CHAPTER - IV

HISTORY OF INDUSTRIAL DEVELOPMENT AND INDUSTRIALIZATION
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4.1. INTRODUCTION:

The emergence of the inter-oceanic sea routes in the 16th century linking the continents of the world and the new world by water transport changed the entire set up of trade, commerce and economic organisation of the world. The old Eurasian land route began to lose its importance and the prosperity and fame of the towns like Kushgar, Balkh of Isfahan situated in the mountainous and desert regions of the interior of the landmass of Eurasia began to decline. Indian and Pacific oceans began to get integrated and unified for the first time in the history of mankind.

4.2. Industrial Revolution:

Industrial Revolution is the name given to the complex process in agriculture and industry which gradually transformed human enterprise and gave birth to the industrial civilisation. The Industrial Revolution was brought about by the great inventions of the later half of the 18th century. The momentous changes and inventions increased production in mining, manufacturing and agriculture. The changes in industry were proceeded by a commercial and an Agricultural Revolution, which from many points of view may be regarded as essential preliminaries to Industrial Revolution.
The inventions were remarkable and followed one another rapidly. The first in order of importance was the application of steam to manufacturers. In 1769, James Hargreaves invented the spinning "Jenny", in 1769 Arkwright produced his spinning machine or water frame, Edmund Cartwright invented power loom, John Kay's flying Shytle etc., ultimately, the effect of Industrial Revolution was to make large scale factory production in the normal type in all industries. In the history of western civilisation the Industrial Revolution accordingly represents a most significant stage of human progress. It did not create but, it furnished much of the nineteenth century.

4.3. Industrialisation:

Industrialisation came into existence after industrial Revolution. "Industrialisation is system of economic development in which the major parts of the national resources are used to a technically up-to-date diversified national industry capable of assuring a high rate of growth for the economy as a whole and of overcoming economic and social backwardness".

"Industrialisation is not merely a technological revolution; it involves profound social changes which must be fully taken into account if the process is to result in higher material standard and a greater degree of human welfare". (U.N. Process and problems of Industrialisation in underdeveloped countries, p 24).

Industrialisation is generally considered as the greatest catalyst of economic growth and development. Therefore, in the context of regional development when it is thought to correct the
regional economic imbalances, setting up of a few industries is considered to be the first Pre-requisite for the economically depressed areas. Industrialisation has proved its worth especially in the developed countries of the world. But, in the under developing countries industrialisation is yet to prove helpful in solving problems like acute poverty, and uneven socio-economic distribution etc.

There has been much controversy in recent years about the industrial future of our country. It favours the maintenance of agricultural predominance in our economic system, on one hand and on the other wants rapid industrialisation. These two considerations justify a detailed inquiry into this question. It is possible for us to pursue an Industrial policy on sound lines unless we are clear as to why and for what purpose we really want to industrialise the region.

According to professor Weber "Skill of Indians in the production of delicate Woven fabrics, in the mixing of colours, the working of metals and precious stones and in all manner of technical arts has from very early times enjoyed a world-wide celebrity". Hence industrialisation is possible for any and every country.

4.3.1. Patterns of Industrialisation:

Patterns of Industrialisation vary from one country to another or from one region to another. i) according to amount of initiative taken by the Government or private enterprise,
Industrialisation may be individual or private, State or Jointly initiated (Mixed economy).

ii) Industrialisation may be Revolutionary as in U S S R and Evolutionary as marked in the United Kingdom.

4.3.2. Processes of Industrialisation:

The society progress from a subsistence phase, through a commercial phase, to an industrial phase. These phases are easily separable. Further the industrial phase involves three stages.

a) Secondary industry concerned with the processing of primary products eg, extracting oil, tanning leather etc.

b) Evolution of secondary industries deal with the transformation of materials. eg, bakery products, cloth, metal etc.

c) Manufacture of machines and other capital equipments, which can not be used for direct satisfaction.

4.3.3. Speed of Industrialisation:

The speed of industrialisation in any region is determined by-

a) The time and stage of technological development.

b) Government policies.

c) It depends on the capital goods and consumption goods industries may have a faster speed of industrialisation.

d) Adequate amount of foreign capital should be available to supplement internal resources.

e) It depends on the low density of population with low ratio to land. Such countries are usually in a better position to benefit from an inflow of industrial capital and skilled labour from abroad.
4.3.4. Factors Inhibiting Industrialisation:

The factors and circumstances which tend to hinder the industrialisation of any under-developed country of an area may be analysed under four broad categories.

i) Economic Environment

Absence of certain basic economic facilities is one of the major obstacles to profitable investment in secondary industry in any region. The factors like inadequacy of transportation, assembling of raw materials and fuel. Location of industries depend on the availability of cost and effective transport system. The shortage of power is also one of the vital element of economic environment constituting serious obstacle to industrialisation.

ii) Socio-Demographic Factors

The social element like entrepreneurial ability, labour and capital conducive to the internal growth of production. Religion, culture, ethnic, tradition, social pattern etc., also pose different problems.

Literacy is important not only for the successful adjustment of the labour to factory work but also for his assimilation of urban way of life.

Demographic aspects like low per capita income, rapid growth of population, shortage of capital tend to add to the difficulties of having and investing enough funds which hinders the industrial development of a region.
iii) Public Administration

An under trained and inefficient civil service man may fail to devise and administer a programme of industrial development. The Government action like sudden and frequent change in the tax rates, foreign trade controls customs or excise duties, strict licensing for industrial enterprises may adversely affect the development of secondary industries.

iv) International Conditions

Shortage of capital goods like new designed machines hinders industrialisation thus, the technological gap between the industrial and less developed regions or countries may continue to exist.

4.3.5. Measures Conducted to Industrialisation:

Several measures and policies have been designed to speed up the industrialisation process. Their applicability and effectiveness, however, differ from one region to another under developed region, depending on its size, resources, industrial status, entrepreneur ability, evolution of suitable institutions to meet the shortage of capital, improving production techniques, and try to start many technical institutions. Above all Government can also play a vital role in the provision of capital by encouraging the participation of the private investors in joint or mixed enterprises.

It may thus, be marked that industrialisation is a process of growth and as such is organically linked both to the social
and economic post and to parallel processes of social and economic development.

4.4. Urbanisation:

Urbanisation and Industrialisation seem to be concomitant, each being cited variously as the cause of the other. It is a fact that economic development is associated with the growth of urbanisation. There is positive co-relation between industrial development and growth of urbanisation. These two processes go hand in hand.

4.5. Industrial Development in India:

Industry, transport, trade and commerce, shipping and other activities were very well organised during Moghal periods. The integrated and co-ordinated Moghal period represented links in the integrated chain from the handicrafts industrial units upon the merchants and traders carrying on the foreign trade. India had a considerable variety of handicrafts and art. These products had a wide foreign market. Artisans worked on their own as well as in karkhanas under master artisans, dealers and financiers. The important articles were cotton (Dhaka muslin), good silk, indigo etc. The development of plantation industries also through threshold of modern industrial development, which started on very modest scale after 1850 on the western and eastern coasts of India in or near the seaport towns of Bombay, Calcutta. Europeans became more interested in indigo, tea, spices, coffee, cotton, silk etc. Which lead to industrial development.

Industrialisation in India started around mid 19th century.
It has increased since independence. Obviously, industries have been installed in rural areas near towns. Technological changes have come with the development of industries and more recently with the development of agriculture. Industrialisation has led to rapid urbanisation in many parts of the country. It is obvious that industrialisation is bound to bring about fundamental changes in the lines of the people of this country, as a result, rapid social change has been coming in such rural areas, where agriculture and industry are two distinct types of economic systems. One being old and the other being most recent.

4.6. Origin of Industrial Development in Karnataka:

Industrialisation a facet of regional economic development, started in Karnataka as early as 1884. After the flow of electricity from Shivasamudram in 1902. It marked the beginning of a new era to the industrial history of the State. Sir M. Vishveshwaraiah was responsible for laying the foundation for a good industrial base in Karnataka. His views and ideas found fulfillment in the establishment of an impressive array of basic and consumer industries dotting the landscape of Karnataka. Thus, national, regional and local interests were concerned with its development. Difference between areas in income and economic growth rates, can often although not simply be associated with difference in manufacturing activity.

Thus, Karnataka was one of the pioneer states in initiating industrial development in India. and has, since then, gone a long way in industrialisation. Karnataka's long history of industrialisation can be attributed to its rich mineral
resources, early hydel power development, vision and foresight of rulers, the colonial influence, technological talent, manpower, and infrastructure. Though the tempo of industrial development has slackened in recent years, the trend now is towards highly skilled electronics and high technical engineering.

4.7. Industrial Development in Kolar District:

Kolar district is geographically located at a distance of 68 km east of Bangalore. This district is one of the backward districts in respect of almost all infrastructural facilities. The district economy is mainly dependent upon agricultural activity. The industrial development in Kolar district is similar to the development of industries in the state because, Kolar district was the first along with Bangalore Mysore to get the benefit of hydel power generated at Cauvery power station at Shivasamudram. Though the district had no thermal or hydro-electric power production unit, the study area was among the first to get electricity on account of the gold mining industry.

The main work of mining started in the year 1789 by Mr John Taylor, a young mining engineer of Norwich. He conducted mining operations throughout the world. The development and management of Kolar Gold Fields were started by a grandson of the founder and the efficient manner in which it was continued resulted in industry becoming the largest and most successful commercial enterprise in the Mysore state (karnataka).
Kolar district occupies the place of pride in the industrial fields today, and largely because of the progress it has made with the commencement of gold mining operations, that has come to known as Kolar Gold Fields.

Apart from Gold mining industry the district is rich in livestock, horticulture and sericulture resources but lags behind in agriculture as it is a dry region, and also the absent of any perennial rivers.

Industries in Kolar district are mainly concentrated in Bangarpet, Kolar, Chickballapur, Chintamani and Gouribidanur taluks. However, there is not much on records to show the nature of industries that flourished in the district before the advent of the modern age, but it can be presumed that the rural parts in the district have their own activities for the development of such of the cottage industries whose product formed a ready market. The manufactured wares consisted of handloom goods including blankets of coarse and fine varieties, bangles, sugarcandy etc. Wool weaving occupation has been put on a firm foundation.

4.8. Location of Industry:

An Industrial location theory can be defined as an endeavour to account for in a consistent, logical manner the locational pattern of industrial activity and the manner in which industrial regions are interrelated. Both geographers as well as economists have made significant contributions to the analysis of industrial location. The geographers by and large have adopted the initiative conceptual base and case studies approach to arrive at some generalisations about the industrial locational patterns.
Since the beginning it has been noticed that certain areas are very much attractive to the concentration of industries. This is mostly because of the advantages that the region offers which fall into a number of categories, such as natural advantages which include the suitability of site, favourable climate, easy access to the resources of power and raw materials etc. These natural advantages are reinforced as the area develops by the acquired advantages which include efficient transport facilities, commercial services, skilled labour, for the location of any industry in any particular region it must enjoy comparative advantage over other industry similarly attracted.

There are certain essential factors which effect the location of industry, they are 1) Geographical factors and 2) non Geographical factors.

Geographical factors include releif, climate, raw materials, transport etc.

non- Geographical factors include historical, economical, social and political. These factors vary from region to region and industry to industry. Hence, an industry's location depends on three main variables they are capital, labour and raw materials (Fig. 14).

4.9 Conclusions :

Thus, industrialisation by virtue of being a key to economic development of any country is regarded as a catalyst to accelerate the change in every walk of life. Every nation plans to set up more and more industries so as to eradicate the
Variables in industrial location.

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 transportation inputs

 assemble costs

 materials inputs

 the process of manufacturing (value added)

 the product output

 the factors of production

 the three major decisions:

 technique

 scale

 location

 FIG-14
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poverty, to raise the standard of living of its people by increasing per capita income and to gear up its prestige which can be attained only through development of industrial sector.

With the growing economic activities, the attention of scholars was diverted towards the geographical study of industries with respect to their location, resource base, infrastructure, are allied developmental aspects.

Despite the ride of entrepreneurial community as a self perpetuating process, the growth of business into the border areas reflect the specific nature of the urban space economy which involved drastic increases in the market, Potential and labour needs of small firms, as they form a chief source of income.