



₹ 200 per unit and the price of the import item is ₹ 1,000 per unit, then India would be able to import only one unit by exporting five units of her export item (i.e., 1/5th of import item per unit of our export item). Thus, if India can produce industrial products of high-value and export these products, then this will not only increase her export earnings but also create favourable terms of trade.

4.2. Industrial growth during the plan periods

Positive attempts have been taken by the planning authorities of the Government of India to make our economy self-sufficient through the expansion of various small, medium and large-scale industries.

4.2.1. Industrial growth during the First Five-Year Plan (1951-56)

The First Plan aimed at the expansion of basic infrastructural facilities like power, irrigation, etc., to facilitate the process of industrialisation in future. Hence, no special effort was undertaken to establish various large-scale and heavy industries. The Industrial Policy Resolution of 1948, based on the philosophy of a mixed economic system, kept provisions for the expansion of both public sector and private sector enterprises (industrial enterprises which are governed and controlled by the Government authorities, are called public sector enterprises). Hence, out of the total investment of Rs. 797 crores, allotted for the industrial development during the First Plan, about Rs. 94 crores was left for the public sector industries.

Some industrial units like Sindhri Fertilizer Factory, Chittaranjan Locomotive Works, Indian Telephone Industries, Integral Coach Factory, etc., were established during this plan period, particularly to facilitate the transport and communications system.

4.2.2. Industrial growth during the Second Five-Year Plan (1956-61)

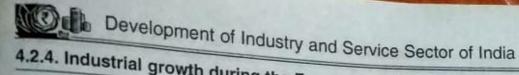
The plan document of the Second Five-Year Plan emphasised the rapid industrialisation based on the expansion of basic and heavy industries like iron and steel, heavy engineering, etc. This programme was actually based on the Industrial Policy Resolution of 1956, which envisaged an expansion of such basic and heavy industries in the public sector. This plan model was prepared by P.C. Mahalanobis. This plan also emphasised a fuller utilisation of production capacity of existing plants, modernisation of the production process in cotton and jute textiles industries, expansion of the production capacity in the consumer goods industries, etc.

Thus, during this plan period, three large-scale steel plants were established in the public sector, viz., the Durgapur Steel Plant in West Bengal, the Rourkela Steel Plant in Orissa and the Bhilai Steel Plant in Madhya Pradesh. Hence, most of the investment during this plan period emphasised on the basic and heavy industries. Various medium-scale industries producing machine tools (which are required in industries like transport, chemicals, textiles, cement, tea, oil mills, sugar, paper, etc.) were also developed.

Village and small-scale industries also recorded substantial progress during this plan period. Village industries like khadi and handlooms, and small-scale industries producing clothes on powerlooms, bicycles, electric motors, electric fans, etc., also expanded during this plan period.

4.2.3. Industrial growth during the Third Five-Year Plan (1961-66)

The Third Five-Year Plan wanted to achieve a balanced growth between industry and agriculture in the long run. To achieve self-reliant growth, i.e., to curtail the extent of external assistance, this plan put greater stress on the expansion of machine building industries, iron and steel industries, etc. Though the overall target of industrial growth could not be achieved, various engineering industries like automobiles, textile machinery, diesel engines, machine tools and other industries, such as, heavy chemicals, petroleum products, cement, mining, etc., indicated considerable progress during this plan period.





4.2.4. Industrial growth during the Fourth Five-Year Plan (1969-74)

This plan aimed at completing the industrial projects already taken up during the earlier plans. Near about three-fourth of the total industrial investment made during this plan, went to the core sector industries like iron and steel, petroleum and petro-chemicals, coal and iron ore, etc.

However, industrial growth rate indicated a declining trend during this plan period. The average annual growth rate of industrial production declined from 8-2 per cent during the Third Plan to only 4-2 per cent during the Fourth Plan. This phase is termed as industrial deceleration. Some economists consider this phase as structural retrogression, because decline in the growth rate of industrial production in case of ferrous metals (like pig iron, steel ingots, etc.), basic and capital goods would mean slow growth in infrastructural inputs (e.g., railway lines, railway wagons, railway engines, electricity-generating machines, etc.). Thus, expansion of other industries would also be restricted.

Causes behind industrial deceleration:

- The occurrence of Indo-Pak and Indo-China wars (in the years 1962, 1965 and 1971) had diverted the Government expenditure in non-productive channels.
- (b) The occurrence of drought conditions (during 1965-66, 1966-67, 1971-72 and 1972-73) led to a fall in the supply of some basic raw materials from agriculture to agro-based industries.
- The oil price hike by the OPEC (Organisation of Petroleum Exporting Countries) since 1973 created some constraints in the supply of fuel and energy in the industrial sector.
- (d) The growth rate of infrastructural investment and public sector investment also indicated a declining trend during 1965-75. Such a falling trend in these investments would mean a fall in the capacity creation in most of the industries.
- (e) Poor performance of the agricultural sector caused lower demand for industrial goods (such as bicycles, wrist watches, radios, etc.).
- The composition of industrial production shifted in favour of some durable consumer goods which satisfied the needs of only a few people falling in the higher income brackets. So, the market for those consumer items is concentrated only within the top 10 per cent of the people. As they get saturated, there remains little scope for further expansion of such consumer goods industries.
- (g) Malfunctioning of the industrial licensing policy, bureaucratic controls, etc. were also responsible for hindering the progress of the industrial sector.

4.2.5. Industrial growth during the Fifth Five-Year Plan (1974-78)

Self-reliant growth with social justice was the basic objective of this Five-Year Plan. Keeping that objective in view, this plan aimed at a rapid growth of core sector industries (like steel, non-ferrous metals, fertilizers, mineral oils, coal and machine building), product diversification in export-oriented industries, expansion in the production capacity of some consumer-goods industries (like cloth, edible oil, sugar, life-saving drugs, etc.), reservation of some items exclusively for the small-scale

After a period of industrial deceleration during the Fourth Plan, this plan saw a recovery in the growth rate of industrial production. Thus, the average annual growth rate of industrial production, which was only 4-2 per cent during the Fourth Plan, increased to 6-2 per cent per annum during the Fifth Plan period. However, this growth rate was much below the targeted growth rate of 9.0 per cent per annum.





4.2.6. Industrial growth during the Sixth Five-Year Plan (1980-85)

The programme for industrial development during this plan period centered around the primary growth objectives of structural diversification, modernisation and self-reliance. Special emphasis was put on the growth of industries in the backward regions for correcting regional imbalances in industrial growth. The plan had a liberal attitude towards the import of foreign technology and capital for the development of export-oriented industries as well as industries producing importsubstitutes. It also aimed at substantial enhancement in the production capacity of a wide range of industries, producing both consumer-goods and capital/intermediate goods for supporting the growth process in agriculture and industry. As against the growth target of 6.9 per cent per annum, the actual achievement in the industrial growth was 6-4 per cent per annum during the plan period. Several factors, such as, continuous power shortage, labour unrest, lack of efficiency in factor utilisation, some set back in the upgradation of technology, etc., were responsible for the nonattainment of this growth target.

4.2.7. Industrial growth during the Seventh Five-Year Plan (1985-90)

This plan aimed particularly at improving the productivity of Indian industries. Hence, this plan put greater stress on the upgradation of technology, development of export-oriented industries, expansion of some 'sunrise' industries (i.e., industries with high growth potential) such as, bio-technology, computers, telecommunications, etc.

4.2.8. Industrial growth during the Eighth Five-Year Plan (1992-97)

In view of the serious crisis in the external sector (import payments were much higher than export earnings creating excessive pressure on foreign exchange reserves of India) since 1990-91 and the growing pressure of inflation, the Government of India adopted a new development strategy during the Eighth Five-Year Plan, based on the philosophy of delicensing and decontrolling. So far as the industrial sector was concerned, the whole emphasis was on unshackling the industrial sector from Government control. The objective was to increase the outward orientation of Indian industries through an improvement in their competitive strength. The new Industrial Policy of 1991 also stressed the need for such a structural reform. Thus, more emphasis was given to the expansion of private sector enterprises. In the initial phase of planned economic development, the public sector no doubt played a pioneering role in the industrial development; but in view of the weak performance (in terms of, say, low rate of return on capital invested) of many public sector enterprises, the new industrial policy stressed the need for either closing down the sick public sector units (i.e., units which were running under huge losses consecutively for three years and there was no hope for their future improvement) or selling the shares of these enterprises to the private entrepreneurs (which was called the policy of disinvestment). Hence, the process of liberalisation in economic policies, which were initiated since the 1980s, got its complete shape during this plan period.

This average annual growth rate of industrial production was only 0-6 per cent in 1991-'92 but reached at a peak of 12-1 per cent in 1995-'96. The average annual growth rate of industrial production during 1992-'97 was about 8 per cent.

4.2.9. Industrial growth during the Ninth Five-Year Plan (1997-2002)

In line with the process of economic liberalisation unleashed since 1991, the Ninth Plan stressed on increasing the opening up of the industrial sector to private enterprises. As the Government wanted to withdraw itself more and more from industrial activities, leaving space for the expansion of the private sector, so only 8-1 per cent of the total public sector outlay was allocated for the development of industry and minerals. This figure contrasts sharply with the same in earlier plans. In fact, the share







of industry and minerals varied between 20 and 22 per cent of the total public sector outlay during the Second to Sixth Plan period.

The target for industrial growth has been set at 8-2 per cent per annum during this plan period. In this field, the major focus will be on building infrastructural facilities and improving the quality of this infrastructure. As against the above-mentioned growth target, actual growth rate of industrial production during 1997-2002 was to the tune of about 4.5 per cent per annum.

■ Causes of slow-down in industrial growth: This slow-down in industrial growth during the Ninth plan may be attributed to some structural and cyclical factors. This includes factors such as : (a) Falling export growth due to an overall slump in world trade; (b) Erosion in competitive advantage of Indian exports on account of steep depreciation in East Asian Currencies during late 1990s (since July, 1997, domestic currencies of different East Asian countries like Malaysia, Indonesia, Thailand, Singapore, India, etc., have been depreciating continuously in terms of the U.S. dollar. This implies that export items of these countries become relatively cheaper to the European countries. Naturally, if the currency of, say, Indonesia depreciates more than that of India, European countries will purchase more from Indonesia rather than India. Again, if there is a competitive depreciation, then the importing countries, may defer their purchase decisions because by doing so, they can import even at a lower price in future; (c) Decline in rural demand for industrial products owing to a low agricultural output in 1997-98; (d) Slow growth of infrastructural investment and infrastructural bottlenecks in power and transport; (e) Slow growth of new investment by the corporate sector due to the existence of excess capacity in industrial units, (f) Low levels of productivity in the industry because of outdated technology, and the inability to reap the economies of scale; etc.

Thus, if we review the trend of industrial growth during the plan periods, we observe that this growth rate was not sustained. The average annual growth rate in industrial production was commendable during 1951-65, but it was followed by a deceleration during 1965-75. Though there was a recovery in this growth rate during 1976-90, with mild fluctuations, it again indicated a recessionary trend during 1997-2002 (see Table-2 & Fig.-1).

4.2.10. Industrial growth during Tenth Five-Year Plan (2002-07)

If we review the pattern of industrial growth during the first three years of the Tenth Five Year Plan, we observe that the average annual growth rate of industrial production increased gradually from 5-7 per cent in 2002-03, to 7-0 per cent in 2003-04 and further to about 8-4 per cent during 2004-05. The average annual growth rate of industrial production was about 8-6 per cent during Tenth plan (2002-07). Better performance of the capital goods industries, basic goods industries and consumer goods industries contributed significantly towards this growth.

The principal causes behind such a revival of industrial production during the Tenth Plan are as

- (1) Increase in the growth rate of production in basic and capital goods industries, (2) Increase in the growth rate of production in the consumer goods industries,
- (3) Greater amount of private sector investment in consumer goods industries,
- (4) More inflow of foreign capital in Indian industries,
- (5) Expansion of external market for Indian Industrial goods, etc. Now, the basic difference in the growth rates of production in various industries during Ninth and Tenth Plan can be shown in a Table (See Table-1).





Table-1 Growth rates of different industries in India during 1997-2013 (Growth p.a)

Industrial goods	1997-98	1998-99	2000-01	2001-02	2003-04	2005-06	2006-07	2012-13
Basic goods	6.9	1.6	3.7	2.6	5-4	6-7	10-3	2.0
2. Capital goods	5-8	12-6	1.8	(-) 3.4	13-6	15-8	18-2	(-) 6.0
3. Intermediate goods	8-0	6.1	4.7	1.5	6-4	2.5	12-0	1.6
4. Consumer goods	5.0	2-2	8-0	6-0	7-1	12-0	10.1	2.4
Growth rate of General index (industrial Production)	6.7	4-1	5.0	2.7	7.0	8-2	11.6	1.1

Source: Economic Survey (2004-05, 2007-08, 2014-15), Govt. of India.

Table-2

Average Annual Growth Rate of Industrial Production in India during the Plan Period

Plan	Period .	Average Annual Growth Rate (%)		
First Plan	(1951-56)	5.6		
Second Plan	(1956-61)	7-3		
Third Plan	(1961-66)	8-2		
Fourth Plan	(1969-74)	4-2		
Fifth Plan	(1974-78)	6.2		
Sixth Plan	(1980-85)	6.4		
Seventh Plan	(1985-90)	8-4		
Eighth Plan	(1992-97)	8.0		
Ninth Plan	(1997-2002)	4.5		
Tenth Plan	(2002-07)	8.6		
Eleventh Plan	(2007-12)	7.4		
Twelfth Plan	(2012-17)*	4.5*		

Source: Economic Survey (Government of India) different issues. [*during 2012-15]

Fig.-1 Growth rate (%)of Industrial Output in India during the Plan Periods

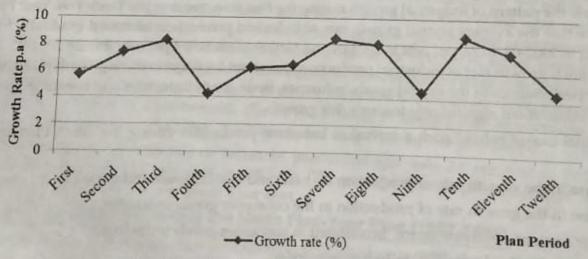


Fig.-1 [Based on the Statistical data shown in Table-2]

4.2.11. Industrial Growth during Eleventh and Twelfth Five-Year Plans (2007-15)

It has been observed that the average annual growth rate of industrial production in India has declined gradually during the Eleventh Plan Period (2007-12), as well as during the first three years





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of the Twelfth Plan period (2012-17). The basic reasons for such a downward trend in this growth rate

- (a) Recessionary trend in the export market,
- (b) Reduction in consumption and investment expenditure in the public sector of India,
- (d) Recessionary trend in the financial market during 2008-10.

4.3. Salient features of the changes in industrial structure during the plan periods

We have already indicated the growth trend in industrial production during the plan periods. Now, we can indicate some of the salient features of the changes in industrial structure of India during the plan periods. These features are noted below:

- (a) Growth of heavy and capital goods industries: Since the inception of the Second Five-Year Plan, the industrial base of the Indian economy has been strengthened with the establishment of many heavy and capital goods industries producing iron and steel (e.g., Bhilai Steel Plant, Bokaro Steel Plant, Rourkela Steel Plant, Durgapur Steel Plant, Salem Steel Plant, etc.), coal, heavy electrical engineering goods (e.g., Bharat Heavy Electricals Ltd.), machinery and machine tools, chemicals and allied products, petroleum products, etc. As a result, production in these industries increased to a large extent.
- (b) Growth of infrastructure industries: Infrastructure industries like electricity, coal, saleable steel, crude petroleum, petroleum refinery products and cement have also expanded considerably during the plan periods. These industries assist the process of industrialisation by providing infrastructural facilities like transport and communications, generation and distribution of electricity, etc. For example, the total installed electricity generating capacity increased from 2,300 MW in 1950-51 to about 1,31,400 MW in 2003-04.
- (c) Growth of industries producing various consumer goods: We know that a balanced industrial structure needs the growth of both the capital-goods and consumer-goods industries. Several consumer-goods industries producing both durable and non-durable consumer-goods have emerged during the plan periods. However, the growth rate of production in durable consumergoods sector (e.g., TV, refrigerators, washing machines, etc.) has been faster than that of the nondurable consumer-goods sector.
 - Generally, the non-durable consumer items like tea, cotton fabrics, vanaspati, mustard oil, sugar, matches, etc., satisfy the consumption needs of a large sector of people. So, they are called mass consumption items. Thus, despite a slow growth of these industries (producing non-durable consumer goods), their weightage or importance was relatively higher than durable consumer goods in the total production of consumer-goods.
- (d) Growth of public sector enterprises: There has been an enormous expansion of public sector enterprises in the industrial sector (i.e., the enterprises which are governed and controlled by the, Government). These public sector enterprises play a pivotal role in the production of fuel oils, fertilizers, communication equipments, non-ferrous metals (like aluminium, copper, zinc, etc.), coal and lignite, iron and steel, etc. The contribution of Central Public Sector Enterprises (CPSE), which are controlled by the Central Government, in the production of coal, lignite and petroleum was more than 95 per cent of the country's total production during 1996-'97. Over two-thirds of the total production of non-ferrous metals of the country was also contributed by these CPSE. Some of these CPSEs are Bharat Heavy Electricals Ltd. (BHEL), Hindustan Cables Ltd. (HCL), Hindustan Zinc Ltd. (HZL), Hindustan Copper Ltd. (HCL), Indian Oil Corporation Ltd. (IOCL), Mahanagar Telephone Nigam Ltd. (MTNL), Indian Petrochemicals Corporation Ltd. (IPCL), Oil and Natural Gas Corporation Ltd. (ONGC), etc. In 1951, the Government investment in 5 CPSEs was only ₹ 29 crore. This has increased to about ₹ 1,93,121 crore in 242 CPSEs in 1997. However, this number has declined gradually since then.



- (e) Growth of various medium-scale industries: The classification of small-scale, medium-scale and large-scale industries generally depends upon the amount of fixed capital needed (i.e., and large-scale industries generally depends upon the amount of fixed capital stage) for the investment needed for purchasing land and buildings, machines, etc., at the initial stage) for the establishment of any industrial unit. In case of medium-scale industries, which employ, on an establishment of any industrial unit, the fixed capital requirement per worker is estimated average, 200 workers per industrial unit, the fixed capital investment is about ₹ 20 crore, on an to be about ₹ 10 lakh. Thus, the requirement of fixed capital investment is about ₹ 20 crore, on an average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average, per unit. Several such medium-scale industries are also an important part of the average are also an important part of the average average are also an important part of the average average are also an important part of the average average are also an important part of the average av
- (f) Growth of small-scale industries: Small-scale industries have also been playing an important role in Indian industrial development in terms of employment generation and economic growth. At present, if fixed capital investment is upto Rs. 1 crore in any industrial unit, it is called a *small-scale unit*. However in 2001-02, this investment limit was raised upto 5 crore in case of small-scale units producing hosiery and hand-tool products. The total number of registered small-scale industrial units has increased from about 16,000 in 1950-51 to about 18-71 lakh in 2005-06. If the unregistered units are also included then this number would be about 123-42 lakh in 2005-06. Total employment generated by these small-scale units has also increased from about 40 lakh in 1973-74 to about 294-91 lakh in 2005-06. Their contribution to value-added (i.e., value of output minus the value of raw materials) has also been substantial in the total value-added in the industrial sector. In 2005-06 the value of output generated by this sector was to the extent of Rs. 4,76,201 crore (at current prices).
- (g) Greater balance in the size-class distribution of industries: In view of the growth in large-scale, medium-scale and small-scale industrial units, the present industrial structure seems to be more balanced from the view point of size-class distribution of industries.
- (h) Greater diversification of industrial products: Greater diversification has taken place in the industrial products because the variety of industrial products produced by different industries has widened. In the early 1950s only four industries (viz., food products, textiles, wood and furniture and basic metals) accounted for two-thirds of total industrial production. However, during the early 1990s, the combined share of those four industries has declined to 32.9 per cent. On the other hand, the shares of electrical and non-electrical machinery, chemicals, non-metallic mineral products, transport equipments, computer software products, etc., have increased gradually. Recently, the software industry and the IT-enabled services (ITES), viz., Business Process Outsourcing (BPO) have emerged as the most expanding sector of the Indian economy. For example, the ITES-BPO industry is estimated to have grown by about 54 per cent during 2003-04, with an export earnings of U.S. \$ 3.6 billion.

4.3.1. Features of industrial structure during 1990s

There have been some significant changes in the industrial structure of India during 1990s. These are noted in the next page.

(a) Foreign technical collaboration and direct investment: Growing trend of foreign technical collaboration and foreign direct investment in joint ventures and wholly owned subsidiaries in the industrial sector of India, are also an important features of the present industrial structure of India. With the introduction of liberalised foreign investment policy by the Government of India technology collaborations and 15,998 foreign direct investment proposals over the period of 1991-2002. All these proposals involved an investment of about ₹ 2,84,812 crore, but the actual inflow was to the extent of ₹ 1,29,838 crore. Out of this total approved investment, about 49 per cent were meant for the core and infrastructure sector which constitutes ferrous and non-ferrous





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metals, special alloys, power, roads, ports, oil refinery, tele-communications, air/sea transport, cement and fertilizers. The share of food processing industries in the total foreign direct investment was 4.0 per cent and that of the chemical industries was 6.7 per cent.

(b) Greater importance to the private sector enterprises: Under the system of mixed economy, public and private sector enterprises co-exist in the industrial sector in India. The Industrial Policy Resolution of 1956 had reserved 17 industries for the public sector. However, the Industrial Policy Resolution of 1991 reduced that number only to 8 and that was further reduced to 6 in 1993. Thus, as many as 11 industries, which were previously reserved for the public sector, are now open to the private sector. These 11 industries include: (a) iron and steel; (b) heavy casting and forgings of iron and steel; (c) heavy plant and machinery; (d) heavy electrical plant; (e) mining of iron ore and manganese ore, chrome ore, gypsum, sulphur, gold and diamond; (f) mining and processing of copper, lead, zinc, tin, etc.; (g) aircraft; (h) air transport; (i) shipbuilding; (j) telephone cables, telegraph and wireless apparatus and (k) generation and distribution

According to the new Industrial Policy (1991), the areas now reserved for the public sector, are as follows: (a) arms and ammunition; (b) atomic energy; (c) minerals required for the production of atomic energy; (d) coal and lignite; (e) mineral oils; and (f) railway transport. Even in these areas, private sector participation can be invited on a discretionary basis. [Later on the item Numbers (c), (d) and (e) were also made open to the private sector.] The present policy of the Government puts more emphasis on the expansion of the private sector and closing down

- Structural shift in favour of consumer goods and intermediate goods industries: There has been a shift in the industrial structure in favour of the consumer goods and intermediate goods industries during 1990s. In the new index of industrial production, the Central Statistical Organisation has considered '1993-94' as the base year (in the old index, the base year was 1980-81). In this new index of industrial production, the weightage of consumer goods and intermediate goods sectors had increased, while the weightage of basic and capital goods sectors had declined.
- (d) Changes within the consumer goods and intermediate goods industries: Within the consumer goods sector, greater weightage is assigned to the consumer non-durables no doubt. However, compared to the old index of industrial production, the weightage of the consumer durables sub-sector has increased by more than 100 per cent in the new index. The growth of this subsector has also been supported by the easy availability of institutional finance. Again, the new index confers greater weightage upon the intermediate goods industries particularly because of the growing importance of the industries producing chemicals and chemical products, plastic, rubber petroleum products, etc.

4.3.2. Imbalance in the industrial structure

If we review the growth rate of industrial production, we observe that the average annual growth rates of production in the basic and capital goods industries were commendable during 1951-65. However, the period 1965-76 is a period of industrial deceleration. The growth rate of industrial output declined for all types of industries during that period. Later on, during the period of industrial recovery (i.e., during 1980-96), the growth rate of industrial production was maximum in the durable consumer goods sector. The structure of the industrial sector had shifted particularly in favour of the intermediate goods (i.e., the goods which are used as inputs in some industries) and consumer goods industries. The growth rates of production in the basic and capital goods industries were less during 1994-2002 as compared to the period 1980-92 (Table-3). This is an indication of structural imbalance in the industrial sector. However, this imbalance was reduced to some extent during the Tenth Plan (2002-07). In fact, the infrastructural facilities in our economy depends on the growth of these basic and capital goods industries. On the other hand, the growth of durable



consumer goods industries satisfy the needs of a small section of rich people within the society, and do not help in strengthening the infrastructural base of our economy.

Table-3 Annual Average Growth Rate of Industrial Production (used based) in India during 1951-2006

Sectors	Growth Rate p.a.(%)						
ALL TO THE REAL	1951-55	1955-60	1960-65	1965-76	1980-92	1994-2002	2002-06
1. Basic goods	4-7	12-1	10-4	6-5	7-4	5-4	5.6
2. Capital goods	9.8	13-1	19.6	2.6	9.4	6-2	13-4
3. Intermediate goods	7.8	6-3	6.9	3.0	4.9	7-7	4-7
4. Consumer goods	4-8	4-4	4.9	3.4	6.0	7-3	9.5
(a) Consumer durables		-	in be entry	6-2	10-8	12.5	8-7
(b) Consumer non-durables		_		2.8	5.3	5-8	9.9
General index of industrial production	5.7	7.2	9.0	4-1	7-8	6-6	7-3

Source: Compiled from Economic Survey (Different Issues), Government of India.

4.4. Public Sector in India

The sector which is controlled and managed by the Government, both at the Central and State levels in India, is called the public sector. During the pre-independence period, the participation of the public sector in economic activity was virtually absent in the Indian economy. The only organisations which were under the management and control of the Government during those days were:

- (1) railways,
- (2) port trust,
- (3) post and telegraph, and
- (4) aircraft and ordnance factories.

However, during the post-independence period, there has been a huge expansion of the public sector since the inception of Industrial Policy, 1956. The Public Sector Enterprises (PSE) or the Public Sector Undertakings (PSU) at present constitute a major national capability in terms of their scale of operation, coverage, technological capabilities and employment generation.

These PSEs (or PSUs) include:

- (1) Departmental enterprises (e.g., railways, post and telegraph).
- (2) Banks and Financial Institutions [e.g., Industrial Finance Corporation of India (IFCI), Reserve Bank of India (RBI), State Bank of India (SBI)].
- (3) Non-departmental enterprises [e.g., Steel Authority of India Limited (SAIL), National Thermal Power Corporation (NTPC)].

These non-departmental PSEs account for 75 per cent of value-added, more than 50 per cent of gross investment and about 33 per cent of the total employment in PSEs. The number of PSEs under the Central Government has increased from only 5 in 1951 to 240 in 2003. In 2010-11, this number was reduced to 220. On the other hand, the number of PSEs at the State level was about 780 in 2003.

4.4.1.Role of Public Sector in Economic development of India

Public sector in India has been playing an important role in shaping the basic structure of the economy. An analysis of the multi-dimensional role played by the public sector brings forth the



causes behind the rapid growth of this sector in India during the plan period. The following are some of the positive roles played by this sector during the plan period in our economy :

- (1) Public sector and income: The share of public sector in Net Domestic Product (NDP) at current prices has increased from 7.5 per cent in 1950-51 to about 24 per cent in 2003. This is largely due to a rapid expansion in the public sector during 1951-91.
- (2) Public sector and capital formation: The share of public sector in gross domestic capital formation has also increased from 3-5 per cent during the First Plan (1951-56) to about 11 per cent during Sixth plan (1980-85), but then it has declined to about 6.3 per cent during the Ninth Plan
- (3) Public sector and employment: Public sector employments in India are of two categories:
 - (a) Public sector employment in Government administration, defence and other Government services. (b) Employment in public sector enterprises of both centre, State and local bodies. In 1971, the public sector offered employment opportunities to about 11 million persons and it has increased to 19-5 million in 1995. However, this number has declined to only about 1-35 million in 2013-14. The maximum number of employment has been generated in transport,
- (4) Public sector and infrastructure: Public sector investment in the infrastructure sector like power, transport and communications, heavy industries, irrigation, education and technical training, etc., has paved the way for agricultural and industrial development of the country. Private sector investments also depend upon such infrastructural facilities developed by the
- Strong industrial base: The growth of the public sector in the field of iron and steel, coal, heavy engineering, heavy electrical machinery, petroleum and natural gas, fertilizers, etc., has also created a strong industrial base for further industrialisation.
- Export promotion and import substitution: PSEs also contributed a lot towards foreign exchange earnings of the country. The foreign exchange earning of the PSEs has increased from only ₹ 35 crore in 1965-66 to ₹ 1,22,719 crore in 2013-14. Some PSEs have also shown creditable records in achieving import substitution and thereby saved precious foreign exchange of the country.
- (7) Contribution to central exchequer: The PSEs have also been contributing a good amount of resources to the central exchequer in the form of dividends, excise duty, customs duty, corporate tax, etc. This contribution has increased from about ₹ 7,600 crore in 1980-81 to about ₹ 2,20,166 crore in 2013-14.
- (8) Checking concentration of income and wealth: Expansion of PSEs in India has been successfully checking the concentration of economic power into the hands of a few persons, and it has also been able to redress the problem of income inequalities to some extent.
- (9) Removal of regional disparities: From the very beginning, industrial development in India has been very skewed towards certain big port-cities like Mumbai, Kolkata and Chennai. Now, in order to remove regional disparities, the public sector tried to disperse the industrial units towards the backward regions of India. Hence, at present, we observe that Orissa, formerly an industrially backward region, has developed in respect of industrial growth.

In 1997, eleven profit making PSEs (such as ONGC, SAIL, IOC, IPCL, VSNL, NTPC etc.) were identified as 'Navaratna' PSEs by the government. At present there are nine such PSEs since IPCL and VSNL have been privatised. During 2010-11, these Navaratna PSEs had a net profit of ₹ 66,729 crore. Some other PSEs having good track records in making profits were identified as Miniratna PSEs. At present, there are about 41 Miniratna PSEs.

At present, the Central Government has given 'Maharatna' status to seven CPSEs that earn maximum profits [e.g., Bharat Heavy Eelctrical Ltd (BHEL), Coal India Ltd., Gas Authority of India Ltd. (GAIL),







Indian Oil Corporation (IOC), etc.] The CPSEs (17 in number) that earn profits somewhat less than those of 'Maharatna' category, etc.] The CPSEs (17 in number) that earn profits somewhat less than those of 'Maharatna' category, get the status of 'Navaratna' [e.g., Hindustan Aeronautics Ltd. (HAL), Hindustan Petroleum Company, get the status of 'Navaratna' [e.g., Hindustan Aeronautics Ltd. (MTNL), Bharat Hindustan Petroleum Corporation Ltd. (HPCL), Mahanagar Telephone Nigam Ltd. (MTNL), Bharat Petroleum Corporation Ltd. (HPCL), Mahanagar Telephone Nigam Ltd. (PPCL) Petroleum Corporation Ltd. (HPCL), Mahanagar Telephone Nigam Ltd. (64 in number) are now called as (Ministration Ltd.). The third layer of the profit-making CPSEs (64 in number) are now called as 'Miniratna' [e.g., Bharat Sanchar Nigam Ltd (BSNL), Hindustan Copper Ltd. (HCL), Airport Authority of Ltd. (HCL), Airport Authority of India (AAI), etc.]

Inspite of the important role played by the PSEs in India, its performance is not noteworthy. Different economists have pointed out several loopholes in their performance pattern. Despite some demerits of the PSEs and the result of the PSEs and the result is not the role. of the PSEs and the recent attitude of the Government towards privatisation, we cannot deny the role of the public sector in supplying basic public goods to the common people of our country at a reasonable price. Here lies the importance of the public sector in any mixed economic system with social welfare being the prime objective.

4.4.2. Problems faced by the Public Sector Enterprises

Massive investments have been made over the past four decades to build up the public sector in India, which possesses a commanding role in our economy. Thus, some of the mature public sector enterprises have successfully expanded their production and built up a reserve of technical competence in a number of areas. However, after the initial growth of this sector, a number of problems have begun to manifest themselves in many of the public enterprises. Serious problems are observed in the insufficient growth in productivity, under-utilisation of capacity, poor project management, overstaffing, lack of technological upgradation or modernisation, inadequate attention to R & D activities (research and development) and human resource development. In addition, public enterprises have shown a very low rate of return on capital invested. The performance of some central sector public enterprises can be represented with the notion of profitability (defined as net profit after tax as a percentage of total capital employed). Though this profitability was increasing gradually during the 1980s; if the petroleum and power sectors are excluded, this becomes negative for other central sector public enterprises.

Table-4 Profit & Loss-making CPSEs and Net profit as a percentage of Capital Employed in some central sector public enterprises (CPSEs)

Year	Profitability					
E 0 2 1-11-10 pg	Profit-making CPSEs	Loss-making CPSEs	Net profit as %of capital employed			
2004-05	143	73	12.88			
2005-06	160	63	11-88			
2006-07	154	61	12-26			
2007-08	160	54	11-21			
2008-09	158	55	10-57			
2009-10	157	60	10.15			
2010-11	158	62	7-08			
2011-12	161	64	7-34			
2012-13	151	78	7.62			
2013-14	163	71	7.53			

Source: Public Enterprises Survey (Several Reports).

During 1990-94, however, there was a declining trend in this profitability. It declined from 4.5 per cent in 1989-90 to 2-8 per cent in 1993-94. Although there was an improvement in profitability during





1994-96, the economic survey of the Government of India indicated that the petroleum, power, telecommunication and financial service sectors together contributed about 59 per cent of the net profit earned by all public sector enterprises in 1994-95. The public enterprises survey (1995-96, 2010-11) indicated that the number of loss-making central sector public enterprises was 74 in 1980-81 (amount of net loss was ₹ 760 crores) and their number increased up to 109 in 2001-02 (amount of net loss was ₹ 10,454 crores). However, the number of loss making CPSEs declined to 62 in 2010-11 (with a net loss of ₹ 21,693 crore). About 31 per cent of total central sector public enterprises incurred such losses in 2013-14 (Table-4). The profitability of the CPSEs also indicated a declining trend during 2004-05 to 2013-14. As per the report of the Department of Public Enterprises (DPE), about 62 CPSEs (under the Central Government) were considered as sick units (out of total 220 operating central sector public enterprises) during 2010-11. The Public Enterprises Survey Report (2010-11) shows that the profitability of the CPSEs, though increased from 6.7% to 12.8% during 2001-05, gradually declined to 9.7% in 2010-11.

4.4.3. Reasons for Poor Performance of Public Sector Enterprises

Several causes have been identified by the researchers for the poor performance of the public sector enterprises in India. These are noted below:

- (1) Low return on capital: The performance of some central sector public enterprises can be represented with the notion of profitability (defined as net profit after tax as a percentage of total capital employed). Though this profitability increased gradually during the 1980s; if the petroleum and power sectors are excluded, this becomes negative for other central sector public enterprises.
- (2) Cost over-run: Non-completion of many public sector projects within the stipulated time period led to an unnecessary increase in the cost of construction. Improper project planning seems to be responsible for such delay and cost over-run. Thus, it puts an additional burden on the scarce resources of our country.
- (3) High capital-output ratio: The amount of capital invested per unit of value-added is relatively higher in public sector enterprises. This type of over-capitalisation can be traced to avoidable expenditure during construction work, surplus machine capacity, tied-up aid resulting in compulsion to purchase imported machinery and equipment, expensive turn-key contracts, etc.
- (4) Improper price-policy: Most of the public sector enterprises do not follow a rational pricepolicy. In most of these enterprises, prices of their products or services are kept at a low level, keeping in mind the needs and purchasing power of the general people. However, the quality of some of these public utility goods (e.g., health service) supplied by the public sector, seems to be very poor. Some economists believe that it is better to provide quality services at a premium rather than providing such poor services at a low price (excepting such cases where public utility services are meant for the backward regions of the country or for backward communities).
- (5) Excessive man-power: Most of the public sector enterprises are also burdened with excessive man-power. The number of employees remain far above their actual requirements. Hence, a huge sum of money is required for the payment of their wages and salaries.
- (6) Under-utilisation of capacity: Some public sector enterprises also do not utilise the full capacity of their plants and machinery. Such under-utilisation of capacity leads to an increase in the average cost of production in these enterprises. As the prices of products and services, in most cases, do not cover the rising average cost of production, these units become sick within a short time.
- (7) Absence of proper work culture: Indiscipline and lack of responsibility among the workers, frequent labour unrest and a bad relationship between the management and workers also paralyse many public sector enterprises.







- (8) Improper management: Efficient management, along with proper delegation of authority from the top level of management to lower levels, are supposed to be the precondition for smooth functioning of an enterprise. Unfortunately political interference, lack of sufficient autonomy to the management and bureaucratic entanglements degrade the managerial efficiency in public sector enterprises.
- (9) Lack of functional autonomy: Most of the public sector enterprises are subject to excessive control, exercised by the Ministry of Finance and the Ministry-in-charge over these public sector enterprises. Thus, development plans of such public sector enterprises are constrained by these rigid control mechanisms, and the poor performance of public sector enterprises is often ascribed to lack of functional autonomy to the management.
- (10) Inappropriate techniques of production: Inappropriate techniques of production are also an important explanation for inefficient operations in many public sector enterprises. For example, in the case of the steel industry, our blast furnace productivity is only around 45 per cent of that of Japan. Our public sector enterprises could not develop such blast furnaces, which could function well even with the quality of coal (i.e., with high ash content), available in India.

4.4.4. The Issue of 'Disinvestment' in the Public Sector

The Government of India wanted to solve the maladies of the public sector through greater emphasis on private sector enterprises. The Industrial Policy Resolution (1991) of the Government also stressed the need for gradual reduction in public sector enterprises. The Industrial Policy Resolution of 1956 kept 17 industries reserved for the public sector. This number was reduced to only 8 in the Industrial Policy of 1991; and this was further reduced to only 3 industries. Thus, out of 17 industries reserved for the public sector, as many as 14 industries (like iron and steel, heavy plant and machinery, heavy electrical plants, mining and processing of copper, lead, zinc, etc., generation and distribution of electricity, ship building, etc.), are now open to the private sector. The Industrial Policy (1991) has also emphasised on the closing down of sick public sector units. The Board for Industrial and Financial Reconstruction (BIFR) makes necessary recommendation for the restructuring or winding up of sick public sector enterprises. About 285 cases of public sector units were referred to the BIFR up to March, 2004. Rehabilitation schemes were sanctioned for 24 public sector units run by the Central Government and 21 public sector units run by the State Governments. It was also recommended that 27 public sector units run by the Central Government and 39 public sector units run by the State Governments had to be wound up.

- Principal elements of the Government policy towards the Public Sector : The main elements of the Government policy towards the PSUs, are stated below:
- (a) Bring down Government equity in most of the PSUs to 26 per cent or lower, if necessary;
- (b) Restructure and revive potentially viable PSUs;
- (c) Close down the PSUs which cannot be revived; and
- (d) Fully protect the interest of the workers.
- The 'Disinvestment' programme: The Government of India planned for the selling of shares of some of the profit-making public sector enterprises to the private sector. This is known as disinvestment programme. This disinvestment programme has been the major plank of the privatisation programme in India. The Government set up a Disinvestment Commission in August, 1996 to advise the Government on disinvestment. The principal objective of this disinvestment policy was to improve the performance of the public sector enterprises. During 1997-98, the subject matter of disinvestment was brought under the department of Economic Affairs (Ministry of Finance). Subsequently, the Department of Disinvestment was constituted in the Ministry of Finance in December, 1999.







- Evolution of disinvestment policy in India: The disinvestment policy has largely evolved through the Budget speeches of Finance Ministers. In brief, this policy evolution can be divided into
- (a) 1991 to 1999: At this stage, the focus was on disinvestment of minority shareholding of the government in favour of financial institutions.
- (b) 1999 to 2004: In this period, the focus was on disinvestment through strategic sale.
- (c) Since 2004: During this period the focus is on disinvestment of minority stakes in the domestic market to the general public.

Table-5 shows the names of some of the public sector enterprises where the disinvestment policy could be successfully followed by the Government.

Disinvestment in Public Sector I

- Dru	Name of the public sector unit	Percentage of total share disinvested (%)	Percentage of Government holding (%) as on 31st March, 1998
1.	Bharat Earthmovers Ltd.	39-19	60-81
2.	Bharat Heavy Electricals Ltd.	32-28	67-72
3.	Bharat Petroleum Corpn. Ltd.	33-80	66-20
4.	Hindustan Organic Chemical Ltd.	41.39	58-61
5.	Hindustan Petroleum Corpn. Ltd.	48-94	51-06
6.	Hindustan Zinc Ltd.	24.08	75-92
7.	Indian Petro Chemicals Corpn. Ltd.	40.05	59-95
8.	Indian Telephone Industries Ltd.	22.98	77-02
9.	Mahanagar Telephone Nigam Ltd.	43-80	56-20
10.	Videsh Sanchar Nigam Ltd.	33.04	66-96

Source: India (1999), Publications Division, Ministry of Information and Broadcasting, Government of India.

Box-1

No. of Central PSUs (as on 31.3.2014): 290

Operating CPSEs: 234

Profit making Central PSUs: 163

Loss-making Central PSUs: 71

No. of employees: 13-51 lakh (excluding casual & contract workers to the extent of 2-3 lakh)

Extent of disinvestment during 1991-2014: (a) Money raised: ₹ 1,52,789-7 crore

(b) No. of Central PSUs involved: 68

Type of Sale: (a) Sale of minority stake in 52 CPSUs

(b) Strategic sale in 16 CPSUs

(1) Maruti Udyog: ₹ 6,398 crore

Top yields from disinvestment:

(2) ONGC : ₹ 12,749 crore

(during 1991-2014)

(3) Coal India : ₹ 15,199 crore

(A) NITDC . ₹ 11 457 crore