CHAPTER TWO

INDUSTRIAL DEVELOPMENT: THE THEORETICAL
BACKGROUND AND POLICY PERSPECTIVE.

2.1 The present chapter is an attempt to construct the conceptual, theoretical & state policy related background for contextualizing the core research activity of the study. The discussion in this chapter is based on survey of relevant literature and policy announcements. The chapter is organized in five sections. Section 2.2 discusses the conceptual and definitional issues related to industry and industrialization. The role of industrialization in economic development is discussed in section 2.3. The policies for industrialization in general, and in India and Assam contexts are taken up in section 2.4 and 2.5. The last section is a brief summary of the discussion of the chapter.

2.2. Notions of Industry, Industrial Growth and Industrialization:

In economic literature, the connotation of the term 'industry' is not free from ambiguity. In microeconomic theory, an industry is either defined on the basis of product being produced or the methods of production being used (Koutsoyiannis 1979). In regard of the former criterion, firms are grouped in accordance to their products whose cross price elasticity of demand reaches a particular threshold. In case of the latter criterion, grouping of firms is made on the basis of similarity in the technological expertise made by producers in supplying certain goods. However, the relative merit of the said two definitions of industry lies on the purpose for which they are chosen. In input-output framework, an industry relates to the production of a given good or service corresponding to the classification of total domestic product into different goods. Under this framework, in absence of depreciation, taxation and foreign sector (i.e. static open model) value added is equal to the gross
output minus inter-industry transactions. Thus, aggregate final demand is equal to aggregate gross value added. In its dynamic setting, current output is not only used for current consumption and/or as current intermediate input but also used as an addition to industries’ inventory stock and fixed capital formation. These two models are not besides other limitations free from arbitrariness with respect to grouping of goods in industries. The intra-industry heterogeneity with respect to technologies, efficiency and demand is not invariant overtime as is assumed in the models. Usually, the term ‘industry’ is generally referred to mean a manufacturing unit as different from agriculture and services. A manufacturing unit or establishment is one which engages in the physical or chemical transformation of goods into new products. However, manufacturing units engage in repair and business maintenance services are also come under this category in the National Industrial classifications of many countries including India.

India like other industrialized economies is very familiar with the practice of evolving National Industrial Classification (NIC) in line with the International Standard Industrial Classification (ISIC). The Central Statistical Organization (CSO) is entrusted with the task of evolving the NICs. CSO made six rounds of revisions of NIC viz. NIC 1962, NIC 1970, NIC 1987, NIC 1998, NIC 2004 & NIC 2008 following the changes in the product mix of industrial units as also technologies of operation. With these revisions the CSO expects that it helps in meeting user requirements, international comparability and also to highlight some of the special features on Indian Economy (CSO, 2008). These classifications are primarily based on the nature and kind of economic activity carried out by an establishment. The revisions have also been taken into account the significant changes in the organization and structure of Industries. The NIC-2004 did not affect any major changes in the structure of earlier NIC-1998 except removing ambiguities/omissions etc. by suitably modifying explanatory notes. In all the NICs, industries are classified into specific number of divisions, major groups, sub-groups and their disaggregation at digit specific levels. The organization as stated tries to
make one to one correspondence of industries at two digit levels throughout the NICs.

Following Krishna (2004) the Industrial Sector in India consists of three broad sub-sectors viz. (i) Manufacturing, (ii) Mining and Quarrying, sometimes referred to as Mining Sub Sector and (iii) Electricity, Gas and Water Supply. The Manufacturing Sector with the highest value added share in the industrial sector in India comprises of two subdivisions: (a) the Factory Sector, referred to as Registered or Organized Manufacturing Sector, which includes all such enterprises registered under the Indian Factories Act 1948 and (b) the Non-factory Sector or Unregistered Manufacturing sector consisting of all manufacturing units which are not registered under the above Act. Indian Factories Act 1948 defines a factory ‘as an establishment employing ten persons with the aid of power and twenty persons without the aid of power.’

Besides manufacturing units registered under the Indian Factories Act 1948, the Annual Survey of Industries, the only source of reliable data on Registered Manufacturing Sector also cover all electricity undertaking engaged in generation, transmission and distribution of electricity registered under Central Electricity Authority, Servicing units, activities like water supply, cold storage, repair of capital goods and other repair services and bidi and cigar establishment registered under Bidi and Cigar Workers (conditions of Employment) Act 1966.

Thus, the industries belonging to ASI frame constitute the Registered Manufacturing sector in India. However, following Ahluwalia (1985, 1991), Golder (1986) and many others we have excluded the repair services and the output/or services of electricity, gas and water supply and cold storage from our study on Registered Manufacturing sector using ASI data.

Industrial Development and Industrialization do not necessarily cover the same dimensions. The increase in the number and /or size of industrial units resulting in growth in value addition by such units together with expansion of employment avenues in industrial sector is referred to as industrial development. Industrialization on the other hand is a ‘process in which
changes of a series of strategic production functions are taking place. It involves those basic changes that accompany the mechanization of an enterprise, the building of a new industry, opening of a new market and the exploitation of a new territory. This is in a way a ‘process of deepening and widening of capital’ (Pei kang 1949). The ‘process of deepening’ as well as ‘widening of capital’ refers respectively to one where more capital is used per unit of output and capital formation grows with increase in output. Strategic innovations such as use of steam engine, railways, electric power etc or changes in strategic production functions have further intensified the organizational changes accompanying the use of modern factory system, marketing structure and banking institutions. These changes work in their way continuously in the production process of industries to give a broader meaning to industrialization. Sweezy (1942) defines industrialization as the ‘establishment of new industries or building means of production’. In this sense, industrialization helps in creating prolonged and enlarged scale economies for exploiting the gains of increasing returns continuously. However, Industrialization may be defined as a process which accelerates economic growth; affects structural changes in the economy, particularly in respect of resource allocation, productivity and factor substitutions, income generation, occupational distribution and foreign trade; and induces certain social change. Thus, the term ‘industrialization’ is the result of a long and historical evolution. In its narrow sense, industrialization is referred to designate the growth of manufacturing sector only. In general, industrialization is associated with such a process in which industrial sector grows faster than the rest of the economy resulting in increase in its share in GDP and also the ratio of work force engaged in industries.

2.3 Role of Industrialization in Economic Development:

The process of economic development cannot be explained without referring to industrialization although both the concepts have different aspects. In development literature, the role of industrialization in economic development
is well recognized. Classical and Keynesian growth theories emphasized the role of capital accumulation and the embodiment of the various forms of technical progress associated with increasing returns as determinants of growth (Thirwall 2003). The classical economists also believe that movement of labour from traditional activities in primary sector to 'modern industry' was the key to raising economy's saving and investment rates and to fostering economic growth (Abramovitz 1986). The Harrod- Domar model of growth laid stress on the role of physical capital and savings in creating effective demand as well as productive capacity in explaining the growth process. Solow (1956), in a growth accounting framework well recognized the role of productivity in the growth process. Kaldor (1967) had formulated three basic laws which had been widely tested in developed and developing countries using both cross section and time series data. He observed a strong positive correlation between the growth of manufacturing output & the growth of gross domestic product (GDP). He also found some character of correlation between growth of manufacturing output and growth of productivity in manufacturing. Growth of manufacturing output leads to growth of productivity outside manufacturing - other findings of Kaldor which signifies the operation of increasing returns to scale in industry due to the presence of static and dynamic returns to scale in manufacturing activities (Thirwall, 2003). Some of the growth theories, such as those of Harrod-Domar and Kaldor had a very significant role on Indian policy (Hijra 1984). Chenery and Tailor (1968) also observed statistically significant relationship between per capita income and the degree of industrialization. The endogenous growth theory developed towards the end of 1980s, gave attention to the role of continuous advances in human capital, technology and factor accumulation to offset the diminishing returns on physical capital in sustaining the growth process (Ray 1998). In development literature, it is well recognized that industrialization is not only provide employment opportunities to surplus labour force but also crucial to development strategy as it provides stimulus throughout the economy by raising labour productivity, output and rate of saving. Raising incomes as resulting from industrial growth are expected to
increase the volume of savings which can create more investments in industry. This progressive spiral can lead the economy from ‘take-off’ into self-sustaining growth (Myrdal 1968). Industrialization besides its own importance also plays a catalyst role for wider economic transformation through linkages and through the creation of economies of scale (Roden 1961). Industrialization is also emphasized for creation of ‘dynamic surpluses’ and for the generation of secondary round of activities through vertical linkages with the other sectors of an economy. Hirchman (1956) advocated industrialization due to its larger linkages effect than agriculture and for its uniformly higher productivity levels. Industrialization is also advocated for maintaining stability in state income through diversification of the economy’s production structure. The mechanism of linkages should therefore encourage Government to formulate policies designed to influence the location of industry as a constituent of wider strategies aimed at reducing regional inequalities (Chapman et.al. 1991). Kuznet (1966) in his well reputed work on modern economic growth has identified high rate of structural transformation in favour of industry in terms of its share to national income and work force as one of the major components of development process. He documents that such a structural transformation experienced no decay of agriculture & instead agriculture itself has got some fillip to productivity growth. Economic globalization has greatly increased the premium on manufacturing particularly of the exportable goods. An expansion of non- tradable is self-limiting as the domestic terms of trade turns against the non-tradable, chocking off further investment & growth. There are also natural limit to export-led growth based on primary products. Developing countries exporting manufactured products with diversification in it do not face such limit (Rodrick D 2008).

In short, the role of industrialization in economic development can in general be viewed from four important ends: first, from the change in the consumption preference due to rising per capita income of population, second from the productivity change due to larger scope for division of labour in Manufacturing, third from allocation of resources angle in terms of greater
substitution possibility of capital for labour due to availability of improved technology and last from the angle of shift in the occupational distribution which helps in absorbing the incremental as well as the surplus labour force from the extractive sectors of an economy.

2.4. Towards Policy Formulation for Industrial Development

Having discussed the conceptual issues related to industry and its role in economic development we now turn our attention in this section to the need for government intervention in the form of regulation and other promotional measures for planning for industrial development of a country.

2.4.1. Need for Government Intervention for Industrialization

The Government's role vis a vis industrial sector of a country can be promotional, regulatory and participatory. In its promotional role Government facilitates industrial activities by developing infrastructure and other supporting activities. As a regulator, Government may try to shape industrialization in a socially desired pattern. Government may even take up industrial production directly if the non-government industrial units are found to be absent or incapable. According to Barthwal (2000) 'the need for government intervention in industry basically originates from a community's desire to achieve certain chosen socio-economic ends and goals. The chosen objectives or goals may vary from community to community and they are largely determined by the political ideology or the economic system followed by a country. The order of a goal in the preference scale again depends upon the political ideology of a society at large'.

Being a facilitator and/ or regulator, the Governments in underdeveloped or developing countries seek to shape the industrial development process with some goals. Some of such goals are rapid growth of national income, improvement in the allocation of factors of production, promotion of export for favourable balance of payment and adoption of import substituting strategy for self sufficiency in future, protection for infant industry to exploit their potential comparative advantage in future, reduction of concentration income
and wealth and reducing regional disparities through strengthening the base of infrastructure as well as public utilities in backward regions. Dispersal of industries and promotion of small scale industry are another two measures adopted by Government to achieve the goals of reducing regional inequalities (Bhagwati et al 1970, Seth 1982).

The economic, political and geographic factors which have a bearing on industrial location can largely be influenced by Government's role as facilitator, regulator and participator in the planning for industrialization in a country. Some of such factors are: efficient transport and communication availability or organized marketing structure, well integrated and consolidated political conditions, availability of land, proximity to energy sources, existence of competitive and complementary industries to encourage challenge and to exploit external economies of scale, availability of technical knowhow and so on (Smith 1971).

While intervening in industries the Government in general adopts a set of fiscal, monetary, institutional and direct controls measures (Bryce 1960). Government intervention in the form of reduction in tariff rates, credit allocation and preferential interest rates and tax incentives are widely adopted measures for export promotion particularly in the South East Asian developing economies (Collins & Park 1989). These fiscal and monetary instruments are used simultaneously as a package to achieve most of the chosen social goals. Such an instrument may have positive effects upon one objective and negative effects upon another.

However, most of the objectives as well as the means of satisfying these objectives conflict with one another. At the same time, a vast array of economic, social and political institutions are engaged in setting and achieving the goals which in turn often leads to clash between public and private interest (Martin 1989). Therefore, a judicious mix of instruments is a necessary precondition for acquiring favourable economic effects.
2.4.2. Government Interventions in the Industrial Sector in India:

In India, systematic thinking as regard the direction of industrial development may be imbibed while taking into account 'The Statement of Industrial Policy 1945', 'The Industrial policy Resolution of 1948' (IPR), the enactment of Industries Development and Regulation Act (IDRA) 1951, the First and Second Five Year Plan documents, the Industrial Policy Resolution 1956 and lately the New Industrial Policy Announcement 1991. The 1945 Statement of Industrial Policy of the then Government of India is remarkable as a precursor of all the thinking that became enshrined in the key industrial policy resolution after independence (Mohan 1992). Industrial Policy Resolution 1948, while defining the broad contours of the policy, considered the state both as an entrepreneur and as a promoter of industrial development. The resolution gave importance to continuous increase in industrial production and equitable distribution in the economy. It assigned a progressively active role of state in the development of industries. The Industrial Policy Resolution 1956 laid stress on developing heavy and basic industries and expansion of public and cooperative sectors for creating gainful employment avenues. The Resolution also gave importance on checking the private monopolies and concentration of economic power in few hands. Owing to then declared objective of establishing a socialistic pattern of society, the resolution also emphasized on taking the sole responsibility of the state to own and develop all the basic and strategic industries and public utility services and these industries were listed in 'Schedule A' of the Resolution. As such some other industries with mixed ownership (i.e. private & public sectors competing together) pattern were listed in 'Schedule B' of the Resolution. The remaining industries which did not come under either Schedule A or Schedule B of the Resolution were exclusively reserved for the private sector. But state was free to enter this category as when required. The private sector industries were required to follow the framework of the social and economic policy of the state and they would be subjected to control and regulation in terms of IRDA 1951 and other relevant legislations. The resolution also puts considerable emphasis on the role of small scale industries in the
development of the economy and state had been assigned the responsibility to assist such industries for their development. Another important area that had got special place in the Resolution was the balanced regional development of industries in the country through dispersal of industries and promotion of small scale industries as well as development of infrastructure in the backward regions (Alagah 1972). In this connection, the IPR 1956 asserted that 'in order that industrialization may benefit the economy of the country as a whole, it is important that disparities in the level of development between different regions should be progressively reduced' (Planning Commission 1981). Even prior to the formulation of the Resolution, the problem of regional imbalance had got considerable importance in the First Five Year Plan (1951) and was asserted in the plan document as for 'industrial development in the country to proceed rapidly and in a balanced manner, greater attention will have to be paid to the development of these states and regions which are so far remained backward'. However, due to the dominant role of techno-economic considerations of establishing heavy and basic industries, the Second Five Year Plan (1956) emphasized the development of infrastructure in backward areas and the promotion of small scale industries as the main instrument of industrial dispersal. The importance of small scale industries in Indian economy has been earmarked since the beginning of the planning process for many reasons. However, all the segment of industry-large, medium and small was assigned a mutually complementary role in formulation of industrial regulation policy in India with a view to facilitating an integrated and harmonious growth of industrial sector. The small scale industries were considered essential in India because of its being labour intensive and having implications for equity, flexibility, capability to contribute to decentralization, to promote entrepreneurship and optimum use of local resources and also for its complementarities with the large scale industries (Sahu 2003-04). The complementarities of small scale industries with large ones can be observed from many angles. The large scale industries should supply raw materials, semi-finished products, byproducts, technical knowhow etc. to small scale industries at reasonable rates so that
they can progress simultaneously along with the large units. In return, small scale units can profitably make use of the byproducts of large units to facilitate reduction in cost of production of large ones besides producing the small tools and implements required by the large units. Utilization of byproducts would also help in generating employment potential (Narayan1997). Thus, an integration of both the sectors would be mutually advantageous.

The policy of Government intervention in industries in India till the 1980's was basically based on the IDRA 1951 & IPR 1956. Till then, the priority for the industrial sector was translated into actual policies through an intricate industrial licensing framework, a protective foreign trade regime and through a framework of regulation of foreign technology and foreign capital. Besides, the policy also entailed price and distribution controls in specific industries and control over capital issues (Ahluwalia 1999). In practice, the operation of licensing system was characterized by undue conservatism and administrative delays. The reports of various committees formed for examining the licensing system revealed that licensing mechanism was not serving its purpose of channelizing investment into desired direction.

The inward looking industrialization process did result in high rates of industrial growth between 1956 and 1966. At the same time, several weaknesses of such a process of industrialization resulted in inefficiencies crept into the system and the economy turned into an increasingly 'high cost' one (Rangarajan 2004).

The policy of intervention in industry by Government in India so far followed had also failed to reduce regional disparities, which was meant to be achieved through dispersal of industries and promotion of small scale industries, through transfer of resources by means of fiscal incentives and concessions and also through some relaxation in the licensing system and also by enacting the Monopoly & Trade Restrictive Practices Act (MRTP) (Mani 1992). At the same time the policy framework with the above legal and economic instruments as developed during the period proved to be utterly
ineffective in curbing the prolonged menace of inequity in the distribution of income & wealth among people. The then policy setup based on Import Substitution Strategy resulted in a high domestic cost structure and thus led to acute balance of payment crisis as well as high fiscal deficit and inflation in the domestic economy (Babu 1999). It was only during 1980-85, the importance of 'efficient import substitution' had been stressed on in the policy framework. Curiously enough, no reference was made in favour of the infant industry argument for protection of infant industry in India (Ahluwalia 1999). The then industrial development strategy for the private sector was largely based on product market regulation, with capacity licensing and reservation of products for exclusive manufacture in the small scale sector being its principal instruments. These dual restrictions had limited the incentives for product innovation, increasing the scale of operation, and improving industrial competiveness and hence encouraged economic rent-seeking across most of the industries (Singhi et al 2012).

In spite of many woes that had been attached to industrial growth based on the industrial regulation framework till 1980's in India, the framework would be able to contribute to the growth of a relatively strong industrial base with dominance of public sector.

Making a sharp departure from the Industrial Policy Resolution 1956, the Union Government announced a new economic policy on July 24, 1991, which heralded the economic reforms in India and has enormously expanded the scope of private investment in most of Industries (Jalan 2004). Important departure of the policy can be viewed from the remarkable policy changes regarding industrial licensing, foreign investment and technology agreement and the amendment of MRTP Act. The new policy regime emphasized on industrial enterprise, efficiency and market as determinants of industrial growth rather than the role of the state as envisaged in the IPR 1956. The reforms gradually removed the product market restrictions and brought down tariff rates and focused more on facilitating industrial development rather than hampering it with a framework of permits and controls. The number of industries requiring industrial license was now reduced to five and they are
associated with grounds of national security, strategic importance, or environmental concerns. As such, the number of industries reserved for public sector has presently reduced and presently it confined to atomic energy and rail transport only. Similarly, the product reservation exclusively for small scale sector was brought down to 21 only in 2009. Following the liberalization of trade regime and the deregulation of the industrial environment, the domestic Manufacturing Sector has shown improved productivity and growth performance particularly in post 2003-04 years. The share of Manufacturing Sector however has remained nearly stable between 14-17% in the last thirty years. As such another concern to this end is that the employment growth in the Manufacturing Sector particularly in Unregistered Manufacturing Sector has shown a sharp decline during 2004-05 to 2009-10 although there has been an apparent structural shift at moderate scale in the Manufacturing Sector towards capital and technology intensive industries viz. rubber, plastic, petroleum and chemical based products and minerals & metal based industries from Agro-based industries and metal products. High resource intensity, higher compliance burden under the extant regulations in manufacturing together with difficulties in land acquisition for setting up industries or lack of locations for mega investment, and reallocation of resource locked up in sick and weak industries are some of the major concerns for the New Manufacturing Policy announced in the Union Budget 2011-12 (Singhi et al 2012).

2.5. Recent Policy Initiative for Industrial Development of Assam

Having discussed in brief some of the broad areas related to industry, industrial development and need for Government intervention for industrial development, we now attempt to make a background for studying the industrial development pattern of Assam within which the work is basically confined to. However, in contextualizing policy statements first a brief historical account of modern industry sector of Assam is presented in the next subsection.
2.5.1. A Brief Historical Account of the Economy and the Industrial Sector of Assam Leading up to the Reference Period of the Study:

In August 1947, when India attained independence from British rule, the entire Northeast Region barring the princely states of Manipur and Tripura consisted of the Assam province. The administrative arrangement throughout the then Assam province was however not uniform. While the plains were under effective administration of the provincial government, the hills inhabited mostly by tribal people were virtually left out from that system of administration. In fact, the hills were classified as 'excluded' or 'partially excluded' areas depending on whether the area was inhabited by a compact aboriginal population or the aboriginal population was mixed with the other communities (Agnihotri 1996). Shifting or 'jhum' cultivation based self contained village was the typical organization of economic life of the hill tribes. Land used to be owned by the village community and access to the same by the individual families for cultivation and other purposes was regulated by the village council or the chief of the village depending on the form of the administrative organization of the tribe. (Ganguli 1986). The population in the plains was also by and large dependent on agriculture. But in contrast to the hills, people in the plains practised settled cultivation with rice as the main crop. In Assam, plains agriculture was by and large comprised of peasant farms, though the feudal Zamindari system was also in existence in the districts neighbouring Bengal.

There was a small but significant modern non-agricultural component of the Assam economy developed and dominated almost entirely by colonial capitalists. This sector consisted of the tea industry based on plantation, mining of coal and oil, and oil refining based on minerals, plywood industry and match factory based on forest resources and railways developed to facilitate the transportation of output of these industries (Sarma 1993). This industrial sector ensured that at the time of independence Assam had per capita income higher than the all India per capita income.

In post Independence decades leading to the 1980s, a series of political-administrative reorganization of the region saw most of the 'excluded and
'partially excluded' areas and the erstwhile North East Frontier Agency curved out as separate states of Nagaland, Mizoram, Meghalaya and Arunachal Pradesh; what remained as Assam are the Brahmaputra and Barak Valley Plains and the Karbi Anglong and the North Cachar Hills separating the two plains.

Partition of the country at Independence dealt a severe blow to the economic and industrial prospect of the Assam and the Northeast region. Partition resulted in geographical isolation of the region by cutting off its approach routes to the rest of the country and the world through East Bengal. Consequently the narrow corridor of North Bengal remained the only link of the region with the rest of the country and the region got burdened with a transport bottleneck and high cost of movement of man and material to and from it. This in turn has hindered economic integration of the region with the rest of the country and reduced the attractiveness of the region as a destination of investment. It is therefore hardly surprising that during the First and Second Five Year Plan period Assam’s economic position gradually declined vis-à-vis the all-India picture. Since 1961-62 Assam’s NSDP per capita has persistently remained below India’s per capita NNP. Sector-wise, the shares of agricultural in NSDP of Assam has been higher than the corresponding shares in India’s NDP, while the share of manufacturing has been lower in the state than in the country as a whole. The above picture of the trends in sectoral composition of state’s economy is corroborated by the distribution of work force according to main economic activity (Bezbaruah 2001).

The relatively small share of manufacturing sector in the NDP of Assam and the small percentages of the state’s work force finding engagement in manufacturing activities indicate that the state has not made much progress in industrialization during the post-Independence period. The industrialization process taking place in the state under colonial rule came to a complete halt in the changed circumstances after Independence. While foreign colonial interest in taking up new industrial ventures waned, there was no significant step up of investment by domestic private or public sector for sustaining the
growth of industries. The State government did not have the resources for the purpose and the Central Government and the domestic private capitalists seemed to lack interest in investing in the State. As Sharma (1966:282) puts it "Limitation of financial and manpower resources of the State Government lead to a situation where the State Government can do very little towards setting up industries under its direct initiative. The State's activities have thus been mainly promotional - to bring to light development potential of the State and woo the Central Government and private industrialists from outside the State to set up mineral and resource based large scale industries alongside consumer goods and light engineering units. But the State Government has little control over the process. The industries that were expected to be set up during the Third Plan period did not materialize except for a few unit......... Private businessmen who contemplated setting up industries in the border State were scared away by the aggression across the northern border in 1962 and the continued presence of the threat even since". Meanwhile discovery of further oil deposits in the State opened up scope for setting up of new industrial units. Goswami (1981:954) reports, "Thanks to extensive oil exploration in the post-Independence period, the estimate of Assam's recoverable crude increased several fold. This necessitated the setting up of additional refining capacity. In addition to Indian experts, a team of Soviet experts was invited by the Government of India to advise them on the site for the proposed refinery in the public sector. The Soviet consultants unequivocally gave their opinion in favour of Silghat near Nowgong as the technically superior site. They also suggested linking Silghat with the main consuming centres outside Assam with a product pipeline. But the Central Government flouting all expert opinion for reasons anything but economic decided to set up the refinery at Barauni in Bihar and to transport crude from Assam through 1151 kms. long pipeline costing Rs. 75 crores as against the estimated cost of Rs. 35 crores only for the product pipeline". As a consequence of such lack of effective initiative in the industrial sector during the early planning era, the share of manufacturing sector in Assam's NSDP dwindled from 12.49% in 1950-51 to 7.93% by 1973-74.
Subsequently of course, responding to the growing public discontentment in the region, the Central Government started paying greater attention to the problems of industrial and overall economic backwardness of the region. Several public sector industrial units were then set up and fiscal transfers to the States of the region have also since been enhanced. From the Fifth Plan onwards there has been additional transfer of resources through the North Eastern Council whose regional plans include mainly such projects which are of common importance to more than one State of the region. As a result there was a revival of industrial activity in the region in the 1970s. However the upswing did not survive very long. First, political upheaval starting in the late 1970s in the form of Assam Movement and subsequently, in course of time, due to economic liberalization in the country the industrialization process in Assam took some fresh beating.

2.5.2. North East Industrial Policies

Consistent with the policy of reducing regional imbalance as well as industrial dispersal as envisaged in IPR 1956 and considering the prolonged backwardness of the North East India and the disadvantages confronted by the region in the post liberalized era, some new initiatives have been taken up by the Union Government in the 1990s for the overall economic development of the region. One of such laudable initiatives is the implementation of the North East Industrial Policy 1997 (NEIP 1997) and the North East Industrial and Investment Promotion Policy 2007 (NEIIPP 2007) in succession.

Both the NEIP 1997 and NEIIPP 2007 have contained a varied range of fiscal incentives and other concessions with certain ceiling on investment and costs meant for encouraging entrepreneurs to establish new industrial units or for expansion or diversification of existing units located in the growth centres approved for the NE-Region or in other growth centres of Industrial & Infrastructure Development Corporation or industrial estate, Parks, export promotion zones situated anywhere in the North Eastern Region. The policies cover all the North Eastern States including Sikkim. Similar
incentives were also extended during period 2001-03 to some other industrially backward states viz. Jammu & Kashmir (J&K), Himachal Pradesh & Uttarakhand. However, North East States and J & K have got additionally enhanced subsidy components on capital investment, interest and transport costs and reimbursement of insurance premium (Planning Commission 2006). The fiscal incentives and concessions extended by the policy to North Eastern States cover 100% income tax and excise duty exemption, 15% capital investment subsidy under NEIP 1997 which further rose to 30% under NEIIPP 2007, 100% reimbursement of insurance premium under Comprehensive Insurance Scheme, 3% interest subsidy on working capital, 50-90% transport subsidy for the transportation of raw materials and finished products to/from designated rail heads. Eligible Industries can enjoy all these concessions for a period of 10 years after the commercial production as covered by a policy or 20 years covering the time period of two concerned policies. The polices also emphasized on strengthening the base of Small Scale Industries of the region by providing with technology and training support to weavers and also prioritizing the setting up of market complex and exhibitions together with establishing a new design of handicraft development centre. In both the policies the funding pattern for Integrated Infrastructure Development Centres has been changed from earlier 2:3 to 4:1 between Government of India and State Governments. The Central Government fund would be in the nature of grant.

2.5.3. State Industrial Policies:

Besides the NEIP 1997 and NEIIPP 2007 taken up by the Union Government, the Government of Assam on his part has also taken initiatives from time to time for facilitating the revival of industrialization process in the State. The State Industrial Policy 2003 and 2008 have been chosen for discussion on account of their coincidence of tenure with that of NEIP 1997 & NEIIPP 2007 of the Central government.

The industrial policy of 2003 as stated emphasized on formulating effective operational guidelines and the simplification of procedures for setting up and
The policy gives importance to adopt Single Window Clearance Mechanism under the State Directorate of Industries and Commerce for expediting clearance and approvals from various Departments/Boards/Corporations in implementation of projects. Other stated provisions in the policy are in the form of fiscal incentives. The incentives cover State capital subsidy @ 30%, interest subsidy component @ 30% on working capital loan, power subsidy at different rates as per connected load rate, captive power generation subsidy @ 50%, feasibility cost subsidy @ 100%, marketing cost subsidy @ 50% and the like. These subsidies have their own ceiling limits as prescribed in the policy.

In addition to these common subsidies, some other Special Subsidies are also included in the Policy for Food Processing/Electronic/Agro based/Biotech industries and also for Major/Heavy Industries and industries setting up through Foreign Direct Investment (FDI). The Policy has also made provisions for providing Special Incentives to sick public sector units and to the industries run by women and physically handicapped persons. As per the Policy provision, Major/Heavy industries setting up through FDI with own power generation would avail different rates of Special Subsidies at different ceiling levels. However, Special incentives for other categories of industry would be fixed at 10% subject to a ceiling of Rs 5 lakh. The above fiscal incentive provisions would be availed by the eligible industries for a period of 5 years from the date of effect of the policy.

With the above policy provisions for fiscal incentives and subsidies along with other legal and administrative reforms, the State government with stated 15 trusts areas for investment has laid stress on increasing the share of industry in Gross State Domestic Product (GSDP) from present 13% to at least 18%. Besides generating more employment opportunities, the policy has envisaged to create an industrial base by promoting large and medium scale industries and encouraging private investment in industrial infrastructure projects. At the same time, the policy by viewing the relative prospects of handicraft in the economy of Assam has made many provisions for revival &
promotion this set of industries besides designing measures to attract outside investors.

The Industrial Policy of Assam 2008, as stated has wanted to synergize the efforts of NEIIPP 2007 by incorporating attractive investment incentives and subsidies on power consumption. The Policy focuses on establishment of more Micro Enterprises for income and employment generation in the economy. It emphasizes on Nature-Economics Centric Development and Rural and Agro linked industrial investment in the State. To achieve the objectives, the policy has stressed on adopting means like creation of quality infrastructure, cluster development, fiscal incentives and tax exemptions to attract and encourage investment, facilitate access to market and mega investment and so on. Most of the fiscal incentive and subsidy provisions included in the policy are more or less the same as included in the Industrial Policy 2003 except its treatments to mega projects. A mega project according to this policy is one which makes a capital investment of minimum Rs 100 crores or generating minimum of 1000 regular employment with potential for development of ancillary industries based on the project. In case of such projects, ceiling amount of subsidy or the period of effectiveness for tax concessions would be relax able besides priority for land allotment.

The detail assessment of NEIP 1997 and the State industrial policies is yet to be undertaken. However, as per press release (2007) and the Eleventh Five Year Plan (2007-2012) document, Rs 1067 crores had been invested to set up 681 industrial units in the region during 1999-2004 which provided an employment generation of 20,709. Assam accounted for around 49% of the total investment during the period. As like in its midterm assessment of NEIIPP 2007, the forum of North East industry ministers in a recent press release (2012) reports that the NE region has got around Rs. 38,000 crores investment proposals from outside investors for setting up of 366 different industries in the region. Assam accounts for nearly 32% of the total investment. These investment proposals are basically meant for setting up of pharmaceutical industries followed by cement, power plants, plastic and hospitality and health care services. The report said that about 75% of the
proposals have already taken a tangible shape and the rest are in the pipeline. The forum has emphasized on setting up small & medium enterprises in the region due to scarcity of land in it for large units. It also vouched for hike in the interest subsidy on working capital to 7% from the present level of 3%.

At the same time, there are apprehensions of some researchers of the region that many of the units setting up under NEIP 1997 were little more than packaging units of goods manufactured outside. These units are as alleged obviously set up to take advantage of the fiscal and other incentives contained in North East Industrial Policies and they thus, cannot contribute to the actual industrial development in the region. However, to correct the loopholes in the NEIP 1997, the NEIIPP 2007 added a clause ‘the benefit of the policy would not be admissible to goods in respect of which only peripheral activities like preservation during storage, cleaning operations, packing, repacking, labeling or relabeling, sorting, alteration of retail sale price etc take place’. Moreover, the policies so far have considerably failed to attract FDI flow for setting up of new industrial establishments in the region in spite of numerous special fiscal incentives, concessions & other provisions as included in both NEIP 1997 & NEIIPP 2007 & the State industrial Policies.

At the same time some fundamental constraints on industrial development in the region as for instance, weak transport and marketing network are yet to be taken up seriously (Sarma & Bezbaruah 2009).

Thus, following Ray (2004) we can say that the industrial policies meant for industrial development of the region need to stress on simultaneous development of several activities with mutual linkages to exploit the benefit of complementarities of industries. At the same time, more effective steps are required to speeding up the process of removing the fundamental constraints of industrial development in the region.
2.6. Summing Up
The discussion in this chapter has enabled us in arriving at a clear definition of industry and industrial development to be followed in course of the study. The discussion on industrial policies related to the State of Assam has given us the background in which industrial development process can be better understood. This chapter thus creates the logical foundation for progression to analysis of the trend in industrial production taken up in the next chapter.