CHAPTER X

SUMMARY AND CONCLUSIONS
10.1 This study has been designed to highlight the dynamics of economic change in the tribal society of Keonjhar district of Orissa.

For this study, data have been collected both from secondary and primary sources. Secondary data on different aspects of the population of the district, their economic activities, the available infrastructure and the development programmes were collected from various official records. A field study was conducted in April, 1982 to further fortify the data base of the study. The total sample size of the field study consisted of three hundred seven households spread over sixteen villages in three tribal blocks of the district. Blocks with less tribal concentration were purposively left out of the ambit of sample study keeping in view the nature and purpose of the study. The selection of ultimate sampling units was done under the framework of 'multi-stage random sampling procedure'. Information was collected from the sample households through prepared questionnaires and by personal interviews.
The specific objectives of the study are:

1. To make an anatomical study of the rural economy of the tribal region of Keonjhar district to identify the functional basis which not only hinders the harmonious development of the region but also breeds and perpetuates poverty.

2. To study the institutional structure and process of development in the tribal region in order to reveal the dynamics of change i.e. to examine to what extent the socio-economic and administrative system operating in the tribal area is in harmony with the interests of the rural poor.

3. To articulate a more appropriate spatial development strategy capable of inducing a change in the functional base which breeds and sustains poverty.

For the identification of functional basis of rural poverty, secondary data with regard to the population characteristics, demography, occupational pattern, land use pattern, cropping pattern and trends in agricultural
production and productivity in the district have been analysed. Data with regard to the pattern of occupation, dependency, land ownership, tenancy, asset distribution, irrigation, credit distribution and agricultural income noticed among the sample household population have also been analysed to supplement the secondary data base of the study and reveal the anatomy of rural poverty in Keonjhar district.

For examining the investment policy for tribal area development, an inter-temporal analysis of the plan outlays for 'tribal sub-plan' has been made. The role of the planning apparatus in tribal development has been studied with the help of a cross-section analysis of allocation of funds for various development schemes. Data from official sources with regard to the achievements under various land reform/tenancy protection measures and transaction of cooperatives have been analysed to examine the credibility of such institutional arrangements as instruments of tribal change. For examining the dynamics of change in tribal society of Keonjhar district, data obtained from the sample survey regarding the accrual of benefits of agriculture and animal husbandry development programmes to different cross-sections of the rural population has been analysed.

For the study of regional dimensions of change in the economy of Keonjhar district, the values of
sixteen development indicators for the thirteen blocks of the district for the year 1981-82 are used. The data are statistically treated to reveal the inter-block variation in the development levels in the district.

The functional scoring of all the villages of Banspal block, in respect of thirty-eight development functions, are computed and analysed to identify the existing settlement hierarchy in the block. The 'functional and areal gaps', evident in the existing central place hierarchy in the block, are sought to be removed by chartering out a new spatial design. While regional planning techniques are used for designing the new spatial frame, practical knowledge of social engineering are made use of in framing a socio-economic development strategy befitting the proposed spatial frame and the functional realities of the micro-region.

A summary of the results of the study are recapitulated below.

10.2 ANATOMY OF RURAL POVERTY : A DIAGNOSTIC EXERCISE

The economy of Keonjhar district is rural in character as 88.67 percent of its population live in rural areas. The economy of the district is dominated by primitive production structure as a major segment of its rural population (58 percent) belongs to backward classes.
More than 90 percent of the villages of the district are small, which account for more than 71 percent of the rural population of the district. As most of these villages are isolated on account of topographical constraints, they present a scenario of closed economies. The economy is further characterised by subsistence production. Lack of minimum threshold population in these villages contribute towards their failure to sustain infrastructure and other service facilities.

The district has a lower density of population per square kilometre of geographical area and per hectare of cultivated area (134 and 3.4 respectively) in comparison to the State averages (169 and 3.8). This indicates that objective conditions of agriculture in the district are not capable of supporting a higher density of population.

The dependency ratio in the tribal areas of the district (1:2.49) is higher than that of the district as a whole (1:2.07) and still higher than that of the State (1:2.04). The higher dependency ratio in the tribal areas of the district is a major drag on the economic status of the households.

Land available for cultivation in the district (34.4 percent of the total geographical area) is less than that for the State as a whole (39.4 percent).
Moreover, the quality of agricultural land, in most parts of the district, is poor making them unsuitable for advanced agriculture. The inhospitable climate and erratic rainfall in the district tend to make agricultural operations a highly fluctuating and risky enterprise.

In spite of the bleak prospects of agricultural development in the district, land based activity continues to be its main productive activity with 73.1 percent of the main work force constituting its cultivators and agricultural labourers. However, between 1971 and 1981, the percentage of cultivators in the district has declined by 2.91 percent and that of agricultural labourers has increased by 0.72 percent. This tends to indicate deterioration in the agricultural scenario of the district and the marginalisation of the peasantry.

Between 1971 and 1981, the percentage of workers, engaged in household industry sector in the district, has declined by 0.9 percent. This tends to indicate that workers engaged in traditional manufacturing, processing, servicing and repair activities, including village artisans and petty traders are caught in a poverty syndrome.

The distribution of operational land in the tribal regions of the district tends to be skewed. The marginal and small farmers, who represent 91.94 percent of the cultivating households covered under the sample survey,
operate 73.5 percent of the operational land. On the other hand, the medium and large farmers representing only 8.06 percent of the cultivators, operate as much as 26.5 percent of the operational land. Since the marginal and small farmers constitute the hardcore of the rural poor in the region, the skewed distribution of operational land tends to explain the basis of their poverty.

During the last quarter century (1955-1981), there has been 29 percent rise in the Gross Cropped Area and a 10 percent rise in the net sown area in the district. However, the benefits of the changed land-use pattern seem to be offset by a fall in the non-cropped area during the same period because of its adverse impacts on the eco-system.

The last quarter century has also witnessed a change in the cropping pattern of the district - a change from wet crops like paddy to dry crops like Ragi, pulses and Oilseeds. This change seems to be the outcome of the objective conditions of agriculture in the district characterised by erratic/inadequate rainfall and absence of assured water supply.

During the period under reference, the district has made very little progress in the diversification of its agriculture. However, improvements noticed in the productivity of important crops like Paddy, Wheat, Ragi
and Sugarcane suggest that with modern inputs, appropriate technology and adequate resources, it is not difficult to bring about a transformation of a backward agricultural population.

The pattern of distribution of agricultural assets in the tribal regions of the district tends to be skewed. The landless, marginal and small farmers, who represent 92.9 percent of the rural households, control 74.79 percent of the agricultural assets, 78.82 percent of land and 52.06 percent of irrigation facilities. Thus, the inequitable distribution of those strategic variables, seem to constrain the bulk of the farmers from change and development.

The delivery of institutional credit among different cross-sections of the rural population also tends to be highly inequitable. 92.9 percent of the households, comprising the landless, marginal and small farmers, get only 64.75 percent of credit for agriculture and 82.77 percent of credit for animal husbandry development. Thus, the limited access of the bulk of the rural poor to institutional credit tends to limit their economic horizons.

The per hectare agricultural income of the marginal and small farmers (Rs.1,049.22 and Rs.1,564.59 respectively) are much less than that of their counterparts.
in other parts of the country. The low income, which tends to limit their operational horizons, is explained by their uneconomic farm size, low asset position and inaccessibility to the package of vital inputs.

The agricultural labourers of the region tend to suffer from utter poverty as most of the target group oriented programmes have by-passed them and the general price rise has outstripped their wage rise.

Non-farm workers, who form 26.9 percent of the main workers of the district, belong to the category of rural poor by virtue of their low asset position, inadequate work opportunities, low level of skill, large family dependency and low real wages. The sagging of demand for their traditional products, caused due to the flooding of the rural markets with modern manufactured goods, has put them in an unfavourable trade relationship with the outside world. Thus, their production system and socio-economic framework not only breeds poverty among them, but also perpetually sustains them at that level.

On the strength of the above findings, it is possible to conclude that the functional basis, which breeds and perpetuates poverty among the people of the district, have remained unaltered inspite of the development efforts of the last thirty-five years.
10.3 INSTITUTIONAL STRUCTURE IN THE TRIBAL SOCIETY AND THE DYNAMICS OF CHANGE

With the launching of the 'Tribal Sub-Plan', there has been a significant growth of public investment in tribal areas. During the Sixth Five-year Plan, 43 percent of the State Plan outlays were earmarked for investment in the tribal sub-plan areas of Orissa. However, a closer analysis reveals that a major portion of the increased investment is not of any immediate relevance to the tribals in the context of the objective realities of their economy. On the contrary, the non-tribal segments of the population, residing in tribal sub-plan areas, tend to benefit more from the increased investment.

The pattern of allocation of State Plan funds to Keonjhar district presents a very gloomy picture. Though Keonjhar is a backward district with 04.5 percent of its geographical area and 73.23 percent of its population covered under the Tribal Sub-plan, only 5.39, 5.87 and 5.99 percent of the State Plan funds were allocated to the district during the first three years of the Sixth Five-year Plan. Moreover, only 3.43, 3.9 and 2.21 percent of the plan allocations for the district in the concerned years were spent on beneficiary-oriented programmes, though such expenditures tend to have a favorable impact on the incomes of the tribals. Though the
majority of the beneficiaries of these programmes belonged to the Scheduled Castes and Scheduled Tribes, they got a comparatively lesser share of the subsidies.

The agrarian structure of the district continues to be characterized by exploitative tenurial practices, which tend to perpetuate agricultural stagnation. Under the existing land ownership pattern, concealed tenancy has proliferated in the district, building sub-tenancy under current resisting the access of the farming community to modern technology and improved agricultural practices. Tenancy protection laws have failed to give adequate protection to the tenants and the land ceiling legislations have not been effective in promoting an egalitarian land distribution pattern.

The delivery of credit by the LARPS, which operate in the Scheduled areas of the district, continues to be biased against the rural poor as the upper caste members (34.97 percent) continue to get a larger share of it (41.9 percent).

Between 1979-80 and 1982-83, the absolute volume of LARPS credit in the district has increased by 30.45 percent. However, their credit for non-agricultural purposes has recorded a sharp fall during the same period. This tends to indicate their retarded interest in the
economic regeneration of the rural poor, whose avenue of prosperity mostly lie outside agriculture on account of their inadequate land base.

Consumption credit is crucial for the tribals as it sustains them during lean months. But the reduction in the total volume of consumption loans given by the LAMPS during the period under consideration tends to indicate their ineffectiveness as an anti-exploitative institution. At the prevailing level of subsistence production, the denial of consumption credit to the tribals tends to drive them to the clutches of money-lenders, promote 'bonded trade' and constrain production.

The sale and purchase transactions of the LAMPS also tend to highlight their failure as anti-exploitative institutions. Between 1979-80 and 1982-83, the value of their sales of consumer goods and inputs have far exceeded the value of their purchases of agricultural and forest produce. Thus, their transactions have led to a reverse flow of value from the tribals to others through LAMPS, which tends to put LAMPS in their inverted role of generating deficit in tribal households.

The analysis tends to indicate that the over-all transactions of the LAMPS, which include both credit and
non-credit transactions, result in substantial trade deficits with members. As such deficits ranged between 48.2 percent and 63.4 percent of the production loans availed by members between 1979-90 and 1982-93, it is possible to maintain that a major part of such loans are most likely utilised to foot their purchase bills from the LMFAS.

On the basis of the above findings, it is possible to conclude that the institutional structure in the tribal society does not tend to operate in harmony with the interests of the rural poor. The prevailing scenario of poverty among the tribals of the district is the outcome of this institutional structure, which has constrained the tribal society from change and development.

The distribution of loans and subsidies under the agriculture development programme tends to be biased in favour of the large farmers and the dominant groups. Large farmers, who form only 3.06 percent of the sample got 19.7 percent of the loans and subsidies and the non-tribal large farmers, who form only 2.2 percent of the sample, got 19.16 percent of the loans and subsidies under the programme.

Between 1979 and 1982, the value of landed assets held by non-tribal marginal farmers and tribal marginal and small farmers has declined by 2, 12 and 2 percent.
respectively. This tends to indicate that the prevailing land relationship and pattern of implementation of agriculture development programmes in the region has aggravated the problem of land alienation leading to the concentration of land in the hands of a few and growing marginalisation of the rural poor.

During the period, growth has been recorded with regard to the value of agricultural implements held by different strata of the rural society. However, this growth tends to be more in respect of the non-tribal landless, marginal, small and large farmers (73%, 47%, 35% and 42% respectively) in comparison to their tribal counterparts (53%, 37%, 20% and 26% respectively). This tends to indicate that the pattern of asset distribution has been far from ideal and it tends to widen the gulf between the tribals and non-tribals, adversely affecting the production and productivity of the former.

The implementation of the Agriculture Development Programme tends to raise the farm incomes of all categories of households. However, the income growth of all categories of non-tribal farmers tend to be more than their tribal counterparts.

The adoption level of different categories of non-tribal farmers in respect of different improved farm practices (31.66%, 37.16% and 32.3%) tends to be higher
than that of the tribal farmers (0.72%, 9.29% and 12.07%). This tends to indicate that, with vast differences in adoption capacity between the tribals and non-tribals, the induction of new technology promotes economic disparity between the two groups, leading to the accentuation of economic conflict.

The distribution of loans and subsidies under the Animal Husbandry Development Programme also tends to be biased against the rural poor. Landless and marginal farmers, who constitute 10.97 percent and 53.71 percent of the sample, got 8.75 and 47.26 percents of the loans and subsidies. The tribal beneficiaries have also received a relatively smaller share of the credit and subsidy in comparison to their non-tribal counterparts.

Between 1979 and 1982, the value of live-stock and birds held by all categories of sample households have increased marginally. However, this rise tends to be more in case of all categories of non-tribal households than their tribal counterparts. This tends to indicate that the pattern of implementation of the Animal Husbandry Programme in the region has widened the asset differentials between the tribals and non-tribals and paved the path of greater income inequality between the advantaged and disadvantaged communities.

During the period, a very marginal and insignificant growth has been recorded in respect of the
incomes of the beneficiaries on account of the Animal Husbandry programme. However, the income growth of the non-tribal beneficiaries tends to be more than the tribes.

On the basis of the above findings it can be safely concluded that the mechanics of rural development programming in the region have conferred differential impact on different cross-sections of the rural society, which is detrimental to the interests of the rural poor.

\[10.4 \text{ REGIONAL DIMENSIONS OF THE ECONOMY: INTER-BLOCK VARIATION IN THE LEVELS OF DEVELOPMENT}\]

Inter-block disparity in the various sectoral activities is measured by the co-efficient of variation in the sectoral index, which tends to be highest in industrial and infrastructural activity (53.09%) followed by socio-cultural activity (45.52%) and agricultural activity (27.89%). The magnitude of inter-block sectoral and composite development disparity (29.41%) suggests the presence of high regional inequality among the blocks of the district. The study also tends to suggest that the intra-district regional inequality in Kaanjhar is the consequence of uneven dispersal of industrial, infrastructural and socio-cultural facilities by the government.
From the point of view of economic development, some blocks of the district (Patna, Scharpada, Chatgaon, Harichandanpur, Telkoi, Sanspal, Champa, Shumpura, Anandapur and Natadihi) are termed as very backward, while Joda, Keonjhar and Chasipura are termed as developing, developed and highly developed respectively.

The study identifies specific sectoral activities, which need strengthening in different blocks for improving their performance in the development scale.

The study of the regional dimensions of development in the district tends to indicate that development impulses generated at few nodal centres in the process of planning have failed to percolate to the surrounding areas.

On the basis of the above findings, it is possible to conclude that the problem of regional imbalance in the district is the natural outcome of the present strategy of development. Therefore, the regional problems of Keonjhar can only be effectively tackled by substituting the present strategy by a spatial planning strategy. Such a strategy alone can ensure the even spread of economic development over space and bring about a harmonious development in all the regions of the district.
10.5 SPATIAL FRAMEWORK FOR DEVELOPMENT PLANNING: AN ILLUSTRATIVE DESIGN FOR BANSPAL BLOCK

The designing of a spatial framework for development planning for the entire district is beyond the resource and time limits of an individual scholar. Therefore, Banspal, the least developed block of the district, is chosen for an illustrative exercise. The designing of the new spatial framework is contemplated in the following stages:

(a) Identification of the existing central place hierarchy in the block to bring into focus the functional and areal gaps in the distribution of functions, which is the cause of the weakness of the spatial economy of the region.

(b) Identification of the basic planning units for delineation of the institutionalised territorial units for planning at the gross-root level.

(c) Proposing a hierarchy of central places of different order to remove the existing gaps in the spatial order, and

(d) Chartering out a functional development strategy, which can be fitted into the proposed spatial frame, for generating
dynamic forces for changing the basis of poverty in the tribal area.

For the identification of the existing central place hierarchy in the block, the 'location co-efficient' technique is used. Results of the analysis indicate that at present the block is served by eleven central villages, two market centres and a service centre. The study indicates that there is gross inadequacy in the number of different levels of nodal centres existing in the area and also the quantum of functions performed by them.

The proposed spatial frame, considered most befitting to the functional realities of the block, consists of five spatial levels, namely the Basic village, the Central village, the Market centre, the Service centre and the Growth point.

For Banspal block, 21 central villages, five market centres, two service centres and a growth point are proposed in the new spatial frame. Under this design, every central village is to serve a population of about 2,000 inhabiting in seven villages, the market centre is to serve a population of about 12,000 inhabiting in 32 villages and the service centre is to serve a population of 30,000 residing in 81 villages. The only growth point, visualised for the block is to serve the entire population of the block (60,000) residing in the 163 villages.
The delineation of the hinterlands of the proposed central places is done with the help of Royly's Law of Retail Gravitation. Groups of contiguous villages with a central village is identified as the basic planning unit for plan implementation at the lowest level.

The socio-economic plan, which is proposed to be integrated with the new spatial frame for generating dynamic forces in the tribal economy, is built in tune with the following strategy:

I. Strategy for the Development of Basic Infrastructure

(a) Transport

Existing transport facilities in the block are to be strengthened for ensuring greater access of the people to the marketing centres. Linking of lower order central places with their next higher order centres would tend to encourage interaction among the people.

(b) Marketing

Marketing opportunities tend to widen the economic horizon of the tribals by ending their isolation and primitiveness. Therefore, dependable marketing institutions of different order should be planned at ideal focal points in order to provide an alternative institutional framework for marketing tribal products at
remunerative prices, reduce the time and cost involved in marketing of tribal products and sustain the productive activities of the tribals on an improved functional base.

(c) Banking

Credit institutions should be promoted in the area as an alternative to the money-lenders. Linking of credit with marketing would tend to widen the economic horizons of the tribals, ensure repayment and recycling of funds and mitigate their status as perpetual debtors. Consumption credit should also be provided by these institutions in order to end bonded-trade practices, diversion of production credit to other purposes and proliferation of over-dues. Credit plans should be linked with production plans and provision of adequate credit at low interest at convenient locations would contribute to the success of various anti-poverty programmes.

(d) Energy

Alternative energy sources should be provided to the tribals. This would tend to release tribal labour from fuel collection and make them available for other productive purposes. Energy systems, such as, 'bio-gas' and 'Farm-forestry', which are small scale, decentralized,
dispersed and employment generating, are considered most suitable for the local objective situation.

II. Strategy for the Development of Social Facilities

(a) Education

Education, in its present form, is of little relevance to the tribals. Enrolment of tribal children in schools tends to withdraw them from labour causing erosion in their family incomes. Therefore, to make education socially relevant, reduce drop-outs and stop proliferation of ghost institutions, educational expansion should be made complementary to expansion of production opportunities. As educational institutions tend to become focal points of social interaction among tribal people, their spatial frame should be carefully designed.

(b) Health

The poor economic base is the cause of the poor health of the tribals. Therefore, unless the economic horizons of the tribal people are expanded, the quality of life of the tribals cannot be improved. In such a situation health planning in tribal areas should be linked with expansion of their economic opportunities. Programmes of providing safe drinking water, mass immunisation and family welfare, run concurrently with
economic programmes, would have the potentiality to remove the 'mal-nutrition syndrome' from the tribal society. A grass-root cadre of health workers drawn from the tribals, would act as the agents of change in tribal society, as they would be most useful in dispelling the psycho-religious and attitudinal constraints, which inhibit the exposure of the tribals to modern medicare facilities.

III. Strategy for the Development of Production opportunities

(a) Agriculture

In the present objective situation of lack of economic opportunities, it would not be wise to advise the tribals to do away with the ruinous practice of shifting cultivation. However, the tribals can be persuaded to adopt shifting cultivation to less harmful consequences by adopting horticulture, terracing and modern water management practices.

Productivity of settled cultivation in the area can be raised by land reclamation, raising irrigation potential and restructuring of the cropping pattern. Introduction of dry farming techniques, watershed approach to irrigation and supply of agricultural inputs to farmers at ideal locations, in desired scale and subsidised rates would contribute significantly to the development of settled agriculture. Disaggregative
remunerative procurement prices for agricultural products and an effective marketing, storing and processing organisation within the block would end 'short-circuit in trade' and ensure farm development.

A strong peasant movement, followed by progressive land reform measures, would ensure abolition of intermediaries, preparation of record of rights, rationalisation of rent structure, protection of tenants and redistribution of land necessary for the economic regeneration of the bulk of the peasantry and success of the agriculture development programmes.

(b) Animal Husbandry

Animal husbandry should be encouraged as a subsidiary occupation only for those who have an adequate land base. Moreover, pasture development, enclosure movement and marketing infrastructure are the pre-requisites for the success of this programme. Therefore, animal husbandry should be encouraged only in those clusters, where these facilities can be provided.

Poultry should be encouraged as a subsidiary activity among the tribals in view of its low investment needs and quick return prospects. However, demonstrations should be conducted to entice the tribals to adopt modern poultry farming, which can ensure better returns.
The above analysis tends to indicate that the problems of smaller spatial units such as Banspal, can be articulated in a regional framework with the help of spatial planning techniques. The functional base of poverty of such micro-regions can also be changed, if the spatial plans, chalked out for this purpose, are integrated with region specific social and economic plans.

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