CHAPTER - II

OVERVIEW OF INDUSTRIALISATION OF THE INDIAN ECONOMY

2.1 Introduction :

The importance of industrialisation for achieving rapid growth and economic prosperity has long been recognised. Industry led growth strategy has been used as a developmental paradigm by some of the developing countries. These countries opted for a kind of industrialisation, through following different approaches, in which the widening of industrial base and the consequent ability to produce a very broad range of industrial products were conceived as a core strategic elements. Industrialisation, as a concept, is difficult to define According Harry G Johnson, "Industrialisation, defined broadly, involves the organisation of production based on the principles of specialisation and division of labour among enterprises as well as within them, necessiated by as well as resulting in the application of new technology, mechanical and electrical energy to maximise returns and minimise per unit cost of production".[1] The Industrialisation involves those basic changes that may accompany the mechanisation of enterprises, the building of a new industry, the opening of a new markets and the exploitation of a new territory.

Many times these factors work in combinations and these combinations vary from one economy to another The above definition broadly explain the industrialisation

in developing economies. In general, when various inputs or raw materials are converted into a final product by the factors of production, with the aid of large number of machines can be referred as a form of productive activity and when this process takes place on a large scale it is known as industrialisation. Therefore an industry is characterised by the conversion of raw materials into final product with the help of human efforts working with machines which themselves are the product of labour. Industrialisation can also be referred to widespread existence of modern large scale industries producing large quantities of goods of various types with the help of heavy and complex machinery and a large number of workers. Simultaneous existence of medium and small-scale industries, generally using machinery, power and employing a large number of people in such industries is foreseen, and these industries are spread over wide regions all over the country. Rest of the chapter is arranged in the following manner. Section 2.2 explains the process of industrialisation and some development strategy adopted for the economy. Section 2.3 sketches the path of Indian industrial development. Section 2.4 presents Indian experiences and the development of industrial base. Section 2.5 summarises the growth performance of Indian manufacturing sector. Section 2.6 is observations of this chapter.

2.2 Process of Industrialisation :

With the advent of industrial revolution in 18th century, the developmental process was completed in a quick manner and have dominated in international scene for a long period. Because of various economic problems in the Asian countries,

there was a general awareness for the industrialisation of these countries after the II World War and this was made possible by their political independence. The industrialisation is expected to improve productivity of labour and incomes of the people which leads to a higher standard of living which in turn results in further industrialisation.

Because of low level of capital formation and low level of technical skills, the rate growth of industrialisation was traditionally low in some of the developing countries like India Even the availability of natural and human resources cannot alone speed up industrialisation process. Proper utilization of available resources, which include proper allocation of resources and efficient utilisation, should be an integral approach towards industrialization process. In an underdeveloped economy like India, the level of industrial development is observed to be low due to lack of natural resources on the one hand and improper (inefficient) and under-utilisation of the available resources on the other. To promote industrialisation, technical know how is essential. This aspect has been first introduced to economics by Schumpeter. Schumpeter believes, "the slow and continuous increase in time, of the national supply of productive means and savings is obviously an important factor in explaining the course of economic history through the centuries, but it is completely overshadowed by the fact that development consists primarily in employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increased or not"[2]

Underdeveloped countries do not possess the ability to develop their own technology. Often these countries prefer labour intensive techniques of production to

production to provide employment to their rapidly growing labour force. But industrialisation in most of developed countries introduced machines i.e. capital intensive techniques of production. Large scale production and increased productivity can be brought through efficient techniques of production and wide application of machines. Therefore, to achieve rapid industrialisation, sincere efforts are needed in developing countries to mechanise the manufacturing processes. Accordingly it becomes conditional to adjust the labour force to the technological evaluation of the manufacturing sector. Domestic R & D is expected to adopt the new technology according to the demand and supply conditions.

For rapid industrialisation, the structural change of an economy in the process of development is a basic requisite. For developing countries to provide strong base for further industrial development, the additional investment is essential in the infrastructure. However the return on capital invested in infrastructure is slow and even low. In some cases, the return is indirect and implicit. Therefore, a developing country has to make choice between alternative avenues of investment. Every country has to take steps to develop the necessary infrastructure to boost further industrial development. At the same time one has to keep in view the alternative avenues whose priority is determined by the path of development adopted by each country.

2.3 Paths of Development :

The fundamental objective of any economic system is to obtain the greatest possible amount of human satisfaction of its people, by proper utilisation of available

resources. But there are wide differences among different countries in achieving this goal. It depends upon the path of development which a country opts for and the economic system it follows. Modern economists suggest two types of institutions for faster economic development. The type of institution could be either market mechanism or central planning by direction. The capitalist economy represents a system of economic organisation in which the means of production are owned by individuals. The use of resources are guided by economic considerations of which the motivation of profit is one of the main considerations. Thus the essence of the capitalist economy is the private ownership of capital. Through market mechanism, the goals are achieved in the system and the system in general leads to efficient allocation of resources provided there are no market failures. Most of Western economies including America followed market system for faster industrial development.

The socialist countries selected the path of economic development through planning for faster economic and industrial development. Planning by direction refers to a system of planning underwhich the state has complete control over the means of productions. In a socialistic set up, the various units are required to perform assigned roles as directed by the central authority The resources which are necessary for the purpose, both material and financial, are allocated in an administrative way[3]. Planning by direction had a highly successful record in socialistic countries It transformed low developed economies into reasonably developed countries in a short period. However this pattern of development have raised a number of queries after the collapse of U.S.S.R, fall of eastern block and marketisation of China.

During the last 50 years, there are countries following the paths of development both in terms of planning and market systems. The type of planning which has features of both capitalism and socialism is widely termed of mixed economic systems and, it contains various elements of both private ownership and state enterprise. The Indian economy has followed a mixed economic system. Since the planning era, Indian planning had been a novel experiment, which laid emphasis on both public sector and private sector. The growth of public sector and economic planning made the development experience of India distinctly different from the capitalist economies of the West in the earlier phase of their development. The second Five Year Plan summed up the objectives of the planned development as "Socialistic pattern of society", implying that "the basic criteria for determining lines of advancement not be private profit, but social gain ---- "[4]. Presence of a large and dominant public sector in India along with free enterprise makes the character of the economy as mixed. Market mechanism has a predominant role in the Indian economy both in product and factor markets. In 1951, Industries Development and Regulation (IDR, 1951) Act was used as the principal instrument for channelling the investments in the industrial sector in socially desired directions.

2.4 Indian Experiences :

2.4.1 Evolution of Industrial Policy :

At the time of independence, the Indian Economy was very poor and industrially backward. The policies of the colonial government were designed to benefit British at

the cost of India. By denying the opportunity to develop economically, British effectively de-industrialised the Indian economy which had a large share of labour force engaged in industry. Traditional industries were destroyed and millions of Indians were thrown out of employment. Some modern manufacturing industries were developed, but it could not prevent the fall of proportion of people dependent on industry[5]. Statistics reveal grave picture of what, India inherited from the British. At the time of independence, industry and mining accounted for only 17% of national income and employed only around 9.5 per cent of total work force. Agriculture share was 49 per cent in national income and employed 71 8 per cent of work force[6].

The relative backwardness of industry at the time of independence in India can be judged from the industrial output of 1948-49 which accounted for only about 6.6 per cent of national income. The textile, jute and other handicrafts industries dominated the scene at the time of independence. In addition, some new industries like ship building, diesel engines, locomotives, automobiles, bicycles, sewing machines etc. came up immediately after independence. Uptill, 1951, when the First Five Year plan was formulated, the emphasis for industrial development in India was more on consumer goods industries. There were some basic capital goods industries and intermediate goods industries which lagged behind in supply and technical aspects. However, cotton textiles and Jute manufacturing were dominant industries which even contributed to the foreign trade of the economy.

The government called an "industries conference" in December 1947 to evaluate the existing capacity of industries and to lay down future course of development. The

policy planners decided that India should go for rapid industrialisation because of the fact that the agricultural sector could not meet the growing demands of increasing population.

The long period of economic stagnation called for a proper strategy to rebuild the economy at a rapid speed. Planning was accepted as the official development strategy and in 1948, India had its first industrial policy resolution. The planning commission was set up in 1950 to formulate five year plans. The planning commission envisaged a predominant role for the public sector and for the private sector, the role envisaged was smaller but important. The commission was assigned the responsibility of identifying the priorities of production and investment in different areas.

The importance of industrialisation as a means for achieving rapid growth and prosperity has all along been recognised in the economic planning as a development strategy for independent India Indeed the objective has been not only to achieve rapid growth and prosperity within the framework of self reliance under the direction of the public sector, but to ensure improved living conditions of masses. The policy framework was respired to play a critical part in bringing about such economic transformation. For increased employment opportunities, for widely dispersed growth, for making optimum use of unused or underused natural resources, for raising the income levels, for stronger infrastructural base for technological upgradation etc., industrial policies should play a crucial role. Thus in the beginning of planning era the establishment of large scale industries on a big scale and simultaneous development of traditional industry became necessary The more comprehensive policy formulation to

achieve this combination was adopted during the second five year plan with the announcement of Industrial Policy Resolution of 1956.

Inspired by the advice of P.C. Mahalanobis, the strategy of state-led investments in capital goods sector was accepted. The Industrial Policy Resolution of 1956 (IPR of 1956) also coincided with the second five year plan. The main objectives of the IPR 1956 are stated to be the following.

(a) To accelerate the rate of economic growth and speed up industrialisation.

(b) To develop heavy industries and machine making industries.

(c) To expand public sector.

(d) To build up a large and growing co-operative sector.

(e) To reduce disparities in income and wealth.

(f) To prevent private monopolies and concentration of economic power in different fields in the hands of a small number of individuals.

It is seen that the IPR of 1956 had more than one objectives and policy resolution formed the basis for the future industrial development of the nation. However, few minor changes were incorporated into the policies which are announced latter depending upon the structural changes in the industrial sector.

Industrial policies and Five Year Plans reflected the strategies of industrialisation The First Five Year Plan assigned priority to the agricultural development Accordingly, in the beginning, most of the industries were based upon the processing of primary agricultural products. The emphasis was also given to set up

basic industries which would provide power and irrigation facilities. The Second Five Year Plan accorded higher priority to rapid industrialisation with particular emphasis on the development of basic and heavy industries so as to strengthen the industrial base of the country. High priority was given to the rapid expansion of iron and steel, non-ferrous metals, cement, heavy chemicals and other important industries. The development of heavy industries was to provide a wide range of machinery and capital equipment for the further industrialisation. In the absence of these industries, the economy had to depend much on imports for capital goods.

Table 2.1 : Breakup of Investment in the Large Scale Industries During 1956-61

(Rs. in crores)

Industry	Public Sector	Private Sector	Total
Producer's goods	463	296	769
Industrial Machinery and Capital goods	84	72	156
Consumer goods	12	167	179
Total	559	535	1094

Source : Government of India, Second Five Year Plan document, p.416.

It could be observed from the Table 2.1 that the total investment envisaged in producers goods industries Rs.769 crores which is more than four times higher than proposed plan investment in other i.e consumer goods and industrial machinery categories. From the above Table, one can conclude that the substantial widening

of industrial base has taken place towards capital goods industries during second plan itself. Consequently, the country was in a position to produce a very broad range of consumer, capital and intermediary goods.

The Third Five Year Plan emphasised the establishment of basic capital and producers goods industries with special emphasis on machine building industries, acquisition of the related skills, technical know-how and designing of the capacity. Therefore, within three plan periods, the industrial structure of the country has undergone a radical change and has become diversified, covering the entire range of consumer, intermediate and capital goods industries. India has made remarkable progress in capital goods industries and built a large body of technical and scientific personnel and work force with various industrial skills in which the country has become more or less self-sufficient by early sixties. In the course of development self reliance and import substitution became a major policy.

2.4.2 The Policy of Self-Reliance and Import Substitution :

Adhering the policy of self sufficiency, Indian development strategy had implemented policy of import substitution Self-reliance has been a principal objective of Indian industrial planning introduced during the Third Five Year Plan (1961-66). With the above objective of self-reliance, export front was neglected. However, in physical terms, the policy of import substitution achieved good results. There is extensive evidence which showed decline in import ratios of the Indian industries. Meanwhile the high cost industrial structure reduced the competitiveness of Indian

exports. The functioning of the protective trade and implications of this for cost and quality aspects of the Indian industry has developed its bias against exports which were well explained by Bhagwati and Srinivasan (1973)[7]. There was total control and curb on import of consumer goods.

The large proportion of domestic infant industries neglected economic efficiency in production. It would be necessary to spell out the degree of protection, time period and other measures which could encourage international competition. Only during Sixth plan, the reference was made to the importance of efficient import substitution. The functioning of the protective trade regime and their implications led to the high cost and neglected quality aspects of the Indian industry. The regulatory industrial policy framework and a protective trade regime were often thought as a complex policy net work. Ahluwalia (1990) mentioned, "It is more accurate to say that trade distortions are introduced specifically to support inefficient investment decisions which are ordained in pursuit of other objectives. For example, the conscious pursuit of a policy of regional dispersal of industrialisation may lead to deliberate location of a number of suboptimal size units in different parts of the country. This decision is then supported by providing whatever protection is needed to support the resulting high-cost production units Similarly, a conscious decision to develop domestic production capability in a particular area may lead to the establishment of a high cost unit which then needs tailored protection in order to survive"[8].

2.4.3 Phases of Industrial Development :

In the process of industrialisation, four distinct periods can be seen in the evolution of industrial development of the Indian Economy. With implementation of Industrial Policy Resolutions of 1948 and 1956, the first period can be taken as 1950-65. This period has resulted in marked structural changes in the economy and industrial sector. This first period have seen key role of public sector by acquiring and keeping the lead in the basic industries in public sector and leaving almost the entire consumer goods and the non-strategic parts of the intermediate goods sector to private sector.

During the second period 1966-84, the emphasis on state ownership and control of strategic parts of Indian industry gradually declined. In 1956, consumer goods accounted for nearly 50 per cent of the weight in the index of industrial production By 1980, their share had declined to 30 per cent In contrast, capital goods increased their share from less than 5 per cent in 1956 to 15 per cent in 1980. Even the basic industries group like electricity, mining, iron and steel and cement growth was better during the second period The diversification of the industrial base made it possible for Indian industry to produce a very broad range of industrial products during 1980s.

The third period 1985-91 signalled the entry of private sector into areas formerly reserved exclusively for the public sector. The period also witnessed a strengthening of the strategy of import liberalisation for modernisation of industry. The fourth period started from 1991 with stabilisation and structural adjustment programmes[9]

Indian planning has made a definite impact on the industrial development of the nation. This can be seen through the number of industries set up, the change in output, income levels and employment generation both in public and private sectors. The results are seen from the diversifying industrial base of the economy.

2.4.4 Diversifying Structure of Indian Industries :

The plan period began with the process of structural diversification of the industrial sector. The period set out the task of establishing basic and capital goods industries on a large scale so that a strong base for industrial development could be built. In terms of production in total manufacturing, consumer goods declined from 48 per cent to 24 per cent while that of capital goods increased from 5 per cent in the year 1956 to 16 per cent by the year 1996 (Table 2.2), similar improvement is seen in the case of Basic goods over this period. Their share rose from 22 per cent in 1956 to 39 per cent by 1996.

Table 2.2 : Diversification within the Industrial Sector

	1956	1960	1970	1990	1995	1996
A. Weights of use based sectors in index of Industrial production						
Basic goods	22.3	25.1	32.3	33.2	38.4	39.4
Intermediate goods	24.6	25.9	20.9	21.3	21 6	20.5
Consumer goods	48.4	37 2	31 5	30.5	23.6	23.7
Capital goods	4.7	11.8	15.2	15.0	16.4	16.4

Source : Compiled by author from Ahluwalia I.J. (1991), Sandesara (1989) and Economic Survey (1995,1996)

Indian planning has made a definite impact on the process of industrialisation with respect to diversifying the industrial base. In the beginning, India's industrial structure was dominated by textiles, sugar and other consumer goods industries. In terms of industrial value added the share of consumer goods industries declined over time from 50 per cent in 1960 to 36.3 per cent by the year 1990. Whereas, during same period the share of intermediate goods and capital goods industries increased.

2.5 Growth Performance of Indian Industry :

2.5.1 Industrial Growth During 1951-68 :

The first phase of industrial growth covers the period of first three Five Year plans. The period was significant in the sense that it laid the basis for industrial development of India. During this period the emphasis was given to the capital goods industries and basic infrastructural development programmes. Huge investments were made in industries like iron and steel, heavy engineering and machine building industries.

As shown in Table 2.3, there occurred a noticeable acceleration in the growth rate of industrial production over the first three plan periods upto 1965, it increased from 5.7 per cent in the First plan to 7 per cent in second and 9 per cent by the Third Five year plan. However, later general industrial index fell down during mid sixties and seventies. The rate of growth of capital goods industries shot up considerably from 9.8 per cent per annum in the first plan to 13 1 per cent per annum in the second plan and further to 19.6 per cent per annum in the third plan.

Table 2.3 : Annual Compound Growth Rates in Index of Industrial Production 1951-1996

Use based on functional classification	1951-55	1955-60	1960-65	1965-74	1975-80	1981-85	1985-90	1991-96
1. Basic goods	4.7	12.1	10.4	6.5	8.4	8.7	7.4	6.4
2. Capital goods	9.8	13.1	19.6	2.6	4.2	6.2	14.8	5.1
3. Intermediate goods	7.8	6.3	6.5	3.0	4.3	6.0	6.4	6.1
4. Consumer goods	4.8	4.4	4.9	3.4	5.5	5.1	7.3	5.0
Durables	-	-	-	-	-	14.3	11.6	10.4
Non-durables	-	-	-	-	-	3.8	6.4	3.9
5. General index	5.7	7.2	9.0	4.1	6.1	6.4	8.5	6.0

Source : Compiled by author from (i) S.L. Shetty "Structural Retrogression in the Indian Economy since the Mid Sixties" EPW Special Supplement 1978, Table 4, p.9 and

(ii) Government of India Hand Book of Industrial Statistics, Table 75, p.114 (1989) and Table 50 - 54, p.50 - 155 of 1992.

The rate of growth of basic goods industries registered a significant increase from 4.7 per cent per annum in the first plan to 12.1 per cent per annum in the second plan and stood at 10.4 per cent per annum in the third plan. Even in capital goods industries the growth rates attained during first three plan periods were higher than those achieved in Intermediate and consumer goods segments. These high growth rates also give us the changing composition of the industrial sector.

2.5.2 Industrial Growth during 1965-76 :

The period 1965-76 marked by a sharp deceleration in industrial growth. The rate of growth fell steeply from 9.0 per cent from third plan to a mere 4.1 per cent per annum during the period 1965-76. During the same period, the capital goods sector grew at an annual rate of 2.6 per cent which is much lower than the previous period. The same lower rate of growth is found in case of basic industries after third plan, the phenomenon of structural retrogression occurred with the decline in the growth rates of capital goods and basic goods industries Only in the consumer goods sector, the rate growth was moderate and over 5 per cent per annum.

The trends in industrial growth since mid sixties to seventies showed persistent industrial stagnation. This phenomenon, characterised by a marked and significant slowdown in the growth of heavy industries and slow and indifferent growth of other industries. Ahluwalia's study (1985)[10] showed the overall picture of industrial stagnation in the organized sector after the mid-sixties and throughout the seventies. The poor growth performance was associated with low or negative productivity performance in the industrial sector during this period.

2.5.3 Recovery Period of 1980s :

The eighties can broadly be termed as period of recovery. During 1985-90 the industrial growth rate picked up to 8.5 per cent per annum. The growth rate of capital goods was 14.8 per cent during 1985-90, which is remarkable and gave boost to higher rate of growth throughout eighties. As noted by Vijay L. Kelkar and Rajiv Kumar, "This

is a marked up turn from growth rates of around 4 per cent achieved during the later half of sixties and the seventies"[11]. This performance is also an improvement over the growth rates achieved during the first and second periods. Similar trends of industrial recovery during eighties are also noted by other studies. Ahluwalia notes the period of 1980s was "marked by significant acceleration in the growth of value added in the manufacturing sector grew at the rate of 7.5 per cent per annum in the period 1980-81 to 1985-86"[12]. This study also pointed out a very important aspect of the growth revival during the first half of the eighties. According to this study, the growth revival during 80's was not associated with acceleration in the growth of factor inputs but was rather based on the better productivity performance. The total factor productivity which registered a negative and low growth in the range of -0.2 to 0.3 per cent per annum during the period of 1966-67 to 1979-90, showed a marked improvement in the first half of the eighties when it registered a growth of 3.4 per cent per annum.

The fastest growing sector during the first half of eighties was consumer durable with the growth rate of above 14 per cent (Table 2.3). This rate of growth in consumer durables continued during the period of nineties also. In case of consumer non-durables items, the growth rate was only around 4 per cent during eighties and early nineties.

Table 2.4 : Relative Importance of Industries 1960-61 and 1991-92

Industry Group	Per cent to output in the Manufacturing sector		
	1960-61	1982-83	1991-92
1. Food Products (20-21)	5.9	7.3	10.73
2. Beverages etc. (22)	2.0	2.0	3.33
3. Textiles (23-26)	31.8	16.2	13.85
4. Wood and Wood Products (27)	0.4	0.9	0.49
5. Paper and Paper Products (28)	4.4	4.3	3.11
6. Leather and Leather Products (29)	0.3	0.5	1.12
7. Rubber, Plastic, Petroleum and Coal Products (30)	4.4	4.8	8.02
8. Chemical and Chemical Products (31)	8.3	14.6	18.41
9. Non-Metallic mineral Products (32)	4.4	4.5	6.42
10. Basic Metal and Alloys (33)	8.7	12.9	7.41
11. Metal Products (34)	2.1	3.1	2.27
12. Machinery, Machine tool etc. Non-electric, Electric Machinery (35-36)	6.7	14.8	17.13
13. Transport Equipment Etc. (37)	10.2	8.2	7.61
14. Mis. Manufacturing Industries	0.9	4.6	0.10

Compiled by the author from the following sources.
(i) ASI (ii) CMIE

A relative share and its importance of an industry can be measured by analysing its contribution to the value added to the manufacturing over a period of time. Table 2.4 presents the relative importance of industries in terms of value added over a period of thirty years. It shows the changing composition of industrial production structure from 1960-61 to 1991-92 in terms of value added. The table shows the relative fall of share of traditional industry textiles from 31.8 in the year 1960-61 to 16.2 in the year 1982-83 and to 13.85 by the year 1991-92. Whereas in case of consumer goods sector, the share remained almost constant. However, the industry Food and Food products share increased from 5.9 per cent in the 1960-61 to 10.7 by the year 1991-92. Capital goods section show increasing trend in terms of valued added over this period. Notably, Rubber, Plastic, Petroleum and Coal products (30), Chemical and Chemical products (31), Machinery, Electrical and Non-Electrical (35-36) etc. showed improvement in their shares over this period. The share of Machineries Electrical and Non-Electrical increased from 6.7 by the year 1960-61 to 14.8 in the year 1982-83 and 17.1 per cent by the year 1991-92. However the share of Transport and Equipment (37) fell from 10.2 in the 1960-61 to 7.6 by the year 1991-92.

Table 2.5 : Changing Structure of Indian Manufacturing (2 digit level)

Sr. No.	Industry Code (2 digit level)	1973-1974 No of Factories	1973-1974 No. of Employees	1973-1974 Value Added	1982-83 No. of Factories	1982-83 No. of Employees	1982-83 Value Added	1992-93 No. of Factories	1992-93 No. of Employees	1992-93 Value Added
1	20-21	13509	695357	57797	17111	1234579	141103	21397	1189612	221859
		(22.81)	(13.71)	(7.52)	(19 49)	(14.42)	(11.60)	(19.10)	(16.09)	(7 62)
2	22	2357	220317	16807	8486	443130	25233	8350	549559	240811
		(3 98)	(4.34)	(2.19)	(9.67)	(5.17)	(2.07)	(7.45)	(7.43)	(8.28)
3	23	5719	971048	114238	6569	1053312	105505	8896	806839	127955
		(9.66)	(19.14)	(14.86)	(7.48)	(12.30)	(8.67)	(7.94)	(10.91)	(4.39)
4	24	2413	160348	22712	3267	253783	49029	3400	298780	94343
		(4.07)	(3.16)	(2.95)	(3.72)	(2.96)	(4.03)	(3.04)	(4.04)	(3.24)
5	25	429	268200	19215	219	258639	22639	420	205225	22041
		(0 72)	(5 29)	(2 50)	(0.25)	(3.02)	(1.86)	(0 37)	(2.78)	(0.76)
6	26	1642	66541	6544	2491	99185	15042	4104	200708	61829
		(2.77)	(1.31)	(0.85)	(2.84)	(1.16)	(1.24)	(3.66)	(2.71)	(2.12)
7	27	2932	75470	6926	3618	78494	6838	3608	69134	10325
		(4.95)	(1.49)	(0.90)	(4 12)	(0.92)	(0.56)	(3.22)	(0.94)	(0.35)
8	28	3779	250663	39537	4571	303167	43134	5565	301576	62720
		(6.38)	(4 94)	(5 14)	(5 21)	(3.54)	(3.54)	(4 96)	(4 08)	(2.16)
9	29	594	44617	5724	880	62443	8936	1587	112233	27481
		(1.00)	(0 88)	(0.74)	(1.00)	(0.73)	(0.73)	(1 42)	(1.52)	(0.94)
10	30	1794	113148	115763	3514	197449	183366	5971	279343	861646
		(3.03)	(2.23)	(15.06)	(4.00)	(2.31)	(15.07)	(5.33)	(3.78)	(29.61)
11	31	3043	321239	35026	5350	494719	77401	7886	635462	249643
		(5.14)	(6 33)	(4 56)	(6 09)	(5 78)	(6 36)	(7 04)	(8.59)	(8.58)
12	32	3757	283812	32295	6667	405765	55054	10365	455944	101039
		(6 34)	(5.59)	(4 20)	(7.59)	(4.74)	(4.52)	(9.25)	(6.17)	(3.47)
13	33	4132	457599	84443	5509	609993	134805	6247	661886	224186
		(6.97)	(9.02)	(10.98)	(6.27)	(7.12)	(11.08)	(5.58)	(8.95)	(7.70)
14	34	4434	175662	28100	5884	195989	30597	7038	233977	45198
		(7.49)	(3 46)	(3.66)	(6 70)	(2.29)	(2.51)	(6.28)	(3.16)	(1.55)
15	35-36	7093	576800	116575	10849	766776	206668	13434	889483	389382
		(11.97)	(11.37)	(15.17)	(12.36)	(8 95)	(16.98)	(11.99)	(12.03)	(13.38)
16	37	1600	391256	66899	2816	505870	111533	3758	503746	169214
		(2 70)	(7.71)	(8 70)	(3 21)	(5.91)	(9.16)	(3.35)	(6.81)	(5.82)
Total		59227	5072077	768601	87801	8563293	1216883	112026	7393507	2909672
		(100 00)	(100 00)	(100.00)	(100 00)	(100 00)	(100 00)	(100 00)	(100 00)	(100.00)

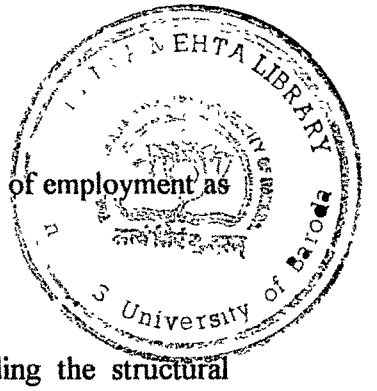
Value added (Rs. lakh) is expressed at 1980-81 prices.

2.5.4 Performance During 1980s :

Table 2.5 indicates composition of different industries in terms of employment and value added for the period 1973-74 to 1992-93. In terms of employment cotton textiles (23) industry has share of 19.14 per cent during 1973-74 which declined to 12.30 per cent during 1982-83 and to 10.91 per cent by the year 1992-93. In the case of food and food products (20-21) and beverages and tobacco products (22) employment proportion gradually increased over the period of study. Whereas in other industries employment share either decreased or improved only marginally. This pattern of change in employment in most of industries indicates the changing importance of industries over a period of time.

The position in terms of value added of cotton textiles (23) was 19.14 per cent during 1973-74 which declined significantly to 8.37 per cent during 1982-83 and to 4.39 per cent by the year 1992-93. Whereas most of the other industries had marginal variations in their share. However, rubber, petroleum products (30) improved their share from 15.06 per cent during 1973-74 and 1982-83 to 29.61 per cent by the year 1992-93. Similarly in the case of chemical and chemical products (31), the share improved in terms of value added from 4.56 per cent in the year 1973-74 to 6.36 per cent in the year 1982-83 and to 8.58 per cent by the year 1992-93.

The share of Basic metal and Alloys (33) in value added decreased from 11 per cent in 1973-74 to 7 70 per cent by the year 1992-93. Similar fall in trend can be observed with electrical and non-electrical machineries (35-36) The Table 2.5 provides changing structure of the manufacturing sector. Cotton textiles which remained the



largest industry in the manufacturing sector experienced fall in the rate of employment as well as in terms of value added over the two decades.

The employment statistics show the broad conclusion regarding the structural transformation of the manufacturing sector. Out of the 16 industrial groups, share of seven major industrial groups, as measured by their percentage shares in factory employment, declined in 1992-93 as compared to 1973-74. The shares of other 9 industries in terms of employment have increased. The decline in the importance of cotton textiles industry (23) is disappointing. In terms of valued added, out of 16 industries, major 9 industries showed decline in their share and 7 industries showed increase in their share. Again cotton textiles showed major decline in its share. This decline is significant in terms of value added in non-metallic mineral products (32), basic metal and alloys (33), metal products (34), electrical and non-electrical machinery (35-36) and transport and transport equipment (37).

2.6 Observations :

The process of Indian industrialisation over planning period has undergone a major structural changes. Initially the development was based upon public sector growth. From second five year plan onwards huge investment on public sector towards infrastructural development and basic industries have taken place. There were increasing investments on heavy industries and also capital goods industries in the successive plans and this has encouraged investments in private sector. However from mid sixties the economy faced the period of industrial recession which slowed down industrial growth during seventies. The recovery started with partial liberalisation in the late seventies and early eighties. There was removal of restrictions, delicensing and liberal policies which encouraged more private sector investments. The mechanism of simplified licensing system was introduced with the financial market reforms started after 1991. During the period of eighties the planning target of 8 per cent annual average industrial growth rate exceeded by the actual growth rate of 8.5 per cent during seventh plan period. The high rate of growth reflects the results of adoption of liberal industrial policy. The changing structure of manufacturing sector led to major changes in employment pattern as well. In most of the industries employment levels declined proportionately compared to increasing number of factories. This led to fall in the average size of the factory. However in terms of value added performance the capital goods sector and consumer durables gained importance. Whereas consumer non-durables declined in their share. The Cotton Textiles, as one of the major Indian manufacturers, lost its importance both in terms of employment and value added.

References :

1. Harry G. Johnson, 1968. *"Economic Policies towards less Developed Countries"*, New York, Praeger, pp.45-46.

2. Schumpeter J.A., 1949. *"The Theory of Economic Development"*, Harvard, Cambridge Mass, pp. 68.

3. Gadgil D.R. *"Planning and Economic Policy in India"*.

4. Government of India, Planning Commission , 1956. *"The Second Five Year Plan Document"*, Delhi, pp.22.

5. Bagchi A. Kumar, 1978. "Some Characteristics of Industrial Growth in India", *EPW, Annual Number*, February.

6. Patnaik Prabhat, 1979. "Industrial Development in India Since Independence", *Social Scientist*, June.

7. Bhagwati J.N. and T.N. Srinivasan, 1975. *"Foreign Trade Regimes and Economic Development : India"*, Delhi : Macmillan.

8. Ahluwalia M.S., 1990. "Policies for Poverty Alleviation", *Asian Development Review*, Vol.8, No.1.

9. Vijay L. Kelkar and Rajiv Kumar, 1990. "Industrial Growth in the Eighties", *EPW*, January 27, pp.21.

10. Ahluwalia I.J., 1985. *"Industrial Growth in India Stagnation Since the Mid-Sixties"*, Oxford University Press.

11. Op cit, Vijay L. Kelkar and Rajiv Kumar, pp.57.

12. Ahluwalia I.J., 1991. *"Productivity and Growth in Indian Manufacturing"*, Delhi : Oxford University Press.