CHAPTER III.

LOCATION THEORIES, FIVE YEAR PLAN AND INDUSTRIAL POLICY.

3.1 INTRODUCTION:

The literature surveyed in Chapter two tries to gauge the causes behind the gap in development between advanced and backward regions as it can create major economic crisis especially in developing countries like India. This chapter takes the thought process further and deals with (I) the various location theories to explain the growth and spread of regional inequalities. (II) Five year plans and backward area development in India (III) Industrial Policy and backward areas in India working group on fiscal and financial incentives and (IV) Industrial Development in Backward Areas of Developed Countries.

(I)

3.2 SOME LOCATION THEORIES:

Location theories originally developed to examine the factors influencing the choice of a particular location, is now being utilised for regional development planning. In this respect we can quote William Alonso, who says, "Increasingly the question of the location of a factory is being considered as a
'project' by a government agency rather than as a profit-making venture by a private corporation. In this sense theory of location of the firm extends to project planning but antecedes regional and national planning."

In Industrial development Industrial location is an important aspect. There are three approaches which lie behind location theories: i) Least Cost approach ii) Market Area Approach and iii) Profit Maximisation Approach.

i) Least cost Approach:

Alfred Weber (2) introduced modern theory of Industrial Location. Before him Von Thunen and Launhardt also presented their ideas on this subject. According to Von Thunen rent and transport cost are the two major factors. He assumed that efficiency of labour and cost of labour remain same at all places.

In the least cost approach of Alfred Weber the optimum location is determined by three principal costs viz., transport cost, labour cost and cost due to
excessive agglomeration, Weber assumed perfect competition and believed that the plants at the lowest cost location will achieve highest profit. According to him industries will tend to locate at that place where savings in terms of labour cost will be larger than additional transport costs. Introducing agglomeration factor, Weber opined that industries will tend to locate where extra labour costs / transport costs are equal to savings in terms of economies of scale achieved through agglomeration. Thus his theory is more concerned with costs and neglects the demand aspect of location.

ii) Market Areas Approach:

August Losch (3) has shown that Weber's assumption about constancy of demand is not realistic. Demand changes with place and market for the product is scattered. It is possible to cover up higher transport cost by earning enough profit through large scale production. Thus he puts greater emphasis on the easy availability of wider markets for selecting a location. Losch has tried to determine the market area for an entrepreneur on the basis of certain assumptions:
1. Equal distribution of natural resources,
2. Uniform density of population in each centre,
3. Equal preference of consumers in each centre,
4. Same population technique for each plant,
5. Variety of demand for each commodity,

On the basis of these assumptions Losch has developed a demand curve. The base of the same is market areas and if production is profitable all the firms will try to develop their own market areas, ultimately this will adjust into a series of hexagonal market area covering the entire plane.

Losch's principle has been criticised on so many grounds, specially for having neglected the spatial variation in supply of inputs and therefore the variation in costs. He identifies the main determinant in selection of location as demand. By not taking into account transport costs, the dynamics of economic development, have been left untouched.

iii. Maximum Profit Approach:

Melvin Greenhut made a significant attempt to assimilate these approaches in which Weber neglected the demand for products, and Losch ignored the spatial
variation in the distribution of inputs. Greenhut integrated the two theories that included costs and demand. He tried to maximise profit rather than minimise cost. Following factors are included in his theory.

1. Cost factors (transport, labour and processing cost) regarding location;
2. Demand factors of location (spatial inter-relation of firms or efforts to establish monopoly on specialised market sections);
3. Cost reducing factors;
4. Income raising factors;
5. Factors reducing individual income;
6. Factors raising individual cost item;
7. Complete individual level thinking analysis.

According to him where transport cost contributes a significant part to the total cost, transport cost becomes a major determinant in industrial location, and production will be located near the raw material sources. The nature of production also influences the selection of place. Greater the elasticity of demand for an individual firm's product, greater will be decentralisation of production, and large firms are more mobile than the small firms in the long run.
A brief review of the theoretical aspects of location decision shows that transport cost and accessibility to markets are the two important factors considered by the entrepreneurs for location of plants. The theories developed on the basis of experience in Western Countries, involve the assumption of perfect competition and free market economy. They cannot be usefully applied in a developing country like India, as they are urban-oriented and deal with economies of scale arising due to industrial concentration. The Western theories which are developed in the framework of free market economy may not always be able to satisfy the social needs of distribution of industrial development.

Those economists who have presented the theories of location have also considered the market for production as a major factor. In the backward areas demand is low because of low per capita income, and insufficient demand does not provide the necessary incentives to attract industries to such areas. There are two more factors, (1) Psychological factor which affects the entrepreneur's decision regarding selection of a place. Richardson (4) calls it habit. Richardson has stated that "central location may be chosen out of habit rather than reasons." (2) Second is social and family ties, due to social and
family constraints firms do not like to migrate to other places leaving their present place. They opt for expansion of their firms in the city of their residence according to K. J. Button\(^5\) such firms inspite of becoming stagnant would not leave their present place. From the aforesaid discussion we can come to a conclusion that theories of location (particularly the least cost theory) which are based on free market economy concentrate their attention on migration of Industries towards cities.

If the entrepreneurs are given free choices of location then there would be a tendency to establish Industries in developed urban areas, with their high level of infrastructure and other necessary amenities. This intensifies the disparities between developed urban regions and the poor backward regions.

3.3 Regional Disparities : Cumulative Causation Theory :

Swedish economist Prof. Gunnar Myrdal\(^6\) explained the process of cumulative causation in terms of 'back wash' and 'spread effects'. In the developing countries, if the process of development was left to market forces, the inequality in development led to further divergence.
According to this theory, due to historical accident, there emerged some favoured localities and regions during the process of growth. These favoured localities and regions offer particularly good natural conditions for development of economic activities to get concentrated there. If things are left to market forces unhampered by any policy intervention, industrial production, commerce, banking, insurance, shipping and indeed almost all the economic activities in the developing economy would tend to give bigger than average returns and cluster in these favoured regions leaving the rest of the country more or less in a backwater. In course of time due to free play of market forces the inequalities increase rather than decrease. The regions which are economically active will witness expansion and capital and labour will migrate to these regions from backward regions. Therefore, the backward regions will be further deprived of investment and labour and the terms of trade will also go against them. Progressive growth of developed regions will, therefore, create a backwash effect adversely affecting the growth of backward regions.
The growth of developed regions will create another type of effect i.e. spread effect. The 'spread effect' is the expansionary momentum from the centres of economic expansion to other regions. Expansionary momentum of spread effect will influence the localities further away, by increasing the demand for raw materials and services. In 'marginal cases' the two kinds of effects will balance each other.

But, in reality the backwash effect is much more powerful than the spread effect in an underdeveloped country which neutralises the spread effect. If the process of development is left free and uninterfered, the inequalities accentuate. Myrdal has, therefore, advocated for strong government intervention to reduce the intensity of backwash effect by stopping the flight of capital and labour from backward regions to developed regions.

3.4 Central Place Theory:

Christaller (8) was one of the first theorists to develop the concept of the hierarchical organisation of settlements. The term settlement hierarchy denotes a ranking of cities and settlements into successive group on the basis of sizes or on functions performed or
facilities offered by the settlements, though in geography, the concept has a different meaning. The idea of hierarchy is that "there exists a discrete class of central places and associated group of functions organised together in a nesting pattern."\(^9\)

A central place is defined as a settlement providing services for the population of its hinterland, supplying it with goods and services such as administrative, banking and professional services, educational, leisure and cultural facilities, as well as those of retail and wholesale trade. Central places vary in importance. They can be classified as high order centres or low order centres. High order centres stock a wide array of goods and services and serve a large population, lower order centres stock a smaller range of goods and services and serve a smaller population.

3.5 Approaches to Hierarchy Research:

There are two major approaches to the settlement hierarchy research. One of them involves the assessment of goods and services available in the Central place and the ranking of the Central places on the basis of goods and services offered. This was done rather elaborately by Smaile and others \(^{10}\) for England and Wales. The other method aims at determining the area dependent on
the Central place for the goods and services offered. How extensive is the region served by the Central settlement? How far and in what direction does the region extend? To what degree does the region depend on the Central settlement for the goods and services offered? Answers to each of these questions constitute useful criteria by which relationships between the Central settlements and the region can be measured (11).

The analytical basis of settlement hierarchy takes Christaller's central place theory as its starting point. The investigation of factors such as size - distribution of cities, classification of settlement according to levels of hierarchy and city-size reveal some sort of relationship between them.

According to Christaller, Central place is the basic unit and it is no way related to a city or a town or even a community. Settlements have both geographical space and population in common, but the basic element of a central place is the provision of goods and services to an area larger than itself. The services may be extensive or limited but the function of a service centre is common to all. Population size was considered but function was the keynote. (12)
According to Christaller's chief characteristic of the central place, is its role as a market centre. Hence, the wider the area served, the higher may be the ranking of that settlement in the hierarchy.

Lattice and K-functions are used to explain the space economy concept. The shortest and therefore, the most economical connection between two points is a straight line. This holds for densely populated regions as for the thinly populated areas. The most favourable development for traffic is the three-axis type, in which the traffic routes cross one another at one point that is, six traffic routes radiate from one point.

The ideal complementary region of a central settlement is bounded by a circle. The distance from each of the points in the complementary region to the centre is the minimum. However, if the complementary region of one central settlement touches the same of another neighbouring settlement, then the region assumes the shape of hexagon. However, this theory takes into account only the service activity, and assumes rationality of consumers to patronise the nearest service centre. The Christaller model also assumes uniform distribution of natural resources and population.
A central place system is not fixed and is in a constant state of change. An increase in the service activity of one centre, perhaps with the development of a new multiple, will have an impact on the service activity of other competing centres. This theory does not provide a thorough dynamic explanation of these changes.

There is a possibility that the domination of the large centres may over-shadow the small centres and discourage the growth of smaller service centres. Another exception to this theory may emerge if a group of centres function together as an unit, there maybe inter dependence between them regarding the pattern of retailing etc.

There is no accepted uniform method, on the basis of which central places can be ranked. Different criteria may lead to different ranking of central places within a particular area.

3.6 Recent Developments in the Theory.

Of the recent works on the theory, that of Berry and Garrison (14) evokes interest. They have emphasised Christaller's concept of 'The range of good' and 'The threshold'. This latter is defined as the minimum number
of consumers that are required to support any particular function, 'Concentration on these....... enables them to avoid Christaller's and Hosch's assumptions dealing with the uniform distribution of the consumers and the hexagonal shape of the market areas. They then assume that there is a hierarchical order of goods which explain the hierarchical order of central places.\(^{(15)}\) Inspite of the fact that there are some unanswered questions about why the hierarchical breaks occur where they do, in the hierarchy of goods, their restatement of the theory has the greatest advantage of being highly flexible.\(^{(16)}\) This allows the theory to be applied to interurban and urban highway activities.

Another important aspect of the recent development of the theory was the shape of the hexagonal model. It was observed that the equal area hexagons, as suggested by both Christaller and Hosch are unlikely to occur in practice. The high density of population at the central core advocated by Hosch tends to result in smaller trade areas, while away from the core the size of the areas tends to increase.\(^{(17)}\) Regular cluster models with no values and unequal area hexagons were noted by Brush in
Wisconsin and they conformed to the model given by Kolb and Brunner.\(^{(18)}\) In this model, the villages are located near the boundary of the influence of towns and hamlets are clustered around villages at the edge of the latter’s trade area. The towns are located in the centre.

By showing a serious lack of interest in regional difference, some studies fall below par in explaining reality. Most of the studies, with the possible exceptions of those by Mayfield in India\(^{(19)}\) and by Grove and Huszar in Ghana \(^{(20)}\) are carried out in Western Countries. The more celebrated among them is the study by Grove and Huszar which aims at utilising the settlement hierarchy in Ghana for the purpose of regional planning.

3.7 The Growth Pole Theory:

The concept of Growth Pole was developed by French economist Perroux \(^{(1955)}\)(21). It recognises that development does not appear everywhere and all at once; it appears in points or development poles with variable intensities. It spreads along diverse channels and has varying terminal effects for the whole of the economy.\(^{(22)}\) According to Perroux a growth pole was a large and expanding firm or industry which could derive
considerable economies of scale during the process of expansion and could influence the growth of a large number of other industries through its additional purchases of inputs and larger output which it could sell at a cheaper rate.\(^{(23)}\) In his theory of growth pole, he attempted to explain that modern process of economic growth deviated from the stationary concept of equilibrium growth. Perroux based his arguments heavily on Schumpeter's theories of the role of innovations and large scale firms. Also according to Perroux, entrepreneurial innovations are the prime causal factors behind economic progress. Inter - Industry linkages and the theory of industrial interdependence play a major role in the development of the pole theory.\(^{(24)}\)

The close relationship between scale of operations, dominance and impulses to innovate became the most important feature of his theory and lead to the concept of dynamic propulsive firm and leading propulsive industry. Dynamic propulsive firms are relatively large in size, have high ability to innovate, belong to fast growing sector and the quantity and intensity of its interrelations with other sectors of the economy are important enough for the induced effects to be transmitted to them. The characteristics of leading propulsive industry are also
similar, such an industry has (i) highly advanced level of technology and managerial expertise, (ii) high income elasticity of demand for its products, (iii) marked local multiplier effects and (iv) strong inter-industry linkages with other sectors. Such linkages can be of two types - forward linkage and backward linkage. In the case of a backward linkage an industry encourages investment in the earlier stages of production by expanding its demand for inputs (which are the outputs of industries in the earlier stages of production). In the case of a forward linkage, an industry encourages investment in the subsequent stages of production either by transmitting innovation or effects of innovations forward. This concept of growth pole is closely related to Perroux's idea of an economic space as a field of forces consisting of centres (or poles or foci) 'from which centrifugal forces emanate and to which centripetal forces are attracted. Each centre, being a centre of attraction and repulsion, has its proper field which is set in the field of other centres. (25)

Perroux's conception of space was essentially an abstract one. It was Boudevilla who gave it a regional character and a specific geographic content. He defined a
regional growth pole as a 'set of expanding industries located in an urban area and including further development of economic activity throughout its zone of influence.' The place where these 'expanding' or 'propulsive' or 'dominant' industries are located in the region becomes the pole of the region and agglomeration tendencies are promoted. Such tendencies arise because of external economies and result in polarization of economic activities around that pole.

Prof. Hirschman (26) in his theory of unbalanced growth emphasizes that because of these external economies there is a tendency among investors to concentrate in the growth poles. Because of this tendency the country gets split into developed and backward areas.

3.8 Trickling Down and Polarization Effects.

According to Hirschman, development in the geographical growth centres would activate certain forces, affect both adverse and favourable types which affect other regions of the country, some of favourable forces are introduced by Hirschman as trickling down forces while unfavourable forces are referred to as Polarisation effects. These forces act mainly through (i) inter -
regional trade and (ii) transfer of capital to backward regions. Moreover the growth pole attracts labour from backward areas thus it helps in reducing the pressure of population.

Due to following factors polarisation effects discourage the growth in hinterland.

(i) The industries of such areas find it difficult to compete with the industries of growth poles which have well developed transport facilities.

(ii) Better investment facilities are available in the growth pole, so the investors in the hinterland would prefer to invest in the growth pole rather than in the hinterland.

(iii) A very harmful effect of polarisation from the point of hinterland is that it pulls the best of labour force towards it. Instead of employing the disguised unemployed, the progress of the growth pole attracts efficient technicians, managers and enterprising young men.

We can compare Hirschman's trickling down and polarisation effects with Myrdal's spread effects and backwash effects. But compared to Myrdal Hirschman is
more optimistic. Hirschman feels that in the long run external diseconomies will appear in the growth centre (industry will be congested and its expansion will be hampered by the inefficient size of the home market resulting from low income levels of the hinterland) and the existence of complementaries will ensure an extensive spread of development. On the other hand, Myrdal believes that this may not be the end result, for the existence of cumulative and circular causation may prevent this from happening. (27)

This growth centre concept is akin to Lloyd Rodwins "concept of concentrated decentralisation". According to this theory urban industrial growth will be diffused to the backward regions of a developing country through concentration of infrastructure and productive investment in selected points or sub-regions. Therefore, one of the business conditions of the growth centre concept is that the growth points, centres and 'poles' should be developed simultaneously to form a balanced centre of hierarchy. The growth centre is considered to be a powerful tool of development of backward regions and an easy instrument at the hands of government to remove regional disparities. In India the growth centre strategy has been accepted as a tool to achieve regional balance in development. (28)
Growth Pole theory and Central place theory both are complementary to each other. While the Growth Pole theory contributes to explaining the impact of propulsive industries and leading firms, on regional economic development, it is not in itself a theory of location which explains where the functional poles are or where the most likely locations of the new poles may be. To explain this, it has to rely on the Central Place theory. On the other hand, the Central Place theory does not explain the growth phenomenon. It is a static theory which only explains the existence of certain patterns of centres. It does not say how these patterns come into being and how they may undergo changes in future, to explain these dynamic phenomena, it needs the help of the growth pole theory. (29)

3.9 Industrial Complex:

The concept of an industrial complex is very akin to development poles theory. "An industrial complex may be defined - in a very wide sense - as an ensemble of technically and economically inter-connected 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 focal points of the complex. The core often appears to be a heavy industry. The concept of industrial complexes is basically functional. The presence of all links in the chain of interacting industries is maintained by production technique. This interconnection is such that all the industries when functioning together can operate optimally rather than when they function over a wide area. Industrial complex is conditioned by the input structure and distribution of output. The characteristics of industries here are that there is a marked similarity between delivery of goods and flow of raw materials between a group of functionally inter-connected industries. Though the propulsive industry is not an absolute necessity for functioning of an industrial complex, economies of agglomeration and concentration is a must.

This concept has several advantages. It can promote functional specialisation, lead to co-ordinated exploitation of natural resources, give rise to promotion of industries based on forward and backward linkages, etc. This Industrial Complex concept has been experimented in India through extensive central investment in basic industries in backward regions, but with little success.
Huge investments are made in basic industries in Madhya Pradesh, Bihar and Orissa but instead of any significant progress in industrial development, the large projects have remained islands of progress in the midst of large backwardness. This has been partly due to inadequate advance planning for such industrial complexes, lack of minimum infrastructure and non-availability of skilled manpower. If these requirements are fulfilled and proper type of propulsive industries chosen the Industrial Complex may prove to be an important tool for greater regional balance in Industrial and economic growth. (31)

The above discussion of location theories show that from the partial cost analysis, the theoretical models have moved forward to cover a variety of institutional and non-institutional factors. In the early years cost of transportation and labour were two important factors. Later demand factor was taken into consideration. Market area for a product or industry was identified both from the point of view of the producers and buyers. It was argued that in this process, production locations would emerge which would be beneficial both to the buyers and sellers. The integrated approach emphasises that it is not enough to minimise costs or maximise revenue, maximisation of profits has to be the objective function.
Personal factors which often exert considerable influence on the selection of location were also taken into account. But these theoretical approaches did not touch upon the geographical transmission mechanism of growth impulses.

II

3.10. Five year Plans and Backward-Area Development in India.

One of the major objectives of economic planning in India is to bring about a balanced development of different regions of the country through decentralised growth of industries and an accelerated development of backward areas so that the fruits of economic development could be shared equitably by one and all. However, as compared to the magnitude of the problem, not much was done or achieved in terms of this objective during the first three, Five year plans. In 1969, the reports of the Pande and Wanchoo Committees laid down certain criteria for identification of backward areas and recommended fiscal and financial incentives as presented in the previous chapter of this study.
But the Fourth Five Year Plan achieved very little by way of reducing the regional imbalance in industrial development in the country. The sixty-ninth Report of the Estimates Committee (69) observed:

'The committee regrets to note that even after 27 years of Independence and completion of Four Five Year Plans, the government have not finalised their strategy for development of backward areas ........ The committee are concerned to note that although the problem of development of backward areas and removal of regional imbalance has been engaging the attention of government from the beginning of the First Five Year Plan, yet no concerted action was initiated on this behalf till 1968. (32)

The Fifth Five Year Plan, therefore, laid stress on techno-economic surveys of backward areas, selection of growth centres, the provision of infrastructure and packages of services to prospective entrepreneurs etc. The scenario did not change and even in the Sixth Plan the following admission was made:

"Certain other deficiencies in the nature and pattern of industrial development have also emerged. Regional imbalances in industrial development have not been
corrected to the extent required. The expectation that massive investment in central sector projects would have a wide-ranging 'trickle-down effect' in stimulating small and ancillary industries has not been realised in many states. Even within states industries have tended to gravitate towards existing centres, the backward areas remaining substantially untouched. The incentive schemes for attracting industries to backward areas have not been able to prevent this tendency to an adequate extent.¶(33)

The committee headed by Shri B. Sivaraman in 1978 known as National Committee on the Development of Backward Areas. (See chapter two) examined the problem afresh and identified six types of problem areas.

In June 1988, it was announced that 100 growth centres will be set-up over the next five years. According to the scheme, the growth centres would act as magnets for attracting industries to backward areas and would be endowed with infrastructural facilities at par with the best available in the country, particularly in respect of power, water, telecommunication and banking. Each growth centre would be provided with Rs. 30 crores in order to create the infrastructural facilities.
In the case of nine states and Union territories, (namely Arunachal Pradesh, Goa, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Pondicherry and Tripura), it was not thought necessary to spend Rs. 25 - 30 crores on each centre. All these states and Union territories, where an investment of Rs. 25 - 30 crores may not be needed, were allocated one growth centre each. The allocation of remaining 52 growth centres was as follows: two each for Assam, Gujarat, Haryana, Jammu and Kashmir, Kerala and Punjab, three each for Karnataka, Orissa, Tamil Nadu and West Bengal, four for Andhra Pradesh, Maharashtra, Rajasthan, five each for Bihar and Madhya Pradesh and six growth centres for Uttar Pradesh.

A growth centre selected under the scheme would be included in category - B, unless it is already included in category - A, of the list of backward areas scheme. These centres would be entitled to all incentives available from time to time for category - B areas.

The distance criteria for the location of growth centres were that the centres should not be within 50 Km. from the boundary of the seven cities with a population of above 15 lakhs but below 25 lakhs and 15 km
from the boundary of 12 cities with a population of 7.5 lakhs.

The growth centre should be located close to the headquarters of districts, sub-divisions, blocks or talukas or developing urban centres. These should have access to a set of basic facilities like (1) proximity to rail-heads, national or state highways, (2) proximity to adequate and dependable sources of water supply and power (3) availability of tele-communication facilities and educational facilities (4) sufficient land for development of housing facilities and for promotion of testing activities.

The final selection of these centres were to be made by the Central Government. States had to submit proposals to the Department of Industrial Development by January 31, 1989 and they had been asked to make suitable provision in their next year's annual plans for these centres.

III.
3.11 Industrial Policy and Backward Areas in India;
Working Group on Fiscal and Financial Incentives :-

During the first twenty years of planning, location policy operated through public investment decision and industrial licensing. Toward the end of the sixties, it was realised that these measures by themselves were not adequate and more positive steps would be needed to foster industrial development in backward regions. In 1968
serious efforts were initiated with regard to the Identification of backward areas, as mentioned earlier.

As a part of the measure to ensure balanced regional development, Government of India had announced a number of concessions and facilities for industries established in selected backward districts/areas. In addition, facilities and incentives were also offered by individual states for attracting industries to backward areas.

The central capital investment subsidy scheme was originally announced in 1971; 10 per cent of the investment made on fixed capital investment viz. land, building and Plant and machinery was to be reimbursed as an outright grant subject to a ceiling of Rs.5 lakhs. This was raised to 15 per cent with effect from 1-3-1973. The maximum amount payable was, however, restricted to Rs.15 lakhs per industrial unit. This subsidy was made available for new units, as well as, to existing units undertaking substantial expansion in notified backward districts. Initially, the subsidy was made available to those projects whose total fixed capital did not exceed Rs.50 lakhs. The scope of the scheme was then extended by increasing the number of districts / areas for which the scheme would apply from 2 to 6 for each of the states identified as
being industrially backward and from 1 to 3 for each of the other states. Since March 1973, the rate of the subsidy was also raised from 10 to 15 percent of the fixed capital investment subject to the condition that the subsidy amount would not exceed Rs. 15 lakhs in any one case irrespective of the cost of the project. The number of districts eligible for the central subsidy increased from 44 in 1971 to 101 in 1973. Out of the 247 districts declared backward by the Planning Commission, 101 districts/areas were selected to qualify for central Investment subsidy.

All India term lending financial institutions, viz., IDBI, IFCI, ICICI extend financial assistance on concessional terms to all new and existing industrial projects having expansion schemes irrespective of the project located in the 247 districts selected by government. The concessions given by these financial institutions are in the form of lower interest rates against the normal rate, at reduced commitment charges, lower under-writing commission for shares and debentures, initial moratorium period up to 5 years, larger amortisations of 15 to 20 years and participation in the Risk capital.
The national committee on the Development of Backward Areas (Shri S. Sivaraman Committee) 1980 evaluated the performance of central subsidy scheme. The study shows that out of a total disbursement of Rs. 57 crores made till 1978-79, 55 percent had gone to the 25 eligible districts/areas of states which were not considered to be industrially backward by the Pande working group.

This committee made a comprehensive study of the different aspects of the problem, and submitted eleven reports, namely:

1. Organisation of Administrative and Financial structure for Backward Areas Development.
2. Industrial dispersal
3. Development of Backward Hill Areas
4. Village and Cottage industries
5. Development of Tribal areas
6. Industrial organisation
7. Development of Drought prone Areas and Desert Areas
8. Development of Coastal Areas affected by salinity
9. Development of chronically Flood Affected Areas
10. Development of North Eastern Region and
There are two or three strands of thought contained in the recommendations of the committee on industrial dispersal. (1) The first of these relates to the identification of backward areas. The committee has proceeded to identify backward areas by a process of elimination of what might be regarded as industrially developed centres along with their areas of influence, because such centres are already powerful magnets to attract industries to them, and that incentives for backward areas would be justified only outside the influence of such centres. (2) A second aspect is to eliminate the distinction between areas of concessional finance and areas of subsidy and make them coterminus to all identified backward areas. It is recognised that the economies of agglomeration cannot be altogether ignored and therefore, industrial growth centres should be deliberately planned in backward areas. The establishment of 100 such growth centres which should act as catalytic agents was then proposed.

The nucleus plant approach announced in the industrial policy statement of July, 1980 of the Government of India was also visualised as an operative mechanism for the development of industrially backward
areas. A nucleus plant in a nucleus industrial centre would concentrate on assembling the products of the ancillary units falling within its orbit/on producing the inputs needed by a large number of smaller units and making marketing arrangement. The nucleus plant aims at greater ancillarisation of industry and diversifying the industrial structure.

With a view to correcting regional imbalances and to secure the industrialisation of backward areas Government issued a press note on 27/2/1982 that applications for industrial licenses for location in the districts which have no large or medium scale industries-popularly called as 'No Industry Districts' would be given over-riding preference over applications for other locations. The list of 'No Industry Districts' have since been revised and up-dated as on 1st August, 1982. Again on April 28, 1983, the minister of industries, announced revised scheme of incentives for setting up industries in no industrial district and backward areas, According to the new scheme, the backward areas have been divided into three categories 'A', 'B' and 'C' areas.

In the 'A' category with 118 no-industry district special regions, 25 percent of the investment subject to a
ceiling of Rs. 25 Lakhs would be given as central investment subsidy. For the category 'B' having 55 districts, the central subsidy would be 15 percent subject to a maximum of Rs. 15 lakhs while in category 'C' the central subsidy would be 10 percent, subject to a maximum of Rs. 10 Lakhs. For the first time Central Subsidy was introduced for category 'C' areas, which were so far eligible only for concessional finance. Under this revised scheme the government also decided that all these three categories in future would be eligible for concessional finance in addition to central subsidy. The scheme also stipulated that areas in 'B' and 'C' districts where investments exceeded Rs. 30 Crores as on March 31, 1983 should not be eligible for further investment subsidy or concessional finance. (In the case of Electronic units set up in Hill districts the maximum ceiling on subsidy was raised from 25 lakhs to 50 lakhs w.e.f. 1.4.85)

3.12 Industrial Development in Backward Regions of Developed countries:

The most oftenly cited countries which have taken major initiatives in reducing regional inequalities and promoting industries in backward areas are Britain, Italy, Yugoslavia and Israel.
(i) **Britain:**

Britain adopted certain measures to reduce the problem of unemployment in the depressed regions in 1934 when the Government passed the special Areas Act. Since then, Britain passed several acts and introduced several incentives, subsidies and controls. It divided backward regions into four categories (a) special development areas (b) development areas (c) Intermediate areas (d) Northern Ireland. The important incentives are: Regional development grants incentives for new machinery plants and mixing works, building etc. Selective assistance, interest relief grants, removal grants for Government factories, tax allowances, finance, regional employment premia etc. Britain has also introduced Industrial Development Certificate (IDC) which is required to be obtained by all the New projects. IDCs have been used as negative instruments to reduce congestion in the highly developed regions and to attract industries to the depressed regions.

The regional policy in Britain has achieved good results. Keeble has pointed out "1960s witnessed a substantially greater movement rate than that recorded for the late 1940s and 1950s. By 1966-71 period nearly
200 manufacturing firms were establishing migrant plants each year in other regions. But Britain achieved only partial success in solving the unemployment problem. As Kenneth Warren says, "Much new industries have been steered to the development areas but even after 30 years the number of jobs created has been too small to remove regional differences in unemployment."

(ii) Italy:

Italy is another country which made sincere efforts to reduce disparities between its developed North and backward South (Mezzogiorno) areas. The industrial growth climate was not favourable to industries. Therefore government intervention was necessary to attract investment to the South. Italian initiative in this direction was started with the 1957 legislation giving several tax incentives to the industries in Mezzogiorno. Several measures regarding concessional loans to the industries were also initiated. In Italy, no strict location control was practiced though the idea of Growth centres was popularised and several industrial nuclei and Zones were created but the policy was never as strict as in Britain.
Italian attempt to disperse industries from North to Mezzogiorno depended mainly on the policy of incentives like, tax incentives, State loans, Capital grants, Building and equipment grants, Transport subsidies etc. Priority treatment was given to large and capital intensive industries as well as to the growth centres termed as industrial nucleii and 'areas'.

Italy did not give much emphasis to negative controls as in Britain. Allan Rodgers has pointed out that in the absence of true locational policy, market forces have produced concentration of investment in a remarkably limited number of industrial Zones. Sixty percent of employment occurred in six areas. Thus a self-selection process of the State and private firms concentrate rather than disperse their resources. \(^{(38)}\)

(iii) Yugoslavia:

It is a centrally planned socialist country which has economically under-developed republics Bosnia-Herzegovina, Macedonia and Montenegro and autonomous province of Kosovo. The unique feature of the Yugoslavia policy in this respect is that the
constitution (1974) of the country has made special mention about the need to devote special attention to the faster development of productive forces in those republics and province. The Yugoslav Policy is to develop industries in the above republics based on the fixing of the target i.e. qualification for each planning period through social intervention. Yugoslavia allocates about 3 percent of National Income for the development of under developed republics and province. The system operates through investment and budgetary subsidies. There are 'Grants in aid' guaranteed investment and supplementary finance.

Resources invested by working organisations and Banks from developed areas in underdeveloped republics have been exempted from interest charges on fixed working capital. All these measures are directed to attract industrial investment from developed areas to under developed areas. Though Yugoslavia is a centrally controlled country its economy is functioning through several workers'organisations and the principle of 'Self management'. It was, therefore, necessary to introduce social intervention and subsidies to attract industries to underdeveloped areas.
(iv) **ISRAEL:**

It is a young nation of immigrant population. They have the tendency to concentrate their capital investment and population in urban centres. Industrial activities are concentrated in urban countries like, Tel, Aviv, Hafiza, Jerusalem etc. so the major objective of the Israel Government is to encourage industrial investment in the backward regions. With this view, the entire country was divided into priority and other areas, according to the level of backwardness. Most backward areas belonged to 'Priority area 'A'. In order to encourage industrial investment in backward areas Israel Government introduced number of grants and subsidies schemes. The graded system of grants were, introduced for building, site development and machinery equipment for all the areas highest being for 'Priority Area 'A' Liberal loan scheme at the concessional rate of interest upto project cost of 55%, and 45% for A, B and C areas, was introduced.

The incentive programme of Israel had good impact on relocating industries in priority areas though dispersal of industries to distant places, did not take place. Studies have shown that industries were
relocated in 'A' areas, 50 miles from the towns of largest market and population centres. That the Israeli Policy was quite successful in attracting industrial investment to priority areas, is by no means a small achievement for a young country like Israel.

Regional disparity exists in developed countries like U.K. which suffers from distressed areas, while young countries like Israel also suffer from backwardness and lack of industrial investment. In the case of Italy an entire part of the country is lagging behind in industrial development. In Yugoslavia though the policy has successfully brought a radical economic transformation over the period, the policy led to the growth of high capital investment intensive industries like power generation, Metallurgy industries etc. In Britain, the regional policy, particularly schemes of subsidies, encouraged establishment of 'foot loose' industries in the development areas, which have less employment content. The above examples show that capital investment subsidies have tended to promote large and capital intensive industries, there the
basic objective of employment generation through industrial development may not be achieved to any significant extent. An alternative strategy for optimal utilisation of local resources and full employment of manpower therefore need to be devised.

3.13 Critical Evaluation:

An experience of industrial growth, both within the country and outside indicates that there is a close relationship between developed infrastructure and industrial activity. To a large extent clustering of industrial activity in backward districts, which are in close proximity to developed areas, is due to the access to markets and good infrastructure like roads, communications etc. This is not to suggest that the availability of infrastructural facilities by itself can promote industrial activity. But from the experience of 15 to 20 districts inspite of availability of incentives for more districts, clearly reveals that unless basic economic infrastructure is available, production in backward areas and flow of goods to and fro would be far from smooth. Any scheme of incentives must take into consideration the peculiarity of the various regions,
otherwise the uniform application of a scheme is bound to have varying results in different areas. In order to provide developmental outlays for particular regions, differential unit costs of development in different regions should be fully taken into consideration to ensure material balances rather than financial balances. For example, wherever chemical complexes exist, they can create facilities for effluent disposal. This is not possible for a unit if it is set up outside the Chemical Zone. Allocation criteria for subsidy or industrial licensing should not be based only on financial considerations but physical considerations of area also which are equally important.

According to the industrial policy, once a district reaches the limit of Rs. 30 Crores investment no concessional finance will be available, but it may be possible, that within a district there may be some talukas still backward, thus the backwardness criteria could be applied on a differential basis to the degree of backwardness by identifying growth centres, blocks, talukas or districts or even regions on the basis of distinct social or economic criteria and the quantum of subsidy should vary according to the needs of the region.
The tendency has been for industry to be located close to the metropolitan areas and still claim the benefits of concessional assistance/subsidy because under the prevailing definition the area is regarded as backward, criteria of backwardness such as population size and number of workers in manufacturing will not give an accurate picture of the industrial potential of particular towns. A proper assessment would involve thorough techno-economic surveys to ascertain the raw material base, market size, linkages with larger industrial centres, characteristics of the labour force and existing availability of infrastructure. It is only on this basis that non-industrialised towns can be arranged in some sort of hierarchy of potential for industrial development. Therefore, the cut-off point can be defined according to the availability of funds for infrastructure development. (39)

State Government have their own subsidy schemes based on a wider definition of backwardness. Financial institutions grant concessional finance to industries located in yet another group of districts, totalling nearly 250. These, no doubt, overlap. Once backwardness becomes a 'Privilege', it comes to be
'abused' both by Government and Industry - government when it uses it as a criterion for relaxation of controls, e.g. MTRP houses can get a licence more easily if they would locate in a backward area, and Industry when it sought to minimise the cost of location in a backward area by being as close to the developed areas as possible. No genuine development of backward areas has taken place except perhaps by the costly efforts of some public sector units.

As early as 1980, the Sivaraman Committee suggested a drastic revision in the definition of backwardness. A major departure from the past was the inclusion of distance from the industrially developed regions as a criterion, so far, however, the distance criterion has not been acceptable, particularly to the states which have already had a wide spread of industry within their territory.

There has also been a concept of 'no-industry' district which gets priority in the grant of industrial licences and for the development of which states receive central assistance. A controversy of recent origin is the demand for 'no-industry' blocks, or talukas rather
than districts. Since in the more developed states no
district is without an industrial unit (some blocks
might be), the change of definition would benefit such
states and is opposed by others.

In this background, replacing subsidies for
backward areas by promotion of growth centres should be
welcomed. However it is one thing to say that no subsidy
will be given to units located near towns, and quite
another to prevent any unit from coming up altogether.

A way must also be found to end the State
Government Schemes of subsidies. Incentive schemes have
become a matter of unseemly competition between states to
attract industry within their territories, causing waste
of government resources. The answer clearly is a well
defined scheme of growth centres which will have
adequate infrastructure and planned complementarities to
attract industry even without any subsidy, or only a
small but nationally determined subsidy to start with.
Yet the choice of centres for locating them will bristle
with problems related to inter-regional and
intra-regional rivalries.
3.14 **Conclusion:**

In this chapter, the various location theories were critically reviewed and the concepts of different costs, cumulative causation, central place, hierarchy Growth Pole, trickling down and polarization. Industrial complex were examined. It was seen that while the factors behind each of these concepts exerted considerable influence in the selection of location for industries, the theories based on the concepts did not touch on the geographical transmission of mechanism of growth impulses. This mechanism has to be understood if the approach should serve as a guide to mitigate regional disparities of economic growth.

With special reference to India, the problem of regional backwardness was studied in the context of the five year plans as also the Industrial Policy that was formulated. Here again it was found that the approach to backwardness is not wholistic which calls for a genuine macro perspective as seen in the critical evaluation of incentives. Further, the survey of other developed
countries and their approaches to resolving the problem of regional backwardness does not throw any light towards evolving effective policies which can serve development and dispersal of industries simultaneously. Nevertheless in the attempt of this study to evolve a macro regional development theory to serve this purpose, regional disparities in India are studied in greater detail in the following chapter.
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