## Agriculture and Economic Development in India

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As the process of economic development gathers momentum, certain stresses and strains are becoming manifest in the Indian economy. There is a persistent rise in the price of foodgrains, and consequently, in the general price level and the cost of living. Secondly, there is a rather grave deterioration in the foreign exchange resources of the country. In this article an effort is made to give a brief account of the progress made during the First Five Year Plan in the sphere of Agriculture and to examine in that background the plans for development during the next five years, particularly with a view to finding out whether the programme will facilitate a balanced growth of the entire economy.

During the First Five Year Plan, production of foodgrains increased by 20 per cent. from 54 million tons (1949-50) to 64.8 million tons. In 1953-54 there was peak production at 68.7 million tons. The index of agricultural production as a whole (1949-50=100) rose from 95.6 in 1950-51 to 114.3 in 1953-54 and 116.4 in 1954-55. In 1955-56, however, there was some decline. Altogether, the index of agricultural production, by the end of the plan period, was about 19 per cent. higher than at the beginning of the Plan. Final estimates of foodgrains production for the year 1956-57 are not yet available. But the production of rice appears to have increased by 1.3 million tons over the previous year. The increase in the index of industrial production during the plan period was of the order of 40 per cent.

Among the programmes of development which have contributed to increase in agricultural production during the First Plan, minor irrigation works, increased use of fertilisers, land reclamation and development and extension of area under cultivation have been specially significant. During the First Plan, about 10 million acres of land have been brought under irrigation from minor works and about 6.3 million acres from large and medium irrigation schemes. During this period, the consumption of ammonium sulphate has more than doubled-from 275,000 tons in 1950 -51 to 600,000 tons in 1955-56. The area brought within the scope of what is called 'Japanese Method' of rice cultivation, was about 2.1 million acres. Nearly 2.4 million acres of land were reclaimed through the Central and the State Tractor Organisations; besides this, about 5 million acres have been developed by cultivators through programmes such as assistance for mechanised cultivation, bunding and levelling and reclamation of land by manual labour. During this period, the total cropped area has increased from 326 million acres to 352 million acres in 1954-55. The area under food crops has risen from 257 million to 272 million acres and under commercial crops from 49 million to about 60 million acres.

Some doubts are expressed regarding the genuineness of this increase. If the figures of foodgrains production are split up in two pa-

rts, one consisting of regions which were hitherto called Part A States and the other consisting of the territories under the administration of the erstwhile Princely States, we discover that the former was, in fact, unable to fulfil the target of the First Five Year Plan. It was only in the latter regions that the target was over-fulfilled by something like 3.20 million tons. It is suggested that much of this increase was simply because of better reporting. It may be noted that between 1949—50 and 1955-56, the increase in the yield per acre of cereals in Part A States—which accounted for 81 % of total production in 1949-50 -was 4.6% as against 33.1% in the regions which were formerly under the administration of Princely States. Secondly, there appears to be no ascertainable correlation between the developmental activities such as irrigation, supply of fertilisers, distribution of improved varieties of seeds, etc. and the registered increases in production, All these facts make it very difficult to assess with any confidence the progress in the production of foodgrains during the last few years.

It was under this economic background that the Second Five Year Plan was formulated. The geographical distribution of the increase in production was not fully analysed and it was felt that the food problem was no longer as acute as at the time of the formulation of First Five Year Plan. It was, therefore, decided to shift in emphasis from agriculture to industry. Thus, though the total outlay on agriculture and community development was increased from Rs. 357 crores under the First Five Year Plan to Rs. 568 crores in the Second, its percentage in the total outlay, declined from 15.1 to 11.8. Similarly, the outlay on irrigation and power was increased from Rs. 661 crores to 913 crores in the Second Fi-

ve Year Plan; but here again, its percentage share declined from 28.1 to 19. The target of foodgrains production by the end of the Second Five Year Plan was placed at 75 million tons, indicating an increase of 10 million tons over the estimated production of 65 million tons in 1955—56. But, within a few months of the publication of the Second Five Year Plan, the sharp rise in the foodgrain prices and the fear of further likely impact of deficit financing of a large scale induced second throughts on the question and at a Conference of State Ministers of Agriculture it was decided to raise the target of foodgrains production by the end of the Second Five Year Plan to 80.4 million tons.

The trend in the prices of the agricultural commodities in the very first year of the Second Five Year Plan shows that the fears entertained regarding the inadequacy of targets of food production were fully justified. In April 1957, the wholesale prices of food articles index was 408.3 as against 313.2 during the year 1955—56. The index for 'Manufacture' on the other hand has been very steady. It increased from 373 in 1955—56 to 384.6 in 1956—57 and has not gone beyond since then.

The crucial question, therefore, is whether the increase in agricultural production postulated for the Second Five Year Plan, will be in balance with the developments in the rest of the economy. In other words, whether agriculture will be able to meet the demands for its products generated during the course of medium as well as long-term economic developments? This question of balance between growth in the different sectors of the economy is even theoretically very difficult to determine. It is made much more difficult because of the deficiency of adequate and reliable stati-

stical data.

While the long-term demands for products of agriculture would be greatly influenced by the trend in the growth of population, in the shorter period, the impact of rising money incomes generated by developmental expenditures, is likely to be more pronounced. Once again, it is very difficult to estimate with any accuracy the income elasticity of demand for food. Such estimates as are available for developed economies, with a fairly high standard of living, are of not much use for countries with a low standard of living and in which the demand for the basic needs, such as for food, is not fully satisfied.

The question of long-term balance between the agricultural sector and the rest of the economy has been ably examined by Professors Ansley Coale and Eggar Hoover in the monograph on "Population Growth and Economic Development". The question they pose is; Whether the course of development envisaged in the agricultural sector is likely to exercise any important constraints upon development in the rest of the economy or vice versa in the course of the next two or three decades. Their findings have been given on assumptions which are different from those of the Planning Commission. For example, they hold that population will increase by 63 per cent. in the next 25 years as against the estimate of 34 per cent. by the Planning Commission. They also hold that farm output will double in 25 years and not in 20 years as assumed by the Planning Commission. The income elasticity of expenditure on food is calculated at .80. Based on these assumptions, their overall judgment is: (i) Agriculture, in any event, is unlikely to exert any constraint on nonagricultural development which could discourage the latter from growing by 150 per cent. or even 200 per cent., while agriculture grows by 100 per cent. If this occurred during the next twenty five years with a population growth of 60 to 66 per cent., the average annual growth of per capita income wou-1d be about 1.3 to 1.7 per annum—this is much smaller than that envisaged by the Planning Commission. (ii) There is considerable flexibility, perhaps, even above these limits, for a further faster growth of non-agricultural output and of total output relative to agriculture. This may involve resort to net imports of agricultural products, probably associated with a rise in the ratio of farm to non-farm prices; (iii) The rate of population growth in the next few decades may well be important in determining how fast the nonagricultural sector can progress relative to agriculture's progress. A very rapid growth of population might seriously restrict the possibilities of increasing the ratio of non-agricultural to agricultural output.

Apart from the question of foodgrains production, there is an important problem of the marketed surpluses. With an increase in incomes of the farming communities, it is quite possible that the percentage of marketed surpluses may actually decline. In a non-regimented economy, in which there is a natural dislike, if not resentment, for compulsory levies, the possibility of withholding of stocks by the farmers, and more particularly, by the trading community, cannot be ruled out. In fact, during the recent period of rising prices of foodgrains, there is some evidence of such action both on the part of the trading community and the farmers. Thus, for example, in April 1957, Bank advances against paddy and rice were about 97 per cent. higher than the corresponding level in 1955 and 84 per cent. of the abnormally high level in April

1956. The advances of the Cooperative Societies and Banks to the cultivators, especially in the surplus foodgrains regions, are also distinctly higher than before. Liberalisation of production and marketing credit may thus, have consequences very different from those intended by the policy of liberal rural credit.

The question of balance between the various sectors of the economy cannot also be considered entirely on the assumption of a closed economy. For this reason, it is necessary to consider the possibilities in the field of international trade. During the last few years, India has been importing considerable quantities of agricultural commodities which have supplemented the national production, and thus helped to maintain a balance with the other sectors. Confining our attention to foodgrains, we find that in the year 1951, India imported 4.7 million tons of foodgrains. Since then, the imports were continuously on the decline year after year and in both 1954 and 1955, the imports were less than a million tons. But since then the trend has been reversed, and in the year 1956, the imports of foodgrains amounted to 1.4 million tons. During the first five months of the year 1957, the imports have already reached the level of 1.4 million tons, and by the close of the year, the figure is expected to reach 3 million tons. During the fiscal year 1956-57, India imported Rs. 102 crores worth of foodgrains, out of which, Rs. 43 crores were paid out of aid under PL 480 and T. C. A.

India's capacity to go on importing foodgrains to make up for the deficiency in national

production depends upon several factors. But the most important of these is the foreign exchange position. As is well known, during the last 12 months, the foreign exchange resources of the country have been severely depleted and there are difficulties even for importing the most essential capital goods for maintaining the continuity in the developmental programme already in hand. Under these circumstances, it is very unlikely that India will be able to spare enough foreign exchange for importing foodgrains and other agricultural raw materials that may be necessary to maintain the balance. Fortunately, the country was able to enter into an agreement with the United States for the supply of agricultural surpluses. The Indo-United States Agreement provides for a sum of \$300 million, roughly equivalent to Rs. 172 crores, for purchase of wheat, rice, cotton, tobacco and dairy products in the next three years. The imports would consist of 3.5 million tons of wheat, 0.2 million tons of rice, 0.5 million bales of cotton, along with smaller provisions for imports of tobaccoand dairy products. It is stipulated that the imports under this Agreement are to be over and above the normal imports from the United States and other countries. This Agreement will give the much needed relief to the foreign exchange resources but will fall short of the total requirements, particularly in foodgrains, till better harvests in India are able to abate the scarcities and bring down the prices of foodgrains from their present abnormally high level.