# Chapter II

## Literature Review

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Chapter II

Literature Review

“Research is a systematic effort to add a new aspect to existing knowledge”

Wilkinson

I. Introduction

Before marching towards any preferred area, it is necessary to study and know its related research studies. Literature investigation is a sort of directive related area study. Literature research begins with the study’s history which is a continuous process. To know the literature on the study the advantages are given below:

1. The literature on the study gives the view of its history.

2. Literature provides logical assumptions or opinions, reports, its sources and other interrelated views.

3. Literature of the research to what extent shall be useful to this study can be known.

4. To what extent, the area has been undertaken in the literature of the previous study can be known so that repetition of the same do not take place in this study.

5. It provides a guideline for how and in what way, the data collected has to be analysed.

There have been many theories and researches on the regional disparities. Regional disparities have been the subject of discussion for the economists starting with the birth of the subject like two human faces does not take the clowned shape like sheep and goat. Going through various studies and after some discussion with the experts this subject of the study has been formulated.
The title of the subject is “An Economic Study of Inter Regional Economic Inequalities in Gujarat”

Regional disparities are found among all the countries among states of a country, among districts of a state, villages of a district and among families, man and woman. Gujarat though one of the most developed state of India its geographical, natural, political, socio-economical inequalities have shown the country that with the will of citizens and political propeller like policies can make the state a developed state which would envy the western country rulers.

This study’s chapter on literature has been categorized into two parts. The first part is allotted to country in which disparities among states have been undertaken. The second is on the regional disparities in which districts and areas of the state information is laid in this chapter through a few studies by scholars. The third discusses process of development wherein GDP. Population, sex differentials, literacy, employment, residential status, infrastructure has been taken up in this chapter. What have the problems and how the road towards development has played an important role has been placed as the ready reference study.

Inequality has been extensively debated by the scholars in theory and empirical investigations. Richards in his two sector model, which focused on growth and distribution within agriculture and industry stressed on share of rent and profits where growth eventually reaching the stage of steady state of zero growth due to diminishing returns in agriculture (Boyer, 1996). Karl Marx opined that capitalist have an incentive of pushing wages to subsistence level (Martin and Sunley 1998, Dunform and Smith 2000) Growth models for closed economies (Solow 1954, 1957, 1970. Cass and Hoopmans 1965) on per capita growth rate show inverse relation to the starting level of output per capita if economies have similar preferences and technologies, the poor economies grow faster than the rich neoclassical believed in market forces, which postulated the regional inequality as a passing phase and the market forces ensure all factors of production tend towards marginal products (Smith 1975), Kalechi (1954, 71), Kaldor marginal products (1955-56, 1960) and Pasinetti (1962, 77, 81) point out at the relationship between income distribution and economic growth.
Kuznets hypothesis (1955, 1963) as it is known is the two sector economy with not too district degrees of sectoral mean incomes, a small population shift from one sector to another shall lead to raising aggregate inequality, which would reduce at later stage.

In India, interstate/region inequality has been one of the major concerns for policy makers and planners. Enormous variations in regional experiences and achievements crippled with the even sharper contrasts in few fields of social development has resulted in remarkable internal diversities in India.

II. Industrial Growth and Regional Disparities

(Bharadwaj Krishna 1982) The regional disparities (interstate) in economic well-being are an unmistakable feature of economic growth and change in India. In the years prior to independence, a pattern of ‘agglomerated’ growth emerged, with islands of concentrated growth but having very weak dispersal effects. As late as 1948, the presidency states (Bombay, Madras and Calcutta) accounted for 76.7 per cent of the total industrial workers and 77 per cent of industrial production… The share of mineral rich states of Bihar, Orissa and Madhya Pradesh was 9.6 per cent industrial production. The southern region around Madras and Bombay, and especially what later became the state of Gujarat was better placed and had a better start in terms of agriculture and industry.

III. Economic Reforms: Liberalization and Disparity Gap Widens

(Srivastava & Others 1994) in his study on regional disparities during the period of economic planning in India observed that the impulses of growth are more widely dispersed than before but confirmed the persistence of wide disparities in development levels. Whether these development disparities have tended to accentuate or diminish in recent years of reforms, trade liberalization and greater integration with the global economy is an important question with social and political economy implications.

The issue of regional disparities in employment in recent years of openness is important simply because labour markets are the key avenue through which international trade and investment openness affects the domestic economy.
(Sachs et al 2002; Ahluwalia 2001; Shetty 2003; Bhattacharya and Sakthivel 2004a; Bagchi and Kurian 2005 among others) The problem of regional income inequalities has attracted much attention in recent years. Most of these have focused on the disparities in per capita incomes and report a tendency for divergence. However, studies of interstate disparities in employment opportunities or labour market outcomes are very few and deserve equal attention.

IV. Difference in Employment Incomes in Liberalized Period

Bhattacharya and Sakthivel (2004b) and Ahsan (2006) constitute the recent key studies with their detailed analysis of interstate differences in employment outcomes. The time period covered in these two studies from 1983 to 1999-2000 corresponding to the then availability of national sample survey (NSS) employment and unemployment data. Other studies have focused on the impact of labour regulations and trade liberalization on manufacturing employment and labour demand.

(Besley and Burgess 2004; Hasan, Mitra and Ramaswamy 2007) These two econometric studies mainly utilise state level data on manufacturing industries available in the annual survey of industries (ASI).

The growth and structure of employment in 14 major states of India during 1983 and 2004-05. This will help maintain comparability with two important recent studies of regional income disparities, namely, Ahluwalia (2001) and Sachs et al (2002). Sachs et al (2002) have carried out both the sigma and beta tests of convergence for the 14 major states using per capita gross state domestic product (GSDP) data for the period 1980 to 1998. They found that 14 major Indian states for the period are diverging overtime. Major states in India exhibited a lack of both sigma and beta convergence. Their analysis leads them to suggest that the forces of convergence are weak in India.

V. Income Inequality and Growth

Ahluwalia (2001) in his comparative evaluation of the economic performance of states observed that the estimated Gini-coefficient (a key measure of income inequality) has increased from about 0.16 in 1986-87 to 0.23 in 1997-98.
The second sub-period (1999-2000 to 2004-05) is a period of recovery of employment growth in India. Job creation has reappeared in the Indian economy after a period of jobless growth in the 1990s. This is correctly reflected in the state-wise employment growth trends in Table 2. In the 14 major states employment grew by 2.8 per cent per annum. This is similar to the all-India growth rate that we referred to earlier (Table 1 &2). This recovery in employment growth is across the 14 states with Kerala as the exception (growth of 1.3 per cent in the first against 1.2 per cent in the second). Recovery is stronger in the higher income states (3.2 per cent from 1.4 per cent). Employment growth in the bottom five states with a share of more than 44 per cent of the workforce, has picked up to grow at the average of 14 states (2.8 per cent) in the second period. We may note the impressive employment performance of two of the bottom five states, namely, Uttar Pradesh and Rajasthan. Among others, four states have recorded impressive growth rates in the second period, namely, West Bengal, Karnataka, Haryana and Maharashtra. The relevant question is what has been the nature of this employment growth across states in terms of rural urban divide and formal and informal composition? Which sectors have grown and which have fallen behind? This will determine the quality of employment growth in a broader structural perspective.

(Kochhar et al 2006) In the study on The traditional Kuznets-Chenery perspective of structural transformation suggests a reallocation of labour from agriculture to manufacturing and services as per capita income rises. The evolution of sectoral shares in India is observed to be unusual and pay has far-reaching implications for employment growth. India's share of services in GDP has risen rapidly from 37 per cent to 49 per cent between 1980 and 2000. However, the rise in employment share—from 18.6 per cent to 22.4 per cent—during the same period is marginal.

VI. Regional Variations Outcome of Productive Services

(Gordon and Gupta 2004) This implies a rapid increase in labour productivity in the services sector, perhaps due to growth in skill-intensive services. This all-India aggregate picture hides many regional variations. The regional variations in per capita income could perhaps be due to the uneven spread of service
sector employment both in quantity and quality. Higher income states will have a
greater share of productive services, while the low income states may end up with low
productivity employment that is actually a spillover of lack of alternative productive
employment opportunities. A preliminary look at the evolution of sectoral
diversification of state economies is likely to throw some light on this issue.

(Imbs and Wacziarg 2003) The study on the pattern of sectoral
diversification along the development path has been recently examined by Their
detailed empirical study shows a u-shaped pattern in sectoral concentration -countries
begin their development journey at a high level of concentration (low income levels)
and diversification increases reaches a minimum level and then the economic activity
structure starts concentrating again. This scheme therefore suggests that there are two
stages of diversification in the development process. The first one is of increasing
diversification followed by one of increasing concentration. However, the, minimum
point occurs quite late in the evolution process of sectoral diversification. This is
interpreted to suggest that countries diversify most of their development path.
However, it is important to what know the level and speed of change in diversification
underlying the present ongoing development process are. This will reveal the inertia
or structural backwardness constraining the inter-regional differences.

VII. Shift in Labour Force in Post Liberalized Period

The study by (Wacziarg and Wallack 2004) examined 25 liberalization
episodes could not detect any dramatic or increased structural shifts in employment
shares across the nine 2-digit sectors. At the all-India level, the study observed greater
changes in employment shares relative to the change during the pre-reform years of
1983-94 (Ramaswamy, 2007). This is an important finding because lack of change in
employment shares would have suggested an absence of resource movements to gain
"from comparative advantages. In other words, inter-sectoral flows of workers are
found to be greater in the post-reform period. Whether this is translated into welfare
gains is another issue that we will take up later.
VIII. Education and Growth

(Bosworth, Collins and Virmani 2007) in their detailed study of sources of growth in India, covering the period 1960-2004, call attention to The low levels of educational attainment of the Indian population and workforce. They point out that India has recently attained an average level of schooling comparable to that achieved in other Asian countries, a quarter century earlier (Bosworth, Collins and Virmani 2007). In term of the educational attainment of the workforce, their estimates indicate that nearly 40 per cent of the workforce is found to be illiterate and those who have completed secondary schooling account for 14 per cent of workers while an additional 6 per cent are estimated to have a university degree.

As seen in table, expectedly, Karnataka, Tamil Nadu, Gujarat and Maharashtra emerge as educated states. The educational performance of Kerala is well known. Among middle income states, Andhra Pradesh and West Bengal have below average education. In brief, high income states also have better potential supply of educated persons. Notice, in particular, the relative advantage in terms of secondary education attainment in better off states. This will prove to be a great source of comparative advantage for these states in the years to come.

Table (1): Educational Differences by State - 2004-05

<table>
<thead>
<tr>
<th>State</th>
<th>Not Literate</th>
<th>Literate and Up to Primary</th>
<th>Middle</th>
<th>Secondary</th>
<th>Higher Secondary</th>
<th>Diploma/Certificate</th>
<th>Graduate and Above</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihar</td>
<td>516</td>
<td>198</td>
<td>152</td>
<td>92</td>
<td>48</td>
<td>5</td>
<td>415</td>
<td>1000</td>
</tr>
<tr>
<td>Orissa</td>
<td>412</td>
<td>252</td>
<td>177</td>
<td>82</td>
<td>50</td>
<td>7</td>
<td>407</td>
<td>1000</td>
</tr>
<tr>
<td>U.Pradesh</td>
<td>478</td>
<td>178</td>
<td>144</td>
<td>62</td>
<td>47</td>
<td>5</td>
<td>434</td>
<td>1000</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>524</td>
<td>192</td>
<td>125</td>
<td>62</td>
<td>47</td>
<td>5</td>
<td>423</td>
<td>1000</td>
</tr>
<tr>
<td>M. Pradesh</td>
<td>456</td>
<td>252</td>
<td>115</td>
<td>61</td>
<td>55</td>
<td>8</td>
<td>402</td>
<td>1000</td>
</tr>
<tr>
<td>Average of bottom five</td>
<td>477</td>
<td>214</td>
<td>136</td>
<td>74</td>
<td>48</td>
<td>5</td>
<td>430</td>
<td>1000</td>
</tr>
<tr>
<td>West Bengal</td>
<td>325</td>
<td>321</td>
<td>162</td>
<td>82</td>
<td>49</td>
<td>3</td>
<td>580</td>
<td>1000</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>491</td>
<td>193</td>
<td>109</td>
<td>99</td>
<td>45</td>
<td>13</td>
<td>504</td>
<td>1000</td>
</tr>
<tr>
<td>Karnataka</td>
<td>382</td>
<td>200</td>
<td>171</td>
<td>124</td>
<td>58</td>
<td>11</td>
<td>552</td>
<td>1000</td>
</tr>
<tr>
<td>Kerala</td>
<td>94</td>
<td>268</td>
<td>305</td>
<td>154</td>
<td>63</td>
<td>58</td>
<td>556</td>
<td>1000</td>
</tr>
<tr>
<td>Average of middle four</td>
<td>323</td>
<td>246</td>
<td>187</td>
<td>115</td>
<td>54</td>
<td>21</td>
<td>549</td>
<td>1000</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>293</td>
<td>278</td>
<td>160</td>
<td>117</td>
<td>68</td>
<td>18</td>
<td>664</td>
<td>1000</td>
</tr>
<tr>
<td>Gujarare</td>
<td>318</td>
<td>229</td>
<td>189</td>
<td>124</td>
<td>63</td>
<td>16</td>
<td>683</td>
<td>1000</td>
</tr>
<tr>
<td>Haryana</td>
<td>351</td>
<td>218</td>
<td>117</td>
<td>150</td>
<td>78</td>
<td>15</td>
<td>712</td>
<td>1000</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>271</td>
<td>199</td>
<td>226</td>
<td>132</td>
<td>69</td>
<td>29</td>
<td>732</td>
<td>1000</td>
</tr>
<tr>
<td>Punjab</td>
<td>315</td>
<td>213</td>
<td>126</td>
<td>175</td>
<td>87</td>
<td>19</td>
<td>652</td>
<td>1000</td>
</tr>
</tbody>
</table>

48
Average of Top five          310  227  164  140  73  19  67  1000  
All India                  382  228  160  102  58  12  57  1000  

Source: NSS 61st round report no 517, Table 3.8.1 (pp. 66) on per 1,000 distribution of persons of 15 years and above by general educational level.

(Lewin and Caillods 2001) have opined that it is fairly argued that secondary education is crucial for economic growth. Modern industry, whether it is manufacturing or services sector like telecommunications emphasizes training and skill acquisition on the job. A workforce with secondary school attainment will turn out to be the best bet for such a job market. What has been the relative position of Indian states in this area of education? In Table 2 data on gross enrolment ratios for upper primary and secondary schooling in India for the 14 states for the year 2003-04 is shown. The relatively better development of education in middle income and high income states emerges clearly. West Bengal lags behind and looks more like bottom five states in this respect.

<table>
<thead>
<tr>
<th>Table (2): Gross Enrolment Ratios - 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Bihar</td>
</tr>
<tr>
<td>Orissa</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
</tr>
<tr>
<td>Rajasthan</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
</tr>
<tr>
<td>West Bengal</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
</tr>
<tr>
<td>Karnataka</td>
</tr>
<tr>
<td>Kerala</td>
</tr>
<tr>
<td>Tamil Nadu</td>
</tr>
<tr>
<td>Gujarat</td>
</tr>
<tr>
<td>Haryana</td>
</tr>
<tr>
<td>Maharashtra</td>
</tr>
<tr>
<td>Punjab</td>
</tr>
<tr>
<td>All India</td>
</tr>
</tbody>
</table>


IX. Human (Skilled) Capital and Growth

(Bagchi and Kurian 2005) the authors’ views are the constraint of skilled labour (human capital) is likely to be the binding constraint for growth and

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employment in many states in India. The positive relationship observed is very encouraging. Labour productivity is the key proximate determinant of output and employment. States with better supply of secondary school educated workers are likely to get more investment and jobs coming in their way. It is now well established that a major chunk of investment, domestic and foreign direct investment (FDI), has gone into five selected states, namely, Maharashtra, Gujarat, Karnataka, Andhra Pradesh and Tamil Nadu. Incidentally, these are all relatively well endowed states with an educated workforce. This finding is troubling, because it also reflects the reality of higher unemployment of secondary educated workers.

X. Development and Regional Disparities

The evolution of conceptual basis for different approaches which deal with the regional disparities of development. The discussion begins from the having a closer look at the views of classical economists with respect to regional analysis. It stretches up to the core peripheral model evolved by regional scientists. Besides, a glance through the regional development experience of Gujarat with respect to regional perspective is discussed hitherto.

(A) Classical Tradition

Presently, institutionalist school is gaining considerable amount of recognition in the economic analysis. The classical economists were mainly concerned about discovering the causes of long term growth of national income and the process by which such growth occurs. From them nation was the unit of spatial analysis. Adam Smith (1776) and Ricardo (1817) was the dominating one. In substance, it was a macro economic approach searching the causes for the riches of nations. The classical did not examine explicitly the existence of the spatial economic inequality within the nation. But the works of the classical economists did raise the spatial economic inequality within the nation. But the works of the classical economists did raise the appetite for understating the process of development of different sectors and their sectoral inter-linkages.
(B) Neo Classical Tradition

For now over past seven decades, various theorists and researchers have been probing into different aspects of development process. Among them the temporal and spatial are quite important one from the perspective of theoretical evolutions as well as removal of economic inequalities among the different regions.

(Harrod, 1948; Domar, 1947) However, the works done by Rostow (1952) made everlasting influence on the linking of linking developmental status of development became very appealing in understanding the temporal dimension of the development process. It was believed that the regional growth experience of the USA and the other developed countries has relevance to understanding of geographic pattern of development of developing countries.

Any regional imbalance of development would be equated with disequilibrium and it was assumed that the forces of market and mobility of factors would take care of such inequality in the long run.

Joseph Schumpeter (1934) differed from the neo-classical concept of steady state of growth in early 1930s. Instead the emphasized that the entrepreneur is the engine of growth. And development of technology through innovations, play a key role in the process of development which is result of disharmonious leaps and spurts as new investment horizons are exploited. Though Schumpeterian analysis is a dynamic concept of development, it still did not take into account the spatial dimension of development process.

The Keynesian analysis also rejected automatic general equilibrium at full employment level. Instead, it laid emphasis on need for intervention to maintain equilibrium. All these were with regard to sectoral development and avoidance of cyclical fluctuations by intervening through the fiscal measures. No explicit spatial considerations were taken into account yet.

Leontief (1953) had a long lasting impact on the construction of general equilibrium models for the open and closed economies. They were initially formulated in the static model but later on could be converted to dynamic ones. They were great tools for the planners of national economy. The inter-sectoral consistency
model of this type too did not take into account impact of spatial parameters on the development process. The main flank of this type of model building was to take account the technologically fixed physical relationships of inputs and outputs of different sectors and then work out the future projections for the growth and concomitant investment of each sector so that economy can grow smoothly.

The explicit interest of regional development economics was quite missing from the mainstream economic theory till early 1950s. But during the mid-1950s and mid 1960s there had been much research concerned with the process and theorization of evidence of development in general and regional development in particular as regional disparities at different levels and types was at the fore in these decades.

XI. Developments of theorization of Regional Development

Ohlin (1933) export base analysis mainly by urban planner, urban regional relationship by Christaller (1933).

Losch (1943) and emergence of pragmatic policy interests in the problems of the lagging regions during the late 1920s and mid-1930s as a short run response to the localized heavy unemployment. However, till the end of 1950s, all these themes remained disconnected and there was a little effort to unite them and formulate at coherent theory of regional development.

Douglas North (1955) that transformed the earlier development of export-base concept into a theory of long term growth. He contended that the long term development of a region can be decided by the export capabilities of the region. Basically this model was first used by city planners who were concerned to predict the short run dynamics of local economies. He advocated that the export base demand can initiate and can provide a booster to the process of development in a region.

Myrdal's (1957) work of cumulative causation. This is considered a pioneering work which explains as to how spatial inequalities of development are built in and are perpetuated over the period of time. His cumulative causation theory, though loosely formulated has had a very widespread strong influence on the subsequent developments in the regional inequalities and development theory. He suggested that once development starts in a particular region/centre for whatsoever
reason, then that region/centre generates its own momentum of the
growth/development through the process of cumulative causation. The location of a
new industry in a region can set off a train of effects which will attract further new
industry. He also hypothesized that the relative strength of backwash and spread
effects are stronger in more developed economies. Thus he emphasized that the
development or under development is a cumulative process and automatic spatial
equity as perceived by neo-classical growth models is ruled out.

Myrdal’s contemporary, Hirschman (1958) though independently in his
own way arrived to the similar conclusions about the occurrence of development.
While studying the spatial integration of activities at different locations, he found that
transmission of growth can be viewed as a path of dis-equilibrated growth caused by
forces of forward and backward linkages.

Myrdal and Hirschman came to conclusion that the automatic equilibrating
forces generated through either by ‘spread and backwash effects’ or ‘forward and
backward linkages’ would be quite weak in the sense that they are not strong enough
to bring about spatial equity of development. Both opined that external intervention
would be essential for bringing about spatial equity of development. This provided a
sound reasoning for the planners to make a case for the active intervention by the state
to bring about spatial equity of development, particularly in the areas of extensive
inequalities.

XII. Emergence of Convergence Hypothesis

Rostow by describing various stages of the growth path became quite popular.
But its generalization to developing countries was first established by Williamson in
1965. He discerned two broad trends about inequality in the spatial development.
First, regional disparities were greater in less developed countries and smaller in
developed countries. Second, over the passage of time, regional disparities had
increased in less developed countries while the same had narrowed in the more
developed countries. These findings suggest that regional inequality, if plotted against
economic development, would result in a bell shaped curve with some peak being
reached at the transition from take-off to the maturity stage.
Bort (1960) and Bort and Stein (1964) provided the theoretical perspective for the convergence hypothesis. The general theory of growth with regional theories. However, the efforts of these economists during 1960s had still great flavors of general equilibrium analysis. They still lacked in taking into account significance of process of urbanization and locational behavior into generalization of regional framework.

The convergence hypothesis and empirical support which it received came under critical review during 1970s. (Scot 1982, Renaud 1979, Richardson 1980, 1982) found that the evidence found of convergence were weak and the equal number of examples be found for the non-convergence. Hence, by mid 1970s, the increasing need was felt for separate theories for regional economics. Friedman and Afonso (1975) explicitly underlined need for such an approach. With retrospect we can identify beginning of evolving such approach to the efforts made by geographers, regional planners and urban economists in the mid 1950s in the US and the UK.

Isard (1956) laid emphasis that the man and his physical environments are inter-wined. Besides, human activity does have a spatial context. Isard (1956, 1960) was successful in devising general theory of regional development based on the works done by Von Thuenen, Weber, and other German locational theorists.

H.W. Richardson (1969) considered of a great significance in putting the spatial aspects of development process in the correct perspective. He pointed out that, it is of no use to introduce a spatial dimension in the general equilibrium framework as popularized by Walras and Pareto. The Paretian type of optimality of allocation of resources needs independency of individual economic decisions. But the moment spatial dimension is added to such formulation the individual locative decisions become spatially interdependent. This causes logical inconsistency in applying the general equilibrium type of analysis to regional economics.

Friedman and Alonso (1975) a notable generalization for the theoretical framework for the regional economics. They noted that the way in which human activity and settlements are distributed all over the national space in a certain rhythm and pattern are not due to a chance or arbitrary mappings, but they are rather from the interdependence that gives a form to economic space. The spatial pattern of activity
and settlements would shift with changes in demand, production, and level of technology and with changes in the social and political organizations of nations. The economic and social development of a nation is reflected in system of flow of and exchange of commodities, services, money and information, its pattern of commuting and migration and its boundary lines of urban influence.

XIII. Developmental and Planning Models

Ohlin (1933) and Loasch (1943) The neoclassical formulation of the regional models of development are space less, that is, these models do not include space as one of the variables in the model for explaining process of growth. Hence, these models are inappropriate for use in analyzing the causes of emergence of regional inequality of development. Both Ohlin and Loasch pointed out the significance of space in relation to economic development. Ohlin pointed out significance of natural endowments of a region which provided advantages of trade which became the basis for the regional development differential. Whereas, Loasch brought out significance of proximity of markets as the cause for emergence of regional inequality of growth and development.

Mid-1950s and early 1960s witnessed a systematic emergence of regional science which encompassed several disciplines like economics, geography, sociology and political science. The initial debate was surrounded around the definition of region.

Perroux (1950) and Boudeville (1966) Perroux defined region as an entity based on abstract economic relations. To him the region was not merely a geographical or a political division, but it was marked by the constituent structure of economic relations. He classified the economic space into three different categories, that is, economic space as defined by a plan; as a field of forces and as a homogeneous aggregate. Besides, he had identified the ability of a region to generate and to receive impulses of growth and transmitting them to other regions. In contrast to Perroux's non-geographic orientation is Boudeville's emphasis on the physical character of space. He also maintains three types of economic spaces, i.e. homogeneous, polarized and programming. The homogeneous space has uniform characteristics with respect to certain geographic parameters. programming space
refer to administrative or political boundaries. Whereas polarized space is determined by degree of interdependence of different urban centers which are ranked in hierarchy of their functional role in the space. These early efforts to delimit the space can be grouped under three different categories, namely, homogeneity, modality and programming.

Isard (1956, 1960) made a landmark impact on understanding the implications of locational choices by industrial firms on the process of regional development. The literature pertaining to the locational choices of firms is dominated by two trends, namely, the least cost and centrality of markets approaches. The former was advocated by Weber (1909), Palander (1935) and Hoover (1937, 1948) whereas the later was supported by Chistaller (1933) and Losch (1940). Each of these approaches precluded the other one. Isard perceived a combination of the frameworks of Von Thuenen, Losch and Weber as a possible approach to a general theory of location. The Von Thuenen’s pattern of co-centric agricultural land use zones around a central city combines easily with Losch’s hierarchical pattern of settlements and hexagonal areas centered on a major metropolis. The assumption of uniform and equal distribution of resources in the even plain of Von Thuenen and Losch was relaxed by introduction of a Weberian analysis in which plant location was determined by localization of raw material. Thus, new production sites and cities may emerge from the Weberian mechanism, to be added to the Von Thuenen-Losch landscape. Isard has first rested Weber’s theory and generalized it to incorporate transport cost consideration of inputs and products. This allowed possibility of more than one production sites. Finally, Loschian type market area analysis and agricultural location theory based on Von Thuenen was embraced to complete space economy. He evolved a general theory of location by synthesizing Weber’s classical theory, Plander’s extension, central place theory, market area framework and agricultural land-use theory. Moreover he was successful in showing significance to scale and urban agglomeration economies in the locational selection.

XIV. Manufacturing Activity Key to Regional Development

Perioff et. al. (1960) found that share of manufacturing activity of a region in the national whole was a crucial determinant of regional development. Ability of a
region to satisfy national and exports demand would decide its development status. The proportionate share of rapidly growing industries to that of sluggish industries located in the region would also decide the development potential of the region. It was emphasized that regional economic growth is not a simple consequence of a discrete set of locational decisions, but it is an outcome of historical status and multiplier impact of new injection of investment in the region. So it is a chain process. And in the long run, growth of forces of internal and external economies of a set of activity would generate self-reinforcing and self-sustaining impulses of the regional growth. Such impulses may vary in their intensity from a region to region.

Schultz (1950) found that the proximity of rapidly growing centers helped the transformation of a region from agrarian to the industrial one. He propounded a hypothesis which consisted three parts.

XV. Education, Growth and Development

Education

Horse Mann, Carter, Robert Dale Owen and George Evans (18th and 19th Century) opined for educational opportunities to the poor groups of population. Horace Mann the reformer among them viewed school as an effective instrument to achieve justice and equality of opportunity to remove poverty.

(Kahan 1963, pp.400-1) An increase of labour productivity is the only means to erase poverty in Russia and the best policy to achieve it is through the spread of education and knowledge.

(Adam Smith) made extensive references to education including generation of public benefits by education of all levels, university education included and hence the role of public providing it.

(John Stewart Mill) follower of Adam Smith, recognized the social benefits more clearly and more explicitly than Smith and others.

(Marshal 1920, pp.138-39) emphasized the most vulnerable of all capital is that invested in human beings” and that “knowledge is our most powerful engine of production, it enables us to subdue nature and force her to satisfy our wants.
(Theodore Schultz 1961) has demonstrated that education is an investment leading to capital formation that contributes to economic growth.

(Ahluwalia 1976, p.322) the labour market oversupply of highly educated people results, given no change in demand in lowering their wages and increase in wages of those with less education, thus contributing to overall reduction in income differences in the labour market.

(Solow 1956, 1957) did not recognize education as a major input for production and hence education was not included in growth models. Economic growth was explained by assuming that in the long run exogenous technological development takes place, it focused initially on physical capital accumulation.

(Bowman 1966) rightly said “Schultz human capital theory created a human investment revolution in economic thought”.

Arrow Spence (1973) and Stiglitz (1975) contributions raised question on the human capital theory and the possibility of treating education as a signal to the employer instead of having any economic value on its own, theme which remained as hypothesis and which did not last.

(Psacharopoulos 2004) summed up contributions beginning with Schultz’s pioneering contribution as below:

<table>
<thead>
<tr>
<th>Period</th>
<th>Theory</th>
<th>Exponents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960s</td>
<td>Human capital</td>
<td>Theodore Schultz, Gray Becker, Jacob</td>
</tr>
<tr>
<td>1970s</td>
<td>Signaling and screening</td>
<td>Kenneth Arrow, Michael Spen, Mincer Stieglitz</td>
</tr>
<tr>
<td>1980s</td>
<td>Endogenous growth</td>
<td>Robert Lucas Paul Roma</td>
</tr>
<tr>
<td>1990s</td>
<td>Externalities, non-market</td>
<td>R. Vennker</td>
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</tbody>
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Robust Findings on the contribution of Education to growth and development

(i) Education Earnings

(Psacharopoulos and Tilak 1991) There is a positive correlation between education and earnings. Individual wage earnings systematically increase significantly by increasing levels of education. Earnings rise with increase in education levels, not rarely but almost universally and quite steeply and systematically, in case of the
general population and also of sub-groups of the population – males, females, rural, urban, socially backward sections, etc.

What emerges from the above is the additional investment in education)

(ii) Benefits of Higher Education

Monetary benefits and non-monetary benefits

The average earnings of individuals are closely related to their educational attainment. Those with bachelor’s degree, a post graduate degree provides nearly as large boost in earnings. Such persons with higher education command on the job market represent both the interest on the capital they have invested in education and the fact that they become more productive.

(Howe 1994) reveals a clear relationship between the education level and the employment prospect the highest employment rate is observed among persons with tertiary education, followed by persons with basic education or less.

(Wang 2003) in his study of impact of universities or surrounding cities, finds that proximity to institutions of higher learning seven induce greater rates of jobs. Increasing education is associated with better working conditions, lower disability rates, longer job tenure, more on the job training opportunities and more promotion opportunities. The value of these non-monetary benefits adds to the economic return to education.

Social Benefits

Romer 1998 explains substitution effects. As the knowledge economy increases in importance, the role of human capital may overturn physical capital and labour determining aggregates growth rates across countries. With this background, the acquisition of knowledge capital creates endogenous growth – growth that feeds on itself and economic returns that accelerate.

(Jorgensen 2000 highlights that a major position of 1990s growth was directly attributable to roles played by research innovations at institutions of higher, education and the greater absorptive capacity of a labour force with greater proportions of college graduates.
Solow 1956 using this model Mankiew, Romer and Weil (1992) argue that large part of cross country difference in steady state is explained by a certain measure of human capital using growth accounting techniques.

(King and Smith 1998) estimated that only 1.9 per cent of annual economic growth rates from 1940 to 1980 were non-education related.

(Pencavel 1991) estimates that from 1919 to 1950 only 1.3 per cent of total growth was directly attributable to higher education but higher education accounted for 14.6 per cent of growth from 1973-84.

(GOI 1985-90) Education develops basic skills and abilities of the persons who in turn can achieve targets of growth and development.

XVI. Sectoral Shift towards Manufacturing and Service

(Classicals Fisher 1939, 1948 and Clerk) has disagreement regarding primary force behind structural changes that accompany economic development arguing on Engel’s law, narrate that shift from agriculture to industry takes place as a result of low income elasticity of demand for manufactured goods. However, they have different views on the demand and supply side factors in respect of shift from manufacturing services.

Fisher, on the demand for manufactured goods and high income elasticity of demand for services is seen his argument is based on hierarchy of needs. Clark agreed with the view that demand will increase shift to service but shift of labour force takes place due to high productivity of manufacture goods and low productivity of services.

(Kaldor 1966, 1967) considered manufacturing as the engine of growth. Agriculture being subject to diminishing returns is not able to sustain an increasing level of production and income and therefore manufacturing without such limitations on expansion of production is the key to sustained economic growth. Growth of services, according to him was induced both by requirements of expanding industrial sector and rising levels of income.

(Bamoul 1967, 2001) in his argument towards demand side, with differences in income elasticity of demand is questioned particularly in regard with the shift of
labour force to service due to differential in productivity growth and not due to demand.

*(Victor Fuchs 1988)* agrees with Bomoul and concludes emergence of domination of services sector in US is largely a result productivity differential that shifts and plays a nominal role in this process. Income elasticity of demand for services is only slightly higher (1.07) than goods (0.93) and that of nonfoods is similar that of services.

*(Niti Mehta 2006)* found tremendous imbalances in the levels of development in Gujarat. Lack of higher education and skill formation reduced the capacity of households to take up diversified activities and dictated the choice of occupation. She suggested tightening the implementation of various policy reforms keeping in view the poorly developed districts as well.

Agriculture still holds predominance in the low developed districts of Gujarat, no sizeable investment have flowed into the agro industrial sector. Currently less than 1 per cent of the agricultural produce is processed in the state against 2 per cent in the country.

*(Victor Fuchs)* in his study of 48 US states over the period (1929-65) also shows the lagging productivity growth of the services sector as the reason for rising employment share.

*(Russo and Schetkatt 2001)* in their study used the concept of final product employment in services that could be attributed to manufacturing as it is generated in the services making intermediate inputs for that sector.

**XVII. Historical patterns for development**

Today’s developed countries have followed a common pattern share of agriculture in GDP of such economies have been at a decline in total output, industry registered an increase for a long period, and then has shown a decline. The share of services has steadily increased all through the rate of increase seems to have accelerated in the latter half of the 20th century.

*(Rowthorn and Walls 1987)* points out the period during which industry has shown a decline in its share, is often described as a period of deindustrialization.
(Clark 1984) suggests about the emergence dominance of services in the economies of development countries, is also seen as signaling the dawn of post industrial society.

(Chenery and Syrquin 1975) arguing on this subject, states that the countries should be divided into different groups by size large, small with primary exports and small with industrial exports. There appears no difference in average performance among the nations in three groups except the share of industry begins to use at a lower per capita income levels in larger than in the small countries.

(Perkins and Syrquin 1989) Irrespective the period of different phases of structural changes occurred at the end of twentieth century most developed countries showed a similar structure of their economies. Agriculture contributes less that 5 per cent in GDP industry 25 to 30 per cent and services around 70 percent in all of them.

(Panchmukhi, Nambiar and Mehta 1986) Two propositions have been generally advanced to explain such fast and a historical transition of an economy directly from an agriculture to a service economy, bypassing industrial development. One it is argued that technological advancement over the past few decades have led to increasing demand for services even at a relatively low level of per capita income and also the distinction between product and of per capita income and also the distinction between product and services has become blurred. Movements of people across countries have produced demonstration effect creating of demand in developing countries as in the developed countries leading to a larger demand for and consequently production of services.

(Sabolo, 1975) Elasticity of demand for services has become greater than unity even in countries with relatively low per capita incomes thus leading to a rise in contribution of services in national product.

(Mitra 1988, Bhattacharya and Mitra 1990, Bhalla 2004) have asked and attempted to examine the question “Is India pioneering a new development path which gives primary to services rather than manufacturing as the leading sector (Singh 2005)
(Datta 1989) argues that a good part of the services growth is producer demand induced growth of commodity production has led to rising demand for services like trade, transport communication, banking and insurance and of the output generated in these subsectors growth of services turns out to be no different from that of goods.

(Satishkumar and Mathur 1996) Their analysis for the 1980s decade seems different from that of goods but support the previous author’s (Datta’s) argument, intermediate demand for services declined from 41 per cent in 1978-79 to 38 per cent in 1989-90 while final demand for them increased from 59 to 62 per cent. In any case, reclassification of subsectors help explain growth of services it does not negate their growth itself.

(Goldar 2003, Ghose 2004) During 1990s employment in export oriented industries grew at a relatively high rate of 3.7 per cent with an employment elasticity of 0.48.

XVIII. Regional disparities in Economic Growth:

(World Bank2006) in its report “India inclusive growth and service delivery, building of India’s success” has shown sharp differentiation across states since the early 1990s reflects acceleration of growth in some states and declaration in other. But the worrying matter in the report was, growth failed to pick up in states such as Orissa, Bihar and UP, that were initially poor to start with by which the gap in performance between the rich and poor states widened dramatically during 1990s.

(World Bank 2008) In the growth report strategies for sustained growth and inclusive development has mentioned that disparity in some distribution in India has risen during 1993-2005 which is revealed by feet that Gini Coefficient in this matter has risen from 0.3152 in 1993-94 to 0.3646 in 2004-05.

(The Draft Eleventh Five Year Plan 2007-2012) has also admitted that regional disparities has continued to growth and the gap has widened as the benefit of growth have been largely confined to better developed regions.
Education, Skill supply and labour productivity

(Bsworth, Collins and Vironaue 2007) in their study for the period 1960-2004 on sources of growth in India, focusing on low levels of education attainment of Indian population and workforce. The show that India has just attained the average lead of schooling comparable to that achieved in other Asian countries 25 years earlier. Their estimates in terms of educational attainment still 40 per cent of the workforce is illiterate and those who have completed secondary schooling is just 14 per cent of the workforce, while additional 6 percent are estimated to have university degree.

(Lewin and Coillads 2001) have opined “Modern industry, whether it is manufacturing or services sector like telecommunication, stress on training and skill acquisition on the job. A workforce with secondary education will turn out to be the best bet for such a job market.

(Bagchi and Kurian 2005) In their finding major chunk of investment, domestic and foreign direct investment (FDI) has gone into developed states as Maharashtra, Karnataka, Gujarat, Andhra Pradesh and Tamil Nadu. These states are relatively well endowed states with an educated workforce. The finding is heart felt, because it reflects reality of higher unemployment of secondary educated workers. The increased output growth has not sufficiently absorbed the additions to the educated labour force. Thus suggests a serious mismatch of demand and supply in the labour market for trained workers.

Regional Employment Structure and Per Capita Income

Kuznet Chenery perspective of structural transformation suggests reallocation of labour from agriculture to manufacturing and services as per capita rises.

(Kochhar et al 2006) India’s share of services in GDP has even rapidly from 37 per cent to 49 per cent between 1980 and 1920. Though rise in employment share from 18.6 to 22.4 per cent during the same period is marginal.

(Gordon and Gupta 2004) The increase in labour productivity in the services sector is due to growth in skill intensive services. Such aggregate scenes hide many
regional variations. The regional variation in per capita income should be perhaps do
to uneven spread of service sector empowerment both in quantity and quality. The
states with low productivity may end with low productivity employment that is
actually a spill-over of lack of alternative productive employment opportunities.

(Waizrarg and Wallack 2004) The study examined 25 liberalization
situations but could not detect any dramatic structural shifts in employment shares
across the nine 2 digit sectors.

The late nineteenth and late twentieth centuries shared more than globalization
and economic convergence. The trend toward globalization in both centuries was
accompanied by changes in the distribution of income as inequality rose in rich
countries and fell in poor ones. Between one-third and one-half of the rise in
inequality since the 1970s in the United States and other member countries of the
Organization of Economic Cooperation and Development (OECD) has been attributed
to global economic forces, about the same as a century earlier. It appears that the
inequality produced by global economic forces before World War I was responsible in
part for the retreat from globalization after the war. What does this retreat imply for
the future? Will the world economy once again retreat from globalization as the rich
OECD countries come under political pressure to cushion the side effects of rising
inequality?

Because contemporary economists are now debating the impact of the forces
of globalization on wage inequality in the OECD countries, the newly liberalized
Latin American regimes, and the East Asian “tigers”.

To reach to the real goal for getting the true essence of the subject under study,
it is not only necessary but compulsory to know the view of other researchers, writers,
experts on the subject. In doing so one can know what model, path or statistical tool,
would give feasible and true results. Thus tolerate i.e. views, findings of different
writers is given below. Some writers in Gujarat have also undertaken research in
regional disparities in Gujarat. To name them Indira Hirway on Human development
and regional difference, Ravi Dholakia on Regional Disparities paper, Vinod Shah
on Regional Inequalities, etc. But as this thesis to some extent have proved to be
useful Niti Mehta and Hima Thaker and Shyam R.L. papers have proved to be more
useful in tracking the disparities among regions and in this case, increased
development in socioeconomic activities leads to higher disparities.