Chapter 2

REVIEW OF LITERATURE

2.1 Most of the countries, especially in the third world, did not look at economic development from a regional perspective. Recently, many factors gave rise to a rapidly growing interest in regional development. After the Second World War these countries have put forward many policy measures for their economic development. As a result of these activities and the propaganda of politicians, regional equity in national development became an important plank of the political and economic agenda of many countries. This trend was particularly evident in countries with a federal system of government. The present study focusses on the inter-state disparities in India.

An attempt is made here to outline the existing theories on regional imbalances. First of all, a conceptual discussion can be made regarding the meaning of the term 'region'.

2.2 THE CONCEPT AND DEFINITION OF REGION

The concept of region has a special significance in economic planning. It was developed by geographers like...
Demergeon Ratzel, Hettner Roxby, Morran, Herberston etc. during the later half of the 19th century.\(^1\) Perhaps no term in the geographical literature has received more attention than the term 'region'.\(^2\) It is simply and generally known. Still uncertainties remain as to its meaning and significance.\(^3\) Such uncertainties have given rise to numerous definitions of the term 'region'.

Defining the term 'region' as a concept appears to be an essential pre-requisite for the analysis of regional economic phenomenon. But there is no particular definition of the term 'region'. Regions may be defined in different ways depending on the objectives of the enquiry or the question under study. A region is a geographical and socio-economic entity delimited as an administrative unit or a combination of such units when the context is clear. It is an area homogeneous with respect to a particular set of conditions determined by the purpose. The choice of a concept of region is, therefore, constrained by the purpose for which delineation of a set of regions is required, and

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3. Ibid.
by the overall structure and degree of integration of the regional system considered as a whole.4

In regional science, a region has been defined as an area in which all parts as far as possible show similar economic structure and similar problems and interests. These similarities call for uniformity in economic action in the form of regional planning. Obviously it is very difficult to define the character and content of a region within a particular set of words. Many hundreds and thousands of words have been written on this topic without coming with a fully satisfactory answer. The only safe statement is there is no unique definition ...."5

However, recently a consensus has slowly evolved for suggesting region as space which is larger than any single urban area or a small group of villages.6 Therefore, the term space brings out the idea of a smaller unit, i.e., region.

In the case of India, most of the studies on regional variations in development, that have already been conducted, have taken 'states' as their regional unit. They justified their selection of regional unit as state largely on account of data availability.

In the present study, however, states are considered as the regional units. In India, with federal democratic constitutional set up, states are recognised to be extremely important administrative units. Each state has its own elected legislative assembly and a council of ministers. The constitution of India has clearly demarcated area of activities and responsibilities for the centre and the states. Moreover, after 1956, the states in India represent groupings on the basis of linguistic and cultural homogeneity. So that they represent real groupings of local sentiment and interest. States, therefore, are considered as the regional units in the present study. Besides, the question of data availability has also accounted for this selection.

2.3 CLASSIFICATION OF REGION

Though there are regions conforming to the definitions given by the regional science, still there are wide variations among regions with respect to their own characteristics and problems. These variations call for classification of region. Generally, regions are classified as congested regions, depressed regions, backward regions etc. Boudeville has classified the region into three categories as: (i) homogeneous regions which are close to natural regions of geographers; (ii) polarised regions which represent polarisation in terms of population density; and (iii) planning regions which represent administrative areas.

Stillwell made a distinction between three kinds of problem regions, viz., (i) under-developed regions, areas with mainly a traditional agricultural structure; (ii) depressed regions, areas which have gone through an industrialisation process but which have not been able to continue the process of economic growth due to lack of

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innovation or unfavourable locational conditions and (iii) congested regions, areas in which a further concentration of activities will lead to additional agglomeration disadvantages which exceed the advantages.

Richardson\(^{10}\) has classified a region into three categories—homogeneous, nodality and programming. As homogeneous entity, region is homogeneous in respect to certain factors like dominant industry, per capita income level, employment level, language etc. As nodel concept a region has one or more cities or dominant nodes, programming regions are planning regions and are defined by law.

Whatever may be the basis of classification of a region, whether homogeneous, polarised or planned, disaggregation of a country's total area into regions reveals the existence of disparities. David Keeble has observed that "these disparities exist not just in terms of absolute levels of population, economic activity or related social infrastructure, but with respect to relative indices

\(^{10}\) H. Richardson, \textit{op.cit.}\n
such as unemployment or activity rate, income per head or rate of employment growth". 11

2.4 THEORIES OF REGIONAL DEVELOPMENT

There are certain theories which were formulated to provide a framework for regional development. Geographers, sociologists, demographers and economists have all attempted to explain the nature of regional development in both developed countries and developing countries. Perhaps the most quoted sentence in the study of regional development in Frances Perroux's observation that "growth does not appear everywhere and all at once, it reveals itself in certain points or poles, with different degrees of intensity; it spreads through diverse channels". 12

There are various theories which explain the causes and courses of regional imbalances. However, today there is no single theory of regional development that commands universal assent. It is necessary, therefore, to study relevant theories to understand the process of regional development. Broadly, theories of regional development may

be divided into neo-classical spaceless, neo-classical spatial, Marxist and neo-Marxist schools of thought. Since industrial location plays an important role in concentration of industrial growth and development, some important location theories and other relevant theories such as growth pole theory, industrial complexes, role of cities in economic development etc. are discussed in brief.

2.4.1 Neo-Classical Theories--Spaceless

In this theory, regional growth and development are considered as the consequence of 'factor mobility'. Based on this concept, Myrdal\(^\text{13}\) and Hirschman\(^\text{14}\) propounded their theories and suggested that due to the effect of three factors--labour migration, capital migration and inter-regional linkage--the growth of developing countries would follow an inverted 'U' shape. Williamson\(^\text{15}\) explains this type of 'U' shape of regional inequality curve mainly.

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with the help of four factors, such as labour migration, capital migration, inter-regional linkages, and central government policy.

According to Myrdal, once growth gets started in a particular region and meets with initial success all sorts of economic and non-economic activities start concentrating there because of ever increasing internal and external economies. The growth in progressive regions affects the growth in lagging regions through "spread effects" and "backwash effects". The spread effects remain dominated by the backwash effects for a number of years and regional imbalances tend to increase at a faster rate. Whereas, according to Hirschman growth once started tends to concentrate around the initial starting points because of external economies. While "the trickling down effects" of this concentration are dominated by the "polarisation effects" in the short run, the trend is reversed in long run. Thus divergence in the early stages of development converges in the later stages. To sum up, the theories of

Myrdal and Hirschman are of particular relevance in explaining how the process of development starts and why it starts in particular places and not in others. However, while Hirschman argues in favour of the need for initially geographical imbalances through the creation of development centres, Myrdal argues that the mechanism for spread effects should be strengthened from the outset.

2.4.2 Neo-Classical Theories--Spatial

The neo-classical spatial theories of regional development are based on the concept of space. The important exponents of these theories are Richardson18 and Borts.19 Richardson pointed out the incompatibility between spaceless neo-classical theory and location theory which must take space explicitly into account. He proposed to substitute location preferences and agglomeration economies--both of which are spatial variables--for the neo-classical yield differentials.

2.4.3 Marxist (View) Theories

Marx20 had never focussed his attention on regional unbalances or spatial uneven development. He

concentrated attention on the inevitable centralisation of capital and redistribution of it among groups of people. Lenin and Trotsky followed the same policy and later spread it in many third world countries. The socialist economies show less intensity of inter-regional inequality. A reduction in the inter-regional inequality may be achieved if the use of resources are planned taking proper care of the requirements of different regions. It is believed that free play of market forces takes full care of all regions and thereby reduces regional imbalances. There is, however, in fact, increase in inter-regional inequality. Hence lies the importance of socialist view on regional development.

2.4.4 The Neo-Marxist View

The neo-Marxists, Samir Amin, Andre Gunder Frank etc. have found neither the neo-classical development theories sound enough particularly for the third world countries. They attacked bourgeois theories from different view points than the classical Marxian. The crux of their contention is that the bulk of the Neo-classical theory is concerned with the problem of growth and development in the

under-developed regions which have either consciously or
unconsciously evaded the contradiction of these newly
emerging nations with the imperialist powers, as propounded
by Lenin in 1913 in his theory of imperialism.

2.4.5 Locational Theories

Besides, the problem of disparities arises due to
the uneven distribution of industrial investment and
employment. Concentration of industries in a few urban areas
can be thought of as a problem of industrial location.
Since regional theory is largely a location theory, some
locational theories are discussed here.

Location theories have originally developed to
examine the logic of the location decision of the firms and
to determine the influential factors as the choice of a
particular location of a firm. The major location theories
can be structured around three approaches, namely (i) the
Least Cost Approach; (ii) the Market Area Approach and
(iii) the Profit Maximisation Approach.

The least cost theory was developed by Alfred
Weber. He put forward that optimum location is

22. Alfred Weber, Theory of the Location of Industries,
translated by C.J. Fridricks, University of Chicago
Press, Chicago, 1929.
determined by three principal costs viz., transportation cost, labour cost and cost due to excessive agglomeration and assumed perfect competition. He also believed that the plant at the lowest cost location will achieve the highest profit. His model was further extended by Walter Isard and considered that the transport input, i.e., distance, played a major role in production and consumption process.

The market area approach was introduced by August Losch. He criticised Weber's assumption of constant demand as unrealistic and varied from place to place. As a result the market for the produce is scattered. August Losch determined the market area for an entrepreneur on the basis of the assumption that (i) there is no spatial variations in the distribution of inputs over a homogeneous place; (ii) density of population is uniform and taste is constant, and (iii) no locational interdependence exists between firms.

Profit maximisation approach as an attempt to integrate cost and demand approaches was made by Melwin Greenhut.\textsuperscript{25} He tried to maximise profit rather than minimise cost, and believed that transportation cost will be the determining factor in industrial location if it constitutes the major portion of the costs.

2.4.6 Growth Pole Theory

Economic space and poles of development provide a dynamic explanation of the process of regional development. The concept of 'development pole' was first developed by Perroux\textsuperscript{26} in 1955 on the basis of the borrowal from the growth economics of Schumpeter, Hirschman and Myrdal though their theories are quite different from each other. By a growth pole, Perroux means "a centre in abstract economic space" from which centrifugal forces emanate and to which centripetal force are attracted. Each centre being a centre of attraction and repulsion has its own field which is set in the field of other centres".\textsuperscript{27} He considered

\begin{itemize}
  \item \textsuperscript{25} Melwin L. Greenhut, Micro-economics and the Space Economy, Illinois Scott-Foresman, Chicago, 1963.
  \item \textsuperscript{26} Frances Perroux, "Note Sur la notion de pole de Croissance", Economic Applique, 1955.
  \item \textsuperscript{27} Frances Perroux, "Economic Space: Theory and Application", Quarterly Journal of Economics, Vol. 64, No. 1, February 1950, p. 95.
\end{itemize}
that the process of economic development should essentially be polarised and it inevitably resulted in cluster of economic activity and growth. In other words, a growth pole is a region where a large and expanding firm or industry is located which would derive considerable economies of scale during the process of expansion. Moreover, this process of expansion could influence the growth of a large number of other industries through its additional purchases of inputs and through its large output which it could sell at a cheaper rate due to the economies of scale.

2.4.7 Industrial Complexes

The idea of industrial complex is similar to the growth pole theory which has been defined as "a rainfield chain of a functionally interconnected industries." In a more detailed sense, an industrial complex is "an ensemble of technically and economically interconnected industrial units, usually located on a given territory. Such a complex is normally a 'planned' one based on physical infrastructure and developed around one major industry which forms the core or the focal point of the

complex. The core often appears to be a heavy industry .... The concept of industrial complex is basically functional."\(^{29}\)

2.4.8 Role of City in Economic Development and Regional Imbalances

Although the theories of development discussed above agree that development, when left to itself, tends to be geographically concentrated, they do not undertake a thorough analysis of the fundamental reasons for this. The role of cities in the economic as well as socio-cultural development is very crucial. Howard Shindman, Clark, Klassen, Richardson and Isard have made significant contribution in this area. Urbanisation is a critical process in the development of modern state. This may be understood from the Indian experience itself, where the large cities like Bombay, Calcutta, Madras, Delhi, Bangalore etc. are more developed than other centres. Any deviation from the traditional society must envisage the development of cities. Historically, the emergence of cities could be seen as a synthesis of economic, administrative defence and religious requirements. Their

spatial setting can be determined partly by natural conditions and partly by the developing network of communication, trade, and transportation facilities. The emergence of modern technology and organisation is also an important factor in the city making process. They are the main agents for geographical integration of the social, political, economic and cultural systems of a nation. They are particularly conducive to innovations and they also provide for external economies.

2.5 OTHER RELEVANT HYPOTHESES

The 'self-perpetuation hypothesis' made by Hughes\textsuperscript{30} and proved empirically by Booth\textsuperscript{31} suggested that disparities diverge in the process of development. As against this, 'Accordian effect hypothesis' suggested convergence by Hanna\textsuperscript{32} and found valid by Perloff and Hanna.\textsuperscript{33}

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Another acceptable hypothesis is 'concentration cycle hypothesis' developed by Myrdal\textsuperscript{34}, Hirschman,\textsuperscript{35} Alonso\textsuperscript{36} and Williamson\textsuperscript{37} and found empirically valid by Williamson and Koropeckyj.\textsuperscript{38} This stated that regional disparities diverge initially only to converge later on.

The 'Centre-Periphery model' of Friedman\textsuperscript{39} stresses cumulative and self-reinforcing advantages of initial location and limited advantages of backward regions normally insufficient to offset agglomeration advantages.

2.6 EMPIRICAL STUDIES ON REGIONAL DISPARITIES

Many studies were undertaken by individual researchers in the past three decades to assess the impact

\begin{itemize}
\item \textsuperscript{35} A.O. Hirschman, \textit{The Strategy of Economic Development}, Yale University Press, Yale, 1958, p.184.
\item \textsuperscript{38} I.S. Koropeckyj, "Equalisation of Regional Development in Socialist Countries", \textit{Economic Development and Cultural Change}, Vol.21, No.1, October 1972, pp.68-86.
\item \textsuperscript{39} J. Friedman, \textit{Regional Development Policy - A Case Study of Venzuela}, p.41.
\end{itemize}
of plan effort aimed at the reduction of regional disparities.

Ashok Mitra made a pioneering study of levels of regional development at the district level, based on 1961 census data. Using a large number of indicators, the study divided the 327 districts of the country into four levels of development relying on simple ranking method. The study brought out the association between different indicators and the levels of development. The Census of India, 1961 uses as many as 30 indicators of the level of development of a region, and then, prepares a composite index of development based on their co-variance. It should be noted in the first place that this procedure may get some satisfactory results for comparison of the levels of development among different regions, but that it may be too complicated to yield very satisfactory results for comparison of the economic growth of different regions.

Nath has done another study by using various indicators to highlight disparities between regions based on state ranks in India. He has taken five indicators for his study and came to a conclusion that Maharashtra, Tamil Nadu stood as the most developed states followed by Gujarat, West Bengal, Punjab and Kerala all of which are designated as the relatively developed states in comparison to remaining eight less developed states. He also finds that "economic growth during the 1950s and early 1960s was probably somewhat more rapid in the developed states than in the less developed ones".

S.K. Rao, for measuring the levels of regional disparities in India, has used the multiple factor analysis after taking into account only six indicators of which


three related to industry. He concluded that "development during the first 15 years of planning in India seems to have led to no reduction in regional disparities; if at all, it seems to have been polarised in two top groups of the states. If one has to name the states which seem to remain depressed, one may mention the following: Assam, Orissa, Madhya Pradesh, Uttar Pradesh, Rajasthan, Bihar and Kerala".

M.N. Pal, in an empirical study, has attempted to identify relatively less or more developed areas (districts) in India as compared to an average national level of development. Instead of taking income as a single indicator of development he has taken several such indicators to compute a composite index which can represent an aggregate picture of regional disparities in the levels of development and also identify the differential pattern of sectoral development and its contributory factor by this method.

Ganguli and Gupta\textsuperscript{44} have done another comprehensive study on the basis of the levels of living indices for 15 states in India by using the method of principal component analysis. They came to the conclusion that the disparities in the overall levels of living between the states declined during the period 1955-65. Yet a few other studies on the inter-state disparities including one by Majumdar\textsuperscript{45} for the period of 1950-51 to 1967-68 and another by Majumdar and Kapoor\textsuperscript{46} taking three yearly averages during the period of 1962-76 have located a rising trend in the extent of regional disparities in India.

Hemalata Rao\textsuperscript{47} has looked into the question in a number of studies (1984).\textsuperscript{48} She has chosen as total number

\begin{itemize}
\item G. Majumdar and R. J. L. Kapoor, "Behaviour of Inter-State Income Inequalities in India", \textit{Journal of Income and Wealth}, 4, 1980.
\item Hemalata Rao, "Identification of Backward Regions and Trends in Regional Disparities in India", \textit{Artha Vijnana}, 10, 1977, pp. 93-112.
\end{itemize}
of 14 states and analysed data for the years 1956, 1961 and 1965. She has taken 24 variables and used the technique of principal component analysis and came to the conclusion that there has been a general decline in absolute differentials between the developed and less developed states.

K.R.G. Nair conducted a study and came to the conclusion that, "the first decade of Indian Planning does not seem to have witnessed any major decrease in inter-state income differentials." He also made another attempt (1982) to analyse in detail the pattern of change in inter-state disparities in the levels of living in India between the fiftees and the eightees. He concluded that there is a glaring gap between the low ranking and high ranking states in terms of per capita NDP during the period under study. The evidence from his study clearly indicates that "inter-state disparities in per capita NDP decline from the fiftees to the mid-sixtees, but increase since then".

Dholakhia's study has covered 15 states and years from 1960-61 to 1980-81 in examining the trends in inter-state income inequalities during this period. These findings are fairly in line with what Nair has reached in his investigation: "The state product inequalities have clearly increased during the period 1960-61 to 1979-80 not only in money terms but also in real terms. The product inequalities, moreover, are also increasing in the primary and the tertiary sector. The trend in the inequalities in the primary and the tertiary sectors, largely governs the trend in the overall product inequality among states. Although the experiences suggest that richer states have gained more and that the poorer states have gained less, the analysis indicates a relationship of complementarity between the objectives of growth and equity in India. The growth equity trade-off does not appear to be very serious in India. The analysis, on the contrary, unravels a promise of growth if equity is aimed at".

K.K. George conducted one study for assessing the divergence in Indian economy and examines how far the

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declared regional goals have been achieved by different agencies like the Finance Commission, Planning Commission and the Financial Institutions. The study came to the conclusion that the regional disparities is increasing in order to the biblical saying, "To the rich shall be given; from the poor shall be taken away".

Another comprehensive study has been conducted by Joshy. He examined in detail the growth of and regional imbalances in infrastructure among states especially in Uttar Pradesh by using a composite index of economic development and came to the conclusion that the inter-state pattern of development in terms of infrastructure facilities has remained more or less unchanged.

Rao and Sundaram made another study and observed that specified regional policies are needed to guide deliberate action to bring about a more even economic and social development in different parts of the economy.

Sampath, using a technique similar to the coefficient of variation, conducted one study and observed that inequality has significantly increased in agricultural sector.

Dhadibhavi made use of the principal component analysis to analyse inter-taluka disparity and backwardness in Karnataka. The inter-taluka variations in respect of agricultural development were not found high.

From the above discussion it is seen that inter-state disparities in economic development among states are either increasing or more or less remained unchanged over decades. Many studies have already been undertaken, using many variables, to explain the nature of disparities in economic development among states. But very little has been done to explain the problem in terms of the differences in the central sector industrial investments. Therefore, the present study aims at bridging the gap.