Chapter - I

INTRODUCTION

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Appraisal of the problem:

1.1) Introduction:

The term 'Industry' which is loosely used in common speech describes a wide range of activities and has many meanings from work performed for economic gain to operation by which raw materials are processed and goods produced mean any branch of productive work, whether it belongs to the primary, secondary or tertiary activities. It is in this sense that the word "Industry" is applied in most of the population census. On the basis of this meaning industry can be divided into three tertiary. Which have many sub divisions amongst them again.

An industry is regarded as a homogeneous group of enterprises in several of companies.¹ Homogeneity being measurable in several ways as indicated below. A company, business, firm, concern or enterprise is an association of persons united for common purpose.

Generally the word industry can be taken to mean any branch of productive work. Whether it belongs to the primary, secondary or tertiary activities.

1.2) The term 'Industry' is often used by itself to denote manufacturing.² The term "manufacturing" includes those activities by which man changes the form or nature of raw materials converting them into more useful products. These transforming operations are conducted in factories to which are brought raw materials from various source regions and from which go finished products to diverse market regions.³

1.3) The processing of raw materials to exchange its value is another sense in which we are the term 'industry' There fore on the basis of this meaning industry can be classified into four groups. Extracting, processing, assembly and servicing.

1.4) "The processing of new materials to exchange its value" is another sense in which we use the term 'Industry' therefore, on the basis of this meaning Industry 'can be classified into four groups - extracting, processing, assembly and
servicing. Each group requires specific inputs (raw material, capital, labour, water) from specific source for its operation and provides specific outputs for purchase in specific markets and market areas.

1.5) Besides above, the terms "industry" refers mainly to manufacturing activity and the essential function of it is the transformation of material or materials into a product which is of greater value than the original materials and the purpose of manufacturing industry is to alter and process materials so that they serve new ends and satisfy different requirements. The term Industry refers mainly to manufacturing activity. Agriculture, mining & most other services are excluded from it. There fore agriculture, mining and most of the services are excluded from the industry And it is in this sense that the term "Industry" will be mainly used in the present study.

2.0 Industrialization in Modern Society:

2.1. Industrialization has seen defined as a process in which changes of a series of strategically production functions are taking place. It involves those basic changes that accompany the mechanization of an enterprises, the building of a new industry. The opening of a market, and the exploitation of a new territory. Industrialization is also treated as a process in which the economic gains of industrial process. Continuously created and wholly or partially realised.

2.2. Industrialization means the growth manufacturing Industry. It is a basic process for achieving. Rapid developing through necessary a regional natural resources and rendering them into production wealth. It is thus a part of the economic development which involves raising standard of living through a steady increase in the efficiency of factors of production.

2.3) Industrialization has been treated by Listoirghs as originally an European phenomenon. Sometimes, more narrowly as a British phenomenon which made its decisive appearance in the second half as the 18th century that simply caught on elsewhere while industrialization began in the later half of the 19th century. At present India as among the ten largest industrial nations in the world.
2.4) Industrialization is not an end in itself of course, but a means to raise living standards. The per capital income of the people of the country. Therefore Government and all other involved in the comparing to solve problems of under developed countries through industrial growth to consider general. Industrialization aims and problems and every specifics projects in terms of value to the economy.¹¹

2.5) Industrialization raises the economic status of a society. Therefore, in any society or region or country industrialization can be very effective tool to achieve economic development.¹² Actual process of industrialization brings profound charges in the pattern of living which calls for considerable social adjustment and adoption. These adjustment among other factors depend upon the standard of living in the agrarian society, population and layout of factories and worker houses and the nature of pre industrial culture.

Besides, industrialization directly influences commerce and trade, communication, human resources, urbanization service centers, economic structure and financial resources. Availability of technical assistance indigenous research and development efforts of a society or region or country.

2.6) The most important role of industrialization will be that of absorbing the human potential (growth of population) to reach a satisfactory level of population. However it is also necessary that there should not be reduction but an increase of agricultural production through one charization. It is also necessary to remember that problem of poverty and unemployment.

National defence and economic regeneration in general can not be solved without industrialization.¹³

3.0) Stages of economic Development (Rostow)

3.1) Economic development which is generally measured either in terms of per capita income or in terms of rate of growth, can be viewed the economy as the process of the transformation of the economy from its present level of technology to a better technology or as the process of expansion or improvement of the
basic productive elements - population - natural resources. Capital accumulation labour and technological progress.14

3.2) Number of theories15 and models of the economic development and economic growth have been put forward by difference economics. Many economists especially German believed that growth occurs in stages.16 Among the stage theories, Rastow's work is the most recent one. Rostow's economic development theory was propounded with special reference to under-developed countries. According to him it is possible to identify all societies in their economic dimensions. As lying with in one of the five stages.

1) The traditional society.
2) The pre conditions for take.
3) The take off phase.
4) The drive to maturity.
5) The stage of high communication.17

A traditional society has been defined "as one whose structure is developed with limited production functions based on pre-Newtonian science and the technology and as pre-Newtonian attitude towards the physical world."18

The second stage is a transitional area in which the pre-conditions for sustained growth are created. The pre conditions for sustained industrialization according to Rostow, has usually required radical changes in three non-industrial sectors : first a build up of social overhead capital, especially in transport in order to encourage the extreme of the market to exploit natural resources productivity and to allow the state to rule effectively second, a technological revaluation in agriculture so that agriculture productivity increase to meet the requirements of a rising.

General and urban population third an expansion of imports, including capital imports, financed by efficient production and marketing of natural resources for exports.19
The take off the great watershed in the life of a society when growth becomes its normal conditions forces modernisation counted against the habits and institutions. The drive to maturity is the period when a society has effectively applied the range of modern technology to the bulk of its resources.

In the age of high communication the balance of attention of the society is shifted from supply to demand, from problems of production to problems of consumption and of welfare in the widest sense.

3.3) According Rostow India launched her take off during 1950 while emotional findings suggested that Indian economy entered into the stage of take off in 1954-55. After the take off Indian economy did not progress satisfactory and as a result real gross national product and reach national income increased only 2-3 % during the year 1955-63. Indian economy win drive to maturity by the end of thrusts five year plan i.e. by 2016 A.D. Attaining maturity by thirteenth plan is only rough estimate and to dogmatism is tustitled about the exact year of achieving.

3.4) A few characteristics of the marathwada region clearly indicate that marathwada region is still in the stage of pre condition for take off except Aurangabad, Jalna, Nanded and Latur cities. A few enterprises are energizing in the region. A few industries mainly agro based appear in the region and new production functions are adopted in agriculture and industry out of 132 large and medium scale industries 78 industries are concentrate in Aurangabad district. All these characteristics indicate that the economy of this region has entered the stage of pre-conditions for take off phase.

4.0) **Comparison of the sector of occupation**:

4.1) Occupation refers to a persons trade or processing or the type of work in which are is engaged such occupation structure of any society or nation is related to a number of factors. The basic foundation is laid by nature and the variety of physical resources good land for agriculture, trees for foreseeing, rich geological strata for preparing bricks etc. While commercialization in the use of
these primary resources diversities the occupational structure and industrialization bring in further diversification by creating a variety of additional jobs.\textsuperscript{22}

4.2) As there are various occupation and their types and number highly very from nation to nation region to region, we may broadly classify them into three sectors viz. Primary, secondary and tertiary based on the nature of economic activities. In the primary sector of occupation the chief factor of production is land and production involves the direct extraction of some useful substance from the physical environment.

The secondary sector of occupation involves the process of converting raw Material into final products which is of greater value than original. While tertiary sector of occupation involves both production and exchange and both (secondary and tertiary) sectors of occupation are characteristically lesser user of land as compare to primary sector of occupation.

4.3) A major geographic difference between primary, secondary and tertiary sector of occupation lies in their difference distributional pattern. The primary sector of occupations is spread mostly in villages, where as secondary and tertiary sectors of occupation tread to concentrate in towns and cities.

4.4) The primary sector of occupation is dominant in the underdeveloped world, but less prominent is developed areas and less well paid than the secondary and tertiary sectors. But it is also true that through the primary occupations continue to dominate the labor force, they are losing their pre-eminence as explores in those countries which have succeeded in modernizing their economics. And only in the less developed by primary sector of occupation\textsuperscript{23} The properties of workers engaged in the secondary advanced occupation is highest in technically advanced countries and lowest in underdeveloped countries. However, the absolute number of secondary workers in some of the currently under developed countries. has also risen fairly rapidly.\textsuperscript{24}
5.0 Secondary Economic Activities and Economic Growth:

5.1) An increasingly high relative proportion of workers engaged in secondary economic activities which is characteristic of the modern world's a symbol of economic metamorphosis. Similarly the growth of secondary sector represents mainly string the wing of the economic potential of a country and flowering a national economy.25

5.2) Economic growth is measured by rising per capita income and output per worker which are basically dependent upon the national income and gross domestic product. But secondary economic activity achieve rapid economic development, relatively higher national income and gross output of the nation through harnessing a nation's natural resources and rendering then in to productive wealth.

5.3) Besides above modern secondary economic activity yields a different type of out-put and employees a larger production of the population engaged in industry is responsible for the development. Economic growth is also dependent upon the absolute amount or regional earnings and development of tertiary activities. It seems is nearly all countries secondary economic activities supply larger absolute amounts of national earnings.

6.0 Resource Utilization

6.1) Resource is a term applicable to a wide range of environment attributes which are of potential use to man either directly as an input to the agricultural or industrial economy of indirectly by exchanging the resource for monetary assets.26 All these resources weather physical or human can be utilize upon which man develops his economic or potential.

6.2) The strength of nation's social, economics or potential is chiefly determined by the resources they command and their capacity to utilize these resources, more presence of resources in any region does not necessarily make for their development in an economic sense. Therefore, whatever, resources the region possesses they should be utilized effectively,27 and optimally inspite of well
endowed with natural and human resources Marathwada still remained backward mainly because of under utilization of the present resources.

7.0 Necessity of Integrated Approach

7.1) We need to adopt an integrated approach the maximum and different utilization of resources of course such an integrated approach is necessary for changing the attitudes of people towards the ways and scope for resources utilization of the region ultimately makes. The region industrial development of the region helps for the industrial development of the region.

7.2) As the regional development is primarily dependent upon the maximum and efficient utilization of all types of available resources, attention should be paid to the utilization and development of each of the resources of the region but there is necessity of an integrated approach for studying the above aspects.

8.0) Geography is an Integrative Discipline

8.1) In this modern world knowledge of each discipline has been expanding day by day. Discipline have become inter related and inter-dependent to one another. Several new branch have been developing and each branch is inter-related and inter-depend to one another for the further exploration of knowledge.

8.2) It is widely accepted by most of the geographical that geography is an integrative discipline which bridges the built between the natural sciences on the other. At present geography, no doubt, is a widely ranging discipline which help to justify, sir Hanford Makinders contention that 'geography' is once an art a science and a philosophy.28

8.3) Every science, studies a single phenomenon as a time eg. Botany, vegetation, zoology-animal, geology rocks and minerals etc. but geography is the only science which studies all the phenomenon that are distributed on the surface of the earth land water climate, minerals, forest, animal, population, settlement various crops, economic activities which have later on become distinguished sub-branches of Geography.
8.4) In the beginning knowledge of the geography was explored through the two branches that is human geography and physical geography. But later on these branches have given rise to the several sub-branches which been clearly distinguished from one another, how ever they are closely integrated and interdependent. In this sense geography is an integrative discipline.

9.0  **Industrial Geography**

9.1) Industrial geography is one of the youngest and well established branches of economic geography. After the first world was and second world was rapid industrialization has started in most of the countries of the world. The traditional and village industries slowly started to disappear and several new types of industries came in to existence besides small scale industries have also expanded considerably due to this the industrial structure has become more divested and expanded. As result most of the sociologist, economists, regional planners and economic geographers are attracted towards the new study of industries with the new in the development plans of the country. Economic geographer's started to study the new discipline i.e. industries with related to geographical factors.

9.2) The location factor is determined either by economical conditions or by natural conditions or by both. However there are other factors also which have some bearing on the location of industries. Economic geographers can sour out the most favorable areas for any production. He can also find out the geographical distribution favorable locations factors which go to develop the industries even the industrialist's ultimate sources will depend upon his behavior in the geographical environment.

9.3) How ever the studies of industries from geographical point of view win until 1950 were more concerned with theoretical matters most of the work till period was done in the context of industries location as a response to the physical environment concepts in industrial geography started only with the work of Harshorne, Walter christaller, George Renner and E.M. Rawston.
9.4) What is "Geography of manufacturing" of what features of manufacturing are significant from the viewpoint of geography? The geographer is interested primarily in three aspects of manufacturing: its pattern of distribution, its relationship to other elements with in its region of location and its relationship to other region.\(^{35}\)

9.5) Industrial geography is essentially associated with productive efforts of man for manufacturing the things to satisfy his needs. Therefore simply defined industrial geography is the study of the distribution of manufacturing industry. In a bracer sense "industrial geography is concerned with the interpretation of present distribution pattern. Global continued, national or regional" The geographic approach using the map as the chief tool of analysis is eminently suited to this type of study.

10.0) Slow growth of Industrial Geography of India

10.1) Industrial geography a young branch of economic geography in the true sense, came into existence in the beginning of 20th century. In other nations systematic study in the field of industrial geography started with the workers of chirstaller, W. Rawstion, E.M. Renner, R.T. Harshare and Smita D.M. on the century systematic contribution in this field have come quite late from Indian geographers.

10.2) Studies in the field industrial geography by Indian geographers can be traced back to early parties the 20th century. Before independence very few work was done in the field of industrial geography by Indian Geographers in which mention can be made of works of Iyengar C.V.V. (1930)\(^{36}\), Rao R.H. (1930)\(^{37}\), Loknathan P.S. (1931), 1936 and 1939 \(^{38}\), Kalyan Sundaran (1934)\(^{39}\), Prakashrao V.L.S. (1941)\(^{40}\), and Ghosh S.C. (1946)\(^{41}\). The serious attempts was made by prof. V.L.S. Prakashrao to understand the role geographical factors in the location of industries.\(^{42}\)

The above mentioned trend of research in the field it industrial geography before independent shows that the spatial distribution of industries and geographical
factor operating in their location and the features of industrial land-scope have been systematically analysed by the Indian Geographers.

10.3 But after the India affianced independence many studies in the field of industrial geography have been undertaken by the Indian geographers. Therefore we may say that a dominant trend of research in the field of industrial geography in India has been evident in the post independent period. Geographers in the field of "industrial Geography" reveals the following characteristics.

I) A few geographers produce areally geographers analysis of locational aspects.

II) A few geographers have analyzed different aspects of concentration and dispersal of industries on a regional basis dispersal of industries on a regional basis and to religions outstanding zones of the country.

III) A number of geographers have emphasized on factors which have promoted industrial development in different regions of the country and have studied present industrial structure problem of growth and prospects of development by selecting individual industry.

Such as sugar industry, cotton textile, tea, coffee, Rubber, plantation and processing industries the copper, the aluminum and iron and street industry while a few geographers have studied problem of the small scale and cottage industries mostly typical in nature.43

10.4) Of course, many areas of research in the field of industrial geography have remained untouched by the Indian Geographers. Therefore it may be said that there are large and serious gaps in the study of industrial geography. A large programme of research based on new techniques will have to be promoted to highlight the contribution of geography to the planning of industries in India. Studies in industrial geography need considerable reorientation in both theoretical to applied aspects.44 Systematic studies of industrial location resource base, inter industry transaction with in and between location and oriented studies of different industries from the view point of industrial and
regional development yet have to be done by the Indian geographers in the field of industrial geography.

Likewise there is a need for formulating models of industrial complex and different resource regions as a part of the strategy in the formation of economic regions. For this purpose a beginning has to be made in studding problem of industrial locations and industrialization in a regional farm work.

11.0 Industrial Geographic Approach:

11.1) In the field of industrial geography we can study in depth the resource based. Industries particularly those related to agriculture, forest minerals etc. such a study is very essential for the backward regions which are for away from industrial resource development, for the industrial and resource development of any region. Industrial geographic approach is desirable particularly in a backward region like Marathwada.

11.2) Traditionally there are two approaches in the industrial geography for studying the distribution of manufacturing industry by industry and by region. First approach is to accurse for difference in the development of particulars industries as between nations. While the second and more useful approach is to analyze the distribution of industries with in a smaller area for example a nation, state or a region, The former is analytical while the later is synthetic.

11.3) Due to the first approach industries geography becomes relationally precise study of the distribution of factories that collectively make up in industry by considering the distribution of many plants in several industrial areas of nations. It becomes possible to formulate general principle of location. Such geographical about manufacturing industry may prove meaningful.

However there are several types of industries and each industry has its own locational characteristics. There fore, most generalization that can be made about the economic geography of one industry are irrelevent for the other industry and vice versa. Therefore synthetic approach of industrial geography becomes sometimes meaningful and more useful.
11.4) Though both approaches taking individual industries one by one identifying different areas in which they are located and secondly taking regions one by one and consider different industries are useful for studying the industrial geography of the Marathwada, the later approach is more useful and meaningful for the under developed an area like the Marathwada region.

12.0 Aims and objectives of the present study.

12.1) To study the availability of infra-structural and geographical factors on which the development and growth of industries depend.
12.2) To map describe and interpret the present distribution of manufacturing industries in the Marathwada region.
12.3) To study the trends in industrial development in the Marathwada region specifically from 1960 onwards.
12.4) The analysis of the existing industries (classifying them in to major groups)
12.5) To study the resources potential from the view point of industries to set up in the region.
12.6) To study the efforts for the growth of industries by industrial estates and Government agencies.
12.7) To find out the indications of the future development of industries and the prospects for the industrial growth in the Marathwada region
12.8) In addition an attempt has also been made to give a critical account of different resources (i.e. landuse, Industrial cropping pattern, minerals fisheries, water resources, human resources etc) as a base for industrial development.

13.0 Methodology :

13.1) As this work has to be done single handily. I hope the readers will take into consideration is obvious limitations. It was not possible to collect in each case the primary data regarding the industrial units. Therefore, secondary data was obtained from the Government officers and seven district industries centres.
13.2) The study region comprise of seven district. Therefore, taluka is selected as a suitable data base for studying the region. In a few topics due to the non-availability of taluka level data district is taken as unit.

13.3) Various types of Industries are established in the Marathwada region in which each has different types of distribution and locational pattern. Therefore, for the study of special distribution and locational patterns of industries, all the manufacturing industries of the region have been classified into ten major groups on the basis of original standard and natural resources consumed by manufacturing industries and final products of the manufacturing of industries.

13.4) Different geographers have used different criteria to measure the level of industrialization. In the present study, to measure the level of industrialization of the Marathwada region two variables have been used. A) the number of manufacturing industries and b) persons employed in the manufacturing industries.

There are two reasons in using these to variables to measure the level of industrialization. One of the two reasons in the case of Marathwada region only these two types of data are available, except in the case of small scale industries. Another reason is that by adopting these two variables together an index arrives near to reality and gives more accurate picture of the level of industrialization.

13.5) The study of distribution and scope of different types of industries are mainly based on-

1) Local and regional resources.
2) Finished products, by products and waste products of existing industries.
3) Ancillary demands of existing large scale unity.
4) Studies made by several institutions and organization like district industries centers, Maharashtra chamber of commerce, Indian chamber of commerce, Maharashtra industrial development corporation, Marathwada development corporation.
14.0 Sources of data and information used for the present study:

It is necessary to list in detail all the sources from which a fund of information and great deal of data are derived during the course of the research work.

Statistical data used for the present study have been collected from the different sources. The data regarding small-scale industries have been collected during the field work period from the officers of "District Industries centers" of A'bad, Jalna, Parbhani, Beed, Nanded, Latur and O'bad. Data of factory industries have been taken from the officer of the Deputy Inspector of industries, A'bad region during the field work. It has been also taken from the socio-economic reviews and district statistical abstracts of A'bad, Jalna, Parbhani, Nanded, Beed, Latur and O'bad. Data of Khadi and village industries Khadi and village industries officer of every district. Data of occupational structure population, agriculture, forest products, fisheries, industrial crops, transportation and communication etc. are taken from the "Soci-economic review and district statistical abstracts of A'bad Jalna, Parbhani, Nanded, Beed, Latur and O'bad, statistical abstracts of Maharashtra as well as from the hand book of Maharashtra and joint directories office of statistics and economic. A'bad.

Statistical data regarding finance and other economic aspects of industries have been taken from the annual reports of Maharashtra state finance corporation development corporation of Marathwada. Maharashtra small scale Industries Development Corporation, Maharashtra Industrial Development Corporation and Statistical Abstracts of Maharashtra etc. Statistical information regarding industrial estate and industrial units of it have been taken from the M.I.D.C. office, A'bad and MDC office A'bad.
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