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LAND AND FOREST RESOURCE MANAGEMENT
FOR ECONOMIC BETTERMENT OF WEAKER
SECTIONS IN RURAL INDIA

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ECONOMIC BETTERMENT OF WEAKER SECTIONS IN RURAL INDIA

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I. Introduction and Objectives

It has long since been recognised that economic policies must not only aim at attaining higher growth rates in production and incomes, but also mould the institutional framework so as to contribute to the effective realization of wider and deeper social values. This implies at least two issues. First, the poor must be provided with an opportunity to perceive and participate in the process of economic development. Second, certain basic principles of natural resource management should be invoked to enhance the use capability of such resources. This paper examines a few relevant issues in these contexts.

One objective of this examination is to show that even if interest in rural change in general and agricultural development in particular has been widely shared, many of the policies pursued appear to focus at "tension management". This provides a basis for the second and the main objective which argues that the process of sustained change for economic betterment of weaker sections of the people in rural India can be accelerated through introducing well integrated natural resource management programmes.

II. Some Past and Current Policies

A number of strategies have been used to involve the poor in the developmental processes. These include Land Reforms, Rural Community Development Programme, Drought Prone Areas Programmes, Small and Marginal Farmers' and Agricultural Labourers' Development Agencies, Minimum Wages for Agricultural Labour, Freedom from Bonded Labour, Rural Debt Liquidation, etc. Some voluntary efforts like the land gift movement have also been carried out with considerable public support. Rural India has changed considerably during the last three decades, but the change has not been commensurate with the size of the effort or the problems.

Almost all of these efforts have focussed on individual cultivators/farm families. Land reforms have been the most emphasized of the intervention strategies. But, against the initial estimate of over 24 million hectares only 0.56 million hectares were redistributed during the years 1950-1978 (Times of India, 1978). At the same time, the number of households which owned less than one hectare of land increased from 35 to 49 millions between 1961 and 1971. Their percentage in the total land owning households moved from 55 to 63, with 7.6 and 10 per cent of the total agricultural land in the respective years. Two-thirds of the farm firms, thus, face absolute scarcity of the most crucial production agent. During the same period, the number of owners with less than 0.2 hectare of land increased from 19 to 29 millions, and the land area owned by this group increased from 0.70 to

0.83 million hectares. The number of land owners in this group and the area owned by them, thus, increased by 53 and 18.5 percent, respectively (Gupta and Singh, 1977). This situation could be interpreted as an attempt at proping the poor through make believe programmes of gainful employment.

The effects have also gone against the stated objectives of creating "economic" size of holdings. It has been estimated that in 1970-71, less than one per cent of the total number of farms contributed 25 per cent to the total foodgrain production in India and about 90 per cent of the total production was accounted for by less than 50 per cent of the holdings (Vyas, 1978). Should one expect the remaining 50 per cent of the farmers to attract enough attention from the developmental agencies ?

Specific agencies do, however, exist to help the small and marginal farmers. Since their inception in 1970, and upto June 1978, 5.7 million farmers were reported to have "benefited" through programmes comprising of minor irrigation, dairy, and poultry development (Desai, 1979, p. 226). Given the size of the target group at a minimum of 50 millions, the programmes have "benefitted" a little over 11 per cent. No systematic data on the 'extent' of the benefits were available. But, if short, medium, and long term loans distributed through cooperatives and commercial banks could be taken as an indicator, the change would not be

appreciable. During the years 1970-71 to 1977-78, a total of Rs. 3,330 millions were disbursed as loans (Ibid). This worked out at a little over Rs. 580 per beneficiary over the 8 year period or an average of less than Rs. 75 per beneficiary per year.

An important consideration is that structural change could be necessary, but can not be sufficient to bring about the needed change in the economic status of the weaker sections of the society when enough land, capable of sustaining a dynamic system of crop production, and to accommodate the target groups, is not available. The socio-political dynamics, however, continue to emphasize land ownership rather than its use. Attempts have even been made to purchase land from big holders, and to distribute the same amongst landless agricultural workers. But the impact of such interventions has been negligible, or even negative in some cases.

For one such experiment in 1976, aimed at benefiting 13 families, the land cost alone was over Rs. 5,000 per family. Most of this land was sandy and incapable of supporting many annual crops, and the new allottees of the land had neither the needed draft power nor the equipment (Sinha, 1976). Such cases could generate thoughts that land distribution has been used as a tool for "tension management" or to divert the mental energies of the people. If not, why should one argue for more amenities for industrial

workers and only "toe-hold" of land for the unemployed in the rural areas? It is time to think of these contradictions, and enable the rural poor to recognise that land ownership would not meet the objective of a better quality of life for them.

Whatever positive impact that the efforts at structural change could have had on the socio-economic fabric in rural India, seems to have been undone by the Agricultural Price Policy. These prices have remained consistently high in India and, year after year, the Government fixed higher procurement prices than those recommended by the Agricultural Prices Commission - a body of experts appointed by the Government. The terms of trade have constantly moved in favour of agriculture and most of the benefits have gone to the surplus producing farmers (Dantwala, 1977). In 1971, the top 30 per cent of the rural households in India owned 80 per cent of the assets, while the lowest 20 per cent shared only 0.76 per cent (Anon., no date). Even those who hold that the attempts at structural change have not been totally inconsequential, agree that the ranks of the poorest in rural India have been swelling (Vyas, 1979).

III. Land and Forest Resources Management Programmes for Agricultural Development and Economic Betterment of the Rural Poor

Effective management of the inter-related natural resources systems could maximise sustainable outputs of goods and services,

and provide gainful employment opportunities to the rural poor. This section has been devoted to a discussion of certain aspects of land resource management. The guiding principle has been to evolve land use patterns which do not over burden the stock of the resources, and bring to life the less productive and unproductive areas, such as barren uplands, jungles, grazing lands, eroded lands, deserts, and marginal agricultural lands.

Forest land is one of India's major natural resource systems. Virtually no interdisciplinary research for its effective management has been carried out. The Forestry system has leaned heavily on nature for its rehabilitation and regeneration. This has meant high returns per unit of investment, but the potential of the land has not been harnessed to provide gainful employment. With 75 million hectares of forest land, comprising nearly 23 per cent of the geographical and 50 per cent of the cultivated area of the country, the sector's contribution to the GDP at current price between 1970-71 and 1974-75 averaged at 1.09 per cent (Anon., 1976, p.14). This is mainly because of low investments. During 1950-51 to 1977-78, forestry's share stood at 2.48 and 0.54 per cent of agriculture and the total developmental resources, respectively. On an average, this worked out at less than Rs.2.00 per hectare per year (Gupta, 1978).

This has happened despite the Indian Planners' and policy makers' awareness of the importance of forests as evidenced by the discussions of links between ^{forests} and people, between forests and food, etc. But, little happened in practice. One reason could be the emphasis placed on enhancing 'food supplies', in the narrowest sense of the term, which resulted in the emphasis on self sufficiency not only at the national level but also at the regional levels. A more important reason, however, could be the focus on individual farm operators. Such factors did not allow fair appreciation of the value of regional specialization which, in turn, could lead to efficient utilization of natural and human resources. Moreover, the fact that, like annual crops, tree crops also depend on human ingenuity and conscious efforts escaped the desired and deserved attention.

The procrastinations of the past could encourage us to look into the prospects. Forestry activities are labour intensive. One estimate is that the labour components per unit of output at producers' prices were 66.12, 60.21, and 59.34 per cent for wood products, timber and other forest products, respectively (Chatterjee, 1977). More generally, it is estimated that for every man employed in the forests⁴, get employed outside. Thus, the forward linkages of forestry activities are quite strong and can be further improved through growth of wood processing and other forest based industries.

Of the 75 million hectares under forests, about 60 per cent is currently exploited. It has been estimated that the exploitable area under the forests can be enhanced by 18-20 per cent. This resource appears to hold a promise for contributing to sustained change in rural India through generating additional goods, and employment opportunities. The facts that, on an average, only 0.215 m³ of industrial and commercial wood, and 0.362 m³ of fuelwood per hectare of exploitable forest area were harvested in 1975-76, could be enough to say that intensive management of this resource would lead to manifold increase in its productivity (Anon., 1978). The financial requirements of such efforts would be substantial but the job opportunities generated per unit of investment would be higher than in most other alternatives. It could also be noted that unskilled labour constitutes nearly 95 per cent of the total employment in forestry operations. The implications in terms of economic betterment of the rural poor, or growth with social justice, could be obvious.

More importantly, better management of the exploitable forest area can contribute to rural change even without significant additional investments. The forests in India generate a wide variety of non-wood products, popularly known as minor forest products. These can be collected without damage to the standing trees and with advantage to the seasonally unemployed labour force near the forests. It has been estimated that employment

opportunities in this activity can be enhanced from the current level of 1.5 million man-years to 3.2 million man-years (Gupta and Guleria, 1980).

Similarly, it has been estimated that upto 8 m^3 stacked volume of small timber per hectare of harvested forest can be collected from certain areas. The minimum weight of this material could be reckoned at 0.2 mt per m^3 or $1.5 \text{ mt per hectare}$. The cost of collection and carrying the material upto the roadhead, including administrative overheads, would be a maximum of Rs.100 per mt. Assuming that the transportation costs of 5 mts. of this material over a distance of 100-120 kms would be Rs.200, the total cost at a wholesale fuel wood market would be Rs. 140 per mt. Its sale price, on the other hand, could be a minimum of Rs. 250 mt. The picture would emerge much better if the social benefits and costs of this and similar other operations were worked out. In essence, anything whether a leaf or twig, which is worth taking out must not be left behind unless it is silviculturally required, such as for humus formulation, checking soil erosion, maintaining soil fertility.

Besides better management of the existing forests, the nation has the objective of increasing forest land to one-third of the geographical area. The opportunity lies through bringing wastelands, road and canal sides, common lands, and marginal

agricultural lands under tree crops. One could briefly touch only three aspects. Firstly, there exist some 45 million hectares of barren, unculturable and culturable waste land. A large part of this may be good for supporting appropriately identified tree species. Assuming that i).25 per cent of this land can be brought under trees over the next 5 years, and ii) at least one man-year would be required per hectare of the activity, the step can absorb a major portion of the unemployed labour forces in rural India, reduce dependence on governmental help, and generate self-respect and confidence among the people.

Secondly, inspite of inadequate data, there is a near unanimity of opinion that shifting cultivation is economically and socially undesirable in most situations. The land under shifting cultivation could be better used through integrated development of forests and forest based industries in the remote regions. Such locations for industry are necessary for logistic reasons. For instance, the North Eastern Region has a comparative advantage in bamboo, an ideal but scarce raw material for paper. Bamboo transportation out of the difficult terrain could not be economical. An exercise for a bamboo based 250 ton per day capacity paper mill in Tripura State indicated that 32,000 hectares of crop could feed the mill. This land could be freed out of the area currently under shifting cultivation. The 'Jhumias' could be expected to

comply, because the activity would provide more and better employment than the existing system, and would not dislodge the people from their traditional environments (Gupta and Sambrani, 1978).

Thirdly, there is a large chunk of ploughed land which can be classified as marginal or incapable of sustaining a progressive system of annual crops. A recent study for the hot arid region of Rajasthan indicated that, after accounting for labour used in cultivation at Rs. 5 per man-day (equal to the minimum wage rate), the net returns per hectare of land and enterprise from annual crops ranged between Rs. -40 and Rs. 30, with an average at Rs. -20 in a "good" or above average agricultural year. Comparable returns under a silvi-pastoral system based on six tree species, considered suitable for the region, ranged between Rs. 360 and Rs. 3,270 with an average at over Rs. 1,500. Labour requirements per hectare of land under the latter use pattern were significantly higher, and wages accounted for 74 to 95 per cent of the total costs of raising and harvesting the trees and grasses (Gupta and Mohan, 1979). More such studies would prove that the use of lands according to their inherent capabilities could be the best way to induce agricultural development as well as economic betterment of the rural poor.

It could ^{be} noted that the measures discussed in this paper meet the tests of technical, financial, economic, and managerial

feasibility. They do hold the prospects of growth with social justice. At the same time, however, the benefits from the proposed development of forestry and forest based industries would not be confined to the rural poor. In spite of a rising import bill, the country is faced with a paper famine. Current estimates of shortfall between production and demand vary between 30 and 75 thousand tonnes. Wholesale prices per tonne of paper have increased from Rs. 4,000 in November 1977 to over Rs. 9,000 at present. Similarly, the fuelwood prices have been rising and the sources of supply have been dwindling. This could lead to an ironical situation where the country has food but no fuel to cook (Thapar, 1975). Further, the floods resulting in losses of human lives, property, soil fertility, and other productive resources, have become a regular phenomenon. It has been estimated that India annually loses 2.5, 3.8, and 2.6 million tonnes of N, P, and K through soil erosion, and these amounts are much higher than the current consumption of soil nutrients (Swaminathan, 1973). Land resource management on the proposed lines could go a long way in solving such problems, and generating employment opportunities for those who need work.

Some

IV. Problems and Their Solutions

The first and most important problem is lack of adequate statistics. Revised land use data at the village and block levels would have to be collected. For areas ascribed as forests,

information on the existing species, stock and quality of vegetation, etc., would be required for better utilization of the resources.

Similarly, agro-climatic and soil type data for barren, culturable waste, and marginal agricultural lands would be needed to identify appropriate tree species.

Secondly, it has been observed that scientific forest management is a less popular and more difficult step in predominantly agricultural countries than in the industrialised ones. The short term individual interests could be in conflict with the collective ones. Such conflicts arise out of the practice to overexploit the common resources for private gains, such as open grazing. The solution would lie in invoking group action, combining voluntarism with economic incentives, and preparing a phased plan for bringing such lands under a silvipastoral system. At the macro level, a specieswise flow chart of expected forest produce over a sufficiently long period would have to be developed to facilitate planned growth of forest based industries. There could be no doubt that the nation has the technical competence to perform these tasks.

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