Chapter I. INTRODUCTION

The realization that development is not distributed equitably across the various spatial and geographical units of a country had gathered roots towards the beginning of this century. It was echoed in the writings of Von Thunon, Walter Christaller, Alfred Losch, Perroux and Boudeville. Subsequently, this realization lead to the adoption and incorporation of geographical space as an essential ingredient of economic and developmental planning. Backward, depressed, less developed, underdeveloped, or laggard regions were identified throughout the world. In a developing country like India, planners began to concentrate more upon the extremely controversial issue of sharp cleavages and disparities in the levels of development between different geographical regions. More and more efforts were directed at levelling such imbalances. In order to understand the problems of such regions better and to invoke greater regional participation, the planning process was decentralized. Consequently, plans were formulated for smaller and smaller spatial units such as States, Divisions, Districts and blocks. Nowadays, even village and Panchayat level plans are being formulated and implemented with the intention of advancing the benefits of development in areas previously untouched.

As early as 1909, Alfred Weber¹ had attempted to understand why industries tend to be located in particular

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¹ Alfred Weber, Theory of Location and Industries, Translated by Karl Friedrich in 1929. Original work is of 1909 in German.
geographic areas. Weber concluded that location of industries depends upon certain primary and secondary factors. Primary factors are mainly regional consisting of the cost of labour and transport together with their types. The cost of transport in turn depends upon the type of material to be used, its weight and the distance to be covered by transportation. Secondary factors chiefly consist of the cost of production that would incur an agglomerating or deglomerating impact on industrial location. If the cost of production is reducible by industrial concentration, it would become an agglomerating factor. If it is reducible by industrial decentralization or dispersal, it would become a deglomerating factor.

In highlighting the uneven character of development, Von Thunon had envisaged the existence of an isolated state. He isolated state comprised of a developed central city (which was the only market place for the state) surrounded by its undeveloped rural hinterland that derived its subsistence by supplying surplus agrarian products to the city. Von Thunon organized this rural hinterland into six concentric zones of agricultural activity. He concluded that the zone/area closest to the city would be relatively more developed than the zones located farther away. The zone located closest to the city would enjoy better production choices and realize greater profits than its counterparts located farther away. This is because the profits gained by a farmer would decline as the distance from the city increases. Declining profits would be influenced by three

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major factors, namely, production cost, transport cost and selling price. Each zone would be engaged in the production of a specific agricultural product depending upon the interplay of the factors mentioned above. The innermost zone would have the advantage of producing heavy and bulky products. The zone located farthest would practise animal husbandry and the zones midway would be best suited to produce food grains and timber. The greater the distance of a zone from the city, the more backward it is likely to be. Since profitability as well as profitable production choices would decline with increase in distance from the central city. Modern technology, economic conditions, improved agriculture and transportation have upset Von Thunon's model of concentric zones. Nowadays, it is difficult to restrict production of specific commodities to specific zones around a central city. Nevertheless, the distance from a developed city, the efficiency of transport systems based upon a solid infrastructure of roads and communication is definitely a very important factor behind regional imbalances.

In 1933, a German geographer named Walter Christaller propounded his theory of central places. Unlike Von Thunon, for whom development primarily meant agricultural production, Christaller understood it as the growth of human settlements, activities and the spread of goods and services. He was of the view that the distribution of human settlements across a given spatial area is in accordance with a distinct pattern. Development is not dispersed equally in all directions but manifests first

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at favoured points from where it tends to propagate outwards to less developed hinterland. A favoured point is like a nucleus around which the accumulation of development occurs. It is a distribution point of goods and services for its less developed surrounding areas. Christaller named a favoured point as a central place and the activities it performs purely for its surrounding hinterland as central functions. In contrast to Von Thunon's model based upon a single central city surrounded by a single rural hinterland, Christaller envisages a multiplicity of central places performing a variety of functions and serving a multitude of rural hinterlands. Finally, Christaller's central places and functions are closely woven together in a complex hierarchical relationship represented by geometric figures. Central functions are represented by triangular lattices while hinterlands or service areas around central places are symbolized by hexagonal shapes. The hierarchical relationship signifies that a lower order central place will nest or merge in to a higher order central place continuing the system of progression until it is broken by the irrationality of consumer behaviour, geographical heterogeneity and/or inaccessibility by transport. These three being the preconditions of Christaller's theory. A lower order central place is lower because it has a smaller area to serve, fewer functions to perform and lower volumes of trade and business to transact. The nesting of lower central places within higher ones occurs probably because a lower central place eventually becomes the hinterland of a higher order central place.4

4. Ibid.
Similar views regarding the concentration of economic development in space was echoed by Perroux in what is known as the theory of growth poles. Perroux held that economic activities or forces never spread evenly across space. Instead, they tend to cluster together forming internal and external economies of their own. Urban industrial centers arising as a consequence of such clustering are called growth poles. Economic forces imply firms or industrial enterprises of a leading and innovative character that are capable of producing strong growth impulses in their environment. The establishment of a large industrial enterprise in an area exerts its influence on the economy through backward and forward linkages. Acting as a nucleus, such large enterprises pull other associated industries into the same area. Thus a cluster of mutually interdependent and interlinked industries is formed. This is called a growth pole. If permitted to operate without external control, such forces create spatial disparities and congestion which may be corrected by specific policy interventions designed to disperse propulsive industries across space. Another aspect of growth pole theory is the process whereby leading industries shift from large growth pole to smaller towns forming similar linkages and transforming such small towns into growth poles. Thus the formation of growth poles continues.

It is clear from the discussion above that development does not disperse proportionately in geographic space but tends to in

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selected areas where the needed infrastructures have already evolved. It does not distend into deprived areas on its own but keeps on circulating within the same regions. Consequently, deprived areas are buried deeper in the garb of backwardness while already developed areas achieve ever increasing heights of growth and prosperity. A long term persistence of this tendency creates sharp cleavages, strengthens regional disparity and germinates regional/political strife. This trend pervades through all levels of geographic categorization. At the international level, we find a block of rich and prosperous nations viz-a-viz' backward and deprived nations. At the national level, we a developed state/province against their backward counterparts. And so the phenomenon continues to permeate downwards until we reach a cluster of villages defined as a development block. A number of denominators have been assigned by various scholars to this phenomenon, i.e., regional disparity, inequality or imbalance, or regional dualism. Sometimes, it is also referred to as the regional problem, the development problem or the problem of backwardness. Friedmann and Alonso are of the view that policy makers in transitional societies are often confronted with the regional problem. This is a common occurrence during the early stages of industrialization when economic activities get concentrated in one or few centers which act as 'suction pumps pulling-in the more dynamic
intense growth, and a periphery whose economy is either stagnant or declining. Examples of such dualistic patterns are to be found in Brazil, India, Pakistan, Cambodia, Mexico and Venezuela.\footnote{Frank J. Stilwell, \textit{Regional Economic Policy}, Macmillan, 1972. p.9.}

It is possible to demonstrate this phenomenon empirically. A comparative study of the level of industrial development across the various Indian States highlights the extent of developmental disparities existent among them. The Annual Survey Of Industries 1991-92 indicates that the highest concentration of working factories was witnessed in Andhra Pradesh (14.2 percent) followed by Tamil Nadu (13.8 percent), Maharashtra (13.6 percent) and Gujarat (9.9 percent.)\footnote{India, \textit{Annual Survey Of Industries 1991-92, Summary Results For Factory Sector}, Central Statistical Organization, Dept. Of Statistics, Ministry Of Welfare And Program Implementation, Government Of India, Delhi, 1995. pp.9, 49.} Taken together, these four states accounted for more than 50 percent of working factories in India with the other half being distributed among the remaining 21 States and 5 Union Territories in a highly unequal pattern of distribution. The case of Hill States is particularly pathetic. In fact, the combined share of ten States namely, Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Punjab, Rajasthan, Uttar Pradesh, Madhya Pradesh, Tamil Nadu and West Bengal amounts to 83.1 percent of total working factories in India with the other 16.9 percent being distributed among the rest of the States. Table 1.1 highlights this striking disparity graphically.
Table 1.1
Position Of Working Factories
(1991-1992)

<table>
<thead>
<tr>
<th>States</th>
<th>Factories</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>15972</td>
<td>14.2</td>
</tr>
<tr>
<td>Assam</td>
<td>1625</td>
<td>1.44</td>
</tr>
<tr>
<td>Bihar</td>
<td>3671</td>
<td>3.3</td>
</tr>
<tr>
<td>Gujarat</td>
<td>11094</td>
<td>9.9</td>
</tr>
<tr>
<td>Haryana</td>
<td>3102</td>
<td>2.77</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>331</td>
<td>0.29</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>240</td>
<td>0.21</td>
</tr>
<tr>
<td>Karnataka</td>
<td>5850</td>
<td>5.2</td>
</tr>
<tr>
<td>Kerala</td>
<td>3702</td>
<td>3.29</td>
</tr>
<tr>
<td>States</td>
<td>Factories</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Nagaland</td>
<td>63</td>
<td>0.05</td>
</tr>
<tr>
<td>Orissa</td>
<td>1566</td>
<td>1.28</td>
</tr>
<tr>
<td>Punjab</td>
<td>5985</td>
<td>5.3</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>3689</td>
<td>3.28</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>15502</td>
<td>13.8</td>
</tr>
<tr>
<td>Tripura</td>
<td>200</td>
<td>0.17</td>
</tr>
<tr>
<td>U.P.</td>
<td>10124</td>
<td>9.0</td>
</tr>
<tr>
<td>West Bengal</td>
<td>5679</td>
<td>5.1</td>
</tr>
<tr>
<td>All India</td>
<td>112286</td>
<td>100</td>
</tr>
</tbody>
</table>


This striking imbalance is also visible in case of value-based indicators of industrial development. The four states of Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu taken together contributed 44.9 percent in fixed capital, 47.4 percent in gross output and 44.3 percent in value-added by manufacture. Table 1.2 presents some of the major indicators of industrial development with a view to reflect the contributions of Indian States to Value-based Attributes of Industrial development. For convenience figures have been converted to percentage points of All-India All-Industries Attributes.

* Ibid. pp.9, 49.
<table>
<thead>
<tr>
<th>States</th>
<th>Total Input</th>
<th>NVA</th>
<th>Net Income</th>
<th>G.C.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>6.7</td>
<td>5.8</td>
<td>4.04</td>
<td>7.85</td>
</tr>
<tr>
<td>Assam</td>
<td>1.07</td>
<td>1.38</td>
<td>1.69</td>
<td>0.70</td>
</tr>
<tr>
<td>Bihar</td>
<td>4.5</td>
<td>6.0</td>
<td>6.61</td>
<td>8.08</td>
</tr>
<tr>
<td>Gujarat</td>
<td>11.00</td>
<td>7.5</td>
<td>6.56</td>
<td>8.90</td>
</tr>
<tr>
<td>Haryana</td>
<td>3.70</td>
<td>3.18</td>
<td>3.03</td>
<td>2.56</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>0.38</td>
<td>0.74</td>
<td>0.87</td>
<td>0.51</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>0.22</td>
<td>0.12</td>
<td>0.16</td>
<td>0.06</td>
</tr>
<tr>
<td>Karnataka</td>
<td>4.8</td>
<td>6.24</td>
<td>7.15</td>
<td>3.53</td>
</tr>
<tr>
<td>Kerala</td>
<td>2.68</td>
<td>3.01</td>
<td>3.26</td>
<td>1.67</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>5.2</td>
<td>5.1</td>
<td>4.96</td>
<td>4.91</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>19.8</td>
<td>19.8</td>
<td>18.95</td>
<td>17.05</td>
</tr>
</tbody>
</table>

Table 1.2
Contribution Of Indian States
To Value-Based Attributes
Of Industrial Development
(1991-1992)
<table>
<thead>
<tr>
<th>States</th>
<th>Total Input</th>
<th>NVA</th>
<th>Net Income</th>
<th>G.C.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manipur</td>
<td>0.01</td>
<td>0.00</td>
<td>0.001</td>
<td>0.007</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>0.01</td>
<td>0.03</td>
<td>0.02</td>
<td>0.13</td>
</tr>
<tr>
<td>Nagaland</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.005</td>
</tr>
<tr>
<td>Orissa</td>
<td>2.14</td>
<td>2.28</td>
<td>2.35</td>
<td>3.84</td>
</tr>
<tr>
<td>Punjab</td>
<td>4.9</td>
<td>3.8</td>
<td>6.57</td>
<td>3.74</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>3.37</td>
<td>3.07</td>
<td>2.89</td>
<td>4.58</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>10.4</td>
<td>11.2</td>
<td>12.80</td>
<td>9.22</td>
</tr>
<tr>
<td>Tripura</td>
<td>0.008</td>
<td>0.01</td>
<td>0.01</td>
<td>0.002</td>
</tr>
<tr>
<td>U.P.</td>
<td>9.3</td>
<td>10.8</td>
<td>10.37</td>
<td>11.44</td>
</tr>
<tr>
<td>West Bengal</td>
<td>6.0</td>
<td>6.8</td>
<td>6.86</td>
<td>9.26</td>
</tr>
<tr>
<td>All India</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


Developmental disparities not only exist between states but penetrate deeper through their smaller sub-divisions such as Mandals and Districts. For example, if the prominent industrial pockets of a developed State like Maharashtra are left aside, the
rest of Maharashtra will become just as backward as its counterparts in Orissa, Bihar or Uttar Pradesh. Similarly, the western division of Uttar Pradesh has traditionally dominated the development scenario in the state. In 1986-87, it contained 62.81% of the total registered factories in the state; 42.5% of the total invested capital and nearly 51 percent of the daily average employees. Table 1.3 highlights the disparity of industrial development in the state of Uttar Pradesh.

Table 1.3 Substate Disparity of Industrial Development in U.P. (1986-87) (Rs. in crores)

<table>
<thead>
<tr>
<th>Region</th>
<th>Registered Factor -ies</th>
<th>%</th>
<th>Invested Capital</th>
<th>%</th>
<th>Daily Average Employees</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>7326</td>
<td>62.81%</td>
<td>2588</td>
<td>42.5%</td>
<td>302376</td>
<td>50.6%</td>
</tr>
<tr>
<td>Central</td>
<td>2149</td>
<td>18.42%</td>
<td>906.93</td>
<td>14.89%</td>
<td>138685</td>
<td>23.2%</td>
</tr>
<tr>
<td>Eastern</td>
<td>1455</td>
<td>12.47%</td>
<td>2119.77</td>
<td>34.80%</td>
<td>112847</td>
<td>18.87%</td>
</tr>
<tr>
<td>Hills</td>
<td>609</td>
<td>5.22%</td>
<td>379.80</td>
<td>6.23%</td>
<td>29869</td>
<td>5%</td>
</tr>
<tr>
<td>Bundelkhand</td>
<td>124</td>
<td>1.06%</td>
<td>95.95</td>
<td>1.6%</td>
<td>14027</td>
<td>2.3%</td>
</tr>
<tr>
<td>U.P.</td>
<td>11,663</td>
<td>100%</td>
<td>6,090.45</td>
<td>100%</td>
<td>597,804</td>
<td>100%</td>
</tr>
</tbody>
</table>


Even a rule of the thumb calculation makes it clear that the western region of U.P. dominates industrial development followed by the Central region, the Eastern Region, the Hills and Bundelkhand in that order.

**What is backwardness and how is it assessed**

The preceding pages illuminate upon the extent of developmental disparities existent among the states of India. The concept of backwardness originates in regional imbalances. It emerges as a relative term when the developmental indicators of one spatial unit are compared with those of another. Generally, areas with lower developmental levels are referred to as backward, underdeveloped, laggard, depressed or less developed. While areas with higher levels of development are treated as developed. But things are not as simple as they look. There are no definite yardsticks for measuring development and there is a multiplicity of criteria for assessing backwardness. The selection and correlation of indicators used to evolve the criteria for measuring development levels also varies from scholar to scholar, depending largely upon the perspective of study and the availability of data. Even the use of the term backwardness is not devoid of controversy. Some make a demarcation between underdeveloped and undeveloped regions. An undeveloped area is one which has no potential resources for development in future at all. While an underdeveloped area possesses potential resources for development but lags behind in
pace of development due to one reason or another. Such as the nondiscovery of natural resources or their inefficient utilization. Technological advances of the modern age have rendered this distinction redundant. Since no area may be labelled as undeveloped in this sense of the term. Patterns and plans are being perceived for the future development of Antarctica, Arctic and the Saharan region despite their adverse geographic and environmental conditions. Therefore, Meier and Baldwin strongly disagree with this demarcation remarking that the usefulness of a natural resource depends upon its discovery, technical skills and demand conditions. Backwardness implies the failure to make use of existing natural resources. "It is quite possible that entirely new resources might be discovered in the future or new uses of existing resources be discovered."

Even more subtle is the distinction between economic development and economic growth. This distinction leads to a classification of countries as developing and developed. Development denotes the economic conditions prevalent in the erstwhile colonies of the third world. Whereas growth refers to the industrialized powers that were previously imperial. According to Hirschman, economic development requires structural and organizational changes that transform a traditional economy in to a modern one. These changes are not needed in case of the advanced capitalist countries since they have already crossed

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that benchmark. Bonne holds that "economic growth is a process of self-induced expansion characterized under given and unchanged institutional conditions by quantitative changes. While economic development presupposes a conscious and active promotion i.e., institutional changes." In other words, economic growth is self-induced, continuous, automatic and quantitative. while development requires a conscious promotion, a big push, a critical minimum effort for it to transpose in to economic growth. In order to get a taste of this variety, we must review the literature existent on this issue.

(A) The statistical index as a criteria of backwardness:

Statistical indices are extensively employed to define the criteria of backwardness. This is particularly the case with international organizations that rank countries according to their development level in their documents. This is also the case with national planning and development agencies charged with monitoring the implementation of development programs in the various geographical units of a country. The index of per capita income is most commonly used to establish backwardness. Dholakia and Dholakia and Mathur have used this index for highlighting regional imbalance in the Indian context. Benjamin


Higgins has employed the national per capita income as a criteria of defining underdevelopment at the international level. According to Higgins, Underdeveloped countries are those that have a national per capita income of less than 25 percent of United States, or less than 500 Dollars per year in 1959 when Higgins was writing. However, he hastens to add that the choice of this 25 percent landmark as the dividing line between advanced and underdeveloped countries is arbitrary.  

Kundu and Raza have developed two parallel indices of agglomerated and disbursed development and worked out a coefficient of correlation between two patterns of industrialization. Udaya Shekhar examined regional disparity in India with the help of two indices;  

(1) the share of states in total value added; and  
(2) the share of states in total employment generation.  

He also used the Hirschmann-Herfindahl and Theil indices to establish the effect of size, population income differences on industrialization. R.T. Tewari constructed three composite indices of industrial, agricultural and infrastructural development to demonstrate interregional disparity among Indian states. Each composite index is made up with the key/principle

components of that sector. For example, the index of industrial
development is composed of the following ten components:
(1) Value added by manufacturer per industrial
worker;
(2) percentage contribution of industries sector to the State domestic sector;
(3) value of industrial production per Kwh consumption of electricity;
(4) number of factories per Lakh of population;
(5) number of factories per (000 square kilometers) of area;
(6) total productive capital employed per industrial worker;
(7) factory employment per Lakh of population;
(8) factory employment per kilometer of area;
(9) percentage of household industrial workers to total workers; and
(10) percentage of factory employment to total employment.
Although the significance of statistical comparisons and measurements can not be denied for a clear assessment of the development scenario, yet it has met with severe criticism on many counts. What indicators or combinations of them should be chosen is the first controversial question? The per capita income, the gross national product, percentage of agricultural workers, industrial workers, the structure of employment, the consumption of calories per capita, and so on. A wide variety of indicators are available for analysis. A country or state that leads the ranks in one index might fall behind in another. Therefore, what set of indicators reflect the true status of development, is very difficult to pinpoint. The heavy reliance of this method on quantities is the second problem. For indices do not reflect the qualitative aspect of backwardness. What are the real causes of underdevelopment in a given geographic, social and political setting? This question is almost completely ignored if indices are taken as the solitary criteria of backwardness. Therefore, indices might be utilized to evaluate the success and failure of development policies at a static point in time or at
regular intervals. They might also be used successfully to take a precise stock of the economy or specific development programs from time to time. But statistical indices alone can not constitute the only exclusive criteria for defining backwardness despite their inevitability as a tool for the same purpose. Finally, the nonavailability of accurate data in backward areas makes calculations liable to errors. Collecting correct figures from a backward area is a nightmare. It is especially cumbersome to evaluate the contribution of the traditional subsidence sector to the regional or national economy since nearly all the figures are unaccounted and unrecorded.\textsuperscript{20}

\textit{A Historical Explanation of Backwardness:}

The historical explanation of backwardness has been offered by a number of scholars including Raymond Aron, Colin Clark, Friedrich List and W.W. Rostow whose work is most valued. The normal practice is to arrange the process of development in to historical stages of growth. An underdeveloped society is one which has not completed the process and is passing through a transitional phase. A developed society is one which has completed this process and has reached the stage of high mass consumption or a highly developed form of capitalism. Thus, Colin Clarke distinguishes three stages of growth. These are:

1. A traditional society with agriculture as the dominant sector;

2. a developing society in which the proportion of the

processing industry increases viz-a-viz' agriculture; and

3. a developed society wherein the proportion of tertiary or service industry outgrows others.21

Friedrich List marks the following five stages in the evolution of a society: a savage stage; a pastoral stage; the agricultural stage; the agricultural and manufacturing stage; the agricultural, manufacturing and commercial stage.22

Among these, Rostow's theory of the stages of growth23 is the most popular. He arranges the process of social development in five consecutive stages.

1. The traditional society: The traditional society is somewhat similar to the sociological concept of a homogenous traditional society (dealt elsewhere in this thesis). Such a society lacks a scientific understanding of the physical environment. Consequently, its technology is primitive and simple, methods and techniques of production are also traditional and poor if compared with modern standards. At least 75 percent of the working population is engaged in the production of food. Sociologically, the society is hierarchically structured and politically, its power is concentrated in feuds or landlords or a central authority supported closely by the army of the bureaucracy.


22. see Friedrich List, Das nationale system der politischen Oekonomie, Stuttgart, 1841.

2. The Transitional Stage: A transitional society is somewhat similar to a dualistic society where the traditional and modern elements coexist, clash and conflict with each other in trying to achieve universal acceptance. It comes in to being when alien ideas and techniques of production and exploitation of resources penetrate in to a traditional society. The social elite within the traditional society gets ready to adopt such progressive ideas, techniques and mentality. The in-flow of foreign capital and technology begin to improve the state of transport, agriculture and foreign trade. We could say that all developing countries of the present day are passing through such a transitional phase where the bullock-cart coexists with modern road, air and rail transport, fuel cakes and fuel wood coexist with electric and nuclear power, and the age-old plough coexists with the tractor.

3. The Take-off Stage: Take-off is the stage where the conflict of dualism is finally resolved. The progressive modern elements come to dominate over the traditional elements or marginalize them reducing them to insignificance. A take-off, according to Rostow, is determined by the fulfillment of three conditions:

1. a rise in the rate of investment from 5 percent or below to over 10 percent of national income;
2. the development of one or more substantial manufacturing sectors with a high rate of growth; and
3. the emergence of a social, political and institutional framework which exploits the impulse to expand.

4. The Drive to Maturity: Take-off is followed by a drive
to maturity wherein the economic growth hitherto experienced only by the leading sectors now trickles down permeating the remaining sectors of economy. The use and application of technology broadens. The composition of labour undergoes a change from rural unskilled labour to urban and skilled labour. The newly emergent labour class penetrates into the political sphere too. Since industrialization has been accomplished, the society sets its eyes upon superior nonindustrial goals.

5. The Stage of High Mass Consumption: This is a stage where the pursuit of basic needs such as food, clothing and shelter public and private services comes to an end and the society targets higher objectives such as high private consumption of consumer durables, large automobiles, houses and gardens and other luxuries. According to Rostow, this stage can only be achieved if a society resists the temptation to become a world power. In his opinion, the United States is such a society which, resisted the attraction of becoming a world power and pursued high mass consumption as a goal since the 20s. Rostow holds that while Western Europe and Japan had entered the era of high mass consumption (when Rostow was writing), the Soviet Union was knocking at the doors. Rostow firmly believes that socialism merely represents a transitional stage in the overall development process and it is not an inexplicable anomaly. Eventually, the Communist countries too would mature into the stage of developed capitalism. 24

It is noteworthy that Rostow organizes the various stages

of growth in accordance with the level of productive forces in a given society at a given point in time. He believes that their level is determined by the social environment (i.e., peoples' attitude and propensities) within which they develop. The social environment determines the level of productive forces and the most congenial social environment for their evolution is to be found in a capitalistic society. Therefore, Rostow assigns a greater importance to social attitudes and propensities rather than the ownership of productive forces as the essential preconditions for transformation into the take-off stage. Herein, he names six propensities as essential. These are:

1. the propensity to develop basic sciences;
2. to apply science to economics;
3. to accept innovation;
4. to seek material advancement;
5. to have children; and
6. to consume. 25

Thus, a businessman does not think like a businessman because he is one, but he becomes a businessman because he thinks like a businessman. The emphasis being on his attitude and propensity or habit. An artisan or a peasant is not a businessman because he lacks that attitude and those propensities. 26 However, the problem remains that how will an artisan cultivate such attitudes and propensities until the entire socio-economic fabric


changes or he gets an extraordinary opportunity to change his attitude. How will the change in attitude come or from where will it come? This question has been partially answered by Rostow though quite indirectly. According to him, Britain was the first country to break free from traditional society and transform into a take-off society. This was mainly on account of the expansion of its territory which significantly broadened her attitude towards science, technology, religion, politics and economics. The expansion of foreign markets extended trade into hitherto unknown areas altering the entire sphere of economic practices. 27 The transformation of Britain penetrated other European societies and they too proceeded on a similar path. It is also noteworthy that while recognizing the negative effects of colonialism on a subject society, Rostow justifies colonialism as essential for the evolution process. He believes that the development of colonies (which are primarily traditional) requires strong external stimulus in the form of foreign capital, foreign technology and external ideas. 28 It is here that he contradicts his earlier stand. Where did Britain get the external stimulus to change her attitudes and leap to the take-off stage?

A Sociological explanation of backwardness:

Subscribers to the sociological school assign great importance to the social environment within which an area develops, the attitudes, motivations, propensities, habits or

27. Ibid.
28. Ibid.
inclinations of the people as strong influences on the process of development. They do not trace the genesis of underdevelopment in economic forces in as much as in the sociological and psychological forces of the people living in an area. When comparing the level of development between the advanced and the underdeveloped countries, their focus is more upon the social attitudes and habits rather than scarcity of capital and productivity of labour. They believe that economic phenomenon are largely influenced and determined by sociological phenomenon. Furtado goes to the extent of saying that economic development is determined by sociological factors that can not be explained in purely economic terms. "Economic analysis can not explain why any society starts developing and to what social agents this process is due." The sociological school may further be subdivided in two sections of thought. One that views the entire community of backward areas/countries as essentially one, homogenous, stagnant and traditional society. The other that articulates the existence of a dualism within a backward society. The dualistic view is further torn apart in two sections of thought. The first among them advocates a social dualism. While the second advocates a sectoral or economic-technological sort of dualism. Each of these views require a brief outlining.

1. The idea of a homogenous, traditional and stagnant society: This view compares the social and psychological characteristics of advanced and backward societies and reach the conclusion that a backward society is backward because the social and psychological characteristics inherent in its people are

different or inferior from their counterparts in developed societies. However, the list of such characteristics varies from author to author. Most authors stress extensively upon a lack of entrepreneurship, capitalistic enterprise and the lack of profit making motives as important differences. According to Meier and Baldwin, a backward society fails to meet the challenges posed by new economic problems. This failure is due to a lack of individualism, low efficiency of labour, its inability to move between sectors, lack of entrepreneurship, a rigid cast structure economic ignorance and limited occupational specialization.\(^{30}\)Leibenstein enumerates the following four characteristics or attitudes in this regard.

1. a willingness to accept entrepreneurial risks;
2. an eagerness to promote scientific and technical progress;
3. a willingness to be trained for industrial and dirty jobs; and
4. a western market and profit incentive.\(^{31}\)

Similarly, Tinbergen has outlined a list of nine psychological traits that must be present in the leaders of a society if it is to develop. These are:

1. be Interested in material wealth;
2. be interested in future;
3. be willing to take risks;

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4. be interested in technology;
5. show persistence;
6. be able to work hard;
7. be able to cooperate with many people;
8. be open to new ideas; and
9. be able to make logical analysis of complex phenomenon.

The basic problem with this idea is that it smells of racialism or has racist overtones. It may be interpreted to imply that some countries are more advanced than others because their people have better and superior brains enabling them to think better, superior social behaviour, customs and institutions and psychological traits than those who remain backward because they inherit inferior mental ability and psychology. Secondly, some of the characteristics are rather vaguely presented. For example, how can we interpret Tinbergen's inventory of essential traits? What is the meaning of "show persistence" and "be able to work hard"? He might be saying that people in traditional stagnant and backward societies are uninterested in material wealth, they are not interested in their future and technology, they fail to cooperate with their fellows and make logical analysis of complex phenomenon. Thirdly, one might ask whether these traits influence and cause backwardness or are they themselves influenced by and consequences of economic backwardness? It is quite difficult for an individual of a backward society who has no knowledge or experience of modern technology to be interested in it, think about it and even more so to purchase it unless external

assistance is made available to him. A family living below the poverty line can not possibly take economic risks. In other words, does a society continue to remain backward because it can not take risks, use modern technology have capitalist and entrepreneurial motives, or is it the other way round that the society does not have such traits and will not have them till it remains backward? Alternatively, these characteristics and backwardness might be linked in some sort of a vicious circle wherein both cause each other to exist and persist. Fourthly, some modern capitalist traits do exist in all traditional societies, i.e., money, wages, exchange, market, ownership and labour. Even though their nature, kind and degree varies tremendously. How can we determine which ones are superior and which ones are inferior among them or in comparison with developed societies. Finally, an element of heterogeneity in the customs, institutions, behaviour and attitude does exist among the various backward societies. This goes against the assumption that all backward societies are homogenous. Even though the element of traditionality and stagnation might be present in all of them.

2. The concept of social dualism within a backward society: Subscribers to this view hold that a traditional society is not totally homogenous but dualistic. Within such a society, there is a portion marked with primitive and subsistence characteristics contrasted with modern economic elements. Dualism too is of two types. One is a social dualism advocated by Dr. J.H. Boeke based on his experiences in Indonesia, and the other is a sectoral, economic and technological sort of dualism.
Dr. Boeke defines social dualism as "the clashing of an imported social system with an indigenous social system of another style. Most frequently, the imported social system is high capitalism." Dr. Boeke further claims that the penetration of foreign western capitalism into a traditional pre-capitalist agrarian society results in its disintegration. Due to their diametric opposition to each other, neither of the two becomes general and characteristic of a country. A uniform policy for the whole country becomes difficult to formulate and even more tedious to implement since the interests of both types clash with each other. The pre-capitalist section has limited basic needs, downward slopping supply, risk taking and effort making curves, a complete absence of profit seeking with the solitary exception of speculative profits, a conscious dislike for investing capital, a lack of business quality, organization and discipline, fatalism and resignation, absence of regular labourers and labour immobility. The capitalist sector is characterized by the opposite characteristics. Boeke concludes that the penetration of capitalism only upsets and disturbs a traditional society and even causes its decay. "There is no question of an eastern producer adapting himself to the western example--technologically, economically and socially." Hence, its import is completely fruitless and western economics is completely

34. Ibid.
35. Ibid.
inapplicable to eastern societies.\textsuperscript{36}

Boeke's social dualism is challenged by Benjamin Higgins mainly on these grounds. Higgins argues that both dualism and the characteristics of an eastern society, as highlighted by Boeke, may be found in western societies too. Some degree of dualism may be found in every society whether it be eastern or western like Italy, Canada or U.S.A. and areas lagging behind in technology, socio-economic welfare, lower living standards, may also be found in western societies. Blocked finances or a crisis of liquidity, preference for short term speculative investments over long term ones and the absence of regular labourers exist in every economy irrespective of east and west.\textsuperscript{37} Higgins therefore concludes that dualism is not social or cultural but it is sectoral. The native sector is distinguished by lower levels of technology and socio-economic welfare. While the other sector "under the influence of western leadership" is marked by advanced techniques and higher socio-economic welfare. The former is confined to peasant agriculture, small industry, handicrafts and related trades. While the later contains petroleum fields and refineries, mines, plantations, large scale industry and related trades.\textsuperscript{38}

3. Sectoral Dualism: Sectoral dualism, as advocated by Higgins in the previous paragraph, rests on the assumption of two economic sectors opposed to each other on the basis of their

\textsuperscript{36}Ibid. see also pages 5 and 289.


\textsuperscript{38}Ibid.
historicity, economics, use of technology or production techniques and the combination of labour and capital utilization as factors of production. The traditional sector is primarily agrarian and produces basic commodities such as food and handicraft for domestic/local consumption. The industrial sector is modern and produces raw materials and finished goods for export as well as domestic consumption. While the traditional sector is native, the industrial sector develops with the in-flow of foreign capital, techniques and management. Sectoral dualism attributes backwardness to its own existence and the following explanation is offered in this regard. The industrial sector grows faster than the traditional sector due to the involvement of external factors. Such expansion upsets the ratio of population growth to the accumulation of capital. I.e., population begins to grow at a faster rate than capital accumulation. Since the modern industrial sector is capital intensive (and not labour intensive) it lacks by far the capacity to absorb the rapidly growing labour force which in turn is a corollary of population explosion. This leads to the origin of industrial unemployment. The labour rendered unemployed in this way is left with no option but to shift back to the original traditional sector from which it came. As more and more labour shifts to the agrarian sector, its capacity to absorb surplus labour also begins to decrease. This is inspite of the fact that it is labour-intensive and has a greater ability to vary the factors of production such as the proportion and ratio between labour, capital and technology. The abundance of cheap labour thus created upsets the land-labour ratio, i.e., land is now
scarce whereas labour is available in plenty. A threshold is reached where all available land gets cultivated but labour is still abundant. This is the stage where the productivity of labour falls to zero. Implying that labour is there but has no work to do. In other words, disguised unemployment catches root. This is the stage where there is no incentive for the workers to either stay or leave the traditional sector since none of the two sectors is expanding under the circumstances.39

Thus dualism of this kind ends on a pathetic note. While tracing the root of backwardness in dualism it does not say whether a uniformity of economic sectors would end backwardness or not. It may also criticized on the ground that in order to reach its logical conclusion it relies heavily upon the completion of a chain of events that must occur one after the other in the exact order specified. If one factor does not cause the next, the chain breaks and the theory too becomes difficult to sustain. For example, if rapid industrialization did not cause a rapid population growth, the other events in the chain would not take place either. In Higgins view, real and sound industrialization actually lowers the rate of population growth.40 If we take the example from India, the rapid population explosion in our country since 1901 has been triggered by industrialization. It is probably due to our religious attitude to bearing children which assumes children to be a gift of God. And also to pure arithmetics implying that 2 plus 2 are


4 and 4 plus 4 are eight. Meier has cited the case of Latin America where dualism exists without overpopulation. In fact these countries are victims of population sparsity instead of overpopulation and yet they are backward and a dualistic structure of economy is present in them. "Both Higgins and Lewis disagree with the idea that overpopulation and surplus labour originates in the modern industrial sector. Instead, they blame the inefficient traditional sector as the source of overpopulation and disguised unemployment." According to Szentes, the theory of dualism shifts our attention from purely quantitative aspects of backwardness and draws our attention to its qualitative and structural aspects. But the isolation of social dualism on one and economic or technological dualism on the other, "dooms both variants to failure." 

Backwardness as a Combination of Hindering Factors:

This approach explains backwardness as the outcome of certain factors that hinder development. It begins by specifying and listing such factors and comparing their existence in the developed capitalist countries with their existence in backward nations at a static point in time. The situation or the gap that appears as a consequence of such comparisons constitutes the


explanation of backwardness. Leibenstein has made a comprehensive inventory of factors hindering the development process which he calls the characteristics of backwardness. The entire list contains 34 characteristics that might be grouped into five main categories as below:

1. General economic characteristics:

   (1) A very high percentage of population in agriculture. Usually 70-90 percent;
   (2) Absolute overpopulation in agriculture i.e., it is possible to reduce the number of workers in agriculture and still obtain the same output;
   (3) Evidence of considerable disguised employment and lack of such opportunities outside agriculture;
   (4) Very little capital per head;
   (5) Very little income per head and as a consequence, existence near the subsistence level;
   (6) Practically zero savings from the masses, and whatever savings do exist, come from a land holding class whose values are not conducive to investment in industry and commerce;
   (7) The primary industries, i.e., agriculture, forestry and mining, are usually the residual employment categories;
   (8) Agricultural output is made up of cereals and primary raw materials with relatively low output of protein foods. If one acre of cereals produce a certain number of calories, it would take 5-7 acres of meat products to produce the same number of calories;
   (9) Major proportion of expenditure is incurred on food and necessities;
   (10) Export of food stuff and raw materials;
   (11) Low volume of trade per capita;
   (12) Poor marketing and credit facilities;
   (13) Poor housing;

2. Agricultural:

   (14) A low capitalization of land with an uneconomic use of whatever little capital exists due to the exceedingly small size of land holdings;
   (15) The level of agrarian techniques is low and tools and equipment are primitive;
   (16) Even where there are big land owners, such as in India, the openings for modernized agricultural production for sale are limited due to difficult transport and absence of efficient demand in the local market. In many backward countries, agriculture is confined to production for the foreign markets;
   (17) An inability of land owners and peasants to whether even a small crisis. As a consequence, efforts are made to take

the maximum possible yield leading to soil depletion;
(18) High indebtedness related to assets and income;
(19) Methods of production for the domestic market are old fashioned and inefficient leaving little surplus for marketing. This is irrespective of land ownership position;
(20) A feeling of land hunger due to exceedingly small holdings and small diversified plots. The reason for this being that holdings and continually divided and subdivided as the population on land increases;

3. Cultural and political factors:

(21) Rudimentary education and a high illiteracy among most people;
(22) Excessive prevalence of child labour;
(23) General weakness or absence of the middle class;
(24) Inferiority of status in women;
(25) Traditionally determined behaviour for the bulk of the populace;

4. Demographic factors:

(26) High fertility rate usually above 40 per thousand;
(27) High mortality rate and low expectation of life at birth;
(28) Inadequate nutrition and dietary deficiencies;
(29) Rudimentary hygiene, public health and sanitation;
(30) Rural overcrowding;

5. Technological and miscellaneous:

(31) Low yield per acre;
(32) Inadequate training for technicians and engineers;
(33) Inadequate, crude transport and communication especially in rural areas;
(34) Crude technology;

Similar lists have also been compiled by others. A major difficulty with such lists/inventories is the incoherent ordering of factors. They seek to combine diverse phenomenon in an arbitrary manner including and excluding characteristics at will. Moreover, the effect of a specific factor in isolation upon the state of backwardness becomes difficult to understand. For example, some of the relative terms used by Leibenstein are tedious to explain. Such as very little, crude, rudimentary, exceedingly low, poor, rural overcrowding etc. Therefore, it would be more fruitful to isolate these characteristics and
understand their role in causing backwardness one by one.

1. Geographic hindrances: Geographic hindrances to economic development imply a poor endowment of natural resources such as land, water, soil, poor quality of soil, harsh climate and remoteness or inaccessibility. In other words, scarcity of natural resources is the basic deterrent to economic development. Since land, water, soil, minerals, forests and climate may be counted among natural resources. Such shortage does retard economic growth but not without contradictions that make it difficult to make a widely acceptable and generalized statement on this issue. For example, Switzerland (and for that matter all Scandinavian countries) has endowed harsh climate and inadequate mineral resources but they do not lag behind in the pace of development. The geography and resource endowment of Japan did not change suddenly to enable it in becoming an industrialized power. A majority of the countries in Asia, Africa and Latin America are reasonably rich in forests, minerals, land and water but they still fall way behind in the pace of development." All of the hill states in India are rich in forest and water resources but still figure at the bottom of development indices. Contrarily, there are some areas that are genuinely backward due to a scarcity of resources combined with other geographic circumstances. such as Bundelkhand in Uttar Pradesh, Kalahandi in Orissa and many areas in Madhya Pradesh. These areas confront low agricultural production due to poor

soil, inaccessibility due to rocky and ravines territory and shortage of water.

Then how can we explain the relationship and the deterrent effect of resource endowment on economic development? G.M. Meier answers this question by connecting resource scarcity with the demographic features in backward countries. He points out that very few countries were poor in natural resources in 1870. "the present phenomenon of a low amount of resources per head is the result of either the exhaustion of resources, or such a rapid growth of population that overpopulation now puts pressure on the available resources." "But why did the now backward countries fail to make adequate use of their natural resources when they were in plenty? Meier links this question with the colonial history of such countries. This implies that in the past the advantages of the plentiful resources existent in the presently backward nations were sabotaged by the former imperial powers. Presently, their prospects are restricted by the terms of international trade, the international division of labour and other economic factors. "The under-utilization of natural resources also prevents economic development from catching pace. In fact, under-utilization is more significant than scarcity. It implies the inability to translate the inheritance of resources into economic development. The fact that countries in Europe, United States, Malaysia, Japan, Singapore, South Korea and Thailand were able to translate their resources into development


47. Ibid.
levels no matter how scarce they were, puts them ahead of others. While the failure of other countries to exploit judiciously their natural resources puts them behind in the race of development.

2. Demographic Hindrances: A variety of demographic factors are often held responsible for backwardness. In the preceding pages, Leibenstein was quoted to have mentioned a high birth rate, a high mortality rate, inadequate nutrition, rudimentary hygiene, public health and sanitation and rural overcrowding as some of the characteristics of backwardness. Usually, population pressure is identified as the most significant hindrance to development. Population pressure is generated when modern medical techniques succeed in lowering the mortality rate while the birth rate remains high. According to Meier and Baldwin, population pressure manifests itself in three ways:

1. latent unemployment in agriculture;
2. high proportion of dependents per adult; and
3. rapid population growth due to a drop in mortality rate.

In their opinion, population pressure is responsible for the fact that the supply of labour in backward countries exceeds its demand by far. Hence, even the expansion of an economic sector does not create a consequent rise in real wages."

The phenomenon of overpopulation hinders development in so far as it dwarfs the status of development indicators such as per capita income, the production and consumption of food grains per caput, and overburdens public health, education, sanitation and

48. see Gerald M. Meier and Robert E. Baldwin, Op.Cit. p.281. This view is also echoed by A. Lewis, "economic development with unlimited supplies of labour", in A.N. Aggarwala and S.P. Singh (eds), The Economics of Underdevelopment, O.U.P. 1958, pp.400-449.
welfare systems. However, it is not that overpopulation automatically triggers backwardness. This takes place only when overpopulation coexists and coincides with certain other conditions. Such as:

(A) employment opportunities do not grow in proportion with the rise in population;

(B) the capacity of land to grow more food does not enhance side by side; and

(C) the utilization of natural resources is not judicious enough to ward-off the pressure of overpopulation.

In other words, the relationship between backwardness and overpopulation is not as straight as to warrant the simple statement that wherever there one, the other follows. There are backward areas that not overpopulated. The hill region of Uttar Pradesh is faced with a peculiar demographic problem. On one hand, the entire region appears to be sparsely populated. On the other, there exists immense pressure on land, water and forests wherever there is a concentration of population. An adverse age and sex ratio make the problem more complicated. Thus, population effects development of different areas in different ways. In some areas, overpopulation burdens resources to the brink diminishing the indicators of development. In others, its sparsity causes an acute scarcity of labour force resulting in the under-utilization of natural resources thereby contributing to backwardness.

Some scholars have an opinion to the contrary. They believe that demographic features do not effect economic development. Rather, economic development contributes to demographic change. They argue that features such as a high birth rate or a high
mortality rate are caused by development. Meier and Baldwin argue that a fall in the mortality rate occurs due to improved medical practices and modern health services. Both of these are ingredients of economic development. Viner too remarks that overpopulation is harmful only if factors such as a lack of employment opportunities exist in an area de facto. Myint and Kuznets hold similar views. One can question the contribution of overpopulation to economic backwardness by asking a question. The geographical area of the United States is three times more than that of India and its population three times less. Yet United States faces unemployment the existence of less developed pockets within her can not be ruled out completely. A similar trend might be witnessed in many European countries too. Why does unemployment (which is a characteristic caused by overpopulation in backward countries) exist in the advanced countries too? Such questions are probably outside the scope of this thesis. Therefore, it would be sufficient to say for the moment that a number of demographic factors pose hindrances in the way of development and may be counted among the deterrents of development.


3. Capital scarcity: Cited as an important impediment to development, the scarcity of capital becomes an important criteria of backwardness since it is present in all underdeveloped countries. This is the reason behind the perpetual search for international financial aid and foreign capital investment by developing countries. In my opinion, the origins of capital scarcity may be traced in the colonial past of most developing countries of today. When their rulers were reaping the fruits of exploitation and industrial revolution, these countries were preoccupied with freedom struggles, civil strife and natural calamities. After independence, they realized that their traditional capital (in the form of forests, minerals, primitive agriculture, livestock and ornaments) did not matter much since it was out of date in the modern era of technology, modern banking, business practices and industrialization. Therefore, immediately after independence, these countries began to look for foreign aid and capital investment. Jacob Viner values capital scarcity as the third major impediment to development after the quality of working population and natural resources. Viner also correlates the scarcity of capital with the lack of opportunities for profitable investment implying that the former exists due to the later.53 During the course of this research, managers of lending institutions drew attention to the low capacity in Garhwal for absorbing the capital investment available. This means that capital investment is available in abundance but due to a lack of profitable investment ventures, the area fails to absorb it completely. According to Schatz, the shortage of

capital is an illusion created by a false demand for foreign aid. "What exists in actuality is a shortage of viable projects." Therefore, some do not accept the scarcity of capital by itself and emphasize more upon creating more opportunity for profitable investment. In fact, what Schatz and the managers of lending institutions in Garhwal are pointing at is that due to a dearth of profitable ventures in backward regions, capital does not flow in to them. Outside these areas, it is abundant. This is tantamount to saying that scarcity of capital does impede economic development.

4. Low productivity of labour: Low productivity implies that production (both industrial and agricultural) in backward areas is lower than in the advanced areas and this is due to an inferior/poor quality of labour. The inferior/poor quality of labour or workers implies that its physical and intellectual capacity is lacking than its counterparts in the advanced countries. According to Szentes, "the most striking difference between the advanced and backward countries is the level of labour productivity. It is beyond doubt that low productivity of labour is one of most general and principle obstacles to development." According to Furtado, the existence of this feature prevents capital accumulation in underdeveloped areas. Since most of the productive capacity of the working population is absorbed in the satisfaction of basic needs. In Viner's


opinion, Low productivity is caused by a number of historical and cultural factors, the working environment, the quality of health, nutrition and the leadership provided by the Government and social elite apart from the quality of the working population, its entrepreneurs, engineers and technicians. Viner also holds that societies reliant upon traditional agriculture generally resist technical education and dislike a change in the working process.57 In other words, the dearth of skilled labour causes low productivity. However, there might be many exceptions to this phenomenon. For example, India and Sri Lanka (developing countries) produce three quarters of world’s tea and poor Latin American countries produce a larger share of world’s coffee, Cocoa and Sugar-cane. Namibia and Angola, ranking at the bottom of development indices produce the bulk of diamonds. Within India, Bihar, Orissa, dominate the mining of minerals but lag behind in industrialization, agriculture and development indicators such as literacy, per capita income and living standards behind other Indian states. Moreover, the same worker who is inefficient and unproductive in a developing country suddenly becomes competent, efficient and productive if he migrates to a developed country due to a change in the social and economic climate and better wages. This draws our attention to the question, does low productivity of labour cause backwardness, or backwardness triggers it and causes the quality of the workers to remain poor? Or is this merely a characteristic of backwardness found in all developing countries?

In fact, all of the impediments to development discussed in

this section lead us to the same questions. Does a sum total of all the criteria of backwardness discussed in this section automatically cause backwardness? Implying that if these are present in an area or society, it is definitely backward. Or can we turn it around and say than backwardness exists prior to them and causes them to appear in a declining economy? It has been argued above that none of these characteristics is enough by itself to cause backwardness alone. For example, unemployment exists in both developed as well as underdeveloped countries/areas. It exists in Garhwal as well as in Bombay. Some countries/areas are able to surmount an unfavourable resource endowment while others fail to do so. Some areas succeed in creating profitable investment opportunities thereby overcoming the impediment posed by the scarcity of capital while others fail to do so and continue to remain backward. Some succeed in training their workers adequately thereby surmounting their unproductivity while others fail in this venture. Then what actually causes it to happen? Since the gap between developed and undeveloped areas exists de facto and can not be denied. Can we say that the relationship between backwardness and these characteristics is more complex and mutual or reciprocal; that the give and take occurs from both sides? In other words, an interplay or interdependence of these characteristics causes backwardness. Some scholars do not isolate these characteristics but attempt to weave them in to a theory of causal relationships. The next few paragraphs are devoted to an examination of such theories in brief.

*Backwardness as a Vicious Circle:*

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The vicious circle implies a reciprocal relationship between the various impediments to development. This relationship operates in a circular or spiral motion wherein the first supposed impediment causes an occurrence of the second impediment. The second triggers the third and the third causes a repetition of the first. Hence the circular motion of these causal relationships continues to impoverish an area of the benefits of development. For example, a scarcity of capital is a hindrance to development. Scarcity of capital might be caused by the fact that savings are low. Savings might be low because income/wages are low and most of it is spent for acquiring basic necessities. Therefore the accumulation of capital does not take place. Income can not grow until capital accumulates or is brought from outside. In other words, we began by explaining the cause of backwardness in the scarcity of capital, and while explaining the cause behind the occurrence of each phenomenon involved, came back to the starting point. This is a vicious circle. In other word, we are not explaining backwardness as a simple aggregate of some obstructions to development but are tracing a cause and effect relationship among them. One can come across some very straightforward vicious circles such as: "a country is poor because it is poor." "because it is poor, the country does not develop. Because it does not develop, it


remains poor." Large scale industry requires a big market" for its establishment "But in poor countries the extent of market is bound to be small. It will remain small, moreover, until large scale industry is somehow established."  

In Szentes's view, The weakness of the vicious circle theory lies in its failure to explain the historical roots or origins of the causal relationship that originates the circle. Economists might explain it as a natural phenomenon. However, if it is natural, then how did the present day developed countries/areas succeed in breaking free of it and getting developed? Breaking free from it can only occur in two ways. Either due to the import of some external factors that are superior to the backward economy, such as, superior skills, innovations, foreign markets and/or capital investment; or due to the cumulative growth of some internal factors despite backwardness. For example, economic development in India after independence may be attributed to the import of external factors. Our model of economic development was based on the Soviet model; the technology and training skills were imported from the Soviet Union and so on. After 1991, our economic reforms are heavily reliant upon external factors such as foreign investment, foreign technology and skills and a foreign model of economic growth. But Szentes criticizes this theory further by asking, how did the


61 Ibid.

first developed country come in to existence? In other words, he is asking, where did the first developed country find superior external factors to import from? Indeed, if external superior skills are essential for improving a society afflicted by poverty and backwardness, then they must come from a superior society that exists before it. Otherwise, wherefrom will such factors come from? Moreover, the accurate operation of the vicious circle requires that the causal relationships governing it should repeat themselves accurately. But as Szentes points out, the process of social motion can not repeat itself in an unchanged manner over a period of time. Since this capability exists only in scientific processes being conducted under laboratory conditions. In Myrdal’s opinion, the motion of causal relationships is spiral like a spring and not circular like a ring. According to him, it is a cumulative process that might proceed in a downward direction as well as in an upward movement. For example, the relationship between less poverty, more food, improved health and nutrition and a higher capacity to work; reflects an upward movement of economic phenomenon.

**Backwardness as a quasi-stable equilibrium:**

Leibenstein’s quasi-stable equilibrium is modestly different from the theory of the vicious circle. According to him, the difference lies in the ability of an economy to break free from the vicious circle of poverty. "If the circle is truly vicious,

63Ibid.

there would appear to be no way ut. But this, of course, does not explain how countries that were once poor are no longer poor or are no longer as poor as they were." For Leibenstein, backwardness is an equilibrium without development capable of reproducing or reinforcing itself through the interplay of certain promoting and counteracting factors. Such equilibrium implies that the economy is perpetually kept at the subsistence level which is reflect in or measured by a low income per capita. The advanced countries (that have succeeded in breaking this quasi-stable equilibrium) are characterized by a disequilibrium wherein growth is continuous and sustained. While the poor countries are characterized by this subsistence level equilibrium under which the magnitude of certain variables such as labour and capital does keep expanding, but the relationship and interaction of these expanding variable with other forces existing in a backward society is such, that the key indicator of national per capita income keeps fluctuating at the bare minimum.

Leibenstein himself describes the actual functioning of the system by providing examples. Whenever the equilibrium of backwardness (which is pegged to the bare minimum of national income per head) is disturbed by forces that tend to raise the national income, depressing forces are triggered which tend to lower the income level once again. Thus, if an increase in the per capita income improves the standard of living, nutrition and


67. Ibid. p.16.
public health, the mortality rate drops while the birth rate increases or stays stagnant. As a consequence, the population increases and depresses the national income per head back to its original state near the subsistence level. Similarly, a rise in agricultural production may improve nutrition and reduce starvation. But the mortality rate once again drops activating the phenomenon of population growth that returns the national income to its subsistence level. E.G., a rising population results in a further sub-division of land holdings deteriorating the quality of management and maintenance of land thus reducing agricultural yields. Reduced yields parried against a risen population, pull income levels back to their original state. Similarly, the improved quality of soil may increase production temporarily. But its exhaustive exploitation once again lowers its fertility triggering a similar process once again. Investments in the nonagricultural sector might create alternative employment. But will also induce a faster growth of population which will bring the system back to its original state. Thus we find that Leibenstein has permanently pegged his system to the index of national per capita income and the growth of population. The former being a promoting factor while the later becomes a hindrance.

One might ask how Leibenstein is so definite about the reversal of a backward economy to its originality even after a rise in the income levels or marginal improvements elsewhere. Can it never happen that a rise in agricultural production or any other economic comfort fail to trigger a resultant rise in population thus breaking their relationship. And then the surplus
produce generated while the population was stagnant be used to sustain higher income per capita? Or that the community might eventually succeed in stagnating population growth at a point in time? In other words, how can one break free from this vicious equilibrium? Leibenstein holds that in a state of backwardness, when income is low, the effect of forces that depress income is far more powerful than forces that help in raising it. Finally, he emphasizes upon the need for a critical minimum effort that will enable the economy to break free from backwardness and grow in to an advanced nonequilibrium economy wherein growth is sustained, self-induced and income is high. Although he does not detail what the critical minimum effort implies yet he holds that there is a limit beyond which the income depressing forces get weakened and forces that raise the income levels get stronger and overpower them. 68 It is at this stage that the economy generates income at a rate which is higher than the growth rate of population. Thus, if a society succeeds in pushing income growth faster than the rate of population growth and sustain it there, it will break free from the equilibrium of backwardness and cross over in to the domain of economic growth.

Backwardness as the Outcome of External International Factors:

This theory attributes the origin of backwardness as well as the possibility of its liquidation in certain international factors external to the native economy. These include the international economic order, terms of international trade, foreign capital investment and colonialism. The main subscribers to this view are Gunnar Myrdal, Arthur Lewis, Hans W. Singer and

68. Ibid. see pages 16, 36, 95-96, 186-187 etc.
Raul Prebisch. These international factors play a decisive role in creating and continuing underdevelopment. Myrdal, for instance, traces the backwardness to colonialism and the contemporary economic relations between erstwhile colonies and imperial powers. He argues that their economic relations are highly unequal and put the former colonies at a strong disadvantage as far as their development is concerned. The terms of trade are unfavourable to backward countries and increase regional inequalities. The backward countries have to bear the backwash effect of such terms. Moreover, the economic policies pursued by advanced countries adversely influence the development of poor ones. Myrdal holds that economic development or underdevelopment is a cumulative or spiral process. Its upward movement increases development while a downward movement results in its decline. "The cumulative process in turn is set in motion by the freeplay of market forces. Myrdal believes that this freeplay of market forces creates spread effects (favourable consequences) for rich developed countries while create the backwash effects (unfavourable) for poor ones. "There is a tendency inherent in market forces to create regional inequalities and that this tendency becomes more dominant the poorer a country is" and these are "two of the most important laws of economic development and underdevelopment under laissez-faire." Such backwash effects may only be countered by equally strong spread effects or by

69. The cumulative process has been discussed on page 46 of the present work.

deliberate state intervention and regulation. Since the poorer a country the weaker the spread effects this solution is hard to materialize. "The higher the level of economic development a country has already attained, the stronger the spread effects will usually be. For a higher level of economic development is accompanied by improved transportation, communication, higher level of education, and a more dynamic communication of ideas and values."  

Myrdal also believes that contemporary backwardness is closely connected with colonial policy of exploitation and perpetuating dependence. The imperial powers, according to Myrdal, had an obvious interest in monopolizing the dependent country for exploiting its natural resources and cheap labour. While ensuring at the same time a market for industrial goods manufactured in the "metropolitan country".  

Therefore, it took special measures to hamper the growth of indigenous industries in colonies. Capital flows from the parent country to its dependent country were specifically targeted at economic enclaves whose purpose was to procure natural resources, cheap labour and create a market for manufactured goods coming from abroad. This distortion of the socio-economic structure has created a situation in the erstwhile colonies wherein the rural sector does not produce the raw material essential for industrial expansion. It only produces food stuff and basic commodities which are not required by industry."

71 Ibid. p.34.
72. Ibid. pp.57-58.
73. Ibid.
According to Raul Prebisch, the major impediment in the economic development of backward countries is their disadvantaged position in international trade. Backward countries have evolved as the periphery of the international economic system wherein their function is only to produce food and basic raw material for the industrial center. Since the benefits of technical progress are unevenly distributed, these countries have failed to industrialize and even the benefits of higher productivity are systematically transferred to already developed industrial centers. This is mainly due to the abundance of surplus labour in backward countries which constantly pressurizes the wage system pushing wages down. Consequently, the price of export commodities too falls down. Therefore the benefits of higher productivity in backward countries are transferred to a developed country that purchases products at falling prices. On the other hand, products of industrialized countries are expensive since they are not afflicted by the problem of surplus labour that lowers prices. Prebisch thus believes that the international economic order, the division of labour and the terms of world trade and highly unfavourable to or biased against the backward countries.

Lewis too is convinced that "practically all the benefit of increasing efficiency in export industry" of backward countries

"goes to the foreign consumer." He too argues that the transfer of income is linked with unlimited supplies of labour in the traditional rural sector of the backward countries. The price of labour in industrial sector of such countries is determined by its price in the rural sector. The relationship is so ominous that labour wages in the traditional sector cast a lowering impact on industrial wages too. Overpopulation upsets the land to man ratio to a point where there is too much labour and too little land to cultivate. This causes the marginal productivity of labour in the traditional sector to be negligible and its wages bare minimum. It is this fact that lowers industrial wages too. Lewis further believes that "capitalists have a direct interest in holding down the productivity of subsistence workers. This is one of the worst features of imperialism. The imperialists invest capital and hire workers. It is to their advantage to keep wages low. In actual fact, the record of every imperial power in Africa in modern times is one of impoverishing the subsistence economy. Either by taking away people's land or by demanding forced labour in the capital sector, or by imposing taxes to drive people to work for the capitalist employer."

One might criticize these theories on the ground that they begin by assuming international factors as the determinants of backwardness. But except for Myrdal, both Lewis and Prebisch point to the surplus of labour as the key issue that lowers


76 Ibid. pp.409-410.
prices of exported commodities and transfers the benefit of industrialization in backward countries from them to advanced ones. Surplus labour is a factor internal to the economy of a country. The real international causes being the exploitation during the colonial phase in the history of most backward countries of today, unfavourable terms of trade, harmful economic policies and the unequal distribution of technology and technical progress across the world. Lower prices of exportable commodities should actually have benefitted them and made them more competitive regardless of whether they are caused by surplus labour or anything else. But in reality this does not happen. Export products, whether agricultural or industrial, require constant updating, advanced technological inputs and ever-increasing economic inputs on research and development, marketing and innumerable aspects of modern business. Since all these entities originate in the advanced countries where prices are extremely high for backward countries to afford, their products receive a thrashing in the world market. It is here that the external international factors actually come in to play.

Another variant of this theory relates the detrimental influence of international forces with factors internal to a backward economy in such a way, that the ultimate blame or burden of backwardness falls upon internal factors. Jacob Viner, Meier and Baldwin, Myint and Nurkse are some of the stalwarts of this view. Viner agrees that the terms of world trade are unfavourable for underdeveloped countries. But he disagrees that they are generally and secularly adverse for all backward countries alike as a rule. Disadvantages in world trade may be corrected by
pursuing adequate economic policies. He assigns more significance
to the cyclical fluctuation in the price of raw materials, the
policy of protectionism and the artificial trade barriers created
by Governments of developed as well as backward economies
alike.  

Meier and Baldwin too follow a similar course of accepting
the contribution of international forces in causing backwardness.
While, at the same time, arguing that such forces become active
only due to forces inherent in a backward economy. In other
words, they adjust some of their malicious role with internal
ones. Taking the example of fluctuation in raw material prices,
they postulate that raw material prices have a tendency to rise
higher than the prices of manufactured goods during times of
economic buoyancy and prosperity. However, Governments in
backward countries fail to utilize judiciously the extra income
gained when their prices shoot. Consequently, during depression,
when raw material prices droop, the economy fails to withstand
the pressure. During prosperity, the extra income gained is spent
on importing consumables or upon speculative ventures where
profit is higher. Moreover, there is a tendency to guard
against the possibility of a future decline in the purchasing
power of money by investing in real estate or the capital thus
gained is simply posted abroad. Furthermore, during boom time,
a backward country is afflicted by inflationary pressures and a
severe balance of payments crisis which leads to a misallocation
of resources. Hence, the increased earnings are quickly wasted.

77. Jacob Viner, "The Economics of Development", in Aggarwala and
on nonessential expenditures that furthers the inequality of world trade and puts backward economies on a disadvantaged footing viz-a-viz their developed counterparts when the real crisis arrives. During times of crisis, raw material prices have a tendency to drop faster than manufactured goods. Terms of trade for poor countries manufacturing primary goods and raw material deteriorate briskly. The in-flow of foreign capital dries, and the country is deprived of necessary funds to import food, capital goods, technology and improvements in infrastructure. In other words, Meier and Baldwin are arguing that the terms of trade for backward countries deteriorate because of ill-conceived economic policies pursued by their Governments. And that international factors are not to be blamed completely.

Meier and Baldwin also emphasize the adverse influence of monopolistic foreign capital investments in underdeveloped countries. However, the theory closely resembles a vicious circle in such a way that the ultimate burden of underdevelopment falls once again upon internal characteristics. Meier for instance opines that although foreign capital is essential for economic development, yet "the need for external borrowing does not mean that the development problem is only a financial one and can be solved only if foreign investment is forthcoming." Meier argues that many countries imported British capital without much improvement in their development levels. Foreign investments were

78. see G.M. Meier and R.E. Baldwin, Economic Development: Theory History and Policy, pp.329-333.

selectively targeted at key areas related closely with the export sector of backward economies. E.G., the plantation systems that produced raw materials and primary products, and the railways that connected such key areas to sea ports. Consequently, while the export sector received the bulk of investment and grew rapidly, other sectors were ignored and the income as well as demand in them did not grow. The export sector comprising of plantations or mines etc kept the real income of the natives low since it merely required unskilled labour and primary materials. Secondly, it helped in transferring actual profits abroad, i.e., back to the mother country which was the source of foreign investment in the first place. "In other words, foreign companies retard economic development by keeping wages and prices of agrarian products artificially low on one hand, and, on the other, by transferring profits abroad, and by artificially keeping the prices of finished goods high." But in the final analysis, they partially acquit the external factors shifting some of the blame on internal ones such as social and geographical hindrances (discussed elsewhere), lack of specialized skills, ignorance of economic relation by natives and imperfect market conditions.

Summing Up: Our discussion in this section, began with a basic question, "what is backwardness?" We witnessed a wide variety of answers and explanations to this question during our discussion. For some, backwardness is a benchmark in a

80. Ibid. p.69.
82. Ibid. p.332-333.
statistical index, for others, it a stage in an overall historical process of development. Some explain it as the aggregate of certain impediments to development. For some, it is caused by sociological and psychological traits, attitudes and motivations. While for some others, it is a consequence of external international forces, mainly, the international economic system within which a backward economy operates. It is very difficult to say whether the features discussed in this section actually cause backwardness or are its consequences or symptoms. The question is quite tricky and difficult to answer. The scarcity of capital originates backwardness as well as reflects backwardness as its symptom. The surplus of primary workers, causes as well as symptomizes backwardness. However, geographical hindrances might not be regarded as its symptoms. We can not say that Garhwal is mountainous because it is backward. The opposite may sound more realistic. Similarly, historical features, such as colonialism and its adverse influence on the economy of a backward country can only be regarded as the causes of backwardness and may not be treated as its symptoms. However, this certainty is difficult to apply in all circumstances. Poverty and the absence of basic amenities are the causes as well as symptoms of underdevelopment. A possible answer to this question can perhaps be that no matter how much we may theorize it, backwardness is no more and no less than the symptoms it produces. For a patient, a disease is known by its symptoms. A doctor recognizes a disease by its symptoms. Reducing the symptoms also reduces the disease. Likewise, for its victims, backwardness is no more and no less than the symptoms it
produces. For a poor man, underdevelopment implies the difference between being rich and not being rich, having money and not having it, having food, water and shelter and not having them, possessing luxury at disposal and having to struggle even for basic amenities.

**Liquidating Backwardness Through Industrialization**

Is it possible to liquidate or exterminate backwardness? If so, then how can this objective be achieved? It is heartening to observe that most of the causes or symptoms of backwardness discussed in the previous section may be substantially minimized through positive State intervention. The State is indeed the most powerful institution to take on this enormous problem. It touches upon all aspects of life within its boundary and is endowed with the ability to arrive at mutually acceptable solutions to international problems. Through the network of its agencies and the framework of its policies, the State is equipped with the ability to reach the remotest areas and tackle the various aspects of the problem. However, whether it be the ancient Egyptian, Greek or Roman civilizations or the modern West European, North American, Japanese or Singaporean manifestations of economic success, eradicating economic backwardness in such a way that not even a trace of it is left behind, has so far not been possible. Relative backwardness and poverty continues to haunt even the most advanced countries till today. Nevertheless, it is possible to minimize backwardness and to transform an area from a general state of being poor and backward to a general state of being rich and prosperous. A total liquidation of economic backwardness so that not even a single area is left so
and not even a single human being remains poor, is perhaps a very tall claim.

Before the industrial revolution, the only method for increasing the wealth of a State was to increase its territory by war and subjugation. The subject State thus bore the brunt of poverty while the ruler became richer and succeeded in increasing the incomes of its people. After industrial revolution however, industrialization has been perceived as the standard and bona fide method of providing alternate employment, increasing per capita income raising living standards and in general, of removing backwardness. In its early stages, industrialization might create its own form of misery and deprivation, but in an advanced stage, it succeeds in transforming a State from a general condition of poverty to a general condition of prosperity. The significance of industrialization has increased so much, that it is treated as a synonym to social and economic progress. As Pandit Nehru once put it in one of his speeches, "real progress must ultimately depend upon industrialization."

But how is socio-economic progress connected with or dependent upon industrialization? We have seen in the preceding pages that the traditional/primary/agricultural method of living in underdeveloped countries is associated with mere subsistence, inefficiency and under-utilization of resources and factors of production. While the modern industrial sector and way of living

is associated with the reverse progressive characteristics. As Colin Clark puts it, economic progress entails a movement of labour, resources, capital etc from agriculture (which is a low productivity sector) to industry (which is a high performance, high productivity sector). Economic progress is correlated with a high proportion of working population in the secondary and tertiary sectors. A high proportion of workers in the traditional sector signifies a low per capita incomes. Lewis too has dubbed the traditional sector as inefficient and overburdened. A sector in which the marginal productivity of labour declines to zero and no incentive if left for investing capital and other resources in it. Therefore, unless surplus labour moves from agriculture to industry, economic development can not be achieved. Rostow's historical explanation, the vicious circle theory and Leibenstein's quasi-stable equilibrium, underscore the need for industrialization for a society if it has to break the shackles of backwardness in an indirect manner. Rostow talks about the victory of new ideas, attitudes, technology and techniques over traditional elements as a condition for a take-off. The vicious circle theory asks for importing superior skills, innovations and entrepreneurial skills. While the equilibrium theory demands that the level of per capita income must be kept above and sustained above the rate of population growth for a few years if development is to be realized. Now these conditions may only be met through industrial


85. Refer to the discussion on the low productivity of labour in the preceding pages.
development of backward areas.

**Concluding Observations:**

The introduction to this thesis enables us to make the following concluding observations. Firstly, development has a very bad tendency to concentrate or cluster together in areas where conditions suitable for its growth are already existent. One might also say that development is partial and favours such areas. It does not by itself disperse in to such areas where it is not present at all or is present in a lesser degree. This tendency is also called regional imbalance or disparity. Development is like a seed that blossoms in to a pretty flower only if the environment is conducive to its growth. Otherwise, it does not germinate properly and succumbs to its environmental injuries. Von Thunon's central city represents an area where the conditions are favourable for development to blossom. His concentric zones represent successive stages of increasing environmental harshness to its growth. Christaller's central places and the growth poles of Perroux and Boudeville too represent cases of environmental suitability.

Subsequently, we made an attempt to identify the causes and symptoms of economic backwardness. These represent the conditions that are harsh to economic development. They retard its growth and strangle its throat. This section enables us to make the observation that economic backwardness is reducible by reducing or attacking at its symptoms or causes. This requires a positive intervention by the State and the most powerful tool that the State may employ for achieving this objective is industrialization of backward areas. State is perhaps the most
powerful contemporary institution to take on the evil of backwardness. The role of industrialization or industrial development as such an important tool might be questioned. Some may argue that industrialization generates its own specie of misery and deprivation and cite examples of suffering in Britain during the era of industrial revolution. It is true that industrialization, during its early stages, creates miserable conditions for a large section of the population. Nevertheless, it is also true that all the underdeveloped countries of today are rushing to catch up in the race for industrialization. Countries are judged as successes or failures on the solitary ground of whether they have succeeded in industrializing or not. Governments primarily focus policies and target resources at industrial development. Even agriculture is seen from an industrial angle wherein it is sought to be modernized, mechanized and linked closely with industry. Whether it be tourism, heavy industry electronics or agro-based industry, industrialization has become the buzz-word and everyone is rushing for it. Taking a small example from Garhwal where visitors used to come as pilgrims with a religious feeling, and the natives treated them that way. But now they treated as tourists and tourism is treated as an industry. Industrialization has more or less hijacked the entire meaning of economic development. Moreover, industrialization too is not merely restricted to the establishment of some factories, but commercialization is perhaps a more suitable term to connote the meaning of industrialization.

The Study Area
The Hill Region of Uttar Pradesh (also known as U.P. Himalayas) has been divided into eight Districts. These are: Almora, Pithoragarh, Nainital; Chamoli, Dehradun, Uttar Kashi, Tehri Garhwal and Pauri Garhwal. The first three Districts, namely, Almora, Nainital and Pithoragarh comprise to Kumaun Mandal. While the remaining five Districts, namely, Chamoli, Dehradun, Uttar Kashi, Tehri Garhwal and Pauri Garhwal comprise the Garhwal Mandal. Recently, a new District called Rudrapur has also been carved out in the Kumaun region. A detailed analysis of the various geographical, economic and historical features of the study area has been presented in Chapters III. and IV.

OBJECTIVE OF PRESENT STUDY

The focus of the present study lies in understanding the problems associated with backwardness of Garhwal together with an evaluation of the role of industrial development in resolving these problems or as a solution to these problems. It involves an analysis of existing policy measures for the industrial development of Garhwal. In brief the study carries the following objectives:

(1) An understanding of the nature of backwardness prevalent in Garhwal;

(2) To evaluate the extent to which industrial development can become a solution to backwardness in Garhwal keeping in view the serious limitations upon agriculture due to the nonavailability of land, irrigation and other modern agricultural facilities in the hills;

(3) The present study seeks to evaluate the existing policy measures for the industrial development of Garhwal;
(4) To analyze whether there have been any weaknesses or lacunae in the implementation of policies and programs for the industrial development of this region;

(5) Finally, it seeks to discover what kind of new programs might be launched in this context.

Our purpose is not merely to demonstrate the regional disparities by employing one method or the other. We are attempting to pierce through the problems of backwardness and understand their nature in a specific and geographically contiguous region. Our concentration is more upon problems and policies.

**Methodology**

Given the nature of the subject, both statistical and nonstatistical empirical data was required to complete this research. Statistical data would enable us to measure the extent of backwardness in Garhwal, to assess the success and failure of various schemes and to place the issues effecting this area on an empirical footing. While nonstatistical but empirical data was required to understand the real issues and problems faced by the weavers, knitters and other small entrepreneurs of this region. Nonstatistical data was necessary to obtain a clear opinion from the people themselves about the problems they were facing and the issues effecting them. For example, the scarcity of measured land and excessive dependence upon agriculture as discussed in the third chapter required statistics to measure scarcity. While its effect on people could not be measured by presenting figures alone. Therefore, their opinion on the issue had to be obtained.
Similarly, the actual difficulties faced by craftsmen engaged in wool, wood craft and other artisan processes requires both articulated ideas, opinions, thought on one hand, and figures on the other. The difficulty faced in obtaining raw material for native industry, problems faced in obtaining loans, subsidies, water and power for industry, lack of technical training and entrepreneurship development, financial assistance and marketing of goods viz-a-viz' competition from large branded manufacturers, could not have been gauged without talking to the people and obtaining their views on these burning issues. Meanwhile, it was necessary to strike a balance between mere figures and mere views. Mere statistics without substance are irrelevant. While mere views without some figures become difficult to believe.

Quantitative data has been collected from Plan documents, industrial surveys, Census of 1981 and 1991, statistical diaries and other Government documents. Quantitative data was also collected during field work across Garhwal from District and Division offices of various Government Departments, production centers and banks.

Nonstatistical data on problems, opinions and issues was collected mainly through informal unstructured interviews with a cross section of people. These included officials of various departments, entrepreneurs, traders, industrialists, men and women both rural and urban belonging to all districts of the Garhwal Mandal. About 100 such interviews were conducted during the course of this research. Interviews were mainly informal conversations focussed at stimulating the person to speak and articulate a clear idea. These form the basis for chapter 6, 7
and 8. While some opinion regarding the effect of British Raj on the economic life of Garhwal and the impact of land scarcity on daily living were also obtained, which have been included in chapter 3.

Collection of numeric data from local offices proved to be an extremely difficult task. Accurate figures were simply not available on many desirable aspects. I had planned to quantify the various categories of industries operating in each district of Garhwal Mandal on the basis of manufactured commodity. For example, I desired to collect accurate figures regarding how many fruit processing, food related, wool based or service based units were operational in each district of Garhwal over a period of many years and mark the trends thereby. However, I did not succeed in doing so. Government offices such as District Industries Centers, Khadi Board, U.P.F.C. or the Sankhya Vibhag either did not have these figures or they did not make them available to me. A serious problem was that since the formation of the Hill Development Department, separate figures for Kumaun and Garhwal are not presented on many desirable indicators for this research. These figures are presented for the entire Uttarakhand region. Therefore, it became very difficult to separate figures on Garhwal. The Collection of data from the five Hill Districts of Garhwal has proved to be an immensely difficult task. Especially in view of the immense spread of the area and the time it takes to travel from one place to another. The five Districts cover around 30090 Square Kilometers of area and a journey often takes somewhere between 10-12 hours. The climate and the topography makes this task even more difficult. Even the
Government officials specifically entrusted with the task of collecting and compiling data in this region openly admit this difficulty. However, an attempt has been made to provide the most up-to-date figures for this research as far as possible. Many of the industrial occupations operating in this region are seasonal like a Monsoon Stream which goes dry when its season is over. It was quite difficult to estimate with accuracy how much employment they generate and how much is invested in them. These industries start operation in the most suitable season when the climate is suitable for production, transportation and marketing and when the raw material for their produce is readily available. It was also found that the occupation of a large number of people in this region is not permanent. i.e., it varies from season to season. Accurate estimates of employment and investment in such cases are also difficult to make. Since weaving is seasonal. Finally, my ability to collect quantitative data through intensive field work was also restricted on account of my visual disability. It is hoped that the lapses existent are minute and do not effect the overall character of the study.

The organization of material between chapters has been done in the following manner. Chapter I. introduces the basic concepts of development and backwardness and makes us aware about the causes, symptoms and characteristics of backwardness. Chapter II. focusses on the policy of the Government regarding backward area development through industrialization. Chapter III. deals with the actual nature of backwardness prevalent in Garhwal and the real problems faced by the people of this region. Chapter IV. outlines the perception and strategy of the State Government with
reference to the development of Garhwal and the place of industrial development within it. Chapter V. marks the beginning of discussion on industries in Garhwal. It outlines the programs and schemes launched by the Government to promote industries in the region. Chapter VI. concentrates on the status of various category of industries operational in Garhwal and the issues effecting their functioning and people engaged in such activity. Chapter VII. is specifically devoted to tourism industry in view of its significance for the economy of the area. Chapter VIII. sums up the study with a discussion on the key questions effecting all category of industry, the difficulties faced by local entrepreneurs and craftsmen engaged in them and outlines suggested remedies in policy.