

## **The Problems and Potentials of Industrialisation Process in a Transition Economy: Lessons from Bangladesh**

ASM Rejaul Hassan Karim Bakshi  
Department of Economics, University of Rajshahi, Rajshahi, Bangladesh

**Abstract:** This study attempts to study the problems and potentials of industrialisation that faces a transition economy like Bangladesh from the historical perspective. Since the country like Bangladesh is predominantly agriculture base and the limited industrial output and exports also arise from the primary production the country face a stiff competition in the world market to maintain and develop its terms of trade and balance of payment in its favour. The economy is of much vulnerable as the industrial structure and output are not diversified enough and hence suffers very often from the external shocks. This study, in this context, attempts to study the structural bottleneck of the Bangladesh industry, its problems and suggests some policy implications thereby.

**Key words:** Industrialisation, Problems, Transition economy, Bangladesh

### **Introduction**

The overall economic development of a country depends on mainly agriculture, industry, and trade and service sectors. In Bangladesh economy, the role which played by the agriculture sector is tremendous but all other sector could not stepped as like as agriculture. Agriculture is the mainstay of Bangladesh economy accounting for about 19.49% (inclusive of all sub-sectors) of GDP.

The economic growth of Bangladesh has stepped up, qualitative change in the recent past five years (1996-2001). GDP growth rate of 6.04 % in the year 2000,2001, with an average growth of over 5% has been attained in the year 1996-2001. In the recent past the economic growth of Bangladesh had a growing trend due to bumper harvest in agriculture and successful implementation of public welfare-oriented programmes.

The industry sector played a predominant role in the economic development of Bangladesh. This sector of Bangladesh includes small, medium to large scale manufacturing and cottage industries.

The sector accounts for 15.58 % (projected for 2001, 02 of GDP and employs around 12 % of employed labor force. Its contribution to GDP has been gradually increasing over the last few years from about 9.9% in 1984, 85 to 15.46 % in 2000, 01. Industrial exports both in intermediate and in finished forms constitutes around three-quarter of the total exports in 1999, 00. This sector is regarded to have immense potentiality of growth and expansion. Needless to say the sector occupies an important position in the economy of the country and the sector's growth considered critical for the growth of the economy as a whole.

**Objectives of the Study:** The general objective of this study is to discuss various issues relating industrialisation process and development of Bangladesh. The specific objectives are as follows:

To study the pattern of industrial development of Bangladesh from the very past.

To identify the problems faced by Bangladesh industry in its transition to further development

To critically discuss various policies Bangladesh took part so far for the development of industry, and

To suggest policy recommendations for sustainable industrial development for a country in transition like Bangladesh.

### **Materials and Methods**

For the purpose of rigorous and scientific justification of the study various statistical methods are used. Reliable intermediate data sources are used for the purpose of the study. The data sources are Finance Ministry of Bangladesh, Planning Commission of Bangladesh, Statistical Year Book Bangladesh, Bangladesh Bank, Five Year Plans of Bangladesh, Bangladesh Economic Review, Annual Report of Export Processing Zones of Bangladesh, Asian Development Bank, World Bank etc along with some unpublished research work at home and abroad.

**Role and Importance of Industrialization:** About 17% real GDP comes from industry sector; 12% of civil labour force employ in this sector; 82% foreign exchange or export earnings come from industry in which garments industry covered lion share; It supplies the agricultural machineries and accessories; It processes the agricultural output; It supplies consumer, capital and inter-mediary goods and technologies.

**Bakshi:** The problems and potentials of industrialisation process in a transition economy

**Background or Requirements of Industrialization:** The industrialization of a country depends on some factors. Among the others socio economic condition is very important but in case of Bangladesh 53% of the total population is poor. So it is too difficult to be an industrialist country. However the following backgrounds are needed for industrialization.

a) Socio economic context of a country ; b) Level of economic development; c) International relations with other countries; d) Attitude of the commitment of the government in the power; e) Rate of literacy and level of technical know-how

**Historical Background:** Bangladesh had little composition of large-scale industrial units in 1947 such as a few textiles mills, a few sugar mills, a cement factory and a number of jute bailing presses during 1947-1971 the industrial sector was developed under government patronage. The East Pakistan Industrial Development Corporation (EPIDC) was established to develop large scale and basic industries. Under the initiative, supervision and management of EPIDC a small industrial base was developed which includes jute mills, textile mills, sugar mill, fertilizer factory newsprint mill and small dockyard etc. By the end of 1960's the contribution of manufacturing industry (large and small) to GDP at 1959-60 prices was Rs.1672 million (7.8%) in 1969-70 comparing to Rs.39 million (3%) in 1949-50. Considering large and small-scale industries it was Rs.783 million (3.7%) and Rs.889 million in 1969-70 and in 1949-50 the figures were Rs.69 million (0.6%) and Rs.270 million (2.4%) respectively.

**Pre-liberation Period:** The industrial history of ancient Bengal was not so outstanding or promising. The then Raja, Maha-Rajas did not look after the industrialization. There was some small cottage industry in the region. 'Dakhai Mausline' (very fine cloths) was so prominent in ancient Bengal. However, the industrial revolution in Europe and the British East-India Company introduced the industrial goods in Indian subcontinent. But the government of India (British ruler) imposed a 'discriminatory protection' for Indian industry. There were several limitations both external and internal restrained the government of Bengal from taking a 'forward' and 'bold' industrial policy and it was made to restrict the local cottage and small industry.

The first Industries Department was established in 1917 in Bengal and there was no industrial policy. The development of indigenous products was left entirely to private enterprise in which the government took no particular interest. Its main emphasis was on the export trade to which the govt. devoted its entire energy. From that time industrial development started in a slow pace. However, the first industry in India and Bengal were as following :

1775-	The first industry in India was the Coal and Mining by Sumar and Heady;
1850-	Coal industry in West Bengal;
1851-	Cotton industry in West Bengal;
1934/35-	Keru and Co. in Dorshona, Jessore in Bangladesh;
1957-	Adamjee jute mills in Narayanganj (biggest in Asia/world);
1960s-	Lot of industry started in Bangladesh. Jute, textile, cement, pulp and study, fish processing etc. were the major industry developed in Bangladesh.

### **Level of Industrialization of Bangladesh**

#### **Different Definitions and Statistics Related to Industrialization**

**Definition:** United Nations Industrial Development Committee states that industrialization is a process through which a growing part of National Income is invested in the manufacturing sector for the production of consumer goods, capital goods and for infrastructure development for the progress and welfare of a nation. 'Industry' is broadly defined to include both manufacturing and service industry. 'Manufacturing industry' includes all production, processing and assembling activities as well as repairing and reconditioning of processed goods. 'Service industry' includes those service-oriented activities, which involve significant use of equipment or fixed assets. The list of service activities is currently declared "industries".

**Objective of Industrialization:** Macro objectives of industrialization are:-

a) To give employment working labour force; b) To increase GDP; c) To supply consumer, capital and intermediary goods; d) To support agriculture sector and service sectors; e) To improve balance of payment positive by promoting export industry and import substitute industries.

**Size and Categories of Manufacturing Sector:** Manufacturing industries in Bangladesh are classified in different ways and a consistent set of definition of different size categories is difficult to find. Normally there are three

## Bakshi: The problems and potentials of industrialisation process in a transition economy

categories of industries: large (include medium enterprise), small and cottage. The main source of official data of large industry is BBS( Bangladesh Bureau of Statistics ). The BBS defines large industries on the basis of employment size. On the other, Bangladesh Small and Cottage Industries Corporation (BSCIC) becomes the official source of information for small and cottage industries and uses investment limit to differentiate between the size categories. Industrialization Policy 1991 defines small industries on the basis of size of the capital. Thus small industry is one whose total fixed investment was limited to TK.30 million including working capital and the price of land, expenses of inland transportation and machinery commission was not included here. The upper limit of investment level in cottage industry was TK. 5,00,000. Industrial Policy 1999, defines size categories in terms of both capital and employment size. Thus 'large industry' is defined to include all industrial enterprises having 100 or more workers and having a fixed capital of over TK. 300 million. 'Medium industry' covers enterprises employing between 50 and 99 workers and with fixed capital investment of between TK 100 million and TK.300 million. 'Small industry' means enterprises having fewer than 50 workers and investment is less than TK.100 million. 'Cottage industry' mean household-based units operated by family members.

**Composition of Industries:** The large industry in Bangladesh has a narrow base and a few large industries are dominating the scene. At the two-digit level (32) textiles, apparels and leather is the major category. They contribute about 47 % value added and cover 65 % of employment within the large industry sector. At the four digit level jute textiles is the dominant industry and contribute 26 % value added with 37 % of employment. Within textile sub-sector other four digit industries are: (3211) cotton textiles and (3231) readymade garments. In terms of contribution to value added (24%) the second most important sub-sector after textiles is (35) chemical, rubber and plastics. Major four digit industries in this group are: (3524) fertilizer, (3541) petroleum refining and (3511) allopathic medicine. The survey of BSCIC highlighted the narrow base of small industries with the sub-sector, food manufacturing which is seemed to be more diversified. Within this group, four digit industries are: automobile servicing and repairing, light engineering and hosiery and readymade garments. In case of cottage industry, no remarkable contribution either in value added and employment creation is appeared.

### Basic Characteristics of Bangladesh Industry

**Industrial Tire on Bangladesh:** Bangladesh industry has 3 tires: a) Small scale- financial investment up to Tk. 30 million excluding land and installation costs; b) Large scale- investment more than Tk. 30 million ;c)Cottage industry- total investment up to Tk. 0.5 million.

**Asset Haring:** In 1975 total industrial asset owned by the state and private sector was 85% and 15% respectively and in 1990 the share was 40% and 60%.

**Number of Industry:** In 1969 large and medium scale industry was 3130 and 3356 in 1980, middle of the 90's the number of industry raised 23,752. At the same time small scale industry was 32,000 and cottage industry excluding handloom was 3,83,000 and handloom was 2,12,421 within which power loom was 27,742.

**Dispersion of Large and Medium Scale Industry in Bangladesh:** The number of industrial dispersion shown in the following tables as per Bangladesh Statistical Year Book 2002.

Table 1: The number of industrial dispersion

Total No of industry in Bangladesh	26,446	100.00 %
In Dhaka division	11,790	44.58 %
In Chittagong Division	3,791	14.34 %
In Khulna Division	3,100	11.72 %
In Rajshahi Division	7,765	24.36 %

### Fixed Industrial Asset Allocation in Bangladesh

Total fixed industrial asset	Tk.	102,515	million	100.00%
Land	Tk.	7,113	million	6.95%
Building	Tk.	18,625	million	18.19%
Plants and machiner	Tk.	68,921	million	67.29%
Transports	Tk.	1,655	million	1.61%
Others	Tk.	6,103	million	5.96%

## Bakshi: The problems and potentials of industrialisation process in a transition economy

### Employees in Industry Sectors

Total employees	11, 56,204	100.00 %
Male	9, 79,328	84.70 %
Female	1, 76,876	15.30 %

(One third labour force in large and medium scale industry, one third in cottage industry and one third in handloom industry. About 15% labour force employed in garments industry.)

### End Use of Industrial Goods

Consumers goods	59%
Intermediary goods	39%
Capital goods	2%

Table 2: Industrial growth and output (at 1984-85 price level)

Year	Output value added in million Tk.	5 years annual average growth rate
1975/76	30,040	---
1980/81	37,120	4.71 %
1985/86	41,160	2.18 %
1990/91	50,420	4.50 %
1995/96	72,820	7.40 %
1999/00	88,700	92,260
2000-01	5.45 %	5.62%

(Total change 195.27 from 1975 to 2000. Simple annual average growth rate is 7.81 %.)

Table 3: Index of industrial production (Manufacturing). Base 1988/89=100

	1995-96	1996-97	1997-98	1998-99	1999-00
General Index (Manufacturing)	174	179	196	204	213

Source: Statistical Pocket book, 2000.

It indicates that from 1995 to 2000, only 39 unit production increased.

Industrialization policies of Bangladesh in different times and its effects in the industrialization process.

### Industrial Policy in Bangladesh

**Nationalization Policy:** Just after liberation the government announced nationalization policy enabling the state to nationalize all abandoned enterprises with assets valued Tk. 1.5 million along with the entire jute, textile, and sugar industries irrespective of ownership under the PO 27. The first industrial policy declared in 1974.

### Effects

**Post Liberation Period –Socialist Transformation of the Economy:** In Bangladesh the public enterprises were created by Awami League government right after liberation. The 1970's election manifesto of Awami League promised to nationalize the heavy industry in Bangladesh. Just after the liberation war of Bangladesh, the government took over the public ownership all industrial units abandoned by the Pakistanis with the assets above Tk. 1.5 millions; furthermore, while promising to pay compensations, it nationalized all units owned by Bangladesh citizens in three large-scale industries i.e. cotton textiles (excepting handloom and specialized textiles), jute manufacturing and sugar manufacturing. Before independence, total industrial assets under Pakistani ownership constituted 43% of all industrial assets under private ownership. Because of the nationalization, the share of the public ownership in total industrial assets went up from 36% before independence to 86%. It in fact became the test case for the fulfillment of important electoral pledges but specifically was seen by many as a first major step towards fulfilling the commitment to a socialist transformation of the economy.

The nationalized industrial enterprises were initially grouped in ten sector corporations, such as chemicals and fertilizers and iron and steel, newsprint and study, food and other products, etc. By 1976, the number of sectors corporations was reduced by about half. These sector corporations were run by public administrators under the direct control of the ministry of industry. These officials or administrators were often appointed on political considerations. There were the bitter relationship developed between the labour union and management for different issues.

### **Bakshi: The problems and potentials of industrialisation process in a transition economy**

Since, its inception, the programme of nationalization in Bangladesh has been plagued by many problems. There was an additional problem relating to the financial liabilities of the abandoned enterprises, which also required government intervention. There was a serious management problem in the said corporations due to corruption and misuse of power. The conflict between the permanent bureaucracy and professional managers of the corporations regarding the authority for running the enterprises. In a situation, responsibilities and obligations of various agencies or functionaries were not clearly known; conflicts and tensions were the regular phenomena of the sector corporations.

The nationalized industries, as a whole, could not perform well in terms of generating surpluses and contributing to resources for economic development. Out of ten corporations, three big sectors incurred loss and seven others earned profit but not more than 10% of the gross receipts of the sales. A major reason for losses or low profitability was the pricing policy followed by the nationalized industries. The price was fixed by the state and they loosed their flexibility in matching revenues with cost of production.

The monopolistic attitude and absence of competition, the nationalized industry did not improve their efficiency, expertise and innovativeness. The ultimate result is the losing concern of the country. Production has increased in certain sectors, but, in many cases, average cost has exceeded the sale price. In such case, government had to provide easy bank loans or indirect subsidies to keep production going. Thus, while some of the sectors have done fairly well, the overall financial performance of the sector is very poor. At the 80's decade, the nationalized industrial sectors were given freedom to fix their own prices and management of their own. However, due to various reasons the nationalized sector could not show efficiency. From the initial level of nationalization and up to date, most of these sectors are living on government subsidy or sustaining a heavy loss. So, one can say that the nationalized industrial sector of Bangladesh is a burden for the economy.

**Industrial policy (75-82):** After the political change in 1975, the military government announced a revised industrial policy in December 1975, the revised policy opted for a much greater role for the private sector in all spheres of economic activity, including both trade and industry. The policy again revised in May 1977 reducing the role of public sector by allowing the private sector to operate in all sub-sectors except 8 sub-sectors reserved for public sector. By the period of 1978, the state disinvests 77 public sector industries with a value of Tk. 330 million.

**Industrial Policy (1982-92):** The Martial law government announced the New Industrial Policy (NIP) in June 1982. It has further liberalized the industry sector. To encourage the private sector no formal permission of the government was required to set up industries provided entrepreneurs import machinery under the Wage Earner Scheme. To facilitate private investment in industry, loan approval and disbursement procedures were simplified. The Chittagong Export Processing Zone established for encouraging the Foreign Direct Investment (FDI) in industry sector. The industrial policy revised in 1986, 1991 and 1992 with slight change.

**Current Industrial Growth and Structural Change:** After liberation, within the overall objective of attaining a self-reliant economy, the first five-year plan (1973-78) of the country adopted an import-substitution strategy for industrialization with emphasis on domestic production of basic needs and investment goods. But an unfortunate change in local power in 1975 and due to international change in socialism the country increasingly dependent on foreign aid and aid-financed imports covering all types commodities- food, consumer goods, consumer durables, raw materials, intermediate inputs and of course investment goods.

In Bangladesh, the industrial growth took place in a slow pace. Between 1973-74 and 1999-00, manufacturing GDP increased at an annual compound rate of 3.8 %. The trend of growth for the same period was estimated to be 4 % only. The share of manufacturing in the overall GDP hovered around 11 % during the entire period. The following table shows the %age share of industry sector in GDP at current prices and growth rate.

In the year 1995 Bangladesh, calculate the national income on System of National Accounts (SNA) introduced by United Nations. The new system provides a more comprehensive coverage of the economy by classifying the economy into 15 sectors compared to the old 11 sectors. For this SNA system, there lot of things came under the accounts of National Income that was included before that time. Therefore, a tremendous uprising shown in the economic growth of Bangladesh economy. Under the new estimates the yearly compound rate of growth of manufacturing GDP was 8.2 % during 1989/90-1994/95. It was highest in the year 1997/98 the first year of the *Five-fifth-year plan* (FFYP) period. Therefore, the growth rate took downward in the next year for devastating flood. In the following year (1999-00) the sector managed to achieve the moderate growth 4.3 % and the trend is now continuing for the last 2 years. But the share of manufacturing in overall GDP did not increase strongly which is very important for the national economic growth. The resource allocation for industry sector is also liable for such

**Bakshi:** The problems and potentials of industrialisation process in a transition economy

low performance. The following table 7 and 8 indicates accordingly.

Table 4: The %age share of industry sector in GDP at current prices and growth rate.  
(Figure in crore Tk.)

Year in	Total GDP % Share of	Manufacturing	Large and Medium Scale		Small-Scale Manufacturing sector	Growth Rate Industry in GDP
1990-91	110518	14401	10086	4315	2.4	13.0
1991-92	119542	16062	11186	4876	7.3	13.4
1992-93	125369	17995	12616	5379	9.1	14.3
1993-94	135412	19979	14084	5895	7.8	14.8
1994-95	152518	22456	16034	6422	8.6	14.7
1995-96	166324	24635	17573	7062	6.4	14.8
1996-97	180701	27060	19031	8029	5.0	14.9
1997-98	200177	31269	22175	9094	8.5	15.6
1998-99	219697	32783	23527	9256	3.2	13.8
1999-00	237086	38437	24939	9898	4.8	15.7
2000-01	253255	37943	27049	10894	6.3	14.9
2001-02	271124	41093	28974	12119	5.0	15.1

Note: GDP is estimated according to SNA-93 (base year 1995-96)

Manufacturing GDP for the period 1973-74 to 1999/00 at constant 1984-84 prices shown in table 5.

Table 5: Industrial Contribution to GDP (Figure in million Tk.)

Year	Manufacturing GDP	Trend Manufacturing GDP	Share of Manufacturing in overall GDP (%)
1973-75	33960	22875	13.2
1979-80	38287	35520	11.2
1988-89	45927	54487	9.8
1994-95	69163	67132	11.3
1999-00	88700	77451	11.1

Table 6: Compound growth of the industry sector

Year	Compound Growth Rate
1973/74 –1979/80	2.0 %
1979/80—1988/89	2.0 %
1988/89—1994/95	7.1 %
1994/95—1999/00	5.1 %

Table 7: Development Plan and Industrial allocation: (Figure in Million Tk.)

Broad based Yearly plan	Total Allocation	Allocation in Industry	% Share	Remarks
1st Five year Plan (1973-78)	39,520	7380	19	
Two year plan (1978-80)	32,610	5700	17	
2nd Five year Plan (1980-85)	172,090	31,950	19	Including minerals
3rd Five year plan (1985-90)	242,170	61,750	17	Including minerals
4th Five year plan (1990-95)	347,000	16,840	4.85	
5th Five year plan (1997-02)	858,939	11,793.7	1	

Table 8: Manufacturing Sector's share in GDP over a particular period and compound growth Rates (at constant price)

Year	Share in GDP (%)	Period	Annual compound Growth Rate over period (%)
1972/73	9.00	1973-1978	7.35%
1979/80	11.22	1978-1980	6.21%
1984/85	9.86	1973-1980	7.02%
1989/90	9.91	1980-1985	0.93%
1994/95	11.36	1985-1990	4.22%
1995/96	11.37	1990-1995	7.00%
1996/97	11.08	1996-1997	3.31%

Source: BBS

**Bakshi: The problems and potentials of industrialisation process in a transition economy**

The total active labour force in Bangladesh and % of employed persons 10 years and over by broad industry, 1999-2000 and garments related data are in the following three tables.

Table 9: Total number of workers in major industries in Bangladesh

Major Industrial Sector	1996-97	1997-98	1998-99	1999-00
Jute	127409	127363	127364	125460
Cotton	48826	48977	48509	49013
Paper	6461	6251	6101	5994
Steel	2222	2138	2015	2042
Cement	1387	1556	1850	1585
Fertilizer	7208	7200	7178	7200
Petroleum	732	729	727	592
Print and Varnish	513	536	553	592

Source: Statistical Pocketbook, 2000

Table 10: Ready Made Garments (For export mainly)

	1996-97	1997-98	1998-99	1999-00
Total Employees (in million)	1.40	1.50	1.51	1.50
Male (in million)	0.14	0.15	0.15	0.15
Female (in million)	1.26	1.35	1.36	1.36
Number of Garments Factories	2503	2726	2963	2963

Source: Statistical Pocketbook, 2000

The last 30 years of the history of Bangladesh, industry has gone through a slow and rather erratic structural transformation. It defied the classical relationship between the structural composition of an economy and its stage of development. The share of her agricultural sector, though dropped from 58 % in 1972 to about 33 % in 1995, the share of manufacturing sector limped 9.0 % in 1973 to a mere 11.4 % in 1994/95. The service sector, on the other hand jumped from 26 % to about 48 over the same period. The data in the above tables indicate the very low profile of the manufacturing sector of Bangladesh economy. The average growth rate is 6.2 % and the average share of industry in GDP is 14.56 % for the last 12 years (1990/91 to 2000/01). Among this figure the Readymade Garments sub-sector is one of the major industry which is now under serious threat for liberalization in trade and quota facility. It is reported that about 25% of the garment factories are closed or about to close and another 20% is working only in the peak season of the year and closed for the rest of the year. So it is clear that the present status of the industry sector of Bangladesh is very alarming and disappointing.

Table 11: % of employed persons 10 years and over by broad industry 1999-2000

Major Industry Group	Bangladesh	Urban	Rural
All industries	100.00	100.00	100.00
Agriculture, Forestry and Fishery	62.4	19.3	72.0
Mining and Quarrying	0.6	0.5	0.7
Manufacturing	7.4	16.2	5.4
Electricity, Water and Gas	0.2	0.6	0.1
Construction	2.0	3.7	1.6
Trade, Hotel and Restaurants	12.1	23.0	9.7
Transport and Communication	4.6	10.6	3.3
Finance and Business	0.7	2.4	0.3
Community and Personal Service	9.9	23.7	6.9

Source: Statistical Pocketbook, 2000

**New Industrial Policy 1999:** The policy envisages 25% contribution by industries sector and absorption of 20% labor force in industry sector. Development of a dynamic private sector is the key objective of the policy, which will lead the industrialization, and the state will play the only cooperating role. No discrimination between local and foreign investment. One stop service and 5-10 years tax holiday for new industry and 50% tax exemption on export earnings after 10 years are some major features of the policy. "Build, Operate and Own" (BOO) and "Build, Operate and Transfer" (BOT) method is especially encouraged for private investors for infrastructure

**Bakshi:** The problems and potentials of industrialisation process in a transition economy

development.

**Different Initiatives of Govt. and other Agencies and Its Effects**

**Investment Scenario of the Manufacturing Sector:** Public sector investment was 10.06 % and private sector was 89.94 % including foreign direct investment (FDI) of 23.75 % ,the total investment during the period 1990-91 to 1996-97 at TK. 200889 million at current price.

Table 12: Estimates Manufacturing Investment (Current Price) in million Taka

Year	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	Total
Total Investment	23415	22699	24319	25825	35199	34919	34513	200889
Public Sector Investment	8311	3338	1240	2273	2227	1718	1082	20209
Private Sector Investment	15084	19361	23079	23552	32972	33201	33431	180680
Investment as % of GDP	2.8	2.5	2.6	2.5	3.0	2.7	2.0	-

Source: The Fifth Five Years Plan (1997-2002).

From the table it is seen that private sector investment increased remarkably whereas in public sector investment is declining. In 1980-81 the share of public investment in total manufacturing investment was 57 % and in 1998-99 it was reduced to 3.4 %. Only the fertilizer industry received attention because of the linkage with agriculture. On the other, private sector investment increased at an annual compound rate of 38 % during 1987-88 to 1994-95. Thus total manufacturing investment accounted for about 2.4 % of GDP in 1990-91 and 2.0 % of GDP in 1996-97.

**Industrialization Export Processing Zones:** In order to achieve rapid economic growth of the country by increasing the inflow of foreign investment, particularly through industrialization, special steps have been taken since 1983 by setting up Export Processing Zones (EPZ) in the country. Initially three special zones were set up in Chittagong, Dhaka (Savar) and Mongla where favorable facilities/assistance are provided to the potential investors. Enterprises of investors have commercial operation in Chittagong EPZ from 1983-84 and Dhaka EPZ from 1993-94. At the end of June, 2001, 104 enterprises functioning in CEPZ AND 54 are functioning in DEPZ, of which 104 are A-type (100% foreign investment), 23 are B-type (joint ventures) and 31 are C-type (100%) Bangladeshi enterprises.

Table 13 : Export Earnings from EPZs.

Year	Amount in crore Tk.	Amount in million US\$
1988-89	50.8	16
1989-90	111.0	34
1990-91	169.2	48
1991-92	258.9	68
1992-93	428.5	110
1993-94	411.7	103
1994-95	822.4	205
1995-96	1135.4	278
1996-97	1580.0	370
1997-98	2450.1	539
1998-99	2910.5	606
1999-00	3649.8	725
2000-01	4766.8	883

Source: BBS, Annual Export Receipts, 2000-2001

**Sector wise Distribution of Credit:** The bank and financial institution play an important role for industrialization of a country. The credit situation in between the three major sectors of our economy is shown below in table no 14.



**Bakshi: The problems and potentials of industrialisation process in a transition economy**

Table 14: The credit situation in between the three major sectors

Year	Agriculture	Industry	Service
1970	9%	44%	47%
1980	10%	45%	45%
1998	17%	17%	57%

Source: Bangladesh Statistical Year Book 2002.

Table 15: Amount of investment (local and foreign) registered with Board of Investment (Amount in million US\$)

Year	Domestic	FDI	Total
1991/92	91	25	116
1992/93	90	53	143
1993/94	457	850	1307
1994/95	846	677	1523
1995/96	1171	1554	2725
1996/97	1108	1054	2162
1997/98	1043	3156	4199
1998/99	1183	1926	3109
1999/00	1219	1950	3169
2000/01	1370	1227	2597
2001/02	1563	87	1650

Table 16: Manufacturing GDP at constant 1984/85 price for Large and Small Industries

Year	Value Added in Large Industries (million TK)	Value Added in Small Industries (million TK)	Share of Large Industry in Mfg GDP (%)	Yearly Compound Growth Rate	
				Large	Small
1973/74	17239	16721	50.8		
1979/80	20505	17782	53.6	2.9	1.0
1984/85	21282	18830	53.1	0.7	1.2
1988/89	25945	19982	56.5	2.6	1.3
1990/91	29269	21154	58.0	6.2	2.9
1994/95	44884	24281	64.9	9.6	3.3
1995/96	47595	25228	65.4	6.0	3.9
1998/99	56900	28200	66.9	6.1	3.8
1999/00	59380	29320	66.9	5.8	3.8

Source: Ministry of Finance, Economic Survey 2000, June 2000., BBS, Statistical Year Book, Various Issues.

In the year 1970 and 1980 total investment was 44 - 45% of total investment but a shut down only 17% in 1998. It indicates that industrialization in Bangladesh is serious undermining position both from the government sector as well as private sector. On the other hand the service sector enhance on a tremendous speed. It also indicates that the private sector is moving towards the trading only which is good sign for the economy.

**Industrial Investment and FDI:** The amount of total industrial investment is not possible to recognize. But the amount of the investment of enterprises registered in Board of Investment since 1991/92 through December 2001. However, the amount of investment by the registered enterprise has increased from US\$ 116 million in 1991/92 to US\$ 4119 million in 1997/98. But it has declined I to US\$ 2597 in 2000/01, this may be due to terrorist attack in United States in 11 September, 2001. During this period, foreign investment increased from US\$ 25 million to US\$ 3156 million. The following Table No 15 will show the industrial investment and FDI in Bangladesh.

**Contribution of Industry Sector in the Economy and its Effects:** Considering large and small industries, it is seen that the contribution of both the sector increased over the years. But in terms of value addition large industry has been the dominant component of the manufacturing sector in Bangladesh.

Table-16 shows that the share of large industry in manufacturing GDP was about 51 % in 1973-74 and increased to nearly 67 % in 1999-00. This increase in the share of large industries ultimately reflects the

### Bakshi: The problems and potentials of industrialisation process in a transition economy

backwardness of small industries. In 1979-80 the compound rate of growth for large industry was 2.9 % and for small industry it was 1.0 %. The highest compound growth rate for large industries was 9.6 % in 1994-95 and for small industries it was 3.9 % in 1995-96. During 1998 onward the annual compound rate for both the industries reduced showing the sign of slow growth rate in manufacturing sector.

Based on SNA 93 the growth rate of manufacturing sector can be assessed from the following table.

Table 17: Contribution of Manufacturing Sector in GDP and Growth Rate (at constant price of 1995/96)

Type	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
Small and Cottage	6522.0(8.1)	7061.9(8.3)	7609.1(7.8)	8124.0(6.8)	8184.9(0.75)	8659.3(5.8)	9305.6(7.5)
Medium-Large	1629.7(11.4)	17573.2(5.7)	18270.4(3.9)	19966.4(9.3)	20803.3(4.2)	21708.6(4.4)	23825.0(9.8)
Total	23151.7(10.5)	24635.1(6.4)	25679.5(5.0)	28090.8(8.5)	28988.2(3.2)	30367.9(4.8)	33130.8(9.1)

Source: Ministry of Finance, Economic Survey 2001, June 2001.

From the above table it is evident that large industry is the dominant. In 1994-95 the growth rate of small and large industry was 8.1 % and 10.5 % respectively. But in 2000-01 the growth rate is reduced to 7.5 % and 9.8 % for small and large industries respectively. The overall contribution was 0.5 % in 1994-95 and in 2000-01 it was 9.1 %. Data shows that the contribution of large industry is about 2.5 times of that of small industries.

**Industrialization and Export Earnings:** Bangladesh export earning is increasing but not in a very high rate. The following table shows the export earnings but among the figure how much is from the industry cannot be ascertain. But no doubt a big portion of the export earnings would be from industry sector. Because garments sector is the biggest contributor of our export earnings.

Table 18: Export trend of Bangladesh

Financial year	Amount in crore Tk.	Amount in million US\$
1972-72	271.01	348.42
1975-76	55.13	38.47
1980-81	1159.90	709.85
1985-86	2431.40	819.21
1990-91	6065.09	1717.55
1993-94	10097.59	2533.90
1996-97	18813.00	4418.28
1998-99	25491.10	5312.86
1999-00	28818.52	5752.20
2000-01	34858.74	6467.30

Source: BBS, Annual Export Receipts, 2000-2001

Table 19 : Share of garments export in total export

Year	Total Export earnings	Garments export Earnings and % of total export
2000-01	32419.80	16657.8 (60.2 %)
1999-00	24916.50	129.55.3 (60.9 %)
1998-99	20850.8	11009.1 (61.3 %)

**The Performance of Growth of the Industrial Sector:** In Bangladesh manufacturing sector is expanding gradually but the process is very slow. Making a concrete comment on the level of this sector is very critical. Data provided by the Bangladesh Bureau of Statistics (BBS) help to know the share of manufacturing sector in GDP since 1973 to 2000 and they are shown in the following table:

Table 20 : Manufacturing GDP and past Growth Rate at constant 1984-85 prices

Year	Manufacturing GDP (million TK)	Share in GDP	Yearly Growth Rate (%)
1972-73	33960	9	9
1976-77	33546	11.1	-0.4

**Bakshi: The problems and potentials of industrialisation process in a transition economy**

1979-80	38287	11.22	2.0
1984-85	40112	9.86	-1.6
1989-90	49256	9.91	7.2
1994-95	69165	11.36	7.1
1998-99	85100	11.20	5.3
1999-00	88700	11.10	5.1

Source: Bangladesh Bureau of Statistics, 2001.

From the Table No 20, it is revealed that the share of manufacturing sector in the overall GDP is around 11 % during 1973 to 2000. But compared to 1973, total increased amount of manufacturing GDP was about TK.55,740 million. The yearly growth rate is showing the slow pace of industrialization that was 7.2 % in 1989-90 and decreased to 5.1 % in 1999-2000. Between 1973-74 and 1999-00 the manufacturing GDP increased at an annual compound rate of 3.8 %. According to the 'Planning Commission' estimates the industrial sector in Bangladesh grew at an annual compound rate of 5.32 % during the period 1972-73 to 1990-91.

Table 21 : Yearly Compound Growth Rate

Year	Growth Rate (%)
1973/74- 1979/80	2.0
1979/80- 1988/89	2.0
1988/89- 1994/95	7.1
1994/95- 1999/00	5.1

Source: Bureau of Statistics, 2001.

Based on compound growth rate it is also seen that between 1988-89 and 1994-95, the yearly compound rate of manufacturing growth was about 7.1 %. Between 1994-95 and 1999-00 the figure decreased to 5.1 % which is also the sign of slow economic growth

In Bangladesh, the UN has introduced revised and expanded System of National Account 1993 (SNA 93) where 1995/96 is considered as the base year. The revised estimates raised the level of overall GDP. In the old estimate GDP was 11 % and under the new system it is 15 %.

Under the new estimates, the pattern of the growth of manufacturing sector in 1990s is nearly similar to the observed old estimates. In this case the growth rate increased slightly. However, this increase in growth rate is very little comparing to the other neighboring countries like India, Pakistan and Thailand where manufacturing sector contribute 24%, 20% and 16% of GDP respectively. In Thailand the share of manufacturing in overall GDP increases from 22% to 32% within 1980 and 1998. But in Bangladesh it was 11% in 1980 and 15% in 1994 which reflects the failure to meet expectation in industrial sector in Bangladesh.

**The Status of Employment and Labour-Force:** The manufacturing sector constitutes a small segment of the economy in terms of employment share. In 1989-90 the BBS carried out three survey and reported total industrial employment to be around 3 million which was nearly 10 % of all employment in the country as opposed to 57 % share of agricultural sector.

The BSCIC completed a survey of small and cottage industries during the late 1980 and represented the following result.

Table 22: Employment in Different Industries

Industry	Small	Large	Cottage	Total
Employment	847000	434000	1996000	3277000

The annual census of manufacturing industries in 1981-82 on 5,000 large and medium industries showed with 5, 60,000 people employed. In 1980 the survey of 24,000 small scale industries and 2,90,000 cottage industries, revealed the employment of 3,20,000 people and 8,50,000 people respectively.

The yearly census of manufacturing industries (CMI) 1989-90, the handloom census, 1989 and the Integrated Annual Survey of Non-farm Economic activities, 1989 have stated that about 3 million people are employed in this sector, whereas Labour Force Survey (LFS) 1989-90 showed the number to be nearly 7 million. Following the contrast between CMI and LFS data the Planning Commission estimated the manufacturing employment as follows:

## Bakshi: The problems and potentials of industrialisation process in a transition economy

Table 23: Estimates of Manufacturing Employment

Year	Manufacturing Employment (million)	Yearly Rate of Growth (%)
1989-90	2.52	-
1994-95	3.84	8.8
1996-97	3.70	negative
1997-98	3.75	1.4
1998-99	3.81	1.6

Source: Planning Commission

The above table suggests that growth employment in manufacturing sector during the first half of 1990s was rapid and during the second half the growth rate slowed down. CMI also showed the growth tendency about 6.4 % during the first half of the 1990s.

**The Real Productivity and the Real Wages:** Data collected by CMI showed that real wages of all employees in industrial sector increased monotonically during 1973-74 to 1989-90. The rate of the growth in real wage of this group was estimated at about 7 % on the other the BSCIC survey of small industries shoes that from 1977-78 to 1989-90, labour productivity increased at an annual compound rate of 5.9 % while real wage per employee increased at a rate of 4 %.

Table 24: Growth in Real Wage and Labour Productivity

Year	Real Wage Index	Mfg GDP million TK 1984/85 Price	Mfg employment (million)	Labour Productivity (TK)	Yearly compound Growth (%) since	
					Real wage	Labour Productivity
1989/90	1502	49,256	2.52	19,546		
194/95	1947	69,165	3.84	18,012	5.3	-1.62
1996/97	2230	75,400	3.70	20,379	5.8	0.60
1997/98	2463	82,600	3.75	22,027	6.4	1.50
1998/99	2577	85,100	3.81	22,336	6.2	1.49

Source: Zaid Bakht, Industrial Development, A Review of Evidence and Policy Issues, pp.131

During the last 20 years period 1980-81 to 1999-00 real wage grew at a rate of 9 %. From the above data it is seen that there is no correspondence between labour productivity and wage rate while real wage exceeds 6 % and labour productivity less than 2 %.

**Problems Facing Industrial Sector in Bangladesh:** The Fifth Five Year Plan (1997-2002) Bangladesh identified some major obstacles to industrial development of Bangladesh as:

No development of entrepreneurship ;b)Low literacy rate and technical know-how  
Capital scarcity; d)Political instability and weak political will force; e) Tendency of being rich in the name of industrialist without real industry; f) Bank default- A good neck for trading and looting bank money for so called industrialization; g)Industrialist became businessmen; h) Corruption and non-transparency

**Industrial Strategies for Bangladesh:** A vibrant and dynamic private sector will be the principal actor in Bangladesh's industrial arena. The industrial sector of Bangladesh will be competitive in the liberalized internal market as well as in the external market.

To meet local needs; b)To enhance export; c)Increasing productivity and capital ;d)Promoting small scale and cottage industry to enhance employment; e)To establish link industry ; f) Development of Export Processing Zones (EPZs) by the state as well as the Private Export Processing Zones (PEPZs); g)Technological Development/innovation ;h)Development of educated, trained and skilled workforce.

**Prospects of Industrialization:** A prospect of industrialization is related to the growth and development of the whole economy. The initiatives which have taken to boost the economy are certainly have some positive effects to the industrialization process.

Professor Simon Kuznets, (Nobel Laureate in economics in 1971) defined a countries economic growth as "a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and their institutional and ideological adjustments that it demands". Bangladesh economy, the crucial and logical transformation is on the way to take place and it highly prospective for accelerating industrialization. In Bangladesh, labour force is increasing day by day and the absorptive capacity of agriculture is limited. Due to a variety of socio-economic factors, the scope of sustainable growth in

### **Bakshi: The problems and potentials of industrialisation process in a transition economy**

agricultural sector remains constrained and it is this respect structural shift towards industry is assumed to be especially important. Over the last quarter of the century, Bangladesh has gone through a slow process of structural transformation. The share of agricultural sector reduced to 33 % in 1995 from 58 % in 1972. On the other hand, the share of manufacturing sector increases from 9 % in 1973 to 11.4 % in 1994/95 that paved a prospective way to industrialization.

The historical growth record of contemporary developed nations reveals a third important characteristic: a high rate of structural and sectoral change inherent in the growth process. Some of the major components of this structural change include the gradual shift away from agricultural to nonagricultural activities and, more recently, away from industry to services. A significant change in the scale or average size of productive units (away from small family and personal enterprises to the impersonal organization of huge national and multinational corporations); and finally, a corresponding shift in the spatial location and occupational status of the labor force away from rural, agricultural, and related nonagricultural activities toward urban-oriented manufacturing and service pursuits.

Bangladesh is a low income country (those below the per capita GNP below US \$600) like other developing countries. Industrialization of low-income countries is necessary to reduce the pressure of population on land and water resource due to intensive and extensive margin of cultivation. The industrial sector does usually have high linkages with the other sectors of an economy; and as such, the growth of this sector encourages investment in mining, agriculture, infrastructure and different services. Industrialization and urbanization enhances the demand for food and raw materials. Consequently, the prices of these primary products rise and increase the flow of investable resources in agriculture sector.

Broadly speaking, two different strategies can be considered for the industrialization of agrarian economies like Bangladesh. These are export-oriented or export-led and import-substitution strategies. The former works through the process of substituting domestic goods for imported ones. As applied to the industrial sector, the import substitution strategy is recommended for reducing the dependence of developing countries on imported intermediate products and capital goods. But it need not be confined to industries alone, since it can also be applied to substitution of domestic food and raw materials for imported ones.

The country that has small territory and tiny population has a limitation of import substitution strategies. A small country with a low per capita GNP and large population should start with the export-oriented industrialization process. This is because of low GNP and small domestic market. It should start with export-led industries on the strength of its domestic raw materials and cheap labor. The early phase of industrialization was characterized by an import substitution strategy and a strong regulatory role of the state. In contrast, market led reforms, deregulation and export initiation is the later phase industrialization. The promotion of private sector based industrialization is the next thrust in Bangladesh. The traditional sub-sectors like textiles and clothing, jute, tea, leather and leather products, along with agro-based small and medium industries, handicraft etc. should gear up with more efficiency. As well as the following sub-sectors must be identified as thrust sub-sector for promoting industry sector for overall economic development of Bangladesh.

1. Computer software and data entry industry; 2. Agro-based industries including food processing, aquaculture, fish processing, sugar, livestock, poultry etc. ; 3. Artificial flower-making; 4. Electronics; 5. Pharmaceuticals ; 6. Floriculture; 7. Gift items; 8. Infrastructure including transport, cement, light engineering, agriculture machineries etc.; 9. Jute goods; 10. Paper and pulp industry; 11. Jewellery and Diamond cutting and polishing; 12. Leather; 13. Oil and gas; 14. Sericulture and silk industry; 15. Stuffed Toys; 16. Textiles (Grameen Check and Dhaka Check); 17. Hotel and tourism industry

The Fifth Five Years Plan targeted to raise the manufacturing share from the recent 9.28 % level to 12.70 % of GDP by the terminal year of the fifth plan. In 1999-00 the share of manufacturing sector increased to 11.1 % of GDP in constant 1984/85 price. But under new system of national account the share of manufacturing sector is about 15.4 % of GDP. May be it is a prospective sign but it is assumed not to be the real picture. Because they represent 60 to 65 % of all industries where readymade garment industry played the vital role. Among the industries sub-sector Readymade Garment Industry (RMG) and pharmaceutical recorded the highest performance while growth rate of jute and cotton textiles declined.

The Third Five Year Plan targeted to doubling the output both of metal products and of machinery and transport equipment. It is to mention here, if the produced goods satisfy the users, it will be demanded and competence is highly expected here. In Bangladesh the existence of thousands of roadside workers are a visible proof of the competence and the entrepreneurship of skilled worker. These assets could be mobilized to advance the development of all-important engineering and other metal products industries.

It is discussed earlier that the garment industry assures a high growth of manufacturing industry as it contributes about 56 % of export earning. If the import restriction of importing countries could be removed, the achievement of this industry would be more impressive. The growth of export of readymade garment is only a short-term relief but to convert it a sustainable one establishment of backward and forward linkage industry is a must. In the Fifth Five Year Plan emphasis was given to set up backward linkage industry to keep the industry competitive in the

## **Bakshi: The problems and potentials of industrialisation process in a transition economy**

global market.

High value added industry create the opportunity to accelerate industrial growth in any country like Bangladesh. Today the country meets her demand for metal and engineering goods by imports. But the country has a machine tools factory, a diesel engine manufacturing plant and a plant for manufacturing general electrical equipment. Recently these industries failed to show their performance due to having various problems. Under the current industrial policy government has taken initiative to sell share of some of the industries and to hand over some industries to private ownership. In short, government has taken policy to disinvest from the state owned enterprises and nurturing private entrepreneurship. The longer-term growth of Bangladeshi industries will never be high unless the metal sectors begin to grow rapidly. Foreign investment and technology transfer is required to promote growth in the long run in heavy metal and engineering industrial sector.

Bangladesh is in a prospective position in using natural resources and raw materials. The establishment of jute industry that is now under threat and a fertilizer industry based on natural gas is operating here. The newsprint mill based on wood from *Sundarban* is so far working well. But three pulp factories have been suffering from severe shortage of the local raw materials. It is to mention here that, Bangladesh is poor in non-agricultural raw material. So the countries cement factory import limestone from India and the project to produce cement from deep mining limestone becomes a high cost producer. The ceramics factory in Dhaka has to import clay as it is not available locally.

Bangladesh is still a high cost producer of crops because the labour inputs in them is high. Recently the country is going to achieve remarkable gain from agro-based industries like fisheries, dairy and sericulture etc. The sugar industry failed to compete internationally because of high cost of production. Only the leather industry is internationally competence and export large part of its output.

In the remaining situation, the development strategy of Bangladesh must be based on the countries riches resources and it is hard working and prospective men and women. At present this resource is valuable because it is cheap by international standards. Recently export boom in garment industry is the successful example of using this cheap labour force. In Bangladesh measure should be taken to make the labour force skilled to engage them in engineering and related industries.

Another factor related to industrial development is quality and design. Bangladesh being a poor country, the consumer class is also poor. In this case priority should be given on producing capital goods and goods which serves as input in other activities. Thus Bangladesh could gain from industrial sector by converting them prospective one that would be able to maintain internal standard and could compete in the international market.

## **Conclusion**

Bangladesh does not have a glorious history of industrialization or entrepreneurship. It is experienced to be looted for thrice and once its nature of economy has been changed. In 1757, at first, it was looted by the East India Company. In 1947, India took away all the assets from the then East Bengal. In 1971, again, Bangladesh had been looted by west Pakistanis. In 1972, Bangladesh economy was wrongly diverted to nationalization in the light of socialistic economy. By these sorts of draining out of resources and wrong path driving of policies, 'industrialization baby' of Bangladesh is still in the womb of mother. It has prospects and at the same time it has probability to be fall in bad position. Bangladesh is not that much old; only 35 year's old age could be spelled out as infant. So, dreaming for most advantageous industrialized country is far away. But experiences of other ASEAN countries could be learning examples. Those examples should be used for the development of leadership and motivated nation, who might change the situation with commitment and sincerity.

Undoubtedly globalization is a big challenge for heavy competition. The WTO along with IMF, World Bank, will nurse the trade, business and finance of the world market. They have far reaching effects of destiny of the individual nation as well as regional and mankind as a whole. So it is not easy for the developing country to survive with its small size capital and very low level of technology. So, there are a very bad need of appropriate strategy formulation and implementation.

The diversified export-led industrialization is essential for survival. The quality goods and services in a competitive price and information is the main capital of the business. So industrialization should aim at the local needs and toward export earning. In that case local raw material must be preferred. So that both agriculture and industry sector could be benefited. The nation, which will fit them, increasingly investment and production with a lower cost, will be able to keep their head up. Internal resources and foreign investment both are the essential for industrialization. Bangladesh economy must be shifted from agriculture to industry and service sector. Until and unless these two sectors would come up over the agriculture, no hope for development is remained. That does not mean that agriculture sector will disgraced but agro-based industry and service sector will have to be established.

While agriculture serves as the launching pad, industrialization works as the booster rocket for sending the spacecraft of socioeconomic development into the orbit of self-sustaining growth. Bangladesh must find the diversified spacecraft of industrial sub-sector fueling through agriculture and non-traditional items. Without

**Bakshi:** The problems and potentials of industrialisation process in a transition economy

loosing a moment private sector should come up with own capital and seek foreign investment and state should cooperate for maintaining a congenial situation for industrialization targeting sustainable economic development.

The government should ply a vital role in facilitating private sector and maintaining macro policy environment. Slow pace of privatization, problems of industrial finance, infrastructural bottlenecks, particularly those relating to transportation, port facilities and power supply, lack of skilled workers deficient technology, the law and order situation, corruption etc are some of the main factors that should be addressed properly by the government for the development of the industrialization of our country.

Refrences

- Farid, Dr. Shah M., 2000. Planning and Development in Bangladesh, an Unpublished Document Presented in a Seminar, at Planning Commission, Dhaka:
- Alam, A. M. Quamrul, 1995. "Strategies of Industrialization", Policies Issues of Bangladesh, in Habib Zafarullah, M.A. Taslim and Anis Chowdhury eds. Dhaka: United Press Ltd.
- Alamgir, Mohiuddin, 1974. "Nationalized Industries of Bangladesh: Problems and Prospects". the Bangladesh Development Studies, 2: 703-720.
- Bakht, Zaid, 1995. "Bangladesh Industrial Performance in the 1990s: A Reassessment of Official Industrial Statistics." Experience with Economic Reform: A Review of Bangladesh Development 1995. Dhaka: University Press Limited.
- Bhattacharya, Debapriya, 1995. "Bangladesh Industrial Performance in the 1990s: The Investment Scenario." Experience with Economic Reform: A Review of Bangladesh Development 1995. Dhaka: University Press Limited. 1995.
- Chowdhury, A. M. and Alam, Fakrul. Ed., 2002. Bangladesh on the Threshold of the Twenty First Century. Dhaka: Asiatic Society of Bangladesh.
- Iftikhar-ul-Awwal. A. Z. M., 1982. The Industrial Development of Bengal, 1900-1939. New Delhi: Vikas Publishing House Pvt. Ltd,
- Islam, Nurul, 1993. Development Planning in Bangladesh : A study in political Economy. Second Impression. Dhaka: University Press Limited, 216-217.
- Kamal, Mohammad Rowshan, 1985. Problems of Small Scale and Cottage Industries in Bangladesh. Nagoya, Japan: The University of Nagy Press,
- Mandal, Mohammad Solaiman, 2000. Socio-Economic Development and Human Welfare: An Interdisciplinary Approach. Rajshahi, Bangladesh
- Norbye, Ole David Koht, 1993. "Manufacturing Industries in Bangladesh," *Bangladesh: Facts the Future*. ed. by Ole David Koht Norbye. Dhaka: University Press Limited.
- Rahim, A. M. A., 1978. "A Review of Industrial Investment Policy 1971-77". In the Author. Ed. Current Issues of Bangladesh Economy. Dhaka: Bangladesh Books Internationals Ltd., 1978. pp. 87-111.
- Todaro, Michael P., Economic Development. 7th ed. New York: Addison-Wesley, 2000.
- Bahar, Habibullah. et al., eds. 2001. Annual Export Receipts 2000-2001. Dhaka: Statistics Department and Bangladesh Bank
- Bangladesh Bureau of Statistics, 2002. Report of the Labour Force Survey Bangladesh 1999-2000. Dhaka: BBS,
- Bangladesh Industrial Policy, 1999.
- Government of Bangladesh, 2001. Bangladesh Bureau of Statistics.
- Government of Bangladesh, 2001. Bangladesh Economic Review 2001. Dhaka: Ministry of Finance
- Government of Bangladesh, The Planning Commission. The Fifth Five Year Plan (1997-2002)
- Ministry of Finance, Bangladesh Economic Review 1999. Dhaka: Ministry of Finance, 1999.
- Ministry of Finance, Bangladesh Economic Review 2002. Bengali Version. Dhaka: Ministry of Finance, 2002.
- Ministry of Finance, Bangladesh Economic Review 1996. Dhaka: Ministry of Finance, 1996.
- Ministry of Finance, Bangladesh Economic Review 2001. Dhaka: Ministry of Finance, 2001.
- Statistics Department, Annual Export Receipts 2000-2001.