

Prospects and Challenges of Industrialization in Bangladesh

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Abstract

Industrialization is an essential pre-requisite for rapid and sustained economic development and social progress. Industrialization is the process in which a society or country transforms itself from a primarily agricultural society into an industrial one based on the manufacturing of goods and services. Characteristics of industrialization include the use of technological innovation to solve problems as opposed to superstition or dependency upon conditions outside human control such as the weather, as well as more efficient division of labor and economic growth. The growth of economy, the internal development of a nation depends upon the development of industrial sector. Bangladesh is predominantly agriculture base and has limited industrial output and exports. The industrial sector in Bangladesh is a huge contributor for the country's economic growth. The country faces severe competition in the world market to maintain and develop its trade and balance of payment in its favor. The economy is not strong as the industrial infrastructure and output are not diversified enough. The problems of ensuring primary energy services are of prime importance to industrial consumers. The Government of Bangladesh has taken steps to facilitate the industrialization in Bangladesh. The paper addresses the prevailing problems, prospects and challenges of industrialization in Bangladesh and some policy recommendations are highlighted.

Introduction:

Industrialization is a process that happens in countries when they start to use machines to do work that was once done by people. Industrialization changes the society as it happens. During the industrialization of a country people leave farming work to take higher paid jobs in factories

in towns. Industrialization is part of a process where people adopt easier and cheaper ways to make things. Using better technology, it becomes possible to produce more goods in a shorter amount of time. Modernization and structural transformation of the economy and diversification of the economic base, increasing returns and economies of scale, technological progress and productivity increase, accelerated economic growth and employment creation, increase in incomes and standard of living of the people are the universally recognized dynamic benefits arising from industrial development. Industrialization is thus pursued as an overriding development objective in its own right. Industries are the most important aspect of the economy. Industries refer to the production of an economic good or service with an economy. The processing of raw materials to finished goods and provision for services is done by the industries. Industries can be classified as public and private. Industrial revolution led to the development of factories for large scale production with consequent changes in society. It is the extensive organization of an economy for the purpose of manufacturing. Industrialization introduces a form of philosophical change where people obtain a different attitude towards their perception of nature, and a sociological process of ubiquitous rationalization. There is considerable literature on the factors facilitating industrial modernization and enterprise development. Key positive factors identified by researchers have ranged from favorable political-legal environments for industry and commerce, through abundant natural resources of various kinds, to plentiful supplies of relatively low-cost, skilled and adaptable labor's industrial workers incomes rise, markets for consumer goods and services of all kinds tend to expand and provide a further stimulus to industrial investment and growth.

Objectives of Industrialization:

Macro objectives of industrialization are-

- To provide employment to working labour force
- To increase GDP
- To supply consumer, capital and intermediary goods
- To support agriculture and service sectors
- To improve balance of payment positive by promoting export industry and import substitute industries

History of Industrialization in Bangladesh

In 1947, the Indian subcontinent was divided into two parts. One was India and the other one was Pakistan. Pakistan had two parts. One was West Pakistan and the other one was East Pakistan, which is now known as Bangladesh. The government of then West Pakistan dominated the people of this country in different sectors. In the economic sector, the discrimination was the most. Most of the industries of Pakistan were in this country. However, the profit from them was taken to West Pakistan. The progress in jute manufacturing started in that period.

Jute manufacturing sector is one of the oldest traditional manufacturing sectors of Bangladesh, which emerged in erstwhile East Pakistan in the early 1950s. During the 1960s and 1970s major share of the manufacturing sector in national income and manufacturing employment was accounted for by this sector. Exports of jute and jute goods were the two most important sources of foreign exchange of Pakistan during the 1960s. The East was subjugated, as all the revenue went to West Pakistan.

In 1971, with the liberation war of 9 months, Bangladesh became independent. As after the war, the country was left in dire states, the industrial development was very slow. However, Ready Made Garments (RMG) started during this period. And in this sector, Bangladesh could lay claim to considerable success. Today garment export is the main source of foreign exchange earnings. Its success was not necessarily influenced by government policy but essentially by outside forces. It originated in the 1970s when the investors of other South East Asian nations ventured to set up garment factories in Bangladesh and to work around the export quotas imposed on their native countries by the United States.

In the 1980s, the Pharmaceutical Sector made advancement in Bangladesh. It is one of the most developed hi tech sector which is contributing in the country's economy. After the circulation of Drug Control Ordinance - 1982, its development accelerated. During the 80s, other sectors like tea manufacturing, leather factories etc also gained importance. In 1990s, sectors like ship breaking, steel, cement and cold storage goods etc developed and gained momentum. From 2000 to 2012, many industries started their journey successfully, and contributed to the economic growth of Bangladesh. Among them are- electronics, glass, aluminum, plastic, cycle, and ceramic etc. industries. To sum up the whole thing, we can say that after 1971, Bangladesh is slowly and steadily turning its attention to develop its economy, through industrial development, moving away from the agricultural sector.

Why Industrialization is Important in Bangladesh

The industrial sector has historically been the sector that has driven growth as countries have moved from low to middle income status. This is because industry can provide high-wage employment for large numbers of workers and can raise social productivity by producing high-value goods on a mass scale. Poor countries can earn valuable foreign exchange by exporting manufactured products and the foreign exchange can be used to invest in newer machines and technologies so that a rapid move up the technology ladder becomes possible.

The average productivity of industry is higher than in agriculture or most service-sector activities, so as people move out of agriculture into industry, Gross Domestic Production (GDP) increases. Bangladesh as a country with a poor land-person ration is unlikely to prosper through agricultural growth alone. Agriculture is unlikely to deliver rapid growth in Bangladesh because of the difficulty of setting up large-scale farms that can compete with countries that specialize in agriculture such as Australia or Argentina.

Bangladesh has natural resources but that can be exploited, with the exception of natural gas. Thus, industrialization and specialization in manufacturing is the obvious way in which Bangladesh can raise its per capita income and social productivity. The industrial sector consists of manufacturing, together with utilities (gas, electricity and water) and construction main industries, textiles and apparel, jute, sugar, tea, leather, telecommunications, pharmaceuticals, cement, ceramics, shipbuilding, fertilizer, food processing, paper newsprint, light engineering, etc.

Impact of industrialization in Bangladesh

- Play a major role in economic development
- Provide a secure basis for a rapid of growth of income.
- Help in raising the standard of living
- Provide employment, meeting high income demands
- Brings in technological progress and change in the outlook of the people
- Has decreased the dependency on foreign resources

Role of Ministry of Industries in Industrialization

Ministry of Industries is primarily responsible for developing new policies & strategies for promotion, expansion and sustainable development of Industrial sector of the country. Given the present environment and increasing trend in globalization, the private sector is playing an important role in the industrialization of the country. Therefore, the Ministry of Industries has taken the role of a facilitator with a view to creating increased industrial activities in the country. The vision of the Ministry of industries is to promote the contribution of the industrial sector in the indigenous production from 25 to 40 percent and to provide all sorts of assistance in uplifting the labor force in the industrial sector increasing from 16 to 25 percent by 2021.

The major contributions of the Ministry of Industries in Industrialization are listed below:

- Rapid formulation of industrial policy giving priority to private entrepreneurship
- Attaining self sufficiency in production and distribution for the sake of safety in agriculture
- Elevating the standard of products to the world standard in an attempt to preserve the consumer's interest
- Establishment of industrial park (API) for production of raw materials of pharmaceutical industry
- Playing the role of facilitator for the development of cottage, small and medium enterprises
- Keeping market stability by increasing the production of sugar & salt
- Manufacturing environment friendly motor vehicle within the purchasing capacity of the people
- Enhancement of production in the industrial sector through training emphasizing the productively
- Protecting the national interest & expanding the trade and industry by preserving and encouraging intellectual property in relation to industry
- Expansion of industrialization by providing the entrepreneurship with training and incidental assistance by BSCIC & SME Foundation

Industrial Policy in Bangladesh

Bangladesh Government believes that rapid industrialization is a key to the country's economic development. Given the present environment of global competition, the private sector is playing an important role in the industrialization of the country. Therefore, the Government in the Ministry of Industries has taken the role of a facilitator. Faced with the challenges of the free market economy and globalization, the government has accepted private ownership and management of industrial enterprises as one of the major guiding forces in achieving economic growth. Besides this, the government has also brought about many constructive and timely reforms in the running of businesses, and liberalized trade so that private entrepreneurs can seize opportunities of establishing and running industrial enterprises profitably and freely.

To reduce poverty and generate employment opportunities, more efforts are needed to establish agro-based industries as well as to raise agricultural production. This will ensure the protection and fair price of agricultural products and employment of a huge number of unemployed people. In order to create further employment opportunities beyond the agricultural sector, initiatives should be taken to set up small, medium and large industries across the country. If these types of industries are set up in a planned way, then unemployment rates will decline and poverty alleviation will be accelerated. With these objectives in mind, the Industrial Policy has been radically reshaped.

In order to provide administrative, institutional and infrastructure facilities in the country's industrialization, there are organizations such as the Bangladesh Standard and Testing Institution (BSTI), Bangladesh Industrial Technical Assistance Center (BITAC), Bangladesh Institute of Management (BIM), Bangladesh Small and Cottage Industries Corporation (BSCIC), National Productivity Organization (NPO) and Small and Cottage Industries Training Institute (SCITI) under the Ministry of Industries, and the National Institute of Textile Training, Research and Design (NITTRED), Textile Vocational Institutes, Textile Diploma Institute and Bangladesh Silk Research and Training Institutes under the Ministry of Textiles and Jute. For the leather industry, the Bangladesh college of Leather Technology and different district level polytechnic institutes provide technical education. These institutes also provide assistance for industrialization by providing training on management and quality control of goods, safeguarding consumers' interests, producing and repairing import-substitute spare-parts used in industries, manufacturing

new tools necessary for the production of industrial goods that are in demand, and by improving efficiency and overall productivity.

In order to further strengthen the country's industrialization process, the present government has identified the Small and Medium Enterprises (SMEs) as a priority sector and as the driving force for industrialization. A national taskforce led by the Principal Secretary of the Prime Minister's Office has been formed so that proper policies and planning are followed in establishing SMEs. At the same time, with a view to providing entrepreneurs with assistance in the establishment of SMEs, a cell has been created under the supervision of the Ministry of Industries comprising officials experienced in SMEs from the Ministry of Industries, Bangladesh Small and Cottage Industries Corporation (BSCIC), National Productivity Organization (NPO), Asian Development Bank (ADB), FBCCI, National Association of Small and Cottage Industries, Bangladesh (NASCIB) and women entrepreneurs.

The provisions of all facilities for attracting foreign investments have been envisaged in the Industrial Policy. The government has taken an initiative to formulate a separate SME policy to provide entrepreneurs with necessary guidance and strategic support in respect of the establishment of SME industries all over the country. These strategic guidelines will be followed in establishing SMEs across the country.

The present industrial policy presents an integrated strategy for achieving high economic growth in the country through rapid industrialization. The key features of the Government industrial policy 2010 are indicated as follows:

- To expand the production base of the economy by accelerating the level of industrial investment
- To promote the private sector to lead the growth of industrial production and investment
- To focus the role of the government as the facilitator in creating an enabling environment for expanding private investment and sustained economic growth
- To attract foreign direct investment in both export and domestic market oriented industries to make up for the deficient domestic investment resources, and to acquire evolving technology and gain access to export markets

- To ensure rapid growth of industrial employment by encouraging investment in labor incentive manufacturing industries including investment in efficient small and cottage industries
- To generate female employment in higher skill categories through special emphasis on skill development
- To raise industrial productivity and to move progressively to higher value added products through skill and technology upgrading
- To ensure a process of industrialization which is environmentally sound and consistent with the resource endowment of the economy
- To effectively utilize the existing production capacity
- To coordinate all macroeconomic policies
- To develop indigenous technology and to expand production based on domestic raw materials and inputs
- To rehabilitate and support deserving sick industries

If all structural and policy obstacles to industrial development could be overcome, Bangladesh could expect to achieve a double-digit industrial growth in the coming years and move closer to achieving the target of raising the industry sector's share in GDP to 35-45% in the next decade as set by the 2010 industrial policy.

Classification of Industries in Bangladesh:

Different size categories of industries are defined according to Industrial Policy in the following manner:

Large Industry

In the case of manufacturing activity, large industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in excess of Tk. 200 million or enterprises having more than 150 workers.

In the case of non-manufacturing industrial activities, large industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in excess of Tk. 100 million or enterprises having more than 50 workers.

Medium Industry

In the case of manufacturing activity, medium industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in the range of Tk 15 million to Tk. 200 million or enterprises having between 50 and 150 workers.

In the case of non-manufacturing industrial activity, medium industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in the range of Tk 5 million to Tk. 100 million or enterprises having between 25 and 50 workers.

Small Industry

In the case of manufacturing activity, small industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in the range of Tk 0.5 million to Tk. 15 million or enterprises having between 10 and 50 workers.

In the case of non-manufacturing industrial activity, small industry will include enterprises with either the value (replacement cost) of fixed assets excluding land and building in the range of Tk 0.5 million to Tk. 5 million or enterprises having between 10 and 25 workers.

Micro Industry

Micro industry will include industrial enterprises with either the value (replacement cost) of fixed assets excluding land and building of up to Tk 0.5 million or enterprises having 10 or fewer workers.

Cottage Industry

Micro industries with predominance of family labor will be defined as cottage industries.

Reserved Industry

Industries that are kept reserved for public investment due to national security or other reasons have been termed as reserved industries. Current list of reserved industry is given as follows:

- Arms and ammunitions and other military equipments and machineries
- Nuclear power
- Security printing and minting
- Afforestation and Mechanized Extraction within the boundary of reserved forest

Thrust Sector Industries

Thrust sectors will include industries that require preferential policy support to harness their high growth potentials. This may include industries that currently occupy a dominant position in the economy or industries which have high growth potentials but are currently non-existent or are in a nascent stage in the economy. The government will prepare the list and update them from time to time in consultation with all stakeholders and on the basis of information collected on various industries, their growth potentials and likely positive impact on the economy. The government will also determine specific policy support to be provided to these industries on the basis of the identification of constraints faced and past performances of the industries. Current list of thrust sectors is given as follows:

- Agro-based and agro-processing industry
- Artificial flower production
- Basic chemicals/raw materials used in industries
- Ceramics
- Commercial plantation
- Computer software and ICT goods
- Cosmetics and toiletries
- CR coil
- Dye and chemicals used in textiles industry
- Electronics
- Flower cultivation
- Frozen food
- Furniture
- Handicrafts

- Herbal medicines
- High fashion value added RMG
- Horticulture
- Infrastructure
- Integrated shrimp cultivation
- Jewellery and diamond cutting and polishing
- Jute goods and jute-mixed goods
- Leather and leather products
- Light engineering including automobiles
- Luggage fashion-based goods
- Oil and gas
- Optical frame
- Pharmaceutical goods
- Pharmaceuticals
- Plastics
- Readymade garment industry
- Ship Building
- Silkworm and silk industry
- Stationery goods
- Stuffed toys
- Textiles industry
- Tourism industry

Service Sector Industries

Over the years, the boundaries of the industrial manufacturing sector have been stretched to cover transport sector, nationally important activities that include many service sectors. Some service sector industries are listed below:

- Hospitals and clinics
- IT-based activities
- Agro-based activities such as fishing, fish preservation and marketing
- Telecommunication
- Transport and communication
- Forestry and furniture
- Construction industry and housing
- Construction business
- Entertainment

- Photography
- Hotel and tourism
- Warehouse and container service
- Printing and packaging
- Ginning and baling
- Laboratory
- Cold storage
- Horticulture, flower cultivation and flower marketing
- Food crop and oilseed processing
- Knowledge society with high quality merit and efficiency

Role of SMEs in Industrialization:

SME is an important sub-sector of manufacturing industries. SMEs are recognized as engine of economic growth and employment generation for sustainable industrialization in both developed and developing countries of the world. In context of Bangladesh, there is no alternative of small and medium enterprises for rapid industrialization and national economic growth through lower capital investment and employment generation. The SMEs are so important for Bangladesh in industrialization because of the following points:

- Unique nature of providing large scale employment
- Higher labor-capital ratio & higher capital-output ratio
- Needs relatively lower investment
- Need a shorter gestation period and relatively smaller markets to be economic
- Ensure balance regional development
- Ensure a more equitable distribution of income
- Quick respond to opportunities
- Stimulate growth of entrepreneurship
- Promote dispersal of pattern of ownership
- Help facilitate effective mobilization of capital and skill
- Innovate SMEs are the strength of a country

In Bangladesh, SME provide critical support to industrial, agricultural and other sectors of the economy by manufacturing a wide range of spare parts, casting, molds and dies, oil & gas, pipeline fittings, light machinery, etc and by providing repair services. With regard to the spare parts, the SME is known to manufacture spare parts for cement factories, paper mills, jute mills, textile mills, sugar mills, food processing industries, plastic industries, printing industry, fertilizer factories, railway, shipping, marine transport, automobiles, construction related machinery, and pharmaceuticals industry, just to name a few. Undoubtedly, SME supports the very fundamental requirements of industrialization and plays a key role in keeping other industries running.

Problems of the SMEs:

- Absence of effective and transparent legal system
- Financial constraints: rigid collateral requirements
- High interest rate for bank loans
- Export and import delays in ports and customs
- Below capacity utilization
- Lack of appropriate production facilities
- Lack of modern technology and information
- Lack of adequate investment in SME entrepreneurs development
- Non availability of raw materials and trade information
- Lack of skilled technicians and workers
- Lack of knowledge about marketing technique
- Lack of research and development facilities
- Inadequate human resource development program
- Absence/insufficient of capital support
- Inadequate policy reforms
- Illegal imports & non-tariff barriers
- Lack of appropriate infrastructure facilities such as water, electricity, gas etc.

Steps Needed to Boost SME Development:

- Development of innovative lending system and to provide sufficient financial support to SMEs
- Seeking International Financing Access to technology for SMEs
- Develop mechanism for technology transfer and adapting research cell
- Access to technology for SMEs
- Periodical profession training for SMEs
- Expansion and diversification of SMEs & new product development
- Promoting information technology in both public and private sectors
- Advance marketing system : Expansion of local market & global market
- Formulate a basic SME promotion law

Challenges of Industrialization in Bangladesh

Bangladesh is mainly an agricultural country. Agriculture has always been given priority and as a result industries have been ignored. Recently some agro-based industries have been set up. There are some reasons for which the country has lagged behind in heavy and medium-level industries. Industrialization in Bangladesh faces some challenges due to some structural constraints that hindered industrial growth. Let us now consider the challenges faced by the industry sector in general.

- a) Lack of adequate capital:** Bangladesh being a poor country, people's saving is insufficient. As saving is poor, investment is also low. Again people's per capita income is not adequate. So their consumption is also low. Consequently local market oriented industries are also very thin here.
- b) Weak investment base:** Due to long colonial rule, economic discrimination and post-liberation nationalization of industrialization, the growth of entrepreneurship has been slow in Bangladesh. Besides, due to bureaucratic red-tapes and lack of investment climate, capital investment has not been developed here.

- c) **Insufficient Infrastructure:** Infrastructural facilities in our country are insufficient. Power supply, telecommunication, transport, gas, water supply etc. – all facilities are not adequate which have hindered process of industrialization in Bangladesh.
- d) **Technological know-how:** Lack of proper technological know-how is also another reason of our industrial backwardness.
- e) **Lack of adequate resources:** Lack of adequate raw materials and natural resources are also unfavorable for our industrialization.
- f) **Shortage of Energy:** acute shortage of energy and unreliable supply of power and other utilities such as gas and water.
- g) **Unskilled human resources**
Though Bangladesh has a huge population, most of them are unskilled. Country lacks skilled labor, specialists, professionals and technologists which also hamper our industrialization.
- h) **Political instability:** A good govt. policy and political stability are precondition for industrialization. Unfortunately political instability has always been a common phenomenon here. This is a major hindrance towards the advancement of the industry sector of Bangladesh. Frequent strikes result in disruption of daily business. This hampers the smooth running of industries, they are unable to procure raw materials in time hence their production and even transportation is delayed. The politicians only think about themselves. As such, our industry cannot progress and compete with the outside world.
- i) **Labor Unrest:** There is a lack of trained workers in this country. Thus, there is a decline in the efficiency of the company. The companies also need to provide training (apprenticeship) to these laborers and hence quite an amount of money and time is spent on them. This challenge is faced by every company or firm in Bangladesh.
- j) Limited access to credit, its high cost, legal or illegal, and procedural complexities in obtaining credit from banks
- k) Competition from dumped and smuggled imports
- l) Lack of adequate law and order conditions
- m) Growing incidences of crime and extortion at every stage starting from production to distribution and marketing of the products.

Success of present Government

Recommendations

Industry sector is one of the major sectors for income source in Bangladesh. There were many flaws in this sector but Bangladesh could come up with phenomenal results for the enrolment of people and to come out Bangladesh from poverty through this Industry sector. Some recommendations to improve the condition of industrialization in Bangladesh are as follows:

- Develop and implement a good investment friendly environment so that foreign direct investment increases here
- Proper industrial environment should be maintained that will increase the productivity
- Set up new export processing zones to improve infrastructural facilities
- Political stability must be ensured
- Political issues should not affect the industrial activity
- The human resources should be made skilled and more trained
- Technical institute should be set up for training human resources
- Scientific method of management should be introduced
- Industries should look for more technologically advanced equipment
- Government should take lots of steps for building up the Industry sector; they even should thought to build up a city only for the industries, so that the people can easily get into the job site easily
- There is a need to attract more investment and production in our industrial sector
- Necessary arrangements should be taken to make small and medium enterprises (SMEs) profitable
- Government should make rule to put a barrier for import of foreign low quality product
- The Industrial Policy should be implemented properly and effectively
- Special economic zones should be established in the underdeveloped region or less industrialized districts with some subsidies

- Bangladesh govt. should encourage foreign investment to accumulate capital and for technology transfer
- Backward linkage and forward linkage industries should be set up in garments sector with state support
- Wages of worker should be increased to contribute to higher value added activities
- The emphasis on Public Private Partnership (PPP) in the proposed industrial policy is laudable but the concept is still in a rudimentary stage. Government will need to act expeditiously to devise a transport mechanism and frame well-defined rules for participating in and mobilizing funds for the PPP projects.

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