CHAPTER VII

SUMMARY OF CONCLUSION AND FINDINGS

7.1 Summary of conclusion:

This chapter presents a summary of conclusion of the analysis undertaken in the present study related to the problems of regional imbalances and sustainable development in the economy of the Brahmaputra Valley. An attempt is made to measure empirically the extent and time pattern of the change of inter-district disparities in the overall and sectoral socio-economic behaviour in the Brahmaputra valley during the year 1990-91 and 2000-01 on the basis of published data and to a lesser extent on primary sources.

The study sought to measure regional imbalances and sustainable development in the Brahmaputra Valley. Imbalances are of course inherent in the process of development as economic development is rarely uniformly distributed over space or time and rarely does one find a country which does not experience the problem of regional imbalances. When we talk of balanced regional development we mean equality in the levels of per capita real income as nearly as it is possible. We can not sustain high degree of regional imbalances as they result in under-utilization of social and political upheavals. Broadly three reasons may be mentioned for the emergence of regional imbalances:

i) Historical growth based on natural resources,

ii) Uneven distribution of natural resources,
iii) High concentration of resources.

Thus, birth of development enclaves may be consequence of historical coincidence. Such starting point becomes, thereafter, centre for concentration of economic growth. Different regions having different stock of resources experience varying pace of development and regions with high concentration of resources experience high pace of development. Depending on the uneven distribution of resources, a certain degree of polarization is inevitable. What is alarming is the accentuation of this polarization with the economic development as comparatively advanced regions attract resources from the lagging regions pushing the latter on the path of further backwardness. With the poor infrastructure and other facilities lagging regions are also not easy to develop. This along with the limitation of resources which an underdeveloped country faces sometimes prompt government to concentrate on developed regions. Such action is defined in order to keep up the rate of economic growth as early spill over of resources in the lagging regions gets dissipate depressing the rate of economic growth.

These problems are liable to generate discontent and may endanger, if unsolved in the long run, the very integrity of the country. The more backward an economy is, the more the vulnerability of these problems. On the other hand a developing country with limited stock of resources can not afford less than optimum utilization of resources which may not follow regional equality.
There is thus added dimension to regional imbalances in developing economics. (Williamson, 1965)

A consideration of regional balance may then come into conflict with efficiency whereas consideration of equity or equality demands for flow of resources to backward or lagging regions but the same is opposed to the criterion of efficiency because in lagging regions resources dissipate in absence of facilities necessary for development. Thus there may appear antagonism between regional and national objectives and even between the objectives of two regions. To overcome this antagonism regional planning needs to be integrated with the national planning. Regional integration increases the inter-regional interdependence, strengthens inter-regional amity, checks undesired shift of resources and optimizes the use of resources. In view of limitation to the resources and the long term perspective in which a natural process of development converges integration of economic and other activities is a necessity especially in a developing economy.

The economy of Assam is predominantly an agricultural-based rural economy (Taher and Ahmed, 1998). Of the total population of the state 87.5 percent live in the villages and more than 70 percent are directly or indirectly dependent on agriculture for their livelihood. Despite the rich natural resources, mineral resources, fertile lands, and huge amounts of central investment, the economy of Assam is far behind the national average. It stands
at the last rug of the development ladder of states. It suffers from the serious problems like large proportion of the total population below poverty line, abject poverty, mounting unemployment, glaring disparities, low investment potentiality, very low productivity etc.

Planning in Assam has been centralized, schematic and macro based. No attempt has been made until recently to bring the process of planning to action and to needs, priorities and potentialities of an area (Banerjee and Kar, 2007). Planning has to be area-based if the giant problems of poverty, unemployment, inequality, etc. are to be tackled. The development strategy needs to be, future, integrated and coordinated in order to secure regional balance, optimize the use of resources and solve the various problems the economy of Assam suffers from.

There is a vast scope for regional integration in Assam. The lower Assam region has good soil for cultivation and there is also good harvest. There are however few industries in the region which can draw raw materials from agriculture. If agriculture and industry are made inter dependent it will benefit both and overall rate of growth in the state will increase. There is a good scope for inter dependence of agriculture and industry in the region, although such a task will not be easy to achieve. Almost similar in the case in upper Assam region. The N.C. Hills region has attracted lots of state
government investment at large scale but it has not achieved sufficient rate of
growth to transform the economy of Assam as there could not develop
ancillary and small scale industries in the region. There is also need to strike
interdependence between agriculture development in lower Assam and upper
Assam and the N.C. Hills region. It will help modernize agriculture on the one
hand, and create sufficient demand for rapid industrial growth in the state. The
overall rate of growth will thus be stepped up. In the Brahmaputra Valley of
Assam there exist like other parts of India and North East India problems
relating to disparities in development. There are regional differences in the size
of population, climate, topography etc. as also wide ranging disparities in
power, banking and other development related sectors. Lack of basic
amenities, difference in level of living and employment opportunities,
misconceptions of economic exploitation, cultural difference etc. have
encouraged separatist tendencies in the Brahmaputra Valley of Assam.

The economy of the Brahmaputra valley is predominantly an agriculture
based rural economy. Of the total population of the valley 88 percent live in
the villages and 80 percent are directly or indirectly dependent on agriculture
for their livelihood (Census of India, 2001). Despite rich mineral resources,
fertile lands and huge amount of central investment, the economy of
Brahmaputra Valley lags behind the national average. It suffers from serious
problems like having a large proportion its total population below poverty line,
mounting unemployment, glaring disparities, low investment potentialities, very low productivity etc. As such the problem of inter district disparities and imbalances in the Brahmaputra Valley is an issue that warrants analysis. Herein lies the relevance of the present study of regional disparities and development patterns and the question of sustainability. The study is largely based on secondary data but substantiated with primary data based on a sample survey in specific villages of the Brahmaputra Valley.

7.2 Findings:

The findings and observations of the study are presented below:

i) An inter-temporal comparison during the period 1990-91 and 2000-01, shows that regional disparities in agricultural sector have increased.

ii) Most of the districts, have recorded an improvement in the level of agricultural development. In fact, their scores in 1990-91 and 2000-01 are above the state average. The position of Kamrup was found to be better in 1990-9, this district has become agriculturally backward in 2000-01. The relative positions of the districts have not recorded any significant change during the period 1990-2000.
iii) Regional analysis of agricultural development in the districts shows that land and labour productivities are high in agriculturally developed districts, in general, with very high, high, medium and low values of indices. These districts are also found to have high per capita availability of agricultural produce, high intensity of cropping, and high value of the ratio of net area sown to total geographical area during the period 1990-91 and 2000-01. The agriculturally backward districts with low and medium category of indices however are in general less developed in respect of all the indicators.

iv) An inter-temporal analysis indicates that during the period 1990-91 and 2000-01, the extent of inter-district disparities in industrial development of the state of Assam has shown the disparity has reached its high points in 2000-01. Concentration of industrial activities in Upper Brahmaputra Valley districts is high incidence of disparities. Though the backward districts are far behind the developed districts in respect of industrial development, the high pace of development in some of these districts, especially Dhubri, Nagaon and Darrang and also the even development in other districts have helped reducing the extent of disparities in 2000-01.
iv) The average values of the indicators have recorded upward trends. These are the most important factors for the general level of industrial development during the period.

v) Concentration of registered working factories in Kamrup, Dibrugarh and Tinsukia is very high, while all other districts with low category index values are found to be backward in indicator of registered working factories. Though concentration of registered working factories is high, the number of registered working factories per lakh of population is lower in Kamrup than in other districts.

vi) It is revealed in the study that during the period 1990-91 and 2000-01 all the districts have recorded development in tertiary activities. The incidence of banking activities and degree of urbanization are found to be high in Kamrup.

vii) High degree of urbanization is found in a few districts of high and very high categories. In respect of the indicator 'number of bank offices per lakh of population, a good number of districts with low and medium category values are found to be backward. Moreover,
all the districts of these two classes low and medium are also less
developed in terms of ‘concentration of bank offices’ during the
period 1990-91 and 2000-01.

viii) The analysis of the index values for socio-cultural activities recorded
by the districts shows that there has been an upward trend in the state
average of the index during the period. All the indicators here have
played prominent roles for the development of socio-cultural
activities in the state.

ix) The pattern of disparities measured by the coefficient of variation of
the indices shows a declining trend over the years though the extent
of disparities is high.

x) Relative positions of the districts have not registered any significant
change though all the districts have recorded development in socio-
cultural activities during the period.

xi) It is observed that during the period 1990-01 and 2000-01, the level
of economic development in the state has recorded an upward trend
along with the economic development in all the districts, Kamrup,
Dibrugarh, Nagaon remain in the developed category throughout the period. Goalpara is very near to the position of the developed districts.

xii) With development, the extent of disparities, while remaining high has declined to some extent and hence inter district disparity over the years has indicated a downward trend.

xiii) Regional analysis of overall economic development shows that a considerable number of economically backward districts with low category values are developed in agriculture activities during the period, it is also noted that the industrially developed districts, in general are not developed in agriculture. Only Kamrup is exception. The districts are found to be developed both in agriculture and in industry at all the time points. Moreover, quite a few districts which are less developed in the overall assessment are also less developed in tertiary, socio-cultural and industrial activities.

xiv) Reflecting the characteristics of a typical, less-developed economy, the economy of Assam is acutely dependent on the agricultural sector. Various economic as well as socio-political factors are responsible for the continued lack of growth and development of this sector.
xv) The growth rate of population continued to be very high over the decades, particularly since 1961. Although there is a decelerating trend during the last decade, the density of population has widened over time over the all India average.

xvi) Climate policy alone will not solve the climate change problem. Climate outcome will be influenced not only by climate-specific policies but also by the development path chosen. Worlds which is already experiencing the adverse impacts of climate change, can not afford to ‘wait and see’ or follow the historic, unsustainable, carbon-intensive development paths of industrialized countries. Developing countries like India have an outstanding backlog of sustainable development poverty reduction priorities, into which climate change mitigation and adaptation policies must now be integrated.

xvii) Simulations using dynamic crop models indicate a decrease in yield of crops as temperature increase in different parts of Assam. However this is offset by an increase in CO$_2$ at moderate rise in temperature and at higher warming, negative impact on crop productivity is projected due to reduced crop durations.
xviii) The forestry sector (including irrigated/rainfed crops) shows a sharply declining trend in terms of NDVI values based on SPOT vegetation satellite data. Only 7 per cent of the area of the Brahmaputra Valley shows a positive trend whereas 89 per cent area shows a decline in greenness of vegetal cover based on growing season (May to October) data between 1998 and 2009 assessed using 216 SPOT VGT imageries.

xix) Involvement of local people in protection and management of the forest seems to be the only way out for sustainability of forest area in Assam at least as far as meeting needs for fuelwood, fodder and other non-timber forest products are concerned. There is a shift in the approach in the Forest Policy of 1988 with more focus on involvement of people is in the right direction.

xx) The service from the poor villagers in the management and protection of forest cannot be expected unless economic security is provided to them. In most cases they are fully or partially dependent on the forest for their livelihood. There is need to make provisions for other support activities for the people to be fully involved in joint forest management programme (JFM).
xxi) There is the need to think of evolving a cost-effective alternative to fuel wood to the villagers; otherwise they will continue to exploit the forest. The use of kerosene and LPG is minimal in most of the villages due to their low economic status.

xxii) Unrestricted encroachment must be stopped in the forest areas of Assam. The rapid population growth in the state has put pressure on the land of Assam. So, the people have encroached the forest areas. The Revenue Department of the state is stated to be the main culprit as the department is providing *patta* (settlement rights) to the settlers in the forest areas.

xxiii) There is the need to evolve alternatives to timber for meeting household and industrial consumption requirements. The Forest Policy, 1988 states that the long-term solution for meeting the existing gap lies in increasing the productivity of the forests, but to relieve the existing pressure on forests for the demand of railway sleepers, construction industry (particularly in the public sector), furniture and paneling, mine-pit props, paper and paperboard, etc. substitution of wood needs to be taken recourse to.
xxiv) On the front of domestic energy, fuelwood needs to be substituted as far as practicable with alternate sources like bio-gas, LPG and solar energy. At the same time afforestation efforts need to be boosted to enhance sustainability of the forest areas of the study area if it is to be in a position to benefit from carbon credits and avoided deforestation.
References:


