

Agricultural Development in Tamil Nadu*

G. RANGASWAMI¹

With a landspread of about 13,000 sq. km., Tamil Nadu is the eleventh State in geographic area in India, whereas with 48.75 million people it ranks seventh in population. The population density per sq. km. is 375 as against the national average of 203. The total cultivated area of the State is 61,69,000 hectares, which is 47.45% of the total area. This is far above the optimum of one-third of the total area to be cultivated by any State for an ecological balance. As against the required optimum of about 40 lakh ha that should be under forest, only 23 lakh ha has a forest cover, which works out to only 15% of the total area, which is much lower than the national average of 23%. At the present annual growth rate of 2.2%, the State's population will exceed 72 million by 2,000 A.D. As against one ha of cultivated land supporting about 8 persons to-day, by the turn of the century, the same one ha will have to support 12 persons or more. This is about double the national average of human pressure on cultivated land. Therefore, the problems of human and natural resource management in the State of Tamil Nadu, which are already in a bad shape, will become very acute and if adequate corrective steps and appropriate advance

actions are not taken, it will lead to social tensions and economic breakdown.

2. The State is bestowed with certain natural resources of soil, water and sunlight. It has several soil types, but is rather limited in rich black cotton soil which brings better agricultural benefits to the farmers. Though there are forty two large and small rivers, only a few of them are worthy of high irrigation and hydro-electric potential. Unlike the neighbouring States, a large percentage of the State's landstretch is plagued by rain shadow, causing semi-drought conditions. The State's riparian rights are also limited, as most of the rivers which flow in the State originate in the neighbouring State (s). The tropical climate with round-the-year bright sunlight and relative high humidity are the only asset for the State to bank on. Furthermore, nearly 80% of the irrigation potentials has already been exploited and the rest is relatively more expensive for exploitation. The geological wealth cannot be considered on any account as richer than in most of the States, though there are some deposits of iron, lignite, magnesite etc. which support industrial development.

1: Adviser (Agriculture), Planning Commission, New Delhi-110 001.

* The views expressed in this paper are the author's own.

The progress of the State will, therefore, depend mainly on the efficient management of the available limited resources.

3. Agriculture is the main occupation of the State, supporting about 70 per cent of the population but contributing to about one-third of the State's GNP. This accounts for wide economic disparities among the people of the State. The State is marginally surplus in food-grain production; as against the required quantity of about 85.88 lakh tonnes, it produces about 90 lakh tonnes. It is far deficit in pulses and oilseeds production and these commodities move into the State at a high cost. Of the cultivated area, about 47% is irrigated, of which 30% by canal, 40% by well and the rest by tanks. The State is self-sufficient in foodgrain at a high luxurious investment of about 72% of the cropped area and about 80% of irrigation water, whereas money crops are limited to less than 20% of the cropped area. The two major cash crops of cotton and sugarcane account for only 2.3 and 3.2 per cent respectively. The high value crops of coffee, tea, etc. are also limited to about 90,000 hectares. Thus, the income for the agricultural land is limited. Therefore, the economic growth of the State, which is basically dependent on agriculture, is rather slow when compared with some other States like Punjab and Haryana. Though Tamil Nadu is recognised as one of the agriculturally progressive States, with its hard working farmers its compound growth rate in agricultural production during 1966-79 is only about 2.2%, as against the national growth rate of 2.8 per cent and of 4 to 6 per cent in Punjab and Haryana. Unless the State makes

a more rapid progress in agriculture than at present, its economic growth cannot be assured. Even to maintain the present level of growth, various developmental programmes have to be implemented more vigorously than at present. Given the will and efforts the State can produce all the required quantities of pulses and oilseeds, and other commodities to supply the calorie-rich and nutritious food to its people and also substantially increase production of commercial and high-value crops to support the industry and improve agricultural economy.

4. The declared goal of the nation in its planned development is to reduce poverty, eliminate unemployment and under-employment, accelerate rural development and provide the minimum needs such as drinking water, primary education, health care, transport and communication, housing, etc. to the people. These are also the essential goals of Tamil Nadu. There are 15,375 villages in the State and about 61.12 lakh operational land holdings. Of these, marginal holdings are about 64.6 per cent, small 18.4 per cent, medium 16.2 per cent and large 0.8 per cent. The size of the land holdings is getting reduced more rapidly than the national average rate of reduction, which cannot be considered as a healthy trend for better farming in the State. The average size of holding in the State is 0.95 ha against the national average of 2.05 ha. Industrially, the State had made good progress in the past. However, the investment by the State and the Central Governments in the public sector undertakings in Tamil Nadu has been much lower in recent time. As against the national average per capita

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investment of Rs 209, it is only Rs. 113 in Tamil Nadu. The GNP of the State is Rs. 1030 as against national average of Rs. 1249 at 'current price' in 1977-78. While about 20 million people are engaged in agricultural operations, of whom about 50 per cent are landless labourers, the total number of persons employed in the organized sector, both public and private, is only about two million. The unemployment in the State is, therefore, very high. The total number unemployed as of 1977-78 was about 2.80 million, which represents 16.63 per cent of the total persons unemployed on live rolls in the country. Besides, a vast majority of the people employed in the unorganized sectors like agriculture are also under-employed. While the percentage of people below poverty line in 1977-78, assessed on the basis of an average income of Rs. 65 per month in rural areas and Rs. 75 per month in urban areas, was 48.71, the same was over 60 per cent in Tamil Nadu, i.e. about 30 million people do not get a square meal a day in the State. Thus, it could be seen that Tamil Nadu is among the poorest States in a poor country.

5. The outlook for the future, for the country as a whole, depends upon its agriculture. Considering that 52 per cent of the industries in the country are agro-based, getting more than 80 per cent of the required raw material, and accounting for about 56 per cent of industrial employment. Unless there is rapid growth in agriculture to produce the raw material, there cannot be industrial growth. Most of the unemployed and under-employed persons will have to find their living either through direct involve-

ment in agriculture or indirectly through agro-based industries. Under such a tight situation, what are the possibilities of improving agricultural productivity in the State? As stated already, the rate of growth of agriculture in its broad coverage of crop production, horticulture, animal husbandry and dairying, poultry, fisheries, forestry, etc., is much below the national growth rate. Unless this situation is substantially improved, the future of the State cannot become bright. Also, if the State were to improve its economy through agriculture it has to strengthen its programmes in such a manner to better utilize the available resources, with more efficient managerial inputs at all levels, from individual land holdings, to State headquarters, and all the way through villages, blocks, taluks and districts. This calls for modernization of agriculture with a dynamic research and developmental support.

6. That there is ample scope for increasing the agricultural productivity is well demonstrated by the progressive farmers in different parts of the State. The crop yields from annuals and perennials could be three to four-folds that of the State average, for which technology is available. The productivity of milk, egg, meat, etc. could also be more than doubled, through adoption of available technology. The long sea-coast and the inland and estuarine waters provide a vast scope to increase production of fish and other marine species. The area under tea, coffee, rubber and cardamom in the State could be increased by an additional 30,000 ha, and another 25,000 ha with other high value plantation crops of various

species and fruit trees. This would also support several agro-based small and medium industries. Together with such an effort, the State should take steps to diversify agriculture, to reduce the area under cereals, at the same time increasing the production of food-grains at an annual rate of about 4 to 5 per cent, and the land thus released grown to commercial crops including oilseeds, cotton, sugarcane, vegetables, fruits etc. Another important development which is moving fast in the State is Sericulture. This labour-intensive high-economic-return activity should get the required administrative support to cover at least about 50,000 ha during the next five years. There are several areas of rural development which should receive adequate attention. Animal husbandry and dairying programmes for landless labour, small scale agro-based rural industries, handloom and powerloom weaving, handicrafts etc. would help to absorb the rural work force which is presently idle. While the farmers, landless labourers and other rural workers have to be guided, and assisted in intensifying their efforts and in taking to new lines of developmental activities through proper incentives and financial subsidies, no State could afford such a development through perpetual subsidies. The subsidies should be 'self-eliminating', rather than 'self-perpetuating'. On this basis, each farmer should aim at increasing the income from his holdings at least by 50 per cent in the next five years. The State Government through its developmental departments should help the farmer to plan and execute to achieve this objective. Price incentives and marketing facilities which are essential for

proper development, should be made available through proper infra-structure and institutional arrangements. This needs careful planning and advance action by the State's administrative machinery and political leadership. While the farmers in financial distress as at present may need sympathetic support by the Government, the best way of helping them is to create an atmosphere for them to earn more from their small holdings through various technological and material inputs. The State Government has also the responsibility of planning for the future needs, through conservation of natural resources and creation of additional resources such as man-made forests, power generation, harnessing of solar energy, exploration and utilisation of fossil fuel, environmental protection, recycling of organic wastes and drainage waters, etc.

7. The various educational institutions including the seats of higher learning should involve themselves in the task of economic upliftment of the State. The required research and technology support will have to be generated, through their academic institutions and research centres. The relevant technology for an integrated growth of agriculture and various small, medium and large industries will have to come from the Agricultural Technological Universities of the State. The Universities should also more actively help the State to plan for its future and train the required technical manpower and leadership for successful implementation of the plan thus prepared.

8. If the State were to uplift the 6 % of its people who are below the poverty line, they should all be given gainful employments. To touch the

national average of about Rs. 1200 per month, one has to earn Rs. 100 per month, or on an average Rs 5 per day, and 20 days in a month. At least ten million man-years of additional gainful employment opportunities will have to be generated during the Sixth Five-Year Plan period. While this is almost an impossible task, every effort has to be made to open up avenues for rural and urban employment. The State has created an irrigation potential for 30.75 lakh hectares and additional 1.68 lakh hectares is planned for 1980-85 plan period. Through proper use of the present potential and planned additional irrigation resource, an additional two lakh hectares could be brought under irrigation. This would provide additional employment of about 5 to 6 lakh man-years. The expansion of area under plantation crops and hill area development programmes should generate about five lakh man-years of employment. The intensive sericulture development and handloom and powerloom weaving should provide another five lakh man-years of work. The various other developmental programmes such as social forestry, Operation Flood II dairy project, fisheries, and small scale rural industries would provide work for another five lakh persons. In the organized sector including agro-based industries and service sectors, there would arise some scope for employment. Thus, an additional 2.0 to 2.5 million people could be absorbed with planned attack on the problem of unemployment in the State. In order to achieve these

objectives, deeper involvement of the people together with human resource development are essential. This calls for educating the public, especially the rural mass, through non-formal and adult education programmes.

9. In all such efforts, financial input becomes the main bottle-neck. Since several of the development projects like plantation crops, fisheries, social forestry, biogas production, sericulture, etc. are bankable programmes, institutional finances would become readily available. The State should also be able to mobilise more resources from within and from outside the State for developing its economy. What is important at this stage is to have an open mind to learn from its own past experience and from those of other States in the country. It should learn from the experience of other States, such as Gujarat in respect of their Co-operative Dairy and Social Forest Programmes, of West Bengal and Orissa in respect of their Inland Fisheries Programme, Uttar Pradesh in respect of its Biogas Programme, etc. The State should also gear up its administrative structure so as to ensure better technical and managerial input for the much needed massive efforts to pull out the State from the present economic backwardness. While the 'administrative skill' 'technical know-how' and 'political will' are available in the State, they should be orchestrated and turned to meet the needs of the people and to help them solve their present and future problems.