CHAPTER - IX
SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS
CHAPTER-IX

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

9.1 Orissa is one of the most backward states in the country. Its backwardness is characterised by low level of income, dependence of a very large segment of the population on poorly developed agriculture, larger proportion of tribal population, lack of urbanisation, inadequate infrastructure, etc. Within the State, the districts of western Orissa chosen for this study show these characteristics in larger measure.

The urban component of the population in the three districts of the study region was hardly 3 per cent in 1981 while in Phulbani it was as low as one per cent. There were only nine towns in the three districts and even these were mostly the centres of civil administration and marketing rather than of industries.

These districts have as much as 30 per cent of their population as tribal which lives in the interior within the forests and is engaged mainly in primitive agriculture.

According to the Education Commission, these districts were among the five most backward districts in the entire country in respect of primary and secondary education.
The major resource of these districts is arable land most of which is cultivated under rainfed conditions. The use of fertilisers, improved seeds etc., is very small and the average yields are very low.

The region is poorly served in respect of transport since the area is traversed by several rivers; many parts of these districts remain cut off not only during the rainy seasons but even thereafter for two or three months. The main transport facility is of roads, the railways serve only a limited area in two of the three districts.

9.2 Irrigation is available for hardly 10 per cent of the cultivated area in this region. The various sources of irrigation are canals, tanks, wells, tube-wells and other works. Of these, the canals are the only dependable source accounting for about 50 per cent of the net irrigated area in these districts. Irrigation by tanks, wells and other works is uncertain, available for a few waterings only and is fully dependent on the rainfall.

There are discrepancies in the irrigated area as given by the Irrigation Department and the Revenue Department. In the absence of reliable figures, it is difficult to study the impact of irrigation on agricultural development. It is suggested that these two departments should survey the irrigated area and make available agreed figures of the actual irrigated area. This will help in better planning for the future.
In Kalahandi district, from the long term point of view a number of schemes could be tapped. These schemes are Uttei, Indravati (Stage-I), Indra Stage-I (Sundar Weir) and Stage-II, Sandul, Udanti, Ret and Jonk.

There is no major irrigation scheme in Phulbani district, Salki project being the only medium scheme at present. It is suggested that this project should be completed expeditiously so that the full potential may be utilised during the Eighth Plan period.

In respect of tanks, it is suggested that priority should be given to the proper maintenance and repair of the projects under operation and the derelict works should be fully repaired during the Eighth Plan period. This will stabilise the existing irrigation from these works.

The tanks under the charge of Gram Panchayats are neither properly maintained nor repairs carried out when necessary. For repairs of these tanks it is suggested that voluntary work should be organised. Wherever necessary, the advice of technical officers of the R.E.O. should be made available to the Gram Panchayats.

For a proper plan for expanding irrigation by wells, it is necessary to undertake a systematic survey of underground water resources of these districts.

There is very little activity by individual cultivators or co-operatives in respect of constructing tube-wells or masonry wells.
Land Mortgage Banks and the Agriculture Refinance Corporation have so far not paid any attention to this problem in these districts. It is suggested that suitable irrigation programmes in these districts should be taken up with the help of these agencies.

There is great need for demonstrating scientific agronomic practices and economical use of irrigation water in the fields of cultivators. This is all the more necessary in the case of lift irrigation from rivers and canals, as a considerable recurring expenditure has to be incurred in lifting water and making it available for irrigation to cultivators.

The various suggestions for expansion of irrigation in the three districts would need an investment of Rs.8 crores during the Eighth Plan period. It is expected that the gross irrigated area would rise from the present level of 114,000 hectares to 156,000 hectares by 1993-94.

9.3 Orissa is among the few States in India where agricultural statistics, both in terms of quality and coverage, are not comparable to other States. It is suggested that the State Government should take early steps to establish statistical agency on lines similar to those prevalent elsewhere in the country.

In these districts, food crops, which generally yield lower value per hectare compared to commercial crops, are grown on a large area.
The cropping pattern shows that rice is the most important crop in all the three districts. But it is cultivated mainly as a rainfed crop. The scope for improvement of the yields will depend on the extent to which irrigation facilities can be expanded. This in turn would determine the use of fertiliser and high yielding variety seeds.

To activate the economy of these districts, agriculture will have to be developed on right lines. This becomes all the more necessary as possibilities for industrial development are limited.

Since irrigation expansion possibilities in these districts are limited, bulk of the agricultural land will continue to depend on rainfed conditions.

At present under rainfed agriculture, there is the practice of taking only one crop during the year. For making better use of the available land and thereby to increase the agricultural incomes, it is essential that suitable second crops should be introduced in this region.

Towards this end it is first necessary to undertake a detailed soil survey. This will help in knowing the nutritional characteristics of the various soils and thereby in determining the suitability of crops and input use.

For introducing a second crop two steps should be taken namely (i) extension work will have to be done on a very large scale for convincing the cultivator that a second crop is possible
in these areas; and (ii) the extension agency should teach them various cultural practices and help them not only in selecting the suitable crop in the particular area but also in procuring the necessary inputs in time.

It is necessary to conduct research for evolving a suitable variety of early paddy for the kharif season so that it could be harvested in time thereby making a second crop feasible. If this is done, there will be a real break-through in agriculture in this region. It is, therefore, strongly suggested that the Central Rice Research Institute at Cuttack should pay special attention to the requirements of these districts.

In many parts of the country the cultivators have found it very profitable to grow timber trees either on the border of the fields or as a regular crop. This is possible even under rainfed conditions and in land with poor soil. Department should suggest suitable species of fuel wood plant and popularise their cultivation.

The practice of shifting cultivation by tribals particularly in Phulbani district is quite serious. This is a very wasteful method of cultivation. The Government should induce the tribal population to settle down for permanent cultivation, but this could be achieved only over a long period.

9.4 The known mineral occurrences in these districts, with the possible exception of bauxite, are of marginal viability and cannot sustain any heavy mineral-based industry be it in metals or non-metals.
Among the non-resource based mineral industries are glass and ceramics. Though their products are strictly speaking consumer goods, the markets for these generally develop when the society has achieved a certain degree of sophistication rather than in a backward region like this. Hence, there is little scope for starting such industries in the region in near future.

9.5 The place of industries in the economy of these districts is insignificant. There are no large or medium industries in the area. Even the small scale units are very few. These are concentrated in a few towns of which Bolangir has the largest number of such units.

The only units worth mentioning are rice and oil mills. These units mostly process paddy and oilseeds produced locally. Among these the large-sized units are situated near the railway lines. The milled rice is sent out of the districts in years of surplus.

An examination of the potential for industrial development of these areas both from the availability of local resources as well as from the demand points of view reveals that the main lines of development could be in the field of processing industries. This could be based on the local supplies of raw materials from agriculture, forests and livestock.

Among the agro-based industries, there is already surplus capacity in rice milling units. Hence there is no scope for further expansion in this field. There is scope for two small flour mills
in Phulbani, for one rice bran oil unit at Kantabanji, three fruit preservation and canning units, three units for making sisal ropes. Possibilities also exist for a cattle and poultry feed unit, expansion of the existing tanneries, a bone meal unit, a plywood unit, two seasoning plants, three saw mills, one sal seed oil, one unit for manufacturing agricultural implements, etc.

As regards the development of cottage industries, it is necessary to improve the productivity and quality of these industries through organising industrial co-operative societies. These societies could arrange for raw materials and for marketing the products.

9.6 The per capita consumption of electricity in the districts of Bolangir, Kalahandi and Phulbani, were low, being only 2.5, 1.5 and 0.4 KWh respectively in 1987-88. The major part of the electricity now consumed is for lighting. The industrial use is extremely low.

Since Bolangir and parts of Kalahandi are connected to the State grid, these do not suffer from inadequate supply. However, some pockets in these two districts are not served by the distribution system. It is, therefore, suggested that the transmission lines should be extended to such areas.

Phulbani district is shortly connected to the State grid. But proposals to expand the grid area under way. This will ease the situation in this district also.
9.7 The railway sections serve mainly the long distance needs of the area lying outside these districts and provide connection with Vizianagaram and ultimately to Visakhapatnam Port.

The rail sections in these districts are saturated and may call for additional track capacity. But this will depend more on the needs of the areas outside these districts than those inside the districts.

There is no National Highway passing through any of these districts. The roads serving the region are mostly of low category and their quality is poor.

There are a few serious drawbacks in the existing road system as well. Firstly, the inadequate length of roads has failed to open up many pockets in the area. Secondly, a large number of unbrided crossings and weak bridges on different important roads, make continuous movement difficult in fair weather and make it impossible during rains.

The road development in this region is very expensive on account of the mountainous terrain and innumerable rivers, streams, etc. Hence the development has to be selective so that the minimum needs of the area are met and particular attention may be paid to those areas where potential exists. The strategy for road development recommended here is to strengthen some of the existing roads in selected areas so that (i) unrestricted free movement is possible on important inter-district roads; and (ii) land-locked areas in the hinterland get access to the main roads.
The detailed assessment reveals that there are neither prospects of any visible spectacular development based on rich resources nor the region provides any locational advantage for other heavy investments in industries. The economy is likely to continue to depend largely on agriculture for a long period to come.

Normally, for agricultural development, irrigation is looked upon as the key factor for sustained growth. But, curiously enough, though these districts receive high rainfall on an average in the year, the possibilities of irrigation expansion are rather meagre. This is on account of the mountainous terrain and absence of suitable locations for storage works.

Technologically, the land is suitable for the cultivation of several crops during the rabi season. But this practice is not common. Therefore, the extension agency must take up this task of popularising the cultivation of a second crop. It should teach the cultivators as to which crops can be grown in different types of land and suitable seeds should be made available to the cultivators.

In view of the lack of natural resources, it is not possible to develop modern industry to any significant extent in the backward region where demand is also limited. The best line of development under the present circumstances would be to concentrate on the setting up of industries in a few promising fields in the selected market towns such as processing of agricultural produce, fruits and sisal fibre, etc.
It is necessary to expand the road system not only for providing the basic amenity for the movement of men and material but also for serving the marketing needs of the agricultural areas. The market towns should be suitably connected by proper roads.

Another aspect which requires attention is the special development of the tribal areas in this region. As the programme of education in the tribal areas expands, it is expected that literacy rate will rise and the people will give up some of their uneconomic social customs. But this will take rather long time.