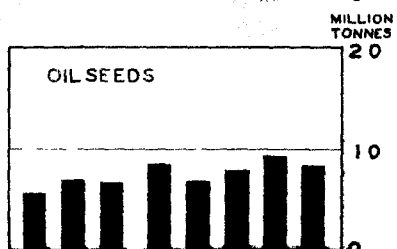
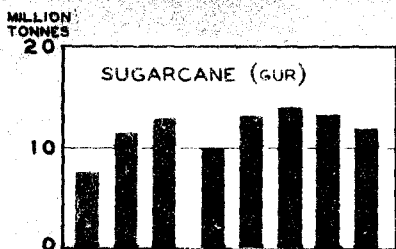
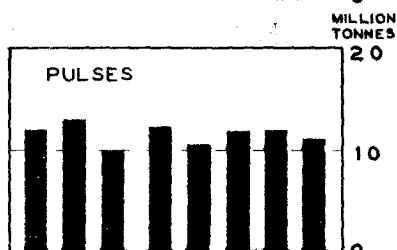
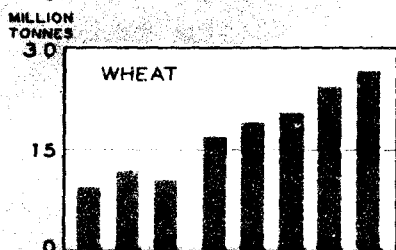
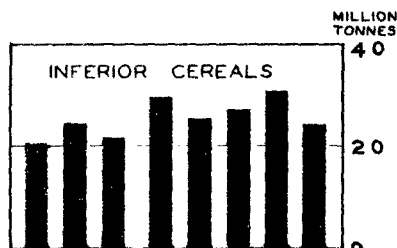
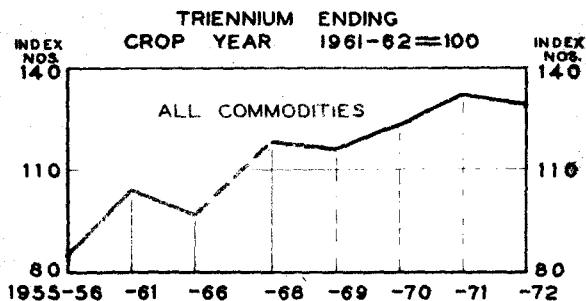
especially through quick implementation of minor irrigation programmes, and through increased supplies of fertilisers, seeds, pesticides and plant protection measures. A provision of Rs. 150 crores for special Central assistance, mainly for development of minor irrigation, was made for this purpose. Further, the provision in the Central Budget for short-term loans for agricultural inputs was raised from Rs. 60 crores to Rs. 100 crores. The final outcome of these efforts cannot be assessed at this stage. However, rabi sowings in many parts of the country have proceeded satisfactorily and the current expectations are that the production of rabi foodgrains in 1972-73 will be substantially higher than in 1971-72.

57. The prospects for increased production of commercial crops in 1972-73 are not very favourable. On current indications, the production of raw cotton, jute and mesta and oilseeds is expected to decline while that of sugar-cane is expected to increase marginally.

58. Agricultural developments in India during the last two years once again highlight the obvious gaps in our agricultural performance. The growth rate (compound) of foodgrains production during the period 1964-65 to 1970-71, estimated at 3.0 per cent per annum, was no doubt higher than the rate of growth (2.7 per cent per annum) realised during the period 1949-50 to 1964-65. However, the rate of growth of overall agricultural production declined from 3.1 per cent during 1949-50 to 1964-65 to 2.3 per cent during 1964-65 to 1970-71, reflecting a deterioration in the situation regarding commercial crops. It is also significant that 50 per cent of the total increase in foodgrains output from 1964-65 to 1970-71 was accounted for by three States of Haryana, Punjab and Uttar Pradesh. In the process, regional imbalances in the level of development seem to have been accentuated. Moreover, an analysis of the bumper foodgrains production in 1970-71 indicates that the growth of output in that year contained a substantial fortuitous element. Nearly one-half of the total increase was accounted for by Rajasthan, where, in one year, food production went up by nearly 85 per cent. This increase was made possible because, in 1970, rains broke a drought in Rajasthan that had lasted several years. The inadequacy of the overall rate of growth of agricultural production, growing imbalances in the production of various crops, and the associated inequalities in the level of regional development which were obvious even in such a good agricultural year as 1970-71 have been further magnified by the events of 1971-72 and 1972-73.

59. The green revolution has so far made a limited impact on agricultural production in India. This is largely because the green revolution has so far been essentially a wheat revolution. There has been a remarkable increase in the total production of wheat as well as in the yield per hectare since 1967-68. This has no doubt helped to reduce the degree of instability of food production in recent years. However, there has been no major break-through in the production of other crops. Although vigorous efforts are now being made to produce new high yielding varieties of seeds for other crops a number of technological and organisational difficulties have still to be overcome. For one thing, unless new drought resistant high yielding varieties of seeds are developed, the new agricultural strategy, laying emphasis on the use of chemical fertilisers and other costly modern

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inputs, is unlikely to be adopted by farmers lacking an assured supply of water. Thus a rapid expansion of area under irrigation and the introduction of new techniques of dry farming, must claim the highest priority in any strategy designed to reduce both the instability of Indian agriculture and the regional differences in the level of development. The following paragraphs describe very briefly the problems and prospects for major crops.

60. All available indicators point to a further increase in the production of wheat in the next few years, provided the structure of prices is maintained at a remunerative level. A number of non-wheat growing States such as West Bengal, Assam and Bihar have recently taken to the cultivation of wheat. The fears expressed sometime ago in certain quarters regarding an excessive production of wheat which could not be absorbed by the country have turned out to be unfounded. In the absence of a rapid increase in the production of wheat both in 1971-72 and 1972-73, there would have been an even greater fall in the production of foodgrains. The increased production of wheat has, therefore, performed a highly stabilising role. In view of considerable uncertainty about the output of coarse grains, it would not be desirable to slacken the efforts to increase the production of wheat, more so since wheat can be an effective substitute for coarse grains. However, the emphasis in the future must be on increasing the yields rather than on diverting the area from other crops to the production of wheat. The latter tendency is to be discouraged since it can intensify imbalances in the production of various crops.

61. The production of rice increased at an average annual rate of 1.1 per cent during the period 1964-65 to 1971-72 as compared to the growth rate of 3.0 per cent during 1949-50 to 1964-65. Although production has been rising since 1969-70, the peak production of 42.7 million tonnes reached in 1971-72 was only 3.4 million tonnes higher than the level of output in 1964-65. Thus far there has been no significant break through in the productivity of rice producing land. In fact, the average annual rate of growth of yield per hectare during the period 1964-65 to 1971-72 was lower than during the period 1949-50 to 1964-65. This is largely because the new high yielding varieties of rice introduced in recent years suffered from certain handicaps, such as high susceptibility to pests and diseases, and unsuitability under water-logged conditions. Experience indicates that these new varieties yield better results under conditions of controlled irrigation and water management during January to April, but they do not fare so well under conditions of heavy and erratic rainfall which prevail during the main rice growing kharif season, i.e., May to December. As a result, the impact of the cultivation of high yielding varieties on total rice production has not so far been impressive. Through the All India Coordinated Rice Improvement Project, attempts are now being made to evolve more suitable varieties, catering to different agronomic and climatic conditions in various parts of India. Thus far 14 new varieties of high yielding ability have been released. It is hoped that after a successful experimentation with some of these varieties, a sustained increase in the production of rice will be possible in the coming years. Another encouraging feature is the growing popularity of summer rice, the output of which rose by 7 lakh tonnes in 1971-72.

Summer rice is grown principally in Andhra Pradesh, West Bengal and Orissa, and in these States the area under this crop is proposed to be expanded considerably.

62. Most of the coarse grains are grown under rainfed conditions. As such, their production is greatly dependent on the vagaries of weather. Some progress has been made in introducing high yielding varieties in the form of hybrid bajra, maize and jowar. However, a number of problems will have to be overcome before these varieties are extensively accepted by farmers. For example, susceptibility of hybrid jowar to pests and diseases, and of hybrid bajra to ergot disease stands in the way of their extensive cultivation. Similarly, since available varieties of hybrid maize do not fit in well with the existing cropping pattern for rabi crops, farmers are reluctant to use them for cultivation.

63. The production of pulses has been stagnant for nearly a decade, and this has led to a considerable pressure on prices. Some of the area under these crops has got diverted to wheat, and other more profitable crops, pushing the cultivation of pulses to poorer lands. The high prices of pulses prevailing in 1972 may induce some reversal of this trend. Since a large part of production of pulses comes from rainfed areas, substantial fluctuations in yield are inevitable. Besides, not much progress has been made in the evolution and introduction of new high yielding varieties. This gap is now sought to be filled by the All India Coordinated Project on Pulse Crops. Attempts are being made to evolve some quick yielding varieties which can be fitted into suitable multiple cropping and relay-cropping patterns in areas with assured water. Already, some short duration varieties of arhar have been released. A new variety "Pusa Baisakhi" for moong and some early maturing varieties of gram have been developed. To popularise new varieties, 9 thousand demonstrations, three in each of the 3 thousand blocks, were undertaken in 1972-73 kharif season. In the States of Orissa, West Bengal, Tamil Nadu and Kerala, substantial additions to the area under pulses have been planned.

64. The oilseeds economy of India also currently presents an unsatisfactory picture. The output of five principal oilseeds which was estimated at 8.56 million tonnes in 1964-65 increased to 9.26 million tonnes in 1970-71. However, production declined by 10.6 per cent in 1971-72. The prospects for 1972-73 are none too encouraging since the groundnut crop, which accounts for nearly two-thirds of the total production, has been adversely affected by the drought in the main producing areas. To meet the expected shortfall a crash programme to bring 180 thousand hectares under Russian varieties of sunflower has been taken up in the States of Andhra Pradesh, Mysore and Tamil Nadu. A Centrally sponsored scheme for soyabean development on 59 thousand hectares is being implemented in the States of Madhya Pradesh, Maharashtra, Gujarat and Uttar Pradesh. A massive plant protection programme, involving spraying of about 226 thousand hectares of rapeseed and mustard area, is also to be implemented during the rabi season. The production of groundnut is proposed to be raised by bringing about 6.6 lakh hectares of irrigated area under the summer groundnut crop. Fiscal incentives in the form of excise

rebate are being given for increased use of cottonseed oil in vanaspati and of rice bran oil in vanaspati and soap. Incentives are also being provided for larger collection and use of oilseeds of tree origin like sal seed. However, it is obvious that unless there is a major breakthrough in productivity, the gap between domestic demand and production will continue to increase. In the past, this gap was met partly by imports of soyabean oil and mutton tallow under PL 480. These concessional imports have now been stopped, and unless there is a major increase in production, the growing demand for vegetable oils will impose a significant burden on the country's foreign exchange resources.

65. The production of raw cotton, which was lagging far behind the planned targets until recently, touched a record level of 65 lakhs bales in 1971-72, marking an increase of about 45 per cent over the preceding year, and an improvement of about 15 per cent over the previous highest production of 1964-65. Favourable weather conditions no doubt played an important role in raising the level of production in 1971-72. However, one encouraging feature of the situation is that some new high yielding varieties of cotton, specially hybrid-4, have given an impressive performance in the matter of yield. Qualitatively, however, they are not yet in a position to displace superior grades of imported cotton, and further research is now being carried out to remove this deficiency. The Intensive Cotton District Programme which is being implemented in 13 districts (six irrigated and seven rainfed) from 1971-72 is also expected to yield some results. The activities of the Cotton Corporation of India and the fixation of support prices for raw cotton will act as a further stabilising factor. It is a matter of considerable satisfaction that, despite drought conditions, the cotton crop in 1972-73 is expected to be only marginally lower than the 1971-72 record crop.

66. Sugarcane output, which is subject to cyclical fluctuations, recorded a further fall of 9.6 per cent in 1971-72 following a decline of 5.8 per cent in the preceding year. While this phase has now passed, the crop in 1972-73 has been partially affected by drought, and, as such, only a moderate increase in the overall production can be expected. The longer term outlook is still uncertain. Much, of course, depends on the quality of cane planted. Hence, efforts for quickening the rate of multiplication of seed and adoption of new varieties of cane, need to be intensified. In the meanwhile, installation of plants by factories for heat treatment of seed cane has been suggested so as to provide healthy and disease-free cane to the sugarcane growers.

67. The past decade has witnessed a marked fluctuation in the production of raw jute and mesta. Having touched the peak level of 76.6 lakh bales in 1964-65, it dipped as low as 38.4 lakh bales in 1968-69. Despite some recovery in the subsequent years, the output in 1971-72 at 68.4 lakh bales was still below the level attained in 1964-65. The production of jute and mesta in 1972-73 is expected to be significantly lower than in 1971-72; this shortfall is apprehended because of a prolonged dry spell that major jute producing States like West Bengal and Bihar had to face. But, even otherwise, jute production has failed to stabilise itself so far. In order to increase production it is necessary to evolve high yielding short-

duration varieties of jute, to strengthen the infra-structure for the availability of credit and inputs and to expand the net work of extension facilities. Under the All-India Coordinated Improvement Project on Jute, efforts are being made to evolve new varieties of jute. The newly constituted Jute Corporation of India could play a useful role in stabilising the prices of raw jute. In June 1972, the minimum statutory support price for raw jute was raised to Rs. 115 per quintal. Effective arrangements will have to be made by the Jute Corporation to collect raw jute at up country centres if the full benefits of stabilisation of prices are to accrue to farmers. In fixing prices, it will also be necessary to preserve the competitiveness of jute goods in the world market.

68. The preceding analysis indicates both the gaps in our agricultural performance and the efforts that are now being made to fill those gaps. In the last few years, a sound beginning has been made in imparting a scientific temper to our agriculture. There is evidence of an acceleration in the rate of growth of productivity per hectare since 1964-65. The growing use of chemical fertilisers in recent years is an indication of a qualitative change in Indian agriculture. However, in order to realise fully the benefits of modern science and technology, it is necessary to further expand the facilities for research as well as the net work of extension services. Highest priority needs to be given to research leading to the introduction of new high yielding varieties for all the principal crops. Special emphasis will have to be laid on those varieties which can withstand the effects of drought. Simultaneously, in order to assist farmers to make optimum use of fertilisers, facilities for soil testing, as well as for credit need to be expanded at a rapid pace. No less urgent is the task to expand the area under irrigation since, under rainfed conditions, farmers, being faced with an excessive degree of uncertainty, may be reluctant to use costly modern inputs like chemical fertilisers. Along with technological advances adequate emphasis has also to be laid on institutional changes designed to secure a more equitable system of land ownership and tenurial conditions and to help small and marginal farmers.

Rural Poverty and Inequalities

69. Small farmers and agricultural landless labourers account for the great majority of the rural working force. In the Fourth Plan, a number of special programmes were included in order to raise the standard of living of this segment of the rural working force. The details of some of these programmes were given in the last year's *Economic Survey*. Recent developments in the working of these programmes are described below.

70. The Fourth Plan had as its target the setting up of Small Farmers Development Agencies in 46 selected areas in the country. By now all the 46 Agencies are in operation. The scheme whose primary emphasis is on improving agriculture through supervised credit, seeks to help potentially viable farmers with holdings of between one to three

hectares. By November, 1972, these Agencies had identified 1.61 million small farmers, of whom 1.01 million were brought into the cooperative fold.

71. The marginal farmers (with holdings upto 1 hectare) and agricultural labourers (generally with a homestead and deriving more than 50 per cent of their income from agricultural wages) are sought to be helped through the Marginal Farmers and Agricultural Labourers Agency Scheme which is now in operation in 41 selected areas of the country. 7.24 lakh marginal farmers, and 2.57 lakh agricultural labourers, had been identified in these project areas by December, 1972. The scheme seeks to increase the earning capacity of the beneficiaries with improved technology, by providing subsidised credit for purchase of selected inputs, and also through a programme of rural works for providing supplementary employment opportunities.

72. The SFDA and MFAL programmes, which were initiated towards the end of 1969-70, started functioning effectively from 1971-72. The Central Budget for 1972-73 provides for an expenditure of Rs. 18 crores on SFDA and MFAL and by the end of December, 1972, Rs. 9.49 crores had been released. It may be mentioned that, under the SFDA programme, upto about November 1972, a total of Rs. 12.82 crores of short-term loans, and Rs. 21.38 crores of term loans, have been advanced. The number of dug-wells and tubewells installed comes to 42.6 thousand and of pumpsets for irrigation 10.2 thousand. Assistance for 18.4 thousand milch cattle has also been provided. Similarly, under the MFAL projects, short term and term loans advanced come to Rs. 1.46 crores and Rs. 3.64 crores respectively. The number of dugwells/tubewells constructed comes to 3.1 thousand and of pumpsets installed to 2 thousand. Assistance has also been given for 11.3 thousand milch cattle.

73. The rural works under the Drought Prone Area Programme seek to relieve the economic distress caused by drought conditions in 54 selected areas in the country. The expenditure on the programme increased from Rs. 6.76 crores in 1970-71 to Rs. 24.03 crores in 1971-72. The outlay on the scheme in 1972-73 amounted to over Rs. 37 crores by the end of December 1972.

74. Agriculture in nearly 128 districts of the country which receive inadequate rainfall, and have also very limited irrigation facilities, is characterised both by low productivity and high instability. The Integrated Dry Land Agricultural Development Programme covering 24 pilot projects seeks to deal with these problems both by increased research on problems of dry farming and by a proper application of known advances in technology on the farms. Considering that the dry farming areas cover nearly 68 million hectares of agricultural land, the evolution of an efficient dry farming technology will no doubt make a major contribution to increasing agricultural production as well as in reducing regional disparities. As such, the country has a high stake in the success of the experiments now being conducted under this programme.

75. The Crash Scheme for Rural Employment, which was launched in April 1971 as a Central scheme, is currently in the second year of its operation. The allocation of Rs. 50 crores per annum is intended for projects which are essentially of a labour-intensive nature and, therefore, relate to road building, land development and reclamation, flood protection and anti-waterlogging, minor irrigation, afforestation, soil conservation, etc.

76. During 1971-72, as against the budget provision of Rs. 50 crores, actual expenditure on the scheme was Rs. 32.37 crores. In spite of the late start made by the scheme, it is estimated to have resulted in generating 80.8 million mandays of employment in 1971-72 as against the original annual target of 87.5 million mandays.

77. The special programmes described above are designed to reduce the rigour of rural poverty and inequalities. However, many of these programmes are still in experimental stages and, as such, it is too early to assess their impact. In order to derive maximum benefit from these schemes, it is necessary to integrate them into the overall strategy of rural development of different regions. As far as possible, the emphasis must be on programmes which increase the nation's productive capacity at the same time as they provide additional income.

78. Institutional reforms involving redistribution of land and providing security of tenure to tenants have been recognised as important instruments for reducing rural inequalities. In most States, legislation exists for fixing reasonable rents payable by tenants, and granting them security of tenure, and also providing for certain rights for purchase of land. Success in implementation has, however, been limited, partly due to heavy pressure of population on land and partly due to inadequacy of records of land rights and other administrative deficiencies.

79. During the current year, renewed attention was focussed on the fixation of ceilings on agricultural holdings. Although legislation prescribing ceilings has been on the statute books of almost all the States in the country for a considerable number of years, because of faulty implementation, as well as legal loopholes, it has not led to any major redistribution of land. The Government of India have issued a set of fresh guidelines in the light of the recommendations made by the Chief Ministers' Conference held in July, 1972 on various aspects of land ceilings. The idea is to bring about a certain measure of uniformity in the ceiling legislation now being revised in various parts of the country, and, generally to reduce the level of ceiling. The family is now being made the basic unit for the application of ceilings throughout the country. A family, for this purpose, would consist of husband, wife and minor children. The ceiling for a family of 5 members would be between 4.05 and 7.28 hectares of land with assured irrigation and capable of growing at least two crops a year; for land with assured irrigation and capable of growing one crop a year the ceiling for the family would be 10.93 hectares; for all other categories of land, including orchards, the ceiling for a family would be 21.85 hectares. Where the number of members exceeds five, additional land

may be allowed to each member, subject to an overall maximum of twice the ceiling for the basic family unit. Categories exempted from the ceiling have been drastically reduced. The most important of the exempted categories are the plantations of tea, coffee, rubber, cocoa and cardamom. The revision of the existing ceiling laws in the light of these guidelines has been undertaken by almost all the States, and the revised enactments have already become operative in a number of them.

80. The extent to which this legislation will lead to a genuine redistribution of land will depend both on the existence of proper records of land rights and the ability of the Government to prevent fictitious transfers of land. The past experience is certainly not very encouraging and one must not underestimate the ability of entrenched landed interests to defeat the basic objectives of land reforms. The administrative machinery in the States will have to lend its wholehearted support to the programme if worthwhile results are to be achieved.