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Strategies for Economic Development of Bangladesh





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- Special Note -

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Index :-

Chapter	<u>Name</u>	Page No
	Executive Summary	7 - 9
1.0	Part-1: Background of Bangladesh's economic development.	
1.1	Bangladesh, a country of immense potential	11 - 13
1.2	Rising progress in the economy of Bangladesh.	14 - 27
1.3	Bangladesh as a Developed Country in Future.	28 - 35
2.0	Part-2: Rural Economy	
2.1	Current Situation of Rural Economy	37 - 51
3.0	Part-3: Development of Village Economy:	
3.1	Separate assessment of Rural Economy	53 - 59
3.2	Modernization of Agriculture	60 - 88
3.3	Expansion of Cottage Industry at Village Level	89 - 101
3.4	Decentralization of SME Sector at Upazilla Level	102 - 111
3.5	Rural housing and infrastructure development	112 - 120
3.6	Increase Education Facilities at Village Level	121 - 141
3.7	Improve Health Services at Upazilla and Village Level	142 - 152
3.8	Introduce Savings-based Pension Scheme for rural poor.	153 - 164
3.9	Increase production of fisheries, poultry and cattle.	165 - 177
3.10	Establish "Rural Affairs" Ministry	178 - 184
4.0	Part-4: Urban Economic Development	
4.1	Urbanization and Urban Expansion	186 - 195
4.2	Development of Urban Housing and Civic Amenities	196 - 209
4.3	Increase Urban Productivity	210 - 215
5.0	Part-5: National Economy Development:	
5.1	Effective Population Control	217 - 228
5.2	Career Oriented Higher Education System	229 - 244
5.3	Compulsory Technical Education	245 - 259
5.4	Expansion & Modernization of Health Sector	260 - 288
5.5	Sustainable Industrialization	289 - 325
5.6	Modernization and Expansion of Garments Sector.	326 - 341
5.7	Development and Expansion of ICT Sector	342 - 365
5.8	Modernization and Expansion of Service Sector	366 - 378
5.9	Expansion and development of export trade	378 - 418
5.10	Development of power & Fuel Sector.	419 - 445
5.11	Sustainable Infrastructure Development	446 - 466





5.12	Increase Foreign Investment.	467 - 483
5.13	Collection and Utilization of Natural Resources	484 - 507
5.14	Forest and environmental development	508 - 518
5.15	Effective Management of Water & River Resources	519 - 527
5.16	Development & Expansion of Tourism Industry.	528 - 538
5.17	Development & Expansion of Blue Economy	539 - 549
5.18	Increase Revenue Mobilization	550 - 570
5.19	Simplification of Tax System.	571 - 584
5.20	Increase Savings, Investment & Reserve	585 - 599
5.21	Limiting Government Liabilities	600 - 606
5.22	Controlling Corruption and Establishment of Rule of Law	607 - 618
5.23	Administrative Reforms and Development	619 - 632
5.24	References	633 -642







Executive Summary:

Bangladesh is a small country in Southeast Asia on the shore of the Bay of Bengal, which has wide borders with India and Myanmar. Although small in size, due to its geographical location, importance of this country in the political and economic arena of South Asia is immense. Especially in recent times due to increasing conflicts between China, India and Pakistan and ongoing trade disputes between China and the United States, importance of Bangladesh to these countries is gradually increasing, which will continue in future. Moreover, heavenly climate and natural environment of this country, fertile soil, abundant undiscovered natural resources in the water and land, cheap labor and talents and activities of people of this country are recognized in international arena. Due to its large population, Bangladesh is a big and attractive market for any country in South Asia, where there is a huge opportunity for investment and trade expansion.

Until 1947, Bangladesh was under British rule, which was later ruled by the Pakistani ruling class. At various times since independence in 1971, the country has been governed by elected and unelected / military governments, all of which were basically busy in maintaining power. As a result, all those governments did not pay much attention to the development of the country's economy, which is one of the reasons for social and economic disadvantage of this country. Moreover, due to overpopulation of the country and backwardness of industry, trade and technology, country's economy has not yet been able to expand as desired. Due to political shortsightedness and limited economic knowledge, past governments have failed to take far-reaching steps in the country's economic development. As a result, even after a couple of decades of independence, quality changes in the country's economy has not been possible and the country lags far behind other South Asian countries in terms of employment, education, health, communication, technology, industry and trade till now.

Executive

Summary:

However, since the present Awami League government came to power, several effective steps have been taken for economic development of the country in the post-2009 period. In addition to taking some steps to modernize the agricultural sector at this time, several mega projects have been undertaken in power, communication, IT and other infrastructure development, most of which are currently under implementation. During this time, in addition to increase in export of readymade garments, amount of remittances sent by the workers working abroad has increased at a significant rate. Taking various steps for development of trade and commerce in the country and hundreds of export processing zones have been set up to attract foreign investment. As a result, in addition to increasing food production and food self-sufficiency in the country over the past decade, GDP growth has averaged over 7.50% during last couple of years and foreign exchange reserves have grown steadily (Reserves stood at USD 48.06 billion by August 2021, which was USD 10.34 billion during June 2009). In view of all these advances, at the beginning of 2021, Bangladesh was recognized by the United Nations for fulfilling conditions for its transition from a low-income country to a middle-income country, which is undoubtedly a matter of honor and pride for Bangladesh. After completion of ongoing mega projects will have a huge positive impact on business, trade, industry and investment in the country, resulting in





significant growth in employment, per capita income and living standards as well as increase in GDP growth is expected.

Another bold initiative of the present government is to adopt a plan to include Bangladesh in the list of high-income countries by 2041, which is undoubtedly a big and commendable challenge. However, as a low-income country, benefits that Bangladesh now enjoys from developed countries in terms of trade, investment and credit, most of those benefits will no longer exist after it is officially upgraded to a middle-income country in 2024. As a result, Bangladesh will have to face then a lot of competition in the field of export trade and development activities, which may at that time be seen as a challenge in terms of industrialization, new employment and increasing per capita income in the country. First condition for reaching into a high-income country is to build a sustainable economy in the country by revolutionizing agriculture, industry and commerce, communications, electricity, fuel and technology, which will play a major role in improving quality of life by increasing employment and per capita income in the country as well as ensuring opportunities for people of all walks of life to meet basic needs including education, health and housing.

Considering overall context of Bangladesh, it may be difficult to reach the list of high-income countries by 2041, but off course possible. Difficult in that sense that since poverty rate in Bangladesh is still above 40% by 2020, 73% of the country's population still live in rural areas, lion's share of whose livelihood depends on agriculture. Floods, natural disasters and river erosion are almost common occurrences in most of rural life of this country. People of this country are still far behind in terms of education, health, housing and other basic rights. Moreover, Bangladesh's position in terms of industry and technology is still at infancy. Therefore, it is very important to awaken belief among the government and majority of people that we will be able to achieve desired goal by addressing all existing problems in the social and economic spheres of the country in a realistic way. Because, if the goal of government and people is not same, it is impossible for the government alone to face this big challenge.

Therefore, in order to meet this big challenge of reaching high-income countries by 2041, our first task will be to build a sustainable economy in the country, which requires precise and far-sighted economic plans and strategies. Strategies that can be followed to make it possible to build a sustainable economy in the country by making unprecedented progress in agriculture, industry and trade by ensuring full use of existing natural and economic resources, which will ensure improvement of living standards of people of all walks of life by fulfilling all basic needs in the country including education, health and housing, which is essential in case of a developed country. With this objective in mind, in order to meet the challenge of 2041, to make the steps taken by the government this purpose more expeditious and effective and to build a sustainable economy in the country through timely and effective initiatives, the book "Strategies for Economic Development of Bangladesh" is presented before the government and the nation in the form of a proposal.

Current situation of the fields related to overall economic development of the country, position of Bangladesh in all areas in international assessment, existing problems in various fields of ongoing economy and for improving situation in each





case, recommendations have been presented in the light of various local and international research and studies, my own experiences and analysis based on realities. Separate assessment of rural economy for overall economic development, which require modernization of agriculture, expansion of SME sector at upazila level, development of rural housing system, introduction of pension scheme under savings for rural poor to reduce poverty to zero and to accelerate overall economic development, simplification of income tax system to increase revenue earnings and increase industrialization, detailed suggestions have been made in this book in development of financing situation in industrial sector. In particular, the book contains detailed proposals on all areas of overall economy that need development and progress to reach the list of high-income countries by 2041, such as effective population control, introduction of vocational higher education system, compulsory technical education, expansion and modernization of health sector, sustainable industrialization, expansion and development of ICT sector, expansion of services sector, expansion and development of export trade, development of power and fuel sector, Sustainable infrastructure development, increasing foreign investment, extraction and utilization of natural resources, forest and environment development, effective management of water and river resources, development and expansion of tourism industry, development and expansion of maritime economy, increase in revenue earnings, simplification of tax system, increasing savings, investment and reserves, limiting government liabilities, curbing corruption and obstacles in establishing good governance and administrative reform and Bangladesh's position in all these areas in international assessment and improving situation in those areas, the book contains detailed proposals. I believe that recommendations contain details and appropriate direction for overcoming existing problems in the areas that are important for the economic development of this country and facing challenges ahead, which are essentials for building a prosperous and sustainable economic strength in the country in future.

If even a drop of my effort comes in handy for overall economic development of this country and if the government and the nation have benefited the least from this effort, then my efforts will be worthwhile. The book has been written keeping in mind the overall economic and social development of this country, which will serve as a guideline for the present and future governments in development and management of overall economy of this country. If there is any political context in any part of this book by any way or any other mistakes, I politely apologize for those unexpected mistakes. Finally, hope that every people of this country will love the country and its people and work for development of this country from their own position and contribute to realize the cherished dream of people of this country to turn Bangladesh into "Golden Bengal".

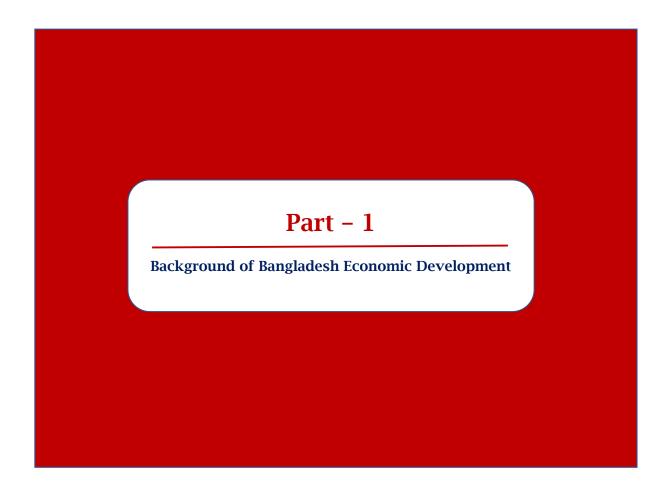
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Chapter: 1.1

Bangladesh, a Country of Immense Potentials







Bangladesh, a country of immense potentials:



"You can't find such a country anywhere, queen of all countries, she is my homeland" she is my Bangladesh. Surrounded by magnificent beauty of nature, Bangladesh is a country of immense potentials full of wealth, grains and flowers. Hundreds of sprawling rivers, canals, fertile soil, abundant natural resources in water and land, glorious natural beauty and the country that is blessed with heavenly weather, is my birthplace, dear Bangladesh. Due to unimaginable fertility of soil, cultivation is easy in this country, just as everything produced in this country is unique in taste and quality due to extraordinary quality of nature. Although small in size, considering geographical location and surrounding conditions, importance of this country in political and economic arena of South East Asia is immense.

People of this country are innately intelligent, hardworking and have extraordinary ability to deal with any adverse situation. Youth of this country are vibrant, courageous and fearless, who have repeatedly proved their manhood in establishment of rights in struggle and movements. People of this Country are a shining example of hospitality, religious values and humanity.

Reasons why this country has immense potentials, why cherished dream of people of this country to reach the list of prosperous country will definitely be succeeded one day and underlying possibilities that will accelerate economic liberation of this country are: -

- 1) Geographical location and favorable natural environment.
- 2) Surrounding condition.
- 3) Abundant working age population.
- 4) Courageous, indomitable, enthusiastic and hardworking young Generation.

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- 5) Potential rural economy.
- 6) Opportunities for development of Blue economy.

Bangladesh, a country of immense potentials





- 7) There are innumerable small and big hills scattered all over the country, which have a huge opportunity to enrich economy of the country by bringing them under agriculture.
- 8) To bring awakened islands in the Bay of Bengal under rapid economic development.
- Indomitable strength and courage of people of this country to overcome any adverse situation.
- 10) Innumerable natural resources in water and land.
- 11) Favorable environment for industrialization.
- 12) Extraordinary fertile strength of soil and quality of products produced.
- 13) Acceptance of products produced in this country in international market.
- 14) Cheap labor market.
- Ability of people of this country to quickly adapt with technology and situations.
- 16) Ability to adapt quickly to international competition.
- 17) Friendly foreign policy.
- 18) Importance of this country in South Asia in the political and economic arena.

If far-sighted people of this country realize these underlying possibilities that exist in this country, believe in them and take proper initiative to utilize those possibilities, then the day is not far away when per capita income, living standard, social and economic status of people of this country will reach enviable heights. This country will become unique in terms of social and economic success, in which people will feel blessed to be born and every person in the country will enjoy their life with satisfaction. Where there will be no poverty, no social degradation and no political violence. There will be no injustice in society, rule of law will be fully established and this country will be the destination of happiness and prosperity. Every people being born in this country, by looking back at juncture of life will be able to say with smile of self-satisfaction "I have done everything that people can do in life, got everything and enjoyed everything". We are looking forward to those most beautiful days, when this country will lead the world economy and become a country of prosperity and potentials "a country of getting everything" golden Bangladesh.

All that is needed is political stability in the country, far-reaching and real effective plan for social and economic development, willingness and political commitment to implement them. For those who have a negative perception about this country, those who have no confidence in the soil and people of this country, who are hesitant about future of this country and those who are reluctant to identify themselves as "Bangladeshi" born in this country, I would like to say for them " Create love for the country and plan for future keeping in mind of all possibilities of this country and work on its implementation - you will see how fast success of life is knocking at your doorstep".







Rising Progress in the Economy of Bangladesh.







Rising Progress in the Economy of Bangladesh.

Topics covered in the chapter :

- A) Emergence of progress in the economy of Bangladesh.
- B) Graphical Presentation of information of Figure-1.2(1)
- C) Visible progress made during last two decades.
 - 1. Poverty Reduction.
 - 2. Success in Agriculture.
 - 3. Success in labor Export.
 - 4. Progress in Education.
 - 5. Progress in ICT Development.
 - 6. Success in Power Generation.
 - 7. Overall Infrastructure Development.
 - 8. Progress in Social and Other Important Areas.







A) Emergence of progress in the economy of Bangladesh:



After nearly 250 years (1800-1947) of British rule and 24 years of Pakistani rule, oppressed people of this country finally roared in the independence movement in 1971. After gaining independence, the country went through many ups and downs and after 4 long decades, this country has been able to turn around economically. Bangladesh today is on the verge of becoming a developing country with its untiring efforts, intelligence, courage and limited resources and is intoxicated with dreams of reaching the list of high-income countries by 2041. In many social and economic indicators, Bangladesh has already been able to respond in international arena, leaving behind the neighboring countries. Henry Kissinger's so-called "Bottomless Basket" is now widely regarded as one of South Asia's emerging economies.

Post-independence economy of the country has come forward with various adversities and instability due to various reasons such as limited resources, inefficient and overpopulated population, political instability, underdeveloped education system, backward infrastructure and many more. It can be said that previous governments have failed to revive the country's economy as expected with realistic and effective measures and plans to address all these problems. During this period, despite efforts of public and private sector as well as numerous domestic / foreign NGOs and donor groups for economic development of the country, it was not possible to achieve desired economic growth. As a result, country's economic growth and development was stagnant during four decades from independence to 2010. By 2009-10, size of the country's national budget was TK. 113,619 crore, ADB size was TK. 26,500 crore, GDP size was USD 391.60 billion, per capita income was USD 781, Foreign exchange reserves were USD 10.34 billion and investments was 27.25% based on GDP. At that time Bangladesh lagged far behind in almost all areas of social and economic development. Bangladesh lags far behind comparing to most countries in the world and even almost all countries in South Asia in most of the indicators related to power, energy, communication and other infrastructure development, education, health, housing, social and economic.

Since Awami League government came to power in the second phase in 2009, they took the issue of economic development of the country seriously and have taken various steps for economic development in the Country. During this period

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Emergence of progress in the economy of Bangladesh:





significant progress was made in agricultural sector as well as in the readymade garments sector and increased labor exports in international market. During this time poverty rate in the country was reduced, food production increased and significant progress was made in the flow of export earnings and inward remittances. In addition, beside increasing rate of education in the country, significant progress was made in development of communication system, power and fuel sector at this time.

Due to various measures taken by the government since 2010, significant progress has been made in the field of agriculture as well as in other fields related to industry, trade and economy and the country's economy has started to turn around. Since 2015, domestic and foreign investment in infrastructure development has increased significantly and about a dozen mega projects have been undertaken in power, communication, port, IT and other infrastructure development, all of which are expected to be completed in next few years. As a result, by 2020, country's economy is now able to gain recognition in international arena as one of the fastest growing economies in South Asia. Over the past decade, size of the national budget has multiplied, scope of Revenue and Expenditure, Annual Development Program, Import and Export Sector, Foreign Exchange Reserve and unprecedented progress in almost all areas of the economy is notable. During this period, GDP growth averaged 7.62 percent and per capita income during F.Y 2019-20 has risen to USD 2064 which was USD 781 in F.Y 2009-10 and it is worth mentioning that Bangladesh is soon to move from a low-income country to a middle-income country and is on track to reach the list of high income countries by 2041. Scenario of progress in various important sectors of the economy during last two decades has been highlighted through Figurei-1.2 (1).

Figure-1.2(1): Budget and ADP size, GDP Size and GDP per capita, inflation, foreign exchange reserves, and investment scenario for the period from 2000-01 to 2019-1020: -

	National	Budget		GDP				
Financial Year	Budget (TK. In Crore)	ADP (TK. In Crore)	GDP In billion US\$ PPP	GDP growt h (%)	GDP Per Capita (Current US\$)	Inflation Rate (%)	Reserve (US\$ Billion)	Invest ment as % of GDP
2000 – 2001	38,524	17,500	193.2	5.4	415	1.94	1.52	24.17
2001 – 2002	42,306	19,000	205.7	4.4	413	2.79	1.31	24.34
2002 – 2003	44,854	19,200	221.9	5.3	446	4.38	1.72	24.68
2003 – 2004	51,980	20,300	241.9	6.3	475	5.83	2.62	24.99
2004 – 2005	57,248	22,000	265.5	5.4	499	6.49	3.22	25.83
2005 – 2006	64,383	23,626	292.4	6.6	510	7.17	2.83	26.14
2006 – 2007	69,740	26,000	319.7	6.4	558	7.22	3.88	26.18
2007 – 2008	87,137	25,600	344.0	6.2	635	9.93	5.28	26.20
2008 – 2009	99,962	25,400	365.0	5.7	702	6.66	5.79	26.21
2009 – 2010	113,819	28,500	391.7	5.9	781	7.71	10.34	26.25
2010 – 2011	132,170	35,130	425.8	6.46	862	10.91	11.17	27.42
2011 – 2012	163,590	41,080	460.8	6.52	883	8.69	9.17	28.26
2012 – 2013	191,738	52,366	496.5	6.01	982	6.78	12.75	28.39
2013 - 2014	222,491	60,000	537.3	6.06	1,119	7.35	18.09	28.58
2014 - 2015	250,506	75,000	581.6	6.55	1,248	6.41	22.32	28.89
2015 – 2016	295,100	93,894	629.9	7.11	1,402	5.92	27.49	29.65
2016 – 2017	340,605	110,700	710.5	7.28	1,564	5.44	32.28	30.51
2017 – 2018	400,266	148,381	785.9	7.86	1,698	5.78	33.43	31.23
2018 - 2019	464,573	173,000	869.4	8.13	1,856	5.44	32.03	31.60
2019 - 2020	523,190	202,771	961.4	5.24	2,064	5.65	35.85	31.76

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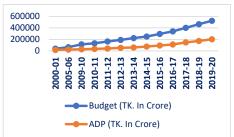
Source: BBS, Ministry of Finance, World Bank and other Sources.





B) Graphical Presentation of information of Figure-1.2(1):-

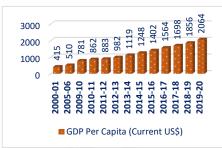
Size of national Budget and ADB during F.Y 2000-01 to 2019-20:-



GDP Growth Rate during F.Y 2000-01 to 2019-20:-



Scenario of Increase GDP Per Capita during F.Y 2000-01 to 2019-20:-



Scenario of Foreign Exchange Reserve during F.Y 2000-01 to 2019-20:-



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C) Visible progress made during last two decades:

Bangladesh has undergone positive changes in various fields of social and economic development since 2000, it took a revolutionary shape in the post-2010 period and progress of various indicators came to notice of the world. During this period, besides making tremendous progress in agricultural sector, poverty reduction, education, labor exports, IT and overall infrastructure development has increased at a significant rate, which has paved way for Bangladesh to move from a low-income country to a middle-income country.

During period of 2010-2020, along with progress of important indicators of the economy, great progress has been made in development of overall infrastructure. A number of major projects in development of power, fuel, communication and other important infrastructure have already been implemented and a few more are underway. Multiple mega projects like port development, creation of new economic zones, construction of metro rail, Padma bridge, construction of deep sea port and Rooppur nuclear power plant are under implementation. During this period, the country has made significant progress in increasing rate of education, life expectancy at birth, reducing maternal and child mortality and other important social and economic indicators. Below is a picture of progress of some other important sectors related to social and economy by 2019.

visible progress made in other areas over the past two decades:









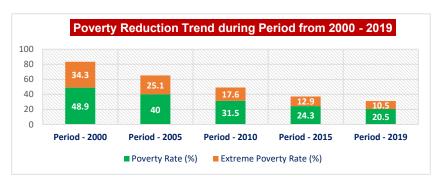
Bangladesh's progress in reducing poverty after 2000 is commendable. In 2000, combined poverty rate in the country was 63.2%, by 2019 it has come down to 31%. In span of 20 years, poverty rate in the country has reduced by 32.2%, which is indeed a great achievement. On the other hand, by the year 2000, average monthly income per household in the country was TK. 5,642 (TK. 4,616 in rural and TK. 9,878 in Urban), during HIES 2016, it has increased to TK. 15,988 (TK. 13,398 in Rural and TK. 22,600 in Urban) [Figure-1.2(2)]

Figure- 1.2(2): Reduction of poverty and progress in average household income during period from 2000 to 2019: -

Poverty	Reduction	:

Index	2000	2005	2010	2015	2019
Poverty & Extreme Poverty					
a) Poverty Rate (%)	48.9	40.0	31.5	24.3	20.5
b) Extreme Poverty Rate	34.3	25.1	17.6	12.9	10.5
(%)					
Average Household Income	5,842	7,209	11,479	15,988	
a) Rural (BDT)	4,816	6,095	9,648	13,398	
b) Urban	9,878	10,463	16,475	22,600	

Source: BBS and Ministry of Finance.







2) Success in Agriculture:



People of this country have already proved that agricultural sector of this country is a shining example of potentials and can play a leading role in the overall development. In the post-independence period, country's population was less than half of what it is today, but before 2000, there was a huge food shortage in the country at that time, at present, population is more than 17.00 crore as of 2020, but now there is no food shortage in the country and even there is a surplus. Due to revolutionary progresses in the country's agricultural sector in the post-2000 period have led to an increase in food production, as well as unprecedented advances in fish production, poultry and cattle production. According to International Ranking 2018, Bangladesh ranks third in open water fish production and fifth in aquatic production.

During financial year 2000-01, production of paddy, fish, cattle and poultry in the country was, paddy 250.85 lakh metric tons, Fish 17.81 lakh metric tons, cattle 379.00 lakh and poultry 1765.10 lakh respectively. In 2018-19 financial year, production stood at paddy 363.91 lakh metric tons, Fish 43.84 lakh metric tons, cattle 555.34 lakh and poultry 3470.35 lakh. **Figure-1.2 (3)**

Success in Agriculture :

Figure-1.2 (3): Scenario of Progress in food, fish, poultry and cattle production during 2000-01 to 2018-19: -

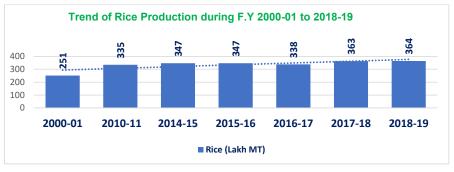
Dundersta	Financial Year									
Products	2000-01	2010-11	2014-15	215-16	2016-17	2017-18	2018-19			
Rice (Lakh MT)	250.85	335.42	347.10	347.01	338.04	362.79	363.91			
Fish (Lakh MT)	17.81	30.62	36.84	38.78	41.34	42.77	43.84			
Livestock (No.	379.00	516.66	539.72	543.57	647.45	551.39	555.34			
in Lakh)										
Poultry (Lakh)	1765.10	2788.06	3122.93	3206.33	3292.00	3379.98	3470.35			

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Source: BD Economic Review





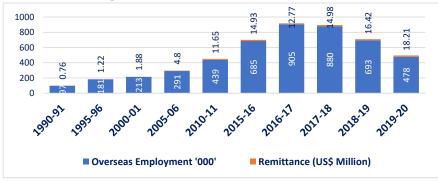




Export of labor facilitates employment of working age population as well as foreign exchange earnings, which plays a unique role in strengthening the country's economy. Since 2010, both labor exports from Bangladesh and inbound remittance inflows have increased at a significant rate. As a result, country's foreign exchange reserves have steadily increased over the past decade, which is crucial to ensure country's economic stability. During fiscal years 2010-11 to 2019-20, average amount of labor exported abroad was 608,000 per annum and amount of inward remittances averaged USD 14,580.50 million per annum, which is highest ever.

Success in labor Export:

Figure-1.2 (4): Scenario of increase in labor exports and inward remittance during 1990-2019:-



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Source: BD Economic Review





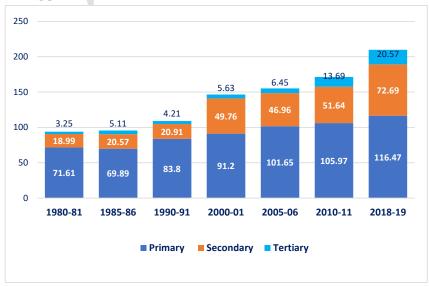




Progress in Education:

Spread of education in the country was very limited from independence to 2000, but enrollment rates at all levels of education have increased significantly since 2000, although we are still far from access to education at village level and vocational and quality higher education. During financial year 2000-01, total enrollment rate at various levels of education was 91.2% at primary level, 49.76% at secondary level and 5.63% at tertiary level respectively, by the F.Y 2018-19 which has increased to 116.47% at primary level, 72.69% at secondary level and 20.57% at tertiary level. Figure - 1.2 (5) Over the past two decades, the country has made remarkable progress in enrolling at all levels of education, which is essential for overall development of the country.

Figure-1.2 (5): Scenario of total enrollment at different levels of education during period from 1980-81 to 2018-19:-



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Source: Induxmundi









In the post-1980, there has been a massive boom in the global information and communication technology sector, during which most of developing countries in South Asia were able to expand their trade by increasing human resource development and increasing exports of goods and services through advancement of information and communication technology.

Although journey of ICT started in Bangladesh after 1990, progress of this sector was not so noticeable till 2010. After the Awami League government came to power second time in 2009, special attention was given to development of ICT sector and emphasis was laid on digitalization as one of the driving forces in the socio-economic development of the country. As a result, after period of 2010, ICT infrastructure construction, optical fiber connections, submarine cable and 4G technology connectivity, government online services, online banking, ICT training in human resource development and a lot of visible progress has been made including bringing all districts, upazilas and unions of the country under optical fiber connectivity, which has made implementation of government's e-government plan quite feasible. As a result, by 2020, number of Internet users in the country stood at about 66.44 million, number of mobile users stood at 163 million and Bangladesh has made unimaginable progress in outsourcing, which has added new possibilities to the development of the country's economy.

Visible advances in the ICT sector have resulted in employment of a large number of young educated population as well as a rapid increase in export of ICT products and services in recent years. Exports of ICT products and services amounted to USD 313.25 million in 2010, which stood at USD 606 million in 2019 **Figure-1.2(6)**. At intervals of ten years, exports in ICT sector have almost doubled, which government is expecting to increase by USD 5.00 billion by 2025.

Figure- 1.2 (6): Scenario of ICT service exports of Bangladesh during 1996-2019: -



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Source: Indexmunfi

Progress in ICT Sector:



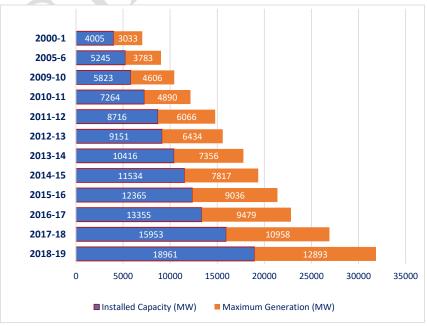






Success in Power Generation: Although country's power generation capacity was limited to 5,719 MW in 2008-9 with maximum generation was limited to 4,162 MW, scenario has started to change since the present government came to power. During fiscal year 2009-10, maximum power generation of the country was 4,606 MW as against Installed capacity of 5,823 MW, by the financial year 2018-19, maximum production has increased to 12,893 MW as against Installed capacity of 18,961 MW. During these 10 years, power generation capacity of the country has increased by 13,138 MW (225.62%) overall, an average increase of 1,313.8 MW (22.56%) per annum. **Figure-1.2** (7)

Figure-1.2 (7): Scenario of overall power generation capacity and maximum generation in the country during the financial year 2000-1 to 2018-19: -



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Source: Researchgate









Overall Infrastructure Development : One of the prerequisites for sustainable economic development is to build strong infrastructure in all sectors across the country by increasing investment in overall infrastructure development. In order to get a place in the list of middle-income countries by 2021 and high-income countries by 2041, it is essential for Bangladesh to fulfill SDG 9 target: "Resilient Infrastructure, Sustainable Industrialization and Innovation". Matter of hope is that although Bangladesh has lagged behind in infrastructure development for a long time but present government has given special importance to infrastructure development and has undertaken about a dozen of mega projects in infrastructure development, several projects have already been implemented and plans are inline to undertake more larger projects. In order to accelerate development of infrastructure, amount of annual revised ADP allocation and annual growth rate in various sectors during last 5 (five) years (FY 2015-16 to 2019-20) has furnished hereunder:-

Figure-1.2 (8): Scenario of revised ADP allocation by sector during the financial year 2015-16 to 2019-20: -

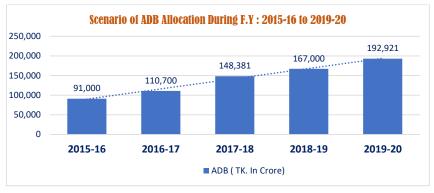
		Financial Year	. (,	ΓK. In Crore)	
Economic Sectors	2015-16	2016-17	2017-18	2018-19	2019-20
Agriculture	4,410.05	5,741.6	5,283.52	6,918.24	6,623.53
Rural Dev. & Institutions	9,046.13	10,761.43	16,722.00	15,154.25	15,777.91
Water Resources	2,609.49	3,342.11	4,147.31	5,000.87	6,552.79
Industries	1,711.35	974.12	1,563.55	2,046.27	3,238.10
Power	15,478.21	13,447.57	22,340.32	23,225.36	23,631.78
Oil, Gas & Natural Resources	1,068.17	1,067.87	1,346.48	2,209.12	2,417.07
Transport	19,212.13	27,360.23	37,513.22	38,099.58	47,431.92
Communication	1,434.82	1,915.79	937.44	2,021.01	1,739.64
Water Supply & Housing	11,092.38	14,391.17	15,146.83	20,371.84	26,839.25
Education & Religion	10,101.74	12,845.97	14,186.56	15,468.65	20,429.10
Sports & Culture	261.00	314.19	318.61	653.66	587.93
Health & Family Welfare	5,556.47	5,655.33	9,607.51	10,902.07	10,108.40
Mass Media	117.98	176.00	219.65	250.39	171.25
Social Welfare & Women dev.	424.48	347.19	431.86	649.71	798.06
Public Administration	2,327.43	2,344.55	2,118.91	4,964.3	5,137.49
Science & Technology	1,808.38	5,472.04	12,593.18	13,353.63	16,790.43
Labour & Employment	421.29	450.77	356.25	464.3	544.37
Others	3,918.50	4,092.07	3547.80	5,246.75	4,101.56
Total:	91,000.00	1,10,700.00	1,48,381.00	1,67,000.00	1,92,921.00
Yearly Growth Rate (%)	21.33	21.65	34.04	12.55	15.52

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Source: MOF







8) Progress in Other Important Areas:



In the post-1980 period, Bangladesh has made significant progress in economic as well as various social and other important indicators, including maternal mortality, infant mortality and life expectancy at birth. In 2000, there were 434 maternal deaths per 100,000 deliveries, which has reduced to 165 by 2019. Whereas in 1980, 133 per 1000 children would have died, in 2019 it has come down to 21. There were 86.5 deaths per 1,000 live births in 1980, but in 2019 it has dropped to 19.1. Underfive mortality rate was 198.6 per thousand in 1980, by 2019 it has dropped to 30.6 and average life expectancy in the country was 52.9 years in 1980, and by 2019 it has risen to 72.43 years.

Figure-1.2 (9): Scenario of progress in social and other important areas during 1970-2019:-

Index	YEAR							
	1980	1990	2000	2005	2010	2015	2019	
Maternal Mortality Rate	-	-	434	343	258	200	165	
Infant Mortality Rate	133	99	64	50	36	29	21	
Neonatal Mortality Rate	86.5	64.2	42.8	35.1	28.3	22.5	19.1	
Under 5 Mortality Rate	198.6	143.8	86.5	64.7	48.7	37.5	30.8	
Life Expectancy at Birth	52.9	58.21	65.45	67.77	69.88	71.51	72.43	

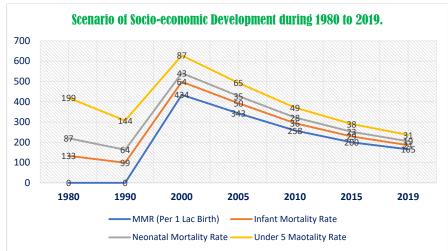
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Source: BBS, World Bank and other Sources.





Progress in other important areas:



One of the challenges for the government now is to accelerate pace of economic progress to ensure strong and sustainable development of the country, to realize its existence in free economic competition and to become a high income country by 2041 by ensuring desired economic and social development. But, this is difficult for the government alone. In the interest of development of the country, if people from all walks of life participate in development of the country regardless of party affiliation, extend their hands of cooperation in implementation of this great and grand objective of government from their own position, it is only a matter of time for this country become a modern, prosperous and developed economy. Because this country belongs to everyone and it is desirable that the country will move forward with combined efforts of all citizens, government's efforts will only reflect expectations and aspirations of people and this is the system of a democratic country. If there is an exception, then no one will be benefited but will suffer everybody.





Chapter: 1.3

Next Bangladesh as a Developed Country







Next Bangladesh as a Developed Country.

Topics covered in the chapter :

- A) Next Bangladesh as a Developed Country.
- B) Features of Advanced Economy.
- C) Fulfilling UN SDG Target 2030 to Ensure Development.
- D) Economic Action Plan to fulfill the Target of 2041.







A) Next Bangladesh as a Developed Country:

Since Bangladesh has already met all necessary conditions to become a middle-income country and gained UN recognition in February 2021, now, for good reason, Bangladesh's goal will be to sustain this achievement as well as quickly become a high-income country. To get a place in the list of developed economies by 2041, there is no alternative but to build a prosperous golden Bengal in future by ensuring sustainable development of overall economy of the country. But question is, what will be the overall characteristics of our coveted modern, developed and prosperous economy? What should be the future action plan of the government to ensure basic infrastructure of the country, equitable distribution of resources, social and economic security of people, code of conduct of the government, quality of education in the country, quality of life, etc. In the coming days, we have to move forward on the path of proper progress keeping in mind all these matters.

Next Bangladesh as a Developed Country:

What does advanced economy mean?

Advanced economy in terms of economics means "A developed economy is typically characteristic of a developed country with a relatively high level of economic growth and security. Standard criteria for evaluating a country's level of development are income per capita or per capita gross domestic product, the level of industrialization, the general standard of living and the amount of technological infrastructure.

Non-economic factors, such as the human development index (HDI), which quantifies a country's levels of education, literacy, and health into a single figure, can also be used to evaluate an economy or the degree of development". A prosperous economy refers to a developed country as a whole with high economic growth and security. In terms of measuring the economic growth of any country, it means per capita income of that country, industrialization, standard of living and adequacy of technological infrastructure. In addition, non-economic issues, such as the Human Development Index, if it is in a single digit in the country's education quality, literacy rate and health index, are used as the basis for measuring a country's economic growth / dimension.

B) Features of Advanced Economy:

Characteristics of Economic growth in a Country:-

Simon Kuznet (Nobel Prize winner for economics in 1971) identified 6 characteristics of growth. (However the study was based on experiences of developed nations.) These characteristics were:

- High rates of growth per capita output and population.
- High rates of increase in total factor of productivity (TFP) i.e. output per unit of all inputs.
- High rates of structural transformation of the economy.



Features of Advanced Economy:

Strategies for Economic Development of Bangladesh



- High rates of social, political and ideological transformation.
- Propensity to trade.
- Limited spread of economic growth.

Therefore, in order to ensure a prosperous and sustainable economic base in the country and to judge our economy in the light of developed countries by 2041, basic economic and social progress issues to be considered in determining development level of a country, e.g. income per capita or per capita gross domestic product, level of industrialization, general standard of living and amount of technological infrastructure and Human Development. Further progress needs to be made and in future we need to focus on formulating and implementing short and long term plans as well as other social indicators such as social security, good governance and integration of democracy. In addition, work needs to be done to increase domestic resources, develop human resources, create a conducive investment environment, create jobs in the country in proportion to working age population, and adequately improve other indicators related to improving living standards, which will make country's economy mature, where following features will exist:-

- A <u>mature economy</u> is the economy of a nation with a stable population and slowing economic growth.
- These economies have reached an advanced stage of development, categorized by slowing GDP growth, decreased spending on infrastructure and a relative increase in consumer spending.
- Countries with mature economies include United States, Canada, Australia, Japan and several nations in Western Europe.

C) Fulfilling UN SDG Target 2030 to Ensure Development:



There are UN obligation to meet "Sustainable Development Goals 2030" to gain international recognition as a developed economy by ensuring sustainable economic development. There is a practice among UN member states to set standard for economic progress on the basis of progress of 17 development goals, which is being implemented worldwide. To get Bangladesh on the list of developed economies by 2041, there is no alternative but to meet the UN's "Sustainable Development Goals 2030" properly.

In order to achieve this goal, it is very important for Bangladesh to achieve desired progress in all indicators related to social and economic development by 2030 and to achieve visible progress in consolidating democracy and establishing rule of law in the country. This requires modernization of agricultural, industrialization, increase in investment and employment, development of sustainable infrastructure,



Fulfilling
UN SDG Target
2030 to Ensure
Development:

Strategies for Economic Development of Bangladesh



human resource development, education, health, housing, electricity, communication, fuel and other sustainable social and economic development.

It is to be noted that Bangladesh is very active in meeting SDG targets set by the United Nations and various steps have been taken by the government to properly implement these agenda by 2030, including implementation of the 7th Five Year Plan (2016-2020) and 8th Five Year plan has been taken up to this regard. Moreover, in order to bring dynamism in the overall economic sector, "Economic Action Plan 2020-2041" and Delta Plan 2100 have been taken up. Analysis of implementation of SDG targets shows that while there has been satisfactory progress in some areas, progress rate has been disappointing in many cases, which is furnished in the following table:-

Progress of implementation of SDG targets in Bangladesh and other developing countries of Southeast Asia by 2018:-

	Countries										
SDG Goals	Bhutan	Sri Lanka	Nepal	Bangladesh	India	Pakistan					
1: Poverty	Good On	Good On	Moderate,	Moderate, On	Moderate,	Moderate,					
	track	track	On Track	Track	On Track	On Track					
2: Zero Hunger	Poor,	Poor,	Poor,	Moderately	Poor,	Poor,					
	Improving	Improving	Improving	Poor, Improving	Improving	Improving					
3: Good Health & Wellbeing	Moderate,	Poor,	Poor,	Moderately	Poor,	Poor,					
	maintaining	Improving	Improving	Poor, Improving	Improving	Stagnating					
4 : Quality Education	Poor,	Poor,	Insufficient	Insufficient	Insufficient	Poor,					
	Improving	Improving	data	data	data	Stagnating					
5 : Gender Equality	Insufficient data	Poor, Stagnating	Poor, Improving	Moderately Poor, Improving		Poor, Stagnating					
6 : Clean Water & sanitation.	Insufficient	Good on	Insufficient	Insufficient	Poor,	Insufficient					
	data	track	data	data	Improving	data					
7 : Affordable and	Insufficient	Poor,	Poor,	Moderately		Poor,					
Clean Energy	data	Stagnating	Improving	Poor, Improving		Improving					
8 : Decent Work and	Insufficient	Good on	Poor,	Poor,	Moderate,	Poor,					
Economic Growth	data	track	Improving	Stagnating	On Track	Improving					
9 : Industry Innovation and Infrastructure	Insufficient	Poor,	Poor,	Moderately	Poor,	Poor,					
	data	Improving	Improving	Poor, Improving	Improving	Improving					
10 : Reduced	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient					
Inequalities	data	data	data	data	data	data					
11 : Sustainable Cities and Communities	Insufficient data	Poor, Stagnating	Poor, Stagnating	Poor, Stagnating	Poor, Stagnating	Poor, Worsening					
12 : Responsible Consumption and Production	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data					
13 : Climate Action	Good, Maintainin g	Good, Maintaining	Moderate, Stagnating	Poor, Stagnating	Poor, Stagnating	Moderate, Stagnating					
14 : Life Below	Insufficient	Poor,	Insufficient	Poor,	Poor,	Poor,					
Water	data	Improving	data	Stagnating	Improving	Stagnating					
15 : Life on Land	Poor, Maintainin g	Poor, Improving	Poor, Stagnating	Very Poor, Worsening	Poor, Stagnating	Poor, Worsening					
16 : Peace Justice and Strong Institutions	Insufficient data	Poor, Worsening	Poor, Stagnating	Poor, Stagnating	Poor, Stagnating	Poor, Stagnating					
17 : Partnerships for Goal	Poor, Maintainin g	Poor, Worsening	Poor, Stagnating	Poor, Stagnating	Poor, Stagnating	Insufficient data					

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Source: Bangladesh SDG Progress Report 2020





D) Economic Action Plan to fulfill the Target of 2041:

Digital Bangladesh



It is true that post-independence economy was dilapidated due to the devastated economy, scarcity of resources, overpopulation, underdeveloped agricultural system, inadequacy of industries, underdeveloped communication system, lack of employment, etc., but it is also true that post independence governments have failed to take effective steps for economic development of the country, as a result of which unemployment became evident, level of poverty in the country gradually became epidemic and country's economy did not develop as expected for a long time.

However, although late, country's economy has turned a lot in the last decade. In addition to increase in the size and volume of economy, there has been significant progress in revenue growth, per capita income, food production, exports and power sector, as well as in other social indicators. Overall economy of the country is now more mature and progressive than ever before. As a result of this continuum of economic progress, Bangladesh is moving from a low-income country to a middle-income country and Bangladesh is now widely regarded as one of the emerging economies in South Asia. Strong initiatives and effective future plans are needed to highlight the country's strong position in the world economy by accelerating the country's progress in the days ahead.

Economic Action Plan to fulfill the Target of 2041:

However, in order to achieve the target of 2041, government has taken initiative to move ahead by formulating Action Plan 2020-2041. Needless to say, this grand plan of the government to meet challenges of the future should therefore take into consideration the country's position, climate and other overall situations, which should be realistic enough, up-to-date and implementable and where right combination of expectation and capabilities will be reflected. Following are some of notable issues that should be taken into consideration in formulating that plan:

 Bangladesh is a village based and agricultural dependent country. Consisting of 64,000 villages, 73% of total population still live in villages and their livelihood depends on agriculture. It is fact that overall economic development of this country needs to be accelerated by ensuring development of rural living standards by strengthening and sustaining rural economy. For rapid development of overall economy of the country, it is therefore necessary to





formulate and implement a plan through a separate assessment of the "Rural Economy".

- 2) Planning should be done keeping in mind the geographical location, social perspective and other circumstantial conditions. For example, soil and climate of this riverine country are suitable for agriculture and 73% of population of the country are involved with agriculture and related sectors. Therefore, in order to accelerate overall development of this country, development of agricultural sector and improvement of living standards of large number of population involved in this sector should be considered first and foremost.
- 3) Taking initiative to utilize this potential for overall development of the country by identifying areas of our capabilities and addressing challenges of the future. For example, Bangladesh is very prosperous in terms of population and has a large number of working age people compared to other countries. We have a unique opportunity to use this energy for socio-economic development of the country by transforming this large number of working age people into skilled manpower as well as to enrich economy of this country by exporting additional manpower abroad, which should be given utmost importance.
- 4) In those areas where we are still lagging far behind, take steps to bring those areas under rapid development by giving them extra importance and opportunities. For example, to ensure quality and work-oriented education system in the country as well as to take initiative to create sufficiently highly educated and skilled manpower by increasing rate of enrolment in technical, technology, agriculture and health in higher education, so that there will be no shortage of qualified people to take the helm in future.
- 5) Along with industrial revolution, agricultural revolution is equally important in fulfilling the goal of 2041. With the aim of increasing food production, it is time to increase contribution of agricultural to export sector through modern and scientific farming as well as agricultural diversification and commercialization.
- 6) Timely development in power, fuel, transport and communication, tourism and other infrastructure sectors is the need of time.
- 7) Production of agriculture and Agro-related sectors (crops, vegetables and herbs, spice crops, such as onion, garlic, ginger, turmeric, chili, etc., poultry and other livestock, milk, drum, fish and fruits, etc.), it is important to pay close attention to the fact that beside fulfilling domestic demand, it can be exported abroad as well. Because, in a riverine and agricultural country like Bangladesh, it is really inappropriate to spend a lot of foreign currency to import agricultural products, such as onion, garlic, ginger, fish, meat, lentils, etc. It is very important to take a tough decision in this regard.
- 8) In case of industrial raw materials, Bangladesh is still completely dependent on imports, which is one of the major obstacles to industrialization. Just as lion's share of foreign exchange spent on imports of raw materials reduces likelihood of industry becoming profitable, similarly, it is impossible for an industry that relies heavily on import-dependent raw materials to survive long.
- 9) In order to accelerate overall development of the country, by expanding field of science, technology and research, it is necessary to make a plan to use all innovative energy in development of the country through rapid commercialization of innovative theories and formulas and to increase adequate investment in its implementation.





- 10) Adequate investment is required for expanding export sector to increase export earnings through increasing size of manufacturing sector. Therefore, in the larger interest, investment in manufacturing sector should be increased by reducing investment in unproductive large projects in next few years.
- 11) Adoption and implementation of far-sighted plans for quality development of green economy as well as Blue economy.
- 12) Effective ways to overcome all those obstacles quickly should be given serious importance in this plan by identifying obstacles in terms of internal resource mobilization, adequate revenue collection, democratization, establishment of rule of law, decentralization, enhancement of administrative and institutional capacity and prevention of corruption etc.

Needless to say, Action Plan 2020-2041 is not a general or conventional plan. Main objective of this master plan is to take overall economic and social progress of the country to a unique level and to place the country in the list of strongest economies in the world and to make its position known in this age of free economy. Therefore, this grand plan should be realistic, promising and 100% effective in fulfilling the goal, so that it does not fail to reach the desired goal through proper implementation of the plan in the next 20 years.





Part – 2 Village Economy





Chapter: 2.1

Current situation of Rural Economy.







Current situation of Rural Economy.

Topics covered in the chapter:

Current situation of Rural Economy at a glance:

- A) 73% of country's population still live in rural areas.
- B) large portion of rural households are unearned.
- C) Floods and other natural disasters are common in villages.
- D) Financial losses due to floods and natural disasters.
- E) Most of the houses in rural areas are of low quality.
- F) Agriculture is the major occupation of rural population.
- G) 46.70% of rural population is still poor.
- H) Rate of higher education at village level is unusually low.
- I) Average monthly income of Top and Bottom 5% Households.
- J) Average monthly income per household varies by village and cities.
- K) Development of power system at village level.
- L) Recommendations for Sustainable Development of Rural Economy.







Current situation of Rural Economy at a glance:

Economy of Bangladesh is mainly rural based. About 73% of total population live in villages and agriculture is one of the driving forces of rural economy. About half of total employment is in agricultural sector, which has played a major role in reducing poverty at village level and improving living standards of rural population. Rural economy is one of the sources of overall economic growth of the country. Contribution of agricultural sector to GDP has averaged about one-third since independence, but contribution of industrial sector to GDP has gradually surpassed that of agricultural as a result of structural changes in the economic sector since 2000. As a result, share of agriculture sector in GDP during fiscal year 2000-01 was 25.03% but in the fiscal year 2018-19 it stood at 13.85%.

Current situation of Rural Economy:

Size of the country's overall economy has expanded considerably in recent years. In the last one decade, size of the country's budget and GDP has increased several times and per capita income has increased almost twice as much as before. During this period, significant progress has been made in expansion of industry and services, positive trend in export earnings and remittance inflows and increasing foreign exchange reserves. However, the progress of the rural economy is still far behind. Education, health, housing and only source of livelihood for rural population related to improving quality of life have not been touched by modernization in agriculture, which is severely hampering coveted dynamism of the country's economy. It is true that in recent times there has been an expansion in agricultural sector of the country, but there has been no modernization in agricultural system. As a result, as agricultural productivity is not increasing, farmers are not able to be benefited due to high production costs. Moreover, loss of houses, roads and crops due to floods, waterlogging and other natural disasters every year and lack of water in dry season disrupts cultivation is a common occurrence in most rural areas of the country.

Due to lack of adequate employment and income generating facilities at village level and agriculture is not profitable, there is considerable poverty and social backwardness, which is having a negative impact on education, health, housing and quality of life of rural population. Vast majority of agricultural workers are landless, spending most of the year with half-unemployed or pseudo-unemployed. Almost hundred percent of rural women have no involvement in any economic activity other than family work. Most families depend on one person's income. As a result, women in rural society are still neglected, cluttered and in many cases victims of domestic and social violence.

It should not be forgotten that in order to ensure a sustainable economy in this country, it is first and foremost important to ensure sustainable development of rural economy, as majority of the country's population live in villages and a large part of the overall economy is rural economy. Development of rural economy requires development of rural infrastructure and rural housing system, development of agricultural system, development of education and health at village level and bringing about meaningful changes in the lives of rural people by increasing employment.

Following are some of reasons why standard development of rural economy is so important for sustaining overall economy of the country:-



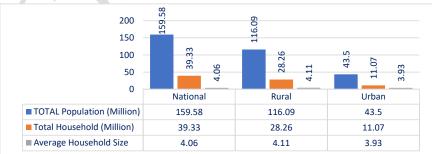


A) 73% of country's population still live in rural areas:

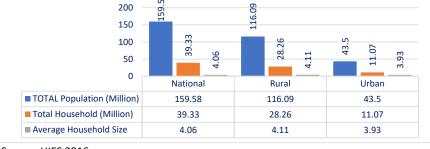


As of HIES 2016, total population of the country were 159.58 million and total households were 39.33 million, of which rural population were 116.09 million (72.75%) and urban population were 43.50 million (27.25%). Average number of family members per household during that period was 4.06 in the whole country, 4.11 in rural areas and 3.93 in urban areas. This means that average members per household in rural areas was about 5% higher than in urban areas.

Figure-2.1 (1): According to HIES 2016, scenario of total population of the country, total households and Average population per household in village and town:-



Source: HIES 2016



73% of the country's population still lives in rural areas:







B) large portion of rural households are unearned:



According to HIES 2016, out of total 39.33 million households in the country, 3.96 million households have no earners, of which 3.18 million (80%) households live in rural areas and remaining .78 million (20%) households live in urban areas. In other words, there are still $(3.96 \times 4.06) = 16.08$ million people in the country who spend their days in complete economic uncertainty, 80% of whom live in villages.

On the other hand, at that time, number of households dependent on a single earner were 25.53 million across the country, of which 16.64 million (73%) live in rural areas and 6.89 million (27%) in urban areas. That means about two-thirds of the families living in village are still dependent on a single earner.

Number of households of two income earners were 7.68 million in the country, of which 5.05 million or 65.76% (17.87% of total household living in rural areas) live in rural areas and remaining 2.63 million (34.24%) households live in urban areas.

country, of which 1.39 million (64.35%) live in rural areas and 0.77 million (35.65%) in urban areas.

Number of households of three or more earners were 2.16 million across the

Figure- 2.1 (2): Number of households in the country on the basis of earner :-



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Source: HIES 2016

A large portion of rural households are unearned:





C) Floods and other natural disasters are common in villages:

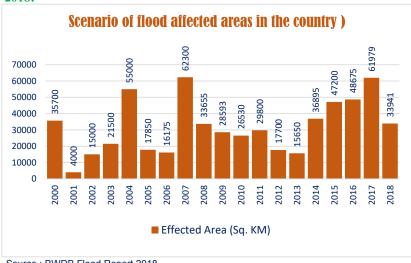


Floods and other natural disasters are common in villages:

The riverine country has about 700 rivers, both large and small, with a combined length of about 24,140 km. Floods, waterlogging, river erosion and other natural calamities are the constant companions of rural people of this country. On an average, about 20% -30% of the country is flooded every year, so that in those areas, about 7 to 8 lakh households are affected, along with massive crop loss every year, on an average, more than 5,000 people die every year, cattle die an average of 15,000 to 20,000 beside countless fish farms, roads, fences, bridges, culverts and other infrastructure are destroyed.

Scenario of flood-affected areas in the country during period from 2000-2018 are furnished hereunder :-

Figure-2.1 (3): Scenario of flood affected areas in the country during 2000-2018: -



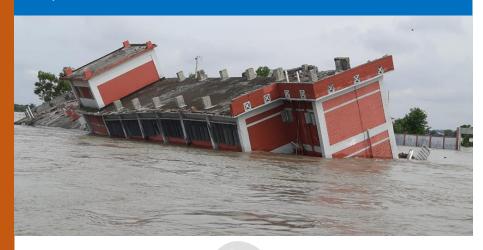
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Source: BWDB Flood Report 2018





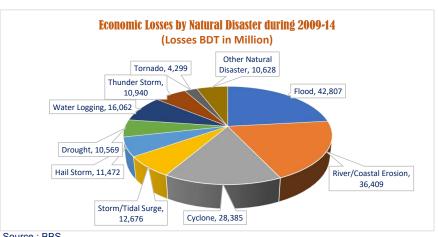
D) Financial losses due to floods and natural disasters:



Figures on financial losses due to floods and natural disasters: According to BBS Survey 2015, number of households affected by floods, waterlogging, river erosion and other natural disasters during period of 2009-2014 (six years) was 43,81,261, average number of flood victims per year is 726,877 and financial losses due to floods during those six years is TK. 184,247 million. Figure-2.1 (4)

It is to be noted that the government has so far implemented and is implementing adequate development programs for development of villages and remote areas and prevention of floods, as a result of which roads and other infrastructures in rural and remote areas of the country are now much better than ever before. If all these development activities are carried out by allocating separate budgets for development of rural and remote areas with a separate assessment of "rural economy", then continuity of development is maintained and development in each region is guaranteed within a specified time.

Figure-2.1 (4): Scenario of Economic losses of floods and other natural calamities during 2009-2014:-

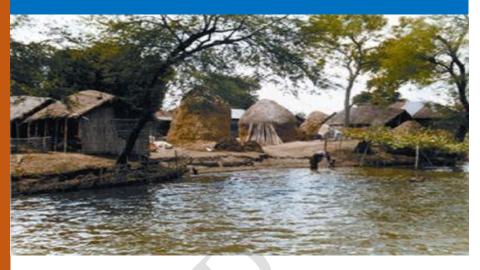


Source : BBS





E) Most of the houses in rural areas are of low quality:

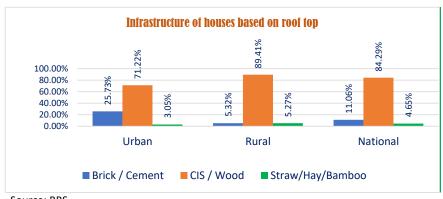


Housing structure of any country carries living standard of people and identity of overall economy of that country. In rural areas of Bangladesh, most of the houses are still built with tin, wood, straw or bamboo tents. Out of a total of 28.26 million households in rural areas, 1.49 million houses are still wooden, straw or bamboo tents, which is really inappropriate for a developing country.

As of HIES 2016, 11.06% (4.35 million) of total 39.33 million households in the country are made of bricks / cement, 84.29% (33.15 million) of houses are tin / wooden canopy and 4.65% (1.83) Million) huts. Out of a total of 28.26 million households in rural areas, only 5.32% (1.50 million) houses have bricks / cement roof, 89.41% (25.27 million) houses have tin / wooden canopy and 5.27% (1.49 million) Hut. Of total 11.70 million households in the city, 28.71% (3.36 million) houses have bricks / cement roofs, 68.28% (7.99 million) houses have tin / wooden tents and 3.05% (0.36 million) huts.

Most of the houses in rural areas are of low quality:

Figure-2.1 (5): Infrastructure of houses based on roof top in the country by 2016:-



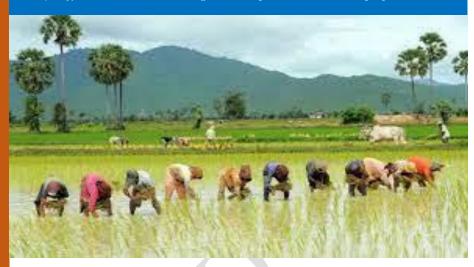
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Source: BBS





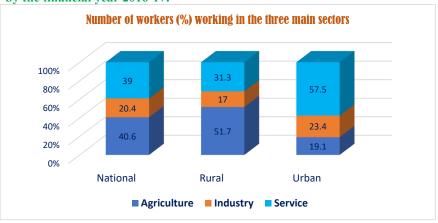
F) Agriculture is the major occupation of rural population:



Agriculture is the major occupation of the rural population:

Agriculture is the only sector in terms of geographical location and climate, the sector by which this country was known in the past, is still known and will continue to be known in future. It is a sector that hides the secret theory that modernization of this sector will improve living standards of the majority of people as well as strengthen country's economy to desired level and will take the country's economic progress to a new level. Not only that, this is the only sector, in which there is no possibility of future collapse or extinction, fear that have in other sectors. At present 37.80% of total population of the country (49.01% of rural population and 10.30% of urban population) are engaged in agriculture and allied occupations. Judging from this site also, agriculture is the largest sector of the country, with which lion's share of the country's livelihood is involved. According to BBS, by 2016-17, 51.7% of rural working age population were in agricultural sector, 17% in industrial sector and 31.3% are in service sector.

Figure-2.1 (6): Number of workers (%) working in the three main sectors by the financial year 2016-17: -



Source: LFS 2016-17





G) 46.70% of rural population is still poor:



46.70% of rural population is still poor:

Incidence of poverty in the country has declined which is noticeable in reality, for example, in recent years, per capita income has increased as well as increased purchasing power, people are moving towards better housing, educating their children, seeking good medical treatment, dreaming of a better future as well as increased self-esteem and choice. There has been a radical changes in the lives of low-income people. Each rickshaw puller is earning more than a thousand taka a day, with an average daily wages of over TK. 800/=. As a result, in order to meet basic needs of daily life, they no longer have to struggle as before, no longer have to spend days in fear of scarcity. Every low-income person now thinks more or less about future of their children, sends them to school, eats more or less good food and spends their days in anticipation of a beautiful future.

According to information of HIES 2016, poverty rate in the country was 24.3%, 26.4% in rural areas and 18.9% in urban areas. In 2005, poverty gap in the country was 12.8%, 13.7% in rural areas and 9.1% in urban areas. In 2016, it dropped to 5% across the country, 5.4% in rural areas and 3.9% in urban areas. Same progress can be seen in the case of extreme poverty, for example - in 2005, rate of extreme poverty in the country was 25.1%, in rural areas 28.6% and in urban areas 14.6%, in 2016 it has come down to 12.9% in the whole country, 14.9% in rural areas and 7.6% in urban. In other words, in the span of one decade between 2005-2016, poverty rate in the country has come down to almost half, which has led to unimaginable progress in poverty alleviation. But we should not stop with this satisfaction, we have to move towards the goal, bringing down level of poverty to zero is now the dream of this nation, where every human being will get taste of improved life.

Poverty, poverty gap and extremely poverty are the three categories of people who fall into poverty. As of 2016, country's ongoing poverty rate is 42.2%, of which 46.7% is in rural areas and 30.4% in urban areas. As of 2018, estimated population of the country is 163.7 million, of which 119.09 million (72.75%) live in rural areas and 44.61 million (27.25%) live in urban areas. As such, the country have still (163.7





X 42.2%) = 69.08 million people living in poverty, of which rural (119.09 x 46.7%) = 55.61 million and urban (44.61 X 30.4%) = 13.56 million.

Figure-2.1 (7): Poverty, poverty gap and extreme poverty rate in the country by the financial year 2016-17: -

INDEX	HIES 2016			HIES 2005			
	National	Rural	Urban	National	Rural	Urban	
Incidence of Poverty: (Head Count %) > Upper Poverty Line > Poverty Gap > Lower Poverty Line	24.3 5.0 12.9	26.4 5.4 14.9	18.9 3.9 7.6	40.0 12.8 25.1	43.8 13.7 28.6	28.4 9.1 14.6	

Source: HIES 2016

H) Rate of higher education at village level is unusually low:



Although number of public and private higher education institutions in the country and enrollment rate of students in higher education has increased significantly than before and continues to increase, but in proportion to population, Bangladesh still lags far behind in case of enrollment rate in higher education compared to many countries in South Asia. According to UNESCO report 2018, enrollment rate in tertiary education is 20.57% in Bangladesh, 28.06% in India, 36.31% in Indonesia, 45.13% in Malaysia, 50.60% in China, 55.33% in Cambodia and 94.35% in South Korea.

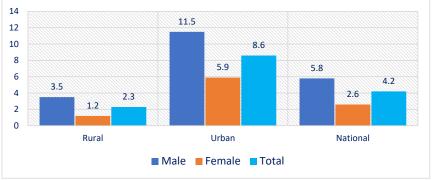
Rate of higher education at village level is unusually low:

On the other hand, rate of students completing tertiary education is less than onethird in rural areas as compared to urban areas. According to LFS -2016-17, completion rate of tertiary education in the country at that time was 4.20%, of which 2.3% was in rural areas and 8.6% in urban areas.





Figure-2.1 (8): Rate of Students completed tertiary education as per LFS: 2016-17 report:-



Source: LFS 2016-17

I) Average monthly income of Top and Bottom 5% Household:

By the F.Y 2016-17, average monthly income of the bottom 5% households in the country was TK. 4,610 nationally, TK. 4,665 in rural areas and Rs 4,213 in urban areas. Important point here is that this 5% household means there are $(39.33 \times 5\%) = 2.0$ million households in the whole country, of which number of households living in villages is 1.43 million. With an average of 4.06 members per household, there are approximately 8.12 million people in the country, including those living in rural areas $(1.43 \times 4.11) = 5.88$ million are involved with this situation. Therefore, bottom 5% households, whether in rural or urban areas, it is important to make them able to lead a prosperous life by increasing income of that class of people rapidly. We know this job is challenging, but not impossible.

Average monthly income of Top and Bottom 5% Household:

To solve this problem, we have to work going deeper into the problem. By identifying issues related to improvement of living standard of this class of people, special emphasis should be given on solving those problems as well as adequate allocation should be made in the national budget for increasing employment at village level and this situation has to be improved gradually through its proper implementation. Otherwise, as its negative impact will disrupt overall economy of the country, on the other hand, it will tarnish our image in the world as a nation more than that.

Figure-2.1 (9): Scenario of changes in the average monthly income of top and bottom 5% households in the country over the past decade:-

INDEX	HIES 2016			HIES 2005			
	National	Rural	Urban	National	Rural	Urban	
Income Accruing to :							
(TK. Per household per month)							
Top 5% Households	45,172	32,561	56,439	33,471	25,044	47,447	
Bottom 5% Households	4,610	4,665	4,213	1,605	1,485	2,113	

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Source: BBS





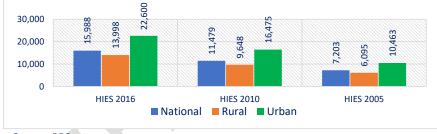
J) Aaverage monthly income per household varies by village and city:

Gap between average monthly income per household in rural and urban areas is

constantly increasing as there are more employment opportunities in urban areas than in rural areas. As a result, people at village level are becoming increasingly cityward and there is a labor crisis in the villages, which in the near future may pose a threat to rural economy. During HIES 2005, average monthly income per household was TK. 7,203 nationally, TK. 6,095 in rural areas and TK. 10,463 in urban areas. At that time monthly income per household varied between village and town was TK. 4,368. During HIES 2016 period, average monthly income per household was TK. 15,988 nationally, TK. 13,998 in rural areas and TK. 22,600 in urban areas. At this time, difference of monthly income per household between rural and urban stood at TK. 8,602.

Aaverage monthly income per household varies by village and city:

Figure-2.1 (10): Scenario of monthly average income Variation per household at village and city level during period of 2005-2016:-



Source: BBS

K) Development of power system at village level:



By 2018, 90% of population in the country has been electrified and at that time per capita electricity generation in the country was 464 kWh (CPD study). Government has a plan to bring rural areas of the country under 100% electrification by 2021. If this plan is implemented, it is hoped that an important obstacle to economic development at village level will be overcome and door to economic development at village level will be opened.

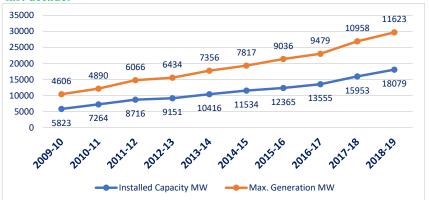


Development of power system at village level:

Strategies for Economic Development of Bangladesh



Figure-2.1 (11): Scenario of increase in power generation in the country in the last decade: -



Source: Power Division, *up to February 2019.

L) Recommendations for Development of Rural Economy:



From the above review and analysis of data, it is clear that visible progress has been made in the overall economic and social indicators of the country over the last decade, there is no doubt that Bangladesh, which has been drowning in the abyss of poverty for ages, has joined the triumph of future progress and in the meantime, people of this country have started enjoying these benefits. But it is also true that progress made over the past decade is only the first step towards achieving ultimate goal. We should work keeping such reality in mind that if all the progress made cannot be accelerated, identify all areas of possible progress unless prompt action is taken for proper progress, achieving ultimate goal can be too late and even progress made can lead to failure in that case.

In order to accelerate the economy of this riverine and village based country to make stand on the strong foundation by accelerating overall economic development



Recommendations for sustainable development of rural economy:

Strategies for Economic Development of Bangladesh



and to reach high income countries by 2041, first of all to ensure village based development by improving quality of life of the large population living in villages at desired level and for this, adoption and implementation of action plan with emphasis on development of rural economy is essential. In formulation of rural economic development plans, first of all, issues related to development of rural infrastructure and improvement of living standards of rural people should be taken into consideration and those plans should be implemented through allocation of funds on priority basis in the development plan of the state budget. Areas that require extensive progress for sustainable development of rural economy, are:-

- 1. Separate assessment of rural economy.
- 2. In addition to imposing restrictions on high birth rates in rural and remote areas and adopting birth control measures to keep families small, strict and pragmatic measures should be taken to prevent child marriage in the country.
- 3. Modernization, diversification, expansion and commercialization of agriculture in the country.
- 4. In addition to increasing rate of higher education at village level, initiatives should be taken to increase rate of enrolment in technical, agriculture and health in higher education.
- Expansion of quality health care at affordable prices at upazila and village level
- 6. Expansion of SME sector through decentralization of small and medium industries in the country by setting up "Upazila Industrial Parks" at Upazila level.
- 7. To empower women in the society and reduce gender inequality by involving rural women in economic activities by increasing cottage industries and other income generating activities at the village level.
- 8. To reduce level of poverty in the country to zero, introduce "Grameen Savings Scheme" with Government Provident Fund facilities for rural poor and "Ration Card" for their food security.
- 9. Introduce "Rural Housing" system designed to improve rural living standards and protect rapidly declining agricultural land:
- 10. Introduce a separate "Ministry of Rural Affairs" for smooth management and rapid development of rural economy and have adequate allocation in the national budget this purpose.
- 11. Nomination of people in all national elections, who have idea about development of rural economy and have capacity to implement them properly.

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Chapter: 3.1

Separate Assessment of Rural Economy.







Separate Assessment of Rural Economy.

Topics covered in the chapter:

A) Separate Assessment of Rural Economy.

- 1. Improving quality of life of rural people:
- 2. Strict population control at village level:
- 3. Permanent solutions to floods and other natural disasters at villages.
- 4. Modernization of Agriculture Sector.
- 5. Development and utilization of rural youth.
- 6. Increase employment and eradicate poverty at village level.
- 7. Develop rural infrastructure and increase civic amenities at village level.
- 8. Protect agricultural land by introducing planned "Rural housing" system.
- 9. Increasing participation rate in higher education at village level.
- 10. Increase scope and quality of health services in rural and remote areas.

B) Needed for sustainable development of rural economy.







A) SEPARATE ASSESSMENT OF RURAL ECONOMY:

Bangladesh covers an area of 1,47,570 sq km with 64,000 villages, of which about 80 percent is rural. As of HIES 2016, total population of the country were 161.3 million, of which 115.5 million (71.61%) live in rural areas and 45.8 million (28.39%) live in urban areas. According to estimates of that time, 37.80% of total workforce of the country were engaged in agriculture and agro-related activities, out of which 49% of rural population is dependent on agriculture and 14.23% of annual GDP is contributed by agriculture and agro-related sectors.

Development of villages with lion's share of the country's total area and improvement of living standards of people living in villages and their economic progress should be in line with overall economic progress of the country, because precondition for overall economic development of this village-based and agriculturally dependent country is rural economic development and improvement of living standards of large population living in villages. Strengthening rural economy means expanding employment opportunities for majority of population of the country living in villages, other employment opportunities beside agricultural work, increasing their financial independence, per capita income and standard of living, so that working individuals of each family will get opportunity to increase financial viability of family by engaging in work according to their performance. With increase in financial mobility, education awareness among people will naturally increase, efforts will be made to build quality housing, better treatment and quality of life, which will help increase per capita income as well as increasing rate of education, health awareness, social stability and living standards in the country, which is the measure of a country's economic progress.

It is real that the way in which past governments and even present government is working to improve rural and remote areas and living standards of rural people across the country in scattered development process is not ensuring expected development. This is because, in order to accelerate development process, it is important to work going into depth of problem on the one hand, and on the other hand to maintain continuity of development process, which requires, formulate policies for desired development of rural economy by identifying its problems and possibilities through separate evaluation of "Rural Economy" and allocating and implementing budget on priority basis.

First Edition: August, 2022

Separate Assessment of Rural Economy:





Following are some of reasons why rural economy needs separate assessment:

1. Improving quality of life of rural people:

More than two-thirds of country's population live in villages, with 12%-14% living in remote areas, vast majority of whom are accustomed to living in extreme poverty and degradation. In order to accelerate overall economic progress of the country, it is necessary to bring rapid change in the living standards of larger population living in rural and remote areas, which requires taking and implementing necessary initiatives for this purpose through separate assessment of rural economy.

2. Strict population control at village level:

Unexpected population growth is one of the major obstacles to the country's economic progress. Low income families living in rural and remote areas are mainly responsible for this. Due to illiteracy, unawareness, deprivation, religious prejudice, child marriage and reluctance to use birth control methods among people living in rural and remote areas, rural families have no idea of population control. The country should move ahead with population control by expanding birth control system at village level, stopping child marriage and imposing strict obligations to keep families small.

3. Permanent solutions to floods and other natural disasters at villages:

In most rural areas of the country, floods and other natural calamities cause innumerable raw houses, roads, bridges, culverts and extensive crop damage and loss of livestock every year, causing major disruptions to rural livelihoods. As a result, reduce in agricultural production, decline people's income at the village level and increase scarcity there, which is one of the main reasons for increasing level of poverty in the country.

Sustainable development of rural economy has become essential by increasing capacity to deal with disasters at village level, emphasizing importance of waterlogging, flood control and sustainable solution to the problem of river erosion and formulating a master plan for this purpose.

4. Modernization of Agriculture Sector:

Economy of this country is village based and agriculture dependent, there is no chance of overall economic progress of this country except agriculture. It is impossible to develop the country's economy without initiating an agricultural revolution through modernization of agricultural and improving living standards of more than two-thirds of population involved in it, as well as ensuring food security in the country. The country has a unique opportunity to mobilize its overall economy by ensuring internal food security and increasing export of agricultural products through expansion of agriculture and agro-related industries. In order to achieve this goal, there is no alternative but to accelerate development of rural economy by giving priority to development of agricultural production and marketing system at village level across the country.

5. Development and utilization of rural youth:

More than two-thirds of the country's working youth live in rural areas, who are largely uneducated or poorly educated and unskilled. Through expansion of technical education and training at village level, it is necessary to prepare this huge youth force living in rural and remote areas to face challenges ahead by turning them into skilled youth forces.





6. Increase employment and eradicate poverty at village level:

People living in rural and remote areas are lagging behind almost in every field including education, health, housing, income generation, which is one of the major obstacles to overall economic and social progress of this country. Development of rural economy has no alternative but to bring rapid progress in the basic areas of improving living standards of rural population through increasing employment at rural level, development of rural infrastructure and necessary steps to eradicate poverty at rural level, which requires separate assessment of rural economy.

7. Develop rural infrastructure and increase civic amenities at village level:

Accelerating improvement of living standards of rural population by increasing modern living facilities at village level through development of rural infrastructure to prevent urbanization by making people rural oriented is essential for building a sustainable overall economy in the country. This task will not be easy without a separate assessment of the rural economy.

8. Protect agricultural land by introducing planned "Rural housing" system:

Constant destruction of arable land in rural and remote areas by construction of unplanned houses, factories, etc. is rapidly depleting arable land in the country, which could be a major threat to contraction of agricultural sector and ensuring food security in the country in future. Moreover, due to lack of effective rural housing policy in the country, housing system at village level is very underdeveloped and haphazard, which is polluting housing standard in the country. It is very important to protect agricultural land as well as to restore order in rural housing system by introducing a planned housing system for construction of houses at village level through separate assessment of rural economy.

9. Increasing participation rate in higher education at village level:

Impact of higher education on formation of a developed nation and society is immense. Higher education is essential in management of the country, managing industry and trade, teaching, Treatment, law and other professions, research, etc. Highly educated nation is respected and admired all over the world. But financial well-being is essential in higher education. Due to lack of financial security, participation rate in higher education among people living in rural and remote areas is almost half that of urban areas. According to HIES 2016, enrollment rate at graduation level at that time was 5.69% nationwide, 4.58% in rural areas and 9% in urban areas. Post-graduation enrolment rate was 0.97% nationwide, 0.87% in rural areas and 1.25% in urban areas. As a result of this huge gap between rural and urban population in higher education, participation of rural population in higher employment and other occupations is quite low. As a result, rural and remote areas are still lagging far behind in terms of social and economic progress, which is a big problem for overall progress of the country. Therefore, it is important bring equality in higher education irrespective of rural and urban areas by increasing opportunities for higher education at village level with a separate assessment of the rural economy.

10. Increase scope and quality of health services in rural and remote areas:

Building a healthy nation is essential for building a developed country. Due to poverty, illiteracy and other environmental conditions, there is a lack of health awareness among rural population, in addition, inadequate health services in rural and remote areas of the country and lack of quality treatment pose a serious threat to the rural health system. Due to poor quality of rural health care system in





Bangladesh, various diseases are almost daily companions of rural population, which has a huge negative impact on their quality of life. This is one of the reasons for rising incidence of poverty among rural population, which is crippling rural economy. In order to solve this problem immediately, it is necessary to develop rural healthcare system in a coordinated and timely manner.

Therefore, considering overall context of the country, there is no alternative but to increase dynamism of overall economy of the country by formulating upazila based plans through separate assessment of "rural economy" and strengthening rural economy through its proper implementation.

B) Needed for sustainable development of rural economy:



Areas those are urgently needed extensive changes and improvements in development of rural economy.

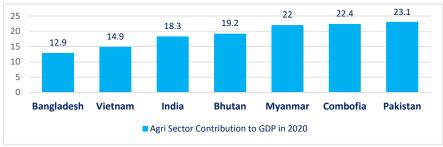
Rural economy covers about 80% of total economy of Bangladesh and about 73% of total population of the country live in villages. Due to various reasons like backwardness in industry and technology, backwardness in infrastructure development, education, health and other areas related to quality of life, etc., majority of people living in villages are engaged in agriculture and related occupations for their livelihood. Therefore, for good reason, economy of this country is village based and agricultural dependent and to ensure sustainable development of the overall economy of this country, it is important to ensure development of rural economy first and foremost. Strengthening rural economy means development of the areas involved in improving living standards of majority of rural population, for example, standard development of basic sectors like food, clothing, housing, education, medicine etc. is the development of rural economy, means development of overall economy. Needless to say, even after 50 years of independence, rural economy of Bangladesh has not developed and expanded at all compared to its importance and wideness, especially due to lack of quality and up-to-date development of the sectors related to rural development in the past. As a result, contribution of agriculture sector to GDP stood at 13.74 percent in FY 2019-20 as against 25.03 percent in 2000-01. According to the World Bank, contribution of agriculture sector to GDP in 2020 was 12.9% in





Bangladesh, 14.9% in Vietnam, 18.3% in India, 19.2% in Vietnam, 22% in Myanmar, 22.4% in Cambodia and 23.1% in Pakistan.

Figure-3.1 (1): According to World Bank information of 2020, contribution of agriculture sector to GDP in Bangladesh and some other countries of South Asia.



Source: World Bank Data

Since Bangladesh has not been able to make much progress in the field of industry and technology till now and this possibility is still a matter of time, therefore, it is natural for the agricultural sector to be predominant in the overall economy as an agricultural country, but opposite is happening in case of Bangladesh. Therefore, considering the context of Bangladesh, in order to ensure sustainable development of overall economy, it is very important to ensure quality development and expansion of the rural economy, which requires rapid and standardized development of the sectors related to rural economy by separate assessment, which are:

- 1) Separate assessment of Rural Economy.
- 2) Modernization of agriculture sector.
- 3) Expansion of cottage industry at village level.
- 4) Decentralization of SME sector at Upazila level.
- 5) Development of rural housing and rural infrastructure.
- 6) Increasing educational opportunities at the village level.
- 7) Improving quality of health services at Upazila and village level.
- 8) Introduce pension scheme under savings for rural poor.
- 9) Increasing production of fish, poultry and cattle.
- 10) To establish "Ministry of Rural Affairs" in the management of rural economy.

Picture about current situation in the above areas, problems that exist in all those areas and detailed recommendations for improving the situation have been presented in the Subsequent chapters.

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Chapter: 3.2

Modernization of Agriculture.







Modernization of Agriculture.

Topics covered in the chapter:

Modernization of Agriculture:

- A) Agriculture sector of the country at a glance.
 - 1. Arable land and its use.
 - 2. Size and expansion of agriculture sector.
 - 3. Production of two main food grains.
 - 4. Poultry and cattle production.
 - 5. Fish production.
 - 6. Meat, milk and egg production.
 - 7. Continuity of growth in agriculture.
 - 8. Agricultural productivity.
 - 9. Contribution of Agriculture Sector to GDP.
 - 10. Bangladesh's position in terms of contribution of agriculture to GDP.
- B) Obstacles to Agricultural Development.
- C) Need for expansion and development of agri. Sector.
 - 1. Modernization of agricultural sector.
 - 2. Increase research activities in agricultural development.
 - 3. Building sustainable agricultural infrastructure across the country.
 - a) Development of Irrigation System.
 - b) Increase budget allocation for agricultural infrastructure development.
 - 4. Introduction of Scientific Cultivation.
 - 5. Increasing use of modern machinery in agriculture.
 - 6. Increasing credit flow to agriculture.
 - 7. Promoting Organic Farming in the Country.
 - 8. Production, storage and use of improved seeds to ensure high yield.
 - 9. Diversify agriculture.
 - 10. Expansion of commercial farming in the farm system.
 - 10.a Govt. should do to expand commercial farming in the Country.
 - 11. Protect agricultural land and increase two and three crop cultivation.
 - 12. Expansion of vertical farming in greenhouse system.
 - 13. Bringing animal farm and poultry industry under compulsory insurance.
- D) Recommendations for development of agri. Sector.







Modernization of Agriculture:



Modernization of agriculture:

According to HIES 2016, total number of households in the country were 39.33 million, of which 28.26 million (71.85%) live in rural areas and 11.07 million (28.15%) live in urban areas. According to Agriculture Census 2019, there are 35.53 million agricultural households in the country, of which 29.62 million (83.37%) live in rural areas and 5.91 million (16.63%) in urban areas. Plan for future should be taken keeping in mind the need to develop a holistic economy by strengthening rural economy and ensuring improvement in living standards of more than two-thirds of country's population living in rural areas and engaged in agriculture. Because, first condition for strengthening rural economy is to make agricultural sector more productive and profitable through modernization. To start "agricultural revolution" in the country by building strong agricultural infrastructure across the country and spreading application of modern farming and multifaceted agricultural systems in a scientific manner, in order to pave the way for radical changes and progress in the lives of larger population of the country involved in agricultural, which will play a vital role in making overall economy of the country sustainable and strong. Besides, government initiatives are essential to increase demand for agricultural products and create markets in international arena through commercialization of agriculture. Country's fertile soil and favorable climate, low labor and low cost ensure high productivity, which is one of the brightest prospects of the country's agricultural sector. Moreover, agricultural products produced in this country are unique in taste and quality, which can be one of the attractions in creating a good position in international arena.

Matter of hope in this case is that present government has realized this reality and has taken some practical steps to develop agricultural sector in recent years, as a result, food production in the country has increased in recent times, multifaceted farming has started, and progress of Bangladesh in production of vegetables, fish, meat, etc. in recent years can be said to be remarkable. By 2020, Bangladesh has become 31st largest economy in the world in terms of purchasing power by international standards. By 2018, Bangladesh is ranked fourth in rice production, 11th in all food grains, 26th in fruit production, seventh in mango production, tenth in tea production, third in natural fish production and first in hilsa production.

In order to sustain this unimaginable success of Bangladesh in the field of agriculture and to meet food needs of growing population of the country in the coming days and to make the economy of the country more dynamic by improving living standards of two thirds of population involved with agriculture, it is very





important to accelerate expansion of agriculture and increase productivity. Current situation of agricultural sector in the country, such as inconsistency of food production with population growth, agricultural sector growth, productivity, contribution of agricultural sector to GDP and details of what needs to be done for rapid development of agricultural sector are highlighted below.

A) Agriculture sector of the country at a glance (FY 2017-18):



1. Arable land and its use:

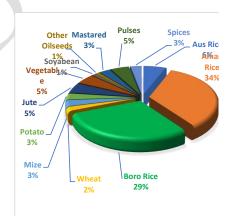
Agricultural land and other info.:

a) Agricultural family and land info. :

SL	Particulars	Amount
1	No. of Agri. Households	16.56 Million
2	Total Cultivable Land	210,16,968
3	Total Cropped Area	385,36,000
4	Net Cropped Area	197,74,000
5	Single Cropped Area	55,14,000
6	Double Cropped Area	98,00,000
7	Triple Cropped Area	44,18,000
8	Total Irrigated Area	137,34,000
9	Cropping Intensity	190%
10	Agriculture Sector Contribution to GDP	14.23%

Source: BBS

b) Use of cultivable land for cultivation:

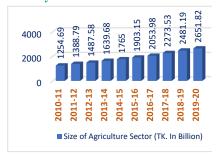


Source: GAIN Report 2019

2. Size and expansion of agriculture sector:

Size of the country's agricultural sector has almost doubled in the last decade, although contribution of agricultural sector to GDP has been steadily declining. Overall size of the country's agriculture sector was Tk 1,254.69 billion in FY 2010-11, which stood at Tk 2,651.82 billion in FY 2019-20 **Figure-3.2** (1). During this period, size of agricultural sector has increased by an average of Tk. 139.71 billion (10%) per annum. In the fiscal year 2019-20, share of agriculture sector in GDP was 13.35%.

Figure-3.2 (1): Size and expansion of the agricultural sector of the country in the last one decade: -



Source: MOF

First Edition: August, 2022

Size and expansion of agri. Sector:





Production of two main food grains:

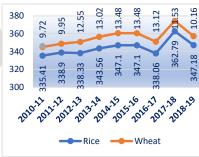
B. Production of two main food grains:

Country's population is growing at an average of about 2.00 lakh per year, but food grain production remains in much the same position. Analysis of food production in recent years shows that food production in the country has remained at almost same level for a long time, although it meets current food demand, but it is certain that in future there will be a massive food shortage without additional food production to meet food needs of growing population. Production of two major food crops (paddy

and wheat) in 2010-11 financial year was 345.13 billion MT and in 2018-19 financial year it stood at 357.34 billion MT. Highest production during this period was 374.32 billion MT in FY 2017-18.

During nine-year period from 2010-11 to 2018-19, food production increased slightly in three fiscal years (2014-15, 2015-16 and 2017-18), but in other years production were almost same. Figure-3.2(2) It is important to ensure food security by expanding agricultural sector, increasing productivity and overall production in line with growing population of the country, otherwise country will be forced to depend on imports to meet domestic demand, which will seriously hamper future progress of the country.

Figure-3.2 (2): Scenario of production of two main food grains during 2010-2017:



Source: BBS and MOF

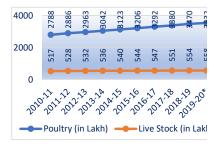
4. Poultry and cattle production:

Livestock and poultry production is very important to meet animal protein deficit in line with population of the country. Poultry and cattle production in the country has increased slightly in recent years, although contribution of livestock sub-sector to GDP is still substantial. Poultry and cattle production in the country in 2010-11 were 2,788 lakh and 517 lakh respectively and in the fiscal year 2019-20 it stood at 3,532 lakh and 558 lakh respectively.

During this period, poultry production increased by an average of 2.70% per annum and cattle production increased by an average of 0.97% per annum. Growth rate of cattle production is comparatively much lower than that of poultry **Figure** - **3.2** (3). As a result, price of meat is gradually going beyond reach of common people, which is having a negative impact on meeting shortage of animal protein in



Figure-3.2 (3): Scenario of poultry and cattle production in the country during financial year 2009-10 to 2018-19: -



First Edition: August, 2022

Poultry and cattle production:





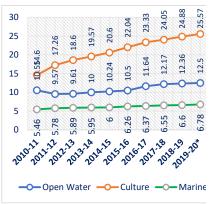
the country. In order to overcome this Source: BD Economic review situation, it is essential to increase *projected production of cattle in the country.

5. Fish production:



In recent years, Bangladesh has made unimaginable progress in fish production. According to international ranking 2018, Bangladesh is in the third position in open water fish production and in the fifth position in aquatic production. Total fish production in the country was 30.62 lakh MT in 2010-11 financial year, it stood at 44.85 lakh MT in 2019-20 financial year. During period from 2010-11 to 2019-20, fish production in the country has increased by an average of 1.42 lakh MT per year. In this case, it is worth mentioning that although capture of open water fish has increased in the country, but catching of marine fish has not increased at all, which is very important to pay attention to. Figure-3.2 (4)

Figure-3.2 (4): Scenario of all types of fish production in the country during the financial year 2010-11 to 2019-20:



Source: BD Economic review *Projected

First Edition: August, 2022

Fish production:

6. Meat, milk and egg production:



In the last few years, production of animal proteins, such as meat, milk and eggs, has gradually increased in the country. As a result, per capita consumption of meat, milk and eggs in the country stood at 124.99 grams per day of meat, 165.07 grams per day of milk and egg 103.89 pcs per year by 2018-19 fiscal year. Meat production



Meat, milk and egg production:

Strategies for Economic Development of Bangladesh

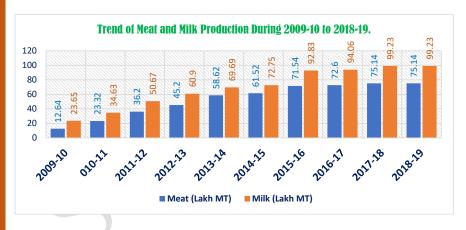


was 12.64 lakh MT in FY 2009-10 which stood at 75.14 lakh MT in FY 2018-19. In financial year 2009-10, production of milk and egg were 23.65 lakh MT and 57,404 lakh respectively, while in financial year 2018-19, it stood at 99.23 lakh MT and 171,100 lakh respectively **Figure-3.2(5)**. This trend of production needs to be further enhanced in future to meet protein demand of growing population.

Figure-3.2 (5): Scenario of meat, milk and egg production in the country during financial year 2009-10 to 2018-19 : -

	Financial Year									
Items	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-17	2017-	201
	10	11	12	13	14	15	16		18	-19
Meat (Lakh	12.64	19.86	23.32	36.20	45.20	58.62	61.52	71.54	72.60	75.1
M.Tons)										
Milk (Lakh	23.65	29.47	34.63	50.67	60.90	69.69	72.75	92.83	94.06	99.2
M.Tons)										
Eggs (Lakh)	57,424	60,785	73,038	76,173	101,680	109,952	119,124	149,331	155,200	171,
										00

Source: BD Economic Review

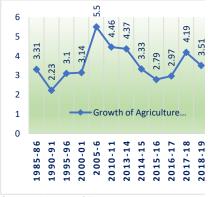


7. Continuity of growth in agriculture:

Expansion of the country's agricultural sector has been revolving around same position for last four decades, resulting in a slight increase in agricultural productivity in recent years, but contribution of agricultural sector to country's GDP has remained almost in the same place. In financial year 1985-86, growth of agricultural sector was 3.31%, which stood at 3.51% by F.Y 2018-19 Figure-3.2 (6).

There seems to be no way out of this situation without ensuring adequate expansion of agricultural sector and increasing productivity through massive modernization of this sector and introduction of diversified agricultural system.

Figure- 3.2 (6): Scenario of growth in agriculture during 1985-86 to 2018-19: -



Source: Ministry of Finance, 2019

First Edition: August, 2022

Continuity of growth in agriculture:





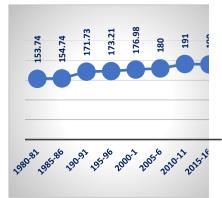
Agricultural productivity:

8. Agricultural productivity:

Productivity in the country's agricultural sector has been steadily increasing since 1990-91 financial year, and productivity in agricultural sector has improved considerably since 2010-11 financial year, which is a clear indication of future prospects in this sector. During 1980-81, agricultural productivity (Cropping Intensity) rate in the country was 153.74%, while in 2015-16 it stood at 190% Figure-3.2 (7).

In the coming days, there is a need to continue this trend of productivity in agricultural sector as well as to start an agricultural revolution in the country through expansion and modernization of this sector.

Figure-3.2 (7): Scenario of productivity in agriculture during period of 1980-81 to 2015-16: -



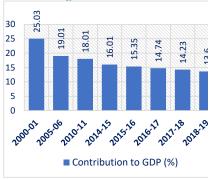
Source: BBS 2016

9. Contribution of Agriculture Sector to GDP:

It is natural that agricultural sector should make a significant contribution to GDP of an agricultural country like Bangladesh. This will be possible only when it is possible to ensure sustainable growth in the sector by increasing size and productivity of the sector.

Bangladesh is an agrarian economy with 73% of total population engaged in agriculture and allied sectors and despite the fact that agriculture is the main sector of the country, its contribution to country's GDP is not significant at all and it is a matter of concern that in recent years, contribution of agricultural sector to GDP gradually declined rather increased. During fiscal year 2000-01, contribution of agricultural sector to GDP was 25.03%, which has stood at 13.60% during fiscal year 2018-19 Figure-3.2 (8). Contribution of agricultural sector to GDP has come down by almost half in these eighteen years, which is very worrying.

Figure- 3.2 (8): Scenario of Agriculture Sector contribution to GDP during 2000-2018: -



Source: BD Economic Review

First Edition: August, 2022

Figure- 3.2 (9): Scenario of contribution of three main sectors to GDP during financial year 2000-01 to 2018-19: -

	Financial Year									
Sector	2000-01	2005-06	2010-11	2013-14	2014-15	2015-16	2016-17	2017-	201	
								18	-19	
Agriculture	25.03	19.01	18.01	16.50	16.01	15.35	14.74	14.23	13.6	
Industry	26.20	25.40	27.38	29.55	30.42	31.54	32.42	33.66	35.1	
Service	48.77	55.59	54.61	53.15	53.58	53.12	52.85	52.11	51.2	

Source: Bangladesh Economic Review 2019 (MOF)

Agriculture Sector to GDP:

Contribution of



Bangladesh's position in South Asia in terms of contribution of

agriculture to

GDP:

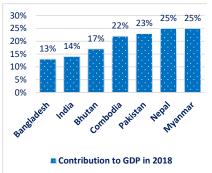
Strategies for Economic Development of Bangladesh



10. Bangladesh's position in South Asia in terms of contribution of agriculture to GDP:

Due to fact that agricultural sector of the country has not been adequately expanded and modernized in the past, neither productivity nor excellence has increased enough in this sector. As a result, contribution of agricultural sector to GDP has been steadily declining in recent years. In terms of contribution of agriculture sector to GDP, Bangladesh has lagged far behind many countries in South Asia. According to world bank report 2018, contribution of agriculture sector to GDP is 13% in Bangladesh, while it is 14% in India, 17% in Bhutan, 22% in Cambodia, 23% in Pakistan, 25% in Nepal and 25% in Myanmar. Figure-3.2 (10).

Figure-3.2 (10): Share of agriculture in the GDP of some South Asian countries in 2018:



Source : World Bank

B) Obstacles to Agricultural Development:



Despite potential of agricultural sector in Bangladesh, size and expansion of country's agricultural sector in recent years has not been satisfactory at all, resulting, contribution of agricultural sector to GDP has been steadily declining. Where livelihood of two thirds of population in this country are dependent on agriculture and agro-based sectors, expected development of this country does not seem to be possible in any other way except by adopting a strategy to accelerate overall economic development of the country by improving living standards of large population engaged in this sector through sustainable development of agriculture. This is because, improvement of living standards of large population associated with agricultural, fulfilling food deficit and industrial development are three issues that are directly related to sustainable economic development. Therefore, one of the goals of the government in coming days should be to establish this sector as a sustainable and profitable industry by identifying existing problems of the country's



Obstacles to Agricultural Development:

Strategies for Economic Development of Bangladesh



agricultural sector and finding practical solutions to those problems. Following are some of notable obstacles to desired development of the country's agricultural sector: -

- 1. Decrease in agricultural land: It is already a small country, on top of that, amount of arable land is constantly declining due to unplanned construction of houses, setting up of factories and river erosion across the country, which will pose a major threat to ensuring food security for a growing population in future.
- 2. **Natural Disasters :** Floods, waterlogging, cyclones, droughts and other natural disasters cause massive crop losses, damage to roads and other infrastructure every year, with a major negative impact on the livelihoods of farmers at village level, which is one of the major obstacles to agricultural development in this country.
- 3. Excessive application of chemical fertilizers: As a result of excessive application of chemical fertilizers, on the one hand, cost of production is increasing, on the other hand, fertility of land is gradually decreasing, which is having a serious negative impact on productivity.
- **4)** Lack of education: Due to lack of education among farmers, agriculture in this country is lagging behind in terms of multifaceted production and productivity.
- 5) Decreased use of modern machinery: As a result of non-use of modern machinery in agriculture like other countries, agriculture has become a difficult and unprofitable sector in the country.
- **6) Inadequacy of improved and graded seeds:** Due to insufficient production and distribution of improved seeds at government, private and farmers level, seed crisis during cultivation season is a casual occurrence in this country, which is a major obstacle to increase productivity in agriculture.
- 7) Problems of conservation of agricultural products: Due to lack of adequate storage facilities for agricultural products at government and private initiatives at village and upazila level has been forcing farmers to sell their products at low prices during off-season and in many cases spoilage of seasonal crops and fruits is wasted due to lack of buyers, as a result, farmers are deprived of a fair price for their crops and face severe financial losses.
- **8. Decrease workers in agricultural sector:** As a result of large number of agricultural workers being employed in industries and going abroad, labor crisis in agricultural sector and wages are increasing at an abnormal rate, which is facing agriculture challenging.
- 9. Inadequate allocation for development of agricultural infrastructure:

Sustainable agricultural infrastructure for development of agricultural sector, such as modern irrigation systems, increasing number of hat bazaars at village level, quality development of rural roads, etc. is essential, which is still lacking in the country. It is important to ensure adequate allocation in the national budget for development of agricultural infrastructure.

- 10. Other obstacles:
 - Not getting a fair price for crop produced due to tyranny of middlemen.





- Lack of adequate hat bazaar in rural and remote areas.
- Difficulties in marketing crops produced due to underdeveloped communications system at village level.
- Lack of adequate agricultural knowledge among farmers to increase productivity.
- Agriculture is not profitable as a result of small scale cultivation at individual level due to non-expansion of farm system.
- High interest and non-availability of agricultural loans.
- Not increasing public and private investment in agriculture.
- Insufficient government patronage to make agriculture profitable and attractive.
- Inadequate allocation in the national budget for development of agricultural sector; and
- Not paying enough attention to development agriculture sector due to excessive attention towards industrialization.

C) Need for expansion and development of agri. sector:



1. Modernization of agricultural sector:

In a country with a large population with limited arable land it is essential to produce food grains, vegetables, fruits, fish, meat, milk, nuts and spices, such as onions, garlic, ginger, chillies, turmeric, etc., sufficiently to meet domestic demand in the country by expanding agricultural sector and increasing productivity is essential, otherwise there is no alternative but to meet this demand through imports. In an agricultural country, it is time to think about how inconsistent import of agricultural products is by spending a lot of foreign currency.

started in some areas of the country and progress of agricultural sector is starting to

First Edition: August, 2022

Only alternative is to get rid of this problem by modernizing agricultural system in the country and producing more crops at low cost with limited resources. However, government has already realized this need and in recent years, modern farming has

come to notice of people.

Modernization of agricultural sector:





Question is "What is meant by modernization of agriculture?" Modernization of agriculture is a process of transforming agriculture from traditional labour-based agriculture to technology-based agriculture. It is one of the fundamental issues in agricultural policies, particularly in countries, where agriculture is less developed. On the other hand, Modern farming refers to industrialized production of livestock, poultry, fish, and crops, which are grown without pesticides or fertilizers, ensuring that the consumer will not suffer adverse health effects from them (Compiled).

In a word, transformation from conventional agricultural system to modern method is the modernization of agricultural system, which ensures high growth yields on certain lands at low cost through use of advanced technology in agriculture. On the other hand, modern farming is the healthy and industrial production of grains and poultry, cows, goats, fish etc.

Advantages of modern and scientific farming methods: -

- Due to extensive research in the field of modern agriculture, world-class progress is made in the field of agriculture.
- As a result of using modern technology and machinery in agriculture, this sector becomes an attractive and profitable industry.
- As a result of modern cultivation, productivity in agricultural sector increases several times.
- Efficiency, performance of workers working in agriculture and amount of work performed per farmer increases several times.
- Increases productivity of land, resulting in increased production per unit.
- In this method cost of production is greatly reduced, so crop production is profitable.
- In case of modern methods of cultivation, improved mechanisms are used instead of cattle in land cultivation, irrigation and transportation of agricultural products, so that in all these cases more work is done in a short time
- As a result of modern agriculture, radical changes are achieved in the peasant society.
- Modern agricultural system accelerates the field of commercialization of agricultural.
- As a result, in addition to solving problem of labor shortage, there is an opportunity for additional workers in agricultural sector to be employed in other sectors.
- As a result of proper use of land in this method, it is possible to produce more and more crops on less land.
- As a result of this method, agricultural farms have opportunity to be more profitable.

In addition to above benefits of modernization in agriculture, there will be multiple opportunities for trade and commerce in the country in the areas of production of agricultural machinery, production of organic fertilizers, seed conservation, etc. Achieving self-sufficiency in agricultural production will ensure food security in the country and commercialization of agriculture. Netherlands, for example, despite being a small country, has an annual agricultural export of about 79 billion U.S. dollars due to high agricultural yields. United States, Germany, France, Brazil, and many other countries in the world have been earning billions of dollars for centuries by exporting large quantities of agricultural products through high-yielding agricultural methods using modern agricultural system.





2. Intensify research activities in agricultural development:



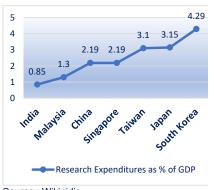
In order to accelerate expansion of agricultural sector in the country, to ensure quality production, increase productivity, prevent crop disease pests and increase cultivation of climate friendly crops, it is necessary to accelerate progress of agricultural sector by utilizing researched results, which will multiply effectiveness of modern farming. Moreover, conducting joint research activities with different agricultural rich countries and exchanging experiences in development of agriculture will increase potentials of this sector many times over.

Although significant progress has been made in agricultural research during the tenure of present government, there is no reason to disagree on the need to intensify research activities in order to take the sector to another level through massive expansion and agrarian revolution. At present, there is no significant allocation in the national budget for research. In order to expand and accelerate development of agricultural sector, it is necessary to keep a significant allocation in the national budget to increase research activities in the country, which other countries have. For example, in 2016-17, research expenditure as a percentage of GDP was 0.85% in India, 1.3% in Malaysia, 2.19% in China, 2.19% in Singapore, 3.1% in Taiwan, 3.15% in Japan and 4.29% in South Korea Figure-3.2 (11).

It is important to intensify research activities on the following issues for rapid expansion and development of agricultural sector :-

- Innovating process of increasing size and productivity of agricultural sector.
- Discovery of low cost natural and organic fertilizer production methods for rapid spread of organic farming for producing healthy food.
- Discover of agricultural disease control methods in natural ways.
- Invent crops that can withstand adverse weather conditions and produce high yields.
- Innovating process of diversifying agricultural sector, expanding commercial agriculture and making agriculture a profitable industry by reducing production costs.
- Inventing high quality food crops.

Figure-3.2 (11): Scenario of research expenditure in several South Asian countries in FY 2016-17:-



Source : Wikipidia

First Edition: August, 2022

Intensify research activities in agricultural development:





3. Building sustainable agricultural infrastructure across the country:



Construction of improved agricultural infrastructure across the country is one of the prerequisites for rapid expansion and development of agricultural sector. Such as development of irrigation system, digging of canals and rivers for drainage, development of communication system in remote areas, establishment of adequate hat bazaars and seed storage at village level, establishment of cold storage at upazila level for storage of seasonal crops and all other matters that are involved in facilitation of agricultural system, falls within agricultural infrastructure.

Reforms are needed in all areas to build strong agricultural infrastructure:-

- To set up adequate irrigation projects in large bills as well as to build modern irrigation networks across the country.
- Development of communication system in remote areas and establishment of adequate hat bazaars.
- Excavation of canals and rivers for drainage.
- Establishment of seed storage at every upazila level for conservation of seeds produced at farmer level and fair distribution during the season.
- Establishment of cold storage in each upazila as per demand in government and private initiatives for long term storage of perishable crops and fruits...
- To increase allocation in the national budget for construction of agricultural infrastructure.

A) Development of Irrigation System:

In dry season cultivation of the country is entirely dependent on the irrigation system. More land can be brought under irrigation, more land will be cultivated in dry season, more food production will increase in the country and food security will be ensured. More than half of the land that has been irrigated so far is under Shallow Tube wells and rest is irrigated through LLP and deep tube wells. Moreover, modern and improved irrigation system is one of the main conditions in modern farming. Irrigation system in Bangladesh is very conventional, introduction of modern irrigation system is very limited here.

Analysis of the amount of land under irrigation system in the country during period from 2010-11 to 2019-20 shows that amount of land under irrigation system has increased very little during these ten years period. In financial year 2010-11, out of 78.38 lakh hectares of net cultivable land, amount of land under irrigation system was 52.63 lakh hectares, of which through LLP and Deep Tube wells 17.58 lakh hectares and 35.05 lakh hectares through Shallow tube wells. In fiscal year 2019-20, out of

First Edition: August, 2022

Building sustainable agricultural infrastructure across the country:

Development of Irrigation System:





80.05 lakh hectares of net cultivable land, amount of land under irrigation system was 55.98 lakh hectares, of which LLP 12.50 lakh hectares, 10.80 lakh hectares through deep tube wells and 32.68 lakh hectares through shallow tube wells. During these ten years, amount of land under irrigation in the country has increased by only 3.35 lakh hectares **Figure-3.2** (12).

In order to start agrarian revolution by accelerating expansion and progress of agricultural sector, it is necessary to bring all cultivable lands under modern irrigation system by building strong irrigation infrastructure across the country. Otherwise, there is a possibility of stumbling in development of this sector.

Figure-3.2 (12): Land under cultivation and irrigation system in the country during financial year 2010-11 to 2019-20: -



Figure-3.2 (13): Arable land and land under irrigation system in the country during period from 2010-11 to 2019-20:-

Indication Mathead	Financial Year									
Irrigation Method	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-
	11	12	13	14	15	16	17	18	19	20
Net Cropped Area	78.38	79.29	79.09	79.24	79.30	79.46	79.52	80.02	80.05	80.05
Area under Irrigation	52.63	53.22	53.72	54.02	54.48	54.90	55.27	55.58	55.87	55.98
a) LLP & Others	10.39	11.45	11.96	12.46	12.51	13.42	13.85	15.13	12.48	12.50
b) Deep Tube well	7.19	7.59	9.34	8.78	9.62	11.94	10.63	10.73	10.76	10.80
c) Shallow Tube well	35.05	34.18	32.48	32.79	32.35	29.54	30.79	29.82	32.63	32.68

Source: BD Economic Review

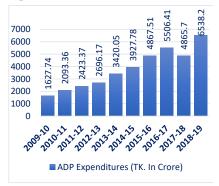
B) Increase budget allocation for agricultural infrastructure development:

It is necessary to keep adequate allocation in the national budget for development of agriculture sector considering its priority for building improved agricultural infrastructure across the country.

If necessary, it is to accelerate modernization of agricultural sector by allocating adequate budget for development of agricultural sector by reducing or stopping investment in large projects in unproductive sector, as current allocation in agricultural sector is not sufficient for modernization.

In financial year 2010-11, annual development expenditure in agricultural sector was Tk. 1,627.74 crore, while in the financial year 2018-19 it stood at Tk. 6,538.20 crore. During this period, growth rate of annual development expenditure in agriculture was 18.89% per annum on an average **Figure-3.2** (14).

Figure-3.2 (14): Scenario of Annual Development Expenditure in Agriculture in the last one decade: -



Source: BD Economic Review

First Edition: August, 2022

Increasing the budget allocation for agricultural infrastructure development:



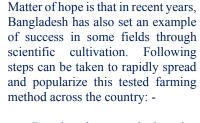


4) Introduction of Scientific Cultivation:

Best attraction of this age is cultivation in a scientific way. Many countries around the world have achieved and are making remarkable achievements in the field of agriculture using scientific methods in the field of cultivation of grains, fruits and vegetables, poultry and cattle farming, fish farming and afforestation using modern farming methods. Scientific methods of cultivation have become so popular all over the world because of scientific method of cultivation based on the results of research activities, less risk of crop loss due to disease, comparatively low production cost and guarantee of high yield.

Introduction of Scientific Cultivation:







 Based on the researched results, increase trend of agriculture, fish and aquatic farming and raising of poultry and cattle farming in the country.



- Special discount on import and manufacture of machinery and equipment used in scientific cultivation.
- Prevention of agricultural pests in a scientific manner.
- Provide adequate training and supervision on scientific cultivation at field level and in remote areas.
- To increase agricultural credit and technical assistance at field level

First Edition: August, 2022

5) Increasing use of modern machinery in agriculture :

As use of modern machinery in agriculture makes agricultural work much easier, use of this machinery for performing large volume work on any large scale in a short period of time and at low cost is recognized as more profitable and diversifies agricultural sector. In developed countries, use of modern machinery in cultivation, planting, plowing, harvesting, poultry and animal husbandry and fish farming is a casual affair and they have been enjoying it's benefits for a long time. Use of modern machinery is widely recognized as profitable especially in case of commercial farming and that's why use of modern machinery in agriculture is increasing day by day.

However, it is also true that purchase of modern equipment is quite expensive and in a low-income country like Bangladesh, providing capital for purchase of modern equipment at an early stage is a challenge for new entrepreneur. But it is also true





that with increase in use of agricultural machinery, progress and productivity of agricultural sector will increase and flow of trade in agricultural machinery in the country will increase a lot and investment and employment will increase considerably.

Increasing the use of modern machinery in agriculture:

In order to accelerate modernization of agricultural sector, it is important to mobilize farming community to increase use of modern machinery at all levels of agriculture, to facilitate import and production of agricultural machinery as well as to sell agricultural machinery at subsidized prices and to provide adequate agricultural credit at low interest rates.

Things to do to increase use of modern machinery in agriculture:-

- In addition to providing scope for duty free import of agricultural machinery, steps to be taken to produce such machinery on a commercial basis in the country.
- Selling agricultural machinery at subsidized price to keep prices of agricultural machinery within reach of farmers.
- Ensure easy availability of agricultural credit at field level for purchase of agricultural machinery.
- Provide motivation and training in use of agricultural machinery at field level.







6) Increasing credit flow to agriculture:



According to the report of Agriculture Census 2019, number of agricultural households in the country at that time were 16.56 million, of which 15.95 million were living in rural areas and 0.61 million in urban areas. Amount of agricultural loans disbursed in financial year 2018-19 was Tk. 236.16 billion. As of 2018-19,





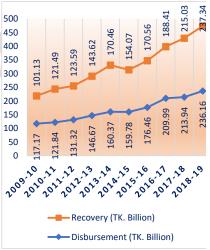
Increasing credit flow to agriculture:

amount of agricultural loan disbursed per household stands at TK. 14,261, which in the present context is absolutely inadequate. Amount of agricultural loans disbursed in FY 2009-10 was Tk. 117.17 billion, while the amount of loans disbursed during FY 2019-20 was Tk. 236.16 billion. During this period, distribution of agricultural credit has increased by an average of Tk 11.90 billion per annum **Figure-3.2** (15).

In order to expand agricultural sector through modernization, adequate agricultural credit is required for households directly involved in agriculture, especially to expand field of cultivation in farm system, otherwise rapid progress in this sector will be difficult. However, in order to make agricultural credit easily available to farmers, Bangladesh Bank has published revised schedule with changes in the loan policy, which are as follows: -

- Banks are required to distribute at least 10 per cent of their annual target to the fisheries sector.
- Floating system lending, integrated farming system lending and turkey rearing lending.
- In case of non-achievement of lending target per acre for disbursement of loan in fish farming, credit limit for disbursement of credit in grain / crop sector and lending target set by private banks, the amount credited to Bangladesh Bank at the rate of 3% of unearned target or alternatively unearned target.
- If the deposit is made at the rate of 3% of the unearned target, the unearned money of the previous financial year / fiscal years will be refunded in full / partial distribution in the next 2 financial years, otherwise the money will not be refundable.

Figure-3.2 (15): Scenario of distribution and collection of agricultural loans during the financial year 2009-10 to 2018-19: -



Source: BD Economic Review







7) Promoting Organic Farming in the Country:



One of the features of organic farming is use of natural and organic fertilizers and cultivation of healthy crops by controlling pests in a natural way. This is because organic manure is more effective in increasing fertility of land as well as quality and high yield of crops. Cost of production of organic manure is low, so it is economical, as a result acceptance and use of organic manure is increasing day by day all over the world.

By gradually discouraging use of artificial fertilizers, it is necessary to motivate farming community to increase use of organic fertilizers in agricultural production as well as to expand production of adequate organic fertilizers on a commercial basis in the country. Besides, it is necessary to ensure easy availability of organic fertilizers at affordable prices in the country by providing necessary financial and technical assistance to the entrepreneurs. As a result, besides creating infrastructure for production of organic fertilizers in the country, huge success in organic farming is inevitable, because demand for organic agricultural products in international market is huge due to health benefits of organically grown agricultural products. Use of synthetic fertilizers has been declining day by day in recent times due to widespread expansion of organic farming worldwide. In 2016, Bangladesh was ranked 25th out of 161 countries in use of artificial fertilizers and even in this case, Bangladesh is included in the list of countries that use more fertilizers in South Asia Figure-3.2 (16).

Promoting organic farming in the country:

Steps can be taken to promote organic farming: -

- Encourage farmers at field level to increase use of organic farming and organic fertilizers.
- To take necessary steps to increase production of natural and organic fertilizers on commercial basis in the country.
- Ensure training at upazila level for commercial production of organic manure and provide necessary financial



Figure-3.2 (16): Scenario of fertilizer application per hectare in South Asian countries in 2016: -





- and technical assistance to trained entrepreneurs.
- Substantial increase in credit flow by including bio-fertilizer production in SME sector.
- Strengthen the system of regular training and supervision on preservation and marketing of products produced through organic farming in remote areas through Upazila Agriculture Office.

-		per				85	.37	242.18	4.	380.28	503.32	1723 39
12.18	13.25	17.87	131.92	144.43	161.75	165.85	231.37	242	289.4		Σ.	
AFGANISTAN	BHUTAN	MYANMAR	SRI LANKA	PAKISTAN	THAILAND	INDIA	INDONESIA	JAPAN	BANGLADESH	SOUTH	CHINA	MAIAYSIA

Source : indexmodi

8) Production, storage and use of improved seeds to ensure high yield:



Improved seeds are the first condition for increasing yield. One of the prerequisites for agricultural development is to have improved seed production, storage and adequate supply of seeds in season all over the country through public and private initiatives. In absence of adequate government seed repositories in the country, in most cases farmers produce seeds themselves and store them as per their conventional methods, which does not fall into category of standard seed storage at all. As a result, most of seeds in remote areas are not standardized, resulting in low yields. According to various organizations, Bangladesh currently needs an average of about 12.50 lakh MT of seeds per year, in contrast to amount of seeds produced and distributed at public and private levels is 12% -15%, remaining seeds are produced by farmers themselves. During financial year 2015-16, amount of seed production and storage in the country at different levels were 129,568 MT, against which 124,440 MT were distributed. In 2017-18 financial year, amount of seeds produced by various means were 140,981 MT, against which 140,483 MT were distributed **Figure-3.2** (17).

Production, storage and use of improved seeds to ensure high yield:

To ensure high productivity in agriculture : -

- To create improved seed production and distribution network at upazila level across the country.
- Establishment of Government Seed Archives in every Upazila Sadar to ensure proper storage of seeds produced by the farmers, so that local farmers have opportunity to keep their produced seeds in the Upazila Seed Archives and use seeds in good season.
- Training and supervision of farmers at field level in improved seed production and storage.





Figure-3.2 (17): Scenario of seed production and distribution in the country during 2015-16 to 2017-18:

(In metric ton) 2017-18 Name of the Distribution Distribut **Production Production** Distribution **Production** Seed ion Rice 80546 74558 83386 82038 85361 87668 Wheat 16532 20667 18116 16575 17956 18177 Maize 5 7 13 5 21 5 Potato 25134 32901 26453 25352 33044 31321 **Pulses** 2476 1888 1699 1323 2315 1699 Oil Seed 3266 1300 775 1567 1245 1023 Jute 880 724 834 722 723 223 Vegetables 80 83 87 73 104 80 117 105 110 105 **Spices** Total 129,568 124,440 141,296 128,143 140,981 140,483

Source: Economic Review 2018 by MOF

9) Diversify agriculture:

Diversification in Agriculture



Achieving self-sufficiency in agricultural production through diversification of country's agricultural sector is need of time, as the country still has to meet domestic demand and ensure supply of raw materials to industry by importing huge quantities of agricultural products every year. Imported agricultural products include rice, wheat, maize, fresh food, various types of pulses, onion, garlic, ginger, wood and other spices and raw cotton and oilseeds as raw materials for industry. List of most imported products includes oilseeds, wheat and raw cotton. Expenditure on imports of these three products was USD 2,943 million in FY 2012-13, which has increased to USD 5,300 million by FY 2017-18 Figure-3.2 (18).

Although, in recent times, due to increase in food production in the country as well as gradual increase in diversification of individual enterprises in agriculture, production of fish and various fruits has increased significantly, however, in order to meet demand of growing population of the country, it is very important to ensure

First Edition: August, 2022

Diversify agriculture:



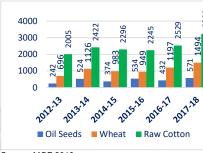


adequate production of fish, meat, milk, eggs, spices etc., as well as increase level of production of various raw materials used in industry.

In order to ensure food security of growing population through diversified production in the country's agricultural sector, there is a need for rapid expansion of diversified farming in the country to increase production of essential raw materials and exports of agricultural products and following steps can be taken to implement this goal: -

- 1. Taking initiatives for increasing production of raw cotton in the country which are imported as industrial raw material in huge. It can be seen whether hilly areas or high lands of the country can be utilized this purpose.
- 2. Aiming to reduce oil seed imports, taking initiative to increase production and use of mustard and sunflower oil by increasing level of mustard and sunflower cultivation in the country.
- 3. Use of wheat as staple food in the country is increasing day by day, so increase production target of wheat as per demand.
- 4. To take initiative to produce adequate milk, eggs, fish and meat in proportion to population of the country to ensure development of public health.
- 5. Setting targets for adequate production of onion, garlic, ginger and other spices.
- To increase financial and technical assistance for establishment of agroprocessing industries and agro-related industries such as powdered milk and baby food production and other agrobased industries in the country.
- 7. Discourage import of agriculture and agro-related products by adopting strict policies to ensure adequate production of all agricultural products to meet domestic demand.

Figure-3.2 (18): Scenario of import of agricultural products in the country during the period 2012-13 to 2017-18:



Source: MOF 2019

Diversification - in Agricultural Context









10) Expansion of commercial farming in the farm system:



Commercial farming is cultivation of products produced through commercial cultivation with more land in the farm system for purpose of sale the products at home and abroad. Generally, all agricultural products which are less produced in conventional farming but are in high demand in domestic or foreign market are preferred in commercial farming. For example, cultivation of various types of irregular vegetables (capsicum, broccoli and other vegetables), cultivation of different types of flowers, fruits, farming of fish and other aquatic water, cultivation of ducks, chickens, cows and goats etc. on commercial basis.

There can be different types of commercial farms, such as: -

- i. Mixed Farm Cultivation of grains, fruits, flowers etc. in the same farm as well as rearing of poultry and cattle.
- ii. Dairy farm.
- iii. Crop farms.
- iv. orchards; etc.

Commercial farming usually uses modern agricultural machinery and scientific methods, so commercial farming is always at the forefront in terms of production of high yields and healthy products. Commercial farming plays a leading role in meeting domestic demand and increasing export earnings.

Figure-3.2 (19): Scenario of Bangladesh's agricultural exports during the period 2011-12 to 2015-16:



Source : EPB

of As a result, farm-based multifaceted commercial farming has spread in all developed countries of the world and every developed country earns huge amount of foreign exchange each year by exporting agricultural products. In recent times, commercial farming has also started in Bangladesh on private initiatives and volume of agricultural products exports to the country is gradually increasing. During fiscal year 2011-12, export of agricultural products of Bangladesh amounted to USD 402.7 million, which stood at 596.06 million in fiscal year 2015-16. During this period, average annual export of agricultural products was USD 547.13 million Figure-3.2 (19).

First Edition: August, 2022

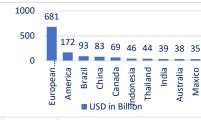
Expansion of commercial farming in the farm system:





Countries with strong economies in the world have been contributing significantly agricultural domestic production through large-scale commercial farming as well as making significant contributions to export earnings through agricultural including exports, United States, Netherlands, Germany, Brazil, France, China, Spain, Canada, Belgium, Italy and Argentina are among them. Figure--3.2 (20)

Figure-3.2 (20): Top 10 countries in the export of agricultural products in 2018:



Source: WTO

10(a): Govt. should do to expand commercial farming in the Country:

Commercial farming has to be done on a farm basis with modern agricultural machinery and scientific methods with a lot of land and investment in this farming is high, so many experienced entrepreneurs are not able to engage in commercial farming due to lack of necessary capital. In addition, commercial farming involves storage and packaging of products for selling at home and abroad, which requires training.

Steps can be taken for rapid expansion of commercial farming in the country:

- Government policy to ensure necessary financial and technical support to the entrepreneurs in this sector.
- Bangladesh has ample opportunity to increase volume of export of agricultural products and increase export earnings through bilateral trade agreements with various countries and through proper use and application of those agreements concluded to reduce tariff barriers to Bangladeshi agricultural products.
- To have necessary training arrangements at district and upazila level on profitably conducting commercial farming, production of quality products, packaging of export products, search for export markets and other necessary matters.

11) Protect agricultural land and increase two and three crop cultivation:

In this small country, amount of cultivable agricultural land is insufficient to feed a growing population, on top of that, amount of agricultural land in the country is constantly declining due to unplanned construction of houses in rural areas and setting up of Mills & factories etc. Apart from taking immediate steps to prevent loss of arable land, there seems to be no alternative but to solve this problem by increasing level of agricultural production by bringing limited arable land of the country under two-crop and three-crop cultivation through extensive use of modern and scientific methods in cultivation. It should be noted that due to high or low elevation of many cultivable lands, it is not possible to cultivate all lands easily and most of the crops of those low lands are damaged by floods and other natural calamities almost every year.

Moreover, amount of cultivable land that is increasing naturally and officially every year is not being added to net cultivable land due to various reasons. Therefore, in order to meet challenges ahead, it is necessary to take a big plan to increase size and production of agricultural sector by protecting cultivable land of the country and bringing all lands under two-crop and three-crop cultivation, which requires:

First Edition: August, 2022

Government should do to expand commercial farmingin the country:

Protect agricultural land and increase the level of two and three crop cultivation:





- Formulation of "Rural Housing Policy" for construction of standard houses in villages.
- Introduce provision of clearance from the Upazila Land Office for construction of houses on cultivable land in rural areas.
- Construction of dams on priority basis to prevent erosion in river affected areas.
- Not allowed to set up brickfields and other industries on cultivable land
- To be strict in suppressing all activities that destroy arable land.

Figu	re-3.2 (21): Scen	ario of	using cu	ltivable					
	during F.Y 2015								
SL	Items	2015- 16	2016- 17	2017- 18					
Land	l Utilization (Area in '	000' Acre)	•	•					
1	Total cropped area	38,148	38,256	38,536					
2	Net Cropped area	19,636	19,650	19,774					
3	Single Cropped area	5,566	5,492	5,514					
4	Double Cropped area	9,671	9,711	9,800					
5	Triple Cropped area	4,356	4,380	4,418					
Prod	uction of Major agricu	ıltural croj	os (in '000'	MT)					
1	Rice	34,710	34,710	33,803					
2	Wheat	1,347	1,348	1,311					
3	Maize	2,271	2,446	3,026					
4	Jute	1,399	1,371	8,247					
5	Tea	66	65	82					
6	Fruits	4,635	4,765	5,019					
	Annual Fish production (3,684 3,878 4,134 in '000' MT)								
	culture Sector ribution to GDP	14.5%	13.41%	13.07%					

Source: BBS

12) Expansion of vertical farming in greenhouse system:



Vertical farming first invented in 1915 by American geologist Gilbert Ellis Bailey, initial concept of vertical farming was rather understood as a sort of rooftop farming.

Definition: Vertical farming often falls in line with 'indoor farming', 'urban agriculture' and 'controlled-environment agriculture' (which also encompasses greenhouse cultivation), but the concept remains unique. With vertical farming, growing takes place where factors such as temperature, nutrients, lighting, irrigation, and air circulation are constantly monitored and adjusted. In short, vertical farming is the systematic cultivation of limited land through greenhouses. In this cultivation, it is possible to grow healthy crops at a high rate throughout the year through systematic use of small tracts of land in a scientific manner, as a result of which greenhouse cultivation has spread rapidly throughout the world.





Expansion of vertical farming in greenhouse system:

i) Advantages of Vertical Farming:

Due to multiple benefits of this method of cultivation, need and importance of expansion of vertical farming in a small, natural disaster and populous country like Bangladesh is immense and its future is bright. Rapid expansion of vertical cultivation is essential in this country for a variety of reasons such as land scarcity, low production costs, health benefits and high yields throughout the year. Following are some of important benefits of vertical farming:-

- This cultivation is done indoors on small plots of land, so there is no pair of this cultivation to solve problem of scarcity of land.
- Indoor rooftop or elevated cultivation reduces the risk of natural disasters.
- A farming is more likely to be profitable due to lower irrigation and production costs.
- Cultivation in a scientific manner ensures healthy and high yields throughout the year, making vertical farming much more commercially viable.
- In areas where cultivation is difficult due to salinity of land and other inadequacies, it is possible to overcome the problem by spreading vertical cultivation in those areas.





ii) Future prospects of vertical farming:

According to a survey conducted by the UK-based research institute "Reportbuyer.com" size of vertical farming in the world in 2018 was USD 2.23 billion, which will increase by 2026 to USD 12.77 billion. According to Asia-based research institute "Graphical Research ",Vertical farming growth in Asia will continue to be high in the coming years and by 2024, vertical farming market growth in the Asia Pacific Zone will be CAGR 31.50%.

Figure-3.2 (22): Growth Estimates of It is to be hoped that in recent times in Global Vertical Farming by 2026:
some parts of Bangladesh, vertical

Vertical Farming Market, by region



some parts of Bangladesh, vertical cultivation in greenhouses on a commercial basis has been started on a small scale through private initiatives and according to a newspaper report their progress in this regard is quite good, however, it is not enough to increase export of agricultural products through high level agricultural production by using small land of this country. Needless government needs to take to say, additional steps to increase vertical cultivation in greenhouses on a commercial basis in the country.

First Edition: August, 2022

Future prospects of vertical farming:





Government duties to expedite the

spread of vertical

cultivation:

Introduction of compulsory insurance in cattle and poultry industries:

iii) Government duties to expedite spread of vertical cultivation:

Although greenhouse farming does not require modern agricultural machinery, construction of greenhouse infrastructure and verticals requires a significant amount of capital initially, which is not possible for many new entrepreneurs. Moreover, training is essential in cultivation under this method. In addition to reminding the policy of commercial farming for rapid expansion of vertical cultivation in greenhouses in the country, following steps can be taken: -

- To spread "greenhouse" farming in the country through educated youth.
- At the initiative of Ministry of Agriculture, at upazila level, there should be a system of detailed training on cultivation in this method, proper preservation and marketing system of products.
- Provision of low interest agricultural loans to provide initial capital to trained entrepreneurs; and
- Establishment of Agricultural Technical Assistance Cell at Upazila level under initiative of Ministry of Agriculture.

13) Bringing animal farm and poultry industry under compulsory insurance:

With increase in population, demand for fish, meat and eggs in the country is constantly increasing to meet shortage of animal protein. Country's cattle and poultry are insufficient to meet this growing demand. One of the reasons for backwardness in the farm and poultry sector is disease and fear of losing capital in this industry. Numerous poultry die in the farms every year due to disease. As a result, farm owners lost their capital due to severe economic losses and new entrepreneurs are afraid to enter the profession for this uncertainty.

In order to overcome this situation, it is necessary to make this sector fearless by making farms and poultry sector of the country compulsory under insurance, so that, farm and poultry owners do not lose capital due of poultry disease and entrepreneurs will be more interested in investing here instead of being intimidated.

D) Recommendations for development of agri. Sector:



In view of the current situation and challenges ahead, it is now necessary to take effective initiatives to ensure sustainable development and expansion of agricultural sector through 100% modernization, so that, to achieve self-sufficiency in





Recommendations for development of the agri. Sector:

production of agricultural products in the country as well as to facilitate commercialization of agriculture. Because, fact that should be kept in mind that just as it is not possible to ensure food security in an agrarian country without sustainable development and self-sufficiency of agricultural sector, similarly, thought of desired economic progress in this country is devoid of reality without ensuring sustainable development of agricultural sector or bypassing this sector. Expansion of agricultural sector does not mean discouraging industrialization, but use of agriculture in production of industrial raw materials will play a leading role in expansion of industrialization.

Following steps can be taken for rapid expansion and development of agricultural sector of the country: -

- 1. Modernization of agricultural sector.
- 2. To strengthen research activities in agricultural development in the country.
- 3. To make this sector promising by building strong and sustainable agricultural infrastructure over the country.
- 4. Increase agricultural productivity through scientific method of cultivation.
- 5. To make agriculture easier and more affordable, "increase use of modern machinery in agriculture."
- 6. Increase flow of credit in agriculture at low interest and easy terms.
- 7. "Promoting organic farming" in the country to produce healthy food.
- 8. Ensure production, storage and use of improved seeds to ensure high yields.
- 9. Achieving self-reliance in agriculture through diversification of agriculture.
- 10 Expansion of commercial farming in farm system to build an export oriented agricultural sector.
- 11. Protect agricultural land and increase level of two and three crop cultivation.
- 12. Promotion of "vertical farming in greenhouse method" through educated youth.
- 13. In order to increase cultivable land, to bring newly emerging chars under economic development by developing agricultural and industrial zones as soon as possible.
- 14. Adapting strict policy for production of all agricultural products (rice, wheat and spices, such as chilli, turmeric, onion, garlic, ginger and other spices and milk, eggs, fish, meat etc.) to meet domestic demand.
- 15. Bringing poultry industry under compulsory insurance to reduce investment risk in this sector.
- 16. Establishment of "Loan Advising Booths" of Krishi Bank at village level across the country for convenience of farmers.
- 17. Establishment of at least one seed storage facility, one cold storage, dealership of modern agricultural machinery, agricultural development training and agricultural support center in each upazila.
- 18. Introduce regular training and supervision system on the following issues in remote areas in coordination with Upazila Agriculture Office and NGOs for overall development of agricultural system.
 - Cultivation of suitable crops according to soil type and land.
 - Growing multiple different crops simultaneously on the same land and year-round crop production on the land.
 - Detailed training on commercial farming in a scientific manner.
 - Provide necessary training on greenhouse farming and to impose obligations on banks and NGOs to provide necessary funds to trained entrepreneurs.





- Training on how to benefit financially by cultivating high / low and fallow lands, ditches, small and large ponds etc. which have been neglected since long.
- Provide necessary training on scientific techniques of cultivation, proper use of modern agricultural machinery, production and use of natural fertilizers, crop pest control in natural ways, cultivation of high yielding crops and vegetables and enjoyment of facilities provided by the government for development of agriculture and farmers.
- Dates and palms trees grow well all over Bangladesh. It is easy to plant
 dates and palm trees at road side or anywhere, it does not cost much. So
 training on commercial production of date molasses and palm juice among
 people of remote areas.
- Coconut is widely grown in coastal and char areas. Coconut trees can be easily planted in the yard or anywhere, there is no cost. Provide training on commercial coconut cultivation in all these areas.

It is to be noted that as a result of above training, it is necessary to publish pictures of agricultural progress in each upazila at the end of year, so that accountability of the concerned department of each upazila is ensured in this regard.





Chapter: 3.3

Expansion of cottage industries at village level.







Expansion of Cottage Industries at village level.

Topics Covered in the Chapter

Income and Earning Situation at village level

- A) Unemployment and Poverty at Village level.
 - 1. Unemployment Rate at village level.
 - 2. Outbreaks of poverty at village level.
 - 3. Average monthly income by town and village.
 - 4. Homestead infrastructure at village level.
 - 5. Number of landless families at village level.
- B) Expansion of Cottage Industries for Rural Employment.
 - 1. Size and expansion of small and cottage industries of the Country.
 - 2. Contribution of small and cottage industries to GDP.
 - 3. Government's efforts to develop the cottage industry.
- C) Recommendations for expansion of cottage industry at Villages.







Income and Earning Situation at village level:

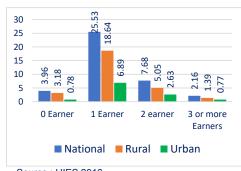
One of the features of a strong economy is that every working age man and woman in every household in the country will ensure financial well-being of the family by earning income from their work, with positive effect of which economy of the country will be smooth and fast. If all working age people of the family, irrespective of men and women, are engaged in work, then financial well-being is inevitable in that family. Any financially sound family is active in improving quality of life by their own thinking. Child's education, health awareness and other basic issues of life are then able to solve on their own. No financially well-off family is ever considered a burden on the government or the country. Only a financially well-off person or family is able making their children worthy, live a quality life and plan a realistic future for their own well-being, which improves their own standard of living as well as keeps the country's economy afloat.

About 73% of total population of Bangladesh live in villages. A large portion of families living in rural and remote areas of the country depend on a single earner, women of each family are either housewives or do nothing. Again, there are so many families that all families have no source of income. As a result, all those families continue to suffer from shortages throughout the year and it is not possible to meet the needs of family members, education and health properly in those family. As women are not involved in any economic activities, they have no status in the family and society. As a result, gender inequality is very prevalent in rural society which is one of the major obstacles to women's empowerment in this country.

According to HIES 2016, out of a total of 39.33 million households in the country, 3.96 million households have no income earners, of which 3.18 million (80%) households live in rural areas and remaining .78 million (20%)

households live in urban areas. In other words, there are still (3.96 x 4.06) = 16.08 million people spend their days in complete economic uncertainty in the country, of which 80% live in villages. On the other hand. number of households dependent on a single earner is 25.53 million across the country, of which 16.64 million (73%) live in rural areas and 6.89 million (27%) in urban areas. That means about two-thirds of the families living in villages are still dependent on a single earner **Figure-3.3** (1).

Figure-3.3 (1): Number of households in the country on the basis of earning income



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Source: HIES 2016

In order to ensure sustainable development of overall economy of the country, it is essential that working members of every household irrespective of village and city, must have opportunity and environment to lead a prosperous life through employment. Although women have opportunity to work in garment industry or other fields at city level, but there is no such opportunity at village level. As a result, women living in rural and remote areas are forced to live a very low standard of

Income and **Earning Situation** at village level:





living due to severe economic stress, which is acting as one of the major obstacles to social and economic development of the country.

Every able-bodied man and woman living in rural and remote areas can lead a prosperous life by earning, have opportunity to improve quality of life by meeting basic needs of life, it is time to look at this in the interest of overall development of the country. This requires adequate employment at village level, which requires far-reaching planning and its proper implementation.

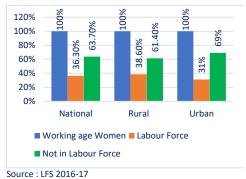
A) Unemployment and Poverty at Village level:

1) Unemployment Rate at village level:

Unemployment rates in rural and remote areas of the country are much higher than in cities. According to the Labor Force Survey 2016-17, country had a working age population of 109,054 million over 15 years, of which 77,091 million (70.69%) were in rural areas and 31,963 million (29.31%) were in urban areas. 80.3% of working men over 15 years of age in villages are involved in labor force, while remaining 19.7% of working men are out of labor force, who are either unemployed, semi-unemployed or Pseudo-unemployed. Moreover, a significant portion of population involved in the labor force is again unemployed. On the other hand, 38.6% of rural women over 15 years of age are involved in labor force, while remaining 61.4% of working women are out of the labor force, most of whom are housewives and are engaged with housekeeping work **Figure-3.3** (2).

working age rural population above 15 years outside the labor force was 31,395 million, which is 40.72% of total working age population of villages and 19.30% of total population of the country at that time. Moreover, a large portion of agricultural workers spend maximum time of the year either half-unemployed or as Pseudounemployed. Their financial stability are not changed year after year as they do not have opportunity to earn other income besides agriculture.

According to that report, number of working age rural population above 15 years outside the labor force was 31.395 million, which is 40.72% of 2016-17:



First Edition: August, 2022

Figure-3.3 (3): Working population over 15 years of age in rural and urban areas by 2016-17:

									(in '000'	
		Rural			Urban		Bangladesh			
Labour Force Status	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Labour Force	30,939	14,957	45,696	12,790	5,018	17,808	43,528	19,976	63,505	
Not in Labour Force	7,556	23,839	31,395	2,995	11,160	14,155	10,551	34,998	45,549	
Total:	38,795	38,796	77,091	15,785	16,178	31,963	54,080	54,974	109,054	
	Column %									

Unemployment and poverty at village level:





Labour Force	80.3	38.6	59.3	81.0	31.0	55.7	80.5	36.3	58.2
Not in Labour	19.7	61.4	40.7	19.0	69.0	44.3	19.5	63.7	41.8
Force	15.7	01.4	40.7	15.0	07.0	44.5	17.5	05.7	41.0
Total:	100	100	100	100	100	100	100	100	100
		9,	6 of Worl	king age p	opulation				
Labour Force	28.2	13.7	41.9	11.7	4.6	16.3	39.9	18.3	58.2
Not in Labour	6.9	21.9	28.8	2.7	10.2	13.0	9.7	32.1	41.8
Force									
Total:	35.1	35.6	70.7	14.5	14.8	29.3	49.6	50.4	100

Source: LFS 2016-17 by BBS

2) Outbreaks of poverty at village level:



Although overall poverty rate in the country is lower than before, rate of poverty and extreme poverty in rural areas is still significantly higher than in urban areas. During 1995-96, poverty rate in the country was 50.1% nationally, 54.5% in rural areas and 27.8% in urban areas. At that time, rate of living below poverty line was 35.2% nationally, 39.5% in rural areas and 13.7% in urban areas. Poverty rate was 26.78% higher and extreme poverty rate was 25.6% higher in rural areas than urban areas at that time. According to BBS Survey 2016, poverty rate stands at 24.3% nationally, 26.4% in rural areas and 18.9% in urban areas. Rate of extreme poverty was 12.9% nationally, 14.9% in rural areas and 7.6% in urban areas at that time. It does mean that poverty rate is still about 7.5% higher and extreme poverty rate is 7.3% higher in rural areas than in urban areas.

Overall, poverty rate in the country is still 37.2% nationally, 41.3% in rural areas and 26.5% in urban areas. This means that poverty rate in rural areas is still 14.8% higher than in urban areas. During 2016, population living in villages were 116.09 million, so, number of poor people living in villages at that time (116.09 X 41.3%) = 47.95 million, which is about 30% of country's total population at that time **Figure-3.3** (4).

Outbreaks of poverty at village level:

Figure-3.3 (4): Rate of poverty and extreme poverty in rural and urban areas during period of 1995-2016:

	Upp	er Poverty I	Line	Lower Poverty Line					
Year	National	Rural	Urban	National	Rural	Urban			
2016	24.3	26.4	18.9	12.9	14.9	7.6			
2010	31.5	35.2	21.3	17.6	21.1	7.7			
2005	40.0	43.8	28.4	25.1	28.6	14.6			
2000	48.9	52.3	35.2	34.3	39.5	13.7			
1995	50.1	54.5	27.8	35.2	39.5	13.7			

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Source: BBS





3) Average monthly income by town and village:

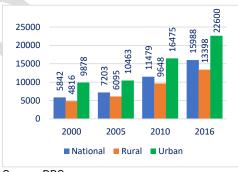


Due to increase in per capita income in the country in recent years, average monthly income per household has increased compared to the past.

In 2000, average monthly income per household in the country was TK. 5,842 nationally, TK. 4,816 in rural areas and TK. 9,878 in urban areas. In 2016, monthly income per family increased to TK. 15,988 nationally, TK. 13,398 in rural areas and TK. 22,600 in urban areas.

Between 2000 and 2016, monthly per capita income increased by TK. 10,148 nationally, TK. 8,582 in rural areas and TK. 12.722 in urban areas. Monthly income was about 48% higher in urban than rural areas at that time Figure-3.3 (5).

Figure-3.3 (5): Scenario of monthly income per household in rural and urban areas during 2000-2016: -



Source: BBS

4) Homestead infrastructure at village level:



Due to financial hardship of most of the families in rural areas of the country, infrastructure of houses is quite substandard. As a result, every year storms, rains, cyclones and floods destroy countless houses and make the poor homeless, which is having a huge negative impact on the country's economy.

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income by town and village:

Average monthly

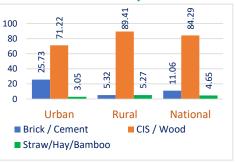




Homestead infrastructure at village level:

As of HIES 2016, 11.06% (4.35 million) of total 39.33 million households in the country are made of brick / cement, 84.29% (33.15 million) of houses are made of tin / wood canopy and 4.65% (1.83 million) huts. Out of a total of 28.26 million households in the villages, only 5.32% (1.50 million) houses have brick / cement roof, 89.41% (25.27 million) houses have tin / wooden canopy and 5.27% (1.49 million)) Hut **Figure-3.3** (6).

Figure-3.3 (6): Housing infrastructure in rural and urban areas by 2016: -



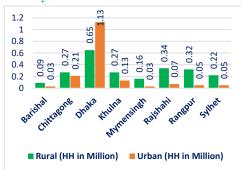
Source: BBS

5) Number of landless families at village level:

According to Agricultural Census 2019, about 7.84% of households living in rural and remote areas of the country are landless amounting to 2.32 million, of which 0.09 million in Barisal division, 0.27 million in Chittagong, 0.65 million in Dhaka and 0.27 million in Khulna, 0.16 million in Mymensingh, 0.34 million in Rajshahi, 0.32 million in Rangpur and 0.22 million in Sylhet division **Figure-3.3** (7) . As of 2008, number of landless households in the country were 3.26 million (12.84%). From 2008 to 2019, number of landless families in the country has decreased by about 0.94 million, which is undoubtedly a sign of progress.

Most of these landless families living in rural and remote areas are either agricultural workers or day laborers, who spend most of the time of the year unemployed due to lack of work. As a result, all these people never get a touch of financial prosperity in life. If there were adequate employment opportunities at village level, landless people would have opportunity to develop themselves financially by working all year round, which is especially essential for overall economic progress of the country.

Figure-3.3 (7): District wise number of landless agricultural households in the country in 2019:



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Agriculture Census 2019



Number of landless families at village level:





B) Expansion of Cottage Industries for Rural Employment:



Practice of conducting various profitable activities domestically in one's own cottage and producing goods using locally available raw materials for financial gain has been going on for a long time, which is known as cottage industry. There is no pair to solve problem of unemployment of working members of the family as well as to bring positive change in the standard of living by increasing financial consistency in this industry. Although small in size, due to possible to carry out this industry on a small scale, with small capital and in one's own cottage, size of cottage industry and employment in this industry is increasing day by day in developing countries, especially in South Asian countries.

Importance of expansion of cottage industry in the Economy: -

- Cottage industry is labor dependent and through expansion of cottage industry in the country it is possible to create more than two thirds of total employment in the industry, which can reduce unemployment and contribute a lot to overall economic development of the country.
- Women in villages and remote areas are usually veiled, they do not feel
 comfortable working outside the home. This work is especially useful for
 rural women as it is possible to work in this industry with less capital, less
 space and in their own cottages, which will undoubtedly increase
 involvement of women in economic activities.
- Through expansion of cottage industry in the country, there is ample opportunity to enrich country's economy with export initiatives after meeting local demand by increasing production of daily necessities.
- Cottage industry plays a vital role in expansion and productivity of the manufacturing sector, therefore, expansion of cottage industry is one of the major contributors to the growth of industrialization in the country.
- Expansion of cottage industry in the country will ensure financial prosperity of rural households by increasing employment at village level, which will make a huge effort to turn people from urban to rural.
- One of the easiest ways to expand cottage industry at the village level is to enrich rural economy.

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Expansion of cottage industries for rural employment:





1) Size and expansion of small and cottage industries of the Country:



Role of small and cottage industries is very much to make country's economy dynamic by enriching the manufacturing sector. In a populous country like Bangladesh, there is no alternative of cottage industry to bring economic prosperity to rural families by solving problem of unemployment in rural and remote areas. If proper government guidance, necessary financial and technical assistance, proper marketing arrangements of manufactured goods and other necessary facilities can be ensured for expansion of this industry, then total production in this sector will not be impossible to surpass the production in the large industrial sector of the country. Size and volume of small and cottage industries in the country has increased considerably in the last few years and if this trend continues, it is expected that in the near future, small and cottage industries will create a strong position in the country's economy.

Size and expansion of small and cottage industries:

A review of the size and growth rate of country's small and cottage industries during fiscal year 2011-12 to 2018-19 shows that size of this sector during fiscal year 2011-12 was TK. 22,569.10 crore, which during fiscal year 2018-19 stood at TK. 40,851. 90 crores. In other words, during these eight years period, size of small and cottage industries in the country has increased to Tk. 18,282.80 crore, on an average, it has increased every year by TK. 2,265.35 crore or 10.13% Figure-3.3 (8).

Figure-3.3 (8): Expansion of small and cottage industries in the country during 2011-12 to 2018-19:



Source: Bangladesh Economic Review 2019

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In 2011-12 financial year, growth of small and cottage industries in the country was 6.58%, during 2018-19 financial year it stood at 10.26%. During this period, growth rate of small and cottage industries in the country was 8.75% per annum on an average **Figure-3.3** (9).

Figure-3.3 (9): Size and expansion of small and cottage industries in the country during financial year from 2011-12 to 2018-19:

							(in	Crore Tk.)
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Small &	22,569.1	24,557.9	26,113.1	28,342.6	30,909.4	33,945.8	37,086.4	40,851.9
Cottage								
Growth	(6.58)	(8.81)	(6.33)	(8.54)	(9.06)	(11.20)	(9.25)	(10.26)
%								

Source: Bangladesh Economic Review 2019





Contribution of small and cottage industries to GDP:

2) Contribution of small and cottage industries to GDP:

It is natural that with size and expansion of small and cottage industries in the country, contribution of this sector to country's economy will increase. But since growth rate of this sector has been very similar in the last decade, its participation in GDP has remained at almost same level for a long time. Contribution of small and cottage industries to the country's GDP during period from 2012-13 to 2018-19 was 3.51% in FY 2012-13, 3.51% in FY 2013-14, 3.58% in FY 2014-15, 3.64% in FY15-16, 3.73% in FY 2016-17, 3.78%% in FY 2017-18 and 3.85% in FY 2018-19 **Figure-3.3** (10).

Finally it can be said that the size and growth rate of cottage industries in the country is still much less than potentials of this sector. Whereas, establishment of small and cottage industries is relatively easy, anyone can set up any kind of small & cottage industry with

little capital and in a short period of time and beside his own financial development there is an opportunity contribute to economic development of the country through this industry. Therefore, it has become imperative to develop this industry by making small and cottage industries widely popular to ensure rapid development of the economy country's sustainable through positive changes in the living standards of poor by reducing unemployment in rural and remote areas.

Figure-3.3 (10): Scenario of contribution of small and cottage industries to the GDP during the period 2012-13 to 2018-19:



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3) Government's efforts to develop the cottage industry:



Government's efforts to develop the cottage industry:

History of cottage industry in Bangladesh is long. By engaging low educated and illiterate men and women in the cottage industry in rural and remote areas, their own financial development as well as increasing employment in the country is possible, which will play a major role in expansion of the country's overall economy. Government has taken various steps and efforts to expand this industry and in the last decade, significant progress has been made in this industry in the country. According to report of the Ministry of Industry, by 2018, number of cottage industries in the country were 852,568, number of small scale industries were 124,105 and total employment in this industries were 3.72 million.





C) Recommendations for expansion of cottage industry at Villages :



It would not be an exaggeration to say that desired economic progress in this country is impossible without ensuring development of their livelihood by involving a large working population remain outside the labor force in rural and remote areas of the country in economic activities. This problem is very old, which has always been an obstacle to the progress of the country's economy. Needless to say, governments of the past and even present government is fighting with all their might to find a timely solution to this old problem. Therefore, time has come to find a timely solution to this big problem.

Following steps can be taken in collaboration with BSCIC, selected few NGOs and Ministry of Agriculture to improve quality of life of the large working rural population remain outside labor force by involving them in economic activities

- 1. Taking effective initiatives to make the country's economy more dynamic by extensive expansion of cottage industry in rural and remote areas and exporting products produced in this sector beside meeting domestic demand, where following issues will be covered
 - Implementation of "Cottage Industry Development" policy in collaboration with BSCIC, selected NGOs and Ministry of Agriculture.
 - To Prepare a list of products to be produced in this sector by sorting out domestic demand and international market and control production process in the cottage industry maintaining that list.

A) List of domestically marketed products:

- sewing project, stone laying and craft project in saree, three piece, punjabi etc.
- Items widely used in daily life in village, such as Sital Pati widely used in rural areas, palm leaf carved fan, seating wrap and bamboo and wooden furniture, various interesting handicrafts and daily household items.
- Katha and blanket sewing, making artificial flowers, boutique and cloth printing work, screen printing etc. There are many things that men and women of the villages can do effortlessly,



Recommend-ations for expansion of cottage industry at village level:

Strategies for Economic Development of Bangladesh



such as bee farming, Mushroom cultivation, candle making, date molasses production, mustard oil production, making pottery and so on.

• Domestic dairy products, such as ghee, cheese and butter etc.

B) List of export products:

- Show-pitch, toys, dolls, Nakshi katha, artificial flowers, bamboo and cane show-pitch and various traditional handicrafts which have great demand abroad.
- 2. To provide benefits of government provident fund to women engaged in cottage industries against savings scheme.
- **3.** By setting up "Upazila Cottage Industries Development Center" at upazila level in the whole country through BSCIC, which will perform the following activities:-
 - To ensure that the trainees are engaged in production of self-trained products by providing necessary financial and technical assistance through regular training at village level on the production of products prescribed for the cottage industry sector and regularly supervise the fields, so that no trained person can refrain from production activities.
 - Arrangement for purchase of products produced in this sector at fixed prices by the government through "Upazila Cottage Industries Development Centers".
 - Profit earned through sale of purchased products at government initiative at home and abroad to be spent on development of cottage industries in the country.
 - To conduct field micro-credit activities at fixed interest rates through designated banks and NGOs for financing in this sector.
 - To publish annual report by storing "cottage industry development information" based on upazila, so as to publish number of trained persons in the relevant year, total number of industries including number of new industries started in that year, amount of annual production and turnover and annual profit of this sector based on upazila.
 - Competitive attitude to be created by ensuring accountability of the officers working at field level and proper evaluation of skills
- **4.** Adequate training for women at village level on the following topics through Upazila Agriculture Offices:
 - Poultry and cattle rearing in modern way, fish farming in modern way, vegetable cultivation around the house.
 - Bee cultivation, Mushroom cultivation, production of date molasses, production of mustard oil, production of dairy products, such as ghee, cheese and butter etc.
 - Provide necessary financial, technical and overall support to the trainees to be engaged in the trained work.

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Note: BSCIC and Upazila Agriculture Offices as well as certain NGOs can be engaged in this work with provisions of adequate accountability.





- 5. Small and cottage industry development society should be set up in association with the entrepreneurs in every village, so that there is adequate publicity as well as foundation of this industry is strengthened at village.
- 6. Launch of various production oriented projects under supervision and investment of the NGO's: NGO's should not be limited to providing only loan in the name of micro credit but should work together with the government to improve living standards of poor by creating adequate employment at village level through massive expansion of cottage industry at upazila and village level with their own funds.
- 7. In case of free training and engagement of trainees with necessary funding, some written conditions may be imposed for greater interests, such as: -
 - Women working under this facility will adopt birth control methods and pledge to keep the family confined to two children.
 - Everyone will send their children to school and compulsorily complete at least SSC and two years vocational course.
 - Refrain from giving child marriages to children.
 - will refrain from giving and taking dowry.
 - will abide by government rules and regulations while construction of new residential houses and in all other cases.
 - Each will deposit a certain portion of their monthly income (as determined by the government) in the Government Provident Fund. At the end of the term, which will be paid in the form of a pension in accordance with rules of Government Provident Fund, so that every employee working here can be completely protected from future economic uncertainties.
- **8.** In order to accelerate overall economic development of the country by utilizing infinite potentials of positive development in the rural economy through massive expansion of cottage industry, issues that need to be fully implemented with priority are: -
 - To ensure regular training, supervision, response and evaluation at field level.
 - Ensure necessary financing, technical and other facilities.
 - Product produced in this sector should be officially bought / sold at fair price by the government at upazila level.
 - To preserve up to date and correct information of this sector at upazila and national level and to publish them at the end of the year.

First Edition: August, 2022



Chapter: 3.4

Decentralization of SME Sector at Upazilla Level.







Decentralization of SME Sector at Upazilla Level.

Topics Covered in the Chapter

- A) Decentralization of SME Sector at Upazilla Level.
 - 1. Future prospects of SME sector in Bangladesh.
 - 2. Worldwide expansion of SME sector.
- B) Current situation of SME sector in Bangladesh.
 - 1. Size of Manufacturing Sector.
 - 2. Growth of Manufacturing sector.
 - 3. Share of Manufacturing Sector to GDP.
 - 4. SME Sector Financing.
- C) Obstacles to development of SME Sector .
- D) Recommendations for SME Sector Development.







A) Decentralization of SME Sector at Upazilla Level:

It is more or less known that manufacturing sector plays a major role in all countries in terms of increasing employment, meeting domestic demand and expanding export trade. In order to ensure rapid development and sustainable economy of the country, in case of developing countries, expansion of small and medium industries under productive sector is usually given priority. As a result, SME sector is expanding rapidly around the world, especially in the last decade in many countries in South Asia, progress of SME sector has gained considerable momentum. According to statistics of 2019, among all types of organizations, SME sector organization is 80% in Bangladesh, 97.60% in India, 99% in China, 99.70% in Japan and 60% in Pakistan.

In a populous and low-income country like Bangladesh, SME sector has potentials to play a major role in the overall economic development by increasing employment and alleviating poverty. It is not at all impossible to bring entire country under SME network, especially by expanding the SME sector at upazila level. As per data of 2019, about 30% of total employment in the country is in SME sector, of which 27% is in small scale industries and remaining 3% is in medium scale industries. Share of SME sector in GDP in 2019-20 FY was only 20.25% in Bangladesh, whereas it is 80% in India, 60% in China and 69.50% in Japan.

Needless to say, SME sector in Bangladesh has not expanded at that rate as much as expected, although over the past two decades, SME sector has occupied an important place in Bangladesh's economy and is acting as the backbone of the country's economic development.

1) Future prospects of SME sector in Bangladesh:

In a developing and populous country like Bangladesh, rapid development of small and medium scale industries is essential to meet domestic demand and expand export sector. This is because investment in small and medium enterprises is low and entrepreneurs from all walks of life, whether urban or Village are benefited by investing in this sector as well as contributing to the country's economy by creating new jobs. Economy of this country is wide at village level and labor and land are relatively cheap there. Utilizing this potentials, it is necessary to increase excellence of the country's productive sector by making it a hub of attractive investment across the country through proper use of technology, exchange of experiences, production of quality products and finding new export markets. Here are some of reasons why future of the SME sector in Bangladesh is very promising:

- Require less capital and comparatively less labor.
- Land and labor are relatively cheap here.
- It is possible to spread this industry everywhere in villages and cities.
- Opportunities for sale of produced products in the country as well as export abroad.
- As a result of the government's interest in development of SME sector, availability of bank loans.
- Necessary infrastructure for development of SME sector is being developed rapidly in the country.

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Decentralization of SME Sector at Upazilla Level:

Future prospects of SME sector in Bangladesh:





 Expansion of SME sector will accelerate employment growth, which will play a major role in eradicating poverty in the country.

2) Worldwide expansion of SME sector:

Worldwide, small and medium enterprises are considered as the backbone of economic development. According to World Trade Organization, about 95% of total industrial enterprises in the world are covered by the SME sector and 65% of total employment in the world takes place in this sector. In this age of globalization, many countries are busy to strengthen the country's economy by expanding export sector by exploiting vast opportunities for products and services produced in the world market. However, this requires infrastructure development, proper use of technology in the SME sector, exchange of experiences, production of quality products and exploration of new export markets. Over the past decade, many Asian countries have had considerable success in implementing this policy, using SME sector as a stepping stone to economic progress. A significant portion of small and medium enterprises in all countries meet their domestic demand as well as export their products directly abroad, which is increasing every year. Contribution of SME sector in exports of some Asian countries in the last decade are highlighted through Figure-3.4 (1).

Worldwide expansion of SME Sector:

Figure-3.4 (1): Scenario of direct export of SME sector and participation in total exports of some countries of South Asia in the financial year 2015-16:-

Country	Shar	e of Firms Ex Directly (%		Share of Total Sales that are Exporting Directly (%)				
	Small	Medium	Large	Small	Medium	Large		
Combodia	6.9	19.1	26.9	6.8	16.7	26.3		
Indonesia	5.3	7.9	25.2	2.9	5.0	11.7		
Malaysia	4.3	19.2	69.0	2.2	7.6	30.3		
Viet Nam	4.0	11.5	36.1	2.2	6.6	21.6		
Philippine	3.9	9.0	23.6	1.8	6.1	16.6		
Thailand	2.2	3.4	28.1	0.8	2.0	18.9		
Myanmar	1.2	10.7	39.6	1.2	5.3	38.2		

B) Current situation of SME sector in Bangladesh:



Present government has identified the SME sector as a potential sector and is making every effort to take this sector forward with the help of various banks and financial institutions through Bangladesh SME Foundation. In the SME development Policy





Current situation of SME Sector in

Bangladesh:

2005 identified 11 industries as booster sectors and divided them into four categories (medium, small, micro and cottage) according to size. Present government is continuing its efforts to expand the sector by dividing into several sub-sectors for development of potential SME sector by increasing credit assistance, providing various incentives including cash incentives against exports.

According to Economic Census 2013, there are 45,14,091 industries of all kinds in the country, of which cottage industries were 36,51,253 (80.89%), micro industries 80,423 (1.78%) and small scale industries 770,063 (17.05%), medium industries 7,109 (0.16%) and large scale industries were 5,247 (0.12%). Total employment in industrial sector at that time were 190,62,978, of which 42.03% was in cottage industries, 2.55% in micro industries, 33.52% in small scale industries, 3.70% in medium industries and 18.20% in large scale industries.

Figure-3.4 (2): Number of all types of industrial establishments in the country during 2012-13 and number of people working in them: -

Category of Establishments	No. of Establishments	Total Persons Engaged	Employment As % of Total	Average Employment per Establishment
Cottage	36,51,253	80,12,684	42.03 %	2.19 Persons
Micro	80,423	486 ,765	2.55 %	6.05 Persons
Small	770,063	63,90,577	33.52 %	8.30 Persons
Medium	7,109	706,111	3.70 %	99 Persons
Large	5,247	34,66,841	18.20 %	661 Persons
Total:	45,14,091	190,62,978	100 %	4.22 Persons

Source: BBS

Figure-3.4(3): No. of Permanent Establishments and Employments in Industrial Sector by 2012-13:



Source: BBS

1) Size of Manufacturing Sector:



Size and expansion of a country's manufacturing sector is crucial in judging a country's economy. Importance of manufacturing sector is immense to meet domestic demand as well as to strengthen foundation of the country's economy by





Size of Manufacturing sector:

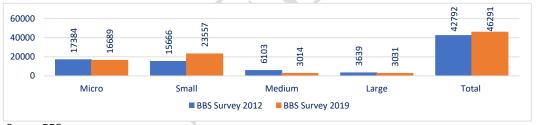
increasing export earnings. In Bangladesh, present government has given due importance to expansion of productive sector and has continued its efforts to expand the sector by increasing funding and other facilities. But surprising thing is that number of industries in the productive sector in the country has decreased in the last few years. Analysis of the size of country's productive sector over the past decade shows that between 2012 and 2018 (seven years), number of microindustries in the productive sector decreased by 695, during this period number of small-scale industries increased by 7,891, number of medium-sized industries decreased by 3,089 and large-scale industries decreased by 608. In other words, although number of small scale industries in the country has increased in the last decade, but number of micro, medium and large scale industries has decreased at a significant rate.

Figure-3.4 (4.a): Size of Manufacturing sector in the country during F.Y 2012-13 to 2018-19:

Characteristics		Industrial Su	r vey : 2018- 20	19	Industrial Survey 2012-13				
Class of Industry	No. of Estab lisments	People Engaged	Net Fixed Asset (In Crore TK.)	Value of products (In Crore TK.)	No. of Estab lishmen ts	People Engaged	Net Fixed Asset (In Crore TK.)	Value of products (In Crore TK.)	
Micro (TPE 0-24)	16,689	263,720	8,365.7	31,215.2	17,384	271,644	4,652.8	27,581.8	
Small (TPE 25-99)	23,557	11,27,841	65,123.2	195,448.7	15,666	738,801	28,333.6	120,326.7	
Medium (TPE 100-250)	3,014	461,142	28,963.4	33,007.2	6,103	10,41,220	28,690.1	140,834.2	
Large (TPE 250+)	3,031	40,27,141	222,255.9	586,735.1	3,639	29,64,272	57,134.2	250,747.8	
Total :	46,291	58,79,844	324,708.2	846,406.2	42,792	50,15,937	118,810.8	539,490.5	

Source: BBS

Figure-3.4(4.b): Size and Growth of manufacturing Sector during F.Y 2012-2019:-



Source: BBS

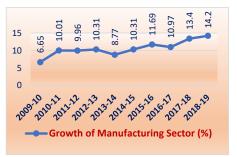
Growth of Mfg. Sector:

2) Growth of Manufacturing sector:

In the manufacturing sector, growth rate of small, medium and large scale industries was 6.65% in FY 2009-10, which stood at 14.20% in FY 2018-19. During this period, average growth in the manufacturing sector was 10.63%.

Growth in the country's productive sector has been fluctuated between 7% and 10.50% for the past two decades. High growth in the productive sector is essential to increase dynamism of the country's overall economy by increasing industrial production, because production is the only improvement Figure-3.4 (5).

Figure-3.4 (5): Scenario of expansion in productive sector during F.Y 2009-10 to 2018-19: -



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Source: MOF

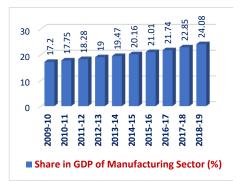




3) Share of Manufacturing Sector to GDP:

During financial year 2009-10 to 2018-19, share of manufacturing sector in GDP of small, medium and large scale industries in the country was limited to 17% - 24%. Share of manufacturing sector in GDP stood at 24.08% in FY 2018-19, which was 17.2% in FY 2009-10 Figure-3.4 (6). But in other developing countries of the world, only share of SME sector in GDP is above 40% on average. In 2019, share of SME sector in GDP is 25% in Bangladesh, 38.9% in Malaysia, 45% in India, 50% in Singapore and 51% in South Korea.(Researchgate)

Figure-3.4 (6): Share of the productive sector in GDP during F.Y 2009-10 to 2018-19: -



Source: MOF

Share of Mfg. sector to GDP:

4 SME Sector Financing:

In recent years, SME sector has been identified as one of the most promising sectors in the economic development of Bangladesh and government has increased funding in recent years considering its rapid development priorities. A review of loans disbursed to this sector during financial year 2011 to 2018 (eight years) shows that amount of loans disbursed in the fiscal year 2011-12 was Tk. 55,256 crore, which stood at Tk. 155,809 crore in FY 2018-19. During these eight years, credit flow to this sector has increased by an average of about 15% per annum.

Rate of loans disbursed in three sub-categories (Services, Manufacturing and Trading) is 5% - 7% in service sector, 28% - 30% in the manufacturing sector and 62% - 65% in the trading sector. This means that the rate of loans disbursed in the manufacturing sector is about half of the loans disbursed in the trading sector. According to World Bank and other international organizations, rate of financing in the SME sector in Bangladesh is significantly lower than other developing countries in South Asia. Following is a summary of loans disbursed in CMSME sector during financial year 2011 to 2018 (eight years).

SME Sector Financing:

Figure-3.4 (7): Scenario of loans disbursed by banks and other financial institutions in the SME sector during financial year 2011-12 to 2018-19:-

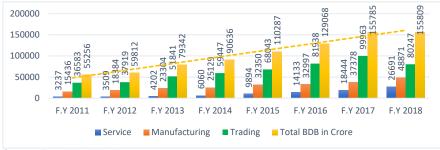
Period	Disbu	ırsement Sub-Cat	egories	Total	Increase
Periou	Service	Manufacturing	Trading	Taka	(%)
F.Y 2011	3,237	15,436	36,583	55,256	3.20%
F.Y 2012	3,509	18,384	37,919	59,812	8.25%
F.Y 2013	4,202	23,304	51,841	79,346	32.66%
F.Y 2014	6,060	25,129	59,447	90,636	14.23%
F.Y 2015	9,894	32,350	68,043	110,287	21.68%
F.Y 2016	14,133	32,997	81,938	129,068	17.03%
F.Y 2017	18,444	37,378	99,963	155,785	20.70%
F.Y 2018	26,691	48,871	80,247	155,809	0.02%

Source : Bangladesh bank SME Dept. CMSME : Cottage, Micro, Small and Medium Enterprise.





Figure-3.4(8): Graphical presentation of the information shown in Figure-3.4(7) above:-



Source: Bangladesh bank

C) Obstacles to development of SME Sector:

Although remarkable progress has been made in alleviating poverty by creating new jobs through sustainable development of SME sector in developing countries of the world, compared to that, Bangladesh is still lagging far behind in this regard. In developing countries, SME sector contributes an average of 50% of total employment and 40% to GDP, but in Bangladesh it is still limited to 30% and 25%. Needless to say, despite ample potentials for development of SME sector available in Bangladesh, desired progress is being delayed due to inability to utilize those potentials properly. SME sector is lagging behind in Bangladesh due to urban based SME sector, inadequate financing and financing complexity in this sector, business and technical inefficiency and other reasons.

Following are notable obstacles to development of SME sector in Bangladesh:

- City based SME sector: Facilities provided by the government for expansion of SME sector in Bangladesh are city based, so expansion of this sector is limited to urban areas only.
- 2. Lack of infrastructure to build industries at upazila level: As a result of lack of infrastructure or industrial parks to build industries at upazila level, only city based businesses and industries are developing in the SME sector. As a result, educated youth at village level do not have opportunity to start business unless they come to city, which is one of the major obstacles to expansion of SME sector in the country.
- 3. Lack of business skills: Generally, small and medium capital entrepreneurs invest in SME sector, most of whom are business unskilled.
- 4. Lack of technical skills: In the current era of free economy, it is difficult to survive in competition without advanced technology industry. It is almost impossible for entrepreneurs to set up and run advanced technology industries without adequate ideas and technical skills about their own business, which requires government backing and technical assistance, which is still inadequate in this country.
- 5. Lack of skilled workers: There is a dearth of skilled workers in the SME sector, so desired productivity has not yet come in this sector.
- 6. **Inadequate financing:** Since low capital entrepreneurs invest in SME sector, adequate financing is required for rapid expansion of this sector. Although

First Edition: August, 2022

Obstacles to the development of



small and medium enterprises:

Strategies for Economic Development of Bangladesh



- government is providing financial assistance through banks and other financial institutions, it is still insufficient compared to demand.
- 7. **Complexity of financing:** Since there is no provision for collateral for financing in the SME sector, financing institutions suffer from uncertainty in financing and show reluctance to finance in SME sector.
- 8. **Inadequate training system for entrepreneur development:** There is a system of training for entrepreneurship development in SME sector at government and private level in the country, but it is insufficient.
- 9. Lack of obligation to control quality of products: In an open market economy, product quality is a big issue. As there is no official obligation to control quality of products produced in the SME sector, many entrepreneurs have failed to capture market for their products in the open competition.
- 10. Lack of knowledge about exports among entrepreneurs: Due to lack of knowledge about exports, SME entrepreneurs fail to capture market for their products to export them abroad, as a result of which they are deprived of getting a fair price for their products and face losses.
- 11. Lack of business attitude among educated class: Due to weakness of the educated youth towards jobs, less entrepreneurs are being created in SME sector in the country, which is hindering expansion of this sector.
- 12. Lack of visionary and realistic government plan: SME Policy 2005 is in progress for development of SME sector in the country and SME Policy 2019 (Draft) is awaiting final approval. Needless to say, those policies must be farsighted and realistic for sustainable development of SME sector in the country, so that SME sector is able to play a significant role in the country's economy.

D) Recommendations for SME Sector Development:



Considering cheap land, cheap labor, low capital and other aspects, establishment of small and medium industries is much easier at Upzila level than in cities. Communication system of Upazilas is now better than ever before and power system has also improved considerably meantime there. Moreover, financial well-being of people in rural areas has increased, many people in rural areas have bank deposits, but due to lack of adequate business knowledge, all those people are afraid to invest in industrial sector. If the government takes steps to create a conducive environment for establishment of small and cottage industries at upazila level and provide necessary assistance to investors, then financially well-off people of villages will



Recommendations for SME Sector Develop-ment:

Strategies for Economic Development of Bangladesh



become interested in investing in this industry effortlessly and success in this field will make the country's economy much faster and more sustainable.

Possible steps for development of small and medium Enterprises in manufacturing sector at upazila level: -

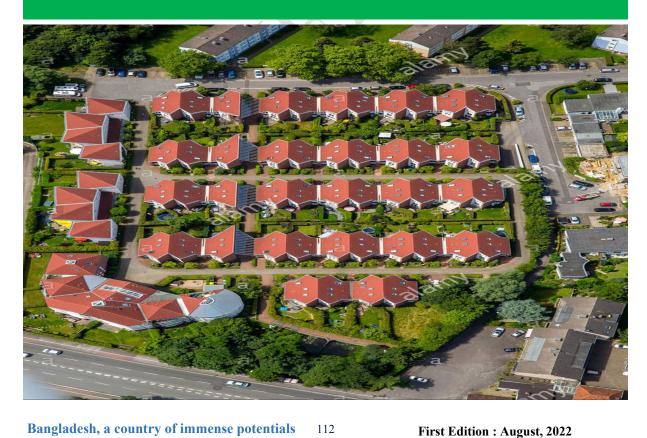
- 1. Formulation of far-sighted and pragmatic policies for sustainable development of the SME sector across the country.
- Decentralization of small and medium industries by setting up self-contained "Upazila Industrial Park" in each Upazila Sadar, where following facilities will be available: -
 - Construction of necessary infrastructure like roads, electricity, water, gas etc. to make upazila Industrial Park self-sufficient.
 - Supply of electricity, gas and water at subsidized prices to industrial establishments located in upazila Industrial Park.
 - Providing export benefits, Tax and all other industrial benefits.
 - Provide duty free and minimum VAT rate facility on import of raw materials and capital machineries.
 - Arrangement of financing at low interest and easy terms through designated banks for setting up industries in SME sector.
- 3. Establishment of "One Stop Industrial and Technical Assistance Cell" in every Upazila Sadar, so that allotment of industrial plots, necessary licenses, clearances and all activities and advice related to industrial establishment are available in one place, as well as training, co-operation and supervision on the following issues: -
 - Adequate publicity and promotion among financially well-off people at village level for setting up industries under small and medium enterprises.
 - Provide necessary training to those interested in setting up small and medium scale industries at upazila Industrial Park, provide technical assistance for marketing of manufactured goods, export related training and where necessary, encourage entrepreneurs to provide financial assistance through designated banks.
 - Extensive training facilities at upazila level to build a skilled workforce in the SME sector.
 - To provide training on production of export oriented products and making arrangements for purchase of manufactured goods locally by the government at fair prices.
- 4. Strict restrictions on quality control of products produced in this sector.
- 5. Eliminate existing complexities of financing in the SME sector by banks and other financial institutions, so that financing in this sector will be easy and transparent.
- 6. Organize regular seminars, symposiums etc. at the initiative of Upazila Industrial and Technical Cell to create business trend among educated youth.
- Improving quality of goods produced in the SME sector as well as improved and attractive packaging to survive in competition with products of other countries.





Chapter: 3.5

Rural Housing and Infrastructure **Development**







Rural Housing and Infrastructure development.

Topics Covered in the Chapter

Rural Housing and Infrastructure Development:

- A) Rural Housing Situation in Bangladesh
 - 1. Growing population growth.
 - 2. Loss of arable land due to unplanned construction of houses.
 - 3. Current structure of Residential houses in the country.
- B) Protection of Arable land and Dev. of Rural Environment.
- C) Introduction of planned Rural Housing System.
- D) Long-term effects of implementing rural housing policy.







Rural Housing and Infrastructure Development:



Rural housing system is a manifestation of rural living standards and overall economy of the country. Because, improved housing is one of the prerequisites for a developed environment, which is essential for formation of a developed nation. In a densely populated and agrarian economy like Bangladesh where about 73% of total population of the country live in villages, rural housing system should be orderly and developed to improve living standards of this large population. According to BBS Survey 2016, 5.27% of the houses in rural and remote areas of Bangladesh are still Shack / hut, which is really inappropriate for a developing country. Due to poor quality of housing in the remote areas, innumerable houses are destroyed every year due to various natural calamities and countless families become destitute, which is another reason for increasing poverty rate in the country.

Rural Housing and

Infrastructure

Development:

As Bangladesh soon to move from a low-income country to a middle-income country and is working towards reaching high-income countries by 2041, it is imperative to bring about significant positive changes in the living standards of larger rural population including housing. Improved housing improves people's outlook and makes them trying to improve living standards, which is crucial for overall development of the country. Improved

housing at village level requires improved infrastructure including roads, electricity, modern farming systems, education and health. All these infrastructures are gradually improving at village level in Bangladesh, as a result of which people in rural areas are trying to improve their living standards in recent times, they are now more aware than before about improved housing, improved medical care and children's education etc.



First Edition: August, 2022

In recent times, Bangladesh has made significant progress in terms of overall economic progress. A number of mega projects for development of power, communication and transport sectors have already been implemented and many





more are underway. In addition, per capita income has increased in the country and there has been positive progress in education and many other social and economic indicators. Most importantly, all these developments of Bangladesh have come to notice of the world and Bangladesh has already gained special recognition as a country of self-sufficient economy. Now is the time to focus on building a developed nation, which requires increasing civic amenities at village level and moving forward in building a developed country and nation by ensuring improved housing in a planned way for the majority of people of the country living in villages.

A) Rural Housing Situation in Bangladesh:

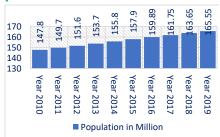


1) Growing population growth:

Country's population continues to grow, at the same time, housing demand of the growing population is increasing. A comparative analysis of population growth of the country during period of 2010-2019 (10 years) shows that average population of the country is increasing every year by about 2.00 lakh, as well as housing demand of this increasing population is increasing Figure-(3.5 (1). Since lion's share of people live in rural and remote areas, new houses are constantly being added there to keep pace with population growth. As a result, arable land is constantly being destroyed, which in the near future will have a huge negative impact on the food security of growing population of the country.



Figure-3.5 (1): Scenario of population growth in the country during the period 2010-2019: -



Source : CEIC Data

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Growing population growth:





2) Loss of arable land due to unplanned houses in villages:

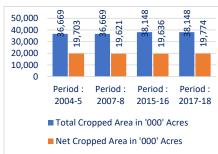


In most rural areas, marriages of boys and girls are arranged at a much younger age. As the population growth rate there is higher than in city, it is very common for them to have an average of 4-5 or more children in each family. After marriage of the boys, every family needs extra houses and in order to provide additional housing, many unplanned houses are being built on the cultivable lands in rural areas continuously. On the one hand, these unplanned houses are ruining traditional beauty of the villages and on the other hand, construction of houses everywhere is destroying a lot of cultivable land every year and causing waterlogging and environmental disasters. If this situation continues, amount of cultivable land in the country will decrease rapidly and it will become impossible at one stage to produce enough food for this growing population of the country and soon the country will be forced into a food crisis.

Loss of arable land due to unplanned construction of houses and factories:

Analysis shows that total and net cultivable land in the country during period from 2004-5 to 2017-18 (14 years), in the fiscal year 2004-5, total and net cultivable land in the country was 366.69 lakh acres and 197.03 lakh acres respectively. In 2017-18 financial year, total and net cultivable land in the country stood at 381.48 lakh acres and 197.78 lakh acres respectively. In other words, total cultivable land in the country has increased to 14.79 lakh acres during these 14 years period, so the amount of net cultivable land in the country should be 211.82 lakh acres in 2017-18. But in 2017-18, amount of net cultivable land in the country stood at 197.74 lakh acres. It means, even though total cultivable land in the country has increased a little during these 14 years, but net cultivable land has decreased by (211.82-197.74) = 14.08 lakh acres, an average decrease of 1.00 lakh acres (0.51%) per year **Figure-3.5** (2).

Figure-3.5 (2): Scenario of increase and decrease of total and net cultivable land in the country during 2004-5 to 2017-18:-



Source: BBS Agricultural Yearbook







3) Current structure of Residential houses in the country:

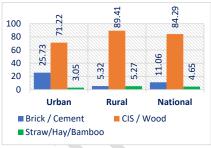
Structure of homestead reflects family, social, and overall environmental standards of the country as a whole. Improved family and social environment is one of the major prerequisites for building a developed nation. In line with overall progress of the country, it is imperative that structure of homesteads across the country be planned and modernized, which will enhance the prestige of Bangladesh in the world. At city level, although housing structure is gradually improving, majority of rural and remote housing structures are still in a state of decline. As a result, floods and other natural disasters destroy countless homes in rural and remote areas every year, leaving thousands of families destitute, which is a major blow to the country's overall economy. Without long-term government planning and intervention, it is difficult to expect sudden improvement in the structure of housing at village level.

According to HIES 2016, 84.29% of houses in the country are made of tin / wooden canopy, 4.65% of huts and 11.06% of houses are made of brick / cement.

of Residential houses in the country:

Current structure





Source: BBS

In rural and remote areas 89.41% of houses have tin / wooden canopy, 5.27% of huts and 5.32% of houses have brick / cement roof. In the city, 68.28% of households have tin / wooden canopy, 3.05% of huts and 28.71% of houses have brick / cement roof. In other words, out of 28.26 million households in rural areas of the country, 1.49 million households are still slums, which is really inappropriate for a developing country.

B) Protection of Arable land and Dev. of Rural Environment:

With increase in population in the country, number of families are increasing and number of unplanned houses are constantly increasing to meet housing needs of additional families, so that a huge amount of arable land is being destroyed every year. Building houses in rural areas in a planned manner under government policy will increase food production in the country by protecting huge amount of crop land lost due to unplanned construction of houses every year, on the other hand, it will bring about a drastic change in the social environment in rural areas. Resulting, people at village level will get opportunity to live in improved housing facilities as well as beauty of the villages will increase to a great extent which will help to make the people village oriented and image of the country will be much higher.

Scenario of declining food production in the country due to loss of agricultural land every year: -

- During 2004-5 to 2017-18, cultivable land decreased by 14.00 lakh acres.
- Due to loss of arable land considering two crops, less food is produced every year (14.00 lakh acres x 1.71 M.T x 2)....... 47.8 lakh MT.



Protection of Arable land and Development of Rural **Environment:**

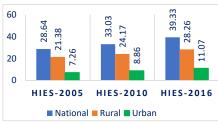
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Analysis shows that total number of households in the country increased during period of 2005-2016 (12 years), in 2005, total number of households in the country were 28.64 million, in rural areas 21.38 million and in urban areas 7.26 million.

In 2016, total number of households in Figure-3.5 (4): Scenario of family the country stood at 39.33 million, 28.26 million in rural areas and 11.07 million in urban areas. In other words, number of households in the country has increased by 10.69 million during last 12 years, an average of 8,90,833 families have increased every year. During this period, number of households at village level increased by 6.88 million and by 3.81 million in urban areas.

growth in villages and towns during 2005-2016:-



Source: BBS

C) Introduction of planned Rural Housing System:



"Rural Housing Policy" is required for development of rural housing system in line with overall economic progress of the country and under that policy, housing system at village level will be restructured and new housing will be created in future. National Housing Policy 2016 is in force in Bangladesh, main goal of which is to "facilitate suitable housing for people of all levels and improve housing and settlements to improve housing and work environment on the basis of sustainable development and equality and everybody have equal rights of minimum services and opportunities of health, safe with affordable prices".

It is necessary to formulate and implement a "Rural Housing Policy" for development of housing system at the village level, giving priority to main objectives of the current housing policy, which will include the following basic issues: -

- 1. Design of modern rural housing project: Design of houses under the project and all related rules and regulations.
- 2. Marking the place: There will be a system of marking the land for building a certain number of houses in a specific area in each village through Upazila land office. Suppose there will be a maximum of 20 houses in a village and land will be fixed up based on maximum of 2.50-3.00 kathas for each house.

First Edition: August, 2022

Introduce planned Rural Housing System:









Modern Village Structure – 2



Modern Village Structure - 3



Modern Village Structure - 4

- 3. Construction of new houses: In case of building new house for additional family members, to impose obligation to construct 2/3/4 storied building as per requirement in place designated by the land office without giving permission for construction of separate houses.
- 4. Discourage construction of raw houses: Construction of houses/hut with bamboo, cane and mud should be discouraged. Because raw houses are destroyed by storms every year and many families become homeless and faces financial hardship and in many cases it takes a long time for them to overcome this stress.
- 5. Provision of clearance: Anyone wishing to construct a house in a specified design in the specified area should apply for a house construction clearance with the designated officer of the upazila.
- 6. Arrangement of bank loan:
 There will be provision of medium or long term loan in case of need for construction of house in the place prescribed by the land office and in case of determining the amount of bank loan, clearance obtained from land office for construction of house will be considered as main document.
- 7. Development of roads and infrastructure: After decided the location of dwelling house project by the land office, construction of roads, power and other infrastructure development in the project area in every village under government initiative.
- 8. Other issues required for project implementation.
- 9. If it is not possible to do it all over the country at a time, this project can be implemented gradually based on upazila.





D) Long-term effects of implementing rural housing policy :



Proper implementation of rural housing policy will bring rural and remote areas across the country under a planned, modern and improved housing system and next generation will have opportunity to grow up in this modern and developed environment. Growing up in an advanced environment, people possess advanced thinking consciousness and advanced ideology and have advanced ideas about life. There is no doubt that this project will play a leading role in bringing about a fundamental changes in the lives of backward rural people of this country. Following are some of the long-term results of rural housing policy implementation:

Long-term effects of implementing rural housing policy:

- 1. Villages and remote areas of the whole country will come under planned, modern and improved housing process, which is one of the features of a developed country.
- As a result of bringing innumerable houses scattered in rural and remote areas under the planned housing process, a large amount of cultivable land will come out in every village, which will make a unique contribution to food production.
- 3. As a result of construction of houses with weak infrastructure, rural people are at risk of natural disasters. By the implementation of rural housing policy, this risk will be completely eliminated.
- 4. Construction of new houses under this project will save a huge amount of arable land which lost due to unplanned construction of innumerable houses in the rural areas every year.
- 5. This will undoubtedly be a big step in gifting a beautiful and clean country to the next generation.

First Edition: August, 2022





Chapter: 3.6

Increase Higher Education Facilities at Upazilla Level







Increase Higher Education Facilities at Upazilla Level.

Topics Covered in the Chapter

- A) Increasing Higher Education facilities at Upazilla level.
- B) Contribution of education sector to GDP.
- C) Expenditure on education in proportion to GDP.
- D) Comparison with education expenditure of other countries.
- E) Inadequate ADP allocation in education sector.
- F) Growth of education sector.
- G) Literacy rate in the country.
- H) Current situation of education sector at a glance.
- I) Enrollment varies by village and cities.
 - 1. Enrollment, dropout and completion at Primary Level.
 - 2. Enrollment, dropout and completion at Secondary Level.
 - 3. Enrollment, dropout and completion at Higher Secondary Level.
 - 4. Scenario of Enrollment at Tertiary Level.
 - 5. Enrollment in various professional subjects.
- J) Reasons for declining enrollment from secondary to next levels.
- K) Special attention is urgent to the issues related to ensure quality education.
 - 1. Special emphasis on English education from primary Level.
 - 2. Inclusion of moral education in the curriculum.
 - 3. Imposing obligation to send every child to school at a certain age.
 - 4. Introduction of one-way education system.
- L) Recommendations for improving quality of education





Increasing Higher

ies at Upazilla

level:

Strategies for Economic Development of Bangladesh



A) Increasing Higher Education facilities at Upazilla level:

Education is recognized worldwide as one of the most powerful means of eradicating poverty and inequality and improving quality of life. As a result of progress in education increase people's intelligence, self-confidence, efficiency, values and social awareness at individual level and educated people are always striving to improve quality of life. Every educated person is able to engage himself in economic activities by creating new working scope and workplaces by utilizing his own education, intelligence and efficiency. Increased economic activity at individual level increases per capita income, then standard of living at family and social level improves, unemployment in the country decreases which has a huge positive impact on the country's economy, which is essential for sustainable economic development. That is why education rate is almost 100% in all economically prosperous countries of the world.

Education facilit-

Needless to say, main goal of the state should be to build every citizen of the country irrespective of village and city educated first in order to build the economy of this country prosperous quickly. Because, without formation of an educated nation, development is not possible at individual level, family, society and state level. When children of each family will get opportunity to become educated and efficient, they will be able to improve their destiny by using their education and intelligence in the course of life. As a result, financial well-being and social awareness will increase in every family, which is able to bring about a revolutionary changes in the macroeconomic and social development of the country.

Therefore, it is important to increase quality education and rate of adequate higher education in the country to meet the challenges ahead, because in future, they will take the helm of the country. In order to achieve this goal, it is necessary to give equal importance to both urban and rural areas, especially at village level, so that rate of higher education can be adequately increased, as 73% of the country's population lives in rural areas. Increasing the rate of higher education at village level means increasing the rate of higher education in the country and improving living standards of the largest population in the country, which is essential for development of a sustainable economy.

B) Contribution of education sector to GDP:

Although education sector of post-independence Bangladesh as a whole has gradually expanded slightly, it is fact that the sector has not expanded in line with the country's GDP and economic expansion. As a result, share of education in the country's GDP has been limited to 2% -2.50% for a long time. During financial year 1994-95, share of education sector in GDP was 2.11%, in 1999-00 it was 2.20%, in 2004-05 it was 2.46%, in 2009-10 it was 2.23% and in 2019-20 it was 2.46%. During the last decade (2010-11 to 2019-20), contribution of education sector to GDP was 2.34% on average Figure-3.6 (1).

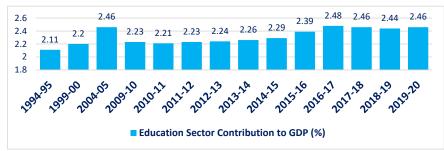


Contribution of education sector to GDP:

Strategies for Economic Development of Bangladesh



Figure-3.6 (1): Scenario of contribution of education sector in GDP during period from 1994-95 to 2019-20:-

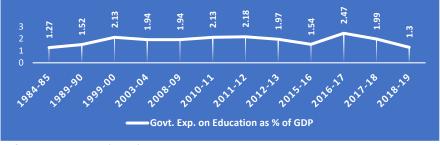


Source: BD Economic Review

C) Expenditure on education in proportion to GDP:

In recent years, size of the national budget and GDP has increased several times, as well as scope of government revenue and expenditure. As such, it is natural that government expenditure will increase proportionately in all sectors including education. But in reality, there has been a deviation in the education sector. During last four decades from 1980 to 2019, education expenditure as a percentage of GDP ranged from a minimum of 1.27% to a maximum of 2.47%. Expenditure on education as percentage of GDP was 1.27% in FY 1984-85, which stood at 1.3% in FY 2018-19. It means that even though the overall expenditure on education has increased during these four decades, expenditures on education in proportion to GDP has not increased at all **Figure-3.6** (2).

Figure-3.6 (2): Expenditure on education in proportion to GDP during financial years 1979-80 to 2018-19:-



Source: BD Economic Review

D)Comparison with education expenditure of other countries:

Bangladesh still lags far behind the developing countries of the world and even most of the countries in South Asia in terms of education expenditure to GDP. According to 2019 data, expenditure on education as percentage of GDP was 1.3% in Bangladesh, in the same period which was 1.9% in Myanmar, 2.1% in Sri Lanka

First Edition: August, 2022

Expenditure on education in proportion to GDP



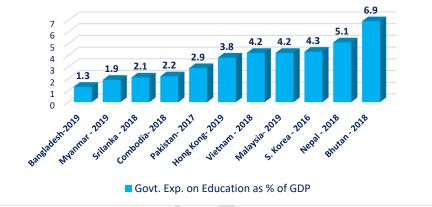
Comparison with Education expenditure of other Countries:

Strategies for Economic Development of Bangladesh



(2018), 2.2% in Cambodia (2018), 2.9% in Pakistan (2017), 3.8% in Hong Kong (2019), 4.2% in Vietnam (2018),) 4.2% in Malaysia (2019), 4.3% in S. Korea (2016), 5.1% in Nepal (2018) and 6.9% in Bhutan (2018) **Figure-3.6** (3).

Figure-3.6 (3): Scenario of expenditure on education in proportion to GDP of Bangladesh and a few South Asian countries by 2019:-



Source: World bank data

E) Inadequate ADP allocation in education sector:

In order to build a developed nation, it is essential to increase rate and quality of education in the country, for which it is necessary to make the education system upto-date. This requires increasing number of educational institutions in proportion to population of the country as well as training of teachers and other areas related to education, such as introduction of modern education system, reduction of education cost, introduction of vocational education system and quality development and expansion in all related fields including increasing research and development at higher education level, which requires adequate investment in the education sector. In the past, adequate investment has not been possible in modernizing the education sector of the country, as a result of which timely development of this sector has not been possible. Needless to say, overall development of the country is impossible without timely development of the education sector.



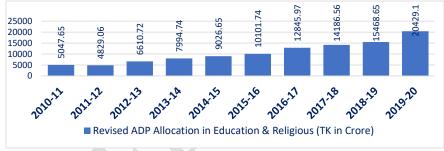
Inadequate ADP allocation in education sector:

Strategies for Economic Development of Bangladesh



It is true that in recent years annual development expenditure in education sector in the country has increased more than ever before. However, It's a matter of watching whether this is consistent with size and expansion of the education sector, total government expenditure and the country's economy and GDP growth. In the last decade (2009-10 to 2018-19), analysis of annual development expenditure in the education sector of the country shows that during financial year 2009-10, annual development expenditure in the education sector was Tk 43.05 billion, which is 15.11 percent of the total ADB allocation in that fiscal year. Annual development expenditure in the education sector in FY 2018-19 stood at Tk. 149.34 billion, which is 8.63% of the total ADP allocation in that fiscal year. Although annual development expenditure in education sector has increased overall during these ten years, but expenditure in education sector has decreased considerably as compared to increase in the size of national budget and GDP during this period Figure-3.6 (4).

Figure-3.6 (4): Scenario of Annual Development Expenditure in the Education Sector during period from 2009-10 to 2018-19:-

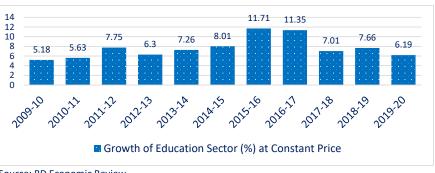


Source: BD Economic Review

F) Growth of education sector:

Growth analysis in the education sector for the period from 2009-10 to 2019-20 shows that growth in other years except 2015-16 and 2016-17 has fluctuated between 5% -8%. In 2015-16 and 2016-17, growth was 11.71% and 11.35% respectively, which is almost double that of other years during this period. In the last decade (2009-10 to 2019-20) average growth in the education sector was 7.64% Figure-3.6 (5).

Figure-3.6 (5): Growth of education sector during F.Y 2009-10 to 2019-20:-



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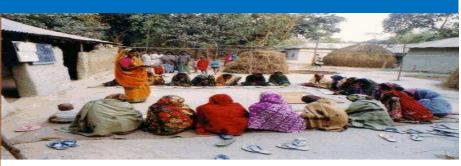
Source: BD Economic Review

Growth of education sector:









It is true that in the last two decades, literacy rate among people above 15 years of age has increased at a significant rate in the country. Literacy rate of population above 15 years of age was 47.49% in 2001, it has stood at 74.68% by 2019, which is undoubtedly a remarkable progress. However, it must be understood that no nation can be educated just by increasing the literacy rate. We need to build a nation educated in real education, who are able to contribute to development of the country as well as improve their quality of life by utilizing education they have acquired.

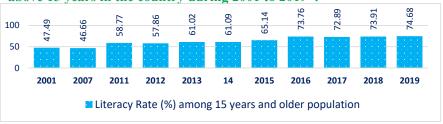
Question is at what level of education will a person be able to improve quality of life by applying the education he has acquired and he can be called educated by the standards of this country? Principles that are currently being followed in calculating rate of education in this country are: -

- 1) A class that can only recognize letters and write names.
- 2) Class that have completed primary education.
- 3) Class that have completed secondary education.
- 4) Class that have completed higher secondary education.
- 5) Educated in undergraduate or higher education.

Reality is that according to the standards of the country's education system, it is very difficult for a person to find a job on his own and to be able to adapt to work until he has completed at least a secondary or equivalent education. Especially in this age of information technology, it is even more difficult. Moreover, in addition to compulsory general education, some technical education is required to prove oneself qualified in the workplace. **Therefore, it has become imperative for those who are unable to pursue higher education to have a minimum of two years of technical education in addition to obtaining a secondary or equivalent certificate.**

literacy rate in the country:

Figure-3.6 (6): Scenario of increase in the literacy rate of population above 15 years in the country during 2001 to 2019:-



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Source: Globaleconomy.com





H) Current situation of education sector at a glance :



According to Article 15 of the Constitution of Bangladesh, basic issues related to the quality of life of citizens, such as food, shelter, education and health are part of the state policy. Government is always responsible for the quality development of all these sectors related to improvement of living standards of citizens.

Ongoing education system in Bangladesh is not very old. Until 1947, education system of the country was under British control. At that time English was included in the curriculum as an essential subject in secondary and higher secondary education. Later, during rule of Pakistan, Urdu and religious education were given priority in the education curriculum, which had a major negative impact on the rate and quality of education in the country. After gaining independence in 1971, Bengali language was identified as the main medium and a secular education system was introduced in the country, which has been continued to date. At present, education system is running in the country under the Education Policy 2010, structure of which is as follows: -

1	Elementary Education	:	Till Class VIII
2	Secondary & Higher Secondary	:	Grade IX to XII
3	Higher Education	:	Bachelor's, Master's and Doctoral
			Degrees.

Notes:

- 1. At the Elementary and Secondary level, separate Madrasa Education System is being continued beside general education.
- 2. After Secondary Education, technical and vocational education is in vogue, where diploma courses in various subjects are completed.

According to the current education system, number of educational institutions, teachers and students of all levels in the country by 2018 is highlighted through **Figure-3.6** (7).

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Current situation of education sector at a glance:





Figure-3.6 (7): Number of educational institutions, teachers and students in the country by 2018 :-

Tune of Education	Mgt.	Institutions, Teacher & Students				Indicators				
Type of Education		No. of Institutions	No. of Teachers	No. of Students	TSR	SPI	TPI			
(1) Primary Education										
	Public	65,529	348,867	130,34,723	37	199	5			
Primary Education	Private	68,618	336,533	43,03,377	12	63	5			
	Total:	134,147	685,400	173,38,100	25	129	5			
(2	(2) Secondary and Higher Secondary level Education									
Secondary	Public	663	13,006	660,844	51	997	20			
Education	Private	19,802	221,159	98,14,256	44	496	11			
Ludcation	Total	20,465	234,165	104,75,100	45	512	11			
	Public	673	27,913	21,94,430	79	3,261	41			
College Education	Private	3,822	95,605	20,84,011	22	545	25			
	Total	4,495	123,518	42,78,441	35	952	27			
Madrasah Education	Public	3	60	6,714	112	2,238	20			
IVIGUITUSUIT EGGCGCIOTI	Private	9,291	109,858	24,71,248	22	266	12			
	Total	9,294	109,918	24,77,962	23	267	12			
Professional	Public	79	4,027	24,071	6	305	51			
Education	Private	346	5,240	97,417	19	282	15			
	Total	425	9,267	121,488	13	286	22			
	Public	84	1,345	18,580	14	221	16			
Teacher Education	Private	132	914	6,166	7	47	7			
	Total	216	2,259	24,746	11	115	10			
	Public	866	11,423	329,005	29	380	13			
Technical Vocational	Private	5,999	39,508	738,479	19	123	7			
	Total	6,865	50,931	10,67,484	21	155	7			
	Public	2,368	57,774	32,33,644	56	1,366	24			
Total (Secondary &	Private	39,392	472,284	152,11,577	32	386	12			
Higher Secondary)	Total :	41,760	530,058	184,45,221	35	442	13			
(3) University Education										
	Public	37	13,799	676,623	49	18,287	373			
University	Private	103	15,575	351,691	23	3,414	151			
	Total:	140	29,374	10,28,314	35	7,345	210			

Source: BBS







I) Enrollment varies by village and cities:



Analysis of enrollment rates at different levels of education in the country shows that while enrollment rate in grade I to V is close to 52%, enrollment rate at college and tertiary level is significantly lower. On the other hand, although enrollment in grades 1-10 is slightly higher at village level than at the city level, rate of puncture at college and tertiary level is alarmingly lower at village level than in the city, which is almost half.

By 2016, enrollment rate in grade I to V class was 51.28% nationally, 52.90% in rural areas and 46.49% in urban areas. Enrollment rate in 6th-10th class is 26.43% nationally, 26.66% in rural areas and 25.74% in urban areas. Degree / equivalent registration is 5.69% nationally, 4.58% in rural and 9.0% in urban. Post graduate, doctor, engineer, diploma, etc., there is a wide variation in registration at village and city level. Needless to say, 73 per cent of the country's population lives in rural areas, so it is not possible to increase rate of higher education nationally unless the rate of registration for higher education in rural areas is increased.

Enrolment varies by village and cities:

Figure-3.6 (8): Scenario of enrollment at different levels of education in rural and urban areas by 2016:-

INDEX	HIES 2016			HIES 2010			
	National	Rural	Urban	National	Rural	Urban	
Class: I - V	51.28	52.90	46.49	42.70	44.87	37.48	
Class: VI – IX	26.43	26.66	25.74	39.03	40.05	36.57	
SSC / HSC / Equivalent	13.16	12.66	14.67	15.44	13.03	21.27	
Graduate / Equivalent	5.69	4.58	9.00	1.33	0.96	2.23	
Post Graduate	0.97	0.87	1.25	0.66	0.34	1.43	
Doctor	0.03	0.01	0.09	0.01	0.00	0.04	
Engineer	0.22	0.17	0.39	0.12	0.06	0.27	
Diploma / Vocational	0.98	0.89	1.25				
Others	1.22	1.26	1.12	0.70	0.70	0.72	
Total:	100	100	100	100	100	100	

Source: BBS





1) Enrollment, dropout and completion at Primary Level:

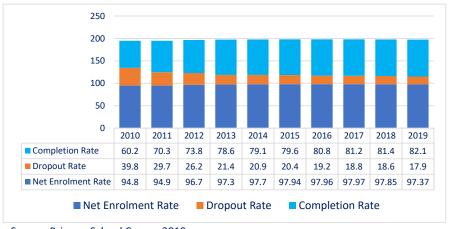


Review of primary level enrollment, dropout and completion rate of primary education in the country shows that in the last one decade, enrollment rate has remained steady as well as dropout rate has dropped, resulting in a significant increase in primary education completion rate in the country. In 2010, net enrollment rate at primary level was 94.60%, dropout rate was 39.80% and completion rate was 60.20%. In 2019, enrollment rate at primary level stood at 97.34%, dropout rate dropped to 17.90% and completion rate at primary education stood at 82.10%. During these ten years period, overall enrollment rate at primary level has increased by 2.54%, dropout rate has dropped to 21.90% and rate of completion at primary education has increased proportionately, which is a positive sign of increasing education rate in the country Figure-3.6 (9).

But, it is a matter of frustration that, according to the Bureau of Primary Education, 2.26% of children in the country are still deprived of access to primary education due to poverty, child labor and social constraints, as a result, a large portion of the

country's population remain still illiterate.

Figure-3.6 (9): Rate of Enrollment, dropout and completion at primary level In the last decade in the country:-



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Source: Primary School Census 2019

Enrolment. dropout and completion at **Primary Level:**





2) Enrollment, dropout and completion at Secondary Level:



Although, in addition to maintaining continuity in the enrollment rate in primary education in the country in the last decade, decreased student dropout rate in the middle and increase in primary completion rate, but, dropout rate at secondary and higher secondary level is still almost double than that of primary level. In 2008, net enrollment rate at secondary level in the country was 45.51%, dropout rate was 61.38% (male 56.61% and female 65.69%) and rate of secondary completion at that time was 38.62% (male 43.39% and women 34.31%). In 2017, net enrollment rate at secondary level stood at 63.74%, dropout rate at secondary level was 37.81% (male 33.43% and female 41.52%) and rate of secondary completion was 62.19% (male 66.57% and women 58.48%). During these ten years, enrollment at secondary level has increased overall by 18.33%, an average of 1.83% per annum. During this time dropout rate dropped to 23.57% overall, average annual drop to 2.36% and proportion of secondary school completion rate increased proportionately Figure-3.6 (10).

It is noteworthy that dropout rate at secondary level is much higher for female students than for male students. In 2008, overall dropout rate at secondary level was 61.38% (males 56.61% and females 65.69%), while dropout rate of female students at secondary level was 9.08% higher than males. In 2017, overall dropout rate at secondary level was 37.81% (male 33.43% and female 41.52%), at this time, dropout at secondary level was 8.09% higher for female than male.

Enrolment, dropout and completion at Secondary Level:

Figure-3.6 (10): Scenario of Enrollment, drop-out and Completion rate at secondary level during period of 2008-2017:-

Year	NER	Dropout (%)			Completion (%)		
		Total	Boys	Girls	Total	Boys	Girls
2008	45.41	61.38	56.61	65.69	38.62	43.39	34.31
2009	46.34	55.31	42.15	64.93	44.69	57.85	35.07
2010	47.65	55.26	57.29	53.57	44.74	42.71	46.43
2011	47.29	53.28	46.73	56.43	46.72	53.27	43.57
2012	49.67	44.65	34.9	52.36	55.35	65.10	47.64
2013	54.27	43.18	34.18	48.89	56.82	65.82	51.11
2014	-	41.59	34.52	47.67	58.41	65.48	52.33
2015	59.14	40.29	33.72	45.92	59.71	66.28	54.08
2016	65.22	38.30	33.80	42.19	61.70	66.12	57.81
2017	63.74	37.81	33.43	41.52	62.19	66.57	58.48

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Source: BBS Note: NER (Net Enrolment Rate)





3) Enrollment, dropout and completion at Higher Secondary Level:

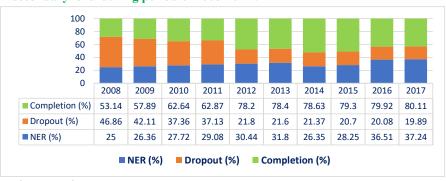


Enrollment rate at higher secondary level in the country is still about half that of secondary level, though the dropout rate at this stage is slightly lower than the secondary level. Matter of hope is that over the past decade (2008-2018) enrollment rate at higher secondary level, irrespective of village and city, has steadily increased and dropout rate at this stage has come down by almost half as compared to the past. As a result, rate of students completing higher secondary education in the country is gradually increasing.

During period of 2008-2017, review of enrollment at higher secondary level, dropout rate and completion rate at this stage shows that In 2008, enrollment rate at higher secondary level was 25%, at this stage dropout rate was 46.86% and completion rate was 53.14%. In 2017, enrollment rate at higher secondary level increased to 37.24%, dropout rate at this stage decreased to 19.89% and completion rate increased to 80.11%. During these ten years, enrollment rate at higher secondary level in the country has increased overall by 12.24%, an average of 1.22% per annum. During this period, drop-out rate at higher secondary level has decreased by 26.97% overall, average annual drop has decreased by 2.70% and proportion of graduating students has increased proportionally. In 2008, percentage of students completing higher secondary education in the country was 53.14%, in 2017 it stood at 80.11% **Figure-3.6 (11).**

Enrolment, dropout and completion at Higher Secondary Level:

Figure-3.6 (11): Rate of enrollment, drop-out and graduation at higher secondary level during period of 2008-2017:-



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Source: BBS





4) Scenario of Enrollment at Tertiary Level:

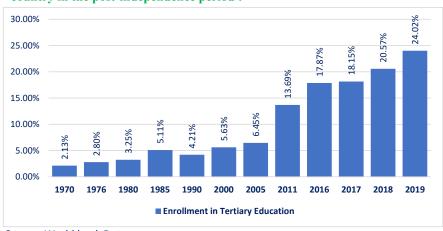


Enrollment rate in tertiary education in the country till 2000 was less than 5%, which was 10% in 2010 and stood at 24% by 2019, which is negligible in proportion comparing to the country's population Figure-3.6 (12).

Rate of Tertiary completed population in the country is only a quarter in rural areas compared to urban areas and in this case, participation of women is less than one third than that of men. According to LFS 2016-17 report, at that time, tertiary level completion rate in the country was 4.2%, of which 5.8% were males and 2.6% females. This rate was 2.3% in rural areas, of which males are 3.5% and females 1.2% and in urban areas it was 8.6%, of which males are 11.5% and females are 5.9%.

In terms of tertiary enrollment, Bangladesh still lags far behind the developing countries of the world and even most countries in South Asia. By 2019, enrollment rate in tertiary education in Bangladesh was only 24%, whereas, this rate was 29% in India, 31% in Maldives, 35% in Philippines, 36% in Indonesia, 43% in Malaysia, 49% in Thailand, 54% in China, 81% in Hong Kong, 89% in Singapore, 90% in Argentina and 108% in Australia. By 2019, average tertiary enrollment rate is 25% in South Asia, 75% in Europe and 39% worldwide Figure-3.6 (12).

Figure-3.6 (12): Scenario of progress in enrollment of tertiary education in the country in the post-independence period :-



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Source: World bank Data

Scenario of Enrolment at **Tertiary Level:**





5) Enrollment in various professional subjects:



In addition to general tertiary education, number of students enrolled in 425 public and private institutions for various professional subjects at tertiary level in 2018 were 121,488. Number of students studying professional subjects in the country were 69,943 in 2010 and 122,829 in 2015. In this case, number of students increased slightly in the period of 2010-2015, but number of students did not increase after 2015. Moreover, number of professional public educational institutions in the country is less than a quarter than that of private educational institutions, which is hindering the spread of professional education in the country. Needless to say, in order to increase quality services in various important sectors, it is necessary to create professional skilled manpower in line with population and economy of the country. Number of quality professional institutes and students studying at government and private levels in Bangladesh is less than required and in this case new manpower is also being created less, which is creating huge deficit in professional services Figure-3.6 (13).

Figure-3.6 (13): Scenario of student enrollment in various professional subjects in 2018 :-

C.I.	Time of locality since	No. of	Enrolment of Students			
S.L	Type of Institution	Institutions	Public	Private	Total	
1	Medical College	111	17,967	27,421	45,388	
2	Dental College	35	2,382	4,472	6,853	
3	Nursing College	71	1,475	2,951	4,426	
4	Homeopathic College	62	221	27,043	27,264	
5	Unani / Ayurvedic College	16	754	2,842	3,596	
6	Textile Technology College	11	832	364	1,196	
7	Leather Technology College	1	440	1	440	
8	Law College	80	1	23,395	23,395	
9	Art College	8	-	1,555	1,555	
10	Agriculture College	5	-	2,345	2,345	
11	Library Science	12	-	2,575	2,575	
12	Others	13	-	2,455	2,455	
	Total :	425	24,071	97,417	121,488	

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Source: BBS







J) Reasons for declining enrollment from secondary to next levels:

Although enrollment rate at primary level and number of students completing primary education in the country is satisfactory at present, but enrollment rate at secondary, Higher Secondary and tertiary level is not at all satisfactory as compared to other countries in South Asia. Moreover, rate of female students than male students in completing secondary to post-secondary education is alarmingly low. As a result, rate of higher education in the country is growing at a very slow pace, which will no doubt have a huge negative impact on production, administration and other sectors of the economy in future. Human resource development is paramount in accelerating the overall development of a country and higher education is one of the major prerequisites for human resource development. Desired social and economic development of the country is almost impossible without quality development of human resources.

Main obstacle to expansion of higher education in the country is low enrollment rate in secondary and higher classes, many of which reasons include financial insolvency, family and social constraints, religious prejudices and lack of quality education in the country and many others. Another notable reason for low enrollment in the above classes is that quality of English education in rural schools is very low. Practice of general knowledge and morality is completely absent there. Students in the upper classes have to face a lot of difficulties due to not knowing English well and poor test results, which has become a major obstacle in their higher education. As a result, enrollment rate in tertiary education in rural and remote areas is alarmingly low, with women accounting for less than half that of men, which is one of the major obstacles to increasing the rate of higher education in the country.

declining enrollment from Secondary to next levels:

Reasons for

Main reasons for declining enrollment from secondary to next levels : -

- 1. **Poverty:** Most of the families living in rural and urban underdeveloped areas are unable to enroll their children in higher education due to poverty. As a result, although children of those families somehow cross the boundary of primary but without being admitted to the secondary level, goes down in search of income.
- Lack of education in the family: In most of the families living in underdeveloped areas of rural and urban areas, parents are uneducated or poorly educated and parents are not interested in educating their children in secondary or higher classes.
- Lack of ideas about higher education: Most of the backward families are hard working people, they have no idea or interest in higher education, so tendency of boys and girls in those families to enter higher education is very low.
- 4. **Incompetence in English language:** Due to lack of good English teachers in rural schools and lack of environment for English language practice, students studying at village level are extremely weak in English, which makes them afraid and uninterested in pursuing higher education.
- 5. **Non-cessation of child labor:** Due to non-cessation of child labor in the country, financially distressed families employ their children for any purpose





- of income as soon as they complete primary education, a trend that is severely hampering the growth rate of higher education in the country.
- 6. **Child marriage:** Child marriage is a common practice in rural and urban areas in low educated and uneducated families, where issue of marriage of boys and girls is given more priority than education, which is having a major impact on declining education rate and population growth in the country.
- 7. Religious prejudice: Uneducated and backward families usually live a life of dependence on fate due to religious prejudice, who despite their financial well-being are completely indifferent to giving higher education to their children, especially girls, which is having a negative impact on increase in the rate of higher education in the country.
- 8. Underdeveloped social environment: The term higher education is unfamiliar to people living in underdeveloped environment, because, under influence of environment, all those people live more / less in the same way, where life means only eating and surviving. Underdeveloped environment is therefore a serious threat to the expansion of higher education in the country.
- 9. Lack of government obligation: As secondary education is not compulsory in the country, boys and girls from backward families usually do not want to go to secondary level after crossing the boundaries of primary. This is another reason for declining rate of higher education in the country.
- 10. Not getting proper employment at the end of education: Employment on the basis of merit at the end of education is a fair right of an educated person. As that position has not yet been created in Bangladesh, there is a lot of skepticism among people about employment after education, as a result many people lose interest in higher education, which is having a big negative impact on the growth of higher education in the country.

K) Special attention is urgent to the issues related to ensure quality education



1) Special emphasis on English education from primary:

In order to keep pace with the world in the age of globalization and information technology, there is a need to place great emphasis on mother tongue as well as



Special attention is important to all those issues that improve the rate and quality of education:

Strategies for Economic Development of Bangladesh



English education from primary to last stage of higher education. Because it is absolutely impossible to keep pace with the world in this age without acquiring international standard skills in English language. It is well known that the quality of our education in the world is underestimated due to lack of adequate proficiency in English. While there are some good English teachers in urban schools in our country, there is a dearth of quality English teachers in rural and remote schools. As a result, students in those schools in rural and remote areas have always lagged far behind in English, which in turn creates serious problems for their higher education and jobs and other competitive fields. Despite having a lot of talents and genius, those students lag far behind in their careers just because of not know English well, which is having a serious negative impact in their personal lives and our national life as a whole.

In order to spread English education in the country, from the very beginning stage of primary school, great emphasis should be laid on making every student proficient in English. In order to achieve this goal, a quality English teacher (at least Master's degree and proficient in English) should be recruited in each primary school of the country and all recruited teachers should be sent to work with special training in government initiatives, so that recruited teachers are able to fulfill the government's goal of expanding English education in the country. Strict action will have to be taken against English teachers and schools that fail to produce quality results in English in the final examination of primary and higher education.

2) Inclusion of moral education in the curriculum:

It goes without saying that there is no practice of morality in any case of family, social environment and school yard in our country. Honesty, truthfulness, self-confidence, foresight, patriotism, human rights and everything else that helps a human being to become flawless in life are all covered by moral teachings. Morality is no less important than education in the personal and social life of people, but in many cases it bears more importance. We are lagging far behind in terms of moral education, which is one of the prerequisites for building a developed and civilized nation. Due to lack of moral education, young generation in the country are getting involved in drug addiction, violence and other criminal activities and corruption, nepotism, murder and human rights violations are happening all over the country from low to high levels. It is known to everybody that Bangladesh has already won the top certificate in the international arena several times as a corrupt nation.

In a society or country where morality is prevalent, there is bound to be fall of violence, corruption and degradation, which is the hallmark of an ideal and livable society. Morality is one of the prerequisites for the social and economic progress of any country. Emergence of a developed and civilized nation is the result of moral strength of every person in the society, which depends on three main areas, namely - family, Primary school and social environment. If every child is brought under moral education from the first stage of education, morality will have a great impact on them in later life, which will play a leading role in bringing prosperity and stability in their personal and social life as well as building a moral and civilized nation.

Therefore, it is imperative that subject of moral education be included in the education curriculum and that "moral education classes" be conducted in every primary and secondary school in the country through experienced and well-trained teachers.





3) Imposing obligation to send every child to school at a certain age:

If parents in a family are uneducated, economic condition of the family is bad or there is a lack of education awareness in the family, children of all those families do not go to school at a certain age and even if they do, they drop out in the middle. Therefore, in order to increase enrollment and completion rate at initial stage, it is necessary to impose a government obligation to send children of each family to school at a certain age, but in this case, it is important for the government to ensure financial well-being / source of income of all those families, otherwise It is beyond doubt that this step will be ruined.

4) Introduction of one-way education system:

There is already questions in the country and abroad about the quality of education system of this country, as a result of which educated society of this country has to face many obstacles in competitions for jobs and other purposes after complete their education. On top of that, two types of education in a country (general education and madrasa education) are making the standard of overall education system of the country more shaky as well as making future of the educated society of this country uncertain. In the overall social and economic structure of the country, there is a demand for students in general education at all levels of industry, services and administration. As a result, educated class in madrasa education is in dire straits to find employment after ending education and in most cases fails to get proper employment, which plunges their future lives into economic uncertainty. Needless to say, a person in economic uncertainty is completely incapable of improving quality of life.

Those educated in madrasa are also citizens of this country. Appropriate employment at the end of education is their fair right. But in the overall structure of the country and in the state system, employment opportunities for educated class in madrasa education is very limited. As a result, a large section of the country's educated class is constantly drifting towards economic uncertainty, which is posing a serious threat to the country's sustainable economic development, which at one stage will take on a much larger scale. Therefore, in order to build a sustainable economy by building a developed nation by improving rate and quality of education in the country, it is important to ensure equal benefits for all in the workplace by introducing one-way education system in the country.



Education Issues in Bangladesh

- Low-quality education
- High drop out rate both at primary and secondary levels
- Poor infrastructure, overcrowding, lack of facilities and low-quality teachers

First Edition: August, 2022

Urban-rural divide in resources and knowledge







L) Recommendations for improving quality of education :



Needless to say, increasing the rate of education in the country as well as promoting quality and vocational education is essential to ensure sustainable economic and overall development. Because, one of the fundamental issues of social and economic development is education. Sustainable economic development is not possible for any country without adequate investment in education and sustainable development of education system. Through education, people acquire ability to know and understand themselves and the world. Education widens scope for improving the quality of life at individual level as well as contributing to greater social development. Education increases productivity and creativity among people and drives them towards entrepreneurship and technological development. Moreover, it plays a major role in ensuring social and economic security in the people's lives as well as balanced distribution of income in the society. (Ilhan Ozturk)

Recommendations for improving quality of education: Education and development are closely linked and their role in eradicating poverty and inequality is immense. In a developing country like Bangladesh, there is no alternative but to building an educated nation by increasing the rate and quality of education in the country to build a sustainable economy. Following is a summary of all areas that need to be looked into in order to increase the rate and quality of education in the country: -

- 1. To send children of each family to primary school at a certain age and to impose a legal obligation on them not to stop studying in the middle until they have obtained a secondary or equivalent certificate.
- 2. To ensure that children of poor families go to school and to continue their education without any hindrance till secondary, to arrange financial aid on the basis of number of family members.
- 3. Obligation to obtain secondary or equivalent certificate as well as two years of technical education for those who are unable to enter higher education.
- 4. Increase amount of scholarships and stipends at all levels of education in terms of reality.





- 5. To make minimum age of marriage 25 for boys and 20 for girls, to make it compulsory to get a "marriage clearance" by showing a certificate of completion of compulsory education to the officer-in-charge of the upazila for marriage.
- 6. Appoint quality and trained English teacher in every primary school across the country with the aim of making every student proficient in English from first step of primary school in expansion of English education in the country.
- 7. Introduce subject of moral education in the education curriculum by launching "moral education classes" in primary and secondary schools across the country under Extra Curriculum through experienced and personable teachers.
- 8. Introduction of one-way education system in the country to improve quality of education and ensure equal benefits for all in the workplace.
- 9. To further expand and strengthen supervision of Upazila Education Offices in improving the quality of education system and improving skills of teachers in the educational institutions located in the Upazila.
- 10. Arrange training for teachers on monthly basis through Upazila Education Offices to improve skills of teachers for proper implementation of education curriculum
- 11. In addition to increasing government facilities to improve quality of life of teachers, increase social assessment, for example, to provide concession rental facilities in public transport, giving power to issue character and other certificates etc.
- 12. Select and award the best educational institution, best teacher and best guardian from among the educational institutions under each upazila on an annual basis across the country and to take strict action against educational institutions with bad results.

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Chapter: 3.7

Improve Health
Facilities at
Upazila and
Village Level.







Improve Health Facilities at Upazilla and Village Level.

Topics Covered in the Chapter

Quality improvement of health care at upazila and village level

- A) Population distribution at Upazila, Union, Ward and Village level.
- B) Scope of primary health care at upazila and village level.
 - 1. Health services at upazila level.
 - 2. Health services at union level.
- C) Scope of health services at ward / village level.
 - 1. Types of healthcare provided.
 - 2. Services provided in community clinics.
 - 3. Adequacy of medical equipment.
 - 4. Quality of service provided.
- D) Death rate by disease at village and city level.
- E) Progress of important health sector indicators by village and city.
- F) Evaluation of ongoing Rural Health System.
- G) Recommendations to Improve Quality Health services at Upazilla and Village .









Quality improvement of health care at upazila and village level:

Health sector is a big part of overall economy of the country. Because, precondition for achieving economic prosperity is formation of a healthy nation and for formation of a healthy nation, improved health care system is essential. It is impossible to build a sustainable economy without building a healthy nation. Features of improved healthcare are, ensuring quality healthcare for all at low cost by increasing scope of healthcare across the country, where hospitals, doctors, nurses, technicians and all facilities related to healthcare can be adequately ensured in proportion to population. Needless to say, it is



important to increase health awareness among people at individual level as well as government initiatives for development of health sector in the country.

More than two-thirds of total population of Bangladesh live in rural and remote areas, majority of whom are people with limited incomes, who are still far behind in education and health awareness and who are constantly plagued by various diseases. We need to build a healthy nation by ensuring quality healthcare at a fair cost, if necessary at free of cost, for people of all walks of life, living in rural and remote areas of the country for building healthy nation and that is why there is a need for greater expansion of healthcare facilities in rural and remote areas of the country. According to Health Policy - 2011, paragraph (Jha) it is said to strengthen Upazila healthcare system to ensure health and nutrition services to people living at village level by identifying community clinics as primary level of health care to ensure primary health care at grassroots level and development of referral system at upazila and district level to ensure provision of more health care.

Although previous governments lagged far behind in development of health sector due to financial and other constraints, present government is continuing its efforts to increase scope of health services at upazila and village levels. As part of this effort, government has started providing primary health care in rural and remote areas through community clinics as well as improving quality of services in upazila health complexes across the country. Since financial year 2012-13, amount of government allocation for development of rural health system has been continuously increasing. Allocation for rural health sector (community clinic project) in FY 2012-13 was Tk 3,917.80 million and in FY 2017-18 it stood at Tk 7,687.10 million.

What is disappointing, however, is that although size of national budget has increased several times over the past decade, but allocation to the country's overall health sector has not increased in proportion to that. During fiscal years from 2010-11 to 2019-20, allocation to health sector averaged 4.97% of national budget, which is less than 1% of GDP, lowest among South Asian countries. With such a small allocation in the health sector, it is truly impossible to increase the range of health

First Edition: August, 2022

Health Facilities at upazila and village level:



Population

distribution at

Upazila, Union,

Ward and Villages

Strategies for Economic Development of Bangladesh



services in the country and ensure quality health services. Moreover, according to various quarters, irresistible corruption is one of the major reasons for backwardness of the country's health sector.

A) Population distribution at Upazila, Union, Ward and Villages:

According to HVRS-2018, total population of the country were 164.6 million, of which 119.75 million (72.75%) live in rural areas and 44.85 million (27.25%) live in urban areas. (Distribution ratio based on HIES-2016). According to information of that time, amount of population living at upazila, union, ward and village level is highlighted through **Figure-3.7** (1).

Figure-3.7 (1): Scenario of Population living in each upazila, union, ward and village by 2018:-



Source: BBS

Figure-3.7 (2): As per HVRS-2018, amount of population living at the upazila, union, ward and village level:-

Area	Particulars Particulars Particulars	Population	
Rural:	Total Population	11,97,50,000	
Upazila - 490	Average Population per Upazila	244,388	
Union - 4,553	Average Population per Union	26,310	
Ward - 40,977	Average Population per Ward	2,922	
Village - 87,310	Average Population per Village	1,372	

Source: HVRS-2018

B) Scope of primary health care at upazila and village level:



Scope of primary health care in Bangladesh is wide at upazila and village level, but it is still inadequate and substandard. At upazila level, there is a system of providing primary health care in rural and remote areas across the country through "Upazila Health Complex", at union level "Union Health Care Center" and at ward level



Scope of primary health care at upazila and village level Currently:

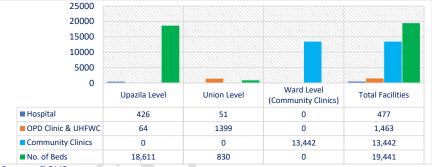
Strategies for Economic Development of Bangladesh



"Community Clinics". In order to ensure good health for all, scope of health services should be increased in proportion to population of the country as well as guarantee of quality health services at affordable prices should be taken into consideration. With this in mind, present government has started a variety of health services through "community clinics" for development of the health sector in rural and remote areas, which has already gained a lot of recognition.

By 2017, there are 477 hospitals (426 at upazila level and 51 at union level) among the institutions engaged in primary health care at upazila and village level with a total number of 19,441 beds, 1,463 OPD clinics (64 at upazila level and 1,399 at union level) and 13,442 community clinics at ward level **Figure-3.7 (3).**

Figure-3.7 (3): Primary health care at upazila and village level by 2017:-



Source : DGHS

1) Health services at upazila level:

Total number of upazilas in the country is 490 and by 2017, average population living in each upazila is 244,338. At that time total number of Upazila Health Complexes (UHC) in the country was 426 with a total number of 18,611 beds, on an average there are 44 beds in each UHC and 6 doctors. In other words, in 426 upazilas, there is 1 (one) doctor for 40,731 people and one bed for 5,554 population. Health services are provided in the remaining 64 upazilas through OPD Clinics.

2) Health services at union level:

Total number of unions in the country is 4,553 and average population living in each union is 26,310. By 2019, there were 5,124 Union Health Centers set up at the union level across the country to provide free primary health care to low-income people through health workers,



উপজেলা হেলথ্ কমপ্লেক্স (৪২৬টি)



ইউনিয়ন স্বাস্থ্যসেবা কেন্দ্ৰ (৫,১২৪ টি)





with a population of about 23,370 against each health center.

C) Scope of health services at ward / village level:



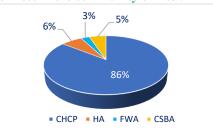
Primary health care is being provided through community clinics at ward / village level, where each community clinic has a health assistant, a family welfare assistant and an assistant health inspector. Total number of wards in the country is 40,977 and average population living in each ward is 2,922. By 2018, health workers have been providing free primary health care to low-income people in remote areas through 13,442 community clinics set up at ward level across the country. According to World Health Organization's 2018 report, 18% of community clinic users are extremely poor, 30% poor and 52% middle class.

Scope of health services at Ward / village level:

1. Types of healthcare provided:

While every clinic needs at least one full-time qualified doctor / certified professional health worker to provide health care in community clinics, in many cases it is still not fully implemented. According to CBHC Report 2018, among service providers in community clinics there are 85.7% of certified professional health workers, 6.5% health assistants, 2.6% family planning workers and 5.2% community

Figure-3.7 (4): Scenario of different categories health workers providing services in the community clinics:-







skilled birth attendance providing Source: CBHC Report 2018 health services Figure-3.7 (4).

2) Services provided in community clinics:



Services provided at community clinics include limited treatment services, ANC, normal child delivery, family planning, child health care and vitamin A capsule distribution etc. are notable Figure-3.7 (5).

3) Adequacy of medical equipment:

According to the list of Bangladesh Health Facility Survey report. community clinics have necessary medical equipment to ensure proper provision of primary health care, such as - Adult Scale, Child Scale, Infant Thermometer, Stethoscope, Blood Pressure Machine and Light Source. According to World Health Organization survey in 2018, most of the clinics had inadequate equipment other than only two of these seven equipment (stethoscopes and blood pressure machines) Figure-3.7 (6)

4) Quality of service provided:

Despite inadequacy of capacity, equipment medical and certified doctors in community clinics, most clients are satisfied with the behavior and quality of service provided by the health workers. According to World Health Organization Survey 2018, 66% of service recipients in community clinics are satisfied and 26% are very satisfied. Remaining 7% were found to be moderately satisfied and only 1% is dissatisfied Figure-3.7 (6).

Figure-3.7 (5): List of services provided in community clinics: -

S.L	Type of Services	Service Providing
1	Limited Curative Care	100%
2	ANC	100%
3	Normal Child birth/ delivery	Partially
4	Family Planning	100%
5	Child health services :	
	a) Curative care for sick children.	100%
	b) Growth monitoring	100%
	c) Vaccination	100%
6	Vitamin A capsule distribution	mostly

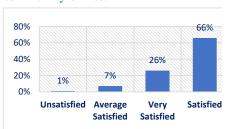
Source: Who Report 2019

Figure-3.7 (6): Adequacy of basic medical equipment in community clinics as per 2018 survey:-

Basic Equipment	Available in functional condition
Adult Scale	75%
Child Scale	75%
Infant Scale	62.5%
Thermometer	87.5%
Stethoscope	100%
Bloof Preasure Apparatus	100%
Light Source	25%
Glucometer	75%
Acute respiratory inspection timer	12.5%
Stadiometer	50%
Growth monitoring chart	87.5%

Source: CBHC Report 2018

Figure-3.7 (7): Scenario of clients satisfaction on the services provided in community clinics:



Source: WHO Report 2018



Death rate by

and city level:

disease at village

Strategies for Economic Development of Bangladesh



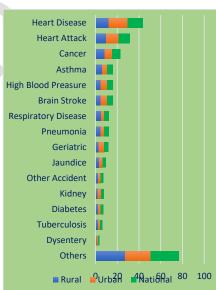
D) Death rate by disease at village and city level:

Depending on the place and environment, type of disease and degree of prevalence vary, it is dealt with through proper coordination of the medical system, this is the practice of health system. Level of various life-threatening diseases at the village and urban level in the country always varies, which has a significant impact on the death rate

Mortality from heart disease, heart attack, high blood pressure, brain stroke, geriatric disease, kidney and diabetic is significantly higher in urban than rural areas. On the other hand, deaths from cancer, asthma, infectious diseases, pneumonia, jaundice and tuberculosis are significantly higher in rural areas than in urban areas. According to SVRS 2018 Report, death rate of the top 15 life threatening diseases at the city and village level is shown below: -

Figure-3.7 (8): Scenario of death rate of top 15 life threatening diseases at city and village level:

-			
Diseases	D	eath Rate	(%)
Diseases	Rural	Urban	National
Heart Disease	12.2	17.4	14.2
Heart Attack	9.7	11.4	10.4
Cancer	8.3	6.8	7.7
Asthma	6.2	4.5	5.5
High Blood	5.0	5.8	5.3
Pressure			
Brain Stroke	4.6	6.1	5.2
Respiratory	5.2	2.8	4.3
Disease			
Pneumonia	4.7	3.4	4.2
Geriatric	3.0	4.8	3.7
Jaundice	3.3	2.9	3.2
Other	2.6	2.3	2.5
Accident			
Kidney	1.9	3.2	2.4
Diabetes	2.3	2.6	2.4
Tuberculosis	2.5	1.5	2.1
Dysentery	1.2	1.3	1.3
Others	27.5	23.3	25.8
Source : SVRS 2	2018		



Source: SVRS 2018

E) Progress of important health sector indicators by village and city:

There is no doubt that significant progress has been made in recent years in many important indicators of the health sector, at least in the reports of World Health Organization, World Bank, IMF and various agencies under the Ministry of Health indicate so. However, it is also true that just as Bangladesh is still lagging behind in achieving SDG 2030 targets in the health sector, similarly, it is not being possible to ensure development of health sector keeping balance at village and city level. For example, in most of the important indicators in the health sector, such as crude



Progress of important indicators of health sector by village and

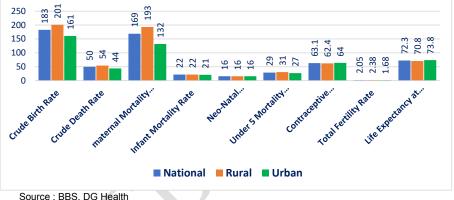
city:

Strategies for Economic Development of Bangladesh



birth rate, crude death rate, maternal and child mortality rate, contraceptive rate, fertility rate and life expectancy, progress in rural areas is comparatively much lower than in urban areas. Sustainable development of the health sector requires ensuring consistency in the quality of health services and progress in the health sector, regardless of village or city. Otherwise, it is impossible to ensure health of the large population of this country living at village level, which will have a large scale negative impact on the overall economic progress of the country. Following is a comparative position of some of important indicators of health sector at village and city level by 2018.

Figure-3.7 (9): Scenario of progress of some important indicators of health sector at village and city level by 2018:-



F) Evaluation of ongoing Rural Health System:



The "Union Health Centers" set up at the union level and "Community Clinic" set up at ward level to provide primary health care to low-income people in rural and remote areas is undoubtedly an excellent initiative in the development of the health sector at village level. However, compared to population at village level, number of full-fledged doctors in those clinics, necessary medical equipment and level and quality of services are still insufficient. As more than two-thirds of the country's population live in rural and remote areas, most of whom are financially indigent,





Evaluation of ongoing Rural Health System:

still far behind in education and health awareness. In order to ensure sustainable economic progress in the country, it is essential to increase coverage of health services at upazila and village level and ensure quality healthcare among larger population of the country at low cost and if necessary at free of cost.

Just as expansion and development of the health sector is essential to accelerate overall progress of the country, it is equally essential for Bangladesh to achieve the targets set in the health sector to meet the challenges of 2041. With these two goals in mind, it is time to formulate and implement an effective and long term development plan for the health sector.

G) Recommendations to Improve Quality Health services:



Among specific objectives of the Health Policy-2011 for development of health sector in the country are :

- a) To ensure availability of primary health and emergency medical care for all.
- b) To increase and expand easy availability of quality health care; and
- c) To motivate people to take services for prevention of diseases.

It is to be noted that at present there are only provision of providing primary medical services at upazila level, People under the upazilas have to go to district town hospital for emergency treatment, for larger population of the country, which is a lot of suffering and costly and in terms of ensuring easy access to health care is the opposite picture. Therefore, to ensure development of health services in the country, it is important to create quality emergency health care opportunities at upazila level as well as to increase quality of primary health care services among people living in rural and remote areas.

Proposed Steps for Development of Health Services at Upazila Level:

- A) Upgradation of Upazila Health Complexes to secondary level, which require:
 - To increase the number of services, number of doctors, nurses, health technicians and other necessary facilities in the Health Complexes.



Recommendations to Improve Quality Health services at Upazilla and Village Level:

Strategies for Economic Development of Bangladesh



- In order to provide quality services at least 15-20 services in each health complex, at least 10 specialist doctors, 20 nurses and required number of health technicians and other staffs will be recruited and adequate medical equipment to be provided to accelerate the achievement of SDG Goal-3.c.1.
- In case of allocation of specialist doctors in health complexes, it is important to have specialists in diseases that are more prevalent at the village level.

B) Controlling of the following activities by establishing "Upazila Health Control Office" under the Ministry of Health in each Upazila Sadar:

- Supervision of Upazila Health System: Supervising the activities of Health Complexes, Union Health Care Centers and Community Clinics serving in the concerned Upazilas and take immediate steps to keep the medical equipment of those institutions operational.
- Operation of Mobile Health Units at Upazila level: At least 4 "Upazila Mobile Health Units" to be formed in each upazila and temporary medical camps to be set up in all the villages and remote areas under their respective upazilas at least once a week free of cost. (At least 1 mother and pediatrician, 1 doctor of medicine, 1 nurse, 1 assistant = total 4 personnel will be specified in each unit).
- Creating a medical database: Storing necessary information on the health of the concerned upazila and creating a database.
- Monitoring and Training: Supervise field level monitoring, training of health workers and all related activities.

C) Increase access to quality primary health care at village level:

- Continuation of services at Union Health Centers and Community Clinics for 8 hours daily and 6 days a week.
- Increase the quality of health services at union level by appointing at least 1 full-fledged doctor, 1 trained nurse, 1 trained health worker and one trained nanny in each health center as well as to accelerate achievement of SDG Goal-3.c.1.
- Ensure adequate supply of necessary medical equipment and regular supply of medicines to the health centers providing services at union and village level.
- Extend training period of health workers working in community clinics to a minimum of 6 months.
- In order to ensure effective development of maternal and child health and birth control system at village level, national salary scale of the staffs of Union Health Centers and Community Clinics needs to be ensured and bring them under accountability.
- Extensive publicity and campaigns at the village level about health services provided through Union Health Centers and Community Clinics

First Edition: August, 2022



Chapter: 3.8

Introduce Savingsbased Pension Scheme for Rural Poor.







Introduce Savings-based Pension Scheme for Rural Poor.

Topics Covered in the Chapter

Introduce Savings-based Pension Scheme for Rural Poor:

- A) Current picture of poverty in the country.
 - 1. Poverty, extreme poverty and poverty gap.
 - 2. Number of extreme poor families in the country.
- B) How Rural Poverty is Hampering Overall Development.
 - 1. Rural poor are lagging behind in education due to poverty.
 - 2. Rural poor are at health risk due to poverty and ignorance.
 - 3. Rural poor live in low quality housing due to poverty.
 - 4. Main obstacles to manpower development is rural poverty.
 - 5. Extreme poverty at village level hampering economic development.
- C) Introducing "Savings-based Pension Scheme" to alleviate Rural Poverty.







Introduce Savings-based Pension Scheme for Rural Poor:



In order to accelerate overall development of a country, equitable distribution of resources in the society is very important, otherwise resources of the country become vested in a particular class / group. As a result, economic classification is created in the society, which severely hinders the mainstream of overall progress and acts as a major obstacle in building a sustainable economy in the country.

Size of the country's economy has grown significantly in recent years than before. During this time, size of national budget has multiplied, GDP, per capita income, national savings, investment, foreign exchange reserves and the economy have made more or less visible progress. As a result, poverty rate in the country has come down as compared to the past, which is undoubtedly playing a positive role in improving living standards of poor. Good news is that in recognition of all these advances, in February 2021, United Nations has recognized Bangladesh's transformation from a low-income country to a middle-income country, which is undoubtedly a great achievement for Bangladesh and the Bengali nation.

But along with this economic progress, matter which is becoming clear that the country's wealth, trade and social dominance are gradually falling into the hands of a group of people, so that the gap between rich and poor in society is now very visible. As a result of unequal distribution of resources, there is unequal competition in all spheres, resulting rich people become richer and poor groups are rotating in the same circle. Although per capita income of the country has increased due to immense income and abundant wealth of a handful of these wealthy people, in reality number of poor people in the country is still about half of the total population. According to HIES 2016, poverty rate in the country (including poverty, extreme poverty and poverty gap) is 42.2%, in rural areas it is 46.7% and in urban areas it is 30.4%.

Attempts to build a sustainable economy by keeping a large number of people in the country poor and to reach the level of a developed country, will be a deprived of reality. In order for Bangladesh to reach the level of a developed economy, it is necessary to rapidly controlling poverty by introducing an investment policy in proportion to resources and creating adequate employment in the country and to empower poor population financially through special government incentives and

First Edition: August, 2022

Introduction of savings-based pension scheme for rural poor:





financial assistance, so that poor do not lag behind in any situation in economic competition, education, medical treatment and quality of life. To this end, it has become imperative to protect that class of people from social inequality and economic uncertainty by introducing a pension scheme under savings for the rural poor.

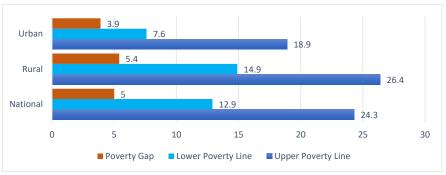
A) Current picture of poverty in the country:



1) Poverty, extreme poverty and poverty gap:

According to HIES 2016, poverty rate in the country (including poverty, extreme poverty and poverty gap) was 42.2%, in rural areas it was 46.7% and in urban areas it was 30.4%. According to that report, 24.3% of total population in the country is above the poverty line, poverty gap is 5.0% and 12.9% of the population is below the poverty line. Of these, 26.4% are above the poverty line in rural areas, poverty gap is 5.4% and 14.9% below the poverty line and 18.9% above the poverty line in urban areas, poverty gap is 3.9% and 7.6% below the poverty line. In other words, poverty rate in rural areas is almost double that of urban areas. As of HIES 2016, total population of the country was 159.58 million, of which 116.09 million (72.75%) live in rural areas, among them (116.09 million X 46.7%) = 54.21 million people are bound by the chain of poverty Figure-3.8 (1).

Figure-3.8 (1): According to HIES 2016, rate of poverty, poverty gap and extreme poverty in the country:-



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Source: BBS

Current picture of poverty in the country:



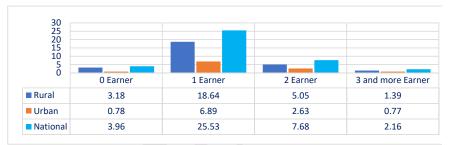


Number of extreme poor families in the country:

2) Number of extreme poor families in the country:

There is no earning person in the family to earn an income, do not have land and do not have even shelter to live on, lion's share of such impoverished families live in villages. All those helpless families spend their days in complete economic uncertainty who have no future at all. According to HIES 2016, number of families in this category in the whole country were 3.96 million, of which 3.18 million were living in villages and 0.78 million in cities. Total population of incomeless households across the country at that time were 16.08 million (3.96 x 4.06), of which 13.07 million live in rural areas (3.18 x 4.11) **Figure-3.8 (2).**

Figure-3.8 (2): Total number of households in the country based on earners :-



Source: BBS

B) How Rural Poverty is Hampering Overall Develop.:



Poverty, like in other developing countries, has also been identified as one of the major obstacles to social and economic development in Bangladesh. Majority of population of this riverine and village dependent country live in rural and remote areas, where communication infrastructure, education, medical facilities, employment, etc. are lagging behind in almost all areas. Moreover, a large portion of population living in rural and remote areas is landless day laborers and helpless. Although in the post-independence period, poverty rate in the country was above



How Rural Poverty is Hampering

Overall Develop.:

Rural poor are lagging behind in education due to poverty:

Strategies for Economic Development of Bangladesh



80%, but over time it has gradually declined and poverty rate in the country stood at 42.2% by 2020, in rural areas at 46.7% and in urban areas at 30.4%.

Since 2010, due to country's economic transformation, infrastructure development and increasing domestic and foreign investment have led to significant growth in GDP, employment and per capita income, as a result, level of poverty in the country has decreased somewhat, although rate of this reduction is less than 2% per annum as per various organizations. Per capita income stood at US\$ 2,068 by 2020, from US\$ 700 in 2010. However, due to unequal distribution of wealth in the society, per capita income in the country has increased due to huge income of a limited wealthy people but its impact at individual level has seldom been fallen. As a result, it can be said that there has not been much positive progress in alleviating poverty at village level in the past. Out of 116.09 million people living in rural areas by 2016, 54.21 million people are enclosed in the fence of poverty, which is 46.69% of population living in rural areas and about 34% of total population of the country at that time.

Due to financial hardship and future economic uncertainty, those poor people living in rural and remote areas are lagging behind in every aspect of life. Poor are constantly lagging behind in the matters related to quality of life, such as higher education, quality medical care, improved housing, etc., which is having a negative impact on human resource development in the country as well as hampering and questioning overall progress of the country. Following is a brief summary: -

1. Rural poor are lagging behind in education due to poverty:

According to BBS, by 2016, literacy rate was 73.2% nationally, 67.6% in rural areas and 80.1% in urban areas. For the same reason, rural poor are lagging behind in enrolling in higher education. According to HIES 2016, Degree / equivalent registration is 5.69% nationally, 4.58% in rural areas and 9.0% in urban areas. Post Graduate, Doctor, Engineer, Diploma etc., there is a wide variation in registration at village and city level. Rate of students completing tertiary education is less than one-third in rural areas compared to urban areas. According to LFS: 2016-17, rate of completion of tertiary education in the country was 4.20%, of which 2.3% was in rural areas and 8.6% in urban areas. Due to lack of financial capabilities, participation rate in higher education among poor is abnormally low, which has a negative impact on the growth rate of higher education in the country as well as poor are constantly lagging behind in improving living standards, which is one of the major obstacles to sustainable economic development.







2. Rural poor are at health risk due to poverty and ignorance:



Rural poor are at health risk due to poverty and ignorance:

Due to financial constraints, poor people living in rural and remote areas either avoid treatment for the disease or resort to rural doctors and make the disease more difficult, which is one of the major obstacles to building a healthy nation. According to a survey conducted by BMC International Health & Human Rights in 2010, 51% of rural patients do not seek treatment for various reasons. Of these, 45% of patients do not feel the need for treatment, 40% of patients do not seek medical attention due to financial crises, 5% of patients take treatment in the light of any previous prescription, 3% of patients wait for the disease to become more complicated, 2% of patients do their own medicine, 2% of patients have no reliance on medical treatment, 1.5% of patients do not seek treatment as there is no doctors around and the remaining 1.5% of patients recover without treatment **Figure-3.8 (3).**

On the other hand, out of 49% of patients treated, among them 67% seek treatment from rural doctors, 12% seek homeopathic treatment, 9% seek treatment from MBBS doctors, 6% rely on various home remedies, 2% Patients rely on traditional healthcare and remaining 4% recover by other means **Figure-3.8** (4).

Figure-3.8 (3): Reasons of rural patients not going for treatment : -

SL	Reasons of household do not seek care for their illness.	% of Patient
1	They do not feel that the disease require any treatment	45 %
2	They do not have enough money to go to doctor.	40 %
3	Self medicating based on the prescription provided by any health	
	care earlier for similar health problem.	5 %
4	Wait for the disease to get serious enough to consult with doctor.	3 %
5	Depend on self medication with out prescription.	2 %
6	Do not seek treatment as they do not have believe on treatment.	2 %
7	Do not go to doctor as there is no health care providers nearby.	1.5 %
8	Got cure without any treatment	1.5 %
	Total:	100%

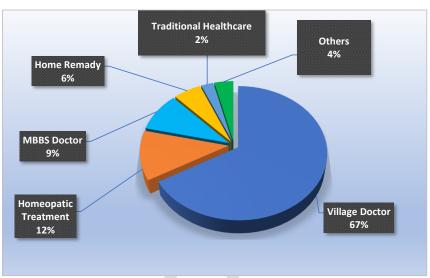
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Source: BMC International Health & Human Rights Report, 2010





Figure-3.8 (4): Types of treatment for diseases among rural population :



Source: Source: BMC International Health & Human Rights Report, 2010

3. Rural poor live in low quality housing due to poverty:

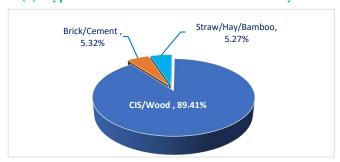


During 2016, number of households in rural and remote areas of the country was 28.26 million, of which only 5.32% (1.50 million) were brick / cement roofs, 89.41% (25.27 million) were tin / wooden canopies and 5 .27% (1.49 million) huts. Due to financial constraints, rural poor are forced to live in poor housing and unhealthy environment, which is one of the major obstacles to building a developed nation **Figure-3.8(5)**.





Figure-3.8 (5): Types of houses in rural and remote areas by 2016:



Source: BBS

4. Main obstacles to manpower development is rural poverty:

Main tool of development of a country is the working youth of that country, which is much more valuable than natural and all other resources. According to various international organizations, working population of Bangladesh over the age of 15 by 2019 is 67.61% of the total population, which was 62.83% in 2009, major portion of this population are from rural and remote areas. Rate of working age population has been constantly increasing in the country, which is undoubtedly a great blessing for Bangladesh. Education, health and skills are needed to transform this working population into manpower. But due to severe poverty at village level, working youth is not able to develop with necessary education, health and skills. As a result, adequate human resources not being created in the country, which is essential to build a sustainable economy. According to Human Development Index 2020, Bangladesh ranks 133rd out of 189 countries in terms of human resource development, lowest among South Asia. Whereas in that index, India ranks 131st, Vietnam 129th, Vietnam 117th, Philippines 107th, Indonesia 107th, Maldives 95th, China 85th, Thailand 79th, Sri Lanka 72nd. S Korea 23rd, Japan 19th and Singapore is in 11th position **Figure-3.8 (6).**

Figure-3.8 (6): According to Human Development Index 2020, rank of Bangladesh and some other South Asian Countries:-



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Source: UNDP Note: Higher rank indicates lower position.

Main obstacles to manpower development is rural poverty:





5. Extreme poverty at village level hampering economic development:



Although overall poverty rate in the country has declined somewhat in recent times, rate of poverty and extreme poverty in rural and remote areas is still almost double that of urban areas. According to World Bank Survey report 2019, rates of poverty and extreme poverty at village level were 26.7% and 15% respectively and at urban level 19.3% and 8% respectively by 2016 **Figure-3.8(7)**. This huge gap between poverty at village and urban level is tainting the dream of building a golden Bengal by exposing fragile state of the neglected rural economy at home and abroad, on the other hand, working age unskilled rural population is being forced to move to city to look for work, which is making the country's labor market increasingly unbalanced and endangered. Whereas, it is not difficult to establish rural development as a part of national development by taking practical steps through alleviating poverty at the village level.

Extreme poverty at village level hampering economic development:

Figure-3.8 (7): Scenario of poverty variation at village and city level during period of 2000-2016:-

Year		Rural	Urvan			
	Poverty	Extreme Poverty	Poverty	Extreme Poverty		
2000	52.3%	37.9%	35.1%	19.9%		
2005	43.8%	28.6%	28.4%	14.6%		
2010	35.2%	21.1%	21.3%	7.7%		
2016	26.7%	15.0%	19.3%	8.0%		

Source: World Bank Survey 2019







C) Introducing "Savings-based Pension Scheme" to elevate Rural Poverty:



Since the independence of Bangladesh, acute poverty at village level has been one of the major obstacles to improving living standards of rural population as well as overall economic development of the country. Many steps have been taken during the tenure of different governments to improve this situation, besides the efforts of various NGOs and donor agencies were not less. However, as a result of multipronged measures taken by the present government to alleviate poverty in the post-2010 period, poverty rate in the country has come down to a tolerable level and the government is moving ahead with the aim of reducing poverty to zero by 2030. This is undoubtedly a big challenge for the government from the practical point of view. Reducing poverty to zero means ensuring employment for the population living above and below the poverty line as well as ensuring free participation of that class of people in all areas directly related to their livelihood development, such as education, medical care, housing, etc. For this, it is necessary to create adequate new jobs in industry and other sectors in line with the working population joining the labor market of the country every year, which is quite time consuming for a country like Bangladesh.

Introducing
"Savings-based
Pension Scheme"
to alleviate rural
poverty:

It is responsibility of the government to ensure economic security of the rural poor in line with overall economy of the country. Without food security for the poor as well as education, medical care, housing and pensions in old age, social system will never be sustainable. In developed countries, therefore, unemployment benefits and pension system are in operation for unemployed and poor population.

In order to bring economic stability to rural poor in Bangladesh, it has become necessary to take steps to eradicate poverty by creating savings among them, so that poor do not lag behind in basic fields like education, medical care and housing and is able to provide minimum amount of money in case of emergency.

Savings-based Pension scheme for rural poor:

Introduce "Savings-Based Pension Scheme" under the Government Provident Fund facility for the rural poor to reduce poverty quota in the country to zero, so that for every poor family living in village, compulsory savings system should be introduced for a period of minimum 15/20 years on the basis of monthly contribution in the ratio of 1: 2 with government participation (government contribution of TK. 2 against account holder's deposit of TK. 1), which will have opportunity to enjoy on a long-term pension basis as per rules of the Government Provident Fund. Loans can be taken against this savings for children's education, medical treatment,





construction of houses and other urgent needs. This will greatly reduce the risk of economic catastrophe for the poor families in the country, which will serve as one of the bold steps to reduce poverty quota in the country to zero. Moreover, launching of this savings scheme will ensure financial stability in poor households as well as building huge reserves in the banking sector, which will make the country's overall economy strong and powerful.

1. Rules for identifying poor families under this scheme: -

- If there is no earning person in the family or there is no regular source of income: or
- If average monthly income of a family of more than two members is less than TK. 5,000 / =; or
- If the family does not have permanent assets or amount of asset is very small.

a) Major rules of the project are :-

- Poor families will collect permit to open a savings account from the office in charge of their respective upazilas by presenting required information and open a "savings account" in a bank designated by the government on the basis of that permit.
- The term of the savings account shall be fixed by the Government, which in any case is not less than 15 years.
- Account holder will deposit the amount to his saving account as prescribed by the government (say TK. 500 / per month) and against this deposit, at the end of the year a total of TK. 12,000 / per annum will be deposited by the government at the rate of TK. 1,000/- per month based on the ratio 1:2.
- After expiry of at least 5 (five) years of the savings account, in special circumstances up to one third of the balance of the own account can be taken as interest free, one year repayable loan.
- Disruption in payment of installments, re-opening of closed accounts, balance money of non-inherited accounts, continuation of installments of that person in the absence or death of the account holder, distribution of surplus money among the heirs over a period of time and other related solutions in this regard can be done in the conventional rules of the bank or in a separate rule.
- At the end of the period, this amount of money will be enjoyed by the account holder on a monthly pension basis under the government pension scheme facilities

b) Families benefiting from this project will be committed to the following:-

- They will strictly follow rules and regulations of the scheme.
- No family covered under the scheme can adopt more than two children.
- Will send children to school at a certain age and do not stop school-going children from going to school.

First Edition: August, 2022

• Refrain from giving child marriage and dowry.

Mandatory observance of above conditions will play a significant role in long-term economic stability in the marginalized families as well as population control at the village level, increasing rate of education and preventing child marriage.





Chapter: 3.9

Increase production of fisheries, poultry and cattle.







Increase production of fisheries, poultry and cattle.

Topics Covered in the Chapter

- A) Fish production and Extraction.
 - 1.0 Fish Production:
 - 1.1 Fish farming and production.
 - 1.2 History of progress of fish farming in Bangladesh.
 - 1.3 Bangladesh's position in fish production.
 - 1.4 Scenario of continuous progress in fish production.
 - 2.0 **Fishing:**
 - 2.1 Marine Fish Extraction.
 - 2.2 Bangladesh's position on marine fisheries.
 - 3.0 Fish Exports:
 - 3.1 Export of frozen fish.
 - 3.2 Bangladesh's position in the world in export of frozen fish.
- B) Poultry and cattle production.
- C) Production of Meat, milk and eggs.
- D) Recommendations for increasing fish, poultry and cattle production.







A) Fish production and Extraction:



Bangladesh is naturally rich in fisheries resources due to its geographical location, low lying lands, numerous small and large rivers, canals, beels, lakes, natural wetlands and being located on the shore of Bay of Bengal. From time immemorial, farmers of this country have been known as "Bangali in fish and rice". A large portion of population of the country has been making living by fish farming and procurement since time immemorial. Due to high profitability, this profession has been gradually spread up in the country and currently more than 12% of total population of the country is directly or indirectly dependent on fish farming and procurement for their livelihood.

Fish production in the country has been steadily increasing since 2000 and Bangladesh has achieved unimaginable success in this regard in the last one decade. At present fisheries sector is established as a prosperous sector in Bangladesh. By the financial year 2018-19, Fisheries sector contributes 3.50% of total GDP and 25.72% of total agricultural GDP of the country. During last 13 years (2008-9 to 2018-19) average growth in this sector has been 5.01%, of which, inland Open Water Capture has increased by an average of 1.87%, Fish farming in inland water bodies has increased by an average of 8.59% and marine fishing has increased by an average of 2.49%.

Bangladesh is currently self-sufficient in fish production and according to BBS, per capita fish consumption in the country in 2016 was 62.58 grams per day. According to FAO report, State of World Fisheries and Aquaculture 2018, Bangladesh ranks third in terms of fish production in inland waterlogging and 5th in global aquaculture production. Moreover, in recent years, Bangladesh has shown enviable expertise in hilsa extraction and has obtained Geographical Indication (GI) certificate. During financial year 2019-20, production of all kinds of fish in the country was 44.85 lakh metric tons, where inland fish production was 56.7% (Fisheries Yearbook 2018-19)

It is to be noted that although Bangladesh has achieved self-sufficiency in fish production in recent times, we are still far behind in fish farming in a scientific manner. Because of which, productivity is low as well as production costs are high and quality of fish is also low. As a result, although fish produced in Bangladesh meet demand of the country, but demand for Bangladeshi fish in foreign markets is still quite low. Moreover, Bangladesh still lags far behind the neighboring countries in catching marine fish and newly occupied water areas of the Bay of Bengal can not fully utilized for fishing from deep sea.

Current situation and future prospects of fisheries sector of Bangladesh are highlighted below:-

First Edition: August, 2022

Fish production and Extraction:





1) Fish Production:



1.1) Fish farming and production:

In recent years, Bangladesh has made unimaginable progress in fish production. According to international ranking 2018, Bangladesh is in third position in production of inland open water fish and fifth position in aquatic production. Total fish production in the country was 30.62 lakh MT in FY 2010-11, which has stood at 44.85 lakh MT in FY 2019-20, out of which fish production and extraction in inland water bodies was 84.88% and marine fish extraction was 15, 12%. During period from financial year 2010-11 to 2019-20, fish production in the country has increased by an average of 1.42 lakh MT per year. In this case, it is worth mentioning that although fish production and catching in inland open water has increased recently in the country, but catching of marine fish has not increased at all, which is very important to pay attention to [Figure-3.9 (1)].

Figure- 3.9 (1): Scenario of all types of fish production in the country during period from F.Y 2010-11 to 2019-20:



Source: BD Economic review *Projected

First Edition: August, 2022



1.2) History of progress of fish farming in Bangladesh:

Practice of making living by fishing and fish farming in ponds and reservoirs is old for many people in Bangladesh. Although fishing from canals and seas was widespread at that time, but commercial fish farming in ponds and reservoirs was very limited. Since 2000, trend of fish farming in ponds and reservoirs has been increasing in the country along with fishing from canals, beels and seas and this trend has become widespread since financial year 2007-08. In FY 1999-2000, production of all types of fish in the country was 16.61 lakh MT, which has increased to 43.84

Fish farming and production:





History of progress of fish farming in Bangladesh:

lakh MT by the F.Y 2018-19. From 1999-00 to 2018-19, total fish catching in the country has increased by 164% (average yearly increase of 5.34%), of which open freshwater fish collection has increased by 84.48% (average yearly increase of 3.43%), fish collection through farming has increased overall by 278.84% (average yearly increase of 7.63%) and marine fish capture has increased by 97.60% overall (average yearly increase of 3.98%).

Trend of fish farming in ponds and reservoirs mainly on commercial basis has started to spread in the country after 2007-08. During period from 1999-00 to 2006-7, commercial fish farming in the country increased by an average of 5.50% per annum and during period from 2007-8 to 2018-19, fish farming increased by an average of 12.29% per annum.

Figure- 3.9 (2): Scenario of continuous increase in fish production in three major sectors of the country during last 20 years (FY 1999-00 to 2018-19): -

	Se	Sector wise Fish Production Trend (in Lakh M.Ton)											
Fiscal Year	Inland Open Water (Capture)			ose Water oture)	Marine	Fisheries	Total						
	Lakh M.Ton	Growth %	Lakh M.Ton	Growth %	Lakh M.Ton	Growth %	Lakh M.Ton	Growt h %					
1999-00	6.70	3.24	6.57	11.36	3.34	7.19	16.61	7.02					
2000-01	6.89	2.84	7.13	8.52	3.79	11.87	17.81	7.22					
2001-02	6.88	-0.15	7.87	10.38	4.15	8.67	18.90	6.12					
2002-03	7.09	3.05	8.57	8.89	4.32	3.94	19.98	5.71					
2003-04	7.32	3.24	9.15	6.77	4.55	5.05	21.02	5.21					
2004-05	8.59	17.35	8.82	-3.61	4.75	4.21	22.16	5.42					
2005-06	9.57	11.41	8.92	1.13	4.80	1.04	23.29	5.10					
2006-07	10.07	5.22	9.46	6.05	4.87	1.44	24.40	4.77					
2007-08	10.60	5.26	10.06	6.34	4.98	2.21	25.63	5.04					
2008-09	11.24	6.04	10.63	5.67	5.15	3.30	27.01	5.38					
2009-10	10.30	-8.36	13.52	27.19	5.17	0.39	28.99	7.33					
2010-11	10.55	2.43	14.61	8.06	5.46	5.31	30.62	5.62					
2011-12	9.57	-9.29	17.26	18.14	5.79	5.70	32.62	6.53					
2012-13	9.61	0.42	18.60	7.76	5.89	1.70	34.10	4.54					
2013-14	9.96	3.64	19.57	5.22	5.95	1.01	35.48	4.05					
2014-15	10.24	2.81	20.60	5.26	6.00	0.83	36.84	3.83					
2015-16	10.48	2.34	22.04	6.99	6.26	4.15	38.76	5.21					
2016-17	11.64	11.07	23.33	5.85	6.37	1.73	41.34	6.66					
2017-18	12.17	4.55	24.05	3.09	6.55	2.75	42.77	3.46					
2018-19	12.36	1.56	24.89	3.49	6.60	7.19	43.84	2.50					

Source: Fisheries Year book 2018-19



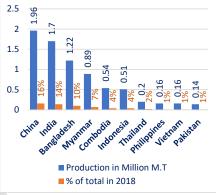




1.3) Bangladesh's position in fish production :

Bangladesh is currently one of the 25 highest fish producing countries in the world in terms of inland open water fish capture. According to FAO report " State of World Fisheries and Aquaculture 2018". Bangladesh ranks third in terms of fish production in inland open waterlogging. In that list, China is ranked 1st, India 2nd, Myanmar 4th, Cambodia 5th, Indonesia 6th, Thailand 7th, Philippines 8th, Vietnam 9th and Pakistan 10th. According to that report, China accounted for 16% of combined production of the world's 25 largest fish producers, India 14%, Bangladesh 10%, Myanmar 7%, Cambodia 4%, Indonesia 4%, Thailand 2% and Philippines, Vietnam and Pakistan 1% each [Figure-3.9 (3)].

Figure - 3.9 (3): According to FAO report 2018, position of Bangladesh and other countries in South Asia in inland open water fish capture:-



Source: FAP Report

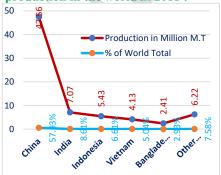
1.4) Scenario of continuous progress in fish production:

China is at the forefront of aquatic 1995-2018, production during followed by India, Indonesia, Vietnam and Bangladesh respectively. According to 2018 estimates, aquatic fish production in China was 47.56 million MT, which is 58.93% of total aquatic produced in the world in that year, India 7.07 million MT (8.61%), Indonesia 5.43 million MT (6.61%), Vietnam 4.13 million MT (5.04%) and Bangladesh 2.41 million MT (2.93%). During these 24 years period, aquatic fish production increased by an average of 8.33% in China, 13.58% in India, 31.18% in Indonesia, 41.12% in Vietnam, 27.21% in Bangladesh and 5.02% in other Asian countries.

First Edition: August, 2022

Bangladesh's position in fish production:

Figure - 3.9 (4): Amount of fish production in Bangladesh and a few other countries in South Asia is expressed as percentage of total fish production in the world in 2018: -



Source: FAO Report 2020

Scenario of continuous Progress in fish production:

Figure- 3.9 (5): Scenario of progress of Bangladesh and other countries in South Asia in aquatic production during period of 1995 to 2018:-

Country	Y E A R								
		1995	2000	2005	2010	2015	2018		
	a) Million Tones	15.86	21.52	28.12	35.51	43.75	47.56		
China	b) % of World Total	65.03%	66.39%	63.48%	61.50%	60.12%	57.93%		
	c) Average growth rate (%) during this period								
	a) Million Tones	1.66	1.94	2.97	3.79	5.26	7.07		
	b) % of World Total	6.80%	5.99%	6.70%	6.56%	7.23%	8.61%		





India	c) Average growth ra	ite (%) dur	ing this pe	eriod			13.58%		
	a) Million Tones	0.64	0.79	1.20	2.30	4.34	5.43		
Indonesia	b) % of World Total	2.63%	2.43%	2.70%	3.99%	5.97%	6.61%		
aonesia	c) Average growth ra	ite (%) dur	ing this pe	eriod			31.18%		
a) Million Tones 0.37 0.50 1.44 2.68 3.46									
Vietnam	b) % of World Total	1.56%	1.54%	3.24%	4.65%	4.76%	5.04%		
- Treatmann	c) Average growth rate (%) during this period								
	a) Million Tones	0.32	0.66	0.88	1.31	2.06	2.41		
Bangladesh	b) % of World Total	1.30%	2.03%	1.99%	2.27%	2.83%	2.93%		
	c) Average growth rate (%) during this period								
Other	a) Million Tones 2.82 3.01 4.58 5.63 5.72					6.22			
Asian	b) % of World Total	11.58%	9.29%	10.34%	9.76%	7.86%	7.58%		
Countries	c) Average growth ra	c) Average growth rate (%) during this period							

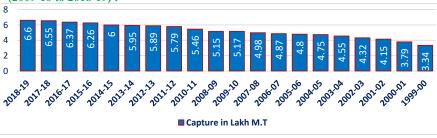
Source: FAO Report 2020



2.1) Marine Fish Extraction:

Marine fish and other aquatic animals, such as crabs, oysters, octopuses, etc., are most popular in the food list of many countries around the world. As a result, many countries around the world are enriching their country's economy by procuring marine fish as well as other aquatic animals by meeting their domestic needs and exporting them abroad. Although Bangladesh has vast facilities and water areas for marine fishing, Bangladesh is still lagging behind in this regard. Analysis of marine fish catch data over the last 20 years period (1999-00 to 2018-19) shows that average marine catch rate in the country during this period is 5.24 lakh metric tons per annum and average annual growth in this case is 3.90%, which is much less than other fishing countries in the world and almost all countries in Asia [Figure- 3.9 (6)].

Figure- 3.9 (6): Scenario of marine fish extraction in Bangladesh during last decade (2009-10 to 2018-19):-



First Edition: August, 2022

Source: Fisheries Yearbook 2018-19

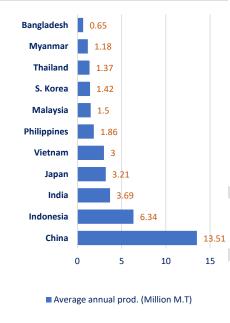
Marine Fish Extraction:





2.2) Bangladesh's position on marine fisheries :

Figure-3.9 (7): Scenario of average marine fish capture in Bangladesh and some other South Asian countries during period of 2014-2018: -



Source: FAO Report 2020

To date, Bangladesh lags far behind other countries of the world and almost all countries in Asia in marine fishing. During period of 2014-2018, average annual marine fish extraction in Bangladesh was 0.65 million MT, in Myanmar it was 1.18 million MT, in Thailand 1.37, South Korea 1.42, Malaysia 1.50, Philippines 1.86, Vietnam 3.00, Japan 3.21, India 3.69, Indonesia 6.34 and China 13.51 million MT [Figure-3.9(7)].

According to data of 2018, marine fish captured in China in that year was 12.68 million MT which was 15% of total marine fish captured in the world in that year. Indonesia captured 6.71 million MT (8%) in that year, India 3.62 million MT (4%), Japan 3.10 million MT (4%), Vietnam 3.19 million MT (4%), Philippines 1.89 million MT (2%), 1.45 million MT (2%) in Malaysia, 1.33 million MT (2%) in S. Korea, 1.51 million MT (1%) in Thailand, 1.14 million MT (1%) in Myanmar and 0.66 million MT (0.58%) in Bangladesh [Figure-3.9(8)].

First Edition: August, 2022

Bangladesh's position on marine fisheries:

Figure - 3.9 (8): Scenario of marine fishing of Bangladesh and other South Asian countries during period of 2014-2018:-

Country	Ye	arly Produc	tion (Mil	5)	% of World	5 yrs Average in	
	2014	2015	2016	2017	2018	total in 2018	Million M.T
China	14.81	14.39	13.78	13.19	12.68	15%	13.77
Indonesia	6.02	6.22	6.11	6.31	6.71	8%	6.27
India	3.42	3.50	3.71	3.94	3.62	4%	3.64
Japan	3.63	3.37	3.17	3.18	3.10	4%	3.29
Vietnam	2.71	2.71	2.93	3.15	3.19	4%	2.94
Philippines	2.14	1.95	1.87	1.72	1.89	2%	1.91
Malaysia	1.46	1.49	1.57	1.47	1.45	2%	1.49
S. Korea	1.72	1.64	1.35	1.35	1.33	2%	1.48
Thailand	1.56	1.32	1.34	1.31	1.51	2%	1.41
Myanmar	2.70	1.11	1.19	1.27	1.14	1%	1.48
Bangladesh	0.60	0.63	0.64	0.66	0.66	0.58%	0.64

Source: FAO Report 2020 and Fisheries Yearbook 2018-19





3) Fish Exports:



3.1) Export of frozen fish:

Bangladesh has been exporting frozen shrimp and small quantity of other frozen fish for a long time, although the amount of export has remained at the same level year after year. An analysis of the country's frozen fish exports over the past decade (2009-10 to 2018-19) shows that exports amounted to US\$445 million in FY 2009-10,625

million in FY 2010-11, 598 million in Figure- 3.9 (9): Scenario of frozen fish FY 2011-12, 544 million in FY 2012-13. 638 million in FY 2013-14, 568 million in FY 2014-15, 536 million in FY 2015-16, 526 million in FY 2016-17, 508 million in FY 2017-18 and US\$ 500 million in FY 2018-19. During this period, frozen fish exports averaged US\$ 548.80 million per annum and annual export growth averaged 1.87%. Over the past ten years, frozen fish exports have fluctuated between US\$ 445 million and US\$ 638 million Figure- 3.9 (9).

export of Bangladesh during period from 2009-10 to 2018-19:-



Source: BD Economic Revie

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Export of frozen fish:

3.2) Bangladesh's position in the world in export of frozen fish:

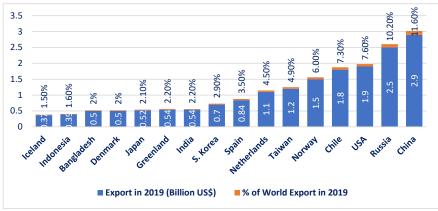
Although Bangladesh lags behind in marine and other fish exports, it has some participation in international arena in export of frozen shrimp. In 2019, China is the world's largest exporter of frozen fish. In that year, Export of frozen fish amounted to (US\$) 2.9 billion in China, which was 11.6% of total frozen fish exports in the world in that year, Russia 2.5 billion (10.20%), United States 1.9 billion. (7.6%), Chile 1.8 billion (7.3%), Norway 1.5 billion (6.0%), Taiwan 1.2 billion (4.9%), Netherlands 1.1 billion (4.5%), Spain 0.84 billion (3.5%), S. Korea 0.70 billion (2.9%), India 0.54 billion (2.2%), Greenland 0.54 billion (2.2%), Japan 0.52 billion (2.1%), Denmark 0.50 billion (2.0%), Bangladesh 0.50 billion (2.0%), Indonesia 0.39 billion (1.6%) and Iceland 0.37 billion (1.5%).

Needless to say, if Bangladesh becomes more enterprising, there will be substantial progress in export of frozen fish and there is no doubt that Bangladesh's participation in international arena will increase several times





Figure - 3.9 (10): Scenario of frozen fish exports from major exporting countries of the world in 2019:



Source: Worldstopexports and other source

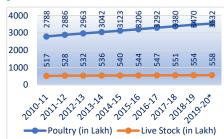
B) Poultry and cattle production:



Livestock and poultry production is very important to meet animal protein deficit in line with population of the country. Poultry and cattle production in the country has increased slightly in the last few years, but contribution of livestock sub-sector to GDP is still substantially low. Poultry and cattle production in the country in 2010-11 was 2,788 lakh and 517 lakh respectively and in 2019-20 it has stood at 3,532 lakh and 558 lakh respectively.

During this period, poultry production increased by an average of 2.70% per annum and cattle production increased by an average of 0.97% per annum. Rate of increase in cattle production is comparatively much lower than that of poultry [Figure - 3.10 (11)]. As a result, price of meat is gradually going beyond reach of general people, which is having a negative impact on filling shortage of animal protein in the country. Adequate increase in cattle production in the country is essential to overcome this

Figure - 3.9 (11): Scenario of poultry and cattle production in the country during period from 2009-10 to 2018-19:



Source: BD Economic review *Projected

First Edition: August, 2022

Poultry and cattle production:

situation.





C) Production of Meat, milk and eggs:



Production of Meat, milk and eggs:

Production of animal proteins, such as meat, milk and eggs, has gradually increased in the country during last few years. As a result, per capita consumption of meat, milk and eggs in the country has stood, meat 124.99 grams per day, milk 165.07 grams per day and egg103.89 pcs per year by the financial year 2018-19. Meat production in the country in 2009-10 was 12.64 lakh MT, which has stood at 75.14 lakh MT by the FY 2018-19 . In 2009-10, milk and eggs production was 23.65 lakh MT and 57,404 lakh respectively, which has stood at 99.23 lakh MT and 171,100 lakh respectively by the FY 2018-19 **Figure- 3.9 (12)**. This trend of production needs to be further enhanced in future to meet growing protein demand of the growing population.

Figure- 3.9 (12): Scenario of meat, milk and egg production in the country during period from 2009-10 to 2018-19:-

		Financial Year										
Items	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-		
	10	11	12	13	14	15	16	17	18	19		
Meat (Lakh	12.64	19.86	23.32	36.20	45.20	58.62	61.52	71.54	72.60	75.14		
M.Tons)												
Milk (Lakh	23.65	29.47	34.63	50.67	60.90	69.69	72.75	92.83	94.06	99.23		
M.Tons)												
Eggs (Lakh)	57,424	60,785	73,038	76,173	101,680	109,952	119,124	149,331	155,200	171,100		

Source: BD Economic Review

D) Recommendations for increasing fish, poultry and cattle production:

Bangladesh's natural environment, rivers, canals, lakes and natural water bodies are working as a suitable natural infrastructure for fish farming and fishing. As a result, Bangladesh is undoubtedly a prosperous and suitable place for fish farming and procurement, Bangladesh's enviable success in fish farming and extraction in the last couple of years proves this fact.

Important thing in this case is that fish farming system in Bangladesh is still conventional and outdated in most cases. Due to low use of technology in fish farming, cost of production is high on the one hand, on the other hand, productivity is relatively low, which is causing losses to fish farmers. Moreover, demand for fish produced in Bangladesh is not being created abroad and fish export from Bangladesh is not being possible, as the issue of taste and public health of fish produced is still largely neglected. In addition, natural environment is being polluted and destroyed due to various reasons like urbanization, untreated industrial waste, uncontrolled use of pesticides, filling of natural reservoirs, etc., which is having a



Recommendations to increase fish, poultry and cattle production:

Strategies for Economic Development of Bangladesh



huge negative impact on inland open water fishing. Despite having ample facilities, Bangladesh still lags far behind the world and South Asian countries in terms of marine fishing and capturing of other sea animals. During last five years (2014-2018), average marine fishing in Bangladesh was 0.64 million MT and in 2018, marine fishing in Bangladesh accounted for only 0.58% of total world marine fishing. Lack of use of technology in marine fishing, lack of training, inadequacy of modern fishing equipment, boats and trawlers etc. and above all lack of relevant government policies and patronage are the reasons for lagging behind in this case.

On the other hand, it is true that the level of poultry and cattle production in the country has increased slightly than before in the last few years, but that is insufficient compared to growing population in the country, as a result, contribution of animal sub-sector to GDP is still quite low. No matter what the problems are, in the interest of overall economic progress of Bangladesh, fish, poultry and cattle production must be increased at any cost. This is because, it is a sector through which there are immense potentials are hidden to enrich the country's economy through employment, meeting demand for protein of a large population and increasing export earnings. Therefore, it has become necessary to formulate a farsighted policy to export extensively of domestically produced fish, poultry and cattle by meeting domestic demand in the coming days.

Recommendations for increasing fish, poultry and cattle production:-

A) To increase fish production and extraction:

- Formulation and implementation of long-term government plans for expanding fisheries sector and export of fish abroad by meeting domestic demand.
- 2. Adoption of more stringent policies in urbanization, using pesticides in agriculture and prevention of flooding of rivers, canals and natural reservoirs to ensure free movement of fish in inland open water.
- 3. Adoption and implementation of government plans to make this sector a modern, profitable and attractive industry by increasing and popularizing use of technology in fish farming.
- 4. Strengthen government training system on modern, hygienic and technology based fish farming.
- 5. Controlling application of medicines and hormones in fish farming and emphasize on healthy fish production to increase nutritional value of fish.
- 6. Supervision and training through Upazila Fisheries Officers to bring all marrow ponds, doba nala etc. in rural and remote areas under fish farming without keeping them neglected.
- 7. To facilitate marketing of fish and other agricultural crops and to improve quality of life in rural areas, develop roads and hat bazaars in rural and remote areas and increase number of hat bazaars across the country to reduce violence of middlemen.







- 8. Supervision of fish farming, training and distribution of low interest loans among indigent farmers through Upazila Agriculture Offices.
- 9. Strengthen training on technology-based fishing among coastal fishermen in marine fishing.
- 10. To increase government patronage and easy loans among fishermen for purchase of modern fishing equipment, boats and trawlers.
- 11. Strengthen extensive training and government support on deep sea fishing and conservation and export of marine and other fish.
- 12. Taking initiative to extract fish from deep sea under government initiative.

B) To increase production of poultry and cattle:

- 1. Formulation and implementation of policies to increase production of poultry and cattle in the country.
- 2. To bring this sector under compulsory insurance to remove uncertainty of investment in poultry and cattle farms.
- 3. Strengthen training on modern management of poultry and cattle farms.
- 4. Completely stop import of egg, meat, cattle and buffaloes.
- 5. To take necessary steps to increase production of poultry and animal feed in sufficient quantity to keep the prices of poultry and animal feed tolerable.
- 6. To provide adequate government assistance to increase milk and dairy food production in the country.
- 7. Conduct nationwide training on preservation, processing, use and export of animal skins and fur.
- 8. Providing loans on easy terms with low interest to entrepreneurs to provide initial capital in this industry.
- 9. To make full use of Upazila Animal Husbandry Officer and Upazila Veterinarians for this purpose.
- 10. To bring improved breeds of cows, goats, ducks, chickens etc. from different countries and to take initiative to expand production of those poultry and cattle in the country.
- 11. To ensure adequate allocation in the national budget for development of poultry and cattle farming industries





Chapter: 3.10

Establish "
Ministry of Rural
Affairs "







Establish "Ministry of Rural Affairs "

Topics Covered in the Chapter

- A) Establish "Ministry of Rural Affairs" to manage Rural Economy.
- B) Objectives and requirements for setting up a separate ministry.
- C) Scope of responsibilities and duties of LGRD Ministry.
- D) Why separate Ministry is needed for Development of Rural Economy?
- E) Rationality of keeping adequate allocation in ADP for rural development.
- F) Scope of work of the proposed "Ministry of Rural Affairs.







A) Establish "Ministry of Rural Affairs" to manage Rural Economy:

There are arrangements for conducting and supervising development activities at the village level in Bangladesh through the Ministry of Local Government, Rural Development and Cooperatives. Until 2010, size and volume of the country's economy was limited, so development and economic activities at the village level were very limited. At that time it was not very difficult for the same ministry to control both local government and rural development. However, since 2010, size and volume of the country's economy has multiplied and continues to grow. As a result, pace of economic development at village level has increased several times more than ever before. Apart from increasing working manpower at village level, great progress has been made in almost all fields like development of agriculture, poultry rearing, fish and livestock farms etc. In order to make the rural economy sustainable and strong by increasing economic activities at village level in future and increase civic amenities at village level - development of electricity, roads and other infrastructure will undoubtedly increase several times. Rural way of life has already begun to change, which in the near future will undoubtedly compete with the cities. Needless to say, in future it will be really difficult for the same ministry to handle multiple functions of local government as well as rural development activities. Therefore, keeping in view the future, it has become imperative to set up a separate "Ministry of Rural Affairs" to manage rural economy.

Establish "
Ministry of Rural
Affairs" to manage
Rural Economy:

B) Objectives and requirements for setting up a separate ministry:

When workflow in any sector under a particular ministry increases significantly, there is a need to set up a separate ministry for proper control of that sector. Size and volume of the country's economy has multiplied over the past decade, country's economy is now more matured than ever before and if this trend continues, economy of this country will undoubtedly reach a unique level in future. To make this success of the economy sustainable, effective planning and proper and effective control in all sectors need to be established.

Lion's share of the economy of Bangladesh is dominated by the rural economy and

ministry. Because, it is impossible to control and develop rural economy in the right

about 73% of the country's population is directly involved with rural economy. Agriculture, fisheries and forestry are the lifeblood of rural economy. Rural economy has been playing an important role in the overall economy of the country through production of food, vegetables, fish, meat, fruits and in many cases industrial raw materials. It is now a proven fact that it is impossible to build a sustainable economy in Bangladesh without expansion of rural economy. In order to ensure proper coordination and rapid expansion of rural economy, it is necessary to expand economic activities at village level by forming independent and separate

Objectives and requirements for setting up a separate ministry:





First Edition: August, 2022

way in future without forming a separate ministry.





C) Scope of responsibilities and duties of LGRD Ministry:

Scope of responsibilities and duties of LGRD Ministry:

Main responsibilities and duties of the Ministry of LGRD are to manage administration, financing and election related functions of local government bodies (Zila Parishad, Upazila Parishad, Union Parishad, Municipality and City Corporation) and formulate policies related to rural development. In addition, administration of Local Government Engineering Department (LGED), Department of Public Health Engineering (DPHE), Water Supply and Sewerage Authority (WASA) and National Local Government Institute (NILG) and supervise and monitor all activities conducted by the above agencies are responsibilities and duties of this ministry.

LGRD ministry is divided into two divisions, such as: -

- 1) Local Government Division.
- 2) Rural Development and Cooperative Division.

Major Responsibilities and duties of Ministry of LGRD are listed below: -

- 1. Matters relating to local government institutions with local government institutions.
- 2. Authorization, control and execution of authorities for establishment of local government and village administration .
- 3. Administration of Local Government Engineering Department (LGED), Department of Public Health Engineering (DPHE), Water Supply and Sewerage Authority (WASA) and National Local Government Institute (NILG) and to monitor and supervise all the programs conducted by the above agencies are responsibilities and duties of this ministry.
- 4. Administration of B.S.S (Public Health Engineer).
- 5. Drinking Water related issues.
- 6. Development of rural water supply, sanitation and sewerage system.
- 7. a. Development, maintenance and management of sub-roads, union roads and rural roads including bridges and culverts allotted by the Government in a timely manner.
 - b. Development and management in development centers and other markets connected by upazilas, unions and village roads.
 - c. Development, maintenance and management of small scale water resources projects to the extent determined by the Government.
- 8. Rural police.
- 9. Burial ceremonies and cemeteries, cremation ceremonies and cremation ghats.
- 10. Cattle pounds and resistance.
- 11. Postal Bungalows and Local authorities Rest House.
- 12. Public parks and trees under local government establishments.
- 13. Secretariat administration including financial matters.
- 14. Administration and control of offices and agencies under this division.
- 15. Liaison with international organizations and subject matter assigned to this department Relationships and agreements with global organizations.
- 16. All the laws related to this division.
- 17. Search and retrieval on any subject related to this category and statistics. (Source: LGRD Ministry website)





D) Why separate Ministry is needed to manage Rural Economy?

At present, Ministry of LGRD is in charge of the activities related to rural development. In addition to administration and management of local government institutions, Ministry of LGRD has been carrying out of these responsibility. However, in analysis of duties and responsibilities of the Ministry of LGRD, it is clear that although "Rural Development and Cooperatives Division" is run under this Ministry, most of the functions of this Ministry are centered on administration, financing and election of local government institutions. In fact, this Ministry does not have enough manpower, administrative infrastructure and planning required for the present context and future needs for sustainable rural development in the country. As a result, no effective steps have been taken for rural development under this ministry in the past. Evidence of this can be seen in review of annual development programs of the last few years. Analysis of annual development allocation in the national budget for the period from 2017-18 to 2020-21 shows that annual development allocation as against the LGRD ministry during this period was 15.90% of the total ADP on average (TK. 27,649 crore), out of which 91.62% for Local Government Division, 5.39% for Rural Development and Cooperatives Division and 2.99% for Chittagong Hill Tracts Affairs Figure-3.10 (1). In other words, this sector has somehow been continued by allocating only nominal ADP allocation in the Rural Development and Cooperative Division. Therefore, in order to build a sustainable rural economy, it is very important for the Ministry to have sole responsibility for all matters related to rural development by launching a separate "Ministry of Rural Affairs".

Why separate
"Village Ministry"
is needed to
manage Rural
Economy?

Figure-3.9 (1): Scenario of ADP allocation in various subdivisions under the Ministry of LGRD during financial year 2016-17 to 2020-21: -

		Financia	al Year	(Taka In Crore)		
Ministry / Division	2016-17	2017-18	2018-19	2019-20	2020-21	
Local Govt. Division	18,547	21,526	25,469	29,920	31,221	
Rural dev. & cooperative division	914	1,414	1,695	1,865	1,588	
Ministry of Ctg. Hill Tracts Affairs	544	849	989	841	865	
Total LGRD Sector	20,005	23,789	28,153	32,626	33,674	
Total development budget	112,526	159,013	179,669	211,683	215,043	
LGRD Sector (% of total dev.	17.78	14.96	15.67	15.41	15.66	
Exp.)						
As S	% of Total L	GRD Secto	r			
Local Govt. Division	92.71	90.49	90.47	91.71	92.72	
Rural dev. & cooperative division	4.57	5.94	6.02	5.72	4.72	
Ministry of Ctg. Hill Tracts Affairs	2.72	3.57	3.51	2.57	2.56	
Total:	100	100	100	100	100	

Source: Economic division, Ministry of Finance.





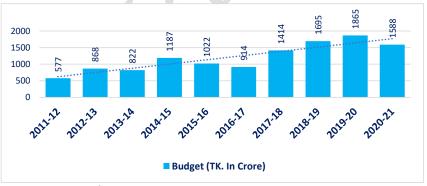


E) Rationality of keeping adequate allocation in ADP for rural development:

In order to ensure desired development in a sector, it is very important to have adequate development allocation for that sector in the national budget, otherwise, desired development in that sector is impossible. Role of rural economy in the overall economy of Bangladesh is huge. Rapid expansion of rural economy is essential for sustainable development of the country's economy and for this it is necessary to ensure adequate development allocation in the national budget. But a review of annual development allocations for rural development in the national budget over the past decade (2011-12 to 2020-21) shows that rural areas, which is the address of 73% of Bangladesh's population, have negligible annual development allocations compared to all other sectors. During this period, annual allocation for rural development has fluctuated between Tk. 577 crore to Tk. 1,865 crore, which was an average of Tk 1,195.20 crore per annum **Figure-3.9** (2).

Therefore, it is very important to ensure adequate annual development allocation for rural development in the national budget for rapid development of rural economy.

Figure-3.9 (2): Scenario of ADP allocation in Rural Development and Cooperative Division during financial year 2011-12 to 2020-21:-



Source: Ministry of Finance

Rationality of keeping adequate allocation in ADP for rural development:







F) Scope of work of the proposed "Ministry of Rural Affairs":

Proposed "Ministry of Rural Affairs" will be a separate and independent ministry, main responsibilities and duties of this ministry will be to formulate policies, supervise, coordinate and manage all matters related to manage and development of rural economy. Major responsibilities of this ministry is to oversee all matters related to rural development including development of roads, bridges and culverts at upazila and village level, development of rural housing, expansion of hat bazaars, disaster management, cooperation in agriculture and trade development. In addition, providing cooperation and coordination among work of other organizations working at village level such as electricity, water and sewerage, telecommunication, education and health, etc. to increase civic amenities at village level and building sustainable rural economy by increasing rural employment will be the prime responsibility of this ministry. Scope of activities of the proposed Ministry of Rural Affairs is summarized below: -

- 1. To formulate, supervise, coordinate and manage policies on all issues related to development of rural economy.
- 2. Development of rural housing system.
- 3. Development, maintenance and management of roads, bridges and culverts at upazila and village level.
- 4. Hat Bazar development and management at upazila and village level.
- 5. Cooperation and coordination in the work of other organizations working at the village level such as electricity, water and sewerage, telecommunications, education and health etc.
- 6. Supervise all matters related to the development of rural life including cooperation in disaster management, development of agriculture and trade.
- 7. Rural police and law and order situation at village and upazila level.
- 8. Burial ceremonies and cemeteries, cremation ceremonies and cremation ghats.
- 9. Cattle pounds and resistance.
- 10. Public parks and trees under local government establishments.
- 11. Secretariat administration including financial matters.
- 12. Administration and control of offices and agencies under this ministry.
- 13. Liaison with international agencies and tenor of the subject matter assigned to this Ministry and the tenor of relations and agreements with the world bodies.

First Edition: August, 2022

- 14. All laws related to this ministry.
- 15. Research and statistics on any subject related to this ministry.
- 16. Other necessary functions.

Scope of work of the Proposed "Ministry of Rural Affairs"









Chapter: 4.1

Urbanization and Urban Expansion



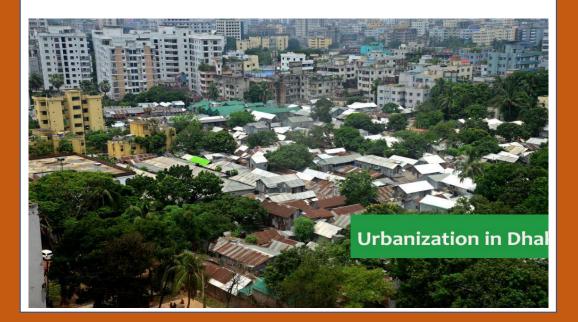




Urbanization and Urban Expansion.

Topics Covered in the Chapter

- a) Urbanization and Urban Expansion.
- b) Importance of urbanization in economic development.
- c) Urbanization trends in Bangladesh.
- d) Bangladesh's position in the world in terms of urbanization.
- e) Challenges of urbanization.
- f) Estimates of world urbanization situations till 2050.
- g) Actions to address urbanization challenges.







A) Urbanization and Urban Expansion:



According to the Bangladesh Bureau of Statistics, there are a total of 532 urban centers in the country. By 2020, there are 42 cities with a population of more than 1.00 lakh, of which 6 are large cities with a population of more than 5.00 lakhs, namely, Dhaka, Chittagong, Rajshahi, Khulna, Sylhet and Bogra. There are total 11 city corporations and 322 municipalities in the country by 2020.

What does urbanization mean?

Urbanization is the increase in size and basic infrastructure of the city to make it more livable when people leave countryside and come to city in large numbers for their livelihood. Urbanization as defined by the UN Department of Economic and Social Affairs "Urbanization is a complex socio-economic process that transforms the built environment, converting formerly rural into urban settlements, while also shifting the spatial distribution of a population from rural to urban areas. It includes changes in dominant occupations, lifestyle, culture and behavior, and thus alters the demographic and social structure of both urban and rural areas ". The degree or level of urbanization is typically expressed as the percentage of population residing in urban areas, defined according to criteria used by national governments for distinguishing between urban and rural areas. In practice, urbanization refers both to the increase in the percentage of population residing in urban areas and to the associated growth in the number of urban dwellers, in the size of cities and in the total area occupied by urban settlements.

According to the United Nations, by 2018, about 55% (4.2 billion) of the world's population live in cities and by 2050 that number could exceed 70%. By 2020, number of cities in the whole world with a population of more than 5 lacs are 1,055, with 51.4% (2.25 billion) of the world's population living. Number of cities with a population of more than 5.00 lakhs is 6 in Bangladesh, by 2017 where about 2.35 crore people were living.

People's interest in urban life and perimeter of the city are rapidly expanding worldwide due to availability of basic living facilities including employment, education, medical care and possibility of decent standard of living in a small area. According to the United Nations, average annual rate of urban migration from rural to urban areas is about 0.47% in the world. Therefore, urbanization bears more importance in providing employment and a better life in a densely populated and underdeveloped rural country like Bangladesh,.

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Urbanization and Urban Expansion:





B) Importance of urbanization in economic development:

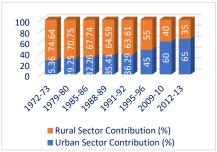


Importance of urbanization in economic development:

Urbanization has gained worldwide recognition as one of the driving forces of development and progress of any country, especially in case of underdeveloped and developing countries, this concept is strongly applicable. As a result of urbanization, beside basic necessities of life become easy accessible to the people - education, health, employment, trade, commerce and manufacturing sectors are expanded, which has a direct impact on the country's economy and plays a vital role in making the economy sustainable. In developing countries around the world, therefore, urban expansion and urban development competition is widely visible. According to UN Department of Economic and Social Affairs, Advantages of urbanization are: -

- Urbanization is directly linked to three sustainable developments (economic, social and environmental).
- Urbanization has a strong positive role in achieving economic growth, poverty alleviation and human resource development.
- Pragmatic policy adopted by the government in sustainable urban expansion planning and management ensures equitable distribution of urbanization benefits.

Figure-4.1 (1): Scenario of contribution of rural and urban sector to GDP of Bangladesh during period from 1972-73 to 2012-13: -



Source: Journal on Urbanization and Economic
Development of Bangladesh by Sardar Syed Ahmed and
Montasir Ahmed.

First Edition: August, 2022

Since 1990, pace of urban development in Bangladesh has increased more than ever before, resulting in a steady increase in contribution of urban sector to Bangladesh's GDP in recent times. During 1972-73, contribution of urban sector to GDP was 25.36%, while in 2012-13 it stood at 65% **Figure-4.1** (1).

Till to date, most of industry and commerce in Bangladesh is being managed through four major cities (Dhaka, Chittagong, Sylhet and Rajshahi). For the interest of rapid expansion of the country's economy and rapid social and environmental development, it is imperative to bring many more cities under sustainable urban development and economic activities in those cities be greatly increased by expanding those cities.





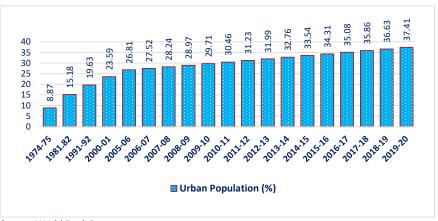
C) Urbanization trends in Bangladesh:



Due to lack of employment in the populated rural areas, trend towards urbanization among low-income people in Bangladesh has increased considerably in recent times and this trend has increased significantly, especially since 1980. During 1981-82, urban population rate in the country was 15.18% of total population and during 2019-20, it stood at 37.41%. During last four decades from 1971-72 to 2019-20, urban population grew at an average rate of 0.57%.

It is worth mentioning that although a large number of people flock to the city every year in search of livelihood, they can not enjoy any civic benefits as most of them are of low standard of education. They have to spend their days pulling rickshaws or doing hard labor, impact of improving quality of life on this community is very rare.

Figure-4.1 (2): Scenario of urbanization in the country during last two decades (2000-2019):-



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Source: World Bank Report

Urbanization trends in Bangladesh:



Bangladesh's

the world in terms

of urbanization:

position in

Strategies for Economic Development of Bangladesh



D) Bangladesh's position in the world in terms of urbanization:



Although Bangladesh is ahead in terms of urban population growth, it is still far behind in terms of urban expansion and urban development compared to many countries, especially in South Asia. According to international ranking 2020, Bangladesh ranks 150th out of 194 countries in terms of urban expansion and development Figure- 4.1 (4). Among other South Asian countries in that ranking, Singapore ranks 1st, Japan 15th, Malaysia 54th, China 96th, Indonesia 110th, Thailand 128th, Philippines 133rd, Bhutan 144th and Maldives 148th. But matter of hope, Bangladesh is ahead of other South Asian countries such as Vietnam, Pakistan, India, Myanmar and Sri Lanka in this case.

Bangladesh is at the forefront of urban population growth in South Asia. In the last decade, average annual growth rate of urban population in Bangladesh was 3.42% Figure-4.1(3). Urban population growth rate in Bangladesh during 2015-Asian countries, such as in Singapore 1.39%, in Japan 0.14%, Malaysia 2.13%, China 2.42%, Indonesia 2.27%, Bhutan 2.98%, Maldives 2.93%, 2.37% in India, 1.74% in Myanmar and

Figure-4.1 (3): Scenario of growth of urban population in Bangladesh in the last decade :-



Source: World Bank Report

20 is 3.17%. This rate in other South Thailand 1.73%, Philippines 1.99%, Vietnam 2.98%, 2.53% in Pakistan, 0.80% in Sri Lanka Figure-4.1(4).

Figure-4.1 (4): As per International Ranking 2020, Position of Bangladesh and other countries in South Asia among 194 countries based on the rate of urbanization and urban population (%):-

Country	Rank	Urban Population (%) (2015-2020)	Urbanization Rate (%) during (2015-2020)
Singapore	1	100	1.39
Japan	15	91.8	-0.14
Malaysia	54	77.2	2.13
China	96	61.4	2.42





Indonesia	110	56.6	2.27
Thailand	128	51.4	1.73
Philippines	133	47.4	1.99
Bhutan	144	42.3	2.98
Maldives	148	40.7	2.93
Bangladesh	150	38.2	3.17
Vietnam	151	37.3	2.98
Pakistan	152	37.2	2.53
India	161	34.9	2.37
Myanmar	165	31.1	1.74
Sri Lanka	187	18.7	0.80

Source: CIA World Factbook

E) Challenges of Urbanization:

Although urbanization is one of the driving forces of economic development, ensuring housing, education, health and other civic amenities in line with urbanization is one of the big challenges of urbanization, otherwise urbanization is bound to be threatened. In order to reap benefits of urbanization, it is essential to develop and expand the city with adequate civic amenities in line with growth of urban population. By identifying global urbanization as a stepping stone to development, it is enriching country's economy through urban development in different countries. Needless to say, at present although contribution of urban sector to GDP in Bangladesh is about 65%, but urban sector of the country is still quite unplanned and undeveloped and lags far behind the developing countries of the world

Due to overpopulation at village level, employment crisis and development of urban-centered education, health and administrative systems, pressure of urban population (rate of urbanization) in Bangladesh has increased considerably over the past few decades. According to CIA World Factbook, rate of urbanization in Bangladesh during period of 2015-20 is 3.17%, which is the highest in South Asia, but compared to that, housing and other civic amenities in the cities have not increased. As a result, housing crisis has taken a serious turn along with lack of civic amenities in the cities of the country. According to Urban Development Directorate Report 2016, urban housing deficit in the country will be around 8.5 million units by 2021, which is one of the biggest challenges in terms of rapid urbanization.

Significant challenges of urbanization in Bangladesh include: -

- 1. Urban development and expansion in line with urban population growth.
- 2. Taking practical and effective initiatives to address housing crisis in cities.
- 3. Ensuring education, health and other civic amenities for citizens.
- 4. To increase urban productivity and employment in order to maintain dynamism of urban economy.
- Adequate increase in communication, water, electricity, sewerage and other infrastructure in cities.

First Edition: August, 2022

6. Ensuring adequate and quality urban services.

Challenges of Urbanization:





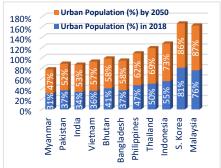
- To maintain law and order in the cities and provide proper security to citizens
- 8. Protecting the city's environment and tackling climate change issues in accordance with UN guidelines.
- 9. Proper supervision of urban resources.
- 10. Preparation and implementation of urban planning based on future needs; And
- 11. City administration in a proper and standard way.

During post-independence governments, various steps have been taken and more or less implemented in urban development through five year plans. Various steps have been taken for development of cities in the latest Seventh Five Year Plan (2016-2020) and implementation of SDG 11 (Urban Agenda) is awaiting approval of National Urban Policy 2015 (Upgraded). Moreover, various initiatives taken by the present government for urban development, such as 2021-41 Plan and Bangladesh Delta Plan 2100 are expected to play a significant role in development of urban sector in the country.

F) Estimates of world urbanization situations till 2050:

According to estimates of World Urbanization Prospect 2018, Vietnam and Bangladesh will be the most populous cities in South Asia during period of 2018-2050. In 2018, rate of urban population in Vietnam was 34%, by 2050 it will stood at 57%. During this period, urban population in Vietnam will increase by 21% (0.66% per year on average). On the other hand, rate of urban population in Bangladesh was 37% in 2018, which will stood at 58% by 2050. During this period. urban population Bangladesh will increase by 21% (average of 0.66% per annum) Figure-4.1 (5).

Figure-4.1 (5): Estimates of urbanization of Bangladesh and some other countries of South Asia by 2050:



Source: World Urbanization Prospect 2018

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According to that estimates, by 2050, urban population will be 47% in Myanmar, 52% in Pakistan, 53% in India, 56% in Vietnam, 57% in Vietnam, 58% in Bhutan, 58% in Bangladesh, 62% in the Philippines, 69% in Thailand, 73% in Indonesia, 86% in S. Korea and 87% in Malaysia **Figure-4.1** (6).

Figure-4.1 (6): Estimates of urban population growth based on the total population of Bangladesh and a few other countries in South Asia by 2050:

Country	Uı	rban Popula	ation in '00	Pro	portion	Urban	(%)	
	1990	2018	2030	2050	1990	2018	2030	2050
Myanmar	10,255	16,468	20,615	29,392	25	31	35	47
Pakistan	32,924	73,630	99,360	160,228	31	37	41	52
India	222,297	460,780	607,342	876,613	26	34	40	53
Vietnam	13,817	34,659	47,248	65,711	20	36	44	57

Estimates of world urbanization situations by 2050:





Bhutan	88	324	444	573	16	41	49	58
Bangladesh	21,037	60,944	84,689	117,837	20	37	46	58
Philippines	29,106	49,962	63,844	93,465	47	47	51	62
Thailand	16,649	34,556	40,676	45,410	29	50	58	69
Indonesia	55,491	147,603	185,755	234,105	31	55	63	73
S. Korea	31,696	41,678	43,241	43,616	74	81	82	86
Malaysia	8,982	24,364	30,109	36,440	50	76	82	87

Source: World Urbanization Prospect 2018

G) Actions to address urbanization challenges:



Analysis of urban trends over the past three decades makes it clear that the influx of urban people in search of livelihood will increase in the coming days, which will put additional pressure on the city's housing, employment, law and order and environmental situation. According to World Urbanization Prospect 2018 estimates, urban population in Bangladesh will be about 58% of total population by 2050. Due to lack of employment of the growing population in agricultural sector and increase in the rate of education in the country, urbanization among people of all walks of life will increase in the coming days. Moreover, in order to reach high-income countries by 2041, it has become important to increase urbanization to accelerate the country's economic development.

In line with rising trend of urbanization in the country, biggest challenge now is to increase urban productivity and employment along with adequate urban development and urban expansion, urban housing and other civic amenities, which requires far-reaching expansion plans and effective initiatives. Otherwise, there will be an increase in poverty in the cities as well as chaos in housing sector, education, health and other civic amenities and administration, which will have a far-reaching negative impact on the overall economy of the country.

In the coming days, it is imperative to take practical steps to develop urban housing and other civic amenities in line with urbanization and increase investment in urban development and expansion at public and private levels in order to fully utilize urbanization in economic development. As ongoing policies and measures are not adequate for urban development, it is not being possible to ensure adequate amount

First Edition: August, 2022

Things to do to address urbanization challenges:





of urban housing and other civic amenities for centuries, which is one of the major challenges for urbanization.

Areas that need to be further emphasized in future to address challenges of urbanization in Bangladesh are listed below:

- 1. Formulation and implementation of realistic plans for urban development and urban expansion.
- 2. To encourage government investment in urban development and expansion as well as domestic and foreign investment.
- 3. A permanent solution to the urban housing problem in the light of other countries is essential.
- 4. To make every district town economically significant by gradually and rapidly bringing them under purview of urban growth and adequate increase in housing and other civic amenities in those towns, so that pressure of urbanization on a particular city will not increase excessively.
- 5. Quality development of education, health and other civic amenities in proportion to population of each city, so that all residents are able to enjoy adequate civic amenities.
- 6. To alleviate poverty as well as enrich the national economy by increasing productivity and employment in cities.
- 7. Adequate provision of water, electricity, communication, sewerage and other infrastructures in the cities, so that characteristics of a decent city can be seen
- 8. Adherence to UN guidelines on environmental protection and climate change in urban development and expansion.
- 9. Ensuring equitable distribution of civic services in cities.
- 10. Favorable investment environment, easy financing and quality development of business related indicators for business development.
- 11. Standard development of law and order situation and administrative system in cities to ensure social and personal security of citizens.

First Edition: August, 2022

12. City management in a modern and smart way.





Chapter: 4.2

Development of urban housing and civic amenities.







Development of urban housing and civic amenities.

Topics Covered in the Chapter

- A) Urban Housing and Civic Amenities.
 - 1. Nature of accommodation in cities of the country.
 - 2. Classification of urban households by occupation.
 - 3. Per capita cost of living in urban areas.
- B) Major causes of urban housing crisis.
 - 1. Absence of effective and realistic urban housing policy.
 - 2. Unusual increase in land prices.
 - 3. Unbridled increase in the price of flats.
- C) Major causes for abnormal rises in flat price.
 - 1. Rising prices of construction materials.
 - 2. Inadequate housing loan facilities.
 - 3. Outstanding housing loan and mortgaged loan in proportion to GDP.
 - 4. Housing loans are unusually low compared to total loans.
- D) Govt. initiatives for development of urban housing and civic services:
- E) Civic amenities and security.
- F) Recommendations for development of urban housing and civic amenities.







A) Urban Housing and Civic Amenities:

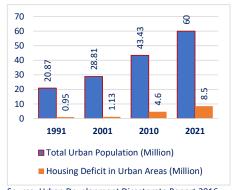
In line with the growth of urban population, coordinated urban development and expansion of urban housing and other civic amenities, such as electricity, water, sewerage, education, health and communication, is essential to ensure a decent standard of living for citizens at all levels. Because urban population is the main driving force of urban economy and speed and quality of the country's economy depends on the quality of life of citizens. That is why in developed countries so much emphasis is placed on urban development and expansion with quality housing and other civic amenities for all

In Bangladesh, on the one hand, there is a limited number of cities, on the other hand, due to limited employment at village level and river erosion, floods and other natural disasters every year, strong rush of population towards urban, but compared to that due to lack of planned urban development and expansion, housing and other civic amenities in the cities are insufficient. As a result, a large number of people in the country's major cities are being forced to live a low standard of living without civic amenities and this number of population has steadily increased in recent years. According to 2014 Slum Census, number of slums in the cities has increased from 2,991 to 13,995 between 1997 and 2014. As a result, Bangladesh has highest number of slum dwellers in proportion to population living in South Asian cities (BBS Survey 2015), which has a major negative impact on the quality of life of those population, which is disrupting normal course of the country's economy as well as questioning the quality of the overall economy.

Despite the fact that cities are the hub of civic amenities, unplanned urban growth and development is putting enormous pressure on urban system and urban service activities in the country. As a result, besides housing crisis in the cities of the country, problems of electricity, water and sewerage, traffic congestion due to inadequate communication system, security and many other problems are very evident. According to various international organizations, cities of Bangladesh are totally unsuitable for quality and safe living. It goes without saying that there is no

provision of housing and other civic amenities for low-income people in the cities of the country. Housing crisis in the cities is already evident, which is gradually becoming more evident. According to Urban Directorate Report 2016, population of cities in the country was 20.87 million in 1991 and housing deficit was 0.95 million units at that time. By 2010, population in the cities has increased to 43.43 million and housing deficit arrived at 4.6 million units. According to estimates of that organization, by 2021, population in the country will reach to 60 million and housing deficit will be 8.5 million units (14.17%) Figure-4.2 (1).

Figure-4.2 (1): Scenario of population living in the cities and housing deficit during 1990-2021: -



Source: Urban Development Directorate Report 2016

First Edition: August, 2022

Urban Housing and Civic Amenities:



Nature of accommodation in cities of the country:

Classification of urban households by occupation:

Strategies for Economic Development of Bangladesh



1) Nature of accommodation in cities of the country:

Apart from the two big cities of Dhaka and Chittagong, civic amenities are inadequate in other cities of the country, similarly, good quality housing system has not been developed yet in all those cities. In addition to increasing civic amenities in Dhaka and Chittagong, although some improved housing systems have been developed there, but they are still inadequate compared to population living in those cities. According to BBS Survey 2019, 53.28% of total housing in cities of the country (59.70% in Dhaka and Chittagong and 29.36% in other cities) are brick / cement roof, 45.48% (39.14% in Dhaka and Chittagong and 69.02% in other cities) of tin / CI sheets and 1.26% (1.16%

in Dhaka and Chittagong and 1.62% in Figure-4.2 (2): According to the roof noted that in urban areas, most of the tin / CI seat houses are located in slum areas, where civic amenities are very inadequate. As such, cities of the country have still (45.48 + 1.26) =46.74% housing is very low quality and are excluded of civic amenities Figure-4.2(2).

other cities) of wood / straw. It is to be structure, type / nature of housing in the cities of the country by 2019:

Roof materials	Dhaka and Ctg. (%)	Other big Cities (%)	All Urban Areas (%)
Brick/Cement	59.70	29.36	53.26
Tin / CI Sheet	39.14	69.02	45.48
Wood/Straw	1.16	1.62	1.26
Total	100 %	100 %	100 %

Source: Urban Socioeconomic Survey 2019

2) Classification of urban households by occupation:

A significant portion of the country's urban population is still without income, most of them are living in slums deprived of civic amenities. As of 2019, head of households among households living in urban areas are day laborers 14.73% (14.77% in Dhaka and Chittagong and 14.57% in other cities), 25.18% are salaried households (26.32% in Dhaka and Chittagong and 20.95% in other cities), Selfemployment 17.73% (17.11% in Dhaka and Chittagong and 20.06% in other cities), Business 20.59% (20.36% in Dhaka and Chittagong and 21.43% in other cities), Farming

5.76% (5.88% in Dhaka and Chittagong and 5.28% in other cities) and number of households with no fixed income is 16.02% (15.57% in Dhaka and Chittagong and 17.70% in other cities) Figure-4.2 (3).

According to HIES 2016, number of families living in the cities is 11.07 million. As such, number of households with no source of income in the cities of the country is (11.07 x 16.02%) = 1.77 million.

Figure-4.2 (3): Classification of urban households on the basis of occupation of head of households by 2019:-

Occupation	Dhaka and Ctg. (%)	Other big Cities (%)	All Urban Areas (%)
Wage Labour	14.77	14.57	14.73
Salaried	26.32	20.95	25.18
Self Employed	17.11	20.06	17.73
Business/Trade	20.36	21.43	20.59
Farming & Others	5.88	5.28	5.76
Non-Earnings	15.57	17.70	16.02

Source: Urban Socioeconomic Survey 2019







Per capita cost of living in urban areas:

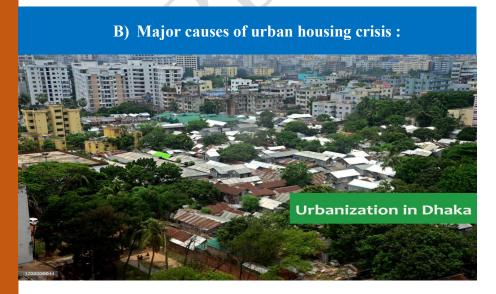
3) Per capita cost of living in urban areas:

capita cost of living. In Dhaka-Chittagong, for example, per capita house rent is about half the cost of food. On the other hand, education, medical care, travel and other services in other cities of the country are much higher than in Dhaka and Chittagong. According to Urban Socio-economic survey, by 2019, overall per capita cost of living in urban areas is TK. 4,042 in Dhaka-3,966 (TK. Chittagong and TK. 3,683 in other cities), of which food cost is 50.75%, house rent 20.81%, medical cost 4.72%, wearing 3.22%, education 2.74%, travel 4.75%, electricity, water etc. 6.39% and other expenses 6.62% Figure-4.2 (4).

Dhaka-Chittagong and other cities of the country differ in terms of per capita cost of living. In Dhaka-items in urban areas:

Expenditures	Dhaka and Ctg. (%)	Other big Cities (%)	All Urban Areas (%)
Food Exp.	2,035	2,001	2,027
Non-Food Exp	2,007	1,682	1,939
Monthly Exp.	4,042	3,683	3,966
Sha	re (%) of Exp	54.80	50.75
House Rent	24.67	6.46	20.81
Medical	3.61	8.83	4.72
Clothing	3.29	2.96	3.22
Education	2.25	4.58	2.74
Transport	4.36	6.18	4.75
Elec., Water	6.49	6.03	6.39
Other Exp.	5.67	10.16	6.62
Total:	100	100	100

Source: Urban Socioeconomic Survey 2019



Low-income people from all over the country are constantly coming to the cities in search of work. Compared to population arriving in the cities, on the one hand, lack of jobs, on the other hand, due to housing crisis of low-income people, high housing and other daily expenses, life of this class of people has become very difficult. As a result, this class of people is forced to adapt to a low standard of living in slums. According to various international organizations, by 2021, number of this class of population in cities of the country will be about 14.18%.

Housing crisis is getting worse due to lack of adequate housing in proportion to population in the cities of the country. Especially for low-income population living



Major causes of urban housing crisis:

Absence of effective and realistic urban housing policy:

Strategies for Economic Development of Bangladesh



in the big cities like Dhaka and Chittagong, their own housing is gradually turning into a golden deer and living in healthy housing is becoming almost impossible due to continuous increase in house rent. Main reasons for insufficient expansion of urban housing industry in the country among others are: -

- 1. Absence of effective and realistic urban housing policy.
- 2. Urban growth not commensurate with urban population growth.
- 3. Land and flat prices have risen at an unusual rate in recent years.
- 4. Constantly rising prices of construction materials.
- 5. Insufficient housing loans at high interest rates.

Due to the housing crisis, house rents are rising uncontrollably in the cities. Lion's share of income of the middle and lower middle class goes to rent (about one-third of total income), which has a huge negative impact on their children's education, medical care and family life and countless families are forced to live in low-income housing. Following are some of the reasons for increasing housing crisis in cities:

1) Absence of effective and realistic urban housing policy:

In the last two decades, urbanization has increased at an unusual rate in the country. Especially in the period of 2015-2020, growth rate of urbanization in Bangladesh is 3.17%, which is highest compared to other countries in South Asia. Most of the people who are regularly coming to cities are low-income people who come to cities in search of work. But compared to that, civic amenities and housing for low-income people in cities have not been expanded at all, as a result of which housing crisis of low-income people in the big cities of the country has reached its climax.

Development of the housing sector and financing process in this sector is continuing under the ongoing government housing policy in the country, but in reality it is insufficient enough to solve the housing crisis there. Housing financing and housing development are also taking place in the private sector, but it is very little. Policies under which housing and civic amenities are currently being developed at Urban village level are: -

- National Land Use Policy, 2001
- National Rural Development Policy, 2001
- National Housing Policy, 2006
- National Urban Sector Policy, 2010
- Seventh Five Year Plan 2017-2020

Ensuring healthy housing and civic amenities for low-income people is paramount in realizing the real purpose of urbanization by increasing productivity in cities, as they are the main driving force of urban mobility. Therefore, in order to address the housing crisis of low-income people in urban areas, it has become imperative to adopt an effective and realistic housing policy to develop adequate housing at public and private levels and increase housing financing. Otherwise, there is no doubt that in near future, chaos in the housing sector will go out of control in the cities of the country.

2) Unusual increase in land prices:

Another reason for the lack of adequate housing for low-income population in cities is unusual rise in land prices in recent times. During 35 years period from 1975 to 2010, price of land at prime locations of Dhaka city has increased several hundred times. In all these prime locations, average price per khata in 1975 was Tk 22,667,





Unusual increase in land prices:

while in 2000 average price per khata stood at Tk 2,077,778. During these 25 years, price per khata land has increased by an average of 733%. Again In 2000, average price of land in these prime locations was TK. 2,077,778 per khata, while in 2010 price increased to TK. 16,055,556 per khata. It means, price of land in Dhaka city has increased by an average of 639% in the interval of ten years between 2000-2010 **Figure-4.2 (5).**

Figure-4.2 (5): Scenario of land price increase in notable locations of Dhaka city between 1975 and 2010: -

0.000		Pe	Periods		Value Increased (%)	
Area	1975	1990	2000	2010	1975-2000	2000- 2010
Baridhara	25,000	600,000	5,000,000	40,000,000	733 %	700 %
Gulshan	25,000	600,000	2,200,000	25,000,000	267 %	1036 %
Banani	25,000	600,000	2,000,000	15,000,000	233 %	650 %
Dhanmondi	25,000	600,000	2,200,000	20,000,000	267 %	809 %
Uttara	20,000	300,000	1,000,000	7,500,000	233 %	650 %
Motijheel	50,000	1,200,000	3,500,000	20,000,000	192 %	471 %
Shantinagar	20,000	500,000	1,500,000	10,000,000	200 %	567 %
Mirpur	10,000	200,000	700,000	4,000,000	250 %	471 %
Badda	4,000	200,000	600,000	3,000,000	200 %	400 %
Average	22,667	533,333	2,077,778	16,055,556	286 %	639 %

Source: REHAB

3) Unbridled increase in the price of flats:

Another reason for the lack of adequate housing for low-income population in cities is uncontrolled rise in flat prices in recent times. In the 20 years gap between 1990 and 2010, price of flats at prime locations in Dhaka city has increased several hundred times. In all these prime locations, average price per square feet of flat in 1990 was Tk 1,777, while in 2000 price per square feet stood at an average of Tk 2,138. In 10 years, price per square feet of flat has increased by an average of 21%. Again in 2000, price of a flat in these prime locations was TK. 2,138 per square feet, but in 2010 price increased to an average of TK. 10,500 per square feet. In other words, price of flats in Dhaka city has increased by an average of 381% in the span of ten years between 2000-2010 **Figure-4.2** (6).

Figure-4.2 (6): Scenario of increase in price of flats at prime locations of Dhaka city between 1990 and 2010: -

	Periods (BDT per Sq. feet)			Value Increased (%)		
Area	1990	1995	2000	2010	1990-2000	2000-2010
Dhanmondi	2,150	2,200	2,400	14,000	12 %	483 %
Gulshan	2,115	2,080	2,450	14,000	16 %	471 %
Banani	1,750	1,950	2,200	12,500	26 %	468 %
Baridhara	1,850	1,950	2,150	20,000	16 %	830 %
Lalmatia	1,800	1,950	2,400	8,500	33 %	254 %
Mirpur	1,250	1,300	1,500	5,500	20 %	267 %
Shantinagar	1,850	1,900	2,200	5,000	19 %	127 %
Mohammadpur	1,450	1,600	1,800	4,500	24 %	150 %
Average	1,777	1,866	2,138	10,500	21 %	381 %

First Edition: August, 2022

Source: REHAB

Unbridled increase in the price of flats:





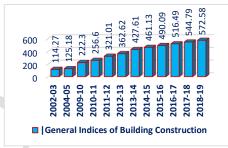
C) Major causes for abnormal rises in flat price:

1) Rising prices of construction materials:

Construction cost of flats has increased several times more than ever before due to abnormal rise in prices of construction materials. Analysis of various price indexes of construction materials over the past two decades shows that workers' wages,

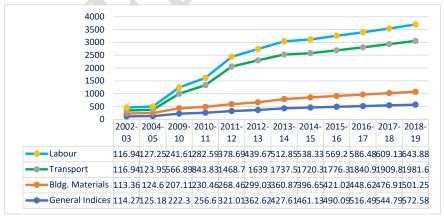
transportation and construction materials prices have multiplied several times during this period, which is one of the major reasons for unusual increase in the price of flats. During financial year 2002-03, general price index of building construction was 114.27, during period of FY 2018-19 it stood at 572.56. During last 16 years, general construction price index of building construction has increased by 401.08% with average annual increase of 23.59% **Figure-4.2**(7).

Figure-4.2 (7): Scenario of increase in General Price Index of Building Construction during 2002-03 to 2018-19:



Source: BBS Report

Figure-4.2(8): Indices of Cost of Building Construction in Bangladesh (Base: 1998-99 = 100):-



Source: BBS Report



First Edition: August, 2022

Major causes for abnormal rises in flat price:





2) Inadequate housing loan facilities:

Housing loan is a big issue in solving the housing crisis in the country, as it is almost impossible for low-income people to build housing on their own funds without housing loan. Current government housing finance program is not at all adequate to meet the housing needs of low-income people in both rural and urban areas. Moreover, private housing development and housing finance institutions are also failing to play a significant role in meeting the growing housing demand. As a result, housing crisis in the country's major cities has now reached its peak.

Figure-4.2 (9): Scenario of housing loan trend in the country during financial year 2005-2016:-



Source: BB/Dhakatribune

Housing finance analysis during fiscal year 2005-6 to 2016-17, shows that combined public and private housing finance in the fiscal year 2005-06 was Tk 8,680 crore, while in the fiscal year 2016-17 it stood at Tk 56,290 crore. During this period, amount of housing finance in the country averaged Tk 28,131.58 crore per annum. It is to be noted that level of financing in the housing sector has increased considerably since 2010-11.

Figure-4.2 (10): Rate of home loan disbursement by different levels of institutions in 2016-17 (%): -



Source: BB/Dhaka tribune

First Edition: August, 2022

During financial year 2010-11 to 2016-17, average housing finance was Tk 39,421.71 crore per annum. During this period, financing in the housing sector has increased by an average of 22.85% per annum **Figure-4.2** (9).

As per data for the financial year 2016-17, 55% of total housing finance in that year issued by private banks, 21% by state-owned banks, 12% by specialized housing finance, 4% by foreign banks and 8% by other financial institutions **Figure-4.2(10)**.

3) Outstanding housing loan and mortgaged loan in proportion to GDP:

Status of outstanding housing loans indicates the level of financed debt in the country's housing sector. Level of funding for housing sector development in Bangladesh, both public and private, is very limited compared to actual demand. According to surveys by various international organizations, demand for housing loans in the country is increasing at an average of around Tk 200 billion a year. According to Bangladesh Bank, demand for housing loans in the country during F.Y 2019-20 was Tk 1,496 billion which will stood at Tk 1,544 billion in the 2020-21 fiscal year. During financial

Inadequate housing loan facilities:



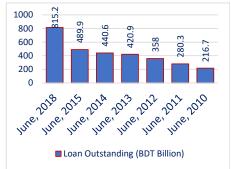


Outstanding housing loan and mortgaged loan in proportion to GDP:

year 2009-10 to 2017-18, outstanding housing loans was TK. 216.7 billion in June 2010, TK. 280.3 billion in June 2011, TK. 358 billion in June 2012, TK. 420.9 billion in June 2013, TK. 440.6 billion in June-2014, TK. 489.9 billion in June-2015 and TK. 815.2 billion in June-2018 **Figure-4.2** (11).

During this period, mortgaged ratio to GDP was 2.72% in FY 2009-10, 3.06% in FY 2010-11, 3.39% in FY 2011-12, 3.51% in FY 2012-13, 3.28% in 2013-14 and 3.23% in FY 2014-15 **Figure-4.2(12).**

Figure-4.2 (11): Scenario of outstanding housing loan during F.Y 2010-2015: -



Source: IFC Report/ Other Source

Figure-4.2 (12): Outstanding housing loan and mortgage loan ratio to GDP in the country during 2010-2015: -

Lenders Category	Total Housing Loan Outstanding (BDT Billion)							
zenacio category	June -	June -	June -	June -	June -	June -		
	15	14	13	12	11	10		
A. Special Housing Finance Providers -	63.6	59.4	55.2	51.9	48.3	44.9		
i) House Buinding Finance Corp.	30.3	29.7	28.0	25.8	25.1	25.1		
ii) Delta Brack Housing	28.7	26.4	24.4	23.6	20.7	17.4		
iii) National Housing Finance	4.6	3.3	2.8	2.5	2.5	2.4		
B. Banks -	395.5	358.0	349.0	286.8	220.6	162.4		
i) Private Commercial Banks	266.0	231.8	229.8	191.8	147.6	99.0		
ii) State Owned Comm. Banks.	108.5	95.6	73.1	63.4	53.0	48.1		
iii) Other Specialized Banks	210.0	30.6	46.1	31.6	20.0	15.3		
C) Other Non-banking Institutions -	30.8	23.2	16.7	19.2	11.3	9.2		
Total Housing Loan Outstanding:	489.9	440.6	420.9	358.0	280.3	216.7		
Mortgage Debt to GDP	3.23%	3.28%	3.51	3.39%	3.06	2.72%		
			%		%			

Source: IFC Report

4) Housing loans are unusually low compared to total loans:

Rate of home loan in Bangladesh is abnormally low compared to total loan, which is substantially insufficient compared to overall home loan demand. To date, Bangladesh lags far behind many countries in South Asia in terms of providing home loans both in public and private sector.

According to 2016 statistics, home loans account for 7.10% of total loans in the Philippines, 9.10% in Bangladesh, 12.46% in India, 19.90% in Thailand, 22.70% in Bhutan and 29.17% in Indonesia **Figure-4.2(13)**.

Figure-4.2 (13): Scenario of housing loan (%) compared to total loan disbursed by Bangladesh and some countries in South Asia in 2016: -



Source: IDLC Business Report 2017

First Edition: August, 2022

Housing loans are unusually low compared to total loans:





To address the growing housing crisis in the country, home loans needs to be increased at a significant rate. In addition to increasing government funding to effectively address the housing crisis at urban and rural levels, private sector banks and other financial institutions need to be more enterprising and proactive.

D) Govt. initiatives for development of urban housing and civic services:

Housing is a complex social and economic component, which is considered as a basic element of living which is associated with the quality development of human life. Urban housing system is an expression of economic standards of the country. Pace at which urban population is increasing in Bangladesh, in addition to development of industry, trade, commerce and other infrastructure, it has become imperative to adopt a pragmatic plan to solve housing crisis of the growing population to ensure sustainable development of the country's economy.

Housing crisis has been evident in the cities of Bangladesh for a long time, which is getting worse and worse gradually. Due to high housing prices, large populations of low-income in the cities, who are the main driving force of urban economy, are forced to make a living in low-graded housing, which is one of the manifestations of weakness of urban economy. Rents on privately owned houses have also Increased uncontrollably in recent years due to widespread housing crisis in cities.

As a result, living expenses of low-income population in the cities have increased at an abnormal rate, which is having a severe negative impact on the living standards of that class of people. During period of 8 (eight) years from financial year 2010-11 to 2017-18, house rent in Dhaka city has increased by an average of more than 8.50% p.a **Figure-4.2** (14).

Present government is continuing its efforts to solve this obvious problem by adopting the National Housing Policy 2017 along with guidelines for solving housing problem in the Seventh Five Year Plan. In addition, a number of projects have been implemented in the major cities of the country for development of electricity, water, gas and transportation system by 2020 and many more projects are underway, among them, Metro Rail project to be constructed modernize to transportation system in Dhaka city seems to be quite timely.

Figure-4.2 (14): Scenario of average house rent increase in Dhaka city between 2011 and 2018:-



Source: MTB Journal

Figure-4.2(15): Rent Indices for Private Residential Houses in Urban Centers for the period from 2000-01 to 2017-18:-



First Edition: August, 2022

Source: BBS Report

Government initiatives for development of urban housing and civic services:



Civic amenities

and security:

Strategies for Economic Development of Bangladesh



E) Civic amenities and security:

Cities are now home to more than half of the world's population. Cities that are mainstays of every country's economy, from trade to commerce, that's why improving quality of life and security of all city dwellers is so important all over the world. As of 2015, cities contribute about 85% of the world's GDP. A livable city refers to urban infrastructure with modern facilities and administrative activities and management of social and personal security of the citizens, so that residents of the city are able to enjoy all civic amenities irrespective of class and occupation and live a safe and peaceful life.

Needless to say, cities of Bangladesh are still lagging behind in terms of urban infrastructure, such as electricity, sanitation, education, health, communication, healthy environment and social and personal security. Dhaka is the capital of Bangladesh and largest city in the country, with a population of about 2.00 crore by 2020. According to Safe Cities Index 2019, Dhaka ranks 56th among the 60 busiest cities in the world in terms of livability. In that list among other South

Asian cities, Tokyo is 1st, Singapore is 2nd, Seoul is 8th, Hong Kong is 20th, Beijing is 31st, Kuala Lumpur is 35th, Manila is 43rd, New Delhi is 52nd, Jakarta is 53rd and Pakistan is 57th Figure-4.2(16).

In order to accelerating economic progress of the country, as urban development and urban expansion is urgent, Bangladesh should be more active in ensuring adequate infrastructure development in cities, environmental development and social and personal security of all walks of life.

Figure-4.2 (16): As per 2019 ranking, position of Dhaka and a few other cities in Asia among 60 busiest cities in the world in terms of livability:-



Source: Safe Cities Index 2019

First Edition: August, 2022

Figure-4.2 (17): Overall and sector-wise position of Dhaka and some other cities in Asia among 60 busiest cities in the world in terms of livability as per 2019 ranking:

	Overall Rank		Scores in different type of security				
Rank	City / Country	Scores	Digital Security	Health Security	Infrastru cture security	Personal security	
1	Tokyo, Japan	92.0	94.4	87.5	94.3	91.7	
2	Singapore	91.5	93.1	80.9	96.9	95.3	
8	Seul, S. Korea	87.4	84.7	85.2	92.4	87.5	
20	Hong Kong	83.7	78.8	73.2	91.1	91.9	
31	Bejing, China	70.5	58.1	68.0	72.1	83.9	
35	Kualalampur, Malaysia	66.3	54.4	64.4	64.7	81.8	
43	Manila, Philippines	59.2	52.1	56.6	53.6	74.7	
52	New Delhi, India	55.0	51.0	54.6	40.7	73.6	
53	Jakarta, Indonesia	54.5	42.3	51.7	52.3	71.7	
56	Dhaka, Bangladesh	44.6	41.9	45.1	34.2	57.4	
57	Karachi, Pakistan	43.5	43.1	39.0	46.1	45.9	

Source: Safe Cities Index 2019 by Economic Intelligence Unit





F) Recommendations for development of urban housing and civic amenities:



As a result of not being able to increase urban housing and civic amenities in line with urbanization in Bangladesh, housing crisis of the low-income population in all big cities of the country has reached its peak in recent times. Needless to say, government does not have effective measures to address housing crisis of low-income people in the cities. High cost of housing built by private housing development companies is often beyond the reach of low-income people.

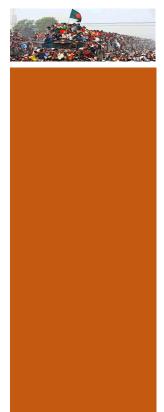
Current home loan system in the country is not in favor of low-income population, only middle and upper classes can enjoy this loan. Moreover, volume of public and private mortgages compared to actual demand is very limited, short-term and high interest rates. As of 2016, home loans accounted for 9.10% of total loans in Bangladesh which is 12.46% in India, 19.90% in Thailand, 22.70% in Bhutan and 29.17% in Indonesia. Due to limited range of home loans in the country, people with limited income are losing interest in buying their own housing, which is one of the obstacles to expansion of the country's housing sector. Due to lack of adequate housing in the cities, most people are dependent on rental housing, which is one of the reasons for unbridled increase in house rents in the cities.

More than half of urban population is low-income people, who can never afford to buy their own housing based on their income, although these large number of low-income population are the main driving force of urban economy. In order to improve quality of urban economy as well as to bring dynamism in the overall economy of the country, it is time to improve quality of life of these low-income people by ensuring quality housing and civic amenities. Because, in order to build a civilized country and nation, quality housing is considered first and foremost. Just as it is not possible to solve this larger problem overnight, it is also impossible to get rid of this problem without a real and positive attitude of the government and bold steps.

In addition to the ongoing policies of the government, following steps can be taken to solve the urban housing crisis and increase civic amenities: -

First Edition: August, 2022

Recommendations for development of urban housing and civic amenities:





- 1. First of all, formulation and implementation of realistic policies to solve the housing crisis of low-income people living in cities within next ten years.
- 2. To take necessary steps to increase domestic and foreign investment by involving the private sector in urban housing development.
- 3. To make financing process in the housing sector easier as well as to increase the level of financing adequately.
- 4. Increase financing period in housing sector and keep the interest rate limited to 5%.
- 5. Introduce at least 90% of flat price financing for low income people.
- 6. Permanent solution to the urban housing problem is to build housing on a commercial basis at the initiative of the government in the light of Singapore and other countries, so that citizens can purchase housing at a fair price. For example, Singapore Housing Development Board was formed in 1965 to address the housing problem in Singapore and solved this problem in just 5 (five) years by allocating low-cost housing to low-income people. By 2020, 91.7% of Singapore's population are living in their own homes.
- 7. To make it economically significant by regularly increasing the perimeter of the city in line with urbanization as well as increasing housing and civic amenities in every district town.
- 8. To construct flats by government with adequate civic amenities for low-income people in special places of the city and to distribute them among those classes of people on easy terms.





Chapter: 4.3

Increasing Urban Productivity .







Increasing Urban Productivity.

Topics Covered in the Chapter

- A) Increasing Urban Productivity.
- B) Importance of Urban Productivity.
- C) Areas related to urban productivity.
- D) Long-term effects of urban productivity.







A) Increasing Urban Productivity:

Urban economy is a process consisting of urban education, health, transportation and other civic amenities, trade, commerce, production and distribution system, which thrives on integration of rural economy and plays an important role in enriching the overall economy of the country by increasing productivity. Broadly speaking, urban economics is a branch of macroeconomics, which evaluates the overall structure of the city and issues related to livelihood of people living in cities.

Urbanization acts as an automatic engine to accelerate economic progress of a country. People from rural areas of the country come to city for the purpose of exchanging goods and services and in many cases for a better life with hope of permanent residence. In cities, skills and experience of people of different background come together and exchange of multidimensional goods and services are increased. Multiplicity of goods and services and gathering of skilled and experienced people attract domestic and foreign investment in various sectors, leading to urban infrastructure development and expansion of multifaceted industries in cities, which helps in increasing urban productivity. A large part of productivity of a country is determined by the productivity of the big cities of that country.

In general, larger cities are more productive in the light of experience, which ensures proper use of labor, efficient work coordination, choice of workers in production and proper evaluation of ancillary issues of the producer. This productivity continues to prosper until the cost of land, labor, housing and other necessities in the city exceeds this productivity.

B) Importance of Urban Productivity:

Economic prosperity of a country is a combination of rural and urban productivity of that country. A large part of a country's productivity is determined by the productivity of the country's major cities, because urban productivity directly contributes to the country's GDP growth and ensures rapid transformation of the economy. Therefore, in spite of hundreds of obstacles in urban management and development, there is a tendency in developed and developing countries around the world to enrich country's economy by increasing urban productivity. In the context of Bangladesh, in order to meet challenge of 2041, rapid transformation of overall economy of the country in line with rural productivity and urban productivity is very important.

Although transition from an agro-based economy to a modern economy through increasing urbanization is a real challenge for Bangladesh, but over the past few decades, both urbanization and contribution of urban sector to GDP in Bangladesh have increased significantly, which is symbolizing the growth of urban productivity. Contribution of urban sector to GDP during 1972-73 was 25.36%, which stood at 65% in 2012-13. During this period, growth of urban sector was 0.98% on average **Figure-4.3** (1).

According to the World Bank, growth of urban productivity depends on four strategies, namely:-

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Increasing Urban Productivity:

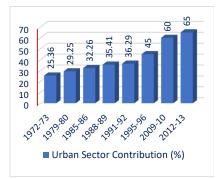




Importance of Urban Productivity:

- 1. Increase institutional capacity for investment level development, management and maintenance and development of infrastructure management at city level by increasing private sector participation.
- 2. Improving city-wide regulatory framework to increase market efficiency and increase private sector participation in urban housing and urban infrastructure development.
- 3. To increase financial and technical capacity of municipal institutions through more efficient division of resources and responsibilities between central and local governments; and
- 4. Strengthening financial services for urban development.

Figure-4.3 (1): Contribution of rural and urban sector to GDP of Bangladesh during the period from 1982-83 to 2012-13: -



Source: Journal on Urbanization and Economic Development of Bangladesh by Sardar Syed Ahmed and Montasir Ahmed.

C) Areas related to urban productivity:

Urban productivity is an integrated process between urban administration, urban planning and implementation which accelerates the overall economy by increasing the momentum of urban economy. Urban productivity depends on the overall amenities of the city, such as housing, transportation, water and sewerage, electricity and other civic amenities and proper coordination of administrative skills and security in urban management, which requires long-term strategic planning and its proper implementation.

In order to increase urban productivity, cities needs to be transformed into a modern / smart city, as effective development of the areas associated with smart city ensures an increase in urban productivity. In most of the major cities of Bangladesh, necessary areas for smart cities have not yet made effective progress, resulting whose Bangladesh lagging far behind in terms of urban productivity in the world and even in South Asia.

Smart City Concept should be fully utilized in Bangladesh for urban development and expansion to enjoy the benefits of urbanization and bring dynamism to the overall economy by increasing urban productivity. Because, implementation of smart city concept will not only be the beginning of modern urbanization in Bangladesh, but also the opportunity to develop the rural economy will be greatly expanded as a result of wonderful combination of rural and urban economy. Following is a summary of the areas related to construction of smart cities in the light of UN Habitat III:

 Modern Urban Patterns and Urbanization Process: As a result of following this process will ensure discipline in the areas related to urban development and expansion, such as infrastructure, services and urban housing development, as well as in efficient distribution of population, employment, etc.

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Areas related to urban productivity:





- 2. Improved Urban Administration: In addition to maintain law and order and security in the city as well as to ensure improved urban governance, reforms and decentralization of local government institutions under policies and strategies, participation of civil society and public at all levels in formulating and implementing city administration policies and improve skills of individuals and organizations.
- 3. Sustainable development of urban economy: Sustainable development of overall economy of the country is essential to keep pace with changes in the global economy, which requires adequate employment at the city level and increase urban productivity to ensure proper development of local economy by alleviating poverty in the cities.
- 4. Effective and Efficient Land Management: Main objective of this policy is to ensure proper use of land in urban development and expansion while maintaining ecological balance through sustainable land use planning and innovative land management. Needless to say, effective urban planning and land management system for development in metropolitan and other cities of the country is not yet integrated enough. However, in recent years, government has taken initiatives to improve urbanization system and has taken long-term plans to solve the problems of cities.
- 5. Adequate Infrastructure Development and Quality Services: Ensuring quality civic services through adequate infrastructure development is one of the hallmarks of modern urban management. Notable civic services include safe water supply, sanitation, waste management, transportation and communication, energy, health, education, safety and other emergency services related to improving the quality of life of citizens. Sustainable infrastructure development is the most important step in building a smart city to ensure adequate urban services.
- **6. Modern Waste Management:** Modern waste management is an integral part of efficient urban management to keep cities clean and to protect the city's environment.
- 7. Improved urban transportation system: Integrated and balanced urban transport system is another very important element of modern urban management. Main objective of this policy is to build an integrated transportation system across the city considering the need of mechanical and non-mechanical vehicles, private transport and public transport in proportion to urban population and volume of city. In this case, among other things, role of important places in the city, work centers, residential areas, educational institutions, hospitals, shopping malls and important establishments in the public and private sectors should take into consideration.
- 8. Modern Urban Housing System: Due to rapid urbanization, population has increased at an abnormal rate and housing crisis in the country's cities has reached its peak. Overall abnormal rise in land and construction prices in recent years has exacerbated this problem. As a result, owning housing in cities is now beyond the reach of low-income people. Effective solution to urban housing crisis requires a multi-fold increase in investment in the public and private sectors through adoption of long-term and realistic





urban housing policies. Moreover, in order to solve rapid urban housing crisis in the country, it has become urgent for the government to build housing for the low-income population on a commercial basis.

- 9. Urban Poverty Alleviation: A large portion of population who are constantly rushing to the cities in search of work are low educated or uneducated low income earners. This category includes about a quarter of total population living in the big cities of the country, who make a living in low-income housing without civic amenities. Eliminating urban poverty, creating adequate employment for low-income people through increasing urban productivity, as well as ensuring equal opportunities in education, health, housing and other civic services to improve their quality of life and in this case, needs & rights of women and children should be given more importance.
- 10. Development of Urban Environmental Management: Environmental pollution in cities around the world has become difficult to prevent due to high population density, overcrowding, decentralization of industries in cities and a variety of issues related to urban development, which is seriously harmful to public health. Special emphasis should be given on preventive measures that may lead to development of environmental degradation in future to maintain balance of environment while ensuring a clean environment in the cities.
- areas of the country is now widely recognized as increasing economic dynamism in both areas. This is because a significant portion of households living at village level depend on urban related business and income from family members working in cities. A large portion of goods produced at village level come to the cities, which plays a unique role in expansion of agricultural sector of the country. A large portion of daily labor demanded of the cities come from villages, again market for many products produced in the city is wide at village level. Therefore, in order to increase urban productivity, it is very important to increase economic dynamism in both the cases by increasing economic exchange between village and cities.

D) Long-term effects of urban productivity:

Urban development and expansion plans should be undertaken by identifying urban economy as the engine of overall economic development. This is because, adoption of up-to-date policies and strategies in urban development and expansion planning will help make the country's ongoing urbanization process more efficient and fully utilize our cities as engines of development. Important thing in this case is that sustainable urbanization expands interaction between urban and rural areas, exchange of goods, supply of labor and trade opportunity, which brings dynamism to rural economy as well as opportunity to develop the overall economy by increasing urban productivity. Therefore, rural and urban economies can be identified as two pillars of the overall economy and proper evaluation and utilization of these two pillars will serve as an important process in building a sustainable economy in the country.

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Long-term effects of urban productivity:









Chapter: 5.1

Effective Population Control.







Effective Population Control.

Topics Covered in the Chapter

- A) Effective Population Control.
- B) Future population growth forecast of Bangladesh.
- C) Bangladesh position in terms of population density.
- D) Family planning program for population control.
 - 1. Brief history of expansion of family planning activities in the country.
 - 2. Ongoing family planning activities in Bangladesh.
 - 3. CIP for National Family Planning Program (2016–2020).
 - 4. Expansion of Family Planning activities in Bangladesh.
- E) Effectiveness of ongoing family planning Activities.
- F) Bangladesh's position in the world on birth control measures.
- G) Fertility rates vary by village and cities.
- H) Reasons for failure of effective population control.
- I) Recommendations for effective population control.





Effective

Control:

Population

Strategies for Economic Development of Bangladesh



A) Effective Population Control:

Overpopulation which is inconsistent with volume, size and economic condition of the country poses a serious threat to economic development. With limited resources of the country, it is no longer become possible for the state to ensure education, medical care, housing and employment of this huge population, most of the people in the country then grew up uneducated, incompetent and dependent on destiny. This uneducated and unskilled huge population is as incompetent and unsuccessful at workplace as they are also completely indifferent to improvement of their living standards. As a result, the country become then a hell of scarcity, poverty, violence and moral decay. Same picture is observed in almost all densely populated countries of the world, it is well known to all. Therefore, moderate population is the first condition for development of any country.

There is no need to re-analyze it that Bangladesh is a very populous country on the world map considering its size, geographical location, economic and environmental conditions. Total population of the country was 111.46 million in 1991 and at that time population density per square K.M were 755 people, by 2018 population of the country stood at 164.60 million and population density per square K.M stood at 1,116 people. In these 27 years, population of the country has increased by 53.14 million overall, an average increase of 1.97 million per year. In 1991, population growth rate in the country was 2.17%, by 2018 it has come down to 1.33%. Although population growth rate has come down below 2 percent since 2000, total population of the country has been gradually increasing, which is alarming compared to size, area and resources of the country **Figure-5.1(1)**.

Overpopulation is one of the major threats to overall development of the country, government and people of this country have realized this reality long ago and so far lots of projects have been undertaken in the family planning and birth control by spending hundreds of crores of taka with government's own funding and donor support. Extent to which progress has been made in this regard as a result of steps taken by the government, private sector and donor agencies in the country so far to curb population growth is highlighted below.

Figure-5.1 (1): Scenario of population growth of the country during 1984 to 2018 :-

Year	Population (Million)	Density per sq. km	% of population living in Village	Growth rate of population	Global position
1991	111.46	755	76.66	2.17	9
2001	130.52	884	72.86	1.59	8
2011	149.77	1015	73.73	1.38	8
2016	159.58	1090	72.75	1.37	8
2018	164.60	1116	72.75	1.33	8

Source: BBS

Figure-5.1(2): Graphycal presentation of Population Growth during 1991-2018:-



Source: BBS



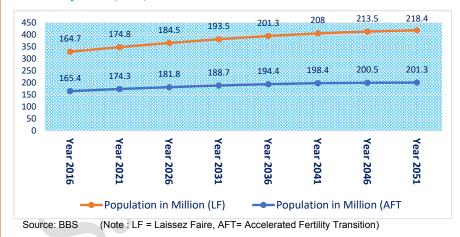


B) Future population growth forecast of Bangladesh:

As Bangladesh is very small in size, if current trend of population growth in the country continues, due to overpopulation, in the near future, social and economic disasters as well as natural disasters are imminent in this country. Because, in the realm of nature, everything is balanced in a systematic way, and in any case, as soon as there is any abnormalities, nature adjusts it applying its own rules. According to **EI-Saharty et. Al (2014) till 2051,** population of the country will be 174.8 million by 2021, 184.5 million in 2026, 193.5 million in 2031, 201.3 million in 2036, 208.00 million in 2041, 213.5 million in 2046 and 218.4 million in 2051, which is several times higher than size, economy and food production capacity of the country.

Future population growth forecast in Bangladesh:

Figure-5.1 (2): Population growth forecast in the country by 2051 according to EI-Saharty et. Al (2014):-



C) Bangladesh position in terms of population density:



In 2018, Bangladesh is ranked third in South Asia in terms of population and first in population density. By 2018, population density per square kilometer in the country stood at 1115 people. At the same time, other South Asian countries had a population density of 411 in India, 267 in Pakistan, 20 in Bhutan, 79 in Myanmar, 135 in Thailand, 95 in Malaysia and 330 in Sri Lanka. According to 2018 census, population density per square km in Bangladesh is 2.71 times that of India, 4.18



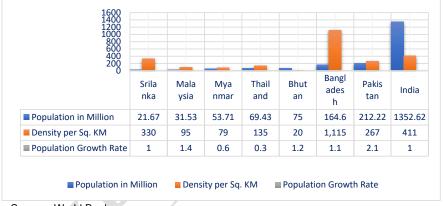


Bangladesh position in terms of population density:

times that of Pakistan, 55.75 times that of Bhutan, 14.11 times that of Myanmar, 8.23 times that of Thailand, 11.74 times that of Malaysia and 3.38 times that of Sri Lanka. In other words, Bangladesh is still the most densely populated country in South Asia **Figure-5.1** (3).

At what stage of catastrophe is Bangladesh staying in terms of population compared to size, area and resources of the country and if this catastrophe can not be prevented very quickly, what could be the consequences of this country in future, conscious people of this country should seriously realize it. Therefore, in order to move towards future progress and to meet the target of 2041, it is necessary to strictly control the population of this country, it is important for everyone to agree on this.

Figure-5.1 (3): Scenario of Population of Bangladesh and some other countries in South Asia by 2018: -



Source: World Bank

D) Family planning program for population control:



1) Brief history of expansion of family planning activities in the country:

Family planning programs in Bangladesh has evolved over seven decades, which began through voluntary and semi-government efforts in the 1950s by a group of social and medical workers. Government-sponsored clinics-and field-based FP services started in the 1960s and from the mid-1970s MCH-based FP services were



Family planning program for population control:

Strategies for Economic Development of Bangladesh



introduced to address rapid population growth as the country's number one problem. A Sector Wide Approach (SWAp), aimed at reforming the health and population sector was introduced during late 1990s, in which entails provision of a package of essential and quality health care services responsive to the needs of people, especially those of children, women, elderly and poor. Next HPNSDP (2011–2016) is the third SWAp and is designed to improve access to and utilization of essential health, population and nutrition services, particularly by the poor. Objective of the HPNSDP is to ensure quality and equitable health care service for all citizens by improving access to and utilization of health, population and nutrition services.

2) Ongoing family planning activities in Bangladesh:

Government sector remains the major provider of contraceptive methods, catering to almost 49% of all users, among them government field workers supply 20%, private sector provides 47% and NGOs supply 4% of all users. Although public sector is the main provider of contraceptives but share of private sector in supplying contraceptives has increased from 36 percent in 2004 to 47 percent in 2014 (BDHS 2014). About two in five pill users (38 percent) and three in five condom users (60 percent) use a socially marketed brand (BDHS 2011). Social Marketing Company (SMC), a not-for-profit social marketing organization selling its own brand of pills, condoms and injectables in Bangladesh at subsidized prices through private sector outlets. Funded by various donor agencies, many NGOs are involved in providing maternal and child health services across the country.

3) Costed Implementation Plan (CIP) for National Family Planning Program (2016–2020), Bangladesh:

CIP consists of specific program and activities which are required to achieve national targets of Family Planning Program in a cost efficient way. In July 2012, at London Summit on Family Planning (FP2020), Bangladesh committed to overall goal of 'Ensuring quality and equitable Family Planning services for all Eligible Couples (ELCO) by improving access to and utilization of FP services, particularly by the poor. Highlights of commitments and targets of London Summit are as follows:-

- Bangladesh will increase access to and use of LAPMs and post-partum and post-abortion services by the poor people in urban and rural areas.
- Government will work with private sector and NGOs to address the needs of young people, especially young couples; reduce regional disparities through working with leaders and communities to delay early marriage and child birth; and increase male involvement in FP.
- One third of Maternal Newborn and Child Health (MNCH) centers will provide adolescent Sexual and Reproductive Health and Rights (SRHR) services.
- Monitoring to ensure quality of care will be strengthened, including informed consent and choice and to support women to continue use of FP.

To achieve the targets Bangladesh committed at FP 2020 summit, a CIP (2016-2020) is being implemented to align FP resources with the country's needs and harmonize approaches undertaken by both public and private stakeholders, which will enable achievement of FP2020's goal on specific activities and targets. (Source: MOHFW, Bangladesh)







4) Expansion of Family Planning activities in Bangladesh:

Family Planning activities in Bangladesh has expanded gradually based on changing situation of population in the country, which started in the 1950s through voluntary and semi-government efforts. At present, Family Planning activities are extensive over the country with a number of effective programs. Bangladesh has made commendable achievements during the last decades in reducing population growth and improving maternal and child health, especially in the period of 2010-2020, visible progress has been made in this sector. Reduction in the total fertility rate (TFR) from 6.3 births per woman in 1975 to 2.05 births per woman in 2018 is very encouraging. Gradual expansion of family planning activities in the country based on the changing situation is summarized in the following table:-

	4 4 14							
Period	Activities							
1953-1959	: Voluntary and semi-government efforts.							
1960-1964	Government sponsored clinic-based Family Planning Program.							
1965-1970	Field-based Government Family Planning Program							
1972-1974	Integrated Health & Family Planning Program.							
1975-1980	: Maternal and Child Health (MCH)-based Multi-sectoral Program.							
1980-1985	: Functionally Integrated Program. Delivery of MCH-FP services were functionally integrated with Health at Upazila level and below.							
1985-1990	: Intensive Family Planning Program. A broad-based multi-dimensional intensive MCH-based family planning program was launched.							
1990-1995	Reduction of rapid growth of population through intensive service delivery and community participation with the following objectives: Expansion of MCH-FP service delivery with enhanced quality of care. Increased resource allocation for program implementation. Promoting family planning as an integral part of development activities through inter-sectoral collaboration. Mobilizing community support and participation. Increased involvement of NGOs and private sectors for supplementing and complementing government efforts. Enhancing women's status through education and participation in social economic and political life.							
1998-2003	: Health and Population Sector Program (HPSP)							
2003-2011	: Health, Nutrition and Population Sector Program (HNPSP)							
2011-2016	Health, Nutrition and Population Sector Development Program (HNPSDP with the following key components:-							
	(i) Improving health services, which is divided into two sub components:							
	a. Improving health services b. Improving service provisions							
	(ii) Strengthening the health system							
2016-2020	CIP Implementation.							

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Source : DG of Family Planning





E) Effectiveness of ongoing family planning Activities:

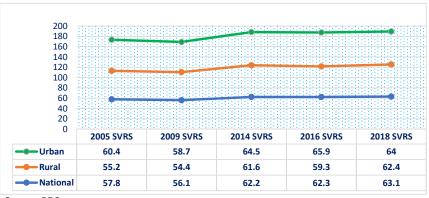


Birth control measures have been in place in the country for a long time, although most of the publicity and campaigns are based in cities. Prevalence of birth control in rural households is still much lower than in urban households.

Analysis of birth rate of married men and women in the country during 2005-2018 shows that in 2005 rate of birth control measures in the country was 57.8% in the whole country, 55.2% in rural areas and 60.4% in urban areas. By 2018, rate of birth control stood at 63.1% in the country as a whole, 62.4% in rural areas and 64% in urban areas. In the interval of 13 years from 2005 to 2018, rate of birth control increased by 5.3% in the whole country, 7.2% in rural areas and 3.6% in urban areas, which is not enough to control population of an overpopulated country like Bangladesh. Needless to say, in developed countries of the world, rate of birth control is usually 75% - 85%. In order to effectively control population growth in Bangladesh, there is no alternative but to increase the rate of adoption of birth control to 85% -90% **Figure-5.1(4)**.

Effectiveness of ongoing family planning activities:

Figure-5.1 (4): Scenario of adoption of birth control measures in the country from 2005 to 2018:-



Source: BBS





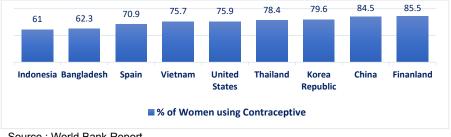
F) Bangladesh's position in the world on birth control measures:



Bangladesh still lags far behind in the world even most of the countries in South Asia, especially in terms of adopting modern birth control measures for women. According to the 2019 ranking, Bangladesh ranks 70th out of 182 countries in terms of adopting modern birth control measures for women. In that list Singapore is ranked 65th, Indonesia 53rd, Vietnam 40th, Bhutan 39th, S. Korea 34th, Thailand 13th, Cambodia 12th and China 4th position. (Indexmundi)

Moreover, Bangladesh is also still far behind in terms of adopting all kinds of birth control measures. According to data for the period of 2015-16, rate of adoption of all types of birth control measures in Bangladesh is only 62.3%. In other countries of the world, such as in Spain, the rate is 70.9%, in Vietnam 75.7%, in USA 75.9%, in Thailand 78.4%, in S. Korea 79.6%, in China 84.5% and 85.5% in Finland.

Figure-5.1 (5): Rate of birth control measures taken by women in Bangladesh and some other countries during 2015-16:-



Source: World Bank Report

G) Fertility rates vary by village and cities:

Fertility of women living in rural and remote areas of Bangladesh is much higher than that of women living in urban areas. In rural areas, where 73% of total population of the country live, rate and quantity of population growth in rural areas is significantly higher than in urban areas due to high fertility of rural women, which is one of the major obstacles to population control in the country. Analysis of data from 2010 to 2018 shows that in 2010, overall female fertility rate in the country was 2.12%, 2.26% in rural areas and 1.72% in urban areas. At that time fertility rate in rural areas is 0.54% higher than in urban areas. According to data of 2018, fertility rate is 2.05% in the whole country, 2.38% in rural areas and 1.68% in urban areas. At this time fertility rate is 0.70% higher in rural areas than in urban areas. During gap of these 8 years, although fertility rate has decreased slightly at national and urban levels but has increased by 0.12% at village level.

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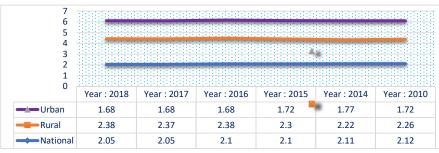
Bangladesh's position in the world on birth control measures:

Fertility rates Vary by village and cities:





Figure-5.1 (7): Scenario of increase and decrease in total fertility rate (%) in the country during 2010 to 2018:-



Source: BBS

H) Reasons for failure of effective population control:



Population of a country works as a blessing only when population is in harmony with size and resources of the country and is possible to engage that population in the development of the country by developing them as a resource in education and skills. In terms of overall capacity, both rate and quantity of population growth in Bangladesh are abnormally high, a large part of which is lagging behind in terms of quality education, health and nutrition, which is constantly becoming a public problem instead of a human resource and is increasing poverty rate in the country as well as severely hampering overall economic progress of the country.

Past governments and even present government have taken various steps to solve this problem effectively, but expected results have not been achieved yet. As a result, there is no room for disagreement in this regard as it is an unresolved challenge for the country in future to ensure proper education, health and other basic needs of this growing population.

Reasons why steps taken by the past and present government for effective population control in the country have not been as effective as expected are: -

1. Prevailing measures in the country to control population are mainly based on light propaganda and campaigns, excess of which is visible only in the cities. Campaign is very limited in the villages or in remote areas. As a result, most

Reasons for failure of effective population control .





- of the families in remote areas are completely indifferent to keeping families small.
- 2. People in remote areas are still unaware of proper use of various birth control methods. Due to ignorance of usage, most families are either afraid or avoid using birth control methods. Moreover, due to high cost of birth control products, many people refrain from taking birth control measures.
- 3. Inadequate contraceptives in rural and remote areas.
- 4. Due to the lack of legal obligation to specifically limit the number of family members, less educated or uneducated and poor or extremely poor families in villages are completely indifferent to limit the family, which is one of the reasons for abnormal population growth in the country.
- 5. Many families refrain from taking birth control measures due to illiteracy and bigotry.

I) Recommendations for effective population control:

ছেলে কিংবা মেয়ে দুই সন্তানই যথেষ্ঠ।



By 2020, Bangladesh is the eighth most populous country in the world. By 1965 this position was 12th and during 1966-2000 it was 9th. Needless to say, Bangladesh is rapidly becoming an overpopulated country due to its abnormal population growth. By 2000, country's population growth rate was over 2%, but by 2020, it has slowed to 1.04%. Population growth rate in Bangladesh is still several times higher than many countries in South Asia. During period of 2015-2020, population growth rate of the country stood at 1.04%, during this period among other countries in South Asia, population growth rate was 0.22% in Thailand, 0.28% in Taiwan, 0.35% in Sri Lanka, 0.36% in S. Korea and 0.39% in China (Wikipedia).

Although Bangladesh is the eighth largest country in the world in terms of population, this undesirable population is one of the major obstacles to sustainable economic development of Bangladesh in terms of resources, capacity and other surrounding conditions. Considering the future of the country's economy and overall situation, it has become imperative to control this unusual pace of population growth at any cost. Otherwise, there is no doubt that in the near future it will be difficult to prevent major catastrophes in sustainable economic development in the country, including food security, health risks and social stability.

Considering overall aspect, following steps can be taken for effective population control in the country:-

First Edition: August, 2022

Recommendations for effective population control .





- 1. In case of marriage, age of man is 25 and for woman 22 should be fixed officially and introduce the provision of collecting marriage permit from the City Corporation / Upazila Office by showing birth registration and education certificate.
- 2. Impose restrictions on completion of compulsory academic and technical education prescribed by the government for every citizen as well as to introduce a system that no citizen gets a marriage clearance before completion of compulsory education.
- 3. Include issues of reproduction, birth control, child rearing and other primary health care issues in the education curriculum.
- 4. Introduce legal punishment to prevent child marriage as well as deprivation of government facilities.
- 5. Ensuring easy availability of birth control materials at nominal cost or at free of cost in slum areas of urban and in rural & remote areas.
- 6. To create awareness at the village level about proper use of contraceptives, possible side effects, benefits of keeping family limit, obligations under birth control laws, etc. through coordinated program of family planning units and NGOs working in rural and remote areas.
- 7. Greatly expand the Family Planning activities in rural and remote areas.
- 8. Extensive publicity and campaign in T.V and other media by imposing legal obligation to limit the number of children in the family to 2 (two), so that people will aware of prevailing birth control laws and try to keep the family small
- 9. Conduct training and publicity & campaigns on the use of modern birth control methods among women in rural and remote areas.
- 10. Families who have more than two children by violating the government rules can be punished by closing down the government facilities as well as other punishments including imposing tax on excess children.
- 11. To preserve and update information of each family under upazila by launching Upazila database, so that updated information is available on the population of each family, earning persons, monthly income and other necessary information.

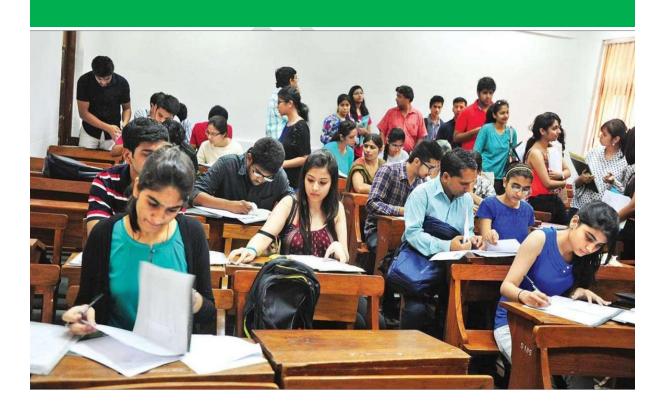
First Edition: August, 2022





Chapter: 5.2

Career oriented Higher Education System.







Career oriented higher education system.

Topics Covered in the Chapter

- A) Career oriented higher education system.
- B) Overall Higher Education Situation in the Country.
- C) Rate of Enrollment at Tertiary Level.
- D) Bangladesh's position in tertiary Enrollment.
- E) Comparative rate of participation of women and men in tertiary education.
- F) Enrollment in Science, Engineering and Technology in higher education.
- G) Research and development activities at tertiary level.
 - 1. Research activities in universities of the country.
 - 2. Criteria for research report published in Bangladesh.
 - 3. Research activities on limited topics.
 - 4. Lagging behind in commercialization of Research Results.
- H) Complexity of employment at the end of education.
- I) Government expenditures on tertiary Education.
- J) Obstacles to spread of tertiary education in the country.
- K) Recommendations to increase quality of education.







A) Career oriented higher education system:



Education is recognized worldwide as one of the most powerful means of eradicating poverty and inequality and improving quality of life. Increasing the rate and quality of education is undeniable for sustainable development of social and economic condition of a country, because, in order to build a developed country, a developed nation and to form a developed nation, quality education system is essential. Needless to say, Bangladesh is still far from a quality education system. One of the features of quality education system is to moving forward with other countries in the areas related to education in international assessment, which are directly related to human resource development. According to the recently UNDP published Global Knowledge Index (GKL) 2020, Bangladesh ranks is 112nd out of 138 countries, which includes seven education-related fields, such as- preuniversity education, technical and vocational education and training, higher education. research, development and innovation, information communications technology, economy and the general enabling environment and in all areas of assessment, Bangladesh lags behind almost all the countries in South Asia **Figure-5.2** (1).

Bangladesh is now widely discussed as the emerging economy of Southeast Asia due to continuous social and economic progress in recent times. Moreover, Bangladesh is going to enter the list of middle-income countries leaving low-income country. As a result, then the flow of domestic and foreign investment will increase many times, as well as number of industries in the manufacturing sector and size and volume of service sector. Country will then need a lot of highly technically skilled people for necessity of science, research and industrialization and a lot of skilled, experienced and highly educated manpower at management level

Therefore, it is important to ensure an international standard and career-oriented higher education system in the fields of science, technology and general education in the country to create skilled manpower for rapid progress in all fields of health, education, technology, economy, research, etc., as well as adequately educated manpower at management level, who will meet the needs of the country in future, otherwise desired progress is bound to be hampered in achieving the goals. Moreover, it is true that in a developing country like Bangladesh, there is no alternative of vocational education in human resource development and self-employment.

First Edition: August, 2022

Career oriented higher education system:





Figure-5.2 (1): Position of Bangladesh and other South Asian countries in the seven areas related to education as per Global Knowledge Index 2020: -

Rank	Country	Global Knowledge Index	Pre-university education	Technical & Vocational Education and Training	Higher Education	Research, Development & Innovation	Information & Communication Technology	Economy	General Enabling Environment
7	Singapore	69.2	75.2	60.2	56.0	53.3	85.9	76.6	81.3
12	Japan	66.2	75.5	61.0	50.5	63.2	83.2	56.2	77.5
19	S. Korea	64.4	72.7	57.7	45.3	63.3	83.4	60.6	69.5
31	China	57.4	76.9	65.2	38.9	44.4	61.4	57.7	57.6
33	Malaysia	55.6	65.8	53.9	45.6	33.1	70.3	57.3	66.7
53	Thailand	48.3	59.3	44.9	37.3	25.7	59.6	53.8	61.8
60	Philippines	46.6	60.0	54.9	38.7	22.8	53.8	43.2	56.3
66	Vietnam	45.6	63.1	49.3	30.9	23.1	49.2	48.4	60.5
75	India	44.4	49.9	55.7	38.9	27.3	52.1	40.6	47.5
81	Indonesia	43.3	53.9	44.7	35.6	15.4	55.7	45.5	57.1
82	Sri Lanka	42.1	69.8	43.7	30.8	17.3	46.1	33.0	60.2
94	Bhutan	40.9	60.3	46.1	33.6	14.9	45.1	33.6	58.3
110	Nepal	36.2	69.6	28.3	31.4	12.4	34.1	32.3	49.5
111	Pakistan	35.9	46.9	42.7	38.7	16.0	37.4	32.0	38.5
112	Bangladesh	35.9	43.9	49.0	24.1	16.4	43.1	31.5	46.4

Source: UNDP Report 2020

B) Overall Higher Education Situation in the Country:

Present government has placed special emphasis on increasing the rate of higher education and skill development in the country and to meet challenges of 2041 "National Skills Development Policy 2011" and "Strategic Plan for Higher Education in Bangladesh 2018–2030" has been set up and development efforts are being made under this plan at college, university, technical and vocational levels.

Analysis of tertiary level educational institutions and number of students studying shows that by 2018, there are 145 universities across the country, of which 103 are private and 42 are government, where total number of students studying is 1.03 million. At that time, there were 1,792 nos. degree pass, honors and masters level colleges in the country, of which 1,430 were private and 462 were government, with a total of 3.54 million students. At the same time, there were 439 polytechnic institutes in the country, out of which 387 are private and 52 are government, where number of students studying was 0.25 million.

In the span of 8 years between 2010-2018, number of tertiary level educational institutions and students in the country has increased at a significant rate. In 2010, number of tertiary educational institutions in the country were 1,675 and number of students were 1.57 million. By 2018, number of tertiary educational institutions in the country stood at 2,476 and number of students stood at 4.82 million. During these 8 years, number of tertiary educational institutions has increased by 801, average number of tertiary education has increased by 100 per year and number of

First Edition: August, 2022

Overall Higher Education Situation in the Country:





students has increased overall by 3.25 million (207%), an average increase of students by 406,250 nos. per year.

Figure-5.2 (2): Number of Tertiary Level Colleges and Universities and of students studying in those institutions as of 2018: -

		2018		2010			
Category	Instituti ons	% of Private	Students (Million)	Instituti ons	% of Private	Students (Million)	
University	145	71	1.03	82	39	0.46	
College :							
Degree (Pass) – 1,121							
Degree (Honors) 596							
Masters College 175	1,892	75.56	3.54	1,388	45	1.01	
Polytechnic Institute	439	88.15	0.25	205	57	0.10	
Total :	2,476		4.82	1,675		1.57	

Source: Banbeis

C) Rate of Enrollment at Tertiary Level:



Main feature of a developed nation is that the rate of higher education is highest in the country, and highly educated nation is the main tool to build a developed country. Higher education is required for proper management of all fields like health, education, technology, administration, economics and research. Especially in an emerging economy like Bangladesh, it is very important to increase the rate of higher education at a significant rate at all levels for rapid and sustainable economic development. Needless to say, higher education should be career oriented and is essential to create new employment in the country in line with population completing higher education, otherwise, number of highly educated unemployed in the country will continue to increase, which will turn people away from higher education.

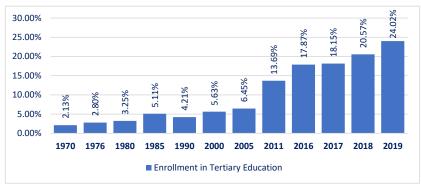
Rate of Enrolment at Tertiary Level:

From independence till 2000, Bangladesh lagged far behind in enrolling in higher education. However, since 2000, enrollment rate in higher education in the country has been gradually increasing and during 2010-2019, enrollment rate in higher education in the country has increased at a significant rate. In 1970, enrollment rate in higher education in the country was 2.13%, in 2000 it was 5.63% and by 2019 it stood at 24.02%.





Figure-5.2 (3): Scenario of progress in Enrollment in tertiary education in the country during period of 1970-2019:-

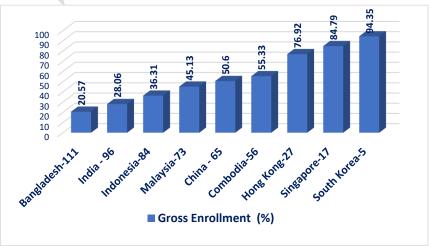


Source: World bank Data

D) Bangladesh's position in tertiary Enrollment:

Enrollment rate in higher education in Bangladesh is much lower than other developing countries in the world and even than many countries in South Asia. As per UNESCO ranking 2018, Tertiary education enrollment rate in Bangladesh is 20.57%, which is in India 28.06%, in Indonesia 36.31%, in Malaysia 45.13%, in China 50.60%, in Cambodia 55.33%, in Hong Kong 76.92%, in Singapore 84.89% and in South Korea 94.35%. According to that ranking, Bangladesh ranks is 111th out of 182 countries in tertiary education. Among other South Asian countries in that ranking, India ranks 96th, Indonesia 84th, Malaysia 73rd, China 65th, Cambodia 56th, Hong Kong 27th, Singapore 17th and South Korea is 5th position.

Figure-5.2 (4): According to UNESCO ranking 2018, position of Bangladesh and some other countries in South Asia in tertiary education and total enrollment rate in this case: -



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Source: UNESCO Report

Bangladesh's position in tertiary Enrollment:



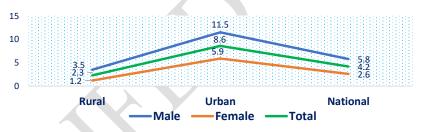


E) Comparative rate of participation of women and men in tertiary education:

Comparative rate of participation of women and men in tertiary education:

Although number of public and private tertiary educational institutions in the country at present and enrollment rate of students at this stage has increased considerably and is steadily increasing, but enrollment rate in higher education is still significantly lower compared to total population of the country. Moreover, percentage of female students is almost half that of male students among students completing Tertiary Level. According to LFS 2016-17 report, rate of students completed tertiary level in the country at that time was 4.2% nationally, of which 5.8% were males and 2.6% females. This rate was 2.3% in rural areas, of which males are 3.5% and females 1.2% and in urban areas it was 8.6%, of which males are 11.5% and females are 5.9%. Rate of population completing Tertiary Level is less than one-third in rural areas as compared to urban areas and women constitute only one-third as compared to men completing Tertiary Level in villages.

Figure-5.2 (5): Rate of students completed tertiary education in the country during F.Y 2016-17:-



Source: LFS 2016-17

F) Enrollment in Science, Engineering and Technology in higher education:

In order to make the growing economy of the country faster and stronger and to survive in this age of open economy, it is necessary to create a lot of skilled manpower in the field of science, Engineering and technology in the country. This need will be more widespread in future to meet the target of 2041. But it is a matter of concern that in the field of higher education in the country, enrollment rate of students in science, engineering and technology is still unexpectedly low, especially in public universities.

Rate of Enrollment in Science, Engineering and Technology in higher education: Review of enrollment rate in science, engineering and technology in government and private universities of the country during period of 2016-2018 shows that the rate in government universities was 10.91% in 2016, 11.28% in 2017 and 10.39% in 2018, on an average which was 10.86%. During same period, enrollment rate in science, engineering and technology in private universities was 32.62% in 2016, 34.50% in 2017 and 38.45% in 2018 which was 35.19% in average. Private universities are far ahead in this regard compared to public universities and progress is being made every year of private universities.





Figure-5.2 (6): Rate of registration in science, engineering and technology in the universities of the country during period of 2016-2018: -

Particulars	2016	2017	2018
Public Universities :			
No. of University	37	37	40
No. of Students enrolled	28,97,688	32,18,184	36,06,724
Enrolled in Science, Engr. and technology	316,114	363,036	374,659
% of students in Science and technology	10.91	11.28	10.39
Private Universities :			
No. of University	95	95	103
No. of Students enrolled	337,157	354,333	361,792
Enrolled in Science and technology	109,979	122,256	139,093
% of students in Science and technology	32.62	34.50	38.45

Source : UGC annual report .

G) Research and development activities at tertiary level:



1) Research activities in universities of the country:

For a long time, research activities in universities around the world have been playing a major role in expanding quality and scope of education as well as in the overall development of the country. Level of research at university level in Bangladesh is still very limited compared to developed and developing countries of the world and even almost all countries in South Asia. Till 1995, average rate of publication of research reports at university level in the country was 165 per year. However, significant progress has been made since 2000 in this field and by 2015 number of research reports published in the country stood at an average of about 3,004 a year **Figure-5.2** (7).



Research and development activities at tertiary level:

Strategies for Economic Development of Bangladesh



Despite this progress, rate of publication of research results in proportion to population is still much lower in Bangladesh than in other countries in South Asia. In 2015, 20 research results were published for every 1 million population in Bangladesh. In other South Asian countries, such as in Nepal this figure was 31, in Pakistan 56, in Maldives 61, in Sri Lanka 62, in Bhutan 77 and in India 79. Moreover, most of the research reports published in Bangladesh are published by certain public and private universities. It goes without saying that no research activities are conducted in about 40% of universities in the country.

research activities Although are conducted on a limited scale in the remaining 60% of the universities, about half of the institutions among them can't publish any research report. One of the reasons for this is that universities do not spend enough on research activities. According to the UGC Report, total expenditure on research of 125 public and private universities in the country in 2019 was TK. 153 crore, on an average only TK. 1.22 crore in each university, which was only 1% of total annual expenditure of those universities.

Figure-5.2 (7): Number of research reports published in the country during the period 1090-2015:



Source: World bank Report

First Edition: August, 2022

Research budget of 2019 of top ten universities (public and private) of the country involved in publishing most of the research reports and number of reports published that year are highlighted through **Figure-5.2** (8).

Figure-5.2 (8): Scenario of Expenditure in research activities of top ten public and private universities in 2019 along with number of their publications:

F	Public Universi	ties	SL	Private Universities			
University	Spending	Publications		University	Spending	Publication	
BSMAU	TK. 7.00 Cr	304	1	Brac U	TK. 37.9 Cr	179	
BAU	TK .7.00 Cr	106	2	ULAB	TK.12.48 Cr	158	
DU	TK. 5.20 Cr	472	3	AIUB	TK. 8.97 Cr	233	
RU	TK. 4.40 Cr	183	4	DIU	TK. 7.53 Cr	-	
SUST	TK. 2.90 Cr	1	5	NSU	TK. 6.53 Cr	1,135	
CU	TK. 2.75 Cr	518	6	IUB	TK. 4.39 Cr	190	
SAU	TK. 2.70 Cr	106	7	Sonargaon	TK. 2.70 Cr	35	
BUET	TK. 2.30 Cr	136	8	EUB	TK. 2.15 Cr	7	
JU	TK. 2.27 Cr	309	9	UIU	TK. 1.95 Cr	98	
KU	TK. 1.77 Cr	-	10	IIUC	TK. 1.49 Cr	195	

Source: tbsnews

2) Criteria for research report published in Bangladesh:

It goes without saying that about 40% of public and private universities in Bangladesh do not have any research activities. According to the World Bank Report 2019, almost half of the universities in Bangladesh who publish research reports have less than 40 publications against per 100 faculty members. In addition, a small number of public and private universities who regularly publish research reports, as per World Bank survey all of those reports are substandard by

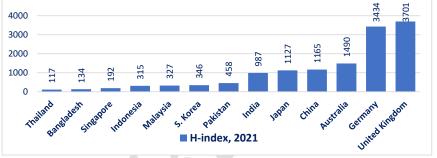




international standards. According to H-index published in January, 2021, criteria for research report published in Bangladesh is 134. Publications of other countries in this standard, such as Singapore 192, Indonesia 315, Malaysia 327, S. Korea 346, Pakistan 458, India 987, Japan 1127, China 1165, Australia 1,490, Germany 3,434 and the U.K 3,701 **Figure-5.2** (9).

Research activities at higher education expand quality and scope of education in the country as well as playing a major role in the overall development of the country. Therefore, it is important to increase level of research at tertiary level in Bangladesh as well as to raise standard of research to international level.

Figure-5.2 (9): According to H-index 2021, criteria of research report of Bangladesh and some other Countries: -



Source: ideas.repec.org

3) Research activities on limited topics:

Most of the research reports published by universities in Bangladesh are on engineering and science based subjects. In order to accelerate overall development of the country and ensure sustainable development, adequate research is needed in education, literature, culture and social development as well as in all sectors of economy, such as manufacturing, marketing and service sector development. But research activities of universities and other research institutes in Bangladesh are still limited to a few specific topics. As a result, according to Global Knowledge Index (GKL) 2020 Bangladesh ranks 112nd in the list of 138 countries, in which Bangladesh is lagging behind all countries in South Asia in all areas of assessment **Figure-5.2 (1).**

According to World Bank Report 2019, in addition to engineering and science subjects, more or less research reports are published on other subjects at university level in Bangladesh are Computer Science, Telecommunications, Science and Technology, Physics, Environmental Science Ecology, Chemistry, Public Environmental Occupational Health, Plant Sciences and Agriculture etc..

4) Lagging behind in commercialization of Research Results:

Number of research reports published in the universities and other research institutes of Bangladesh is unexpectedly less as well as researchers are indifferent in commercializing their research results. While researchers around the world are competing for patent rights to reap long-term benefits of commercializing research results, Bangladeshi researchers are still at a very early stage in that case. According to World Intellectual Property Indicators 2020, number of patent applications in Bangladesh is only 413 in 2019. Number of publications in that year in other South

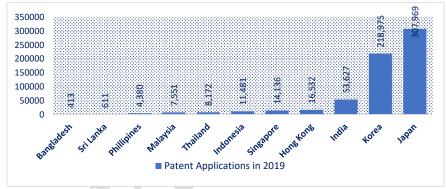




Asian countries were 611 in Sri Lanka, 4,380 in the Philippines, 7,551 in Malaysia, 8,172 in Thailand, 11,481 in Indonesia, 14,136 in Singapore, 16,532 in Hong Kong and 53,627 in India, 218,975 in S. Korea and 307,969 in Japan Figure- 5.2 (10).

There is a special need for quality education to accelerate social and economic progress, create employment and improve living standards in the country. Research in higher education is one of the means to increase excellence in the education sector, which plays a helpful role in enhancing quality of education in the country and in international arena. Therefore, it is important to increase contribution of education to the overall progress of the country by adequately increasing the level and scope of research in the country's higher education institutions.

Figure-5.2 (10): Scenario of patent applications in Bangladesh and some other countries in South Asia in 2019:-



Source: World Intellectual Property Indicators 2020

H) Complexity of employment at the end of education :



If higher education system in the country is not standard and career oriented, at the end of education, highly educated people can rarely create jobs on their own initiative and in case of arranging job, they face a lot of difficulties due to lack of skills. When they fail to arrange a job at the end of education, frustration comes down among them, many lost their way and migrated abroad which is not a good sign for the country at all. Because highly educated people are assets of the country, their participation in development of the country is important, moving abroad with





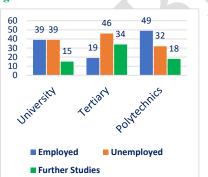
Complexity of employment at the end of education:

higher education means using talents created in the country for development of others without using it for development of one's own country and in that case country becomes incompetent. Needless to say, if there is not enough employment for highly educated people in the country, interest in higher education among people will decline and in that case it will be difficult to increase rate of higher education in the country.

Review of employment rate after 1-2 years of obtaining bachelor's degree in the country based on LFS: 2016-17 report shows that at that time, 39% of university graduates were employed, 15% entered higher education and remaining 39% were unemployed. Among tertiary level graduates, 19% were employed, 34% entered higher education and remaining 46% were unemployed. Among polytechnic graduates, 49% were employed, 18% entered higher education and remaining 32% were unemployed **Figure-5.2** (11).

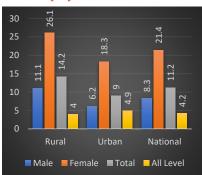
By 2016-17, unemployment rate among tertiary completed population in the country was 11.2% nationally (8.3% male and 21.8% female) and overall unemployment was 4.2%, 14.2% in rural areas (11.1% male and Women 26.1%) and overall unemployment 4.9% and urban 9.0% (men 6.2% and women 18.3%) and overall unemployment 4.9% **Figure-5.2** (12).

Figure-5.2 (11): Scenario of employment rate 1-2 years after graduation:-



Source: LFS: 2016-2017

Figure-5.2 (12): Unemployment rate of tertiary population in the country by 2016-17:-



Source: BBS

I) Government expenditures on tertiary Education :

Government expenditure on tertiary education:

Analysis of data of the last two decades shows that expenditure on education in the country as percentage of GDP was limited to 2% in this period. Expenditure on education in Bangladesh as percentage of GDP in 2019 is 1.3%, which is lowest of almost all countries in South Asia. Over the past decade, government spending in tertiary education sector has fluctuated between 10% and 14% of the country's total education expenditure which stood at 20% in 2016. On the one hand, government spending on education in Bangladesh in terms of GDP is lowest compared to almost all countries in South Asia, on the other hand, expenditure on tertiary education is only 10% -14% of total expenditure on education, which is inadequate to move forward the country's backward tertiary education sector.





Figure-5.2 (13): Scenario of Expenditure on education in the country during period of 2000-2018 (1) in proportion to GDP; and (2) share of total education expenditure in tertiary education:-

I	CI	Particulars	Years							
	SL	rai titulai s	2000	2004	2009	2013	2016	2017	2018	
	1	Govt. Exp. on Education as % of GDP	2.13	1.94	1.94	1.97	1.54	2.47	1.99	
ĺ	2	Exp. on Tertiary as % of								
١		total education exp.	10.1	11.5	13.5	14.7	20.0	-	-	

Source: World Bank, Indexmundi and other Sources.

J) Obstacles to spread of tertiary education in the country:

One of the reasons why enrollment rate in tertiary education is so low in Bangladesh is that at village level this rate is almost half that of the city. As 73% of the country's population lives in rural areas, it is impossible to increase rate of education in the country without increasing level of enrollment in higher education at village level. Among many reasons for low enrollment rate in higher education at village level, following are some of notable ones: -

- 1. **Financial Inconsistency:** Higher education requires patience as well as financial well-being of family, as higher education is time consuming. Due to economic inconsistency in rural families, students tend to earn quick income instead of going to higher education.
- 2. **Inadequate number of higher education institutions:** Number of higher education institutions in the country is much less compared to population and most of the higher education institutions are located at divisional cities, where studying is difficult and expensive for indigent family members.
- 3. Absence of career oriented higher education system: Due to fact that higher education system of the country is not of international standard and career oriented, at the end of their education, students of this country can create jobs on their own initiative in very rare cases, in most cases, they have to search for a job for a long time. Since there is a lack of adequate employment in the country, fear of being unemployed at the end of education always works among students.
- 4. **Unemployment at the end of education:** Adequate and suitable employment are not being created for highly educated population based on the rate of completion of higher education every year in the country, resulting of which highly educated unemployed class is constantly creating reluctance towards higher education among people.
- 5. Lack of adequate facilities in higher education: As government supervision, incentives and facilities are less in higher education compared to primary and secondary education, tendency of rural families are much less to enroll their children in higher education on their own initiatives.
- 6. Non-standardization of higher education system: As higher education system of this country is not up to international standards, it is difficult to compete with other countries in the field of employment and other fields, which is one of the reasons for the country's backwardness in higher education.

First Edition: August, 2022

Obstacles to spread of tertiary education in the country:





- 7. Child marriage trend at village level: At village level, in most cases, rush to get married begins as soon as female students cross the secondary level, as a result, educational life of those students came to an end at this stage, which is another major obstacle in increasing rate of higher education in the country.
- 8. Lack of higher education tendency in the family: Due to lack of ideas about higher education and lack of higher education tendency in the family, children of many financially capable families at village level are not interested in higher education.
- 9. **Religious prejudice and ignorance:** Due to religious prejudice and ignorance in rural families, most of the families are not interested in providing higher education to women, which has left women of this country far behind in higher education and many other areas.

k) Recommendations to increase quality of education :



In order to accelerate socio-economic development of the country and to meet the target of 2041, it is necessary to take initiative to create sufficient skilled manpower in the country by increasing rate of enrollment and quality of higher education as well as introducing thematic career oriented higher education system. Moreover, initiatives need to be taken to significantly increase rate of enrollment in science, engineering and technology in higher education, so as to increase innovation in science and technology in the country, which is inevitable to accelerate and sustain overall development of the country, otherwise we have no choice but to rely on foreign technology for ages.

Possible steps to be taken to increase rate and quality of education as well as to introduce career oriented higher education system in the country: -

a) Steps can be taken to increase rate of higher education:

Needless to say, as 73% of the country's population live in villages, therefore, in order to increase rate of higher education in the country, there should be adequate higher education institutions at Upazila level as well as making higher education easy and affordable, so that ordinary family members of villages can easily participate in higher education. Following steps can be taken to achieve this goal:

First Edition: August, 2022

Recommendations to increase quality of education:





1. increase number of public higher education institutions at district and Upazila level, such as: -

Α	At each Upazila Level :	
	Public Degree (Hons) Masters College	1 Nos.
	public technical college	1 Nos.
	Public Vocational Training Institute	1 Nos.
Note:	In Vocational Training Institutes, adequate arrangements	must have for
В	At each district level :	
	Public university	1 Nos.
	Public Engineering College	1 Nos.
	public medical college	1 Nos.
	public agricultural college	1 Nos.
	Teachers Training College	1 Nos.
	Other Professional Training Colleges	1 Nos.
Note: C	other important public colleges / universities have at least one (1)	at district level.
С	At each divisional Level :	
	Public Engineering University	1 Nos.
	Public agricultural university	1 Nos.
	Veterinary College / University	1 Nos.
	Marine College	1 Nos.
	Aeronautical college	1 Nos.

- 2. Students will get admission in the college of their choice on the basis of result of secondary level and in university / medical / engineering of their choice on the basis of results of higher secondary.
- 3. Admission and tuition fees should be affordable to ordinary students, so that students from low-income families do not have to rush to bear the cost of higher education.
- 4. Introduce interest free Higher education loan system in the country, so that anyone can complete higher education with education loan if necessary, which can be repaid conveniently in working life.
- 5. Introduction of education insurance in higher education.
- 6. To impose some government obligations on recruitment of officers / employees in all types of domestic and foreign organizations, so that if the employer organization is located in upazila, appointment to be made on priority basis among applicants of the concerned upazila and if the employer is located in the district town, priority to be given among applicants of concerned district.
- 7. For the members of financially indigent families engaged in higher education, there should be a system of monthly fixed rate benefits according to grade, so that those students do not have difficulty in continuing their education till the end. In addition, "Merit Scholarship" system should be continued in recognition of merit of the students achieving brilliant results.

B) Things to do to increase quality of higher education:

Just as it is important to increase rate of higher education in order to create a highly educated workforce in the country, similarly, quality education is essential to survive in competition, to contribute to development of the country and to keep pace with the world including creating work field on one's own initiative.





Essential to ensure quality education in the country: -

- i. Experienced and good quality teachers.
- ii. Digital classroom.
- iii. Digital exam system.
- iv. improved and international standard education curriculum; and
- v. Conduct joint educational activities, exchanging knowledge and experiences on the basis of partnership with reputed foreign colleges and universities.

C) Need to introduce career oriented higher education system:

In addition to education curriculum, practical training in the related fields including giving detailed ideas on the field of work under their own subject, Practical training on entrepreneurship development, industrial and technical assistance, financing, risk assessment, production, marketing, quality control and related domestic and international laws are features of a career-oriented education system that provides practical ideas on how to apply techniques to survive in competition. So that at the end of educational life, any student is able to create his own employment by using acquired education without looking for a job and is able to contribute to the progress of himself and the country by making desired improvement in his field of work through surviving in competition.

D) Increasing enrollment in science & technology in higher education :

In this age of digitization, it is essential to revolutionize in science and technology in order to develop overall economy of the country, industrialization, infrastructure development, development of information technology, communication system, protection of independence and sovereignty and strengthening one's country's position in open competition. Therefore, it is necessary to create sufficient skilled manpower in this field by increasing enrollment rate in science, engineering and technology in higher education, who will take the helm of future. To achieve this goal, in addition to steps taken to increase rate and quality of higher education and to introduce Career oriented education system, following additional steps can be taken:

- 1. Impose obligation of hiring local experts in all types of local and foreign funded projects, so as to ensure easy employment of people educated in science and technology, which will play a leading role in increasing enrollment rate in these subjects.
- 2. Increase "Research and Innovation" activities in higher education institutions and increase government allocation adequately into this sector, so that all students have opportunity to participate in the "Research and Innovation" activities.
- To form a separate government institution at divisional level for proper preservation of all the theories and formulas discovered by "Research and Innovations" and for speedy commercialization of those theories where necessary.
- 4. Conduct research and innovation activities in partnership with reputed foreign colleges and universities to strengthen and expand research and innovation activities and to work in joint ventures with private sector of the country to commercialize discovered formulas.





Chapter: 5.3

Compulsory Technical Education.







Compulsory Technical Education.

Topics Covered in the Chapter

Compulsory Technical Education:

- A) Importance of technical education in skills development.
- B) Why is expansion of technical education so important in Bangladesh?
- C) Current situation of technical education in the Country.
 - 1. Situation of TVET in the Country.
 - 2. Slow expansion of technical education.
 - 3. women participation in technical education is relatively low.
 - 4. Inadequate ADP allocation in technical education sector.
 - 5. Complexity of employment of technically trained persons.
- D) Obstacles to expansion of technical education in the country.
- E) Recommendations for expansion of technical education.







Compulsory Technical Education:

Education is the right of every human being. Education is essential for improvement at individual and social level. But it is not possible or necessary for all citizens of the country to get higher education. Higher education requires both financial capability and talent, which not everyone has. Higher education is essential for development of industry, literature, policy making, research and development in order to keep pace with the world and survive in the competition. In all other respects, a minimum academic education is sufficient for any citizen. Question is to what extent should this minimum academic education limit that a citizen can complete in the fastest time and step into working life?

Compulsory Technical Education: Minimum level of academic education that a citizen needs to run his life smoothly should be the limit of compulsory academic education for the citizens of that country. But reality is that a citizen with only a minimum academic education has very little chance of succeeding in the workplace, especially in today's competitive world. In the present context, needless to say that in addition to minimum academic education, some technical education and knowledge of English language multiplies the financial valuation of any ordinary citizen in the workplace at home and abroad. Particularly, its impact on industrialization and labor exports is far-reaching. For example, over the past two decades, Bangladesh has been one of the major sources of foreign exchange earnings through garment and labor exports to various countries, which has been increasing country's export earnings as well as enriching the country's foreign exchange reserves.

Most of the large number of workers working abroad and constantly going abroad with hope of work do not have a minimum academic education, technical education and language knowledge is a long way off. As a result, they have to face a lot of harassment and fraud in abroad and are forced to work with a very low wages compared to workers of other countries. Resulting, amount of remittances sent by them is comparatively less than number of workers working abroad. If, for those who are unable to pursue higher education, after complete compulsory academic education, 2 years of technical education and knowledge of English language could be made compulsory for them, demand for Bangladeshi workers would increase many times in the international labor market beside increase of skilled workers in the country's industrial sector. In that case, all those workers working abroad would benefit financially and remittances would come many times more, which would take the foreign exchange reserves to a unique height very fast and would bring a lot of dynamism to the country's economy. Moreover, expansion of technical education is essential to accelerate economic development of a country and to increase industrial and technological development and innovation of that country.

Therefore, in the interest of overall progress of the country, beside making secondary education compulsory for all, it is necessary to make technical education compulsory for a period of 2 (two) years at the end of secondary education for those who are unable to pursue higher education. Only then will those less educated citizens be ahead in competition in the field of work at home and abroad, their financial assessment will be appropriate as well as increase self-employment and reduce unemployment in the country. However, as per data of





2019, average number of students enrolled in SSC (Vocational) level is less than 2% as compared to students enrolled in SSC level in the country.

Figure-5.3 (1): Comparative picture of students registered at SSC General and SSC Vocational level in the country during 2012-2019:-

	Year					(Stud	lents in I	Million)
	2012	2013	2014	2015	2016	2017	2018	2019
S.S.C General	7.51	8.14	8.79	9.29	9.72	9.80	9.94	9.80
Vocational (S.S.C)	.14	.15	.15	.14	.11	.12	.17	.18
Vocational (%)	1.86	1.84	1.71	1.51	1.13	1.22	1.71	1.84

Source: BTEB Annual Report

A) Importance of technical education in skills development:



Technical and Vocational Education & Training (TVET) is a practical education system, which is one of the means to build a trained workforce through training in various disciplines for the purpose of creating workers for labor market. Through this system, students are provided training on acquiring practical knowledge, technical ideas and practical skills related to profession in different sectors, which makes it possible for a trained person to make rapid progress in the workplace. One of the objectives of expanding technical education and training system in Bangladesh is to prepare youth community to improve their careers through proper training who have completed secondary education but unable to pursue higher education, so that trained person gets opportunity to improve in the job field and self-employment by using their acquired skills.

Importance of technical education in skills development:

Due to backwardness in industry and technology, there is a significant shortage of employment in the country, as well as a huge shortage of skilled manpower in industry, trade and service sector. Bangladesh is moving forward with the goal of reaching the list of middle-income by 2024 and high-income country by 2041, in order to realize that dream, it is necessary to bring dynamism in every sector of industry and commerce, which requires a lot of skilled manpower in all sectors. Therefore, there is no alternative but to create a skilled workforce to meet the future needs by expanding technical education and training in the country. Moreover, technically trained persons get priority in the field of employment at home and abroad and if necessary, they get opportunity to earn income by engaging in self-employment in trained subjects.





B) Why is expansion of technical education so important in Bangladesh?

Bangladesh is a populous country and poverty rate in this country is still above 42% on average. Due to poverty, a large portion of population is still lagging behind in education, lion's share of whom are labor and unskilled. As official, an average of 2.50 million unskilled workers are being added to the country's labor market every year. But, because of the country's labor market is not so much expanded and lack of competence of new workers, a large portion of those unskilled workers who are constantly joining the labor market do not get regular employment. Due to lack of skills, these workers are unable to do anything on their own, resulting most of these workers spend their days in unemployment and economic uncertainty, which is a big obstacle in the economic progress of the country. Failing to arrange employment in the country, some of those workers migrated abroad by selling their land of shelter, but there is also no end to their suffering due to lack of skills and language proficiency.

Why is expansion of technical education so important in Bangladesh?

For those who are unable to pursue higher education, if it would have made compulsory two years of technical education and English language proficiency at the end of secondary level, then employment of those workers newly added to the labor market every year were not so difficult. Because, in most cases, after compulsory technical education, they could either get a job or get a chance to solve unemployment by engaging in self-trained work and remaining workers could work abroad for higher wages to improve their future as well as contribute to the country's economy. Moreover, in order to meet the challenges ahead, there is no alternative but to significantly increase the rate and quality of technical education in the country for increasing supply of skilled workers for development of industry and commerce and bring about excellence in technology in the country.

Among reasons why expansion of technical education in the country is so important, following are some of them:-

- 1) Increasing self-employment: A huge number of new and unskilled labor force is constantly being added to the labor market of the country, as per the government, it is about 2.50 million per annum, while growth rate of employment in the country is only 0.9%. Due to fact that the labor market has not expanded in proportion to increase in the number of workers, most of these unskilled workers who are constantly joining the labor market have to face employment uncertainty. If this new workforce came to labor market with technical training, they would have dominated the job market and if there were no job opportunities, they would have self-employment opportunities based on their training, which would play a big role in eliminating unemployment in the country.
- 2) Increasing number of skilled workers in industry, trade and services: Skilled labor is the key to increasing productivity. There is a considerable shortage of skilled manpower in the country's industries and other sectors, as a result of which the country lags far behind in terms of mobility in industry, trade and services. According to 2018 data, share of industrial sector to GDP is 28.5% in Bangladesh, which is the lowest compared to other developing countries in South Asia. Therefore, in order to meet the challenges ahead, it is imperative to increase skilled workforce in industry and other sectors, which





requires a substantial increase in the rate and quality of technical education in the country.

- 3) Increasing productivity in industrial sector: Increasing productivity in industrial sector is essential to meet domestic demand and increase export earnings, and skills and experience of workers are required to increase productivity. Although Bangladesh has immense number of working age population, but there is a dearth of skilled workers in all sectors. Only by increasing technical education and training in the country is possible to increase number of skilled labor in industry and other sectors.
- 4) Increasing foreign income by increasing labor exports: Since labor market of the country is limited as compared to working population, Bangladesh has an easy way to earn foreign exchange by exporting additional working manpower. But even then, workers' skills and English language proficiency are very important. Because, demand and salary of unskilled and workers weak in English speaking is very limited in the foreign market. Therefore, in order to increase foreign exchange earnings through labor exports, it has become essential to make it compulsory to acquire technical training and English language skills for workers who want to go abroad.
- 5) Poverty Reduction and Increasing Employment: A person with technical training is able to use acquired skills for self-employment beside getting priority in employment at home and abroad, which plays a major role in reducing poverty and increasing employment in the country.
- 6) Creating sufficient skilled manpower to meet the challenges ahead: In order to meet the challenges of 2041, beside increasing investment in socio-economic development, it is necessary to increase productivity in industry, trade and services by creating a lot of skilled manpower. It can be said that it is impossible to achieve this goal without expansion of technical education in the country.

Challenges to TVET In Bangladesh

- Massive collaboration with Industries
- · Women friendly academic environment
- Full operation of CBT&A rather than piloting
- · Increase girls enrollment
- · Continuous support and mode of finance.
- Infrastructure development
- · World wide accreditation
- Increasing number of TVET seats available which implies more investment





C) Current situation of technical education in the Country:



Skills is strength and skilled manpower is the capital of the country. Technical and vocational training is an essential factor for rapid development of industry, commerce and service sectors in the country. Because, without skilled manpower, desired development is not possible in any field of industry, trade and services. That is why trend of creating skilled manpower in industry and other sectors through technical and vocational training is widespread in the countries all over the world.

1) Situation of TVET in the Country:

Technical and Vocational Education & Training (TVET) has been defined differently in different countries. This is mainly to make students proficient in various subjects through training or coaching, so that at the end of training students can directly enter the trained profession and show their skills in the field of work, to that end, TVET program is designed and managed. In the current human capital discourse, the terms 'TVET' and 'Skills Development' are defined in different ways. According to UNESCO, TVET comprises formal, non-formal, and informal learning for the world of work. Young people, women, and men acquire knowledge and skills from basic to advanced levels across a wide range of institutional and work settings and in diverse socio-economic contexts. (ILO)

Technical education and training play a significant role in bringing skills to industry, trade and service sector by providing skilled manpower to the country's labor market. Moreover, technical education and training is also essential in earning foreign exchange through export of skilled workers abroad. Bangladesh Technical Education Board is formulating and implementing a total of 33 (thirty three) curricula for technical and vocational education in government and private level in the formal and informal categories for development of skills of students. As on June 30, 2019, there are 10,452 curriculum-based affiliated institutions in the country, with a total of 10,16,899 students. Number of technical education institutions, teachers and students in the country by 2017 is highlighted in the following table:

Figure-5.3 (2): Number of technical education institutions, teachers and students in the country by 2017:-

Type of Institutions	Mgt.	Institutions,	Teachers ar	nd Students		Indicator	S
	wigt.	No. of Institutions	No. of Teachers	No. of Students	TSR	SPI	TPI
	Public	52	1,498	103,077	69	1,982	29

First Edition: August, 2022

Current situation of technical education in the Country:





Polytechnic Institute	Private	387	4,768	112,574	24	291	12
•	Total :	439	6,266	215,651	34	491	14
	Public	64	1,145	36,512	32	571	18
Technical School &	Private	108	1,172	28,712	24	266	11
College	Total	172	2,317	65,224	28	379	13
	Public	68	1,127	25,415	23	374	17
Technical Training	Private	96	186	12,772	69	133	2
Centers	Total	164	1,313	38,187	29	233	8
	Public	13	148	11,384	77	876	11
Agriculture Training	Private	170	822	18,742	23	110	5
Institutes	Total	183	970	30,126	31	165	5
	Public	11	272	2,972	11	270	25
S.S.C Vocational	Private	158	1,716	21,482	13	136	11
(Independent)	Total	169	1,988	24,454	12	145	12
	Public	-	-	-	-	-	-
S.S.C Vocational	Private	2,556	7,673	199,844	26	78	3
(Attached)	Total	2,556	7,673	199,844	26	78	3
	Public	10	148	3,128	21	313	15
H.S.C Voc/B Mgt.	Private	665	5,822	131,158	23	197	9
(Independent)	Total	675	5,970	134,286	22	199	9
	Public	15	71	1,319	19	88	5
H.S.C Voc/B Mgt.	Private	1,078	6,129	138,152	23	128	6
(Attached)	Total:	1,093	6,200	139,471	22	128	6
	Public	-	-	-	-	-	-
Medical Technology	Private	356	986	24,734	25	69	3
	Total:	356	986	24,734	25	69	3
	Public	55	590	11,727	20	213	11
Other Institutes	Private	35	443	8,260	19	236	13
	Total:	90	1,033	19,987	19	221	11
	Public	288	4,999	195,534	39	679	17
TOTAL : Technical	Private	5,609	29,717	696,430	23	124	5
Education	Total:	5,897	34,716	891,964	26	151	6

Source: Banbeis

2) Slow expansion of technical education:

Although Bangladesh is still lagging far behind in terms of technical education and training, rate of enrollment of students at various levels of technical education has increased slightly in recent years. Total number of students enrolled in technical education in the country 394,278 in 2011-12 financial year, while number of students enrolled in 2018-19 financial year stood at 721,079. During these seven years, number of enrollments in technical education has increased by an average of 46,686 per year or 9.23% **Figure-5.3(4)**.

While 2.50 million working manpower is being added to the country's labor market every year, but enrollment in technical education has increased to an average of 46,686 students per annum, it means that number of enrollments in technical education is increasing very little compared to need. During period from 2012-13 to 2018-19, enrollment rate of students at different levels of technical education has

increased respectively by 16.29% in 2012-13 academic year, 6.57% in 2013-14 academic year, 3.60% in 2014-15 academic year, 23.39% in 2015-16 academic year, 2.57% in 2016-17 academic year 7.44% in 2017-

Figure-5.3 (3): Scenario of increase in student enrollment rate in technical education during 2012-13 to 2018-19:-

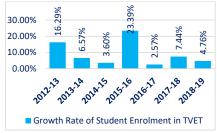
First Edition: August, 2022

Slow expansion of technical education:



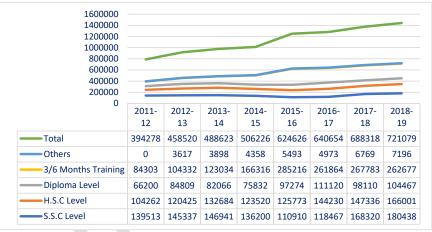


18 academic year and 4.76% in 2018-19 academic year **Figure-5.3** (3). During this period enrollment rate of students at different levels of technical education has increased, SSC Vocational 4.19%, HSC Vocational 8.46%, Diploma 8.26%, 3/6 months training 30.23. % and in other cases 14.29%



Source: BTEB

Figure-5.3 (4): Scenario of student enrollments in technical education at different levels during 2011-12 to 2018-19:-



Source: BTEB Annual Report

3) women participation in technical education is relatively low:



To ensure sustainable development in the country by eliminating gender inequality and accelerating women's empowerment, it is important to maintain consistency in participation of men and women in the labor market. Similarly, equal participation of men and women in skill development must be ensured, otherwise women will



women
participation
in technical
education is
relatively low:

Strategies for Economic Development of Bangladesh

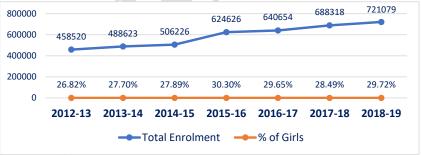


lag behind men in skill development, resulting women will face unequal competition in the field of employment, it is natural.

Although there is consistency in student enrollment at primary and secondary levels of general education in Bangladesh, participation of women in technical education and training is on average less than one-third that of men. This trend is having a huge negative impact on women's participation in the workplace. According to BBS, during 2016-17, labor force participation rate was 58.2% nationally, of which 80.5% were males and 36.3% females. Analysis of data for the period from (2012-13 to 2018-19) shows that compared to total number of students enrolled in technical education in the country, enrollment rate of female students was 26.82% in 2012-13, which has reached 29.72% by 2018-19. Average enrollment rate of female students during this period was 28.65%. **Figure-5.3** (5).

Technical education and training prepares youth community for future workplace by imparting practical knowledge in various sectors after secondary education. For those women who are unable to enter higher education, technical education and training after secondary education is essential for them to acquire skills for future employment competition. However, government is realizing the contribution of women workers with importance in the economic development of the country and in recent years investment has increased in improving enrollment rate of women students in technical and tertiary education.

Figure-5.3 (5): Rate of enrollment of female students in the ratio of total enrollment in technical education during period from 2012-13 to 2018-19:



Source: BTEB Annual Report

4) Inadequate ADP allocation in technical education sector:

In recent years, ADP allocation for education sector in Bangladesh has been in the range of 3% -3.5% of total national budget, which has increased to 4.13% of the budget in the fiscal year 2020-21. Until 2016-17 financial year, only 3% -3.50% of the ADP allocated to education sector was spent on the technical and madrasa sectors. However, amount of ADP disbursed in the technical and madrasa sectors has gradually increased from FY 2017-18, for example, ADP disbursed in this sector was 3.27% of education sector in FY 2016-17, 5.06% in FY 2017-18, 5.97% in FY 2018-19, 6.63% in FY 2019-20 and 8.50% in FY 2020-21 **Figure-5.3** (7).

In case of distribution of ADP funds allocated to education sector to other education sub-sectors, rate of distribution in the technical education sector is unusually low. Total ADP allocation for the education sector for fiscal year 2020-21 is Tk. 23,245 crore, which has been allocated 40.46% in primary education, 51.04% in secondary and higher education and 8.50% in technical and madrasa sectors **Figure-5.3** (6).



Inadequate ADP allocation in technical education sector:

Strategies for Economic Development of Bangladesh



Needless to say, amount of ADP allocation to education sector in Bangladesh is inadequate expansion of this sector. Secondly, ADP allocation to technical education sector is not at all consistent with the needs and potential of this sector. In order to make post-secondary technical education compulsory in the country, it important to very increase investment at a significant rate at government and private levels in the development and expansion of the TVET sector.

Figure-5.3 (6): Scenario of distribution of education sector's ADP to education sub-sector in FY 2020-21 :-



Source: Economic Division, Ministry of Finance

Figure-5.3 (6): Scenario of ADP allocation in the education sector and redistribution the amount to technical and madrasa education sector during F.Y 2016-17 to 2019-20 :-

F.Y	National	Education & Affa		Technical & Madrasa Education		
	Budget (TK. In Crore)	Total allocation (TK. In Crore)	As % of National Budget	Total allocation (TK. In Crore)	As % of Technical & Madrasa Edu.	
2016-17	340,605	12,845.97	3.77 %	420	3.27 %	
2017-18	400,266	14,186.56	3.54 %	718	5.06 %	
2018-19	464,573	15,468.65	3.33 %	923	5.97 %	
2019-20	523,190	20,429.10	3.90 %	1,355	6.63 %	
2020-21(B)	568,000	23,245.00	4.13 %	1,976	8.50 %	

Source: Economic Division, Ministry of Finance

5) Complexity of employment of technically trained persons:

There is no scope of denying that only secondary pass and a minimum of two years of technical training after secondary makes a huge difference in the actual skills of any person. For all these reasons, a technically trained person always gets priority in the workplace at home and abroad. Question is about the quality of technical training. Since technical education has not yet spread enough in Bangladesh, therefore, it is not being possible to ensure technical training in line with needs of the country's labor market and necessary practical skills. As a result, technically trained persons are still facing considerable adversity in terms of employment and self-employment, as well as having to work out of their trained field in many cases and there are even instances of unemployment in some cases. According to BTEB Survey 2018, 94.4% of technically educated persons could be engaged in jobs and other self-employment, but 5.6% of technically educated persons are being forced to work out of their trained fields at home / abroad Figure-5.3 (8).

According to LFS: 2016-2017, in review of employment rate 1-2 years after obtaining bachelor's degree in the country shows that at that time, 39% of those with a bachelor's degree from university were employed, 15% entered higher education and remaining 39% were unemployed. Among tertiary level graduates, 19% were employed, 34% entered higher education and the remaining 48% were unemployed. Among polytechnic graduates, 49% were employed, 18% were

First Edition: August, 2022

Employment prospects of technically trained persons:





enrolled in higher education and remaining 32% were unemployed **Figure-5.2** (11). In other words, people educated in technical education are still ahead in terms of employment.

Figure-5.3 (8): Scenario of Employment and unemployment of those educated in technical education by 2018:-

Employment Status	RPL Stream	Graduates of RTOs	Industry Assessors	Teachers/ Trainers	Average
Employed by Govt./					
Private Sector.	54.8 %	73.0 %	80.6 %	100 %	77.1 %
Self Employed	39.8 %	11.7 %	17.5 %	0.0 %	17.3%
Total gainfully Engaged	94.6 %	84.7 %	98.1 %	100 %	94.4 %
Not Employed	5.4 %	15.3 %	1.9 %	0.0 %	5.6 %

Source: BETB, September 2018

D) Obstacles to expansion of technical education in the country:



In the context of Bangladesh, expansion of technical education bears special importance to increase employment and provide skilled manpower in the labor market. Technical education is an easy and important way to ensure employment of people who are unable to enter higher education, which is an opportunity for trained persons to get employment in the country / abroad or to employ themselves through self-employment using trained knowledge. This opportunity is equally effective for all, men and women. On the other hand, importance of expanding technical education in the country is immense to increase dynamism in industrial, trade and service sectors by providing skilled manpower to the country's labor market and to increase foreign exchange earnings by exporting skilled workers abroad.

Obstacles to expansion of technical education in the country:

But compared to that, spread of technical education in the country is moving very slowly, especially participation of female students across the country is unexpectedly low in this case. According to the 2017 census, number of students studying technical education in the country both public and private were 891,984. During period from 2012-13 to 2018-19, enrollment in technical education has increased by an average of 9.23% per annum, 5.07% at secondary level, 7.16% at higher secondary level and 7.79% at diploma level. During this period, enrollment





of female students in technical education has increased by an average of 13,047 only per annum.

There are various reasons for the lack of adequate expansion of technical education in the country in the past, some of which are as follows: -

- 1. Lack of coordination of technical education and training with actual demand of the labor market.
- 2. Quality of technical education of this country is still not adequately recognized in the country and abroad.
- Compressed labor market due to insufficient expansion of the country's industrial sector.
- 4. Unskilled workers are employed in industrial sector as there is no obligation of technical training certificate.
- 5. Unexpected low participation of women in technical education due to backwardness of women in terms of participation in income generation and inability to effectively stop child marriage in the country.
- 6. Lack of a nationally planned policy to send low educated people to the labor market through technical training.
- Most of the government technical education institutions are located in urban areas, so students of rural and remote areas can not easily participate in technical education.
- 8. Only 5% of the country's technical education and training institutions are government, remaining 95% are non-government institutions, where there are no cost restrictions. As a result, it is difficult for poor families to bear this cost in many cases.
- 9. Apparently technically trained persons are not given priority incase of employment and financing.
- 10. Lack of practical and far-reaching policies of the government to turn the working population of the country into skilled human resources.

Abundance of skilled workers in the labor market is essential to build a sustainable economy by bringing dynamism in industry, trade and services sector in the country. The only way to ensure adequate supply of skilled workers in all sectors is to force working population of the country to enter the labor market through technical training. For which there is a need to improve quality and rapid expansion of technical education in the country. There is no doubt that will of the government and effective and far-reaching measures to address existing problems in expansion and improvement of technical education will open new horizons in the field of technical education in the country.







E) Recommendations for expansion of technical education:



According to Labor Force Survey 2016-17, number of working population above 15 years of age in the country were 109.05 Million, which is 68.28% of total population of the country at that time. As per the government, an average of 2.50 million unskilled labor force is being added to the country's labor market every year, most of which cannot cross the boundaries of secondary level. Due to Lacking skills, experience and knowledge of English language, this working population is facing a lot of difficulties in terms of employment at home and abroad and unemployment rate in the country is constantly rising, which is one of the obstacles in building a sustainable economy in the country. At this moment, big challenge for the government is to facilitate employment of this ever-increasing unskilled and poorly educated population by efficiently engaging them in the labor market. If this challenge can be successfully tackled, on the one hand, as a result of increasing skilled labor force in the country, productivity in industry and other sectors will increase, on the other hand, way of earning a lot of foreign exchange will be expanded by exporting additional skilled labor force to international market.

Recommendations for expansion of technical education in the country:

Needless to say, the only way to make this less educated population efficient is to increase the level of quality technical education and training at government and private levels in the country. Although introduction of technical education in the country is already there, but considering current and future context, it is not enough at all. Soon Bangladesh is going to move from a low income country to a middle income country and is working towards reaching the list of high income countries by 2041. In order to implement this goal, Bangladesh is gradually moving towards an export-oriented economy to increase flow and scope of the country's economy and as part of this process, about 100 economic zones have already been built up across the country, where many large domestic and foreign industries will be set up. All these industries will be needed a lot of skilled workers, officers and employees at production, marketing and management stages, which Bangladesh does not have at this moment.

Due to recent increase in remittance inflows sending by the workers working abroad, country's foreign exchange reserves have been steadily increasing, which has strengthened the country's economy as well as brightened the country's image in the international arena. During fiscal year 2012-13 to 2019-20, amount of remittances sent by workers working abroad averaged USD 15.16 billion per year. In order to facilitate foreign exchange earnings by exporting additional skilled workers abroad,





it is important to provide technical training and English language skills to workers who want to go abroad. In a word, the only solution of expanding employment opportunities of these working poor educated population of the country and turning them into human resources by making them skilled in technical education and proficient in English language and build them fit for domestic and foreign labor market.

Following steps can be taken for quality development and rapid expansion of technical education in the country:-

- 1. In addition to making it compulsory for all to obtain secondary certificate, for those who are unable to pursue higher education, make it compulsory for them to complete 2 (two) years of unpaid technical training and English language education after completion of secondary education.
- In case of marriage, make it compulsory for both boys and girls to obtain marriage clearance from the upazila office by showing the certificate of completion of secondary and technical education.
- 3. To establish at least one "Technical and Vocational Institute" at every Upazila Sadar for rapid expansion of technical education at village level.
- 4. In order to conduct quality training in technical and vocational institutes, ensure recruitment of skilled and experienced teachers in every institution as well as to provide adequate training equipment in those institutions.
- 5. To establish adequate number of technical teachers training institutes in the country for the purpose of imparting proper training to teachers of technical and vocational institutes.
- To restructure the technical training curriculum in line with labor market of the country and abroad and to ensure international standard training in all technical training institutes.
- 7. In the technical training curriculum English language education should be given equal importance and status to technical training
- 8. Introducing provision of recruitment of technical training graduates on priority basis in recruitment of workers in domestic institutions and for abroad.
- 9. In case any of the technical trainees want to be engaged in self-employment, "Industrial and Technical Assistance Cell" working in the upazila should provide them necessary technical assistance as well as ensure necessary financial assistance on priority basis through banks engaged in financing small and medium enterprises.
- 10. To fix minimum salary structure while recruitment of technical training graduates in the country and abroad.
- 11. To completely separate the Technical Education Board from the Madrasa Education Board in order to adequately increase scope and performance of Technical Education Board.
- 12. Ensure adequate annual development allocation in the technical education sector in the national budget for rapid expansion and quality development of technical education in the country.

If proper implementation of the above measures would be possible, beside rapid expansion and quality development of technical education, huge number of skilled youth will be formed in the country in future, which will make an unimaginable contribution to the country's economic progress as well as gaining reputation and importance of skilled workers in the foreign labor market and foreign exchange earnings will be greatly facilitated by exporting skilled workers to international market, no doubt.





Chapter: 5.4

Expansion and Modernization of Health Sector.







Expansion and Modernization of Health Sector.

Topics Covered in the Chapter

- A) Expansion & Modernization of Health Sector.
- B) Evaluation of ongoing health system in the country.
 - 1. Scope and features of ongoing health services in the country by 2017.
 - 2. Structure of ongoing health services in the country under DGHS.
 - 3. Size and scope of healthcare at public and private levels by 2017.
 - 4. National Health Sector Management (Organogram).
- C) Scope of primary healthcare at upazila and village Level.
 - 1. Primary health care at upazila level.
 - 2. Primary health care at union level.
 - 3. primary health care at village level.
- D) Continuous progress of 10 important health indicators.
- E) Death rates by disease at village and city level.
- F) Bangladesh's progress in achieving SDG in health sector.
- G) Nature of ongoing development in health sector.
- H) Contribution of health sector to GDP and its growth.
- I) Per capita health expenditure.
 - 1. Per capita government expenditure on health.
 - 2. Per capita Personal expenditure on health.
 - 3. Total per capita Health expenditure.
- J) Bangladesh's position in South Asia in healthcare standard.
 - 1. In terms of spending on health.
 - 2. In Terms of Health system and health facilities.
- K) Quality of healthcare and future prospects of this sector
 - 1. Quality of healthcare and people's confidence in ongoing healthcare.
 - 2. Generally, Bangladeshi patients go abroad for treatment of which diseases.
 - 3. Expenses for medical treatment abroad.
- L) Possibilities of developing specialized medical treatment in Bangladesh.
- M) Existing problems and constraints in the health sector.
- N) Reasons for increasing health risks in the country.
- O) Recommendations for Expansion and Modernization of health sector.







A) Expansion & Modernization of Health Sector:

As formation of a developed nation is essential for formation of a developed country, similarly, in order to build a developed nation, a healthy nation and to build a healthy nation, it is necessary to ensure developed and adequate health care system in the country. This is time to build a healthy and prosperous nation in the interest of overall progress of the country, Which requires bringing the entire nation under planned and quality health care in phases by increasing scope of healthcare and building modern healthcare systems in line with population density across the country, which is inevitable in achieving SDG goals in the health sector.

Expansion & Modernization of Health Sector:

National Health Policy-2011 has been formulated for development of health sector of the country, It has been said in the proposal "Health is a state of perfect physical, mental and social well-being, which is not limited to absence of disease or weakness only. Healthcare is one of the fundamental human rights, which requires a fair economic and political commitment. Health is universally recognized as an important indicator of human development". According to Article 15 (ka) of the Constitution of the People's Republic of Bangladesh, provision of basic necessities of life including medical care is one of the basic responsibilities of the State and according to Article 18 (1), improvement of nutritional status and public health is one of the main responsibilities of the State.

Under the National Health Policy-2011, development activities in health sector are continuing in the country, specific objectives of which are: -

- Ensuring availability of primary health and emergency medical care for all.
- To increase and expand accessibility of quality healthcare centered on the service recipients on the basis of equality.
- To motivate people to receive services on the basis of rights and dignity for prevention and control of diseases.

Population distribution based on geographical boundaries:-

According to HVRS-2018, population of the country is 164.6 million, of which 119.75 million (72.75%) live in rural areas and 44.85 million (27.25%) live in urban areas. ((Distribution ratio based on HIES-2016):-

Area	Numbe r	Average Population	Populati on
Bangladesh		Total Population (Million)	164.60
Division	8	Per Division (Million)	20.58
Districts	64	Per District (Million)	2.57
Rural Population		(72.75%) Million	119.75
Upazila	492	Population per Upazila	243,394
Union	4,553	Population per Union	26,310
Ward	40,997	Population per Ward	2,922
Village	87,310	Population per Village	1,372

Source: BBS



BANGLADESH HEALTH DEVELOPMENT INITIATIVE HEALTHCARE PROJECTS The Bangladesh Health Development Initiative (BHOI) is a progra that aims to benefit the needy and distressed population Bangladesh with much need beniblarca sailance, treatment and supplies. Medical professionals and volunteers from the Alexander Bangladesh. With much needsheet Bangladesh. TILEMEDICINE APP VILLAGE MEDICAL CENTIFICATION FEBRUARY 2019 TOUR PEBRUARY 2019 TOUR OF Beniblassa Medical Camp Ayesha Prioque Mospital OF Molviblassa Medical Camp Molviblassa Medical

Health Care delivery in rural areas





B) Evaluation of ongoing health system in the country:



It can be said that health sector of Bangladesh has progressed relatively slowly in the post-independence period. During this long period of five decades from 1971 to 2020, country's population has multiplied, both per capita income and standard of living have increased as well as increased purchasing power at individual level. People are now more aware, much more advanced in health development than ever before, resulting of which per capita expenditure on health in the country has increased in recent times and is gradually increasing. But, more than two-thirds of the country's population live in rural and remote areas, lion's share of whom are farmers and low-income people. Health awareness and capacity to spend on health development both are limited to them. Keeping in line with population growth in the country, it has become important to increase scope of health services to ensure good health for all as well as to ensure quality healthcare at affordable prices across the country. In order to be ranked in the list of high-income countries by 2041, Bangladesh has an obligation to achieve the target in health sector by 2030, one of which is "increasing coverage of the health sector in proportion to population of the country and ensuring good health for all by providing quality healthcare".

1) Scope and features of ongoing health services in the country by 2017:

Current healthcare phases of the country include - primary and secondary / emergency healthcare activities. Opportunities in health sector in the country by 2017 are: -

- Total number of hospitals, clinics and diagnostic centers working in the health sector across the country is 34,942, of which:
 - Number of public and private hospitals and clinics are 5,627 and total number of hospital beds are 137,024.
 - ➤ At Upazila and village level, there are 18,640 OPD & Community Clinics; and

First Edition: August, 2022

➤ 10,675 private diagnostic centers.





- Total number of registered health workers working in health sector are 104,806, of which: -
 - Number of health workers working 86,626 against 113,891 posts sanctioned under DGHS; and
 - ➤ 18,180 people working under UNFWC_.
- Ratio of population and health workers per 10,000 population :-
 - ➤ 6.33 Doctor (SDG target of which is 44.5).
 - > 0.32 Medical Technologists (3 in SDG Target)
 - Community and domicile health workers 2.13
 - ➤ Government hospital beds 3.24; and
 - > Private hospital beds 5.57.
- Ratio of doctors, nurses and medical technologists in health sector at present is 1: 0.56: 0.40 (which is 1: 3: 5 in SDG target).
- As against 113,891 posts sanctioned under DGHS, number of health workers working 86,626 and number of vacant posts of health workers at that time were 27,265 (23.94%).

2) Structure of ongoing health services in the country under DGHS:-

National	Divisional	District	Upazila	Union	Ward
 Public Health Institute Post Graduate Medical Institute & Hospital with Nursing Institute. Specialized Health Center. 	 Medical College & Hospital with Nursing Institute. General Hospital with Nursing Institute. Infectious Disease Hospital. Institute of Health Technology. 	 District Hospital with Nursing Institute. General Hospital with Nursing Institute. Medical College & Hospital with Nursing Institute. Chest Disease Clinic. Leprosy Hospital. Medical assistant's Training School. 	 Upazila Health Complex. T.B Clinic (in some). 	 Rural Health Center. Union Sub- Center. UHFWC (in some). 	Community Clinic

3) Size and scope of healthcare at public and private levels by 2017:

Indicators of Health and Family Planning under MOHFW

Health Service Facilities

in the Country:

A) Maternal Mortality Ratio in last 10 years:



A) Total Facilities in Health Sector:

Health Service Facilities	No. of Hospit als	No. of Beds
 a) Govt. Hospitals under DGHS Tertiary hospitals Upazila Health Complex Union Level Hospitals b) Govt. Clinics under UHFWC	127 426 51	29,973 18,611 830

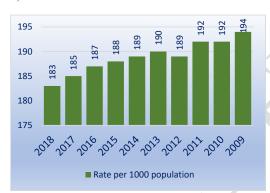




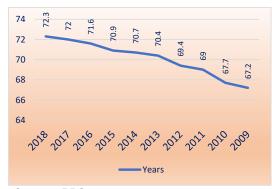
B) Neo-Natal Mortality Rate in last 10 years:



C) Crude Birth rate:



D) Life Expectancy at Birth:



Source: BBS

Total facilities in Health Service	34,942	137,024
Diagnostic Centers	10,675	-
Hospitals & Clinics	5,023	87,610
c) Private Org.(Regd. Under DGHS)		
 Community Clinics at Ward level 	13,422	-
OPD Clinics at Union Level	5,124	-
OPD Clinics at Upazila Level	94	-

B) Health Facilities at Upazila and villages:

Type of Facilities	No. of Hospit als	No. of Beds
Upazila Health complex	426	18,611
Union Level Hospitals	51	830
OPD Clinics & UHFWC at Upazila Level	64	-
OPD Clinics & UHFWC at Union Level	5,124	-
Community Clinics at Ward Level	13,442	-
Total Primary Healthcare Facilities	19,107	19,441

C) Secondary and tertiary level facilities:

Type of Hospitals	No. of Hospital s	No. of Beds
100-bed hospital	1	100
Chest diseases hospitals	13	816
Dental college hospital	1	200
District and general hospitals	64	10,450
Hospital of alternative medicine	2	200
Infectious disease hospitals	5	180
Leprosy hospitals	3	130
Medical college hospitals	17	13,713
Specialized hospital	5	1,050
Specialty postgraduate	11	3,034
institute and hospital		
Trauma center	5	100
Total:	127	29,973

D) Health Workforce under DGHS and UHFWC:

Registered Workforce	Working	Sanctione d
Registered under DGHS :		
Doctors	20,602	24,900
Medical Technologists	5,254	7,817
SACNO	3,886	5,368
 Nurses and Junior Midwives 	56,884	75,806
Workforce under DGHS	86,626	113,891
Registered under UHFWC :		
Junior Midwives	2,429	







Family Welfare Visitors	6,699	-
Community S. Birth Attendants	9,052	-
Workforce under UHFWC	18,180	
Total Workforce in Health Sector	104,806	

E) Population - Health Workforce Ratio:

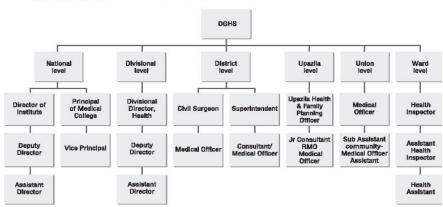
Total population (Million)	162.7
Population per registered physician	1,581
No. of registered physicians per 10,000 populations	6.33
No. of doctors under DGHS per 10,000 populations	1.28
No. of medical technologists per 10,000 populations	0.32
No. of community and domiciliary health workers per 10,000 people	2.13
No. of beds in public hospitals per 10,000 populations	3.24
No. of beds in private hospitals (registered by DGHS) per 10,000 populations	5.57

Source: DGHB-2017 & 18, BBS Statistics 2017 & 18.

4) National Health Sector Management (Organogram):



National Health Sector Management (Organogram):











কমিউনিটি ক্লিনিক পরামর্শ ও সেবার জন্য আজই যোগাযোগ করুন:



1. Primary health care at upazila level:

By 2017, out of a total of 492 upazilas in the country, 426 upazilas have primary health care system through "Upazila Health Complex" with a total number of 18,611 beds, an average of 44 beds in each and 6 doctors. In other words, each of 426 upazilas of the country has 6 (six) doctors and 44 hospital beds against an average population of 243,394. Health services are provided in the remaining 64 upazilas through OPD Clinic. (Note that according to the SDG target, density of health workers is 44.5 per 10,000 population, so, there is a need for 1,083 health workers in each upazila).

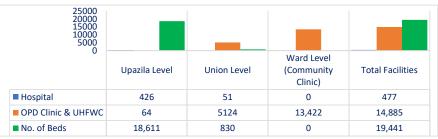
2) Primary health care at union level:

Total number of unions in the country are 4,553 and by 2017, average population living in each union were 26,310. There are 5,124 union health centers set up at union level across the country to provide free primary health care to low-income people through health workers, where population against per health center are about 23,360.

3) primary health care at village level:

Total number of wards in the country is 40,977 and average population living in each ward is 2,922. By 2017, free primary health care to low-income people at ward level is being provided through 13,422 community clinics. Expansion of primary health care in the remaining 27,555 wards has not yet taken place.

Figure-5.4 (1): Primary health care at upazila and village level by 2017: -



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Source: BBS, DGHS

Types and scope of primary health care at upazila and village level:





D) Continuous progress of 10 important health indicators:

It must be acknowledged that in recent years, progress of various important indicators of health sector in the country has been quite successful, at least WHO, World Bank and IMF report and reports of various agencies under the Ministry of Health prove it. However, it is also true that development of health sector is being not possible balancing between rural and urban areas and scope for ensuring quality healthcare is still limited to rural and remote areas compared to urban areas, as a result, Bangladesh is still lagging behind in achieving SDG target in health sector.

Analysis of continuous progress of 10 important indicators in health sector during period of 2009-2016 shows that continuous progress of each indicator is quite satisfactory, but most of the indices except a single index lag far behind the villages compared to city level. For example, latest analysis of 2018 shows: -

- Maternal Mortality Rate (per 1000 live births): 1.69 nationally, 1.93 in Rural and 1.32 in Urban.
- Infant Mortality Rate (Per 1000 Live Birth): 22 nationally, 22 in Rural and 21 in Urban
- Under 5 Mortality Rate (Per 1000 Live Birth): 29 nationally, 31 in Rural and 27 in Urban
- Contraceptive use % : 63.1% nationally, 62.4% in Rural and 64% in Urban.
- Total Fertility Rate (Per Woman 15-49 age) : 2.05 nationally, 2.38 in Rural and 1.68 in Urban.

Figure-5.4 (2): Scenario of continuous progress of 10 important indicators in health sector during 2009-2018:-

	Health	Periods									
SL	Indicator	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
1	Maternal Mortality Rate (Per 1000 Live Birth)										
	National	1.69	1.72	1.78	1.81	1.93	1.97	2.03	2.09	2.16	2.59
	Rural Urban	1.93	1.82	1.90	1.91	1.96	2.11	2.10	2.15	2.30	2.85
	Ulball	1.32	1.57	1.60	1.62	1.82	1.46	1.90	1.96	1.78	1.79
2	Infant Mort	ality Rat	e (Per 1	000 Liv	e Birth)						
	National	22	24	28	29	30	31	33	35	36	39
	Rural	22	25	28	29	31	34	34	36	37	40
	Urban	21	22	28	28	26	26	31	32	35	37
3	Neo-Natal I	Mortality	Rate (Per 100	0 Live E	Birth)					
	National	16	17	19	20	21	20	21	23	26	28
	Rural	16	17	19	20	21	23	22	24	26	29
	Urban	16	17	20	20	19	16	21	22	25	28
4	Under 5 Mortality Rate (Per 1000 Live Birth)										
	National	29	31	35	36	38	41	42	44	47	50
	Rural	31	33	36	39	40	43	44	47	48	52
	Urban	27	27	32	32	30	35	37	39	44	47

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Scenario of continuous progress of 10 important indicators in health sector:





5	Contracept	tive Prev	alence	Rate (%)						
_	National	63.1	62.5	62.3	62.1	62.2	62.4	62.2	58.3	56.7	56.1
	Rural	62.4	59.4	59.3	60.4	61.6	61.8	59.8	56.0	55.3	54.4
	Urban	64.0	66.3	65.9	64.5	64.5	64.1	66.1	62.2	60.9	58.7
6. 1	6. TB case detection rate (%) Per 100,000 Population.										
	National			61	57	54	53	48	44	45	48
	Rural										
	Urban										
7. Child Vaccination (all Vaccines) by 12 months of age.											
Vac	ccinated (%)	86	-	-	-	78	-	-	83	-	-
8.	Total Fertility	y Rate (P	er Wom	nan 15-4	19 age)						
	National	2.05	2.05	2.10	2.10	2.11	2.11	2.12	2.11	2.12	2.15
	Rural	2.38	2.37	2.38	2.30	2.22	2.19	2.30	2.25	2.26	2.28
	Urban	1.68	1.68	1.68	1.72	1.77	1.84	1.84	1.71	1.72	1.65
9. Life-expectancy at birth											
	Total	72.3	72.0	71.6	70.9	70.7	70.4	69.4	69.0	67.7	67.2
	Male	70.8	70.6	70.3	69.4	69.1	68.8	68.2	67.9	66.6	66.1
	Female	73.8	73.5	72.9	72.0	71.6	71.2	70.7	70.3	68.8	68.7
10. Trends in Child Nutritional Status.											
	Stunting	31	-	-	-	36	-	-	41	-	-
Į	Jnderweight	22	-	-	-	33	-	-	36	-	-
	Wasting	8	-	-	-	14	-	-	16	-	-
_	Course - DDC DOLIC										

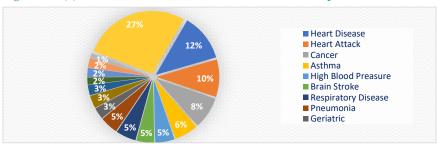
Source : BBS, DGHS

E) Death rates by disease at village and city level:

Depending on the place and environment, type of disease and degree of incidence are different, it is dealt with through proper coordination of medical system, which is the practice of health system. Level of various life-threatening diseases at rural and urban levels of the country always varies, which has a significant impact on death rate. According to 2018 estimates, deaths from heart disease, heart attack, high blood pressure, brain stroke, geriatric diseases, kidney and diabetics are significantly higher in urban areas than in rural areas. On the other hand, deaths from cancer, asthma, infectious diseases, pneumonia, jaundice and tuberculosis are significantly higher in rural areas than in urban areas. Level of impact of various diseases at village and city level should be paramount in the development plan of health sector.

Death rates by disease at village and city level:

Figure-5.4 (3): Scenario of deaths in 15 notable diseases as per SVRS- 2018:-



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Source: SVRS-2018





F) Bangladesh's progress in achieving SDG in health sector:



To get a place in the list of high income countries by 2041, ensuring good health for all in the country by 2030 by achieving SDG target in health sector is a mandatory challenge for Bangladesh. To achieve SDG Goal- 3 "Ensure healthy lives and promote well-being for all at all ages" 4 (four) sectors that are considered for development, those are:-

- Reproductive, maternal, Newborn and child health
- Infectious diseases
- Non communicable diseases
- Service capacity, access and health security

Note: 1. SDG comprises 17 goals, 169 targets including 230 indicators.

Analysis of progress of 25 important indicators in the health sector of Bangladesh in achieving SDG target by 2018, shows that while progress of 5 indicators is satisfactory, achievement of SDG target in other remaining indicators is still far behind. Among lagging indicators are maternal mortality rate, family planning, adolescent birth rate, increased coverage of essential health services, nationally vaccinated 100% of population, official advances in medical research and basic health care, concentration of health workers in proportion to population and ability to comply with international health regulations are notable.

Three most important indicators in the health sector that Bangladesh is in a critical position in terms of progress are: -

- 1. Scope of required health services: Percentage required to achieve SDG is 100%, Bangladesh's achievement by 2018 is only 50%.
- 2. Official progress in medical research and basic health care: To achieve SDG 500 MUS\$ is required, Bangladesh's achievement by 2018 is only 177.4 MUS\$.
- 3. Density of health workers in proportion to population:
 - **Health Workers:** In order to achieve SDG, number of health workers required per 10,000 people is 44.5, By 2018, there are 8.3 health workers for every 10,000 people in Bangladesh.
 - **Doctor, nurse and health technologist ratio:** To achieve SDG this ratio should be 1: 3: 5, by 2018, there are 1: 0.56: 0.40 in Bangladesh.

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Bangladesh's progress in achieving SDG in health sector:





Figure-5.4 (4): Bangladesh's progress in achieving SDG-3 by 2018:



	SDG Goal 3	Achievements of Bangladesh by 2018	Remarks	
SDG Target	Indicator	Target by 2030		
3.1.1	Maternal Mortality ratio (per 100,000 live births)	70	169 (SVRS-2018)	Far behind
3.1.2	Birth attended by skilled Health personnel.	70	69.1 (SVRS-2018)	Good
3.2.1	Under-five mortality rate (Per 1000 Live Birth)	25	29 (SVRS-2018)	Good
3.2.2 3.3.1	Neonatal mortality rate New HIV infections per 1,000 population	12 0.16	16 (SVRS-2018) 0.01 (WHO Report 2018)	Good
3.3.2	Tuberculosis incidence per 100,000 population	150	221 (Global TB report 2018)	Far behind
3.3.3	Malaria incidence per 1,000 population	0	0.69 (Who Report 2018)	Far behind
3.3.4	Hepatitis B incidence per 100,000 population	-	5.46 (From OP)	Far behind
3.3.5	People requiring interventions against neglected tropical diseases	35,000,000	47,484,224 (Health SDG Profile: Bangladesh,2018, WHO)	Far behind
3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	6%	14.4% (SVRS-2018) a) Cancer - 7.7 % b) Respiratory dis 4.3% c) Diabetics - 2.4%	Far behind
3.4.2	Suicide mortality rate Coverage of treatment	2.4	7.8 22.212(2016)	Far behind
3.5.1	interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	-	16.386(2015) 16.852(2014)	Far behind
3.6.1	Death rate due to road traffic injuries Proportion of women of	1.2	15.56 (WHO, 2017	Far behind
3.7.1	reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	100%	73.8%(BDHS, 2017-18)	Far behind
3.7.2	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	50	75 (SVRS,2017)	Far behind
3.8.1	Coverage of essential health services	100	50 (SDG Profile: Bangladesh,2018, WHO)	Far behind
3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income	10%	13.9%(SDG Profile: Bangladesh 2018, WHO)	Far behind





3.9.1	Mortality rate attributed to household and ambient air	55	68.2 (WHO, 2012)	Far behind
3.9.2	pollution Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All	4.5	5.96 (WHO 2016)	Good
	(WASH) services)		5 50 (33330 2010)	0 1
3.9.3	Mortality rate attributed to unintentional poisoning	4	5.72 (WHO 2016)	Good
3.a.1	Age-standardized prevalence of current tobacco use among persons			
3.b.1	aged 15 years and older Proportion of the target population covered by all vaccines included in	100%	85.6% (BDHS, 2018)	Far behind
3.b.2	their national Total net official development assistance to medical research and basic health sectors	500 MUS\$	252.5 MUS\$ (ERD, FY17)	Far behind
3.c.1	Health worker density (per 10,000 population) a) % of Health Worker Density b) Ration — Physician :Nurse:	(a) 44.5 (b) 1: 3: 5	a) 8.3 (HRH Country profile, 2017, MOHFW b) 1: 0.56: 0.40	Far behind
3.d.1	Health Technologist International Health Regulations (IHR) capacity and health emergency preparedness	100	87.5 (WHO, 2016)	Far behind

Source: DGHS Health Report and SVRS-2018

G) Nature of ongoing development in health sector:



In the last 10 years, rate of allocation to health sector in the national budget has been limited to 4.50% - 5.50% of the budget, averaging 4.97%, which is less than 1% of GDP of the corresponding year. Approximately 38% -40% of money allocated to health sector is spent on salaries of its employees, 22% -24% medical students purpose and remaining 38% -40% (1.75% of the national budget on average) is spent on health sector development **Figure-5.4(5)**, which is by no means sufficient for development of health sector of a developing country.



Nature of ongoing development in health sector:

Strategies for Economic Development of Bangladesh



In 2017-18 fiscal year, 0.89% based on GDP was allocated to health sector in Bangladesh. In the same fiscal year, in other South Asian countries allocation to health sector based on GDP was 0.9% in Pakistan, 1.4% in India, 2% in Sri Lanka, 2.3% in Nepal, 2.9% in Afghanistan and 10.9% in Maldives **Figure-5.4** (6).

Figure-5.4 (5): Scenario of annual allocation to health sector in the national budget of Bangladesh in the last decade:- Bangladesh and some other

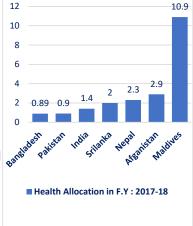
Nationa	al Budget	Health Sector Allocation		
Financial Year			Amount (in Crore TK.)	
2010-11	1,321.70	6.2	8,195	
2011-12	1,635.89	5.4	8,834	
2012-13	1,917.38	4.9	9,395	
2013-14	2,224.91	4.3	9,567	
2014-15	2,505.06	4.4	11,022	
2015-16	2,951.00	4.3	12,689	
2016-17	3,406.05	5.1	17,371	
2017-18	4,002.66	5.2	20,814	
2018-19	4,645.73	5.0	23,229	
2019-20	5,231.90	4.9	25,636	

Break-up of Allocated amount :

- Operating Expenditure 38% 40%
- Medical Education & F.Welfare 22% 24%
- Development Expenditure 38% 40%

Source: Ministry of Health & Family Welfare.

Figure-5.4 (6): Scenario of annual allocation to health sector of Bangladesh and some other countries in South Asia in the fiscal year 2016-17 in proportion to GDP:



Source: South Asian Journal

First Edition: August, 2022

H) Contribution of health sector to GDP and its growth:

Contribution of health sector to the country's GDP is very small, which has remained at almost same level for a long time. This picture is much same incase of spending on health as percentage of GDP, although growth in health sector has fluctuated somewhat during the last decade. Contribution of health sector to annual GDP for the period from 2010-11 to 2017-18, expenditure in health sector in proportion to GDP and growth rate in health sector are given below: -

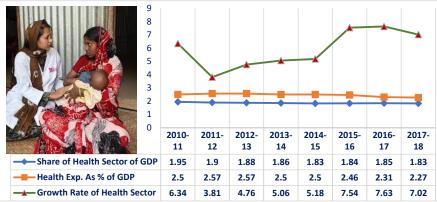
- Contribution of health sector to GDP: 1.95% in FY 2010-11, 1.90% in FY 2011-12, 1.88% in FY 2012-13, 1.86% in FY 2013-14, 1.83% in 2014-15, 1.84% in 2015-16, 1.85% in 2016-17 and 1.83% in 2017-18.
- Current Expenditure on health as a percentage of GDP: 2.5% in FY 2010-11, 2.57% in FY 2011-12, 2.57% in FY 2012-13, 2.5% in FY 2013-14, 2.5% in FY 2014-15, 2.46% in FY 2015-16, 2.31% in FY 2016-17 and 2.27% in FY 2017-18.
- **Growth rate in health sector:** 6.34% in FY 2010-11, 3.81% in FY 2011-12, 4.76% in FY 2012-13, 5.06% in FY 2013-14, 5.18% in FY 2014-15, 7.54% in FY 2015-16, 7.63% in FY 2016-17 and 7.02% in FY 2017-18.

Contribution of health sector to GDP and growth in health sector:





Figure-5.4 (7): Contribution of health sector to GDP during financial year 2010-11 to 2017-18, Current expenditure in health sector in proportion to GDP and growth in health sector:



Source: World Bank Data

I) Per capita health expenditure:

1) Per capita government expenditure on health:

Bangladesh still lags behind in the world in per capita government spending on health, even in South Asia. As per World Health Organization, per capita government expenditure in health sector in Bangladesh (US\$) - 20.18 in 2010, 22.16 in 2011, 22.75 in 2012, 25.86 in 2013, 28.83 in 2014, 31.84 in 2015, 33.53 in 2016 and 36.28 in 2017 **Figure-5.4(8)**. During this period, per capita government spending on health increased by an average of US\$ 2.01 a year.

2) per capita Personal expenditure on health:

In Bangladesh, per capita personal expenditure in health is about 3 times higher than per capita government expenditure in this sector. According to

World Health Organization, per capita personal health expenditure in Bangladesh during period from 2010-11 to 2017-18 were (USD) - 67.21 in 2010, 67.37 in 2011, 67.47 in 2012, 68.52 in 2013, 69.93 in 2014, 71.82 in 2015, 73.13 in 2016 and 73.79 in 2017 **Figure-5.4(9).** Due to unusually high personal health expenditures, limited income people of this country have to face much straggle to meet expenses of emergency medical treatment, even there are many instances of losing everything to meet the cost of emergency medical treatment, which is having a devastating effect on the daily economic lives of lowincome people.

Figure-5.4 (8): Scenario of Per capita health expenditure in Bangladesh in proportion to GDP (US dollars) during fiscal years 2010-11 to 2017-18:-



Source: WHO, 2016

First Edition: August, 2022

Per capita health expenditure:







3) Total per capita Health expenditure:

Following is a picture of total per capita health expenditure in Bangladesh during period of 2010-2017:-

Figure-5.4 (9): Scenario of total per capita health expenditure in Bangladesh during the period 2010-2017:-



Source: WHO Health Report.

J) Bangladesh's position in S. Asia in healthcare standard:

1) Per capita health expenditure:

Standard of the health sector is determined on the basis of expenditure in health sector and adequacy of facilities available in this sector. To date, Bangladesh lags far behind most of the developing countries in the world, even in South Asia, in terms of i) health expenditure in proportion to GDP, ii) per capita government expenditure on health and iii) health expenditure compared to total government expenditure. Bangladesh is in a more vulnerable position in other important indicators of health care, such as Doctors, nurses and childbirth by skilled health workers.

According to information of 2017, expenditure in health sector in proportion to GDP, per capita government expenditure in health and expenditure in the health sector in proportion to total government expenditure are as follows: -

- Expenditure on health as percentage of GDP: In Bangladesh -2.27%, India -3.53%, Bhutan -3.19%, Indonesia -2.99%, Sri Lanka -3.81%, Thailand -3.75%, Malaysia -3.86%, China -5.15%, South Korea -7.6%, Maldives -9.03% and Japan -10.94%.
- Per capita government expenditure in health (US\$): In Bangladesh 36.28, India -69.29, Bhutan -96.80, Indonesia -114.97, Sri Lanka -159.48, Thailand -247.04, Malaysia -384.07, China -440.83, South Korea 2,283.07, Maldives -1,006.94 and Japan -4,168.99.
- Expenditure on health as proportion of total government expenditure: 2.99% in Bangladesh, 3.38% in India, 7.90% in Bhutan, 8.73% in Indonesia, 8.47% in Sri Lanka, 15.03% in Thailand. %, Malaysia -8.93%, China -9.07%, South Korea -13.42%, Maldives -21.78% and Japan -23.64%.

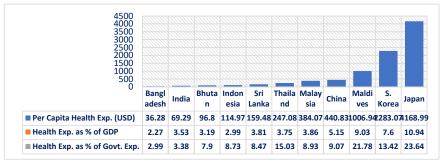
First Edition: August, 2022

Bangladesh's position in South Asia in Per capita health spending and health care standard:





Figure-5.4 (10): Comparative picture of expenditure in health sector in Bangladesh and some other countries in South East Asia in 2017: -



Source: WHO Health Observatory Report

2) Health system and health facilities:

Bangladesh lags far behind almost all countries in South Asia in terms of health system and adequacy of necessary health facilities. One of the reasons being lower than required expenditure in health, poor planning and supervision in this sector. According to World Health Organization (WHO), current expenditure on health as percentage of GDP by 2017 is 2.27% in Bangladesh, 3.53% in India, 3.19% in Bhutan, 2.99% in Indonesia, 3.81% in Sri Lanka, 3.75% in Thailand, 3.86% in Malaysia, 5.15% in China, 7.60% in South Korea, 10.94% in Maldives and 10.94% Japan. In terms of per capita government expenditure in health and health expenditure in terms of total government expenditure, Bangladesh's position is at the very bottom of the list **Figure-5.4** (11).

Moreover, situation in Bangladesh is similarly critical in terms of manpower and other necessary facilities in health sector, which are highlighted below: -

- Doctors for every 10,000 population: 5.81 in Bangladesh, 8.57 in India, 4.24 in Bhutan, 4.27 in Indonesia, 10.04 in Sri Lanka, 8.57 in Thailand, 15.36 in Malaysia, 19.80 in China, 23.61 in South Korea, 45.63 in Maldives and 24.12 in Japan.
- Nurses per 10,000 population: 4.12 in Bangladesh, 17.27 in India, 18.52 in Bhutan, 24.15 in Indonesia, 21.80 in Sri Lanka, 27.59 in Thailand, 34.68 in Malaysia, 26.62 in China, 73.01 in South Korea, 64.28 in Maldives and 121.50 in Japan.
- Childbirth in presence of skilled health workers (%): 67.8 in Bangladesh, 81.4 in India, 96.4 in Bhutan, 93.6 in Indonesia, 98.6 in Sri Lanka, 81.4 in Thailand, 99.5 in Malaysia, 99.9 in China, 100 in South Korea, 95.6 in Maldives and 99.8 in Japan.

Figure-5.4 (11): Comparative picture of health system and health facilities of Bangladesh and some other countries in South Asia by 2017: -

	Не	alth systen	18	Health Facilities			
Country	Current Health Exp. % of GDP	Per Capita Health Exp. (\$)	Govt. health exp. (% of govt. exp.)	Doctor per 10,000 population	Nurse per 10,000 population	Birth attended by skilled health workers (%)	
Bangladesh	2.27	36.28	2.99	5.81	4.12	67.8	
India	3.53	69.29	3.38	8.57	17.27	81.4	
Bhutan	3.19	96.80	7.90	4.24	18.52	96.4	
Indonesia	2.99	114.97	8.73	4.27	24.15	93.6	





Sri Lanka	3.81	159.48	8.47	10.04	21.80	98.6
Thailand	3.75	247.04	15.03	8.57	27.59	81.4
Malaysia	3.86	384.07	8.93	15.36	34.68	99.5
China	5.15	440.83	9.07	19.80	26.62	99.9
S. Korea	7.60	2,283.07	13.42	23.61	73.01	100.0
Maldives	9.03	1,006.94	21.78	45.63	64.28	95.6
Japan	10.94	4,168.99	23.64	24.12	121.50	99.8

Source: WHO Health Observatory Report

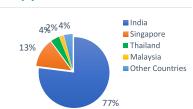
K) Quality of healthcare and future prospects of this sector:

1) Quality of healthcare and people's confidence in ongoing healthcare:

Complain about quality of health care in Bangladesh is very old. There is no end to complaints of people in the country about poor quality of health care in the medical field, miss behave of health workers with patients, shortage of skilled doctors, nurses and technicians, inadequacy of modern medical equipment and abnormally high medical expenses. Moreover, wrong diagnosis, prescribing unnecessary and wrong medicine, wrong pathological report and negligence to patients are some of the common occurrences in the medical field of this country. According to the report of Journal of IBA, DU published in 2013 on the quality of services in India, Thailand, Singapore and Bangladesh in 16 important areas of medical care, combined performance of these 16 important areas is 69.3% in India, 72.12% in Thailand, 74.39% in Singapore and 42.47% in Bangladesh Figure-5.4 (13). In other words, compared to most of the countries in South Asia in the field of medical services, Bangladesh has so far been able to achieve only 50% of required skills, which is very inadequate in the field of advanced and quality treatment.

Needless to say, quality of health care in Figure-5.4 (12): Bangladesh is still far behind that of other Asian countries such as India, Thailand, Malaysia, Singapore, etc. As a result, despite having a number of good healthcare facilities in the country, according to various sources about 1.2 million Bangladeshi citizens migrate abroad for advanced treatment every year, of whose 70% - in India, 13% - in Singapore, 4% - in Thailand, 2% - in Malaysia and 4% in Europe and America seek medical treatment **Figure-5.4**

Scenario of Bangladeshi patients receiving treatment in different countries every year: -



Source: Journal of Business Studies- 2013, DU

First Edition: August, 2022

Figure-5.4 (13): Scenario of performance of Bangladesh and three other neighboring countries in 16 important areas of medical services by 2013: -

Country wise Comparison of Medical Service Parameters

SL	SL Original Variables	Performance (%) by Country				
		India	Thailan d	Singapore	Bangladesh	

Ongoing health service quality in the country:





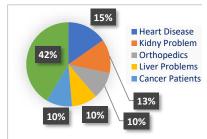
1	Completeness of Services	4.42	4.58	4.69	2.61
2	Accuracy of diagnosis and treatment	4.43	4.50	4.75	2.61
3	Responsiveness of doctors	4.42	4.58	4.69	2.76
4	Knowledge and skills of doctors	4.57	4.58	4.81	3.06
5	Knowledge and skill of nurses and staff	4.19	4.27	4.50	2.26
6	Communication between doctor and patient	4.40	4.17	4.50	2.78
7	Communication between nurse and patient	4.09	3.93	4.31	2.29
8	Doctor courtesy and empathy	4.42	4.33	4.73	2.87
9	Nurse courtesy and empathy	4.22	4.25	4.67	2.35
10	Timely and orderly processing of reports,				
	documents and hospital formalities	4.48	4.83	4.69	2.79
11	Timeliness of laboratory tests	4.45	4.73	4.75	2.89
12	Availability of doctors	4.25	4.50	4.75	2.67
13	Availability of nurses and other staff	4.23	4.67	4.69	2.84
14	Physical appearance of hospital staff	4.21	4.60	4.50	2.45
15	Physical appearance and cleanliness of				
	hospital premises (aesthetics)	4.28	4.82	4.69	2.41
16	Proper performance of hospital equipment	4.24	4.78	4.67	2.83
	Level of overall Performance (%):	69.3	72.12	74.39	42.47
C I I CIRA BU					

Source: Journal of IBA, DU

2) Generally, Bangladeshi patients go abroad for treatment of those diseases:

Analysis of various reports and data shows that an average of 1.2 million Bangladeshis migrate abroad for advanced treatment every year, which is increasing by about 10% -12% every year, as well as increasing amount of foreign exchange expenditure this purpose. According to the report of Journal of Business Studies, Dhaka University published in 2013, among diseases for which Bangladeshi patients go abroad for treatment, heart disease - 17%, kidney patients - 14.5%, orthopedics - 11.5%, liver problems. - 11%, cancer - 11% and other patients 46% Figure-5.4(14).

Figure-5.4 (14): Scenario of usually patients from Bangladesh go abroad for treatment of diseases:-



Source : Journal of Business Studies- 2013, DU

First Edition: August, 2022

Generally, Bangladeshi patients go abroad for treatment of those diseases:

3) Expenses for medical treatment abroad :

According to information published in the Daily Financial Express on 20/10/2019, Bangladeshi people are spending an estimated 4 (four) billion US dollars (TK. 33,600 crore) for medical treatment abroad every year, which is 61.43% more than the amount allocated to health sector in the national budget of F.Y 2017-18, and equivalent to 26.70% of remittances received in that financial year.

Needless to say, due to distrust of quality of health care and ongoing health services in the country, on the one hand, a lot of foreign currency is being wasted on medical treatment abroad every year, on the other hand, this distrust is acting as one of the major obstacles in development of medical sector in the country along with huge financial loss, It has become essential to overcome that situation for development of health sector.

Expenses for medical treatment abroad :





L) Possibilities of developing specialized medical treatment in Bangladesh and required actions to this connection:

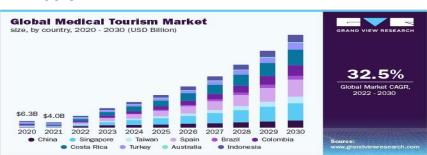


At present, specialty medical service is established as one of the most profitable sectors besides ensuring health care of people of the country. According to the report of International Journal of Business 2013 India, global healthcare revenues are estimated at US\$100 billion by 2012, which are growing steadily. According to India Medical Tourism, in 2017, 14-16 million people around the world received medical treatment outside their own country. In that year alone, 495,056 foreign patients have been treated in India, of which more than 80% were Bangladeshis. India's revenue from medical services in 2015 was around 3 billion US dollars, by 2020 which has been set at 9 billion US dollars.

In recent times, both the range and quality of health care in South Asian countries have grown at a remarkable rate, specially India, Thailand, Singapore and Malaysia has achieved enviable success in this sector. As it is being possible to ensure international quality medical services at affordable prices, people's confidence in Asian medical services is increasing all over the world.

As an emerging economy, Bangladesh has wonderful opportunity to be benefited financially as well as to ensure healthcare of its patients by increasing investment in the medical sector, building several specialized medical institutions of international standard in the country and by making necessary reforms in other fields related to medical development in the light of other countries.

In the coming days, healthcare costs will continue to rise worldwide. Estimated global medical market size prediction from 2015 to 2026 has been shown in the following graph:-



First Edition: August, 2022

Possibilities of developing specialized medical treatment in Bangladesh and required actions to this connection:





In order to promote medical services in the country to international standards, it is necessary to have an effective plan for development of this sector, so that necessary infrastructure and other facilities are quickly developed to ensure international standard medical services in the country through government, private and foreign investment. In addition, all the problems and obstacles in the medical sector of the country, such as poor health care, misbehave with patients by health workers, shortage of skilled doctors, nurses and technicians, hospital environment, inadequacy of modern medical equipment and abnormally high medical costs etc. and solve all those problems quickly by taking effective steps.

In the light of India, Thailand, Singapore and Malaysia, following steps can be taken to develop international standard medical services in the country: -

- 1. Effective plan to improve quality of medical services.
- 2. Rapid development of necessary infrastructure and other facilities to ensure international standard medical services in the country with public, private and foreign investment, such as specialized hospitals, diagnostic centers, international standard doctor and nurse training centers, adequate medical equipment and life saving medicine production and other necessary infrastructure.
- 3. Taking steps to achieve international recognition of specialized hospitals.
- 4. Introducing international health insurance for foreign patients.
- 5. Recruitment of specialized foreign doctors as heads of various departments in specialized hospitals.
- 6. To build a sufficient number of nurses and other health workers skilled in English to ensure quality service to foreign patients.
- 7. To develop international standard food menu delivery system as per demand of different countries in specialized hospitals as well as to ensure international standard security system.
- 8. To attract foreign tourists by building multiple tourist centers, hotels, motels, restaurants etc. with international facilities in the country, so that foreigners can enjoy both leisure vacations and medical treatment in this country.
- 9. To take initiatives for wide publicity in international media by announcing "Medical Tours and Travel Packages" with attractive facilities at public and private levels, as well as to organize massive publicity in the international arena including organizing medical tours and tourism fairs at home and abroad.
- 10. Facilitation of Medical and tourist visa.
- 11. Inviting investment in healthcare and tourism sector with special discounts and offer investment facilities for domestic and foreign investors.
- 12. To take and implement all necessary steps in the light of other countries for rapid expansion of this sector.

M) Existing problems and constraints in the health sector:

Bangladesh's health sector is plagued by problems and limitations. Country's health sector is still lagging behind due to indifference and silence of the post-independence governments towards this sector, country's civil society, intellectuals and policy makers being less committed to adequate expansion and development of health sector and riches feel comfortable getting treatment abroad instead of forcing the government to improve country's health sector. During COVID-19





period, fragile image of the health sector and rampant corruption that has been rampant in the country for a long time has come to light. As a result, present government is very much concerned about expansion and reshaping of this sector and has increased allocation for expansion and development of health sector in the national budget for the fiscal year 2021-2022. Following is a summary of important problems and limitations that exist in the country's health sector by the end of 2020:

- Inadequate and city based health services: In proportion to population, number of quality hospitals, clinics and diagnostic centers in public and private sector in the country is very inadequate and most of the secondary and emergency healthcare institutions are located at district and divisional cities
- 2. Only primary medical care system at upazila level: Where an average population of 243,394 live in each upazila, there are only 6 doctors and a few nurses in each upazila hospital to provide primary healthcare services.
- 3. Inadequate Primary Health Care at Village Level: Provision of primary health care through 5,124 Union Health Centers and 13,422 Community Clinics out of an estimated 120 million people living in rural and remote areas across the country with only 3 (three) months trained health workers instead of qualified doctors, which in no way falls under standard of quality health care.
- 4. Inadequate density of health workers in proportion to population: Number of health workers in the country is alarmingly low in proportion to population, for example, according to information of 2018, there are only 5.81 doctors for every 10,000 population in the country (in SDG target needs 44.5), 4.12 nurses (133.5 required in SDG target) and attendance of 67.8% trained health workers in childbirth (in SDG target 100% required), which is not enough at all to ensure adequate health care in the country.
- 5. **Inadequate government hospitals and clinics:** Number of government secondary and tertiary hospitals in the country is abnormally low in proportion to population. As of 2016, there are 127 secondary and tertiary hospitals at government level, lion's share of which are located at district and divisional level, with a population of 1.30 million per hospital.
- 6. Lack of specialized hospitals: Due to lack of specialized hospitals compared to prevalence of disease in the country, every year millions of people have to go abroad for treatment. As a result, huge amount of foreign exchange goes abroad for medical treatment every year, In 2018, the amount was 4 billion US dollars.
- 7. Government allocations and per capita expenditure on health is very limited compared to actual needs:
 - i) Rate of allocation to health sector in the national budget is lowest compared to developing countries and even South Asian countries, In the F.Y 2017-18, allocation to health sector in the national budget is 5.2%, which is 0.89% of GDP. In the same financial year, allocation to health sector in Pakistan based on GDP is 0.9%, in India 1.4%, in Sri Lanka 2%, in Nepal 2.3%, in Afghanistan 2.9% and in Maldives 10.9%.
 - ii) Per capita government spending on health in Bangladesh is much lower than in even other smaller countries in Southeast Asia. In 2017-18 financial year, per capita government expenditure in health was (US\$) 36.28 in Bangladesh, which was in India 44.59, in

First Edition: August, 2022

Problems and limitations in the health sector:





Pakistan 47.92, in Nepal 1,003.94, in Maldives 159.46, in Sri Lanka 69.29, in Bhutan. 98.8 and in Afghanistan 67.12.

- 8. Lack of quality medical services: Hospitals are severely hampered by inadequate modern medical equipment, inadequate pathological tests, lack of trained doctors and nurses etc..
- 9. Limited research in development of health sector: Due to limited allocation in health sector, research activities in development of this sector is very limited in Bangladesh compared to developed countries, as a result Bangladesh lags far behind the neighboring countries in the health sector.
- 10. Underdeveloped and unhealthy environment of hospitals and clinics: Internal environment of government hospitals and clinics in the country is mostly underdeveloped and unhealthy, which is one of the major obstacles in modern healthcare.
- 11. Lack of professionalism among doctors and health workers: There is a lack of professionalism among doctors and health workers in this country, it is a long standing complaint, which is having a major negative impact on the quality of health care.
- 12. Long formulation at field level due to central management: As there is no opportunity for direct management at upazila and village level, scope of monitoring, control, coordination and decision making at field level is very limited. As a result, proper supervision of hospitals and health care centers at union and village level and in case of loss of medical supplies and equipment or shortage of medicines, medical services are severely disrupted there due to lack of immediate decision.
- 13. Lack of adequate publicity at upazila and village level: Due to lack of adequate publicity at upazila and village level about health services provided in government health centers, most of rural people instead of going to these service centers they prefer to go to unskilled village doctors, which is questioning the quality of government health services at village level.

N) Reasons for increasing health risks in the country:



Due to inadequate health system in the country, level of health risk is increasing in line with population growth, which is one of the obstacles in building a developed nation. If urgent and effective steps are not taken to control health risks in the country before reaching at peak, level of health risks will gradually spiral out of control, threatening the entire nation, which is enough to hamper all future plans of the country and Bangladesh does not have capacity to overcome that situation





immediately. Therefore, in development of overall health system of the country, issues related to health risks should be taken into consideration and prompt action is required to advance development of health sector.

Following are some of notable reasons for ever-increasing health risks in the country: -

- 1. Child marriage: Child marriage is one of the major problems in development of health system in the country. Rapid and large number of children born as a result of child marriage, which leads to deterioration of health of both men and women and incidence of various diseases as well as increase in the level of family strife, poverty, sick and handicapped children. Rate of child marriage is almost double in rural areas as compared to urban areas. According to SVRS- 2018, marriage rate per 1,000 population at the age of 15-19 years is 17.2 males and 120.4 females nationally. Males 22 and females 159.7 in rural areas and males 10.7 and females 74.7 in urban areas.
- 2. Low standard of living in unhealthy environment: Poor and extremely poor households living in rural and remote areas and urban slum areas (which is 37.2% of the total population, 41.3% in rural areas and 26.5% in urban areas) are at 100% health risk in completely unhealthy and low quality environment. As a result, various infectious and water-borne diseases are their constant companions throughout the year, which is having a serious negative impact on the overall health system of the country.
- 3. Adulterated food and medicine: Due to unusual increase in the level of adulterated food and medicine by extremely greedy and unscrupulous traders, number of fatal diseases and deaths in the country is constantly increasing. According to SVRS-2018, death rate from cancer in the country is 9.7%, death from asthma is 6%, death from kidney complications is 2% and death from respiratory diseases is 5%. If this deadly problem cannot be solved effectively and strictly, that days are not far off, outbreak of deadly diseases in the country will upset the whole nation at one stage.
- 4. Inadequate quality control system of food and food products: Quality food is the guarantee of good health and this guarantee depends on proper quality control system of food products in the country. Although BSTI works to control quality of food products in Bangladesh, its activities and supervision are mostly limited to city level, and it has no influence in rural and remote areas. Even at the city level, BSTI quality control and supervision system is inadequate and defective. As a result, mobile courts are constantly removing adulterated and expired food items from the city's big shops, shopping malls and hat bazaars, which is a major threat to the overall health system of the country at all times.
- 5. Lack of health education and knowledge: In context of Bangladesh, apart from medical education, there is no opportunity to know about general education and basic health issues outside of education, such as menstruation, early pregnancy, child rearing and various basic health issues. As a result, menstrual problems and infections, premature pregnancies, uncontrolled abortions, anemia and other health complications are common among women living in underdeveloped societies, especially in rural and remote areas and urban slum areas, which is one of the obstacles in development of overall health system of the country.

First Edition: August, 2022

Reasons for increasing health risks in the country:





- 6. **Inadequate measures at village level for development of maternal and child health:** A healthy mother can only give birth to a healthy child, and a healthy child has the potential to become a worthy citizen in future, which requires adequate measures in the country to improve maternal and child health. Despite the fact that more than two-thirds of the country's population live in rural and remote areas, there are only 5,124 Union Health Care Centers and 13,422 Community Clinics across the country providing primary health care for an average of 3-4 hours a day and 4-5 days a week by only 3 months of trained health workers instead of qualified doctors, which is inadequate and low quality in terms of health services. As a result, rural areas still lag far behind urban areas in all areas such as maternal mortality and infant mortality, premature birth and use of birth control methods, which is one of the major obstacles to development of the country's overall health system. According to SVRS- 2018: -
 - Childbirth rate by doctors and skilled health workers: 69.1% nationwide, 61.8% in rural areas and 80% in urban areas.
 - Maternal mortality (per 1000): 1.69 across the country, 1.93 in rural areas and 1.32 in urban areas.
 - Infant mortality (per 1000): 22 nationwide, 22 in rural areas and 21 in urban areas.
 - Infant mortality under 5 years (per 1000): 29 nationwide, 31 in rural areas and 27 in urban areas.
 - Rate of childbirth for underaged women is:
 - i) 10-14 years old: 1% nationwide, 1.2% in rural areas and 0.7% in urban areas.
 - ii) 15-19 years of age: 73.1% nationwide, 87.8% in rural areas and 56% in urban areas.
 - Birth control use rate: 63.1% nationwide, 62.4% in rural areas and 64% in urban areas.
- 7. Lack of quality treatment for complex diseases in the country: Quality treatment of complex diseases such as heart disease, cancer, kidney complications, respiratory problems and other complex diseases is not yet being possible in Bangladesh, treatment of these complex diseases is still quite expensive in the country, which is possible at relatively low cost in neighboring India. As a result, countless poor people of the country are dying prematurely due to financial failure to cure these complex diseases and middle class is constantly becoming destitute losing their resources to treat these complex diseases. According to a report published in the Daily Star on 4/3/2015, due to expensive medical treatment, 4% or 6.8 million people of total population of the country fall into poverty every year.
- 8. Outbreaks of various infectious and water borne diseases in rural and urban underdeveloped areas: In rural and remote areas, urban slums and underdeveloped areas, prevalence of various water borne diseases, infectious diseases and malnutrition and mortality is many times higher than as usual, which is one of the major threats to the overall health system, among them:
 - **Infectious diseases:** Cholera, diarrhea, jaundice, typhoid, tuberculosis, leprosy, tetanus, diphtheria, whooping cough, measles, rabies and sexually transmitted diseases etc.

First Edition: August, 2022

• Parasitic Diseases: Malaria, Pylaria etc.





 Problems of malnutrition, vitamin and iron deficiency in children and pregnant women.

As of 2018, deaths from asthma: 5.5% in the country, 4.5% in urban areas and 6.2% in rural areas, deaths from infectious diseases: 4.3% in the country, 2.8% in urban areas and 5.2% in rural areas, Deaths from tuberculosis: 2.1% in country, 1.5% in urban and 2.5% in rural and jaundice deaths: 3.2% in country, 2.9% in urban and 3.3% in rural.

- 9. Availability and substantial use of low quality medicines: A lot of low quality medicines are produced in the country behind the eyes of administration, lion's share of which is sold among underdeveloped and poor people in rural and remote areas and in the cities. Due to low price, poor people are more interested in those low quality medicines, as a result, people of that class are constantly suffering from various complex and deadly diseases, which is threatening the health sector of the country.
- 10. Impact of Ignorance and Religious Prejudice among underdeveloped population in eradicating disease: As there is widespread ignorance about prevalence of disease among underdeveloped population of the country, Similarly, instead of going medical center to cure disease, they prefer to buy medicine on the basis of mutual asking and in many cases, trying to cure disease in the form of religious superstitions, in most cases it leads to dangerous. According to a survey conducted by BMC International Health and Human Rights, an average of 4.6% population goes to government health centers for treatment in rural and remote areas, an average of 8.4% seeks treatment at private health centers, 16.4% buys and eats medicines from drug stores, take NGOs benefit 1.8% and 8.7% buy and eat medicines from people who sales medicine from door to door.
- 11. Increased influence of hammer doctors in rural and remote areas due to costly treatment: Due to expensive medical treatment, neglect of medical care among low-income people in rural and remote areas of the country and in most cases, more tendency to resort to a rural doctor instead of a qualified doctor to save money. According to survey conducted by BMC International Health and Human Rights, 11.6% 16.9% of patients in rural and remote areas go to MBBS doctors and 67.5% 69.6% of patients take treatment through rural hammer doctors. Such neglect and tendency towards treatment among majority of population of the country is undoubtedly a big threat to the overall health sector of the country.
- 12. Low quality healthcare in a number of private clinics and diagnostic centers: Numerous clinics and diagnostic centers set up in rural areas of the country and in some urban areas without approval of the Health Department are constantly depriving countless innocent and poor patients through fake medical and pathological tests with fake doctors as well as endangering the lives of a large number of poor people.
- 13. Adverse effects of environment: Due to environmental disasters, innumerable people are constantly suffering from various diseases, which is another serious threat to health system of the country.





O) Recommendations for Expansion of health sector:



In order to accelerate overall progress of the country, we have to be ready to face the challenge of 2041 by expanding and developing health sector in proportion to population and gradually bringing the whole nation under modern and quality health services to build a healthy and prosperous nation. With this goal in mind, it is important to ensure good health for all by formulating and implementing sustainable development plans in the health sector, which is essential for achieving SDG targets in this sector. In addition, to develop specialized medical treatment in the country, Bangladesh should strive to establish itself in South Asia as one of the leading treatment centers for complicated diseases at affordable prices in the form of Thailand, Singapore and Malaysia, so as to save a lot of foreign exchange and income through treatment of domestic patients as well as foreign patients, which will play a tremendous role in the overall development of health sector as well as economic progress of the country.

Recommendations for Expansion and Modernization of health sector:

Specific objectives of the National Health Policy-2011 for development of health sector, such as- a) Ensuring availability of primary health care and emergency medical care for all, b) Expanding availability of quality health care on an equal footing; and c) Motivate people to take up services for prevention and control of diseases.

Recommendations for expansion and modernization of country's health sector:-

2. To increase facilities and scope of secondary / tertiary level health services at district and divisional level: In order to meet the challenges ahead, it is necessary to increase number of modern secondary / tertiary level hospitals, clinics and diagnostic centers at district and divisional level, considering current population and population growth of next 20 years of the country.

Figure-5.4(15): Proposal to increase number of modern secondary / tertiary level hospitals and beds at district and divisional level:-

Secondary & tertiary Hospitals	No. of Existing Hospitals	Additional Required	Total required	No. of beds to be increased to
District and general hospitals	64	-	64	40,000





Medical college hospitals	17	47	64	64,000
Chest diseases hospitals	13	7	20	10,000
Specialty postgraduate	11	14	25	25,000
institute and hospital				
100-bed hospital	1	19	20	20,000
Dental college hospital	1	9	10	10,000
Hospital of alternative	2	8	10	10,000
medicine				
Infectious disease hospitals	5	10	15	15,000
Leprosy hospitals	3	2	5	2,000
Specialized hospital	5	10	15	15,000
Trauma center	5	5	10	5000

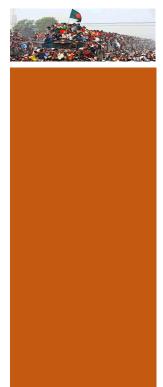
For Development and accreditation of Specialized Treatment:

	Total:	127	141	268	226 000
Specialized Hospital					
International Standard		-	10	10	10,000

- 2. Expansion and development of specialized medical services in the country: To expand and develop specialized medical services in the country, establish specialized hospitals, manufacturing of medical equipment and taking effective initiatives to increase production of life saving medicines by providing special facilities and incentives to domestic and foreign investors.
- 3. Increasing range and quality of medical services at upazila and village level: Please see the chapter 3.7 (Cha) Recommendations for increasing the range and quality of medical services at upazila and village level.

> Other recommendations for development health Sector :

- 4. Making health insurance compulsory for all citizens in the country to make treatment of complex diseases easier for all.
- 5. To increase number of medical colleges and hospitals and students in 64 district towns of the country.
- 6. Increase number of training institutes for doctors and nurses and appoint adequate doctors, nurses and medical technologists in the public sector.
- 7. Ensuring allocation of at least 10% of the annual national budget in the health sector
- 8. Taking initiative for production in the country of all equipment used in medical services, such as surgical instruments, PPE, mask, hand gloves, injection cylinders and needles, thermometers, blood pressure and blood sugar measuring instruments, instruments used in pathological tests and all medical equipment etc..
- 9. Increase research activities to improve quality of medical services and to ensure necessary funding in this sector.
- 10. Taking necessary initiatives to expand export sector by expanding pharmaceutical industry through increasing quality of medicines produced in the country beside meeting domestic demand.
- 11. To create more awareness among underdeveloped population in urban and rural areas for effective prevention of infectious and water borne diseases as





well as to reduce incidence and death rate of infectious diseases by intensifying medical services for those diseases.

- 12. Taking strong initiative to permanently close down the production and sale of low quality medicines, unauthorized private hospitals, clinics and diagnostic centers in the country.
- 13. Taking effective initiatives to stop influence and domination of hammer doctors in rural and remote areas, urban slums and underdeveloped communities.
- 14. To improve maternal and child health, stop child marriage in the country and strictly prohibit having children before the age of 20.
- 15. In order to create health awareness among people, academic curriculum should include topics related to primary health issues, such as -menstrual problems in women, early preparation before having children, precautions to be taken during pregnancy and child rearing etc.
- 16. To further strengthen ongoing programs of the government for improve nutritional status and quality of public health at all levels.
- 17. Political commitment to ensure standard development of health sector and willingness to implement it.







Chapter: 5.5

Sustainable Industrialization.













Sustainable Industrialization.

Topics Covered in the Chapter

- A) Sustainable Industrialization.
- B) Current situation of country's industrial sector.
 - 1. Scope of Industrial Sector expanded in private sector.
 - 2. Number of establishments and employment in the industrial sector.
 - 3. Contribution of industrial sector to GDP and growth in this sector.
 - i) Contribution of industrial sector to GDP.
 - ii) Growth of industrial sector.
 - iii) Comparative position of South Asian countries in terms of contribution of industrial sector to GDP.
- C) Manufacturing sector.
 - 1. Role of manufacturing sector in meeting domestic demand, export and employment.
 - 2. Size and expansion of manufacturing sector.
 - 3. Contribution of manufacturing sector to GDP.
 - 4. Growth of Manufacturing Sector.
- D) Domestic investment flow into the manufacturing sector.
- E) What is needed to increase domestic investment flows in Industrial sector
- F) Foreign investment in the industrial sector.
 - 1. Foreign investment situation in the Industrial sector.
 - 2. Taking steps to attract foreign investment.
- G) Sustainable infrastructure development.
- H) Adequate increase of industrial plants in manufacturing sector
- 1) Taking steps to increase sustainability and quality of industrial establishments.
- J) Credit flow to Industrial Sector.
- K) Increasing involvement and accountability of lending institutions in ind. loans.
- L) Situation of state-owned enterprises in industrial sector.
- M) Evaluation of ongoing industrial sector of the Country.
- N) Problems and obstacles in industrial sector of the Country.
- O) Recommendations for expansion and development of industrial sector.







A) Sustainable Industrialization:

Sustainable Industrialization is the primary source of income generation, allows for rapid and sustained increases in living standards for all people, and provides the technological solutions to environmentally sound industrialization. Technological progress is the foundation of efforts to achieve environmental objectives, such as increased resource and energy-efficiency. Without technology and innovation, industrialization will not happen, and without industrialization, development will not happen. **(UNIDO)**

Three sectors (agriculture, industry and services) that are important for economic development of the country, industrial sector among them is the most important. This is because role of this sector is immense in generating foreign exchange as well as creating employment by meeting domestic demand and increasing exports by expanding industrial sector and increasing production in the country, which is essential for achieving economic prosperity of a country. In this age of globalization, there is no alternative of industrial development in the country to consolidate its existence in the international arena by harnessing excellence of technology to increase productivity in industrial sector and build a sustainable economy by increasing production of quality products at comparatively affordable prices. Needless to say, following this policy, most of the world's largest economies have reached the pinnacle of development by developing industry and technology in the country and leading the world economy.

Good news for Bangladesh that it has a unique opportunity to accelerate country's overall economy by making steady progress in these three sectors of agriculture, industry and services, which many countries do not have. There are necessary manpower, talent, geographical environment required for industrial development are available in the country, all that is needed is proper initiative and a conducive business and investment environment. In order to be ready to face the challenges of 2041, in context of Bangladesh, it is necessary to formulate and implement development plans through these three sectors of agriculture, industry and services with equal importance and proper coordination. Agro-based and domestically produced raw material consuming industries should be given priority in this regard.

It is to be noted that Bangladesh is still lagging far behind many countries in the world and even almost all countries in South Asia in creating a conducive business and investment environment, which is a major obstacle in development of industry and trade in the country. According to "Ease of doing business Index 2019" Bangladesh ranks 176th in the list of 190 countries. In this case, rank of other South Asian countries, such as Pakistan 136, Nepal 110, Bhutan 81, India 77, Indonesia 73, China 46, Japan 39, Malaysia 15 and South. Korea is in 5th position in that list. Surprisingly, countries like Myanmar and Afghanistan are also ahead of Bangladesh in this regard Figure-5.5 (1).

Figure-5.5 (1): Bangladesh's position in South Asia in terms of favorable business and investment environment as per 2019 ranking: -



Note: Higher Rank indicates lower position.

First Edition: August, 2022

Sustainable Industrialization :





Figure-5.5 (2): According to "Ease of doing business Index 2019" rank and scores of Bangladesh and some other South Asia countries: -

		RANK - 2019									
Country	Ease of doing biz	Starti ng biz	Dealing with Construction permits	Getting Electric ity Connect ion	Regist- ering property	Get ting Cre dit	Protecting Minority Investors	Paying Taxes			
S. Korea	5	11	10	2	40	60	23	24			
Malaysia	15	122	3	4	29	32	2	72			
Japan	39	93	44	22	48	85	64	97			
China	46	28	121	14	27	73	64	114			
Indonesia	73	134	112	33	100	44	51	112			
India	77	137	52	24	166	22	7	121			
Bhutan	81	91	88	73	54	85	125	15			
Nepal	110	107	148	137	88	99	72	158			
Pakistan	136	130	166	167	161	112	26	173			
Bangladesh	176	138	138	179	183	161	89	151			

Source: Ease of doing business Index 2019

B) Current situation of country's industrial sector:

1) Scope of Industrial Sector expanded in private sector:

In order to effectively expand industry and export sector, government has already formulated Industrial Policy 2016 and Export Policy 2018-21 and has made efforts to increase industrialization in the country by dividing industrial sector into five categories, such as-1) high priority industry 2) priority industry 3) service industry 4) protected industry; and 5) regulated industry. For rapid industrial development in the country, although 31 industries were mentioned as high priority and priority industries in the Industrial Policy 2016, approximately 17 industries, including garments, have expanded in the large and medium industries and small and cottage industries have developed as potential industries in the country in recent times.

In the industrial sector of Bangladesh, predominance of private sector is very strong. Private sector began expanding in the country after 1990, which is now established as one of the major driving forces of the country's economy. Following are the 17 industries that have flourished in private sector during this long period: -

Scope of Industrial Sector expanded in private sector:

SL	Category of Industry	SL	Category of Industry
1	Garments & Textile	10	Ceramic
2	Food Processing	11	Renewable Energy
3	Shrimps & Fish	12	Pharmaceuticals
4	Plastic	13	Medical Equipment
5	Tourism	14	ICT and Outsourcing
6	Light Engineering	15	Health Care
7	Telecommunication	16	Automotive / Truck / Bus Assembly
8	Leather and Leather Goods	17	Ship Building
9	Cement		

First Edition: August, 2022

Source : USAID Report



Number of

establishments and

employment in the

industrial sector:

Strategies for Economic Development of Bangladesh



2) Number of establishments and employment in the industrial sector:

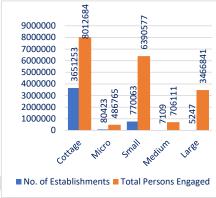
i) Number of Establishments:

According to the report of Economic Census 2013, number of all types of industrial establishments in the country were 45,14,091 and total number of jobs in industrial sector were 190,62,978. Number of industrial establishments by category and people working in this sector at that time are given below:

Category	No. of Establishments	Total Persons Engaged
Cottage	36,51,253	80,12,684
Micro	80,423	486,765
Small	770,063	63,90,577
Medium	7,109	706,111
Large	5,247	34,66,841
Total :	45,14,091	190,62,978

Source: Economic Census 2013

Figure-5.5(3.i): Scenario of number of industrial establishments and employment in the country by 2013:



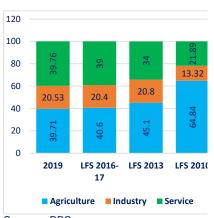
Source: BBS

ii) Employment in industrial sector:

Number of working people is increasing every year in line with growing population in the country. As per LFS: 2016-17, working population of the country were 63.50 million, which were 60.66 million during LFS 2013, 56.65 million during LFS 2010 and 49.46 million during LFS 2005-06. In other words, labor force of the country has increased by 14.04 million during these 12 years, on an average it has increased by 1.17 million every year.

As per government, an estimated 2.50 million unskilled labor force is being added to the country's labor market every year. The only solution for this evergrowing huge workforce is to create increased employment and expand industrial sector to meet the growing

Figure-5.5 (3.ii): Scenario of employment in the three main sectors of the country during the period from 2010-2019:-



Source: BBS

First Edition: August, 2022

domestic demand. During LFS-2010, employment rate in industrial sector of the country was 13.32% of the total employment, which has reached at 20.8% by 2013, and 20.4% by 2016. In other words, employment in industrial sector has increased by 7.21% in the last 7 years (2010-2016), which is 1.03% on an average. In the last 7 years, labor force has increased by 6.85 million in the country, of which 5.22 million have been employed in industrial sector and the remaining 1.63 million have been employed in other sectors **Figure-5.5** (4).

Employment in industrial sector:





Figure-5.5 (4): Scenario of employment in industrial sector during period from 2010-11 to 2016-17: -

LFS 2016-17		LFS 2013	LFS 2010	
Labour Force (Million) 63.50 Employed (Million) 60.83		60.66	56.65	
• Agriculture- 40.6%:		58.07 • Agriculture- 45.1%: 26.19 M	54.08 • Agriculture- 64.84 : 35.07 M	
• Industry - 20.4% :	12.42 M	• Industry - 20.8%: 12.07 M	• Industry - 13.32%: 7.20 M	
• Service - 39% :	23.72 M	• Service - 34.1% : 19.81 M	• Service - 21.89%: 11.81 M	
Total :	60.83 M	Total : 58.07 M	Total : 54.08 M	

Source: BBS

3) Contribution of industrial sector to GDP and growth in this sector:

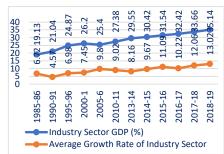
i) Contribution of industrial sector to GDP:

From the beginning of Bangladesh till 1980, scope and growth of industrial sector in the country was very limited, hence contribution of industrial sector to GDP was also limited at that time. Since 1980, industrial sector has been slowly expanding, as well as increasing participation of industrial sector to GDP. Analysis of contribution of industrial sector to GDP during period of 1985-2018 shows that although participation of industrial sector to GDP fluctuated between 19.13% to 27.38% during period from 1985-86 to 2010-11, but during period from F.Y 2010-11 to 2018-19, participation of industrial sector to GDP has increased steadily from 27.37% to 35.14%, which is a manifestation of future potential of industrial sector in this country.

ii) Growth of industrial sector:

Same pattern is observed in case of annual growth in industrial sector, for example, annual growth of industrial sector was limited between 4.47% - 9.67% during financial year 1985-86 to 2014-15 and during 2015-16 to 2018-19, annual growth of this sector has increased from 10.22% to 13.02% **Figure-5.5** (5). Growth rate in industrial sector in recent years has been substantial.

Figure-5.5 (5): Contribution of Industrial Sector to GDP and its Growth during 1985-2019: -



First Edition: August, 2022

Source: MOF

iii) Comparative position of South Asian countries in terms of contribution of industrial sector to GDP:

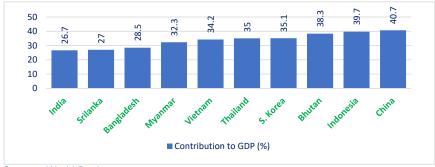
In terms of contribution of industrial sector to the country's GDP, Bangladesh is still lagging behind all other countries except one or two in South Asia. In 2018, contribution of industrial sector to GDP was 28.5% in Bangladesh, which was 26.7% in India, 27% in Sri Lanka, 32.3% in Myanmar, 34.2% in Vietnam, 35% in Thailand, 35.1% in South Korea, 38.3% in Bhutan, 39.7% in Indonesia and 40.7% in China **Figure-5.5(6)**.

Contribution of industrial sector to GDP and its growth:





Figure-5.5 (6): Scenario of contribution of industrial sector to GDP of Bangladesh and some other South Asian countries in 2018:-



Source: World Bank

C) Manufacturing sector:



well as expanding market for domestic demand, which without proper solution, it is impossible to accelerate overall economic progress of the country. One of the challenges of future economy of Bangladesh is to make the country's economy sustainable and dynamic through overcoming import dependence by expanding manufacturing sector and increasing employment and production in this sector for fulfilling domestic demand as well as increasing export earnings. Along with expansion of manufacturing sector, production of industrial raw materials will increase and various types of backward and forward linkage industries will be developed in the country as well as workflow in service sector will increase significantly, which will play a vital role in bringing dynamism to the country's overall economy. Due to this, manufacturing sector of industrialized countries has expanded a lot and contribution of manufacturing sector to GDP of those countries are relatively high.

Due to growing population in the country, labor force is constantly increasing as

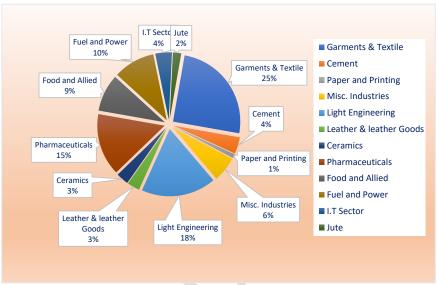
Manufacturing sector:

Due to various constraints, manufacturing sector of Bangladesh is still limited to a few industries, lion's share of industrial products are suitable for sale in the local market, with very little export. Although products produced in industrial sector meet a large portion of domestic demand, average annual import in the country during last five years is about US\$46 Billion.





Figure-5.5 (7): Estimated numbers (%) of various categories of industrial establishments in manufacturing sector in the country by 2017: -



Source: Journal of Chemical Engineering, IEB Vol. 30

1) Role of manufacturing sector in meeting domestic demand, export and employment:

For more than two decades, private sector has been playing a major role in the economy of Bangladesh in every aspect of industry and trade. For expansion and development of private sector, in addition to developing necessary infrastructure in the country, government has increased credit flows, tax exemptions and tax holiday, special incentives and other benefits, as a result, contribution of expanded manufacturing industries in private sector has continuously increased production to fulfill domestic demand, export and employment in recent years. Since 1990, expansion has occurred at least 16 other industries in the country in addition to garment industry, in F.Y 2017-18, combined market value of local sales and exports of which was approximately US\$ 51.12 Billion. Of these, domestic transactions amounted to US\$ 46.91 billion (91.76%) and exports amounted to US\$ 4.21 billion (8.24%), which is 89.19% of exports of goods produced in industrial sector in that financial year. By the F.Y 2017-18, employment in private sector industries was 6.47 million, which is little bid more than 52% of total employment in industrial sector in that year.

Fear is that, although GDP growth has averaged over 7 percent in recent years, employment growth rate in the country is only 0.9 percent, whereas, on an average about 2.0 million unskilled labor force are being added to the country's labor market every year. According to the report of "South Asian Network on Economic Modeling (SANEM)" 2018, employment in the manufacturing sector declined by about 700,000 during period of 2013-2017, an average of 1.6% per annum.

Automobile, tourism and healthcare are the most promising major industries in the private sector with an estimated internal market size of US\$ 13.89 billion, 5.32 billion and 5.92 billion respectively by 2017 and by 2023 market size of which are being estimated automobile US\$ 32 billion, tourism 7.5 billion and healthcare



Role of manufacturing sector in meeting domestic demand, export and employment:

Strategies for Economic Development of Bangladesh



11.71 billion. In recent times, significant progress has been made in the agro-based industry in private sector . By the FY 2017-18, market value of this sector has stood at US\$4.18 billion, of which US\$ 3.54 billion (84.7%) was domestic transactions and export value US\$ 635 Million (15.3%) and employment in this sector are 300,000. According to Bangladesh Agro-Processors' Association (BAPA), there are more than 400 agro-based industries have been set up in the country by 2018, but only a dozen of them have capacity to export. Due to cheap labor, adequate raw materials and favorable weather, there are ample opportunities to export more in large scale through massive expansion of agro-based industries in the country beside meeting local demand, which requires effective initiatives to make the country's economy more dynamic by utilizing this opportunities.

Among industries in the manufacturing sector that meet a large portion of domestic demand, leather and leather goods industries account for 60% of total demand, light engineering 30%, medical equipment 15%, ceramics 87% and pharmaceutical industry 99.5% capable of fulfilling local demand. Plastics, shipbuilding, shrimp and other fisheries and ICT & outsourcing industries are still getting very little export opportunities compared to global market size.

Figure-5.5 (8): Domestic market size of industrial products in private sector of the country by 2017-18 and estimated market size by 2023: -

SL	Tune of Industry	Mark	cet Size BY 2017	Employ	Projected	
5L	Type of Industry	Domestic Market Size	Export In USD	Total Market Size in 2017-18 (Billion USD)	ment (Million)	Market Size by 2023
1	Agri Industries	USD 3.54 B	635 M	4.18 B	0.3	USD 8.23 B
2	Automotive/Bus/Truc k Assembly	USD 13.89 B	1.5 M	13.89 B	0.05	USD 32.00 B
3	Ceramic	USD 0.67 B	52 M	.72 B	0.048	USD 1.56 B
4	Leather & Leather Goods	USD 1.9 B	1.0 B	2.90 B	0.6	USD 4.80 B
5	Light Engineering	USD 3.12 B	356 M	3.48 B	0.8	USD12.06 B
6	Medical Equipment	USD 0.35 B	.44 M	.35 B	0.01	USD 0.74 B
7	Pharmaceuticals	USD 2.44 B	103.46 M	2.54 B	0.172	USD 7.6 B
8	Plastic	USD 1.8 B	1.0 B	2.80 B	1.2	USD 7.2 B
9	Ship Building	USD 2.2 B	30.35 M	2.23 B	0.15	USD 6.0 B
10	Shrimps & Fish	USD 0.37 B	431 M	.80 B	0.85	USD 1.3 B
11	ICT & Outsourcing	USD 1.1 B	600 M	1.70 B	0.94	USD 12.00 B
12	Telecommunication	USD 3.8 B	-	3.80 B	.245	USD 5.08 B
13	Tourism	USD 5.3 B	-	5.30 B	0.85	USD 7.50 B
14	Health Care	USD 5.92 B	-	5.92 B	0.25	USD 11.71 B
15	Renewable Energy	USD 0.51 B	-	.51 B	.0001	USD 3.7 B
	Total;	USD 46.91 B	USD 4.21 B	USD 51.12 B	6.47 M	USD 121.48 B

Source: USAID Report

2) Size and expansion of manufacturing sector:

Present Government of Bangladesh has given importance to expansion of manufacturing sector, especially by identifying the SME sector as one of the means of increasing productivity and has continued its efforts to expand the sector through increased financing, refinancing and other facilities in this sector. But the thing to notice is that while number of small industries in manufacturing sector has increased somewhat over the past decade, number of large and medium scale industries have declined at an alarming rate, which is undoubtedly a negative sign





Size and expansion of manufacturing sector:

for the country's overall economy including declining industrial production and employment.

Analysis of the manufacturing sector shows that between 2012 and 2018 (seven years), number of small scale industries in manufacturing sector in the country increased by 7,891, which increased by an average of 1,127 or 7.20% per annum. During this period, number of micro industries in manufacturing sector decreased by 695, average annual decline was 99.29 or (0.57%), number of medium industries decreased by 3089, average annual decline was 441 or (7.23%) and number of large scale industries decreased by 608, which is an average decline of about 87 or (2.39%) annually.

Figure-5.5 (9): Scenario of size and expansion of manufacturing sector of the country during 2012-2018:-

	Industrial Survey 2019				Industrial Survey 2012			
Category	Establish- Enga ments	People Engaged	Net Fixed Asset (In Crore TK.)	Value of products (In Crore TK.)	No. of Establish- ments	People Engaged	Net Fixed Asset (In Crore TK.)	Value produc (In Cro TK.)
Micro	16,689	263,720	8,365.7	31,215.2	17,384	271,644	4,652.8	27,58
Small	23,557	11,27,841	65,123.2	195,448.7	15,666	738,801	28,333.6	120,32
Medium	3,014	461,142	28,963.4	33,007.2	6,103	10,41,220	28,690.1	140,83
Large	3,031	40,27,141	222,255.9	586,735.1	3,639	29,64,272	57,134.2	250,74
Total :	46,291	58,79,844	324,708.2	846,406.2	42,792	50,15,937	118,810.8	539,49

Source: BBS

3) Contribution of manufacturing sector to GDP:

More than two-thirds of industrial sector's contribution to GDP comes from manufacturing sector. GDP analysis of the last two decades shows that contribution of industrial sector to GDP during financial years 2000-1 to 2009-10 was between 25.3% - 26.2%, of which contribution of manufacturing sector was 15.59% 17.86%. Contribution of industrial sector to GDP has increased slightly since 2010. During financial year 2010-11 to 2018-19, contribution of industrial sector to GDP was 25.05% - 35.14%, average 30.05% per annum, out of which manufacturing sector contribution was averaged 20.50% Figure 5.5(10).

Figure-5.5 (10): Contribution of industrial sector to GDP and share of manufacturing sector in industrial sector (%):-



First Edition: August, 2022

Source: MOF

4) Growth of Manufacturing Sector:

Although there has been some momentum in the growth of country's manufacturing sector since 2000, growth of this sector was limited to 7.8% - 10.01% till 2010. After 2010, upward is observed slightly in the growth of this sector. During financial year 2010-11 to 2016-17, growth of manufacturing sector

Contribution of manufacturing sector to GDP:



Growth of

Sector:

Manufacturing

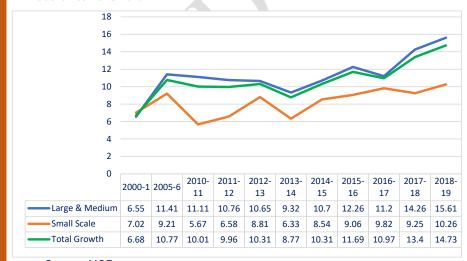
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fluctuated between 8.77% - 11.69% and average annual growth during this period was 10.29%. On the other hand, average annual growth during financial years 2017-18 and 2018-19 was 14.07% **Figure-5.5** (11).

- Growth of Large and Medium Industries: Growth of large and medium industries in manufacturing sector has fluctuated between 9.32% and 12.26% during financial years 2005-6 to 2016-17. During financial year 2010-11 to 2016-17, average annual growth of this sector was 10.86% and during financial years 2017-18 and 2018-19, average annual growth was 14.94%.
- **Growth of small scale industries:** Growth of small scale industries is much slower than that of large and medium scale industries in the manufacturing sector. Although growth of small scale industries was 9.21% during FY 2005-6, growth rate of this industry fluctuated between 5.67% -8.54% during FY 2010-11 to 2014-15 and average annual growth of this sector during this period was 7.19%. since the financial year 2015-16, growth of small scale industries has been slightly higher, so average annual growth of small scale industries during period from 2015-16 to 2018-19 was 9.60%.

Figure-5.5 (11): Scenario of growth trend in manufacturing sector during 2000-01 to 2018-19:-



Source: MOF

D) Domestic investment flow into the manufacturing sector:

Domestic investment

Strengthening the country's economy by expanding industrial sector and increasing production and employment to reach the list of middle-income countries by 2021 and high-income countries by 2041 is an inevitable challenge for Bangladesh, for which, it is necessary to make the industrial sector of the country sustainable by increasing adequate investment through creating a conducive investment environment in the country to ensure rapid expansion of this sector.



flow into the manufacturing sector

Strategies for Economic Development of Bangladesh



Analysis of investment in industrial sector over the past decade shows that although public sector investment to GDP ratio in this case has been below 5% till FY 2009-10, but in FY 2010-11 and 2011-12, it was 5.25% to 5.76%, during period from 2012-13 to 2015-16 it was 6.64% -6.66% and during 2016-17 to 2018-19 investment was limited to 7.41% -8.17%. In other investment in public sector has increased more or less every year, On the other hand, investment in private sector has been hovering between 22% and 23% of GDP for a long period of 10 years, which means that the country has not seen desired expansion in private sector industry during long ten-years period.

Figure-5.5 (12): Scenario of increase in investment in government and private sector in the country during period from 2009-10 to 2018-19:-



Source: MOF

E) What is needed to increase domestic investment in Ind. sector?



Expansion and development of industrial sector depends on increasing flow of public and private investment in this sector. Although public investment in industrial sector has increased slightly every year over the past decade, private sector investment has been limited to 22% -23% of GDP during this period, which means that the country has not seen desired expansion of industry in private sector during these long ten years. Adequate domestic and foreign investment in industrial sector is essential to accelerate expansion of industrial sector and build sustainable industrialization in the country.

Need to attract and increase private investment in industrial sector :-

1. **Favorable investment environment :** such as adequate infrastructure, political stability, adequate government facilities, bureaucratic complexity in official affairs, end of bribery, corruption and procrastination, security of invested money and ensuring profitable investment and rule of law at all levels of the country to be established.

First Edition: August, 2022

What is needed to increase domestic investment flows in Infustrial sector:





2. Provide adequate facilities for investment : - e.g.

- One-stop service for all government clearances including allotment of industrial plots.
- Ensure electricity, water and gas connections within short period.
- Tax waiver facility, easy term loan and working capital facility with low interest, not finding the source of newly invested money but increasing opportunity to emphasize more investment and adequate opportunities for reinvestment.
- To provide bond facility for all types of directly exported and covertly exported industrial establishments against import of raw materials.
- Adequate increase in CIP and other government status for high level investors.
- Provide opportunities to invest in productive sector without having to look for sources of money.
- Introduce international standard training system for industrialists in the country as well as making this training compulsory for all types of entrepreneurs in setting up industries.

F) Foreign investment in the industrial sector :

1) Foreign investment situation in the Industrial sector:

In order to meet challenges of 2041, Bangladesh has to receive a certain amount of foreign investment every year for fulfilling SDG target, Bangladesh is still lagging far behind in this regard. According to SDG targets, in both public and private sectors need to increase investment by 5% -6% (US\$ 12.5 billion) per annum on average, a large portion



of which will come from foreign investment. However, during fiscal year 2015-16 to 2018-19, foreign investment in the country averaged only US\$ 2.25 billion a year, which is not even close to SDG target.

Foreign investment situation in the industrial sector:

Analysis of foreign investment in industrial sector of the country during period from 2005-6 to 2018-19 shows that during financial year 2005-6 to 2012-13, average foreign investment in industrial sector in this 8 (eight) years was US\$1.03 billion annually and during 2013-14 to 2018-19, in these 6 (six) years average US\$ 2.51 billion annually. In other words, foreign investment in the country's industrial sector has almost doubled since 2013-14, although it is significantly less than the SDG target

Figure-5.5 (13): Scenario of domestic and foreign investment in industrial sector of the country during period from 2005-6 to 2018-19:-

Financial Local		Foreign	Investments	Total Investments
Year	Investment	Value	As % of GDP	(Local + Foreign)
2005 6	2.720	0.01	1.17	2.54
2005-6	2.730	0.81	1.17	3.54
2006-7	3.130	0.46	0.64	3.59





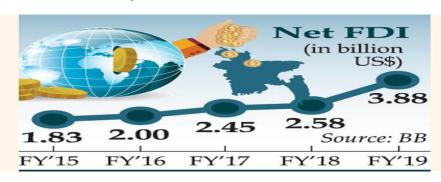
2007-8	1.294	0.65	0.82	1.94
2008-9	3.118	1.33	1.45	4.45
2009-10	2.588	0.91	0.88	3.49
2010-11	6.277	1.23	1.07	7.51
2011-12	7.137	1.26	0.98	8.40
2012-13	6.081	1.58	1.19	7.66
2013-14	5.446	2.60	1.74	8.05
2014-15	8.307	2.54	1.47	10.85
2015-16	11.561	2.83	1.45	14.39
2016-17	13.062	2.33	1.05	15.39
2017-18	16.663	1.81	0.73	18.47
2018-19	15.334	2.94	1.07	18.27

Source: World Bank and BIDA

2) Taking steps to attract foreign investment:

To attract domestic / foreign investment for development of industrial sector needsimproved infrastructure, favorable investment environment, adequate investment opportunities and guaranteed return on investment. In addition to ensuring all these opportunities to attract foreign investment, notable additional facilities that are required: -

- Attractive tourism, adequate hotels, motels and dishes with international facilities.
- In addition to improved health care in the country, separate medical treatment facilities for foreigners including introduce of international health insurance.
- Ensure international standard security measures for foreign investors, working foreign technicians, officers and employees.
- Provide easy visa arrangements for foreign investors as well as multiple entry and permanent residency opportunities.
- Extensive publicity in the international arena about the facilities provided for foreign investment in Bangladesh.
- Introduce provisions to protect strict confidentiality of all investment information of foreign investors.
- In addition to making Salary & allowances of foreign technicians working in the country completely tax-free and strict supervision in this regard.
- Strict implementation of official bureaucratic complexities, eradication of bribery, corruption and protracted embezzlement as well as ensuring creation of a harassment-free environment in every field, so as to brighten the image of the country.
- Introduce one stop service in all cases.



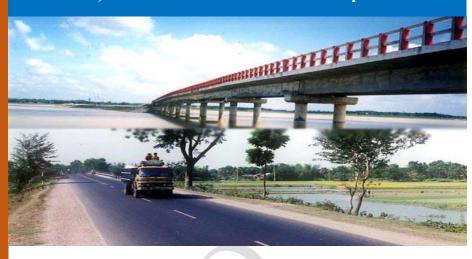
First Edition: August, 2022

Taking steps to attract foreign investment:





G) Sustainable infrastructure development:

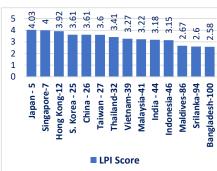


Sustainable infrastructure development:

Sustainable infrastructure is one of the prerequisites for rapid and sustainable industrialization, among them Road, railroad, airports, river and sea ports, electricity, water. Gas, telecommunications etc. Needless to say, Bangladesh still lags far behind in terms of infrastructure development, which is one of the biggest challenges for industrialization.

According to the World Bank Survey 2018, "Logistics Performance Index (LPI) on six dimensions of trade - including customs performance, infrastructure quality, and timeliness of shipment "Bangladesh rank is 100th among 160 countries. In that list, rank of Sri Lanka is 94th, Maldives 86, Indonesia 46, India 44, Malaysia 41, Vietnam 39, Thailand 32, Taiwan 27, China 26, S. Korea 25th, Hong Kong 12th, Singapore is 7th and Japan is 12th among other south Asian countries Figure-5.5 (14).

Figure-5.5 (14): Rank of Bangladesh and some other countries in South Asia according to LPI Rank 2018:-



Source: World Bank LPI Ranks 2018

First Edition: August, 2022

H) Adequate increase of industrial plants in manufacturing sector:

In the post-independence period, productivity in industrial sector did not increase in proportion to increase in domestic demand due to insufficient number of industrial plants grown in manufacturing sector in the country. As a result, a huge amount of foreign exchange is to spent every year to meet domestic demand through imports, because of which, pressure on the country's foreign exchange reserves as well as trade deficit is increasing, which is one of the biggest obstacles to the economic





Adequate increase of industrial plants in manufacturing sector:

progress of a developing country like Bangladesh. In the FY 2017-18, total exports in the country were US\$ 36,209 million against imports of US\$ 54,463 million and trade deficit in that FY was US\$18,258 million, which is 20.14% of total foreign trade performed in that fiscal year.

In order to meet domestic demand as well as to increase export earnings, rapid expansion and development of manufacturing sector is essential for expansion and diversification of the country's export sector. Although ongoing industrial policy 2016 mentions in detail expansion and development of industrial sector, but there is a lack of precise outlines and guidelines about how much industry will be set up in a sector at a given time to achieve industrial prosperity, sources and processes of financing in setting up industries, to continue production process of established industries and to protect the industry from getting sick.

So, in order to meet challenges of 2041, there is no alternative but to increase production and create more employment by adequately increasing all types of industries in manufacturing sector in proportion to growing domestic demand and increased labor force of the country. If it is possible to move forward with specific plan to build a certain number of all types of industries every year, a certain number of industrial plants will be built in the country after a certain period of time as well as large scale investment will be made in industrial sector, which is essential for industrial growth in the country. In order to increase number of industries in manufacturing sector, for example in next 10 years (2021-2030), following "Industrialization Module" can be followed for setting up a specific number of all types of industrial plants in the country.

Industrialization Module (Manufacturing) Effective for 10 years (2021-2030)

Type of Industry	No. of Units to be Installed in each Years (2)	Total no. of Units to be Installed in 10 Years 3 (2 X 10)	Average Project Cost per unit excluding Land & Building (4)	Total Project Cost (in Crore Taka) 5= (4 X 3)
A) Large Scale	100 Units	1,000 units	100.00	100,000/=
B) Medium Scale	500 Units	5,000 units	50.00	250,000//=
C) Small Industry	10,000 Units	100,000 units	2.00	200,000/=
D) Micro & Cottage	20,000 Units	200,000 units	0.05	10,000/=
Total Increase:	30,600 Units	306,000 Units	-	560,000/=

Note: Above schedule is excluded from Readymade garments sector.

I) Taking steps to increase sustainability and quality of industrial establishments:

To ensure rapid expansion and progress of industrial sector, it is necessary to facilitate the process of setting up industries for increasing number of industrial set up in the country, as well as increase use of modern technology in sustainability and quality improvement of this sector, reduction of production costs, produce





quality products, creating opportunities to sell manufactured products at competitive prices, to be able to continue production profitably in established industries and to have detailed and well-defined guidelines on very important issues, so that in any case, no industrial plant falls sick, which includes: -

- Increasing use of modern machinery and technology in production: Use of modern machinery and technology in production reduces cost of production as well as ensures production of quality products, which enables that industrial products to survive in the competitive markets at home and abroad. Therefore, in addition to imposing restrictions on production of quality products in industrial sector, it is necessary to impose restrictions on use of modern technology and quality machinery and equipment in this sector
- Creating opportunities to sell manufactured goods at competitive prices:
 Government needs a strong and active role in creating a platform for selling industrial products at competitive prices in the country and abroad, otherwise there is no doubt that industrial sector will lag behind. In addition to imposing restrictions on import of all products produced in industrial sector, to increase exports, create duty-free export opportunities on the basis of mutual understanding with different countries, efforts should be made to make the products of this country well-known in the world market by making full use of foreign missions to increase international trade by exhibiting Bangladeshi products in different countries, participating in trade fairs and branding Bangladesh in worldwide publicity and campaigns.
- Continuing profitable production in industrial establishments: It is more important to run established industry profitably than to set up a new industry, because if any industry fails to make it profitable, that industry is bound to get sick. Profitable management of industry depends entirely on efficient management and financial consistency. It is important to make sure that if proper solution to these two issues is ensured, misery of industrial sector will largely be wiped out. Therefore, it is important for entrepreneurs and individuals involved in management of every industrial enterprise to undertake high level management training as well as to take effective initiative to keep production operational by providing working capital on the basis of involvement, monitoring and accountability of financing banks.
- Protecting Industrial establishments from getting Sick: In case of long term investment in industrial sector, involvement, monitoring and accountability of the lender bank with activities of borrowing institution should be adequately monitored by the official of the bank through regular monitoring of the borrower's office and factory and report latest situation of the borrowing organization to higher authorities through monthly report, so that in case of any untoward situation in the borrowing institution, it is possible for the bank to take immediate action to control the situation, which will greatly reduce the risk of mass industrialization in the country.

First Edition: August, 2022

Taking steps to increase sustainability and quality of industrial plants:





J) Debt flow in industrial sector:

400			
		ndustri Figures in bi FY'18	
NPLs O	572.01	384.99	48.58%
Disbursement	3998.57	3463.97	15.43%
Recovery	3197.63	2731.73	17.05%
Outstanding	5273.34	4326.44	21.89%

Source: BB

In order to expand industrial sector and keep production going in ongoing industry, ensuring easy flow of credit to industrial sector is one of the major prerequisites for industrial development. As it is necessary to increase industrialization in the country by setting up new industries and increasing size of existing industries, similarly it is equally necessary to increase the flow of long-term industrial credit and increase supply of working capital to keep production going in running industrial establishments. Otherwise, it is not possible to increase industrialization in a country with limited income and insufficient capital like Bangladesh. However, in case of long-term lending in industrial sector, lending system needs to be made more dynamic and efficient by increasing involvement and accountability of the lender bank under strict supervision of the borrower institution without imposing full responsibility on the industrial owners, otherwise, in addition to suffering in recovery of loan, possibility of borrower institution falling sick will remain as usual.

Debt flow in the industrial sector:

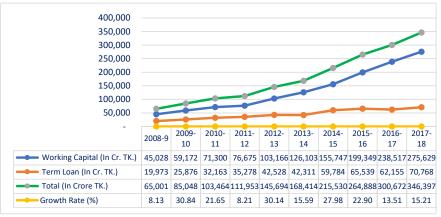
Analysis of credit flows in industrial sector during FY 2008-9 to 2017-18 shows that loans to industrial sector are on average 70% -80% against working capital and only 20% -30% are given as long-term or term loans, which is not sufficient at all to expand industrial sector in the country. For example, term loan was 30.72% in FY 2008-9, 30.43% in FY 2009-10, 31.09% in FY 2010-11, 31.51% in FY 2011-12, 29.19% in FY 2012-13, 25.12% in FY 2013-14, 27.74% in FY 2014-15, 24.72% in FY 2015-16, 20.67% in FY 2016-17 and 20.43% in FY 2017-18.

During this period, except F.Y 2009-10 and 2012-13, in other fiscal years, credit growth in industrial sector has fluctuated between 8.13% and a maximum of 26.98%. During financial years 2009-10 and 2012-13, credit growth in industrial sector was 30.84% and 30.14% respectively.





Figure-5.5 (15): Scenario of credit flow in industrial sector during financial year 2008-9 to 2017-18:-



Source: MOF

K) Increasing involvement and accountability of lending institutions in industrial loans:

While providing long term loans in industrial sector, adequately increase involvement and liability of the lender bank with activities of the borrower organization, discipline needs to be restored by ensuring close monitoring and accountability about use of loans in appropriate purpose and timely repayment of loan installments, so that borrower institutions do not get opportunity of any financial irregularities and under no circumstances does the industry get sick. In this case, ideas are given about additional responsibilities and duties of the lender bank:

1) Supervise day to day activities of the borrower organization under responsibility of a designated bank officer:

For each borrower institution, there will be a designated officer of the bank who will monitor the office and factory of the borrower institution at least once a week and immediately report to the bank about any irregularities in case of management of borrower institution and update overall status of that institution through monthly report to higher authority, so that in case of any untoward situation in the borrower's institution, it will be possible for the bank to take immediate action to control the situation.

2) Presentation of monthly production, marketing and other financial transactions of the borrower institution to the bank officer in prescribed format at the end of each month:

Each borrower will regularly submit current month's transactions of income and expenditure, import and export, work-in progress, availability of raw materials and manufactured goods etc. to the bank official within first week of next month, So that functions and financial transactions of the borrower organization are properly and strictly monitored and is possible to ensure

First Edition: August, 2022

Increasing involvement and accountability of



lending institutions in industrial loan

Strategies for Economic Development of Bangladesh



partnership and accountability of the bank in the organization as well as profitable management of the financed organization.

3) Mandatory deduction of a certain portion against each sale / export price which to keep lean to the bank in the form of FDR:

Bank shall compulsorily deduct at least 2% from each of the borrower organization (on export value in case of export oriented industry and on sales value in case of local industry) and there should be a provision to make FDR with that deducted amount in the name of borrower institution from time to time which to keep lean with the financing bank. Short term loan can be taken against that FDR with joint consent of the bank and entrepreneur to deal with any urgent financial crisis of the organization, otherwise, those FDR cannot be redeemed until the loan is repaid fully. Due to impose of this rule, a large amount of savings will gradually be accumulated in each organization, which will ensure financial stability of the organization as well as protect the organization from getting sick.

4) In case of irregularities in transactions or internal strife of Entrepreneurs, administration of the borrower institution should be taken under control of the bank:

Misappropriation of funds in the borrower organization, taking unauthorized and nameless loan, import of used and old machinery, import of substandard raw materials and production of low quality products, internal strife of Entrepreneurs, or any other reason, if the organization is threatened with loss or continued loss for long period, In that case, subject to permission of Bangladesh Bank, financing bank can take over administration of that institution and operate it under supervision of the bank. In case of failure in such situation to take appropriate action by the financing bank before the borrower organization becomes sick, then part of loss in proportion to the borrower institution will be borne by the financing bank, to effect that policy should be formulated

5) Obligation to audit financial statements of each industrial organization at the end of the year:

There should be a provision that annual financial statements of every industrial organization in the country are required to be audited by any chartered accountant firm, which will be equally acceptable to banks and other investors as a reliable financial report of that organization. Note that if any bank or investor suffers loss due to misrepresentation of wrong or false information about organization in the audit report, there should be a provision to file a compensation case against the reporting firm and seek fair compensation.

6) While providing working capital by banks in the running industrial enterprises, giving priority to audit report instead of collateral:

In order to provide working capital to existing industry, it is necessary to introduce working capital supply system in industrial enterprises giving priority to audit report instead of collateral based on the existing rules and regulations applicable to long term loans. So that no organization is hampered





in production due to financial crises, which will undoubtedly cause a major progress in the production sector of the country.

7) Policy Reform to avoid fraud while issuing industrial loans by banks:

There should be such a provision that entrepreneurs of private banks can't take large anonymous loans from their own banks and in case of industrial lending, loan seeker is compelled to disburse loan on the basis of equal treatment to all institutions and not just to disburse loan to their own or well-known entrepreneurs.

8) In case of new loan / refinance / rescheduling:

In case of issuing new loan or refinancing or rescheduling of previous loan to an organization, amount of loan and other facilities will be determined based on the need and performance of the organization.

L) Situation of state-owned enterprises in industrial sector :

5 (five) state-owned enterprises (BCIC, BJMC, BSFIC, BTMC and BSEC) engaged in manufacturing sector, except BSEC other four companies among them have been incurring losses in such a rate year after year, is really alarming. BTMC is in most delicate situation among these four organizations and then in next positions are BSFIC, BJMC and BCIC respectively. It is noteworthy that as time goes on, combined production and sales of these 5 (five) companies are continuously decreasing, resulting of which amount of combined losses of these companies is continuously increasing. In 2012-13 financial year, combined sales of these five companies was TK. 5,869 crore, after Gradually decreased it has come down to TK. 4,465 crore in 2018-19 financial year. On the other hand, combined losses of these five companies in 2012-13 financial year amounted to TK. 563 crore, which has been gradually increased to TK. 2,543 crore in 2018-19 financial year, during gap of 7 (seven) years, combined losses of these five companies increased by an average of 4.52 times or 22.18% annually Figure-5.5 (16). During financial year from 2014-15 to 2018-19, average financial situation of these five companies were as follows:

- **BTMC**: During these five years, average annual sales of this company was TK. 6.40 crore, average yearly amount of loss was 23 crore (which is 359.38% on the basis of average sales price) and total loss of this company in 2018-19 financial year was TK.25 crore.
- **BSFIC**: Average annual sales of this company was TK. 602 crore, average yearly amount of loss was TK.701 crore (which is 116.45% on the basis of average sales price) and total loss of this company in 2018-19 financial year was TK. 987 crore.
- **BJMC:** Average annual sales of this company was TK.1,147 crore, average yearly amount of loss was TK.611 crore (which is 53.27% on the basis of average sales price) and total loss of this company in 2018-19 financial year was TK. 695 crore.

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Overall situation of state-owned enterprises in industrial sector:







- BCIC: Average annual sales of this company was TK.2,143 crore, average yearly amount of loss was TK.384 crore (which is 17.92% on the basis of average sales price) and total loss of this company in 2018-19 financial year was TK. 911 crore.
- **BSEC:** Average annual sales of this company was TK.780 crore, average yearly amount of profit was TK.56 crore (which is 7.18% on the basis of average sales price) and total profit of this company in 2018-19 financial year was TK. 75 crore.

Figure-5.5 (16): Scenario of profit / loss of five state-owned enterprises at a glance from 2009-10 to 2018-19:-

Corporation 2009-10	1,437 1,802 (366) (435) -30.27 1,343 1317 16 15 1.12	2,312 2,312 2047 125 (63) -2.72 1,367 1407 (40) (66) -4.83	2012-13 2,501 2281 219 89 3.56 1,821 2156 (335) (385) -21.14	2013-14 BCIC 2,197 2239 (43) (94) -4.28 BJMC 1,092 1527 (435) (497) -45.51 BSEC 944 838	2,127 2014-15 2,127 2081 46 103 4.84 1,153 1807 (654) (726) -62.97	2,279 2398 (118) (74) -3.25 1,248 1829 (581) (656) -52.56	2,315 2,315 2574 (259) (485) -20.95 1,175 1579 (404) (481) -40.94	1,988 2342 (354) (555) -27.92 (In 1,175 1596 (421) (497) -42.30	2018-19 rore TK.) 2,008 2824 (817) (911) -45.3) Crore TK.) 984 1610 (626) (695) -70.63 Crore TK.)
Cost of Sales	1,802 (366) (435) -30.27 1,343 1317 16 15 1.12	2047 125 (63) -2.72 1,367 1407 (40) (66) -4.83	2281 219 89 3.56 1,821 2156 (335) (385) -21.14	2,197 2239 (43) (94) -4.28 BJMC 1,092 1527 (435) (497) -45.51 BSEC 944	2081 46 103 4.84 1,153 1807 (654) (726) -62.97	2398 (118) (74) -3.25 1,248 1829 (581) (656) -52.56	2574 (259) (485) -20.95 1,175 1579 (404) (481) -40.94	1,988 2342 (354) (555) -27.92 (In 1,175 1596 (421) (497) -42.30	2,008 2824 (817) (911) -45.3) Crore TK.) 984 1610 (626) (695) -70.63
Cost of Sales	1,802 (366) (435) -30.27 1,343 1317 16 15 1.12	2047 125 (63) -2.72 1,367 1407 (40) (66) -4.83	2281 219 89 3.56 1,821 2156 (335) (385) -21.14	2239 (43) (94) -4.28 BJMC 1,092 1527 (435) (497) -45.51 BSEC 944	2081 46 103 4.84 1,153 1807 (654) (726) -62.97	2398 (118) (74) -3.25 1,248 1829 (581) (656) -52.56	2574 (259) (485) -20.95 1,175 1579 (404) (481) -40.94	2342 (354) (555) -27.92 (In 1,175 1596 (421) (497) -42.30	2824 (817) (911) -45.3) Crore TK.) 984 1610 (626) (695) -70.63
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Net Profit/Loss (261) % of Profit / Loss based on Sales Sales Revenue 990 Cost of Sales (118) Operating Profit/Loss (220) % of Profit / Loss based on Sales Sales Revenue 964 Cost of Sales 877 Operating Profit/Loss 86 Net Profit/Loss 57 % of Profit / Loss 57 % of Profit / Loss 591 based on Sales Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (58) based on Sales (549) Net Profit/Loss (549) based on Sales	1,343 1317 16 15 1.12 1,118 1031	1,367 1407 (40) (66) -4.83 1,082 991 91	1,821 2156 (335) (385) -21.14	(94) -4.28 BJMC 1,092 1527 (435) (497) -45.51 BSEC	103 4.84 1,153 1807 (654) (726) -62.97	(74) - 3.25 1,248 1829 (581) (656) -52.56	(485) -20.95 1,175 1579 (404) (481) -40.94	(555) -27.92 (In 1,175 1596 (421) (497) -42.30	(911) -45.3) Crore TK.) 984 1610 (626) (695) -70.63
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Cost of Sales	1317 16 15 1.12 1,118 1031 87	1407 (40) (66) -4.83 1,082 991 91	2156 (335) (385) -21.14 1,129 1022	1,092 1527 (435) (497) -45.51 BSEC	1807 (654) (726) -62.97	1829 (581) (656) -52.56	1579 (404) (481) -40.94	1,175 1596 (421) (497) -42.30	984 1610 (626) (695) -70.63
Cost of Sales	1317 16 15 1.12 1,118 1031 87	1407 (40) (66) -4.83 1,082 991 91	2156 (335) (385) -21.14 1,129 1022	1527 (435) (497) -45.51 BSEC	1807 (654) (726) -62.97	1829 (581) (656) -52.56	1579 (404) (481) -40.94	1596 (421) (497) -42.30	1610 (626) (695) -70.63
Operating Profit/Loss (129)	16 15 1.12 1,118 1031 87	(40) (66) -4.83 1,082 991 91	(335) (385) -21.14 1,129 1022	(435) (497) -45.51 BSEC	(654) (726) -62.97	(581) (656) -52.56	(404) (481) -40.94	(421) (497) -42.30	(626) (695) -70.63
Net Profit/Loss (220)	15 1.12 1,118 1031 87	(66) -4.83 1,082 991 91	(385) -21.14 1,129 1022	(497) -45.51 BSEC 944	(726) -62.97	(656) -52.56	(481) -40.94	(497) -42.30	(695) -70.63
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Sales Revenue 964 Cost of Sales 877 Operating Profit/Loss 86 Net Profit/Loss 57 % of Profit / Loss 5.91 based on Sales 490 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (58) based on Sales Sales Revenue Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	1,118 1031 87	1,082 991 91	1,129 1022	BSEC 944				(In	
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Cost of Sales 877 Operating Profit/Loss 86 Net Profit/Loss 57 % of Profit / Loss 5.91 based on Sales Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (5.22) Net Profit/Loss (5.49) based on Sales	1031 87	991	1022	944	729	695	724		Crore TK.)
Cost of Sales 877 Operating Profit/Loss 86 Net Profit/Loss 57 % of Profit / Loss 5.91 based on Sales Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (5.22) Net Profit/Loss (5.49) based on Sales	1031 87	991	1022	4	729	695	724	252	
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% of Profit / Loss based on Sales Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit / Loss (5.22) Net Profit / Loss (549) based on Sales	58	E1		106	98	83	78	70	92
Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	4		66	69	57	60	46	43	75
Sales Revenue 218 Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	5.19	4.71	5.85	7.31	7.82	8.63	6.35	5.01	8.39
Cost of Sales 490 Operating Profit/Loss (272) Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales									
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Net Profit/Loss (126) % of Profit / Loss (58) based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	739	567	582	815	945	999	892	951	1112
% of Profit / Loss based on Sales Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit / Loss (549) based on Sales	(182)	(201)	(172)	(423)	(373)	(298)	(244)	(442)	(534)
Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss based on Sales	(171)	(290)	(311)	(565)	(540)	(517)	(630)	(833)	(987)
Sales Revenue 3.28 Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss based on Sales	(31)	(79)	(76)	(144)	(94)	(74)	(97)	(163)	(171)
Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss based on Sales		I		ВТМС				(In C	Crore TK.)
Cost of Sales 8.50 Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss based on Sales	8.56	3.24	6.97	8.49	8.85	9.64	9.57	3.11	0.80
Operating Profit/Loss (5.22) Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	14.07	9.89)	14.10	16.36	17.86	19.55	19.16	9.44	6.37
Net Profit/Loss (18) % of Profit / Loss (549) based on Sales	(5.22)	(6.63	(7.13)	(7.87)	(9.01)	(9.91)	(9.59)	(6.33)	(5.57)
% of Profit / Loss (549) based on Sales	(17)	(17)	(22)	(7.87)	(23)	(9.91) (24)	(9.59) (26)	(0.33) (15)	(25)
based on Sales	(199)	(525)	(316)	(271)	(260)	(249)	(272)	(482)	(3125)
	(133)	(323)	(310)	(2/1)	(200)	(243)	(2/2)	(402)	(3123)
	solidated	_							
Corporation 2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total sales Revenue 3,847	4,464	5,130	5,869	4,633	4,590	4,933	4,871	4,534	4,465
Growth of sales		.,	,	,	,	,	,-	,	,
Revenue (%)		14.92	14.41	(21.06)	(0.93)	7.47	(1.26)	(6.92)	(1.52)
Total Profit/Loss (568)	16.04	(385)	(563)	(1,110)	(1,129)	(1,211)	(1,576)	(1857)	(2543)
% of Profit / Loss	16.04 (550)	, , , , , , , , , , , , , , , , , , ,		,			. ,		
based on Sales -14.76			-9.59	-23.96	-24.60	-24.55	-32.36	-40.96	-56.96

Source : Bangladesh Economic Review 2019





Figure-5.5 (17): Graph of Consolidated Profit / Loss of State-owned Industrial Enterprises during period from 2009-10 to 2018-19: -



Figure-5.5 (18): Scenario of average annual sales and average profit /loss of state-owned enterprises during financial year 2014-15 to 2018-19:-

Corporation	Average Sales Revenue (Crore TK.)	Average Profit / Loss (Crore TK.)	Average Profit / Loss based on Sales Revenue	Profit / Loss in F.Y 2018-19 (Crore TK.)
BCIC	2,143	(384)	17.92 %	(911)
BJMC	1,147	(611)	53.27 %	(695)
BSFIC	602	(701)	116.45 %	(987)
BTMC	6.40	(23)	359.38 %	(25)
BSEC	780	56	7.18 %	75

Source: Bangladesh Economic Review 2019

M) Evaluation of ongoing industrial sector of the Country:

Although there are 31 industries mentioned in the Industrial Policy 2016 including high-priority and priority industries for rapid industrial development in the country, in fact, there are maximum17 industries have expanded in the large and medium industries including garments in private sector and in recent years, small and cottage industries have developed as potential industries in the country, these include - Garments & Textiles 25%, Light Engineering 18%, Pharmaceuticals 15%, Fuel 10%, Food & Food processing 9%, I.T 4%, Cement 4%, Leather & Leather Goods 3%, Ceramics 3% and jute and other 9%.

1. Contribution of industrial sector to GDP: Till now, contribution of industrial sector to GDP of the country is far less than that of most of the countries in South Asia. According to World Bank, in 2018, Bangladesh's share in GDP was 28.5%. In the same period, in other South Asian countries this rate was, in Myanmar 32.3%, in Vietnam 34.2%, in Thailand 35%, in South Korea 35.1%, in Bhutan 38.3%, in Indonesia 39.7% and China 40.7%.

Employment in industrial sector: After 2012, employment in industrial sector has declined rather than increased. According to LFS-2013, rate of

First Edition: August, 2022

Evaluation of ongoing industrial sector of the Country:







employment in industrial sector was 20.8% and during LFS: 2016-17, employment rate in industrial sector has come down to 20.4%. That means, employment in industrial sector has declined by 0.4% during this period.

A) Manufacturing sector:



Due to various constraints, manufacturing sector in Bangladesh is still limited to an estimated highest 17 industries, lion's share of which products is suitable for sale in the local market, quantity of export abroad is very small. Although products produced in industrial sector meet a large portion of the domestic demand, average annual import of the country in the last five years was about US\$46,000 million.

- 1. Number of industries: During period of 2012-17 (seven years), number of small scale industries in manufacturing sector has increased by 7,891 units, but during this seven years period, number of micro industries in manufacturing sector has decreased by 695 units, medium industries has decreased by 3089 units and large industries has decreased by 607 units Figure-5.5 (9).
- 2. **Growth of manufacturing sector:** Average growth of manufacturing sector in the country during 2010-2018 was 11.13%, among them, growth of large and medium industries was 11.76% and growth of small scale industries was 8.26%. In other words, growth of small scale industries in manufacturing sector is relatively low.
- 3. Public and private investment in manufacturing sector: Although public sector investment has increased slightly every year over the past decade, private sector investment has fluctuated between 22% and 23% of GDP, Which means that during this long ten years period, desired expansion in private sector industry didn't happen Figure-5.5(12).
- 4. Foreign investment in manufacturing sector: To meet challenges of 2041, Bangladesh needs to increase investment in both public and private sectors by an average of 5% -6% of GDP (US\$12.5 billion) per annum, a large portion of which will be coming from foreign investment. However, foreign investment during fiscal year 2015-16 to 2018-19 has come averaged 2.25 billion US dollars a year, which is far away to fulfill the SDG target 2030 Figure-5.5 (13)





- 5. Debt flow in industrial sector: In order to increase industrialization in the country by setting up sufficient new industries and increasing the size of existing industries, it is necessary to increase long-term industrial credit flow sufficiently, otherwise it is not possible to increase industrialization in a country like Bangladesh with limited income and insufficient capital. Moreover, only 20% -30% of the loans given to industrial sector are given as long term or term loans, 70% -80% are given against working capital, which is not enough to expand industrial sector of the country Figure-5.5 (15).
- 6. State-owned industries engaged in manufacturing sector: 5 (five) state-owned entities (BCIC, BJMC, BSFIC, BTMC and BSEC) engaged in manufacturing sector, among them except BSEC, it's really terrifying that how four other entities are incurring losses year after year. As time goes on, consolidated production and sales capacity of these companies are constantly declining, while consolidated losses are increasing. In 2012-13 financial year, combined sales of these five companies were TK. 5,869 crore, which has gradually decreased to TK. 4,465 crore in 2018-19 financial year. On the other hand, combined losses of these five companies in 2012-13 financial year amounted to Tk.563 crore, which has gradually increased to TK. 2,543 crore in 2018-19 financial year, during these seven years period, combined losses of these five companies have increased by an average of 4.52 times or 22.18% Figure-5.5 (16), 5.5 (17) and 5.5 (18).
- 7. Achieving SDG 2030 targets in industrial sector: To meet challenges of 2041, although Bangladesh has made progress in some areas in achieving SDG 9: Resilient Infrastructure, Sustainable Industrialization and Innovation, it is still lagging far behind in terms of sustainable industrialization and employment growth in industrial sector compared to growth of working force in the country.

B) Readymade garment sector:



1. Share of garment sector in exports: Share of garment sector in total exports of the country during period of 1991-2000 averaged 67.88%, during 2001-2010 an average of 76.17% and during 2011-2017 an average of 81.10%. In terms of single products in export sector, Bangladesh is in highest position among most promising countries in





Asia. In 2017-18 financial year, in terms of single product in exports was 83.49% in Bangladesh, 44.8% in Philippines, 38.1% in Vietnam, 21.8% in Indonesia, 18% in Pakistan, 17% in Thailand and 16.4% in India. It should be mentioned here that Excess of a single product in exports or a single product dependent export sector is always a serious risk for any country **Figure-5.5** (20).

- 2. Contribution of garment sector to GDP: Although share of garment sector in exports has been increased gradually during last couple of years, its share in the country's GDP has been declining since 2015, for example, contribution of garment sector to GDP during four years from 2010-2013 was 15.7% per annum on average which has declined to 14.57% in 2014-2015 and 12.49% in 2016-2017 financial year Figure-5.5 (20).
- 3. Employment in garment sector: There has been no increase in the number of establishments and employment in garment sector since 2012-13. Number of workers working in garment sector by the financial year 2018-19 is estimated at 36,11,082 (CPD Study, 2018), which is 5.93 percent of total labor force working in the country and 29.07 percent of labor force working in industrial sector at that time Figure-5.5 (21).

N) Problems and obstacles in industrial sector of the Country:

Bangladesh's industrial sector is plagued with various problems and obstacles, which is one of the reasons for backwardness of the country's industrial sector. Sustainable industrialization is essential to meet needs of the country's growing population as well as build a sustainable economy by increasing export earnings and employment. Moreover, sustainable industrialization is an inevitable agenda for Bangladesh to meet challenges of 2041 by achieving SDG 2030 target. In order to ensure desired development of industrial sector, it is very important to take drastic steps to remove existing problems and obstacles in this sector, because due to all these problems and obstacles, industrial sector of Bangladesh has been dilapidated for ages. Following is a summary of notable problems and obstacles in industrial sector of the country:

- 1. Inadequate infrastructure: Sustainable infrastructure is one of the prerequisites for rapid and sustainable industrialization, which includes Roads, railways, airports, rivers and seaports, electricity, water, Gas and telecommunications etc. Although current demand for electricity and gas in industrial sector can be met to a large extent, this demand will increase manifold if industrial sector of the country expands in future, which is impossible to meet without expansion of fuel sector. Therefore, in order to achieve desired expansion of industrial sector in the country, it is necessary to take steps now to develop sustainable infrastructure by attracting sufficient domestic and foreign investment in power, energy and other infrastructure keeping in view the future demand.
- **2. Import dependent raw material :** With exception of agro-based industries, all other industries in the country are dependent on imported raw materials. As a result, a large amount of foreign currency goes out of the country on





the one hand, every year due to import of raw materials for industry, on the other hand, production cost by imported raw materials increases exponentially, which puts the industry facing unequal competition and financial threat.

- **3.** Unskilled labor force: Skilled labor is the only option to bring dynamism in industrial production. Country still lacks adequate skilled manpower in industrial sector due to inadequacy of institutions at public and private levels to build a skilled workforce suitable for industrial sector, which is having a major negative impact on the growth of industrial production.
- **4. Production of low quality goods:** Due to less use of modern technology and equipment in production, increases cost of production on the one hand, on the other hand it becomes not possible to produce quality products, which puts the industry behind competition and makes future of the industry uncertain.
- **5. Liberal Import Policy:** As a result of continuation of liberal import policy, all products produced in the country are imported from different countries in different ways, beside this, many unscrupulous traders import goods by tax evasion through under invoicing. Quality of all those imported products is comparatively better than domestic products and prices are also lower, which is constantly threatening the domestic industry, which is one of the obstacles towards expansion of industrial sector in the country.
- **6. Bribery and corruption in every step:** Due to the country's traditional trend of bribery and corruption, every organization has to pay extra money to get various government clearances and complete formalities from importing raw materials to exporting manufactured goods, which greatly increases the cost of production beside making it difficult to survive.
- 7. Bureaucratic Complexity: Due to well-established bureaucratic complexities in the country, setting up of new industries and expansion of existing industries, long formulation in collection of various government clearances, import of raw materials, quality inspection of imported goods, radioactivity clearances including export of manufactured goods is a casual matter in this country, which is constantly pushing back the country's industrial sector
- **8. Reluctance in using domestic products:** People's interest in domestic products is low due to availability of adequate foreign products at relatively low prices in the domestic market, which is one of the biggest threats to survival of domestic industry.
- 9. Inadequate bank loans and high interest rates: Easy availability of low interest bank loans is one of the main conditions for setting up industries and continuing production in established industries. Bank loans are sufficiently inadequate in industrial sector of the country and 70-80 per cent of loans are given against working capital, long-term industrial loans at low interest are very inadequate. Due to lack of lobbying and collateral, most of industrial establishments fail to avail working capital also from banks, as a result, due to financial constraints, inability to pay salaries of workers and staffs on time in many industrial establishments, shutdowns and lay-offs are happening in industrial sector continuously, which is one of the biggest problems in expansion of industrial sector in the country.

First Edition: August, 2022

Problems and obstacles in industrial sector of the Country:





- 10. Lack of bank involvement in lending: In case of long term industrial loans, due to lack of involvement and accountability of the lending bank in supervision of the borrowing institution, borrowed money is not used properly in industrial production and in many cases embezzled.
- 11. Insufficiency of capital: Due to limited savings of people in this low-income country, it is difficult to take the risk of investing large amount of capital in business at individual level. As a result, lack of capital in both establishment of new industries and management of running industries is one of the major problems in industrial sector of this country, which has been working as one of the obstacles in development of industry in the country for ages.
- 12. Lack of business skills and mentality: Due to lack of vocational education system in the country, as it is failing to create business minded citizens in the conventional education system, lion's share of citizens run for jobs instead of business at the end of education life. A few of them who come forward to set up industry on their own initiative are either incompetent or lack a business mentality among them, resulting of which there are cases of illness and permanent closure of enterprises in industrial sector are happening all time.
- 13. Inadequacy of government incentives in dealing with risks: It is necessary to ensuring supply of quality products at competitive prices is essential for products produced in industrial sector to survive in local and international market, which is quite difficult in many cases for newly established industries in context of Bangladesh. There are currently cash incentives system in the country on export prices for some products, which is helping industry survive in the competition. Similarly, making production of quality products compulsory in every industry as well as introducing sufficient cash incentive on export value for all items will greatly reduce the risk of investment in the industry, which will tremendously increase the rate of setting up of new industries in the country beside a big rise in export sector soon.
- **14. Political Instability:** Another reasons behind not expanding country's industrial sector as expected is long-running political instability. As investment in industrial sector declines due to political instability in the country, similarly, volatile situation has a major negative impact on industrial production and marketing, which is one of the major obstacles to development of industrial sector.
- 15. Lack of specific targets for expansion of industrial sector: Rate of setting up of new industries in the country is comparatively much lower due to lack of specific targets of the government to develop a certain number of industries within stipulated time.
- 16. Lack of adequate research in technology development: Technology is the stairs to industrial development. Due to insufficient research in development of technology in the country, it is not being possible to increase use of technology in excellence of industrial sector, resulting of which, industrial sector of Bangladesh is still dependent on foreign technology, which is very expensive and is one of the obstacles in expansion and development of industrial sector in the country.





- 17. **Unfavorable business start-up environment:** In order to accelerate rapid expansion of industrial sector, it is important to ensure transparent and accountable one-stop service in various government clearances, decision making, allotment of industrial plots, water, electricity and gas connections, etc., currently which is completely absent due to bureaucratic complexity.
- 18. Absence of favorable investment Environment: Favorable investment environment is required to attract domestic and foreign investment in expansion of industrial sector, which guarantees investor a fair dividend on the money invested. Adequate investment facilities, financial incentives, tax exemptions and other necessary facilities for investment as well as adequate international standard hotels, motels, food menus, improved medical and entertainment facilities for foreigners, adequate security, etc. are included in favorable investment environment, which is still inadequate in Bangladesh. As a result, although investment needs to grow at an average annual GDP ratio of 5% -6% (US\$12.5 billion per year) to meet challenge of 2041, foreign investment in the country averaged US\$2.25 billion a year during fiscal year 2015-16 to 2018-19, which is very much insufficient than need Figure-5.5(12).
- 19. Workers' movement: Due to lack of full enforcement of labor laws in the country's industrial sector, workers' laid off any time, absence of rules and regulations in payment of wages, deterioration of employer-worker relations, unsafe factory environment and annoy workers by political influence etc. for multiple reasons, there is a constant workers' dissatisfaction and movement in industrial sector, which is one of the obstacles to expansion of industrial sector.
- 20. Lack of Establishment of Rule of Law at All Levels: Establishment of rule of law at all levels ensures law and order situation in the country as well as making investment environment safe and reliable, which is one of the major prerequisites for industrial expansion in the country. Bangladesh in this case is still lagging behind other countries of the world and even most South Asian countries. According to report of Washington-based organization WJP in 2016-17 financial year, in terms of rule of law, Bangladesh ranks 4th out of 7 countries in South Asia, 24th out of 30 lower middle countries and in the world 102 out of 113 countries.
- 21. Lack of up-to-date database of industrial sector: Updated database of industrial sector is very important for sustainable industrial development, which is still not properly preserved in Bangladesh. Development of database system in industrial sector is essential to accelerate industrial development.







O) Recommendations for development of industrial sector:



In order to meet challenges of 2041, adequate development and sustainable industrialization is essential to eradicate poverty by expanding export sector and increase export earnings, employment and per capita income in the country. To bring rapid expansion of industry and trade and timely revolution in overall production system in the country, first of all it is necessary bringing full dynamism in private sector by facilitating industrialization and trade in the country by increasing opportunities, facilities and incentives in private sector , so that path of industrial revolution will be paved in the country through participation of private sector in industry under leadership of the government.

In order to accelerate industrialization in the country, "National Industrial Policy-2016" has been formulated, where details government's goals, objectives and strategies for development of industrial sector, investment incentives, production growth and quality control of manufactured products and investment policies have been mentioned and National Council for Industrial Development (NCID) has been formed in implementation of this industrial policy. Moreover, "Industrial Development and Innovation Act - 2012" has been formulated for rapid expansion of industrial sector and 7th Five Year Plan has been taken up.

Main objectives of National Industrial Policy-2016 are: -

- Supportive and supervisory role of the government in creating a vibrant and dynamic private sector and increasing efficiency and productivity in achieving industrial growth.
- Entrepreneurship creation through protection, development and growth of interests of local industry.
- Creating a conducive environment to identify small, cottage and medium industries as the main driving force of industrialization.
- Establishment of export oriented industries and diversification.
- Provide encouragement and support to ensure sustainable eco-friendly industrial development.
- Development of specialized industries through optimal utilization of area based agricultural, forest, animal, natural, marine etc. resources.

First Edition: August, 2022

Recommendations for expansion and sustainable development of industrial sector





- Increase production of industrial products, quality development and increase marketing capacity.
- Enabling country's industry to participate in global competition by connecting with international and regional networks through spread of information technology.
- Creating opportunities for greater participation of women entrepreneurs in the industry.
- To provide necessary legal and infrastructural facilities to encourage and attract foreign investment as well as domestic investment.

Considering overall situation of the country, in the light of objectives of national industrial policy 2016, following recommendations are being presented for desired expansion of the country's industrial sector to address challenges ahead: -

- 1) Infrastructure development: Sustainable infrastructure development is one of the prerequisites for sustainable industrialization, which includes Road, Railways, Airports, River and Sea ports, Electricity, Water. Gas, Telecommunications etc. It is most important to increase adequate investment in overall infrastructure development to ensure desired expansion in industrial sector in future and to build sustainable industrialization in the country.
- 2) To create a conducive environment for increasing flow of investment in industrial sector: Expansion and development of Industrial sector depends on increase in the flow of public and private investment in this sector, which requires:
 - a) Favorable investment environment, such as adequate infrastructure, political stability, adequate government facilities, end of bureaucratic complexity in official affairs, bribery, corruption and procrastination, security of invested money and ensuring profitable investment and to establish rule of law at all levels of the country.
 - b) Provide adequate investment facilities, e.g.:-
 - One-stop service for all government clearances, including allotment of industrial plots, connection of electricity, water and gas within short period of time, tax exemption facility, issuing term loan and working capital with low interest and easy terms, in case of new investments, focus on more investment rather than finding source of money and ample opportunities for reinvestment.
 - To provide bond facility for all types of industrial establishments of directly exported and covertly exported against import of raw materials.
 - Adequate increase of CIP and other government status for high level investors.
 - To provide opportunities for investment in manufacturing sector without asking source of money.
 - Introduce international standard training system for industrialists in the country as well as make this training compulsory for all types of entrepreneurs in setting up industries.





- 3) Taking steps to attract foreign investment: In addition to developing adequate infrastructure and providing investment facilities to attract foreign investment, all other notable facilities that are needed in this case: -
 - Adequate tourism, adequate hotels, motels and dishes with international facilities.
 - In addition to improved health care system in the country, separate medical treatment for foreigners with international health insurance facilities.
 - Ensure international standard security measures for foreign investors, working foreign technicians, officers and employees.
 - Provide easy visa arrangements for foreign investors as well as multiple entry and permanent residency opportunities.
 - Extensive publicity in international arena for the facilities provided for foreign investment in Bangladesh.
 - Protect strict confidentiality of all investment information of foreign investors.
 - Salary & allowance of foreign technicians working in the country should be completely tax-free which must be under strict supervision in this regard.
 - In addition to eradicating official bureaucratic complexities, bribery, corruption and long formulation, strictly implement the assurance of creating a harassment-free environment in every stage, so that image of the country is brightened.
 - Introduce one stop service in all cases.
- 4) Increasing credit flow in industrial sector: It is important to increase credit flow for expansion and development of industrial sector by providing both working capital and long-term industrial credit, because it is really difficult to expect industrialization in this low-income country with 100% own finance. Analysis of characteristics of industrial credit in the country shows that only 20% -30% of loan given in industrial sector as long term or term loan, 70% 80% is given against working capital, which is not enough to expand industrial sector of the country.
- 5) Adequate increase in the number of factories in manufacturing sector: In order to meet domestic demand as well as increase export earnings, rapid expansion and development of manufacturing sector is very important for expansion and diversification of country's export sector. Although ongoing Industrial Policy 2016 mentions in detail about expansion and development of industrial sector, but there is a lack of precise outlines and guidelines to achieve industrial prosperity, how many industries will be set up in a sector at any targeted time, source and process of financing in case of setting up of industries, continuation of production process in ongoing industries and protection of industries from getting sick etc. So, in order to meet challenges of 2041, there is no alternative but to increase production and create additional employment by adequately increasing all types of industries in manufacturing sector in proportion to growing domestic demand and increased labor force of the country.





- 6) Taking steps for increasing sustainability and improve quality of industries: In addition to increasing number of industrial establishments in the country, increasing sustainability of established industries by ensuring profitable management of those establishments is another important part of sustainable industrialization, which requires increasing use of modern technology in industrial sector, reduce production costs, produce quality products, creating opportunities to sell manufactured goods at competitive prices and to keep continue profitable production in established industries and it is necessary to have detailed and well-defined guidelines on these very important issues, so that industrial establishment does not fall sick in no case.
- 7) Restructuring and development in the management of state-owned enterprises in manufacturing sector:

Either efforts should be made to make all state-controlled enterprises in manufacturing sector profitable through rapid restructuring or losses should be reduced by gradually releasing them in private sector. Rationality of keeping these institutions running with subsidies thousands of crores from people's tax money year after year is now in question.

- 8) Taking Initiative to produce raw materials of all kinds in the country: It is important to make industrial sector self-sufficient by taking initiative to produce raw materials of all kinds of industries beside agro-based industries in the country, this is because an industry that depends on imported raw materials is difficult to survive in competition due to high production costs on the one hand, and puts the industry at 100% risk due to dependence on other countries for raw materials on the other hand, which makes future of that industry always uncertain.
- 9) Reducing single product dependency through export diversification: Over the past two decades, 80 percent of the country's export trade has become dependent on the ready-made garment industry, which is a serious risk to the country's economy. Over the past decade (2009-2018), Readymade garments account for an average of 81% of the country's total annual export value, 14.5% industrial products and 4.5% agricultural products, in terms of single product dependence which is many times higher than other countries in Asia. In 2017-18 financial year, share of single product in total exports of the country was 16.4% in India, 17% in Thailand, 18.1% in Pakistan, 21.6% in Indonesia, 38.1% in Vietnam, 44.8% in the Philippines and 83.49% in Bangladesh.

In order to make export sector risk-free by reducing dependence on a single commodity in export, it has now become essential to take initiative to increase number of agro-based and other industries and increasing production and export of quality products in those industry beside ready-made garments. Because, if there is a sudden collapse in the garment industry for any reason, there will be a catastrophic collapse in the country's exports sector, which will be extremely dangerous for the country's economy.

10) Building skilled workforce suitable for industrial sector: It is impossible to run a industry efficiently and produce quality products without skilled workers and unpleasant truth is, industrial sector of this country has been suffering from malnutrition of skilled workers for ages. To address challenges





ahead, to build up a skilled workforce suitable for the country's industrial sector and overseas labor market, " Introduce free secondary education compulsory for all, as well as two-years free vocational education and English language training for those who are unable to pursue higher education". Needless to say, for proper implementation of this initiative, there is a need to set up sufficient number of standardized "Technical Education and Training Institutes" at government and private levels across the country.

- 11) Taking initiatives to develop technology and increase technological excellence in the country: In this age of digitalization, economic development and sectors related to economy, such as industrialization, infrastructure development, information technology development, communication system and in all other areas by ensuring quality development, there is no alternative but to bring revolution in the field of science and technology to strengthen the position of own country in the open competition. This requires creating sufficient number of highly skilled technical manpower in the country by increasing rate of enrollment in science and technology in higher education, who will take the helm in future. Achieving this goal requires adequate changes in those areas are:-
 - Ensuring priority of science and technology graduates in employment and business: imposing obligation of hiring local experts in domestic industries and at top level of all projects as well as increasing number of domestic experts in foreign funded projects and giving priority to bank loans and other government facilities in setting up any manufacturing industries by individuals completing technical education, to ensure easy employment of people educated in science and technology, which will play important role in increasing enrollment in science and technology.
 - To increase research activities in higher education institutions: In order to increase "research and innovation" activities in higher education institutions, increase government allocation this purpose, so that excellence in research and innovation in the country will increase rapidly.
 - Preservation of research results and quick commercialization: To
 establish separate government institutions at all divisional levels for
 proper preservation of all theories and formulas discovered in
 "Research and Innovation" and expeditious commercialization where
 necessary.
 - Conduct joint research and innovation activities: Conduct joint research and innovation activities on the basis of partnership with reputed foreign colleges and universities and work in joint ventures with private sector of the country to commercialize discovered formula.
 - Increasing "Technical Know How" exchange with industrialized countries.

First Edition: August, 2022

12) Development of updated data protection system of industrial sector: Development of updated data protection system of industrial sector is very important, because if there is an opportunity to know overall situation of every organization under industrial sector by the government, financing banks, investors and other concerned stakeholders instantly, If any organization is





about to fall sick due to loss or any other irregularities, will be easily noticed by everyone and it will be possible to protect that organization from getting sick with immediate action. Moreover, up-to-date information is essential in any development plan and in measuring size and expansion of the country's industrial sector.

13) Creating entrepreneurial group with business skills and mentality: Due to lack of career oriented education system in the country, it is failing to create business minded citizens in the conventional education system, resulting of which most of the citizen run after jobs instead of business at the end of their education life. Moreover, most of those who come forward to set up industries on their own initiative are either incompetent, or have a complete lack of business mentality, resulting, there are cases of companies falling sick and closing down permanently are happening in industrial sector all times.

In order to alleviate this dilemma in the industry and trade, it is necessary to introduce career oriented education system in the country as well as to strengthen quality entrepreneurial development activities and training many times and while granting clearance for setting up industry for new entrepreneurs and bank loans, entrepreneur development training certificate display can be made compulsory.

- 14) Increase government opportunities and cooperation in dealing with risks and uncertainties in industrial sector: Ensuring supply of quality products at competitive prices is essential for the products produced in industrial sector to survive in domestic and foreign markets, in the context of Bangladesh, which is quite difficult for newly established industry in many cases. Introducing mandatory to produce quality products in every export-oriented industry as well as sufficient cash incentives on the export value of all products and introducing a 10-year tax holiday in newly established industries will greatly reduce the risk of investment in industrial sector, which will tremendously increase setting up of export-oriented industries in the country certainly beside rapid expansion of export sector.
- 15) Mandating attainment of international certification for all export oriented industries: Making mandatory for all export oriented industries to obtain international certification to ensure production of international standard products in export oriented industries as well as taking necessary government initiatives to facilitate attainment of international certification.
- 16) Avoiding liberal import policy: In the interest of development of domestic industry, in addition to imposing restrictions on import of all such products that are produced and producible in the country, it is necessary to ensure adequate production in the agricultural and industrial sectors on the basis of domestic demand. To achieve this goal, Ministry of Agriculture and Ministry of Industries needs to set production targets based on internal demand for each financial year and ensure that production targets are achieved through their network at field level, so that there is no shortage of products in the domestic market.
- 17) Increasing people's interest in using domestic products: As a result of getting sufficient foreign products at relatively low prices in domestic market,





people's interest in domestic products is low enough, which is one of the biggest threats to survival of domestic industry. By this, not only the domestic industry lagging behind, but the government is also losing a lot of revenue as well as increasing negative impact on the overall economy including employment. In the interest of expansion and development of domestic industry, it is necessary to rapidly increase both domestic production and size of domestic market by increasing people's interest in domestic products, which requires: -

- Quick and effective steps of the government to set up sufficient number of factories for all types of domestic industries on the basis of domestic demand.
- To impose government obligation on production of adequate and quality products based on the demand in domestic industry.
- Immediate and necessary steps of the government to make readily available of raw materials used in the domestic industry and reduce production cost and eliminate problems in marketing.
- To run regular publicity and campaigns in the media on government initiatives to increase people's interest in domestic products.
- 18) Eliminate inadequacy of capital at individual level: Due to limited savings of people in this low-income country, it is difficult to take risk of large-scale capital investment in business at individual level at all times. As a result, lack of capital in both the establishment of new industries and management of running industries is one of the major problems in industrial sector of this country, which has been one of the major obstacles in development of industries in the country (especially in expansion of small and cottage industries). Following steps can be taken to eliminate capital inadequacy at individual level:
 - Development of small and cottage industries: In order to ensure economic stability among low-income population, launch of a government-sponsored Rural Savings Scheme Chapter: 3.8(C) under National Pension Scheme would have created a strong social safety net for low-income population and greatly increased investment at individual level, which can have a big impact on expansion of small and cottage industries in the country.
 - In Development of large and medium industries: Ensuring involvement, accountability and liability of the lending bank as well as facilitating bank loans as required in this sector.
 - To provide investment opportunities in manufacturing sector without asking source of money.

First Edition: August, 2022

19) Reducing long formulation in investment and business start-up: It is urgent to introduce transparent and accountable one-stop service in every field of investment and business start-up related to various government clearances, decision making, allotment of industrial plots, water, electricity and gas connections, etc. for rapid expansion of industrial sector in the country, which is currently missing in most cases of bureaucratic complications. In order to solve this problem, It can be said for sure that practical initiatives to solve this problems will remove many old problems in expansion of industry and trade in the country as well as sufficient dynamism will be ensured in this sector.





- 20) Adopt zero tolerance policy in case of Corruptions: Due to irresistible bribery and corruption at all levels, besides making country's industry and trade difficult to manage, government is losing revenues of thousands of crores of money from various sectors every year and due to this so-called bribery and corruption, development activities of the government in all sectors of the country are being seriously hampered. According to TIB report 2017, estimated amount of bribery and corruption in service sector of the country in that year was Tk 10,688.9 crore, of which highest amount of bribery and corruption was made in the land service sector, In this case, law enforcement agencies is in second and judicial services in third position with TK. 2,166.9 crore and 1,241.9 crore respectively. So, for rapid expansion and development of industry and trade in the country, in addition to taking effective initiatives to curb bribery, corruption and irregularities in public sector, it has become imperative to adopt zero tolerance policy in this regard.
- 21) Ensuring full implementation of labor laws: Due to lack of obligation to fully enforce labor laws in the country, extreme chaos is prevailing in industrial sector due to various reasons such as workers laid off anytime, absence of rules and regulations in payment of wages, deteriorating employer-worker relations, unsafe factory environment and politically motivated labor movement etc. which is one of the major obstacles to expansion of country's industrial sector. In the interest of rapid industrial development in the country, it is important to impose obligation to fully implement the labor law in industrial sector.
- 22) Establishment of rule of law and democracy at all levels: Establishment of rule of law at all levels ensures peace and order in the country as well as makes investment environment safe and reliable, which is one of the major prerequisites for industrial expansion in the country. Bangladesh still lags far behind other countries in the world and even in South Asia in this case. According to WJP report 2017-18, a Washington-based organization, Bangladesh ranks 4th out of 6 countries in South Asia in terms of rule of law, 24th out of 30 lower middle countries and 102nd out of 113 countries in the world. To ensure overall social and economic stability of the country, both desire and ability to consolidate democracy through establishment of rule of law at all levels depends on the ideology of the government.

First Edition: August, 2022





Chapter: 5.6

Modernization and Expansion of Garments Sector.







Modernization and Expansion of Garments Sector.

Topics Covered in the Chapter

- A) Evolution of Readymade garments sector in Bangladesh.
- B) Contribution of garments sector to Employment, Exports and GDP.
 - 1. Exports in garments sector and it's portion in total exports.
 - 2. Contribution of garments sector to GDP.
 - 3. Employment in Readymade garments sector.
- C) Bangladesh's position in the world in Apparel exports.
- D) Problems and Obstacles in Apparel Sector.
- E) Future prospects of Apparel Industry in Bangladesh.
- F) Recommendations for expansion of apparel sector.





Evolution of

Readymade

garments sector

in Bangladesh:

Strategies for Economic Development of Bangladesh



A) Evolution of Readymade garments sector in Bangladesh:

Journey of ready-made garment industry in Bangladesh started in the early 70's, although it was in a very limited extent. Basically, development of ready-made garment industry in the country started from mid-80s and full development of this sector took place till 2012. During this period, garment industry has established a strong position in the national economy by playing a major role in employment, foreign exchange earnings and poverty alleviation in the country and by 2020, this sector controls more than 80 percent of the country's total export trade.

Although garment industry started with 8-9 factories at the beginning, number of companies registered in this sector stood at about 6,821 by 2018, of which 3,856 factories were operational by 2018 and number of workers working in this sector is approximately 3.6 million (CPD Study Report 2018), which is 5.93 percent of total labor force working in the country and 29.07 percent of labor force working in

industrial sector at that time

Figure-5.6 (1): Number of factories gradually established in garment sector in Bangladesh by 2018:-



Source: BGMEA and Researchgate.net

B) Contribution of garments sector to Employment, Exports and GDP:

1) Exports in garments sector and it's portion in total exports:

Readymade garments sector has been playing a significant role in the country's exports since 1985, which has taken the leading in export sector since early 1990s and portion of garment sector in total exports stood at 84.21% by the financial year 2018-19. During this long journey, share of readymade garments in the country's exports has been gradually increased. For example, till 1984 share of readymade garments in the country's total exports was 8.17% per annum in average, during 1985-1990 it was 33.07% per annum, during 1991-2000 it was 67.88% per annum, during 2001-2010 it was 76.17% per annum and during 2011-2017 it stood at 81.49% per annum in average.





Contribution of garments sector to exports and GDP:

Figure-5.6 (2): Exports of readymade garments during 1983 to 2019 and portion of garment sector in total exports:-

Financial Year	Export in RMG Sector (USD Million)	Total Export of Bangladesh (USD Million)	% of RMG to Total Export
1983-84	31.57	811.00	3.89
1985-86	131.48	819.21	16.05
1990-91	866.82	1,717.55	50.47
1995-96	2,547.13	3,882.42	65.61
2000-01	4,859.83	6,467.30	75.14
2005-06	7,900.80	10,526.16	75.06
2010-11	17,914.46	22,924.38	78.15
2015-16	28,094.16	34,257.18	82.01
2016-17	28,149	34,655.90	81.23
2017-18	30,614.76	36,668.17	83.49
2018-19	34,133.27	40,535.04	84.21

Source: BGMEA

2) Contribution of garments sector to GDP:

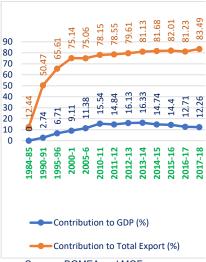
Along with expansion of readymade garments sector, its share in the country's GDP has been steadily increasing, for example, during 1990-91, share of garment sector in GDP was only 2.64%, during 1992-2000 average 6.63% per annum, during 2001-2010 average 11.56% per annum and during 2011-2017 average 14.49% per annum.

It is worth mentioning that although share of garment sector in exports has been gradually increasing, its share in the GDP has been declining since 2015, for example, contribution of garment sector to GDP during 2010-2013 was average 15.7% per annum, 14.57% during 2014-2015 and 12.49% during 2016-2017. That means, during the period from 2014-15 to 2016-17 financial year, contribution of garment sector to GDP has gradually decreased **Figure-5.6** (3).





Figure-5.6 (3): Contribution of garment sector in the country's total exports and GDP:-



Source : BGMEA and MOF





3) Employment in Readymade garments sector:

Along with expansion of garment industry in the country, employment has increased in this sector. Till financial year 1990-91, number of factories in garment sector was only 834 and employed in this sector were about 4.00 lakh workers at that time. Since 1990, number of factories in this sector has been increasing rapidly, as well as increasing employment in this sector. By the financial year 1995-96, employment in this sector stood at 12.90 lakhs. 18.00 lacs by 2000-01, 22.00 lacs by 2005-06, 36.00 lacs by 2010-11 and 40.00 lacs by 2011-12. Factories and employment in garment sector have not increased since financial year 2012-13. By the fiscal year 2018-19, number of workers working in readymade garment sector estimated to be 36,11,082 (CPD Study, 2018), which is 5.93 percent of the total labor force working in the country and 29.07 percent of labor force working in industrial sector at that time Figure-5.5 (21).

Figure-5.6 (4): Scenario of employment in the Readymade Garments Sector from 1984 to 2017:

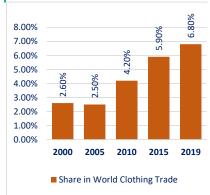


Source: BGMEA

C) Bangladesh's position in the world in Apparel exports:

Although journey of readymade garment sector in Bangladesh started in the early 1970s, exports in this sector started to increase gradually from mid-1980s onwards. Until 2000, existence of Bangladesh in global garment exports was very small, which has been steadily increasing since 2000 and during 2010-2019, Bangladesh has been able to establish a strong position in global garment exports. In 2000, Bangladesh's participation in global garment exports was only 2.60%, by 2019 it has reached at 6.80% [Figure-5.6 (5)]. According to World Trade Organization report 2020, among top 10 major garment exporting countries by 2019 China is ranked first, Bangladesh-second, Vietnam-third, Indiafourth, Turkey-fifth, Hong Kong-sixth, UK-seventh, Indonesia-eight Cambodia in ninth position.

Figure-5.6 (5): Scenario of growth of Bangladesh's participation in global garment exports over the past two decades: -



Source: WTO Report 2020

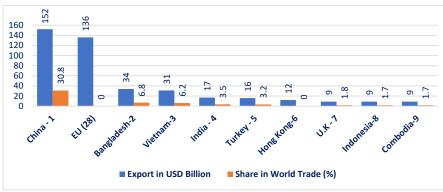
First Edition: August, 2022

Bangladesh's position in the world in garment exports:





Figure-5.6 (6): Position of top ten garment exporting countries in 2019 and share of all those countries in world garment export: -



Source: WTO Report 2020

D) Problems and Obstacles in Apparel Sector:



Problems and Obstacles in Apparel Sector :

For about past three decades, Readymade garment sector has occupied most important position in the economy of Bangladesh and has been making a significant contribution to the country's economy through export and employment growth and development of backward linkage industry. During fiscal year 1995-96, export volume in this sector was US\$2.55 billion, while in the fiscal year 2018-19 it stood at US\$34.13 billion. By the fiscal year 2018-19, garment sector accounted for about 84.21% of the country's total exports and number of workers employed in this sector at that time was estimated at 4.00 million, of which about 85% are women. Over the past decade, contribution of garment sector to GDP has averaged over 12 percent. In a word, unprecedented progress has been made in the country's garment sector in the last three decades and now as a well-established sector is being able to pull the strings of the country's economy. Among factors behind unprecedented growth of this sector are cheap labor, quota facilities, reduction of taxes and VAT and cash incentives against exports, emergence of private sector in the country, efficiency of business community and willingness and initiatives of past and present government.





However, it is also true that the path of rise and progress of garment sector in the country was not so smooth, the sector has been able to reach today's position by overcoming hundreds of problems and limitations. While some of those problems have been solved, most of them still remain unresolved, which is one of the major obstacles to expansion and development of this sector. Needless to say, if proper steps are not taken now to overcome all those problems and limitations that exist in garment sector, it will be difficult for the sector to move forward in future, as well as possibility of falling behind competition. Because, context of past and future are completely different. Although it was possible to survive the sector with many limitations in the past, such as traditional production systems instead of using modern technology and advanced machinery in production, underdeveloped factory environments and non-compliance factories, are no longer possible in future. This is because many more countries are now competing with Bangladesh in the garment sector, among them Vietnam, India, Indonesia, Hong Kong and Cambodia are close competitors. Therefore, in order to make the path of garment sector easier and smoother in future and to increase Bangladesh's participation in global garment exports, it is necessary to be ready to do everything necessary to make this sector up-to-date by properly resolving all existing problems and obstacles in this sector.

Following is a summary of significant problems and obstacles that exist in the country's garment sector in the context of 2020 :-

1. Uneducated and unskilled workers:

According to various surveys, number of workers in the country's garment industry by 2018 is more than 4.00 million, of which about 85 percent are uneducated and unskilled women workers from rural and remote areas. Productivity in garment industry is not growing at desired level due to inefficiency of workers, which has put the business at risk by increasing production costs and delaying shipments. It goes without saying that there is no training system at factory level in Bangladesh to increase skills of workers. Therefore, in order to make the path of this industry smooth in future, it is very important to introduce training system at factory level to improve skills of workers engaged in production.

2. Management level inefficiency:

Efficient management is the key to increasing production and profitable business, absence of which is visible in the country's garment sector. Bangladesh's garment industry is still lagging behind in terms of improved management due to lack of quality training system for officers engaged in production, marketing and administration. It is essential to introduce quality and up-to-date management training system in the country for all sectors to increase productivity and ensure profitable management by bringing dynamism in all stages of management.

3. Underdeveloped factory standards and environment:

Most of the country's garment factories are located in unhealthy environments and dilapidated buildings, where communication, firefighting and other facilities are largely lacking. Environment inside the factory and place of workers eating and rest is underdeveloped and unhealthy. As a result, a large number of buyers from the EU and USA have raised strong objections to these issues and have set time limit for a solution. Although most of the factories have already been able to take effective steps to address these issues, many are still in their infancy. In order to

First Edition: August, 2022

Problems and Obstacles in Apparel Sector:





attract buyers on par with rival countries in future, all these problems and limitations should be addressed on an urgent basis.

4. Non-compliance factory:

Structure, location, firefighting system and safe working environment of the factory, maintaining international standards at production and management level and ensuring facilities and welfare of workers under international labor law are the features of compliance factory, which is very expensive. Most of garment factories in Bangladesh are not compliant. Most buyers now feel comfortable placing orders in a compliant factory, which in future may be the sole demand of buyers at all levels. Without financial support of government, it would be impossible for many entrepreneurs to bring non-compliant factories under rapid compliance at their own finance.

5. Inadequate infrastructure:

Development of overall infrastructure is one of the prerequisites for development of Industry and commerce in the country, among them road, sea and rail communication systems, telecommunications, airports and seaports and electricity, water and gas etc. Needless to say, Bangladesh still lags far behind in the world and even most countries in South Asia in terms of overall infrastructure development. According to "Global Competitiveness Index 2019" Bangladesh ranks 105th out of 141 countries in terms of overall infrastructure. In this list, Singapore ranks 1st among other countries in South Asia, Japan 6th, S. Korea 13th, Malaysia 27th, China 28th, Thailand 40th, Indonesia 50th, Philippines 64th, Vietnam 67th, India 68th, Sri Lanka 84th and Pakistan 110th. Therefore, in order to meet challenges ahead, it is very important to increase investment in overall infrastructure development for rapid expansion of Industry and commerce in the country.

6. Limited export market:

For more than three decades, about 80 percent of Bangladesh's garment exports have been limited to USA and a few EU countries, such as Germany, Italy, France and the UK, where garments from other rival countries are also being exported in parallel. However, demand for readymade garments in South Asia, Middle East, other countries in Europe and America is constantly increasing, which could be identified as a new export destination for Bangladesh. In order to increase exports in this sector in future, it is essential for Bangladesh to be more enterprising in order to capture markets of those countries.

7. Non diversification of products:

About 70% of garment industries in Bangladesh is limited to a few items of low price (T-shirts, sweaters, jeans and a couple of other items). To date, Bangladesh has lagged far behind in exporting high value garments and diversifying its products. Due to low cost items, profit margins on these products are very limited and the country's garment sector is said to have survived in the midst of fierce competition. If one or two shipments are canceled for any reason, it becomes difficult for most entrepreneurs to overcome that stress. Therefore, it is important to keep in mind that it will be difficult to compete with other competing countries in future if we cannot increase export of high priced luxury items beside low cost traditional garments and diversify the products by increasing number of items, for which require:-





- To conduct adequate research activities in the country in fashion design and development.
- Establish required number of high level fashion development institutes in the country.
- Organizing regular internationally promoted fashion shows on the initiative of BGMEA.
- Regular participation of Bangladesh in international fashion shows; and
- Inclusion of "Fashion Design and Development" in academic curriculum.

8. Import dependent raw materials:

Bangladesh's garment industry still survives on import-dependent raw materials, which has put the industry at greater risk by increasing production costs as well as lead times. It is not possible for any industry to advance too far based on import-dependent raw materials. Due to increase in lead time, air shipments and in many cases cancellation of orders are also occurring always due to failure of shipment deadline, which puts entrepreneurs in the midst of massive financial losses, makes strength of organizations shaky and makes it difficult to survive. Therefore, in order to sustainably develop garment industry and make it self-reliant, rapid expansion of textile industry is essential for fully production of main raw material of this industry in the country, otherwise it will be difficult to survive in future, no doubt.

9. Capital deficiency among Entrepreneurs:

Due to being a low income country, capital deficit at individual level is very common in Bangladesh. While bank financing is open to large factories, this facilities is very limited for small factories due to lack of collateral. As a result, small scale factories have to run on sub-contracts all year round for a small CM (Cutting, Sewing and making) charge, It is not possible for them to export directly, which is one of the major obstacles to expansion of garment sector in the country.

10. Investment stagnation:

Since 2012-13 financial year, new investment in the country's Apparel sector has come to a standstill. According to BGMEA, number of factories registered in this sector till 2018 is about 6,821, out of which 4,620 factories are in operation by 2018-19 financial year [Figure-5.6 (1)]. On the other hand, domestic investors have objections to foreign direct investment outside the EPZ in garment sector. Overall, investment in the country's garment sector has been stagnant since 2012, which is a negative sign in expansion of this sector. In order to accelerate rapid expansion and sustainable development of Apparel industry in the country, adequate domestic / foreign investment needs to be increased by announcing attractive investment incentives in both garments and textile sector.

11. Inadequate government incentives:

In order to enable an industry to compete internationally, there is a growing trend around the world to attract investors by making investment risk free in that industry by ensuring adequate government incentives. In case of Bangladesh's Apparel industry, besides tax and VAT benefits, cash incentive facilities are also running. By 2018-19 financial year, 4% cash incentives for non-traditional items exports and 1% for export to all destinations have been continued. Beside this, additional 1% cash incentive for all types of garment exports from FY 2019-20 has been declared. In order to increase competitiveness of garment sector in future, it is necessary to





increase cash incentives against exports as well as other incentives for industrial sector in the light of China and South Korea, so that path of this sector becomes smooth.

12. Workers' pay structure:

As apparel sector in Bangladesh has been limited to a handful of low cost items, profit margin is very limited. Therefore, it is not being possible to increase wages structure of workers working in this sector as per demand even after making hundreds of efforts. As a result, standard of living, food, health and entertainment of workers working in this sector is very low, which is adversely affecting their performance and severely affecting overall productivity in this sector.

13. Political instability:

Although political instability and violence in the country has decreased in recent years, political instability, strikes, blockades and violence in the country were casual till 2010, which severely hampered production, imports and exports in the country's industrial sector and made Bangladesh a politically unstable country in the international arena. Due to which foreign investment in the country decreased at that time and overall economy of the country came to a standstill at that time.

14) Inadequacy of using modern technology in production:

Use of modern technology in industrial sector increases productivity as well as production of quality products and makes the sector up-to-date, which is essential for expansion and excellence of industry in the country. With exception of a few companies in apparel sector in Bangladesh, use of modern equipment and technology has not yet spread in most of the factories, which is preferential in the list of favorites of the reputed buyers. There is no alternate, but to use modern technology and high-capacity machinery in production and quality control in apparel industry to make future smooth and competitive.

15) Labor movement:

Unwarranted labor movement, employer dissatisfaction, non-payment of salary allowance on time and often announcing lay-off for trivial reasons has become common matter in the country's industrial sector, which is treated as an abominated activities in the international arena. All these unpleasant incidents are spread in the medias all over the world, which tarnishes image of the country in the international arena as well as frightens and annoys the buyers, which in turn forces the buyers to turn away from this country and buy apparels from other countries. As apparel sector is a 100% export oriented industry, big interests of buyers from different countries being involved in this sector, it is undoubtedly a sensitive sector and it is natural that small incidents of any organization under this sector would spread all over the world in a moment. Therefore, concerned authorities should be fully aware of the fact that under no circumstances should workers be dissatisfied in this sector and employer-worker relationship is always maintained.

16) Inability to shipment in the lead time:

Buyers from different countries usually order weather-appropriate clothing in those countries to keep pace with changing seasons, which is essential to deliver on time. After season is over, those garments become worthless to the buyers. This is why it is so important making shipment within the lead time mentioned in Master L/C.





But due to various reasons, in some cases shipment in lead time in Bangladesh is very challenging, among them are :-

- Importing clothes from other countries.
- Delay in getting various government clearances due to bureaucratic complications.
- Disruption of production due to load shedding, labor movement and other reasons.
- Delay in getting accessories mediated by the Buying Houses.
- Delay in opening back-to-back due to non-cooperation of Bank and other reasons.

E) Future prospects of Apparel Industry in Bangladesh:

Country's Apparel sector, which has come a long way facing many adversities, is much more mature and promising now than ever before. Cheap labor, favorable natural environment, hard work and confidence of people of this country and recent changing international context have made the apparel sector more promising for Bangladesh. By the FY 2018-19, China accounts for 30.4% of global garment exports, followed by Bangladesh at 6.8%, Vietnam at 6.2% and remaining 56.6% is occupied by other Asian countries and the EU. In recent years, China's garment exports to USA and European markets have been declining at a significant rate due to inter-conflict between China and USA. Moreover, due to technological advancement and rising domestic wages, China has been gradually diverting from garment industry to high-tech industry. On the other hand, due to internal strife in Myanmar, foreign buyers are looking for new destination. In such a changed situation, it is natural that the world market for garments occupied by China and Myanmar will gradually come under control of other countries. If Bangladesh could make proper use of this opportunity in fulfilling this huge gap in garment exports in the world market and if country's apparel industry can be properly represented in international arena by making this sector modern and up-to-date, It is not impossible that by 2030, country's garment exports will exceed US\$ 75-80 billion (15% -16% of global demand), all that is needed is only realistic steps and cooperation of the government for expansion and development of this sector. Among notable reasons that the garment sector of Bangladesh is very promising are: -

Future prospects of Apparel Industry in Bangladesh:

- 1. After experience of long journey, garment industry in Bangladesh is now skilled and experienced to international standards, which will act as one of the main tools to take this sector forward in future.
- 2. Bangladesh has already established a strong position in the global garment export market, which will mature and expand in future.
- 3. Due to cheap labor and favorable natural environment, it will be relatively easy to survive in international competition with other exporting countries.
- 4. By modernizing and up-to-date this sector, Bangladesh has a unique opportunity to capture a huge share of global garment market occupied by China
- 5. As Bangladesh is going to enter into a middle-income country soon, domestic / foreign investment in apparel sector will increase at a significant rate in future, which is essential for rapid expansion and development of this sector.





- 6. A lot of investment is being made in development of the country's overall infrastructure, such as road and rail communication, port infrastructure and capacity, telecommunications, electricity, water and gas, etc., which will play important role in expansion of Industry and trade in the country in future.
- 7. China has already ensured duty-free access to about 5,000 Bangladeshi products including ready-made garments. Duty-free access of Bangladeshimade garments to the market of a such large country like China is undoubtedly a lot of potential for future of this sector.

F) Recommendations for expansion of apparel sector:



At present, apparel sector of Bangladesh is an internationally established and recognized potential sector. Many countries and buyers in the world are now directly or indirectly involved with apparel sector of Bangladesh. Although the sector started its journey with a small number of factories in the mid-1970s, by 2018 number of registered companies in this sector stood at about 6,821, of which 3,856 were operational at that time and it is currently the largest export oriented sector in the country. Exports in this sector amounted to US\$34,133 billion in FY 2018-19, which is 84.21% of the country's total exports in that financial year. By the financial year 2018-19, Bangladesh controls 6.8% of global garment exports and at that time Bangladesh was ranked second among top 10 garment exporters in the world. In addition to increasing export earnings in the country, the sector is also playing an important role in creating employment. By 2019, number of workers working in this sector is more than 4.00 million, which has been playing a major role in the socio-economic development of the country.

However, it is also true that country's garment sector is still plagued by many problems and obstacles. As a result, on the one hand, desired expansion of this sector is not happening, on the other hand, if rapid solution of all these problems and obstacles in garment sector is not ensured, path of this sector will be very difficult in future. This is because international context is rapidly changing and new possibilities are opening up in garment sector as well as many more countries competing with Bangladesh in this sector are rapidly advancing. If efforts are not made to expand and improve the quality of country's garment sector by resolving existing problems quickly, it is only a matter of time to take place of Bangladesh by rival countries in future. Therefore, considering future context, following





Recommendations for expansion of apparel sector:

recommendations have been put forward for expansion and development of country's garment sector in a timely manner:-

- 1. **Initiatives to increase investment in garment sector:** Although development of garment industry in the country was observed by 2012, number of factories in this sector has decreased rather than increased since 2012. By the financial year 2012-13, number of factories in this sector was 5,876, which stood at 4,620 by the financial year 2018-19 {Figure-5.6 (1)}, meaning that investment in garment sector did not increase at all during this period. Adequate increase of domestic /foreign investment is essential for rapid expansion and development of garment industry in the country in future.
- 2. Increasing use of modern technology in production: Use of modern technology in production is now well-established worldwide. Use of modern technology in garment industry in Bangladesh is still very limited, which are having a big negative impact in increasing productivity, quality products and modernization of this sector. In order to survive in future in competition with other countries, it is important to increase use of modern technology in development and expansion of this sector.
- 3. Development and expansion of labor training system: Skilled workers are the tool to increase quality production. About 85% of garment workers in Bangladesh are women, lion's share of whom are uneducated and unskilled come from remote areas and it is illogical to expect productivity from those without adequate training. In future for quality expansion and sustainable development of country's garment industry, adequate increase in productivity in this sector is essential, which requires development and expansion of worker training system in the country at government and private levels in order to build a skilled workforce suitable for this sector.
- 4. Improving quality of administrative skills: In industrial sector, in terms of production, marketing and management, efficient administration plays a vital role in ensuring profitable management as well as improving the quality of organization. Efficient administrative control is therefore required to ensure profitable survive of organization by ensuring quality management of each organization. Expansion of advanced "Administrative and Management Training" system in the country is essential for improving the quality of management skills in garment sector.
- 5. Increase cash and other incentives beside tax and VAT benefits: In addition to tax and VAT benefits for expansion and development of garment sector in the country, cash incentives at fixed rates on export prices are in place, although, current rate of cash incentives is insufficient to ensure rapid growth in this sector. In order to increase more competitiveness of garment sector in future, it is necessary to increase further cash incentives against exports as well as other incentives for industrial sector in the light of China and South Korea.
- 6. Enhancing level of research in development of garment sector: Rapid expansion and development of garment sector in the country, especially in increasing investment and productivity, product quality control, increasing use of technology, expanding export markets and a lot of research is needed to make the country's garment industry to make it globally banding through product diversification





- 7. Sustainable development of overall infrastructure: Sustainable infrastructure development is essential for development of industry and trade in the country. Bangladesh is still lagging behind in the world even almost all countries in South Asia in terms of infrastructure development. As per Global Competitiveness Index 2019, Bangladesh ranks 105th out of 141 countries in terms of overall infrastructure, while other south Asian countries Singapore ranks 1st, Japan 6th, S. Korea 3th, Malaysia is 27th, China is 28th, Thailand is 40th, Indonesia is 50th, Philippines is 64th, Vietnam is 67th, India is 68th and Sri Lanka is 84th. Although about a dozen mega projects are being implemented in the country in recent times for infrastructure development, it is essential to increase Bangladesh's investment in sustainable infrastructure development many times over.
- 8. Increase short and long term credit flow in garment sector and provide back-to-back facilities without collateral: In the ongoing industrial loan policy in the country 70% -80% is given against working capital and only 20-30% is given as long term loans, which is undoubtedly inadequate in terms of expansion of industrial sector. In this low-income country, it is very difficult to provide large amount of capital at individual level without bank financing, which is one of the major obstacles to industrial development in the country. Moreover, due to not getting back-to-back facilities without collateral, many factories have to run by doing sub-contract of others year after year, which is another big problem in expansion of this sector. Therefore, in order to accelerate expansion of garment sector and continue production in existing factories, it is necessary to increase flow of short and long term loans in this sector as well as opportunities for opening back-to-back without collateral.
- 9. Expansion of export market and diversification of products: About 80% of Bangladesh's garments are exported to USA and certain countries in Europe, despite huge potential to Asia and Middle East countries, Bangladesh's garment exports to those countries is very limited. One of the reasons for this is that only a few of the items that are in demand in the world market are produced in Bangladesh, which does not run equally in all parts of the world. Therefore, in future, it is important to diversify garment products in line with global demand for expansion and development of this sector as well as become aware to increase market range of garment exports through bilateral trade agreements and duty-free access facilities with different countries.
- 10. Taking measures for production of raw materials of garment industry in the country: Ensuring uninterrupted supply of main raw materials used in any industry is the main prerequisite for expansion and survival of that industry. Main raw material of garment industry is cloth, which, Bangladesh's garment industry has been survived through imports from China, India and some other countries till now. No industry based on import-dependent raw materials can survive for long. This is because, in addition to increasing production cost, control of industry indirectly goes under raw material supplier / country by this, which is extremely unsafe for development and survival of that industry. Therefore, in the upcoming changing global context, it is very important to take steps for rapid and adequate development of textile industry in this country to ensure rapid development and profitable survival of garment industry in Bangladesh by making it self-reliant, so that cloths used in garment industry is produced entirely in the country.

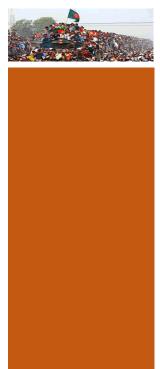




- 11. Improving doing business environment: In order to develop industry and trade in the country and attract investment, it is most important to strengthen quality development and logistical support capacity of the sectors involved in business facilitation, in which Bangladesh is still lagging far behind. Bangladesh ranks 100th out of 160 countries in the Logistics Support Capacity 2019 Global Rankings (LPI Ranking 2019), in that list, among other South Asian countries, Sri Lanka is 94th, Maldives 86th, Indonesia 46th, India 44th, Malaysia 41st, Thailand 32nd, China 26th and S. Korea is in the 25th position. Therefore, it is very important to improve doing business environment and strengthen logistics support capabilities in the country to ensure rapid expansion of garment sector by increasing domestic / foreign investment in future.
- 12. Development of factory quality and Environment: Most of garment factories in the country are still located in dilapidated buildings in the alleys of city, where there is a serious shortage of communication, fire fighting systems and other facilities. Moreover, environment inside many factories, offices and places for workers rest are not up to standard. As a result, good quality buyers are reluctant to place orders in all those factories, which is acting as an extreme obstacle to survival of that class of factories. Therefore, in order to improve quality of garment industry, it is necessary to set up factories in a quality environment and to have an obligation to improve environment inside the factory and office.
- 13. Taking initiatives for safety and welfare of workers: Unpleasant truth is that biggest contributor to survival of country's garment sector is 4.00 million workers working in this sector. Lion's share of these workers live in slums and other unhealthy and unsafe environments deprived of civic amenities due to low wages, which is increasing their health risks as well as having a large negative impact on their livelihood and severely reducing productivity in this sector. Moreover, 100% of garment workers are destitute and helpless, they can save nothing. As a result, they have to return to village again in a state of helplessness at the end of working life, where they have to spend rest of their lives in poverty, which is really inappropriate. Whereas, in development and modernization of garment sector, improvement of living standard of workers is essential. Therefore, in order to improve living standards of workers working in garment sector, it is very important for the government to ensure following benefits: -
 - Construction of required number of labor hostels at designated places near factory zone.
 - Introduce rationing system for the families of garment workers.
 - Ensuring maternity leave and allowances for workers by the factory owners.
 - Make life insurance policy compulsory for every worker.
 - Introduce "Retirement Pension Scheme" as opposed to monthly compulsory savings.

First Edition: August, 2022

14. Taking steps to expand and improve backward industry: Due to expansion of apparel industry in Bangladesh, related industries such as accessories, dyeing, wash, packaging and printing, embroidery etc. have expanded and are playing a very important role in garment export and employment creation. Adequate expansion and improvement of backward





industry is very important in line with expansion and development of garment sector in future.

- 15. Maintaining political stability: Since garment industry is a 100% export oriented sector, maintaining political stability in the country is very important for development and growth of this industry. Because, in volatile political situation, beside production is disrupted, it is very normal for buyers to turn away from Bangladesh. Therefore, in the interest of sustaining garment industry, it is very important to keep the industry free from political influence and programs at all times.
- 16. Prevention of Corruption and Establishment of Rule of Law: Bribery and corruption in public sector of the country is a very old disorder, which has become deadly in recent times and which is acting as a serious obstacle to expansion of industry, trade and investment in the country. According to Global Corruption Perception Index (CPI) 2019, Bangladesh's position in corruption is higher than any other country in South Asia. According to that ranking, Bangladesh ranks 146th in the list of 180 countries, while Singapore is 4th, Hong Kong is 16th, Japan is 20th, Bhutan is 25th. Korea 39th, Malaysia 51st, China 80th, India 80th, Indonesia 85th, Vietnam 96th, Thailand 101st, Nepal 113rd, Philippines 113th, Pakistan 120th, Maldives 130th and Myanmar 130th in that list. Due to lack of rule of law at all levels, corruption has become so rampant that business and social environment in the country has become insecure and unstable and normal flow of industry and trade in the country is being severely disrupted. In order to ensure uninterrupted movement of garment sector in the country in future, it has become essential to enforce rule of law at all levels as well as to strictly curb corruption and adopt a zero tolerance policy towards corruption.

Bangladesh, a country of immense potentials



Chapter: 5.7

Development and Expansion of ICT Sector.







Development and Expansion of ICT Sector.

Topics Covered in the Chapter

- A) Rising of ICT Sector globally.
- B) Bangladesh's participation in ICT Advancement.
 - 1.0 Digital Bangladesh Vision-2021.
 - 2.0 Global Internet Access Facilities.
 - 3.0 Bangladesh position in South Asia in terms of Internet use.
 - 4.0 ICT infrastructure development.
 - 5.a E-Government Development.
 - 5.b Bangladesh's position on e-government development.
 - 6.0 Human Resource Development in ICT Sector.
 - 7.0 Mobile Phone Coverage.
 - 8.0 Fiber optic connection across the Country.
 - 9.0 Launching of Bangabandhu Satellite-1.
- C) Outsourcing and exporting ICT products and services.
 - 1.0 Outsourcing.
 - 2.0 Export of ICT products and services.
 - 3.0 Bangladesh's position in South Asia in ICT service exports.
- D) Annual Allocation for ICT Sector Development.
- E) Future prospects of ICT sector in Bangladesh.
- F) Estimates of Domestic Demand and Market Size of ICT Industry.
- G) Types and skills of organizations engaged in ICT sector.
- H) Bangladesh position in ICT Development.
- I) Recommendations for ICT Sector Development.









A) Rising of ICT Sector globally:

Rapid advancement of technology over the past two decades has opened the door of global digital revolution, known as Fourth Industrial Revolution or 4IR. By creating opportunities for digital systems, communication networks, machine learning and comprehensive data analysis which has brought unimaginable success in the fields of autonomous vehicles, robotics, artificial intelligence, 3D printing, nano and biotechnology and quantum counting. Needless to say, whole of the digital system is related to ICT and ITES services, which has become the forerunner of the Fourth Industrial Revolution and is growing at a tremendous speed throughout the world.

Market size of global ICT sector was US\$2,622 billion in 2005, by 2019 which stood at US\$5,089 billion [Figure-5.7 (1)], an average increase of 163.13 billion a year. During this period, revolution made among all those cases of ICT and ITES services, among them Software accounted for 12%, hardware 23%, service 23%, new technology 17% and telecom services 26% Figure-5.7(2).

Figure-5.7(2): Scenario of unimaginable progress in various fields of ICT and ITES services worldwide during period of 2005-2019: -

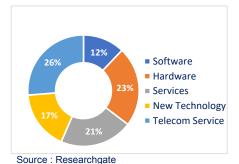




Figure-5.7 (1): Scenario of growing revenue in the global ICT sector during period of 2005-2019:-



Source: Researchgate

First Edition: August, 2022

Rising of ICT Sector globally:





B) Bangladesh's participation in ICT Advancement:



Over the past decade, to implement government's digitalization concept, construction of ICT infrastructure in the country, optical fiber, submarine cable and 4G technology connectivity, government online services, online banking, ICT training in human resource development and a lot of visible progress has been made including bringing all districts, upazilas and unions of the country under optical fiber connection, which has made implementation of the government's e-government plan quite feasible. As a result, by 2020, number of Internet users in the country has stood at about 66.44 million, number of mobile phone users at 163 million and Bangladesh has made unimaginable progress in outsourcing, which has added new possibilities to development of the country's economy.

keeping in view needs of time, in order to accelerate overall development of the country by utilizing information and communication technology, present government has officially announced in 2009 to build a digital Bangladesh by 2021 and a knowledge based developed country by 2041 in accordance with their election manifesto and formulated multiple policies for development of information and communication technology in the country. Latest enacted "Information and Communication Technology Policy 2018" is currently under implementation, with priority given to: -

- Establish a transparent, responsible and accountable government by using information and communication technology.
- Skilled human resource development.
- Ensuring social fairness; and
- Delivering government services to the doorsteps of people through public-private partnership.

Following is a summary of visible progress in ICT sector in the country by 2019:



Digital Bangladesh

Vision-2021:

Strategies for Economic Development of Bangladesh



1) Digital Bangladesh Vision-2021:

In recent years, to transform into an egovernment system with adequate development of digital system in implementation of "Digital Bangladesh Vision-2021" centralized registration in the country, workflow management systems, e-tendering, e-contract management, e-payments, procurement management systems and strengthen online connections to provide many more government services, expanding training systems to create skilled ICT manpower in the country and investment has been increased in development of areas related to digitization including construction of ICT infrastructure. As a result, over the years, significant progress has been made in the ICT related fields, such as data center development, software, devices, IT communication services and other IT services and e-governance system in the country has become increasingly visible, although overall progress of ICT sector in Bangladesh is much slower than neighboring countries. For example, during period of 2010-2017, Bangladesh has lagged ten steps overall instead of progress in the Global ICT Development Index, which is significantly higher than other developing countries in South Asia [Figure-5.7 (3)].

Digital Bangladesh



Figure-5.7 (3): Scenario of progress of Bangladesh and other countries in Asia during 2010-2017 in the ICT Development Index:

Country	IDI 2017		IDI 2	Rank Change	
Country	Rank	Score	Rank	Score	2010- 2017
S. Korea	2	8.85	1	8.40	- 1
Japan	10	8.43	13	7.42	+ 3
Singapore	18	8.05	19	7.08	+ 1
Malaysia	63	6.38	58	4.45	- 5
Thailand	78	5.67	89	3.30	+ 11
China	80	5.60	80	3.55	-
Maldives	85	5.25	67	4.05	- 18
Philippines	101	4.67	92	3.22	- 8
Vietnam	108	4.43	81	3.53	- 27
Indonesia	111	4.33	101	2.83	- 10
Sri Lanka	117	3.91	105	2.79	- 12
Bhutan	121	3.69	119	1.93	- 2
India	134	3.03	116	2.01	- 18
Nepal	140	2.88	134	1.56	- 6
Bangladesh	147	2.53	137	1.52	- 10

Source: ITU IDI , Note: Higher Ranking indicates lower position

2) Global Internet Access Facilities:

By 2020, Bangladesh have been connected with two submarine cable systems SMW4 and SMW5 and is enjoying global internet access facilities through 2G, 3G and 4G internet access. By 2021-2023, Bangladesh is likely to be connected to third submarine cable, which will open the door to 5G internet facilities in the country.

With the development of submarine cable systems, internet speed has increased manifolds, as a result, number of internet users in the country has been also increasing rapidly. In 2000, where the



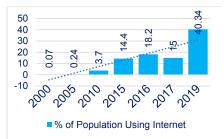
Figure-5.7 (4): Scenario of increase in the rate of Internet users (%) in proportion to population in the country during the period 2000-2019:





Global Internet Access Facilities:

rate of Internet users in the country was 0.07% of population, by 2019, it has risen to 40.34% as estimates of various international organizations (according to BTRC estimates, it is about 55%), [Figure-5.7 (4)]. In this case, it is noteworthy that during 2017-2019, number of internet users in the country has increased several times more than any time in the past.



Source: World Bank Data

3) Bangladesh position in South Asia in terms of Internet use:

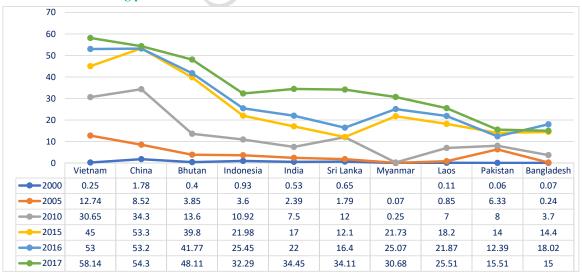
It is undoubtedly true that the rate of internet users has multiplied in proportion to population of the country due to tremendous progress in the field of information technology in the last decade, but it is also true that Bangladesh's progress in this regard is much slower than that of other developing countries in South Asia.



First Edition: August, 2022

Bangladesh position in South Asia in terms of Internet users: According to World Bank, during period of 2000-2017, rate of Internet users in proportion to population increased 57.89% in Vietnam, 52.52% in China, 47.71% in Bhutan, 33.92% in India, 33.46% in Sri Lanka, 30.68% in Myanmar, 25.40% in Laos, 15.45% in Pakistan and 14.93% in Bangladesh [Figure-5.7(5)]. Bangladesh is lagging far behind many Asian countries in terms of internet usage and it is obvious that if Bangladesh can't come out of this situation immediately, it's position will become increasingly fragile internationally.

Figure-5.7 (5): Rate (%) of Internet users in proportion to population in Bangladesh and other Southeast Asian countries during period of 2000 - 2017:-



Source: World Bank Data





4) ICT infrastructure development:

Construction of world-class ICT infrastructure is essential for rapid development of ICT industry in the country and present government is moving ahead with a plan to set up at least one high-tech park, one IT park and one software technology park in each district. In order to achieve this goal, several projects have already been implemented and many more projects are under implementation.



ICT infrastructure development:

Summary of development of ICT infrastructure in the country by 2019: -

- Hi-Tech Park: Construction of Bangabandhu Hi-Tech Park, Kaliakair has been completed by 2019 and at least 12 more IT / Hi-Tech Paks are under construction at district level.
- **Software Technology Park:** Janata Tower Software Technology Park, Dhaka and Sheikh Hasina Software Technology Park, Rajshahi.
- IT Training and Incubator Center: Sheikh Kamal IT Training and Incubator Center, Natore, IT Training and Incubator Center, Rajshahi and IT Training and Incubator Center, Khulna.
- Tier-IV Data Center, Kaliakair.
- Electronics City, Sylhet (under construction).

However, reality is that Bangladesh still lags behind in the world even all other countries except Pakistan in South and Southeast Asia in terms of overall progress in ICT sector. According to ICT Development Index 2017, Bangladesh ranks 147th out of 176 countries, while other neighboring countries such as Malaysia is ranked 63rd, Thailand 78th, Vietnam 108, Indonesia 111, Sri Lanka 117, Bhutan 121, India 134, Myanmar 135, Laos 139 and Nepal is in 140th position in that ranking [Figure-5.7 (6)].

Figure-5.7 (6): Comparative position of Bangladesh and other neighboring countries in the ICT Development Index 2017among 176 countries:



Source: ITU IDI Note: Higher Ranking indicates lower positio







5.a) E-Government Development:

Over the years, use of information technology in providing services in both public and private sectors, such as administration. researchers. makers, civil society and all other sectors the country has increased significantly, which has a positive impact on new employment, education, health, administration, exchange of knowledge and experience and potentiality of egovernment system in the country is gradually increasing.



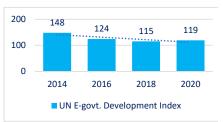
E-Government Development :

According to UN E-government Development Index 2014, Bangladesh ranks 148th out of 191 countries. By 2020, Bangladesh has reached at 119th position 29 steps ahead, which is one of the international recognition of progress in e-governance management in the country in implementation of "Digital Bangladesh Concept" [Figure-5.7(7)].

Notable government e-services in the country by 2020 include: -

- Online admission registration in educational institutions and publication of results.
- Online tax return filing, etendering, e-passport and online banking services.
- Online utility bill payment, telemedicine and video conferencing.
- Registration of job seekers abroad, VAT registration and registration for pilgrimage.
- More than 5,000 Union Information Service Centers launched.
- Providing mobile money orders, postal cash cards and other services by launching more than 10,000 ecenters at post offices at upazila and village level.
- Providing civic services by setting up information centers at district, upazila and union levels.

Figure-5.7 (7): Bangladesh's position and progress in the UN E-govt. Development Index, during period of 2014-2020:-



Source: Un E-govt. Development Index Note: Higher value indicates lower rank



Although Bangladesh's experience in ICT sector is entirely new, government's pragmatic initiatives for rapid expansion and development of ICT sector, such as development of ICT infrastructure in the country, increased investment in internet connectivity, speed and service quality, expansion and development of ICT training, cash incentives on export of goods and services beside tax and VAT benefits in this





sector and unprecedented progresses of country's telecommunications management are making the country's ICT sector more promising, which will undoubtedly play a major role in the country's overall economy in future.

5.b) Bangladesh's position on e-government development:

As a result of giving emphasis on implementation of digitalization concept, Bangladesh's progress in e-government development in a short period of time has been quite successful, especially in recent times, there has been considerable momentum in this regard. According to EDGI Rank 2020, Bangladesh has reached at 119th position out of 191 countries left behind Cambodia, Nepal and Pakistan, although Thailand, Sri Lanka, Vietnam, India, Maldives and Bhutan are far ahead of Bangladesh in this case.

Figure-5.7 (8): Position of Bangladesh and some other South Asian countries in providing various services related to e-governance development by 2020:-

		Scores in Different Index in 2020			
EDGI		EDGI	Online	Telecom.	Human
Rank	Country	Index	Service Index	Infrastructure	Capital Index
2020				Index	
57	Thailand	0.7565	0.7941	0.7004	0.7751
85	Sri Lanka	0.6708	0.7176	0.5289	0.766
86	Vietnam	0.6667	0.6529	0.6694	0.6779
100	India	0.5964	0.8529	0.3515	0.5848
105	Maldives	0.574	0.4353	0.5981	0.6886
103	Bhutan	0.5777	0.6824	0.5367	0.5139
119	Bangladesh	0.5189	0.6118	0.3717	0.5731
124	Combodia	0.5113	0.4529	0.5466	0.5344
132	Nepal	0.4699	0.4	0.4691	0.5405
153	Pakistan	0.4183	0.6294	0.2437	0.3818

Source: UN E-gov. survey 2020

Human Resource Development in ICT Sector:

In the last decade, training system for human resource development in ICT sector in the country has expanded a lot and it can be said that there has been considerable progress in development of skilled human resources in this sector. Government strategies for development employment of skills and implementation of the objectives of Information and Communication Technology Policy-2018 are: -



First Edition: August, 2022

- Develop institutional capacity for producing required number of ICT professionals in line with domestic and global market demand.
- Taking steps to train people of this country in professional matters related to information technology in order to develop their skills.
- Inclusion of IT subjects in technical and vocational education.

Bangladesh's position on e-government development:



Human Resource
Development in
ICT Sector:

Strategies for Economic Development of Bangladesh



- To take necessary policy, support and incentive measures to attract domestic and foreign investment for creation of jobs; and
- Creation of employment and expansion of employment market with the help of public and private sectors in line with the evolution of future technology and industrial sectors.

As part of the above strategy, special emphasis is being laid on creating adequately trained manpower in IT and outsourcing in the country based on international demand and as part of this effort, an initiative has been taken to create 2.00 million IT professionals in the country by 2021.

However, in the evaluation of Global Human Development Index, Bangladesh has not made significant progress in the field of human development in recent years. According to HDI Index 2000, Bangladesh was ranked 146th out of 189 countries, by 2010 situation had improved to 129th place. But, by 2015 it has deteriorated again to 142nd place and by 2019 it has reached 135th place. During period of 2015-2019, Bangladesh has progressed only 7 steps in the field of human development [Figure-5.7 (9)].

By 2019, Bangladesh is lagging far behind all other countries in South Asia in terms of human resource development except Afghanistan, Pakistan and Myanmar. According to HDI Rank 2019, Bangladesh ranks 135th out of 189 countries, followed by Malaysia at 61st, Sri Lanka at 71th, Thailand 77th, China 85th, Philippines 106th, Indonesia 111th, Vietnam 118th, India 129th and Bhutan at 134th position in that ranking [Figure-5.7(10)].

Figure-5.7 (9): Bangladesh's progress in human resource development during the period of 2000-2019: -



Source: UNDP Note: Higher value indicates lower rank.

Figure-5.7 (10): Position of Bangladesh and other countries in South Asia in human resource development by 2019: -



Source: UNDP Note: Higher value indicates lower rank







7) Mobile Phone Coverage:



Figure-5.7 (11): Scenario of increase in the number of mobile phone subscribers(million) in the country during period of 2010-2019: -

165.572 200 180 160 140 120 100 80 60 40 20 2012 2013 2014 2015 ■ Subscribers (Million)

Source: BTRC

Mobile Phone Coverage:

By the end of 2019, about 99% of the country's total population and 95% of geographical area has come under mobile network. As of December 2019, number of mobile phone users in the country stood at 165.582 million, which was 67.92 million in December 2010. During period of 2010-2019, number of mobile phone users in the country has increased by 97.752 million, an average increase of 10.85 million per year [Figure-5.7 (11)].

Fiber optic connection across the Country:

8) Fiber optic connection across the Country:

In order to expand internet service across the country, project has been undertaken by the government to ensure fiber optic connection at district, upazila and union level on an emergency basis. By the middle of 2021, about 28,000 km of optical fiber connection network has been established across the country, which is spread at district, upazila and union level (BTCL).



First Edition: August, 2022

To meet rapidly growing demand for internet bandwidth in the country and to ensure uninterrupted broadband internet service across the country, Bangladesh is expanding its international internet gateway connectivity with submarine cable network systems. At the beginning of 2021, Bangladesh has undertaken third submarine cable network (SEA-ME-WE6) connection project, which is expected to be implemented by 2024. It may be mentioned that Bangladesh was connected with the first submarine cable connection (SEA-ME-WE4) in 2005 and with the second submarine cable (SEA-ME-WE5) connection in 2017. By 2020, bandwidth capacity from the two submarine cables are 2,600Gbps, through which 4G network is operational in the country. Once third submarine cable connection is completed, bandwidth will be upgraded to 7200Gbps, which will make easier to launch 5G network in the country.





Launching of Bangabandhu Satellite-1:

9) Launching of Bangabandhu Satellite-1:

Bangabandhu Satellite-1 (BS-1) is the first Bangladeshi geological communications satellite launched on May 10, 2018 with technical assistance of "Thales Alenia Space of France", which will facilitate broadcasting and telecommunication services across the country, especially in remote areas and resulting of which, Bangladesh has seated in the glorious 57th position in the list of satellite-owned countries.



The satellite has 26 Ku-band and 14 C-band transponders, capable of expanding power across the territory of Bangladesh, India, Nepal, Vietnam, Sri Lanka, the Philippines and Indonesia, through which opportunities has been created to expand trade and commerce in this region by utilizing a wide network. It is located at 119.1 degrees east of the orbital suite, for which orbital suite was purchased in 2017 from the Russian satellite company "Intersputnik" for US\$27 million. Two earth stations have been set up at Joydebpur in Gazipur and Betbunia in Rangamati under this project. Bangabandhu Satellite-1 system is specified in term of end-user service utilization and performances to provide:-

- Direct To Home (DTH): service consisting of multiplexed digital television, radio and associated data direct to very small antennas.
- Video Distribution: multiplexed digital television, radio and associated data services to medium-sized antennas
- VSAT Private Networks: shall support private networks consisting of voice, data, video and Internet services, to banks, gas stations, etc. with medium-sized antennas.
- Broadband: service that allows the end-user (individual, organization, corporation or Government) to remotely access the Internet at high speed with high quality of service.
- Communications Trunks: wide band high data rate point-to-point services

Source: Thales Alenia Space Journal.







C) Outsourcing and exporting ICT products and services:

1) Outsourcing:



As a result of effective development of internet system in the country in the last decade, rate of internet users has increased in proportion to population (around 80.34% by 2019) on the one hand, beside freelancing has quickly gained popularity in Bangladesh as a career option among educated youth group. Government is implementing extensive programs giving importance to facilitate internet access, increase bandwidth, develop power systems, build ICT infrastructure and increase freelancing and ICT training in the country. By 2019, there are about 6.50 lakhs registered freelancers in the country, of which approximately 5.00 lakhs freelancers are working regularly. As a result, Bangladesh's revenue from freelancing has been steadily increasing over the last couple of years and in 2019, Bangladesh ranks 8th in freelancing in the list of top ten countries with an annual revenue growth of 27% [Figure-5.7 (12)].

However, in this case, it is a matter of some disappointment that in the Global Outsourcing Rankings 2014, Bangladesh's position was 27th and by 2017, it has reached at 21st place by 5

Figure-5.7 (12): Annual Revenue Growth (%) of Top 10 Countries according to 2019 Global Freelance Ranking: -

Kanking.						
Rank 2019	Country	Revenue Growth %				
1	USA	78%				
2	UK	59%				
3	Brazil	48%				
4	Pakistan	47%				
5	Ukraine	36%				
6	Philippine	35%				
7	India	29%				
8	Bangladesh	27%				
9	Russia	20%				
10	Surbia	19%				

Source: The Global Gig-Economy Index 2019

First Edition: August, 2022

Outsourcing:

steps ahead, but in 2019, it has reached 32nd position by 11 steps back [Figure-5.7 (13)]. According to the Global Outsourcing Rankings 2019, India is ranked 1st, China 2nd, Malaysia 3rd, Indonesia 4th, Vietnam 5th, Thailand 8th, Philippines 10th, Sri Lanka 25th, Bangladesh 32nd and Pakistan 37th. In other words, in outsourcing, Bangladesh is still lagging behind in Asia except a couple of countries [Figure-5.7 (14)].





Figure-5.7 (13): Scenario of Bangladesh's progress in "Global Outsourcing Ranking" during 2014-2019: -



Source: A.T Kearney Global Service Location Index Note: Higher value indicates lower Rank

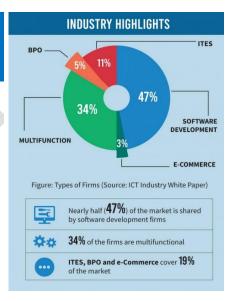
Figure-5.7 (14): Asia as per Global Service Location Index 2019, Position of Bangladesh and other leading countries in outsourcing in Asia:



Source: A.T Kearney Global Service Location Index Note: Higher value indicates lower Rank.

2. Export of ICT products and services:

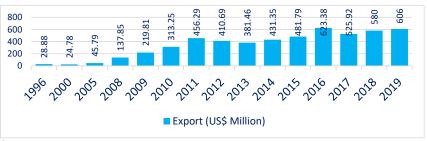
Over the past two decades, use of ICT as one of the tools for economic development has grown exponentially in the development of digital / knowledge-based economies all over the world. As a result, export of ICT services in the world has increased significantly since 2000. According to World Bank, volume of global ICT services exports in 2004 was US\$ 132.98 billion, which stood at 536.02 billion US dollars in 2017. Growth rate of ICT services exports averaged 7.33% during this period.



First Edition: August, 2022

There is a matter of hope that in the last decade, especially since 2008, export of ICT related services, software and exporting ICT services through freelancing has increased almost 2.50 to 3 times in Bangladesh. By 2019, Bangladesh's ICT service exports amounted to US\$606 million, up from 136.75 million in 2008 [Figure-5.7 (15)].

Figure-5.7 (15): Scenario of ICT service exports of Bangladesh during 1996-2019:-



Source: Indexmundi

Export of ICT products and services:





3) Bangladesh's position in South Asia in ICT service exports:

Bangladesh's steady progress in ICT service exports is quite promising and steady growth rate in the last five years (2015-2019) in this case is 7% (5-years CAGR %), while India's growth is 2.6%, Malaysia's 0.7%, Pakistan's 5.5%, Sri Lanka 6.2% and Indonesia -2.4%. In this case, China, Singapore and South. Korea's 5-years CAGR (%) is 8.1%, 9.6% and 9.4% respectively.

However, in terms of ICT service export earnings, Bangladesh still lags far behind most countries in the world and even in South Asia. According to Global Rankings 2019, Bangladesh ranks 58th out of 174 countries in ICT service exports. In this case, other countries in South Asia, such as India is 1st, China 5th, Singapore 13th, South Korea 25th, Malaysia 30th, Pakistan 45th, Sri Lanka is 46th and Indonesia is in 48th position [Figure-5.7(16)].

in order to make a big jump in ICT service export earnings, it is necessary to make ICT sector the third largest industry in the country, build adequate ICT infrastructure in the light of other ICT rich countries, use state-of-the-art internet technology, involve educated youth community to a greater extent in this sector including creating a sufficient number of skilled ICT professionals in the country and it is time to take immediate steps to do everything necessary to attract adequate investment in this sector.

position in South Asia in ICT service exports:

Bangladesh's

Figure-5.7 (18): Comparative position of Bangladesh and some other South Asian countries in ICT service exports during 2015-2019: -

2019		Yearly Export (USD Million)					
Rank	Country	2015	2016	2017	2018	2019	5-years CAGR (%)
				-0-10			, ,
1	India	76,368	76,541	78,519	82,075	84,883	+ 2.6
5	China	24,549	25,432	26,977	28,388	29,835	+ 8.1
13	Singapore	9,248	11,635	11,309	12,079	12,715	+ 9.6
25	S. Korea	3,502	3,719	4,301	4,442	4,697	+ 9.4
30	Malaysia	2,656	2,576	2,678	2,775	2,851	+ 0.7
45	Pakistan	789	873	1,004	1,018	1,062	+ 5.5
46	Sri Lanka	805	858	926	964	1,010	+ 6.2
47	Indonesia	971	970	1,012	1,007	1,008	- 2.4
58	Bangladesh	482	623	526	580	606	+ 7.0

Source: Nationmaster.com

D) Annual Allocation for ICT Sector Development:

By the financial year 2011-12, science, information and communication technology was under the same ministry. Separating the Ministry of Information and Communication Technology from 2012-13 financial year, separate development allocation was introduced in the national budget for rapid and sustainable development of information and communication technology, construction of ICT infrastructure, training in human resource development and development of egovernment system. In its continuation, over the past decade, allocation for development of this sector in the national budget has been gradually increased every year for rapid development of information and communication technology in the





Annual Allocation for Development of Information and Communication Technology:

country, although, allocated budget was not enough at all compared to potentials of this sector.

Annual development allocation was Tk 294 crore in FY 2012-13, TK. 530 crore in FY 2013-14, TK. 880 crore in FY 2014-15, TK. 1,073 crore in FY 2015-16, TK. 1,606 crore in FY 2016-17, TK. 3,784 crore in FY 2017-18, TK. 2,468 crore in FY 2018-19 and TK. 1,645 crore in FY 2019-20 [Figure-5.7 (17)]. Highest annual development allocation in the ICT sector was TK. 3,784 crore in FY 2017-18, which gradually declined in next two financial year to Tk 2,468 crore in FY 2018-19 and Tk 1,645 crore in FY 2019-20 respectively.

Figure-5.7 (18): Scenario of annual allocation in the national budget in the last decade for development of ICT sector in the country:



Source: MOF

E) Future prospects of ICT sector in Bangladesh:



Over the past few decades, ICT has established a strong position as one of the most promising industries in the world in terms of development of country's economy through business development and job creation, resulting in a growing global ICT market size. According to IDC Forecast, global ICT spending in 2018 was US\$4,659 billion, which will increase to US\$ 5,816 billion by 2023 [Figure-5.7 (18)].

It is very hopeful that Bangladesh has been able to join this progress in time. Over the past decade, Bangladesh has shown its potentials in the ICT industry in both public and private sectors, such as proportion of Internet users in the country stands at about 50% of the population by 2019, ICT-related organizations have grown up more than 2,000, a large portion of educated youth has been involved with outsourcing and has succeeded also in this field as expected and most importantly, in the last few years Bangladesh has shown considerable success in meeting domestic demand as well as exporting ICT services (although that was quite less compared to many neighboring countries). It is further hoped that taking ICT a priority industry by the government, advanced ICT infrastructure is being built in the country for rapid development of this industry, Initiatives have been taken to increase investment in ICT sector, training system has been strengthened to create adequate skilled ICT professionals in the country and to reach government services



Future prospects of ICT sector in Bangladesh:

Strategies for Economic Development of Bangladesh

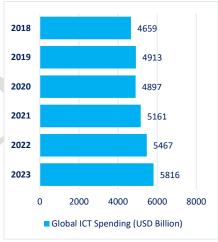


at the doorsteps of people easily, development of e-government system have come a long way .

By making this trend of development of ICT industry more fast and up-to-date, making ICT industry the third driving force of the country's economy, employment of millions of educated youth in this industry, increasing the flow of business and trade and rapid development of the country's economy by increasing exports as well as meeting domestic demand through producing adequate ICT products and services and everything possible should be done to take full advantages of this wonderful opportunity to inform the position of Bangladesh globally in advancement of information and communication technology. Entrepreneurial youth of this country, cheap labor, public and private concerted efforts and timely and realistic initiative of government to attract sufficient domestic. and foreign investment in this sector will surely be able to ensure proper utilization of this potential. According to World Economic "business Forum, dynamism, institutional strength, financing and innovative activities in the country" are the key to industrial prosperity.

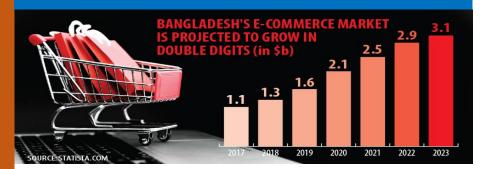


Figure-5.7(18): Global ICT spending forecast 2018-2023 (US\$ Billion):-



Source: IDC

F) Internal Demand and Market Size Estimates of ICT Industry:



1) Domestic demand of IT industry:

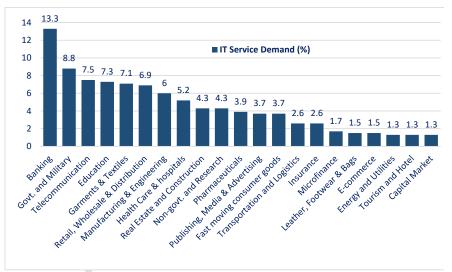
Global market size of ICT industry is growing rapidly due to huge expansion and increasing demand of the global ICT industry. Market size of global ICT industry was US\$2,622 billion in 2005 and by 2019 it stood at US\$5,061 billion [Figure-5.7]





(1)]. Due to unprecedented advancement of information and communication technology in Bangladesh in recent years, internal market size of ICT industry is increasing rapidly due to introduction of e-government system in the country, exchange of information, increasing use of IT in communication, trade and business and as per estimates by a private organization which will stand at US\$ 4.6-4.8 billion by 2025 with consolidated annual growth of 15% in this sector. Use of ICT in every government and private organization has now become very much inevitable and use of ICT in all levels of administration and business is gradually increasing in the country. According to the report published by UNCTAD based on BASIS Survey 2013, demand (%) of ICT industry in different sectors of Bangladesh has shown in Figure-5.7 (19).

Figure-5.7 (19): According to the report published by UNCTAD based on BASIS Survey 2013, demand of IT industry in different sectors in Bangladesh (%): -



Source: UNCTAD Report

2) Domestic market size of ICT industry:

In implementation of "Digital Bangladesh" announced by the government, egovernment system is gradually becoming visible in the country and use of information technology at all levels both public and private, is increasing exponentially. In addition to ensuring use of information technology at all levels of administration to make government services easily accessible to the people, use of information technology at all levels of business including telecommunications, banking, education, insurance and healthcare has become almost inevitable. As a result, internal demand and market size of ICT industry in the country has been increasing rapidly. According to estimates of BCG Everest Group, internal market size of ICT and ICT related services in Bangladesh will reach at US\$ 0.09-1.1 billion by 2017 and US\$ 2.3-2.6 billion by 2018 with consolidated annual growth of 34% in this period and US\$ 4.6-4.8 billion by 2025 with consolidated annual growth of 15% during this period [Figure-5.7 (20)].

Reasons for which information and communication technology sector in Bangladesh will definitely expand much faster in future: -





- World class ICT infrastructure is being developed in the country, as a result of which domestic / foreign investment will increase at a significant rate in this sector in future.
- Numerous IT graduates are randomly joining the sector every year, who will
 undoubtedly take the sector to another level in future.
- Along with expansion of egovernment system in the country for implementation of Digital Bangladesh, both demand and size of information and communication technology services are increasing in all sectors.
- As a result of increasing rate of education in the country, use of information technology at individual level is increasing rapidly.
- Number of internet users across the country is increasing at a geometric rate due to wide internet network and easy access to internet.
- Security in IT sector is increasing as a result of development of power system.
- young generation of Bangladesh has already built a good position in Outsourcing, which is ensuring financial consistency along with education of students and protecting them from clutches of unemployment at the end of their education.
- Relatively cheap labor and Government's timely initiatives for development of ICT sector is further enhancing potentials of this sector.

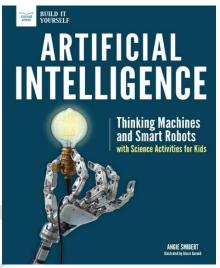
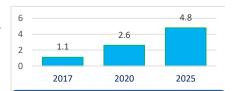


Figure-5.7(20) : Bangladesh ICT Industry Domestic Market Size Forecast (US\$ Billion) :-



Bangladesh IT Industry Domestic Market Size Forecast

Source: BCG Everest Group

First Edition: August, 2022

Needless to say, timely steps taken by the government to develop the ICT sector will further accelerate the current trend of development of the country's ICT sector and volume of exports of ICT products and services will reach the desired level soon, which will be one of the key players in fulfilling the dream of becoming Bangladesh a middle-income country by 2021 and a high-income country by 2041.





G) Types and skills of organizations engaged in ICT sector:

Types of work and skills of organizations engaged in IT sector:

Since 1997, Bangladesh Association of Software & Information Services (BASIS) has been working as a "National Trade Body" for development of software and IT-enabled services in Bangladesh. The organization conducts its regular programs and activities as well capacity building of member companies, service development and enabling member organizations to adapt to government policies as well as developing domestic and international markets for Bangladeshi IT products and services beside developing the domestic IT industry and in the meantime, this organization has shown considerable success in their role.

বেসিস সদস্য প্রতিষ্ঠান সমূহ
মূলত আই.টি সেক্টরে ৯-১০টি
ক্যাটাগরিতে কাজ করে, তন্মধ্যে
বেশিরভাগ প্রতিষ্ঠান সর্বোচ্ছ ৬ টি
ক্যাটাগরিতে এবং স্বল্প সংখ্যক
প্রতিষ্ঠান অবশিষ্ট ৩-৪টি
ক্যাটাগরিতে কাজ করছে।

BASIS member organizations mainly work in 9-10 categories in IT sector, most of them are working in maximum 6 categories and a small number of organizations are working in the remaining 3-4 categories. Significant work type and skill analysis shows that 55.66% of BASIS member organizations are proficient in customized software development, 16.98% proficient in IT enabled services, 12.45% proficient in e-commerce, 4.72% proficient in mobile applications, 4.34% proficient in product companies, 3.02% proficient in system integration, 1.51% proficient in consulting and 1.37% proficient in other fields **Figure-5.7(21)**.

Figure-5.7 (21): Number of BASIS member organizations (%) considering Types and skills of Work :-



First Edition: August, 2022

Source: BASIS Software & IT Service Catalog





H) Bangladesh position in ICT Development:



Over the past two decades, unprecedented advances in information and communication technology over the world have led to an increase in employment as well as development of information and communication technology, quality and scope of services and participation of IT products and services in international trade have increased several times, which has given a new impetus to the world economy by accelerating economic development in many countries. Bangladesh has also been able to integrate itself just time as one of the co-passengers of this advancement and as part of the government's efforts to develop the sector to build an ICT rich country, development of ICT infrastructure in the country over the last decade, facilitation of internet services, strengthened ICT training, increasing domestic and foreign investment in this sector, increasing use of information technology at both public and private levels and has already made significant progress in developing e-governance systems in the country to facilitate government services. As a result, innumerable institutions in various branches of information and communication technology have sprung up, a large portion of educated youth is constantly being associated with this sector and ICT products and services are being exported partially beside fulfilling domestic demand. In outsourcing, Bangladesh has already established a good position in the international arena, which has undoubtedly added another dimension to the country's economic progress by increasing employment and achieving ICT prosperity.

But fear is that pace at which world is advancing in development of information and communication technology, Bangladesh's progress in this regard is quite slow compared to other countries in the world and even many neighboring countries. In the evaluation of various international organizations, Bangladesh is lagging far behind all other countries in Southeast Asia except Pakistan by 2019. Inadequate ICT infrastructure, lack of advanced training and lake of adequate government support for providing capital did not lead to development of international standard



Comparative position of Bangladesh and neighboring countries in ICT:

Strategies for Economic Development of Bangladesh



IT institutions in the country, type and quality of IT products and services produced by domestic companies lag behind other countries, not having enough skilled manpower in this sector due to Lack of quality training and inadequate government allocation for technology development is one of the reasons for slowdown in the country's ICT sector.

Figure-5.7(22): According to survey of various international organizations, comparative position of Bangladesh and neighboring countries in different branches of information and communication technology at a glance by 2019:

Global Index	India	Myan mar	Thai land	Vietn am	Sri Lanka	Bhutan	Bangla desh	Pakis tan
ICT Development Index 2017	134	1	78	108	117	121	147	148
E-govt. dev. Index 2020	100	146	57	86	85	103	119	153
Human Dev. Index 2019	129	145	77	118	71	134	135	152
Global Service Location Index 2019	1	-	7	5	25	-	32	37
ICT Service Export Ranking 2019	1	85	61	-	46	171	58	45
population using Internet by 2017 (%)	34.45	30.68	-	58.14	34.11	48.11	15.0	15.51

Source: World Bank, A.T Kearney and Other Sources.

I) Recommendations for ICT Sector Development:



In the Current World Context in the light of experience of ICT rich countries, by establishing Bangladesh as a modern ICT rich country through utilizing information and communication technology, a unique opportunity is now at the doorstep of Bangladesh to accelerate overall economic progress of the country by creating new jobs and increasing exports of ICT products and services. As a country with an emerging economy, Bangladesh is determined to take advantage of this opportunity. Future of information and communication technology in this country is undoubtedly promising due to many reasons, such as-large number of



Recommendations for ICT Sector Development:

Strategies for Economic Development of Bangladesh



youth force, cheap labor, favorable working environment, increasing internal market size and geographical and regional advantages. All that is needed is a proper government initiative and a far-sighted plan to harness these immense potentials. Needless to say that present government is sincere enough to build a ICT reach country and has made significant progress in development of ICT infrastructure, egovernment, human resource development and investment in this sector, now only challenge of moving fast ahead. But, matter of concern is that as various international organizations, pace at which neighboring countries are advancing in development of ICT, progress of Bangladesh in that case is much slower, which is pushing the country's position back in the international arena.

In order to make ongoing activities of the government more dynamic and up-todate in implementing the challenge of establishing Bangladesh as a modern ICT rich country, following recommendations have been presented based on research and advice of various international organizations and my personal experiences for rapid development of the country's ICT sector:

- Ensuring development of ICT infrastructure in the country in the light of ICT rich countries.
- 2. Building a nationwide high speed internet network as well as reducing cost of connection and halving cost at village and upazila level to make internet access accessible to people at all levels of the country.
- 3. In order to build a skilled workforce in ICT sector, a quality ICT training system has to set up in every district and upazila at both government and private levels, besides strengthening training of trainees in English language and provide full support to trained persons to engage in trained work through training providing institutions.
- 4. To increase use and application of information and communication technology at public and private levels as well as to make use of ICT compulsory in all spheres of providing government services.
- 5. Ensuring equal opportunities and capital for trainees to be involved in ICT business at district, city and upazila level.
- 6. To make ICT education compulsory from class VIII in education curriculum as well as to make ICT training compulsory at school and college level.
- 7. In order to build high quality IT professionals of international standard in the country, a joint venture with ICT rich countries for arranging international standard training system for IT subject graduates and post graduates as well as to provide adequate facilities and capital and other necessary cooperation to the trainees to engage them in trained work.
- 8. To increase Adequate workflow and rapid growth of business and trade in ICT sector, further expand cash incentive system to increase export of ICT products and services along with tax and VAT exemption and duty drawback facility to attract domestic and foreign investment in ICT sector.
- 9. To setting up adequate number of IT Village / Software Technology Parks and ICT Incubators for creating a conducive environment for ICT business in the country and to attract investment.
- 10. Ensuring data security by building international standard data servers / data archives in the country.
- 11. Making PayPal easy and attractive to easily bring money to the country earned through freelancing.





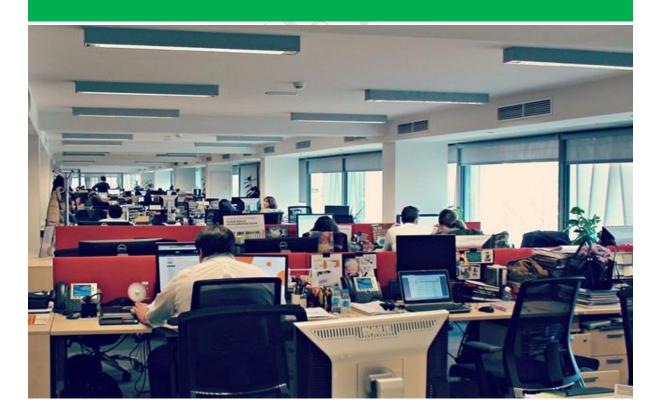
- 12. To increase research activities in ICT sector in the universities for rapid development of information and communication technology in the country and to ensure adequate allocation in the national budget this purpose.
- 13. Entrepreneur Development Training: In order to create entrepreneurial groups in ICT sector, standardized "Entrepreneur Development Training" to be launched at government and private levels across the country and to provide full assistance to trained persons for engaging in trained business / self-employment by providing technical assistance, bank loan and other necessary advice by the training organization.
- 14. Adequate increase of government facilities and cooperation in dealing with risks and uncertainties: Making compulsory production of quality products and services in ICT sector to survive in the competitive market at home and abroad as well as cash incentives on exports for all products and services beside providing tax and VAT benefits for a minimum of 10 years will reduce risk of investment as well as increase investment in this sector.
- 15. Mandating attainment of international certification for all export oriented IT/ITES industries: In order to ensure production of international quality products and services in export oriented IT/ITES Organizations, making it mandatory to obtain international certification for all export oriented IT/ITES companies as well as to take necessary government initiatives to facilitate the attainment of international certification.
- 16. Elimination of capital inadequacy at individual level: Due to limited savings of people in this low-income country, it is always difficult to take the risk of investing large amount of capital in individual business. As a result, lack of capital in both establishment of new industries and management of running industries is one of the major problems in industrial sector of this country, which has been working as one of the major obstacles in expansion of industry in the country (especially in development of small and cottage industries) for ages. It is very important to ensure provision of short and long term capital on easy terms for rapid expansion of ICT industry in the country.
- 17. Reducing long formulation of investment and business start-up process: In order to accelerate expansion of industrial sector in the country, it is very important to ensure transparent and accountable one-stop service in every aspect of investment and business start-up related to various government clearances, decision making, allotment of industrial plots, water, electricity and gas connections, etc., currently which is completely absent due to bureaucratic complexity. It can be said for sure that practical initiatives to solve this problem will remove many old problems in the field of expansion of industry and trade in the country as well as there will be sufficient dynamism in this regard.





Chapter: 5.8

Modernization and Expansion of Service Sector.







Modernization and Expansion of Service Sector.

Topics Covered in the Chapter

- A) Rising of service sector globally.
- B) Service sector of Bangladesh.
 - 1. Scope of the country's service sector.
 - 2. Size and expansion of service sector.
 - 3. Contribution of service sector to GDP.
 - 4. Share of service-sub-sectors in service sector.
 - 5. Bangladesh's position in service sector in South Asia.
- C) Employment in three main sectors of the Country.
- D) Service sector participation In international trade.
 - 1. Imports and exports in service sector.
 - 2. Service trade compared to GDP.
- E) FDI flow in service sector.
- F) Recommendations for expansion of service sector.





Rising of service

sector globally:

Strategies for Economic Development of Bangladesh



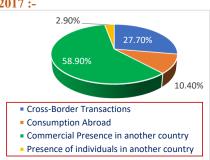
A) Rising of service sector globally:

According to World Trade Organization, "In recent times, service sector (micro, small and medium) has become the backbone in countries all over the world and has established itself as one of the most attractive ingredients of international business. Developed countries in particular are moving faster in exporting services than goods and in many cases developing countries have surpassed developed countries in this regard. As a result, growth of service sector in the world trade is growing much faster than export of goods. According to WTO Report 2019, developing countries' participation in international services exports has increased by more than 10% since 2005 and developing countries accounted for 25% of total exports and 34.4% of total imports in service trade in 2017. During period of 2005-2016, average annual growth rate of service sector in international trade was 5.4%, but in case of merchandise trade, growth rate was 4.6%. In 2018, imports and exports of world services trade amounted to US\$ 5,484 billion and US\$ 5,771 billion respectively, which was about 24.58% of total international trade conducted in that year.

Participation of service sector in the economies of different countries is gradually getting stronger through expansion of the scope of service sector activities at domestic and international level taking advantage of technology. Over the past few decades, unimaginable progress has been made in the global service sector as it is highly effective in the overall economic development of the country by contributing a lot to the development activities of the country, increase export earnings through export of services and creation of employment etc. According to United Nations Conference on Trade and Development (UNCTAD) Survey 2016, service sector contributes one third of total production and 44% of total employment worldwide and according to WTO Report 2019, total service trade volume in the world stood at US\$13.3 trillion in 2017.

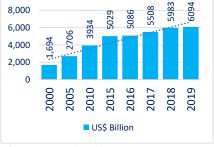
Technology has made the service sector successful in business and has opened new horizons at national and international levels by rapidly expanding the service sector in global trade. As of 2017, service export in world trade in various ways and increase of service export worldwide is highlighted below:

Figure-5.8 (1): According to Mood of Supply, rate of participation of global service sector in international trade in 2017:-



Source: WTO Report, 2019

Figure-5.8 (2): Scenario of growth of global service export market during period of 2000-2019 (Billion US\$):-



Source: World Bank Data

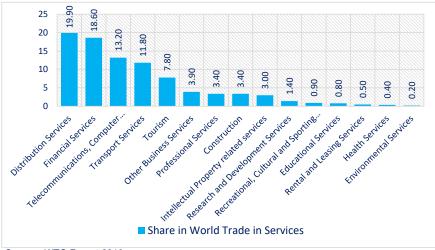
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Bangladesh, a country of immense potentials





Figure-5.8 (3): Rate of participation of service sub-sectors in world trade in 2017:



Source: WTO Report 2019

B) Service sector of Bangladesh:



1) Scope of the country's service sector:

Bangladesh's economy is basically divided into three categories - agriculture, industry and service sector. Service sector covers a large part of the country's economy. Although contribution of service sector to GDP was below 50% on average before 2000, growth and development of private sector in the country after 2000 has led to a significant increase in the size and expansion of service sector, which has been playing an important role in increasing trade and employment in the country. As a result, service sector accounted for 51.26% of GDP by 2019 and about 40% of total employment during this period was in service sector. Needless to say, service sector is of immense importance for rapid development of the economy of a developing country like Bangladesh, as service sector plays a key role



Service sector of Bangladesh:

Strategies for Economic Development of Bangladesh



in expansion of export trade, increase in employment and development of small and medium enterprises. Scenario of participation of three major sectors (agriculture, industry and services) in GDP over the last three decades has been highlighted through Figure-5.8 (4).

Service sector includes construction, wholesale and retail, hotels and restaurants, transport and communications, banking, real estate, education, health, entertainment, media, social work, public administration and defense, electricity, gas and Water supply etc.

Figure-5.8 (4): Scenario of contribution of the three major sectors to GDP during period of 1995-96 to 2018-19:-

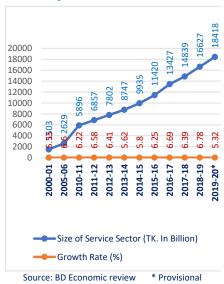


Source: BD Economic Review 2019

2) Size and expansion of service sector:

Bangladesh's economy is divided into three main sectors - agriculture, industry and services, over the past few decades service sector has been contributing more Considering half of GDP. importance of service sector in overall economic development of the country, service sector is expanding rapidly in countries around the world, especially in developing countries. Although late, Bangladesh has made efforts to develop the service sector and has made great strides in expanding service sector and exporting services in recent years, although it is insufficient compared to other developing countries in South Asia. By the FY 2019-20, size of the country's service sector stood at Tk 18,418 billion, up from Tk. 1,503 billion in FY 2000-01 and annual growth in the services sector has fluctuated between 5.50% and 6.50% over the past two decades [Figure-5.8 (5)].

Figure-5.8 (5): Scenario of size and expansion of service sector during financial year 2000-01 to 2019-20:-



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Size and expansion of service sector:





Contribution of

service sector to

GDP:

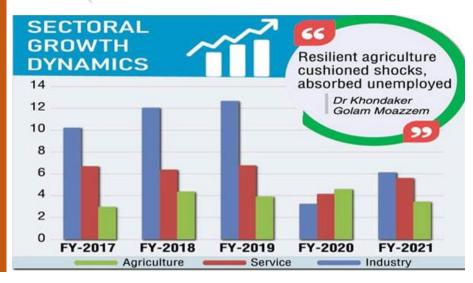
3) Contribution of service sector to GDP:

Although participation of service sector in the country's GDP has not decreased in the last three decades, it has not increased much also. Service sector participation in GDP in the fiscal year 1995-96 was 49.45%, which has stood at 51.28% in fiscal year 2018-19 and while there has been little progress in one or two of service sub-sectors during this period, other service sub-sectors more or less have lagged behind. In this regard, most lagging behind is "Community, Social and Personal Services", while share in GDP in 2005-06 of this sector was 12.37 percent, but in the fiscal year 2018-19 it has come down to 8.16 percent. Real estate and healthcare are in second and third place respectively in retreat. Share of real estate services in GDP was 12.37 percent in the FY 2005-6, which stood at 6.13 percent in FY 2018-19 and while contribution of health sector in GDP was 2.03 percent in 2005-06 financial year, it stood at 1.85 percent in 2018-19 financial year.

Figure-5.8 (7): Rate of participation of service sub-sectors in GDP during period from 2005-6 to 2018-19:-

Comice Cub costons			Financ	ial Year		
Service Sub-sectors	2005-6	2010-11	2015-16	2016-17	2017-18	2018-19
Wholesale & Retail	13.61	14.02	13.99	14.01	13.95	13.88
Transport & Communication	10.16	11.23	11.31	11.26	11.13	10.98
Community, Social and Personal	12.37	10.72	9.18	8.86	8.52	8.16
Real Estate Services	8.29	7.41	6.64	6.49	6.31	6.13
Public Administration and	3.08	3.33	3.63	3.70	3.71	3.65
Financial & Insurance Services	3.11	2.99	3.39	3.45	3.45	3.45
Education	2.18	2.21	2.39	2.48	2.46	2.42
Health and Social Works	2.03	1.95	1.84	1.85	1.83	1.85
Hotel & Restaurant	0.76	0.75	0.75	0.75	0.75	0.74
Total Service Sector Share in	55.59	54.61	53.12	52.85	52.11	51.26
Share of Agriculture Sector	19.01	18.01	15.35	14.74	14.23	13.61
Share of Industrial Sector	25.40	27.38	31.54	32.42	33.66	35.14
Total Share in GDP (%)	100	100	100	100	100	100

Source : MOF





Share of service

sub-sectors in

service sector :

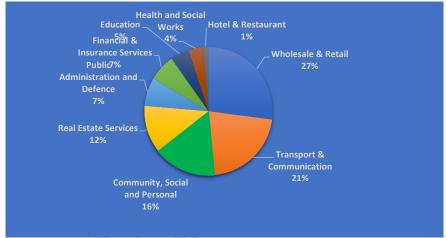
Strategies for Economic Development of Bangladesh



4) Share of service-sub-sectors in service sector:

According to internal policy, service sector of the country is divided into a number of sub-sectors, of which the largest among service sub-sectors in terms of size is "Wholesale and Retail 27%", in second, third and fourth place in this case are Transport and Communications 21%, Community, Social and Personal Services 16% and Real Estate 12%.

Figure-5.8 (7): in service sector, share of service sub-sectors in GDP in the financial year 2018-19:-



Source : BD Economic Review 2019

5) Bangladesh's position in service sector in South Asia:

Over the past decade, most of developing countries have seen a significant increase in the size of GDP as well as a significant expansion in service sector. As a result, participation of service sector in domestic activities of those countries has increased tremendously and export of services has increased at a significant rate, although in case of Bangladesh, It has completely deviated. During 2010-2018, size of Bangladesh's GDP has increased by 137.64%, but, share of service sector in GDP during this period, has decreased instead of increased. However, beside increase in the size of GDP during this period, participation of service sector in GDP has increased by 4.1% in India, 2.7% in Indonesia, 7.4% in Thailand, 4.2% in Cambodia, 4.5% in Malaysia, 4.2% in Vietnam, 6.5% in Myanmar and in Bangladesh decreased by 0.5% instead of growth [Figure-5.8 (8)].

Bangladesh's position in service sector in South Asia:

Figure-5.8 (8): Scenario of comparative expansion in GDP size and services sector in Bangladesh and some developing countries of South Asia during period of 2010-2018: -

	GDP	in Billion	USD	Service,	Value add	ed % of GDP			
Country	2010	2018	Increased %	2010	2018	Increased %			
India	1,676.0	2,719.	62.23	45.0	49.1	4.1			
Indonesia	755.1	1,042.	38.02	40.7	43.4	2.7			
Thailand	341.1	505.0	48.05	49.5	56.9	7.4			
Combodia	286.0	331.0	15.73	53.5	57.7	4.2			

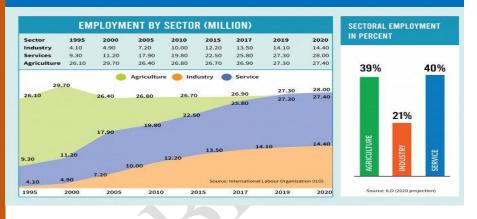




Malaysia	255.0	359.0	40.78	48.5	53.0	4.5
Vietnam	115.9	245.2	111.56	36.9	41.1	4.2
Myanmar	49.5	71.2	43.84	36.7	43.2	6.5
Bangladesh	115.3	274.0	137.64	53.5	53.0	-0.5

Source: World Bank Data

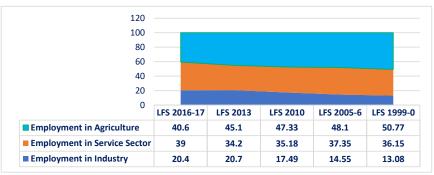
C) Employment in three main sectors of the Country:



1) Overall Employment:

Due to rotation of time and demand, economic transformation is being taken place in countries all over the world and Bangladesh is not out of this rule. As a result of increase in the size of industrial and service sector in the country since 2000, number of workers in these two sectors has increased at a significant rate by declining workers from agricultural sector. According to LFS: 1999-2000, 13.08% of total employment in the country were in industrial sector, 36.15% in service sector and 50.77% in agricultural sector. As of latest LFS: 2016-17, number of working population in the country are 60.82 million, of which 24.69 million (40.6%) are working in agriculture sector, 12.42 million (20.4%) are working in industrial sector and 23.71 million (39%) are working in services sector.

Figure-5.8 (9): Scenario of employment in three major sectors of the country during period of 2000-2017:-



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Source: MOF

Employment in three main sectors of the Country:





Employment in service sector:

2) Employment in service sector:

Number of workers working in the service sector was 35% of total employment during LFS-2010, 34% during LFS-2013 and 39% during LFS :2016-17. Among service sub-sectors, "Wholesale and Retail Trade" is at the forefront of employment, which was accounted for 36.4% of total employment during 2016-17. In terms of employment, "Transportation and Storage" is in second position with 22.05% and education is in the third position with 9.23% employment.

Figure-5.8 (10): Number of workers working in service sub-sectors during LFS: 2016-17 and scenario of increase and decrease in employment in service sector during 2010-2018:-

Major Services	LFS: 2	016-17	Share in Total Employment (%)			
	No. of Employm ent '000'	Share in Service Sector (%)	LFS: 2016	LFS: 2013	LFS 2010	
Wholesale and retail trade	8,638	36.4	14.2	13.0	13.97	
Transportation and storage	5,231	22.05	8.6	6.4	7.36	
Accommodation and food service	1,156	4.87	1.9	1.5	1.54	
Information and communication	182	.77	0.3	0.2	0.10	
Financial and insurance activities	426	1.80	0.7	0.8	0.67	
Real estate activities	122	.51	0.2	0.1	0.06	
Professional, scientific and technical	243	1.02	0.4	0.6	0.21	
Administrative and support service	365	1.54	0.6	0.7	0.90	
Public administration and defense	973	4.10	1.6	1.3	1.00	
Education	2,190	9.23	3.6	3.2	2.38	
Human health and social work	487	2.05	0.8	1.3	0.80	
Arts, entertainment and recreation	61	.26	0.1	0.1	0.12	
Other service activities	2,433	10.26	4.0	2.8	4.02	
Activities of households as employer	1,217	5.13	2.0	2.0	1.87	
Employment in Service Sector:	23,724	100	39.0	34.0	35.0	
Total Employment :	60,828	100	100	100	100	

Source: BBS LFS 2010, 2013 and 2016

D) Service sector participation In international trade:

1) Imports and exports in service sector:

As service sector covers a large part of the economy of Bangladesh, import and export of services has a major impact on the overall trade of the country. Development of service sector is one of the major contributors to the economic progress of the country, which enhances competitiveness of domestic institutions as well as enhances skills, women's participation in business and expands scope of integration into areas of economic activities. Increasing export earnings by relying solely on commodity exports is virtually impossible, at least in this age of technology. That's why, developed and developing countries have made service sector the focal point of the country's economic progress by expanding the service sector domestically and internationally through use of technology.



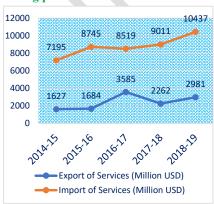


Imports and exports in service sector : Lion's share of development activities belong to the service sector. Due to insufficient expansion and development in service sector of the country, most of development work has to be done either by own money or by importing services with borrowed money. In FY 2018-19, service imports were US\$ 10,437million as against service export of US\$ 2,981 million, which is 250.34% more than service exports. During period from FY 2014-15 to 2018-19, import of services in the country has increased by an average of US\$ 648.40 million per annum, whereas, export of services has increased by an average of US\$ 270.80 million per annum during this period [Figure-5.8(11)].

Many South Asian countries, such as India, Thailand, Cambodia and Myanmar, have huge surpluses on service exports. Countries which have Imports slightly higher than services exports, even in that case also Bangladesh is in a very weak position, for example, in the fiscal year 2018-19, import is more than export of services is 29.47% in S. Korea, 10% in Malaysia, 29.63% in Indonesia, 20% in Vietnam and in case of Bangladesh it is 250.34% [Figure-5.8(12)].

In order to continue development activities in the country, either we have to expand our service sector, or situation will have to be dealt with by importing services at a cost of billions of dollars, which cannot be a positive aspect for development of a country. Therefore, It is very realistic and urgent to increase participation of service sector in the overall economic development of the country by increasing export of services to reduce service imports by increasing our involvement in development activities of the country and to ensure rapid expansion and development of service sector with a view to rapid expansion and diversification of exports.

Figure-5.8 (11): Scenario of service import and export of Bangladesh during period of 2014-2018:-



Source: Nordeatrade.com

Figure-5.8 (12): Scenario of service import and export of Bangladesh and some other South Asian countries in 2018

	Trade in	Commercial S	Services in 2018
Country	Export (Billion USD)	Import (Billion USD)	Import Higher / Lower than Export %
India	204	175	+ 14.22
S. Korea	95	123	- 29.47
Thailand	84	55	+ 34.52
Malaysia	40	44	10.00
Indonesia	27	35	- 29.63
Vietnam	15	18	- 20.00
Combodia	5.25	2.98	+ 43.24
Myanmar	5.08	3.87	+ 23.82
Bangladesh	2.98	10.44	- 250.34

Source: World Trade Statistics 2019

2) Service trade compared to GDP:

As a result of unimaginable rise of global service sector over the past few decades, as size and volume of service sector in the international arena has increased, Similarly, trend of enriching economy of the country by increasing

Figure-5.8 (13): Scenario of exports of goods and services of Bangladesh and some least developed countries in proportion to GDP in 2018:-

Export Ration to GDP



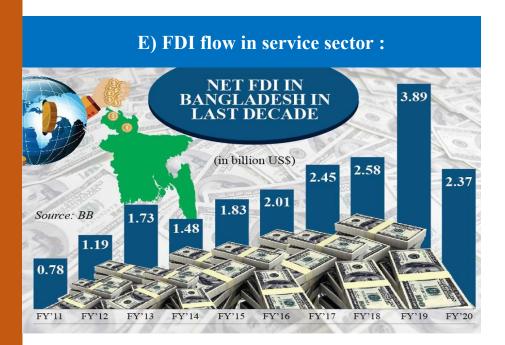


Service trade compared to GDP:

services by utilizing excellence of technology in different countries has also increased tremendously. To date, Bangladesh lags far behind the developing countries in the world and in South Asia, even in the least developed countries in export of services. In 2018, Bangladesh exported services at 1% of GDP, Myanmar 7.4%, Cambodia 21.4%, Ethiopia 5.6%, Nepal 6.2%, Afghanistan 3.8% and Bhutan 7% [Figure-5.8 (13)].

Country	GDP in 2018 (Million USD)	Good s %	Service %	Total % to GDP
Bangladesh	287,630	13.5	1.0	14.5
Myanmar	68,559	17.1	7.4	24.5
Combodia	24,529	52.9	21.4	74.3
Ethiopia	80,279	3.4	5.6	9.0
Nepal	28,812	4.0	6.2	10.2
Afganistan	19,585	18.6	3.8	22.4
Bhutan	2,627	22.7	7.0	29.7

Source: World Trade Statistics 2019



FDI flow in service sector:

Service sector is well ahead of other sectors in terms of attracting foreign investment due to its potentials. In the last decade, about one third of foreign investment in the country has come in service sector. During fiscal year 2010-11 to 2018-19, total foreign investment in various sectors in the country was US\$ 17,946.53 million, averaging US\$ 1,994.06 million annually, of which US\$ 6,646.59 million was in service sector, averaging 738.51 million (37.04%) per year Figure-5.8 (14).

Figure-5.8 (14): Scenario of FDI in Service sector during period from 2010-11 to 2018-19:-

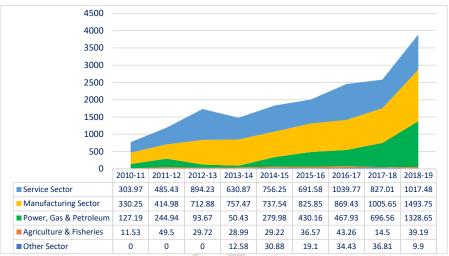


Source: FDI Survey 2019 by BB





Figure-5.8 (15): Scenario of Foreign Direct Investment (FDI) in the country by sector in the last decade:-



Source: FDI Survey 2019 by BB

F) Recommendations for expansion of service sector:

Recommendations for expansion and development of service sector: Service sector has become a major player in the global economy over the past few decades. According to UNCTAD Survey 2016, service sector contributes one-third of the world's gross domestic product and 44% of the world's total employment and according to WTO Report 2019, worldwide service trade in 2017 stood at US\$ 13.3 trillion, increasing steadily every year. So, it is now clear that service sector will lead the world economy in future. It is matter of hope that expansion and upliftment of service sector in Bangladesh has been continuing in the post-2000 period in line with global trend. Contribution of service sector to GDP during fiscal year 2005-6 to 2018-19 is above 53% and growth in service sector is above 6% on average during this period and growth in services sector stands at 6.78% by FY 2018-19 [Figure-5.8(5)].





In order to reach the list of high-income countries by 2041, expansion of service sector is crucial to improve quality of life and increase participation of the country in development activities by increasing employment in proportion to growth of trade and employment. To this end, equal expansion and development of all service subsectors is an important issue. According to LFS: 2016-17, 39% of total employment in the country at that time was in service sector, of which 36.4% in wholesale and retail trade sector, 22.05% in transportation, 9.23% in education and 32.32% in all other sub-sectors [Figure-5.8(10)]. In other words, despite expansion of certain subsectors in service sector in the last few years, expansion and development of most of service sub-sectors has not been so much, which is not a good sign for expansion of service sector in the country.

Therefore, to ensure adequate expansion and quality development of service sector in the country, equal expansion and development of all service sub-sectors is essential, which contains - construction, wholesale and retail business, hotels and restaurants, transport and communications, banks, real estate, education, health, Media, social work, public administration and defense, electricity, gas and water supply, etc. In order to ensure equal expansion and development of all service sub-sectors, special emphasis needs to be given in the areas: -

- 1. Adoption and implementation of effective policies for expansion and development of service sector.
- 2. Overall infrastructure development.
- 3. To increase facilities in the private sector for expansion of service sector .
- 4. Adequate increase in credit flow in service sector.
- 5. Increase use of modern technology to increase quality of services.
- 6. To strengthen training system in this sector.
- Increase supply of trained manpower in service sector by increasing rate of technical education.
- 8. Increasing research activities in expansion and development of service sector.
- To exchange knowledge and technology with other countries and work in joint ventures for rapid development of health, education, tourism and IT sectors
- 10. To take realistic initiatives with adequate facilities to attract domestic / foreign investment in service sector.
- 11. To create a safe investment and doing business environment in the country to make it easier to start a business.
- 12. Ensuring resolution of bureaucratic complexities, suppression of corruption and establishment of rule of law.

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Chapter: 5.9

Expansion and Development of Export Trade.







Expansion and Development of Export Trade.

Topics Covered in the Chapter

- A) Extension and development of export trade.
- B) Bangladesh's capabilities in developing trade.
 - 1. Bangladesh's progress in facilitating business.
 - 2. Bangladesh's position in various indicators of global trade capabilities.
 - 3. Bangladesh's position in logistical support capabilities.
- C) Export trade of Bangladesh.
 - 1. Gradual Development of export trade in Bangladesh.
 - 2. Overall picture of the country's export trade.
 - 3. Scope of export market.
 - 4. Annual export growth.
 - 5. Bangladesh's share in the market of export partner countries.
- D) Sectoral Export and Export in proportion to GDP.
 - 1. Sector wise export.
 - 2. Sectoral share in total exports.
 - 3. Annual exports in proportion to GDP.
 - 4. Bangladesh's position in terms of annual exports and Exportsto GDP ratio.
 - 5. Bangladesh's share in Global exports.
- E) Import Trade:
 - 1. Import trade of Bangladesh.
 - 2. Scenario of Sector based imports.
 - 3. Imports in proportion to GDP.
 - 4. Annual import growth.
- F) Trade Balance
- G) Ongoing trade under international cooperation.
 - 1. Trade with European countries.
 - Trade with USA.
- H) Ongoing trade under regional cooperation.
 - 1.0 APTA: Asia Pacific Trading Arrangements.
 - 1.a Geographical and economic assessment of APTA member countries.
 - 1.b Inter-trade between APTA member countries.
 - 2.0 SAFTA (South Asian Free Trade Area).
 - 3.0 BIMSTEC (Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation).
 - 3.a BIMSTEC member countries at a glance.
 - 3.b BIMSTEC Inter-trade scenario.
- I) Overall trade of Bangladesh under regional and international Agreements.
- J) Problems and Obstacles exist in Export Sector.
- K) Recommendations for development of export sector.





A) Extension and development of export trade:

Export sector plays a major role in the economic development of a country. Abundance of export-oriented industries in the country on the one hand creates adequate employment, on the other hand builds a strong position in international arena through strengthens country's economy by increasing exports, which is essential especially in the age of current open competition. For this, first of all, there is a need to expand export-oriented industry and increase production capacity, employ skilled manpower in this sector and use modern technology to produce international quality products, diversify export sector and expansion of export market globally.

Extension and development of export trade:

An overall analysis of the country's export sector shows that export earnings, led by readymade garments, have steadily increased since 1990, rising from USD16,205 million in FY 2009-10 to USD40,535 in FY 2018-19. During this period, although participation of readymade garments in total exports gradually increased but it did not happen in case of other products, which is a serious risk to building a sustainable export sector in the country. On the other hand, due to not being expanded and production in industrial sector has not increased in proportion to growing domestic demand in the past, volume of imports has been gradually increasing to meet the domestic demand. As a result, country's trade deficit is growing abnormally every year, reaching USD18,258 million in FY17-18, which is 20.14% of total foreign trade performed in that financial year.

In order to make Bangladesh a high-income country by 2041, government has already formulated an export policy 2018-21 to develop export sector, with an export target of USD60.00 billion by 2021, of which 50 billion for readymade garments export and 10 billion for other products.

B) Bangladesh's capabilities in developing trade:

1) Bangladesh's progress in facilitating business:

Bangladesh's progress in terms of trade development potentials is not satisfactory at all. Bangladesh still lags far behind most countries and even in South Asia, in terms of starting a business quickly and easily, infrastructure development and logistics support capabilities. Expansion of trade in the country depends on easy management of business and favorable investment environment. In terms of business facilitation, Bangladesh ranked 170th out of 190 countries in 2014, and gradually deteriorated further in the following years, reaching 168th place by 2020 [Figure-5.9 (1)].



Bangladesh's progress in facilitating

business:

Strategies for Economic Development of Bangladesh



Issues related to business facilitation during 2014-2020, such as starting a business, permitting construction work, electricity connection, property registration, getting loan, providing protection to minority investors, paying taxes, border trade, contract enforcement and bankruptcy resolution, only 3 of these 10 important indicators (Serial-2, 3 and 5) have made slight progress, all remaining indices have lagged behind, which is one of the major obstacles to the expansion of trade and investment in the country [Figure-5.9 (2)].

Figure-5.9 (1): Bangladesh's position in the list of 190 countries in the "Ease of Doing Business Index "during period of 2014-2020:-



Source : Doing Business Ranking by W.B, 2020 Note : Higher Score indicates lower position.

Figure-5.9 (2): Scenario of Bangladesh's continuity in 10 important areas related to business facilitation during period of 2014-2020:-

					YEA	R		
S.L	Index	2014	2015	2016	2017	2018	2019	2020
1	Starting Business	111	115	115	122	131	138	131
2	Dealing with Construction	142	144	138	138	130	138	135
3	Getting Electricity Connection	189	188	187	187	185	179	176
4	Registering Property	183	184	186	185	185	183	184
5	Getting Credit	125	131	152	157	159	161	119
6	Protecting Minority Investors	43	43	69	70	76	89	72
7	Paying Taxes	78	83	148	151	152	151	151
8	Trading Across Borders	140	140	173	173	173	176	176
9	Enforcing Contracts	188	188	189	189	189	189	189
10	Resolving Insolvency	146	147	153	151	152	153	154

Source: Doing Business Ranking by W.B, 2020

Note: Higher Score indicates lower position.

First Edition: August, 2022

2) Bangladesh's position in various indicators of global trade capabilities:



Among many indicators of trade viability - dynamic trade, infrastructure and other indicators related to trade development are notable. By 2018, Bangladesh ranks 120th out of 140 countries in terms of trade efficiency, 109th in terms of infrastructure, 36th in terms of domestic market, 79th in terms of internal credit flow in private sector, 102nd in terms of innovation, 77th in terms of research and





development, 109th in terms of commercialization, 60th in terms of contribution of private sector and 115th in terms of easy labor market.

Figure-5.9 (3): As per Global Enabling Trade Report 2018, Bangladesh's position among 140 countries in terms of trade capabilities:-

SL	Index	Rank	Score out of 100
1	Business Dynamism	120	43.6
	A. Trade Openness	125	50.9
	B. Trade tariff (%)	128	11.91
	C. Complexity of Tariff	33	92.0
	D. Border Clearance Efficiency	115	32.5
2	Infrastructure	109	53.4
	A. Transport Infrastructure	99	37.8
	B. Road Infrastructure	128	34.8
	C. Railroad Infrastructure	42	42.2
	D. Airport Infrastructure	78	48.5
	E. Sea Port Infrastructure	86	25.8
	F. Efficiency of Port Service	93	40.9
	G. Utility Infrastructure	109	69.0
3	Other Indicators :		
	A. Domestic market Size	36	66.5
	B. Domestic Credit to Private Sector (As % of GDP)	79	46.8
-	C. Entrepreneurial Culture	98	43.6
	D. Innovation Capacity	102	30.6
	E. Research and Development	77	23.2
	F. Commercialization	109	41.2
	G. Private Sector Performance	60	50.5
	H. Labour Market flexibility	115	50.9

Source : GET Report, 2018

3) Bangladesh's position in logistical support capabilities :



Logistics support for facilitating international trade, such as customs, infrastructure, shipping, tracking and tracing, and lead time are notable. Bangladesh is one of the developing countries lagging behind in international trade due to inadequate logistical support. In terms of logistics support skills and adequacy, Bangladesh still lags far behind in the world even the potential countries

First Edition : August, 2022

Bangladesh's position in various indicators of global trade potentials:



Bangladesh's position in logistical support

capability:

Strategies for Economic Development of Bangladesh



in South Asia. In the 2019 Global Rankings in Logistics Support Capacity (LPI Ranking 2019), Bangladesh is ranked 100th out of 160 countries, Sri Lanka 94th, Maldives 86th, Indonesia 46th, India 44th, Malaysia 41st, Thailand 32nd, China 26th and South Korea is in 25th position.

Figure-5.9 (4): As per LPI Ranking 2019, position of Bangladesh and other potential countries in South Asia in terms of logistical support capacity:

Country	LPI Rank	LPI Score	Customs	Infrastr ucture	Int'l Shipment	Logistic Compe	Tracking &	Time liness
						tence	Tracing	
Hong Kong	12	3.92	3.81	3.97	3.77	3.93	3.92	4.14
S. Korea	25	3.61	3.40	3.73	3.33	3.59	3.75	3.92
Thailand	32	3.41	3.14	3.14	3.46	3.41	3.47	3.81
Vietnam	39	3.27	2.95	3.01	3.16	3.40	3.45	3.67
Malaysia	41	3.22	2.90	3.15	3.35	3.30	3.15	3.46
India	44	3.18	2.96	2.91	3.21	3.13	3.32	3.50
Indonesia	46	3.15	2.67	2.89	3.23	3.10	3.30	3.67
Bangladesh	100	2.58	2.30	2.39	2.56	2.49	2.79	2.92
Pakistan	122	2.42	2.12	2.20	2.63	2.59	2.27	2.66

Source: World Bank Report, 2018

Figure-5.9 (5): As per LPI Ranking 2019, position of Bangladesh and other countries of South Asia:



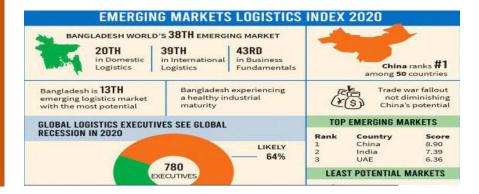
Source: World Bank Report, 2018

Note: Upper Ranking indicates lower position

Figure-5.9 (6): As per Infrastructure Ranking 2018, position of Bangladesh and other countries of South Asia:-

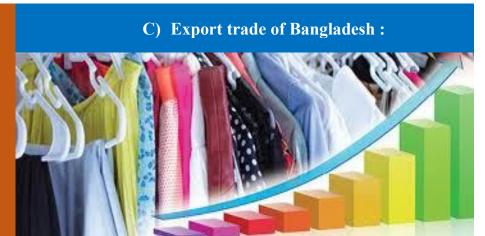


Source : Global Competitiveness Report, 2018 Note : Upper Ranking indicates lower position









Gradual Development

of export trade in

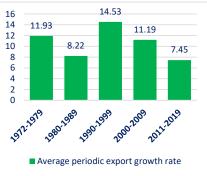
Bangladesh:

1) Gradual Development of export trade in Bangladesh:

Although Bangladesh entered the export trade after independence, size of the country's exports was very limited till 1990. Country's export sector began to turn around with development of ready-made garment industry after 1990 and since then, ready-made garments have been leading the country's export trade.

During period of 1972-73 to 1979-80, size of export trade was in between USD 348 to 750 million and export growth averaged 11.93% per annum in that period. During 1980-81 to 1989-90, size of export trade was in between USD 710 to 1,524 million with average annual growth of 8.22%. Size of export trade during 1990-91 to 1999-00 was in between USD 1,618 to 5,852 million with average annual growth of 14.53%, during 2000-01 to 2009-10 it was in between USD 6,467 to 16,205 million with average annual growth of 11.19% and during 2011-12 to 2018-19 size of export trade stood in between USD 24,302 to 40,535 million with average annual growth of 7.45%.

Figure-5.9 (7): Scenario of average export growth every 10 years during 1972-2018:-



Source : MOF

First Edition: August, 2022

2) Overall picture of the country's export trade :

In export sector of the country, priority sub-sectors are ready-made garments, ICT products, leather and leather products, agricultural and agro-related products, light engineering, pharmaceuticals, jute and jute products, plastic products, home textiles and furniture are notable. However, over the past two decades, country's export trade has become dependent on a single commodity, which is a serious risk to build sustainable economy of a country.



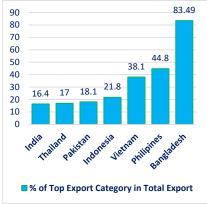
Overall picture of the country's export trade:

Range of export market:

Strategies for Economic Development of Bangladesh



Figure-5.9 (8): Comparative picture of Bangladesh and other South Asian countries in terms of abundance of single product in total exports during FY 2017-18:-



Source: USAID

Over the past decade (2009-2018), country's average annual exports amounted to USD 29.797 million with an average of 81% of total export value being garments, 14.5% manufactured goods and 4.5% of agricultural products. In terms of dependence on single product in total exports, for Bangladesh, this dependence is many times higher than in other emerging economies of South Asia. In 2017-18 financial year, share of single product in total exports of the country was 16.4% in India, 17% in Thailand, 18.1% in Pakistan, 21.8% in Indonesia. 38.1% in Vietnam, 44.8% in the Philippines 83.49% and Bangladesh [Figure-5.9 (8)].

3) Scope of export market:

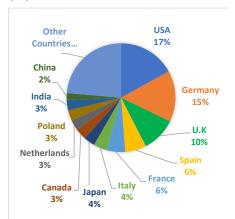
12 countries who are the major partners of Bangladesh's export trade are the United States, Germany, Britain, Spain, France, Italy, Japan, Canada, Netherlands, Poland, India and China. On an average, 75-80% of total annual exports are exported to these 12 countries and remaining 20-25% are exported to other countries. [Figure-5.9 (9)].

Figure-5.9 (10): Scenario of total Exports by Country in FY 2018-19:-

	•	
Country	Export Value (In Million USD)	% of Export
USA	6,876.29	16.96
Germany	6,173.16	15.23
U.K	4,169.31	10.28
Spain	2,554.82	6.30
France	2,217.56	5.47
Italy	1,643.12	4.05
Netherlands	1,278.79	3.15
Poland	1,273.09	3.15
Japan	1,365.74	3.37
Canada	1,339.80	3.30
India	1,248.05	3.07
China	831.20	2.05
Other Countries	9,564.07	23.62
Total :	40,535.00	100

Source: Ministry of Commerce

Figure-5.9 (9): Country based export (%) in FY 2017-18:-







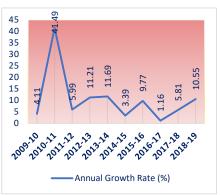


Annual export growth:

4) Annual export growth:

During last decade (2009-2018) average annual growth of export sector in the country was 10.52%, during this period highest export growth was 41.89% in FY 2010-11 and lowest growth was 1.16% in FY 2016-17. Annual export growth was 4.11% in FY 2009-10, 41.49% in FY 2010-11, 5.99% in FY 2011-12, 11.21% in FY 2012-13, 11.69% in FY 2013-14, 3.39% in FY 2014-15, 9.77% in FY 2015-16, 1.16% in FY 2016-17, 5.81% in FY 2017-18 and 10.55% in FY 2018-19 [Figure-5.9(11)].

Figure-5.9 (11): Scenario of the country's export growth during period from 2009-10 to 2018-19 FY:-



Source: Ministry of Finance

4) Bangladesh's share in the market of export partner countries:



Bangladesh's export market has been limited to certain countries for a long time and Bangladesh's participation in the markets of those countries is negligible. As a result, neither exports of primary and industrial products have been increased for a long time, nor export growth of Bangladeshi garments in the world market increased compared to competing countries. in 2018, combined imports of Bangladesh's 12 largest export partner countries accounted for USD 10,914 billion, combined imports of these 12 countries from Bangladesh in that year amounted to USD 30.97 billion, which is only .28% of their total imports.

So, as a first step in increasing the country's export earnings, it is important to focus on rapid expansion of export sector by increasing exports to existing export partner countries, as it is natural that current market expansion will be much easier than finding new destination. If current trend in exports continues, desired expansion of export sector of the country is impossible and large-scale development activities will be severely hampered if export earnings do not increase sufficiently, which will undoubtedly drive our big dreams of the future towards nightmares.

Following is a picture of Bangladesh's participation in the markets of export partner countries:-

Bangladesh's share in the market of export partner countries:





Figure-5.9 (12): In 2018, Bangladesh's exports to 12 major exporting countries as % of total imports of the countries concerned:-



Import in 2018 Country Total Import from As % of Bangladesh Total **Import** (Billion (Billion **Import** USD) USD) **USA** 2,614 6.88 .26 Germany 1,286 6.17 .48 UK 674 4.17 .62 2.55 .66 Spain 388 France 673 2.22 .33 Italy 501 1.64 .33 Japan 749 1.37 .18 Canada 469 1.34 .29 Netherlands 1.28 .20 646 **Poland** 267 1.27 .48 India 511 1.25 .24 China 2.136 .83 .04 Source: World Trade Statistics 2019

Figure-5.9 (13)]. In 2018,

imports from Bangladesh:-

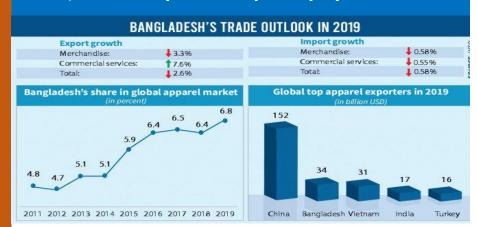
imports of Bangladesh's export

partner countries and share of

0.7	ESSE		0.62	0.66								
0.6		0.48								0.48		
0.5		0			m	m				0		
0.4	0.26				0.33	0.33		0.29			4	
0.3	0.						0.18		0.2		0.24	
0.2							0					4
0.1												0.04
0												
	USA	Germany	U.K	Spain	France	Italy	Japan	Canada	Netherlands	Poland	India	China
									Ne			
	= %	of 1	[otal	llm	nort	of 6	ach	Co	untr	v in	201	Q

Source: World Trade Statistical Review 2019

D) Sectoral Export and Export in proportion to GDP:



1) Sector wise export:

Bangladesh's export sector is mainly divided into three categories- primary products, manufactured goods and readymade garments.

- Primary Products: Raw jute, frozen shrimps and fish & agricultural products.
- Manufactured Goods: Jute Products, Leather and Leather Products, Home Textiles, Chemical Products, Engineering Products, ICT Products and other manufactured products.

First Edition: August, 2022

Ready-made garments: Oven and knit garments.

Sector wise export:







Over the past decade (2009-2018), country's average annual exports were amounted to USD 29,797 million, of which share of primary products averaged 4.50%, manufactured goods 14.50% and readymade garments 81%. During this period, average annual growth of the export sector was 10.52% per annum, highest export growth was 41.89% in FY 2010-11, lowest growth was 1.16% in FY 2016-17 and average annual GDP ratio was 17.54%.

Figure-5.9 (14): Sector-wise exports during period from 2009-10 to 2018-19, sectoral share in total

exports, annual export growth and export in proportion to GDP are highlighted below :-

				E	cports						
									-	Million USD)	
S.	Particulars	2009-10	2010- 11	2011- 12	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19
<u> </u>			- 11	12	13	14	15	10	17	10	19
Α	Primary Commo	ndity :									
	Timary Commit	Juity .									
Rav	v Jute	196	357	266	230	126	112	173	168	156	11:
Fro	zen & Live Fish	445	625	598	544	638	568	536	526	508	50
	icultural Products	243	334	403	536	615	586	596	553	674	90
	al Primary	884	1,316	1,267	1,310	1,379	1,266	1,305	1,247	1,338	1,52
	nmodity :										
As	% of Total Export	5.46	5.74	5.21	4.85	4.57	4.06	3.81	3.60	3.65	3.7
В	Manufactured 6	loods:									
	Goods	540	758	701	801	698	757	747	794	870	70
	ther & Leather	430	651	766	981	1,124	1,31	1,161	1,234	1,086	1,02
Goods											
Home Textiles		539	789	906	792	793	804	753	799	879	85
Chemical Products		103	105	103	93	93	112	124	140	151	20
Engineering Products		311	310	375	367	367	447	510	689	356	34
Other Products		902	1,085	1,095	1,167	1,241	1,200	1,563	1,603	1,373	1,75
Total Mfg. Goods :		2,825	3,698	3,946 16,24	4,201	4,316	4,451	4,858	5,259	4,715	4,88
AS	% of Total Export	17.43	16.13	16.24	15.54	14.30	14.26	14.18	15.17	12.86	12.0
С	Readymade Ga	rmonte :									
	Readymade Ga	illelits .									
Woven		6,013	8,432	9,603	11,040	12,442	13,065	14,739	14,393	15,426	17,24
Knitwears		6,483	9,482	9,486	10,476	12,442	12,427	13,355	13,757	15,189	16,88
Total RMG Export :		12,496	17,914	19.089	21,516	24,492	25,492	28,094	28,150	30,615	34,13
As % of Total Export		77.11	78.13	78.55	79.61	81.13	81.68	82.00	80.07	83.49	84.2
	7. T.										
Total Export (A+B+C):		16,205	22,928	24,302	27,027	30,187	31,209	34,257	34,656	36,668	40,53
Export As % of GDP		16.94	16.02	19.92	20.16	19.54	18.99	17.34	16.65	15.04	14.
			Anr	nual Exp	ort Grov	vth Rate	(%)				
Prir	nary Commodity :	1.61	48.87	(3.72)	3.39	5.27	(8.19)	3.08	(4.37)	7.21	13.6
Manufactured Goods :		20.37	30.90	6.71	6.46	2.74	3.13	9.14	16.51	16.70	3.5
Mai	adymade Garments :	1.20	43.36	6.56	12.71	13.83	4.08	10.21	(1.23)	10.33	11.4

Source : EPB



2) Sectoral share in total exports:

It must be acknowledged that the country's export trade has boomed over the past decade. During this period, annual export earnings were USD 16,205 million in FY 2009-10, USD 22,928 million in FY 2010-11, USD 24,302 million in FY 2011-12, USD 27,027 million in FY 2012-13, USD 30,187 million in FY 2013.14, USD



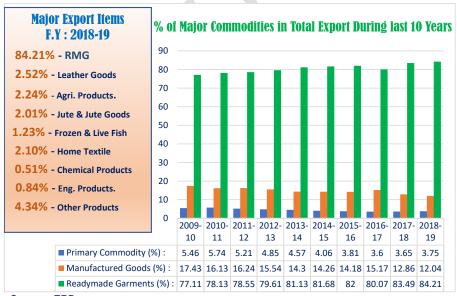


Sectoral share in total exports:

31,209 million in FY 2014-15, USD 34,257 million in FY 2015-16, USD 34,656 million in FY 2016-17, USD 36,668 million in FY 2017-18 and 40,535 million in FY2018-19. Average annual export during this period was USD 29,797.40 million, comprising 4.47% of primary products, 14.82% of manufactured goods and 80.71% of readymade garments.

It is worth mentioning that share of readymade garments in total exports has increased during this period, while share of primary and manufactured goods has declined gradually. For example, in FY 2009-10, total export earnings were USD 16,205 million, comprising 5.46% of primary products, 17.43% of manufactured goods and 77.11% of readymade garments. In the last 2018-19 financial year, total export revenue were USD 40,535 million with share of primary products being 3.75%, manufactured goods 12.04% and readymade garments 84.21%. In other words, share of readymade garments in total exports of the country has gradually increased but share of primary and manufactured products has decreased in proportion to total exports.

Figure-5.9 (15): Share of sectoral exports in the total exports of the country during financial year 2009-10 to 2018-19:-



Source: EPB

3) Annual exports in proportion to GDP:

Over the past decade, country's average annual exports amounted to USD 29,797 million, which were on an annual basis USD 16,205 million in FY 2009-10, USD 22,928 million in FY 2010-11, USD 24,248 in FY 2011-12, USD 27,027 million in FY 2012-13, USD 30,187 million in FY 2013-14, USD 31,209 million in FY 2014-15, USD 34,256 million in FY 2015-16, 34,656 million in FY 2016-17, USD 36,668 million in FY 2017-18 and USD 40,535 million in FY 2018-19.



Annual exports in proportion to GDP:

Bangladesh's position in South Asia in terms of annual exports and Exports in proportion to GDP:

Strategies for Economic Development of Bangladesh

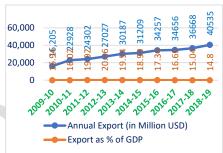


During this period, annual export to GDP ratio averaged 17.54 percent, on an annual basis which was 16.94% in FY 2009-10, 16.02% in FY 2010-11, 19.92% in FY 2011-12, 20.16% in FY 2012-13, 9.54% in FY 2013-14, 18.99% in FY 2014-15, 17.34% in FY 2015-16, 16.65% in FY 2016-17, 15.04% in FY 2017-18 and 14.8% in FY 2018-19.

It may be noted here that despite steady increase in export earnings in the last decade, ratio of export to GDP has gradually declined since FY 2012-13, for example, exports in proportion to GDP increased by 20.16% in FY 2012-13, 19.54% in FY 2013-14, 18.99% in FY 2014-15, 16.65% in FY 2016-17, 15.04% in FY 2017-18 and 14.8% in FY 2018-19 [Figure- 5.9(16)].



Figure-5.9 (16): Scenario of annual Exports and Export in proportion to GDP during period from 2009-10 to 2018-19



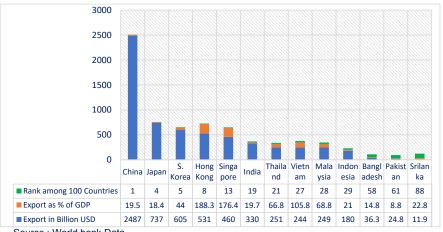
Source: BD Economic Review.

First Edition: August, 2022

4) Bangladesh's position in South Asia in terms of annual exports and Exports in proportion to GDP:

Bangladesh ranks behind all other countries in South Asia except Pakistan and Sri Lanka in terms of annual total exports and Exports in proportion to GDP. According to assessment of 2018-19 financial year, China is in first place in this case, Japan second, Hong Kong third, Singapore fourth, India fifth, Thailand sixth, Vietnam seventh, Malaysia eighth, Indonesia ninth, Bangladesh tenth, Pakistan eleventh and Sri Lanka in twelfth position.

Figure-5.9 (17): Bangladesh's position in South Asia in terms of annual total exports and Exports in proportion to GDP in the fiscal year 2018-19:-



Source: World bank Data





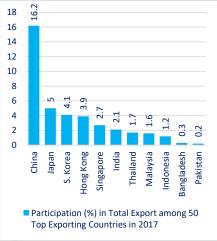
Bangladesh's share in Global exports:

5) Bangladesh's share in Global exports:

Bangladesh's participation in world trade is still at the bottom of the list compared to most of the countries in South Asia. According to World Trade Organization, total exports of the top 50 exporting countries in 2017 were USD 13,530 billion, of which Bangladesh accounted for only .3% (36 billion), followed by China at 16.2%, Japan at 5%. S. Korea 4.1%, Hong Kong 3.9%, Singapore 2.7%, India 2.1%, Thailand 1.7%, Malaysia 1.6%, Indonesia 1.2% and Pakistan 2.2% Figure-5.9 (18)].

Therefore, in order to achieve the target of 2041, it is very important to take all possible steps for rapid expansion and development of export sector to build an export-oriented economy through industrialization growth and export diversification.

Figure-5.9 (18): Participation of Bangladesh and some other South Asian countries in combined exports of 50 major exporting countries in 2017:-



Source: WTO Report, 2018

First Edition: August, 2022

E) Import Trade:

1) Import trade of Bangladesh:

Bangladesh's import sector is divided into four main categories - primary products, intermediate products, capital Machinery and other products.

- **Primary products:** Rice, wheat, oil seeds, crude petroleum and raw cotton.
- Intermediate Products: Edible Oil, Petroleum Products, Fertilizer, Clinker, Staple Fiber, Yarn etc.
- Capital Machinery: Machinery and parts used in industrial production.
- Other products: All other products that are imported in the country.

During the last decade (FY 2009-10 to 2018-19), average annual import of the country was USD 39,707 million, of which primary products were 11.99%, intermediate products 21.20%, capital machinery 7.33% and Other products content is 59.48%. During this period, average annual import growth was 12.04%, highest import growth was 41.79% in FY 2010-11, lowest growth was 0.07% in FY 2014-15 and average annual import in proportion to GDP was 24.33%.

Import trade of Bangladesh:





Figure-5.9 (19): Sectoral imports, sectoral share in total imports, annual import growth and imports in proportion to GDP during period from 2009-10 to 2016-17:- (In Million US\$)

S.L	Particulars	2009-10	2010- 11	2011-12	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	
_					10	17	10	10	- 17	10	
Α	Major Primary Goods :										
	Rice	75	830	288	30	348	508	113	89	1,605	
	Wheat	761	1,081	613	696	1,126	983	949	1,197	1,494	
	Oil Seeds	130	103	177	242	524	374	534	432	571	
	Crude Petroleum	535	923	987	1,102	929	316	386	478	365	
	Raw Cotton	1,439	2,689	2,083	2,005	2,422	2,296	2,245	2,529	3,235	
	Total Primary Goods :	2,940	5,626	4,148	4,075	5,349	4,477	4,227	4,725	7,270	
	As % of Total Import	12.39	16.72	11.68	11.96	13.15	11.00	9.80	10.05	12.35	
В											
	Edible Oil	1,050	1,067	1,644	1,402	1,766	924	1,450	1,626	1,863	
	Petroleum Products	2,021	3,186	3,922	3,642	4,070	2,076	2,275	2,898	3,652	
	Fertilizer	717	1,241	1,381	1,188	1,026	1,339	1,117	737	1,006	
	Clinker	333	446	504	487	615	638	574	644	766	
	Staple Fiber	118	180	428	454	492	1,078	1,018	1,017	1,180	
	Yearn	718	1,391	1,384	1,356	1,506	1,851	1,969	1,972	2,351	
	Total Intermediate Goods :	4,957	7,511	9,263	8,529	9,475	7,906	8,403	8,894	10,818	
	As % of Total Import	20.88	22.32	26.08	25.02	23.29	19.42	19.49	18.92	18.38	
С	Capital Machinery	1,595	2,325	2,005	1,835	2,288	3,321	3,556	3,817	5,462	
	As % of Total Import	6.72	6.91	5.65	5.38	5.63	8.16	8.25	8.12	9.23	
D	Other Goods	14,246	18,196	20,099	19,645	23,563	25,000	26,936	29,569	35,315	
	As % of Total Import	60.01	54.6	56.59	57.64	57.93	61.42	62.46	62.91	59.99	
						1					
	Total Import (A+B+C+D) :	23,738	33,658	35,516	34,084	40,675	40,704	43,122	47,005	58,865	
	Import as % of GDP	23.15	21.78	27.5	27.95	26.76	25.52	24.75	21.3	20.27	
Growth Rate (%):											
	Major Commodity :	0.82	91.36	(26.27)	(1.76)	31.26	(16.30)	(5.58)	11.78	53.86	
	Intermediate Goods	(1.55)	51.52	23.33	(7.92)	11.09	(16.56)	6.29	5.84	21.63	
	Capital Machinery Import	12.32	45.77	(13.76)	(8.48)	24.69	45.15	7.08	7.34	43.09	
	Other Goods	8.45	27.73	10.46	(2.26)	19.94	6.10	7.74	9.78	19.43	
	Total Import Growth :	5.47	41.79	5.52	(4.03)	19.34	0.07	5.94	9.00	25.23	

Source : BD Economic review.



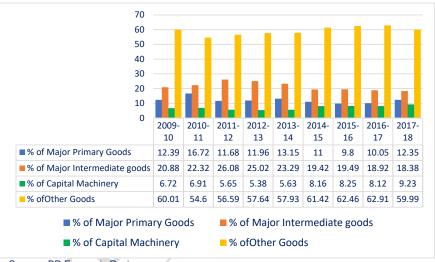




2) Scenario of Sector based imports:

Over the past decade, country's average annual import expenditure was USD 39,707 million, of which 11.99% primary goods, 21.20% intermediate goods, 7.33% capital machinery and other goods 59.46% which is presented by **Figure-5.9 (20) below :-**.

Figure-5.9 (20): Sector based share (%) in annual total imports during period from 2009-10 to 2017-18:-



Source: BD Economic Review

Scenario of Sector based imports:

3) Imports in proportion to GDP:

Average annual import during fiscal year 2009-10 to 2017-18 was USD 39,707 million, on an annual basis which was USD 23,738 million in FY 2009-10, USD 33,658 million in FY 2010-11, 2011. 35,516 million in FY 2011-12, USD 34,084

million, in FY 2012-13, USD 40,675 million in FY 2013-14, USD 40,704 million in FY 2014-15, USD 43,122 million in FY 2015-16, USD 47,005 million in FY 2016-17 and USD 58,865 million in FY 2017-18 [Figure-5.9 80000 (21)].

During this period, annual import to 40000 GDP ratio averaged 24.33 percent, on an 20000 annual basis which was 23.15% in FY 2009-10, 21.78% in FY 2010-11, 27.5% in FY 2011-12, 27.95% in FY 2012-13, 26.76% in FY 2013-14, 25.52% in FY 2014-15, 24.75% in FY 2015-16, 21.3% in FY 2016-17 and 20.27% in FY 2017-18.

Figure-5.9 (21): Scenario of annual Imports and Imports in proportion to GDP during period from FY 2009-10 to 2017-18:-



First Edition: August, 2022

Imports in proportion to GDP:





Annual import growth:

4) Annual import growth:

During period from financial year 2009-10 to 2016-17, average annual import growth of the country was 12.04%, highest import growth was 41.79% in FY 2010-11 and lowest growth was 0.07% in 2014-15 financial year. During this period, annual import growth was 5.47% in FY 2009-10, 41.79% in FY 2010-11, 5.52% in FY 2011-12, 4.03% in FY 2012-13, 19.34% in FY 2013-14, 0.07% in FY 2014-15, 5.94% in FY 2015-16, 9% in FY 2016-17 and 25.23% in FY 2017-18.

Figure-5.9 (22): Scenario of annual import growth during period from 2009-10 to 2017-18:-



Source : BD Economic Review

F) Trade Balance:



Trade Balance:

Bangladesh's economy is still dependent on imports due to limited industrial production, lagging behind in extraction of natural resources, lack of timely expansion and development of agricultural sector, liberal import policy and many more. Due to higher imports than exports and high inflation, country's trade deficit has been steadily rising since independence, which has had a major negative impact on the growth of the country's foreign exchange reserves and hampered development activities in the country. During fiscal year 2009-10 to 2017-18, average annual export (FOB) of the country was USD 26,813 million, average annual import (FOB) was USD 35,318 million and average annual trade volume was USD 62,131 million.

Average annual trade deficit during this period was USD 8,505 million (13.69% of total trade), which was USD 4,710 million in FY 2008-9 (13.13% of total

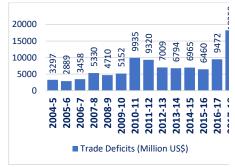
Figure-5.9 (23): Scenario of trade deficit in the country during period from 2004-5 to 2016-17:-





trac 10 201 in mil 6,7 6,9 US mil FY

trade), USD 5,125 million in FY 2009-10 (13.61%), USD 9,935 million in FY 2010-11 (18.02%), USD 9,320 million in FY 2011-12 (16.27%), USD 8,009 million in FY 2012-13 (13.54%), USD 6,794 million in FY 2013-14 (10.24%), 6,965 million in FY 2014-15 (10.19%), USD 6,460 million in FY 2015-16 million (8.81%), USD 9,472 million in FY 2016-17 (12.22%) and USD 18,258 million in FY 2017-18 (20.14%).



Source: MOF

Figure-5.9 (24): Scenario of the country's overall foreign trade during period from FY 2008-9 to 2017-18:-

(In Million USD) **Financial Years Transactions** 2008-9 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16 2016-2017-18 17 34,019 15,581 16,263 22,592 23,989 25,567 29,777 30,697 33,441 36,205 **Export** (FOB) Import (FOB 20,291 21,388 32,527 33,309 33,576 36,571 37,662 39,901 43,491 54,463 **Trade Deficits** - 4,710 - 5,125 - 9,935 - 9,320 - 8,009 6,794 - 6,965 - 6,460 - 9,472 -18,258 % of Deficits 13.13 13.61 18.02 16.27 13.54 10.24 10.19 8.81 12.22 20.14 Trade Size 35,872 37,651 55,119 57,298 59,143 66,348 68,359 73,342 77,510 90,668

Source: MOF Note: Average Yearly Trade Size: USD 62,131 Million and Average Yearly Trade Deficit: 13.69%

G) Ongoing trade under international cooperation :



As a least developed country, Bangladesh has been enjoying opportunity to export its products to the developed and developing member countries of WTO under duty free or concessional tariff facilities. Under this facility, Bangladesh enjoys GSP (Generalized System of Preference) facility for exporting goods to 38 countries of the world including Europe, although in most cases, Bangladesh has been able to use this facility for export of readymade garments only.





Trade with European countries:

1) Trade with European countries:

Bangladesh has been enjoying GSP facilities on export products in 28 EU member countries under "Joint Co-operation Agreement" enacted in 2001 for the purpose of trade and economic cooperation between Bangladesh and the European Union. 50 least developed countries have opportunity to export all their products except arms to the EU member states under EU GSP Scheme with 100% duty free facility, which has been fully implemented since January, 2014, although Bangladesh has rarely been able to utilize this facility in products other than readymade garments to date. Analysis of Bangladesh's exports to Europe during period of 2015-2019 shows that on an average, about 94% of Bangladesh's exports to European countries are readymade garments and other products are only 5-6% on average.

In FY 2014-15, Bangladesh's total exports to Europe amounted to USD12.7 billion euros, of which readymade garments were 11.9 billion (93.70%) and other products were 0.8 billion (6.30%). In FY 2018-19, Bangladesh's total exports to European market were USD16.3 billion Euros, of which readymade garments were 15.3 billion (93.87%) and other products were 1.0 billion (6.13%) [Figure-5.9 (25)]. In other words, although all Bangladeshi products have duty-free access facilities in European countries, Bangladesh is being able to use this facility very little in case of products other than readymade garments.

Figure-5.9 (25): Scenario of Bangladesh's exports of garments and other products to European countries during period from FY 2014-15 to 2018-19:-



Figure-5.9 (26): Scenario of inter-trade between Bangladesh and European Union during period of 2015-2019:-

_			rt to EU on Euros)		lm	Trade			
Year	Textile & Clothing	Other Products	Total Export (Billion Euros)	Export of Other Products as % of Total Export	Textile & Clothing	Other Products	Total Import (Billion Euros)	Balance (Billion Euro	
2015	11.9	0.8	12.7	6.30	.48	1.8	2.3	+ 10.40	
2016	12.9	0.9	13.8	6.52	.44	2.0	2.4	+ 11.40	
2017	13.3	1.0	14.3	6.99	.41	2.5	2.9	+ 11.40	
2018	14.3	0.9	15.2	5.92	.43	2.8	3.2	+ 12.00	
2019	15.3	1.0	16.3	6.13	.45	2.6	3.0	+ 13.70	

Source: EU Commission, GD Trade

2) Trade with USA:

Bangladesh enjoyed GSP facility in the US market till 2013 for export of readymade garments. After the US lifted GSP facility from Bangladesh in 2013, trade between the two countries has been continuing under another agreement signed in November,



Trade with America:

Strategies for Economic Development of Bangladesh



2013 on trade and investment development between the two countries, which is highlighted in the following figure :-

Figure-5.9 (27): Scenario of trade between Bangladesh and America during period of 2016-2019:-

Financial Year	Total Export (US\$ Million)	Total Import (US\$ Million)	Trade Balance (US\$ Million)
2016	6,221	1,134	+ 5,087
2017	5,846	1,358	+ 4,489
2018	5,983	2,160	+ 3,823
2019	6,350	1,735	+ 4,615

Source:

H) Ongoing trade under regional cooperation:





















South Asian Association for Regional Cooperation

Over the past few decades, there is a growing tendency among the countries of region to increase trade and economic cooperation on the basis of mutual understanding. Among regional trade cooperation agreements that Bangladesh has so far signed till date with the countries of Southeast Asian region, notable three agreements are :-

- **1.** APTA : Asia Pacific Trading Arrangements.
- 2. SAFTA: South Asian Free Trade Area.
- 3. BIMSTEC: Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation.

1) APTA: Asia Pacific Trading Arrangements:

The agreement signed in 1975 between China, India, Laos (Lao PDR), South Korea, Sri Lanka and Bangladesh, came into force from November 2005, which is also known as the Bangkok Agreement. One of the aims of this agreement is to increase mutual trade cooperation between the member countries by reducing tariffs and duties on imported goods by the countries with large economies in order to facilitate trade and investment in the countries with relatively small and underdeveloped economies

Number of products offered by the 6 member countries under tariff facility through the 4th amendment of the agreement on January, 2017 is approximately 10,000, which has come into effect from July, 2018, which is as follows: -



Asia Pacific Trading Arrangements (APTA):

Strategies for Economic Development of Bangladesh



SL	SL Country No. of Products Offered under Tariff Con-					
1	India	3,102 Products				
2	South Korea	2,797 Products				
3	China	2,191 Products				
4	Laos	999 Products				
5	Bangladesh	602 Products				
6	Srilanka	598 Products				

Under this agreement, partial tariff facilities on 181 products from China, 75 products from Sri Lanka and 48 products from India and South Korea has declared 100% tariff facilities on 951 products for Bangladesh and Laos, two countries with small and underdeveloped economies. (Financial Express: September 25, 2018)

A) Geographical and economic assessment of APTA member countries:

Among APTA member countries, China, India and South Korea are in the list of developing countries and Bangladesh, Sri Lanka, Laos and Mongolia are in the least developed countries. Following is a brief overview of APTA member countries as of 2018:-

Country	Land Area (Million sq. km)	Population (Million)	GDP Size (US\$ Billion)	Per Capita Income (Current US\$)	Export in 2018 (Billion US\$)
China	9.39	1,392.73	13,608.15	9,770.80	2,494.23
India	2.97	1,352.62	2,718.73	2,010.00	323.06
South Korea	0.10	51.61	1,619.42	31,380.10	605.17
Bangladesh	0.13	161.36	274.02	1,698.30	43.53
Sri Lanka	0.06	21.67	88.90	4,102.05	11.97
Lao PDR	0.23	7.62	17.95	2,542.50	5.57
Mongolia	1.55	3.17	13.07	4,121.70	7.01

Source: World Bank data

B) Inter-trade between APTA member countries:

in order to facilitate tariffs on a large number of products for LDCs and to facilitate inter-trade same procedure will be followed by all member countries in determining the origin of goods, or if necessary, there is an opportunity for the least developed member countries to adopt a more convenient approach. According to latest amendment of APTA agreement, there is a provision of providing complete or partial duty free facility on about 10,000 products for Bangladesh among member countries. But compared to that, Bangladesh is being able to take advantage of a very insignificant amount of exports under this agreement than all other member countries with several times more trade deficit than other members. Despite being a new member of APTA, Mongolia has almost doubled its exports in inter-trade than Bangladesh in FY 2015-16 and Mongolia has a trade surplus of USD 1,457.08 million in APTA inter-trade in that year, while Bangladesh's trade deficit in that FY is USD 19,371.97 million. China and South Korea account for about 90% of total APTA inter-trade and remaining 10% are occupied by India, Bangladesh and other member countries

APTA is undoubtedly an impeccable initiative in enhancing regional trade cooperation. But, while China and South Korea can take full advantage and India can take partial advantage of the agreement, Bangladesh can take very little

First Edition: August, 2022

Inter-trade between APTA member countries :





advantage of this agreement. For example, in FY 2015-16, total inter-exports of APTA member countries amounted to USD 378.90 billion, of which China's exports amounted to USD 172.67 billion (45.57%), South Korea USD173.01 billion (45.66%), India USD 25.05 billion (6.61%), Bangladesh 1.88 billion (0.49%), Laos USD1.56 billion (0.41%), Sri Lanka USD1. 10 billion (0.29%) and Mongolia USD 3.64 billion (0.96%) [Figure-5.9 (28)].

In the same financial year, trade deficit under APTA Agreement was USD19,371.97 million for Bangladesh, USD 47,045.66 million for India, USD 7,669.94 million for Sri Lanka and USD 4,195.82 million for China. During this period, South Korea, Mongolian and Laos these three countries have trade surpluses of USD 75,438.94 million, USD1,457.08 million and USD 423.19 million respectively.

Figure-5.9 (28): Scenario of APTA inter-trade between member states in 2015-16:-

Importing	Exporting Countries (US\$ Million)								
Countries	China	Bangladesh	India	Lao PDR	S. Korea	Sri Lanka	Mongolia		
China	-	869.40	11,764.13	1,359.61	158,974.53	273.44	3,622.60	176,863.71	
Bangladesh	14,300.64	1	5,668.79	0.35	1,158.42	118.87	1	21,247.07	
India	58,397.76	677.10	ı	172.41	12,214.05	632.27	2.35	72,095.94	
Lao PDR	986.97	0.14	23.93		126.41	2.14	-	1,139.59	
South Korea	93,707.10	293.11	3,465.42	22.74	-	70.87	10.36	97,569.60	
Sri Lanka	4,286.88	29.35	4,118.25	7.59	324.42	-	2.12	8,768.61	
Mongolia	988.54	6.00	9.76	0.02	208.71	1.08	-	1,214.11	
Total Export	172,667.89	1,875.10	25,050.28	1,562.72	173,006.54	1,098.67	3,637.43	378,898.63	
			Trade Su	mmary :	2015-16		(Million US\$)	
Total Export	172,667.89	1,875.10	25,050.28	1,562.72	173,006.54	1,098.67	3,637.43	378,898.63	
Export (%)	45.57	0.49	6.61	0.41	45.66	0.29	0.96		
Total Import	176,863.71	21,247.07	72,095.94	1,139.59	97,569.60	8,768.61	2,180.35	378,898.63	
Import (%)	46.68	5.61	19.03	0.30	25.75	2.31	0.32		
Trade Balance	- 4,195.82	- 19,371.97	- 47,045.66	+ 423.13	+75,436.94	- 7,669.94	+1,457.08	-	

Source: Review by Selim Raihan, Professor- Dept. of Economics, DU.



2) SAFTA (South Asian Free Trade Area):

Among SAARC member countries (India, Pakistan, Bangladesh, Sri Lanka, Afghanistan, Bhutan, Nepal and Maldives) signed SAPTA (SAARC Preferential Trading Arrangements) in April, 1993 to increase trade cooperation by reducing tariffs and other barriers, which became effective from 1995. Failing four (4) times trade negotiations among member countries to reach an agreement until 2002, SAFTA (South Asian Free Trade Area) agreement was signed in 2004 on Development of Inter-communication, Trade, Investment and Transit facilities among SAARC member countries, which has become effective since early 2006.

It is noteworthy that while increasing trade and investment through mutual cooperation between SAARC countries is one of the objectives of SAFTA, all member countries are largely dependent on India for both imports and exports. Inter-trade transactions among other member countries are relatively low and in many cases non-existent at all. Reason is that no country is generally interested in doing business with a country that lacks essential conditions of international trade





SAFTA (South Asian Free Trade Area):

(such as product quality, competitive prices, expedited shipments and inadequacies of other facilities), regardless of agreement or good relations. Most of SAARC countries are suffering from a lack of essential facilities for international trade, making it difficult for them to be interdependent in trade. Therefore, it can be said that proper implementation of trade cooperation agreements in both international and regional fields depends a lot on the adequacy of essential terms of international trade of treaty countries.

An inter-trade analysis among SAARC countries under SAFTA agreement shows that India has become a hub for imports and exports for all other member countries, with Pakistan in second place in this case. In 2015-16 financial year, total interexports of SAFTA member countries amounted to USD 22,742.20 million, of which India exported USD 16,933.19 million (74.46%), Pakistan USD 2,798.34 million (12.30%), Bangladesh 767.95 million (3.38%), Sri Lanka 923.64 million (4.06%), Afghanistan 652.37 million (2.87%), Bhutan 170.51 million (0.75%), Nepal 397.17 million (1.75%) and Maldives 99.03 million (0.44%). In total interimports in that financial year Bangladesh accounted for 28.51%, Sri Lanka 19.95%, Nepal 19.94%, India 11.31%, Pakistan 9.17%, Afghanistan 8.17%, Bhutan 1.66%, and Maldives 1.29%.

Bangladesh ranks first among SAARC countries in terms of inter-imports. According to 2015-16 financial year, Bangladesh's inter-imports in that year amounted to USD 6,484.17 million, of which 87.43% from India, 10.12% from Pakistan, 1.83% from Sri Lanka and .62% were imported from Bhutan, Nepal and Maldives. Bangladesh also ranks first in terms of trade deficit in SAFTA intertrade.

In 2015-16 financial year, Bangladesh's deficit in SAARC inter-trade was USD 5,716.22 million, while Nepal's deficit was USD 4,136.91 million, Sri Lanka's deficit was USD 3,614.52 million, Afghanistan's 1,204.85 million, Bhutan's 207.61 million and Maldives 194.93 million. Trade surplus of India and Pakistan was USD 14,361.56 million and USD 713.54 million respectively in that period.

First Edition: August, 2022

Figure-5.9 (29): Scenario of inter-trade between SAARC countries under SAFTA in the FY 2015-16:-

Intra-SAARC Trade scenario during F.Y: 2015-16

(Exports & Imports among SAARC Countries) Total Imports Export (US\$ Million) **Imports** (Million India Pakistan Bangladesh Sri Afganistan Bhutan Nepal Maldives Lanka 461.08 677.10 632.27 282.29 127.33 385.31 2,571.63 India 0 6.25 Pakistan 1,592.58 0.00 48.60 66.33 369.90 0.11 0.96 6.32 2,084.80 Bangladesh 5.668.79 656.16 0.00 118.87 0.05 39.97 0.05 0.28 6,484.17 Sri Lanka 4,118.25 304.12 29.35 0.00 0.05 0.00 0.21 86.18 Afganistan 472.99 1,369.77 4.71 0.63 0.00 0.00 9.12 0.00 Bhutan 374.21 0.00 2.44 0.04 0.00 0.00 1.49 0.00 378.18 2.62 4,534.08 Nepal 4,526.22 0.81 1.26 80.0 3.09 0.00 0.00 104.24 0.01 0.00 293.96 Maldives 180.15 6.40 0.00 0.03 3.13 2,798.34 170.51 Total Export: 16,933.19 767.95 923.64 652.37 397.17 99.03 Trade Summary of 2015-16 (Million US\$) Country 16,933.19 2,798.34 767.95 923.64 652.37 170.51 397.17 99.03 22,742.20 **Export** Export % 74.46 12.30 3.38 4.06 2.87 0.75 1.75 0.44100





Country	2 ,571.63	2,084.80	6,484.17	4,538.16	1,857.22	378.18	4,534.08	293.96	22,742.20
Import									
Import %	11.31	9.17	28.51	19.95	8.17	1.66	19.94	1.29	100
Trade Balance	14,361.56	713.54	- 5,716.22	-3,614.52	- 1,204.85	- 207.61	- 4,136.91	- 194.93	Nil

Source: Review by Selim Raihan, Professor- Dept. of Economics, DU

BIMSTEC :

BIMSTEC member countries at a glance:

3) BIMSTEC (Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation):

As per current global trend, accelerating trade and economic development based on mutual cooperation between the countries of different regions of the world has been recognized . As per World Trade Organization, till now about 287 regional trade agreements (RTAs) have been signed so far. BIMSTEC Just like that a regional trade and economic cooperation agreement which was signed on June 6, 1997 among four South Asian countries - Bangladesh, India, Sri Lanka and Thailand. Later, Myanmar joined the agreement in late 1997 and Vietnam and Nepal in 2004. Under that agreement, 14 sectors pledged for overall development on the basis of mutual cooperation, taking into account importance of enhancing intercommunication, trade and economic cooperation among member countries, those are:-

1	Trade and Investment	8	Cultural Cooperation
2	Technology	9	Environment and Disaster Mana
3	Energy Sector	10	Public Health
4	Transport and Communication	11	People to People contact
5	Tourism	12	Poverty Alleviation
6	Fisheries	13	Counter-Terrorism and Transna
7	Agriculture	14	Climate change

A) BIMSTEC member countries at a glance :

Among BIMSTEC member countries, India and Thailand are in the list of developing countries and Bangladesh, Sri Lanka, Myanmar, Nepal and Vietnam are in least developed countries. Following is the overall situation of BIMSTEC member countries on the basis of information of 2020: -

Country	Land Area (Million Sq. KM)	Population (Million)	GDP Size (US\$ Billion)	Per Capita Inco (Current US\$)
India	2.97	1,380.00	2,708.77	1,928.00
Thailand	0.51	69.80	501.88	7,187.00
Bangladesh	0.13	164.69	329.12	1,961.00
Sri Lanka	0.06	21.41	80.77	3,681.00
Myanmar	0.65	54.41	81.26	1,468.00
Nepal	0.14	29.14	34.47	1,155.00
Bhutan	0.04	0.77	2.50	3,001.00

First Edition: August, 2022

Source: statisticstimes.com / Worldometer





BIMSTEC Intertrade scenario:

B) BIMSTEC Inter-trade scenario :

In 2015-16 financial year, volume of BIMSTEC inter-trade was US\$ 37.96 billion, which was USD 3.92 billion in 2000, USD 9.65 billion in 2005 and USD 24.82 billion in 2010 (WTC, Mumbai). India, Thailand and Myanmar account for about 95% of total exports among BIMSTEC member countries, while remaining 5% are exported by Sri Lanka, Bangladesh, Nepal and Bhutan. In 2015-16 financial year, volume of BIMSTEC inter-exports amounted to USD 37,960.18 million, of which India's exports were 18,998.25 million (50.05%), Thailand's exports were 11,525.92 million (30.36%). Myanmar 5,419.35 million (14.28%), Sri Lanka 728.39 million (1.92%), Bangladesh 665.82 million (1.64%) and Nepal 622.45 million (1.64%).

In BIMSTEC inter-imports in that financial year, India accounted for 23.28%, Thailand 17.61%, Myanmar 14.764%, Sri Lanka 11.84%, Bangladesh 18.53% and Nepal 13%. Bangladesh ranked first in terms of inter-trade deficit in that financial year with deficit of USD 6.37 billion, Nepal 2nd with deficit of USD 4.31 billion, Sri Lanka 3rd with deficit of USD 3.77 billion and Myanmar fourth with deficit of USD 0.17 billion. In that period, India and Thailand have a trade surplus of USD 10.16 billion and USD 4.46 billion respectively Figure-5.9 (30).

Figure-5.9 (30): Scenario of trade deficit / surplus of member countries in BIMSTEC inter-trade in FY 2015-16:-



Source: Researchgate.net

First Edition: August, 2022

Figure-5.9 (31): BIMSTEC Inter-Trade scenario in F.Y 2015-16:-

•	. ,						
Importing Countries		Total Imports (Million US\$)					
	India	Thailand	Myanmar	Sri Lanka	Bangladesh	Nepal	_
India	-	5,686.98	1,401.03	591.69	556.64	602.04	8,838.38
Thailand	3,045.26		3917.02	58.46	43.60	0.90	7,065.27
Myanmar	955.94	4,614.95	-	5.76	16.97		5,593.62
Sri Lanka	3,977.06	461.92	29.71	-	26.06	0.04	4,494.79
Bangladesh	6,174.40	698.91	71.59	68.30	1	19.44	7,032.64
Nepal	4,845.59	63.16		4.18	22.55	-	4,935.48
Total Export:	18,998.25	11,525.92	5,419.35	728.39	665.82	622.45	37,960.18
			Trade Summ	nary of 2015-1	6		
							(Million US\$)
Total Export:	18,998.25	11,525.92	5,419.35	728.39	665.82	622.45	37,960.18
Export %	50.05	30.36	14.28	1.92	1.75	1.64	100
Total Import	8,838.38	7,065.27	5,593.62	4,494.79	7,032.64	4,935.48	37,960.18
Import %	23.28	18.61	14.74	11.84	18.53	13.00	100
Trade Balance	10,159.87	4,460.65	-174.27	-3,766.40	-6,366.82	-4,313.03	_

Source: Researchgate.net



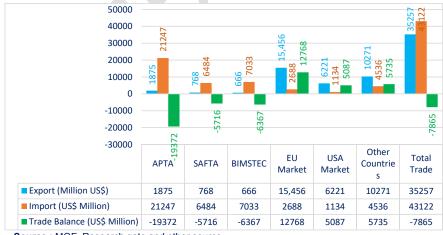


I) Overall trade of Bangladesh under regional and international Agreements:

Lion's share of the country's import and export trade is governed under various trade and economic agreements signed at regional and international levels and decrease/increase of country-based imports and exports happens based on the ability to exercise duty-free and other benefits declared in all those agreements. In 2015-16 financial year, overall trade analysis of the country shows that 80% of import trade and approximately 10% of export trade were executed under ongoing regional trade agreements (APTA, SAFTA and BIMSTEC). Remaining 20% of imports and 90% of exports are made to Europe, America and other countries. In FY 2015-16, Bangladesh had overall trade deficit of USD 7,865 million, of which trade deficit under regional trade agreements for USD 31,455 million against trade surplus with Europe, USA and other countries for USD 23,590 million.

In other words, even though Bangladesh has been able to increase its imports under regional trade agreements, it has not been able to utilize duty-free and other benefits declared in those agreements, as a result, amount of Bangladesh's exports under regional trade agreements is negligible.

Figure-5.9 (31): Scenario of overall trade of the country under regional and international agreements in FY 2015-16:-



Source: MOF, Research gate and other source.

J) Problems and Obstacles exist in Export Sector:

Country's export sector has been limited to a few export products due to inadequacy of export oriented industries, lack of obligation to use advanced raw materials and technology and many other reasons including low quality products, limited export market and administrative and logistical weakness in industrial sector. Although five decades have passed since independence, there has been no significant progress in export growth of any products in the country other than garments. As a result,

Overall trade of Bangladesh under regional and international agreements:





Problems and Obstacles in Export Sector: Bangladesh's participation in international trade has remained negligible till now. According to World Trade Organization report 2021, Bangladesh ranks 52nd in the list of 100 major exporting countries in the world by 2020 and at that time Bangladesh's participation in international trade is only 0.2% (USD 46.60 billion), while China's participation at that time is 14.7%, Japan 3.6%, Hong Kong 3.1%, S. Korea 2.9%, Singapore 2.1%, India 1.6%, Thailand 1.3%, Malaysia 1.3% and Indonesia 0.9%.

It is true that previous governments have repeatedly changed export policy for development of export sector but position of the country's export sector has remained much same for all other products except readymade garments. Export policies 2016 and 2017-21 have also been adopted during the tenure of present government and in this continuity mega projects are being implemented in at least 10 sectors including power, fuel, roads, bridges, railways, ports and deep sea ports to develop overall infrastructure in the country. In addition, various incentive packages including cash incentives, tax exemptions, tax holidays have been introduced on a number of export products including development of almost one hundred export processing Zones to attract domestic and foreign investment in export-oriented industries.

All these initiatives taken by the present government for development of the export sector will undoubtedly play a leading role in development of export sector of the country, however, it can be emphasized that by identifying underlying problems in the export sector and without proper solution of those problems, all plans for development of this sector will be ruined as in the past .

Following is a summary of problems in export sector: -

1) Backwardness in creating a conducive business environment and facilitating business:

Bangladesh has been gradually lagging behind in terms of creating a conducive business environment and facilitating business. According to World Bank's Business Development Index report 2014, Bangladesh ranked 170th out of 190 countries in terms of easy business management, in the following years, it has gradually deteriorated to 173rd in 2015, 178th in 2016, 176th in 2017, 177th in 2018, 176th in 2019 and in 2020 it has slightly ahead to 168th place [Figure-5.9 (1)].

During this period, consideration in facilitating business in the country, such as easy business management, starting a business, permitting construction work, electricity connection, property registration, obtaining loans, providing protection to minority investors, paying taxes, border trade, contract enforcement and bankruptcy resolution, although there has been a slight progress in 3 indicators of these 11 important indicators, but all remaining indicators have lagged behind, which is one of the major obstacles to expansion of trade and domestic & foreign investment in the country [Figure-5.9 (2)].

2. Lagging behind in global trade capacity:

To date, Bangladesh lags far behind the potential countries of the world even in South Asia in terms of global trade capacity. By 2018, Bangladesh ranks 120th out of 140 countries in terms of trade efficiency, 109th in terms of infrastructure, 36th in terms of domestic market, 79th in terms of internal credit flow in private sector, 102nd in terms of innovation, 77th in terms of research and development, 109th in





terms of commercialization, 60th in private sector contributions and 115th in terms of easy labor market [Figure-5.9(3)].

In order to ensure rapid expansion of export sector, it is essential to take necessary and effective steps to achieve significant progress in all indicators of global trade potentials in the shortest possible time, otherwise it is impossible to alleviate misery of export sector soon.

3. Lags behind in logistics support Capabilities :

Logistic support - such as customs, infrastructure, shipping, logistical capability, tracking and tracing and lead time are some of the factors in development of international trade. Bangladesh still lags far behind in the world, even potential countries of South Asia in terms of efficiency and adequacy of logistical support. In the 2018 Global Rankings, Bangladesh ranks 100th out of 180 countries, while Sri Lanka 94th, Maldives 86th, Indonesia 46th, India 44th, Malaysia 41st, Thailand 32nd, China 26th and South Korea is in 25th position in that ranking. So, there is no alternative to rapidly increasing institutional capacity of Bangladesh to facilitate exports and expand export market by rapidly increasing logistical support capacity to ensure rapid expansion of export sector.

4. Inadequate infrastructure:

Infrastructure development is most important for industrial development, trade growth and bringing dynamism to overall economy. In terms of overall infrastructure, Bangladesh is still lags far behind. By 2018, Bangladesh ranks 109th out of 140 countries in terms of improved infrastructure, while Pakistan 93rd, Vietnam 75th, Indonesia 71st, Sri Lanka 65th, India 63rd, Thailand 60th, China 29th and South Korea is in 6th position in that ranking [Figure-5.9(6)].

In addition to increasing industrial development and trade flows, it is important to increase Bangladesh's annual development expenditure on infrastructure development to increase dynamism of the overall economy either way.

5. Inadequacy of export oriented industries in the country:

In the post-independence period, due to weak export policies, on the one hand, adequate number of export oriented industries have not been set up in the country, on the other hand, neither the number of export products nor export market has increased. As a result, to date, no product other than readymade garments has been able to play a significant role in export earnings. Due to insufficient growth in industrial sector of the country, large domestic demand has to be met by importing spending huge amount of foreign exchange every year, which puts pressure on the country's foreign exchange reserves as well as increasing trade deficit every year continuously, which is one of the biggest obstacles to the economic progress of a developing country like Bangladesh.. In the FY 2017-18, total imports of the country were USD 54,463 million against total exports of USD 36,209 million and trade deficit in that FY was USD 18,258 million, which is 20 per cent of the total foreign trade performed in that FY.

6. Lagging behind in production of international standard products:

Lack of use of modern machinery and modern methods in production increases cost of production on the one hand, on the other hand it is not possible to produce quality products, which puts the industry behind competition and makes future of the industry uncertain.





7. Inadequate management in export quality development:

Due to lack of adequate management and obligation in the country to ensure international standards for all exports products, manufacturing companies are lagging behind in producing international quality products and failing to survive in international competition, which is working as one of the biggest obstacles to export growth. For example, type of laboratory and certification system in place in the country to ensure international quality of readymade garments, It is necessary to build similar management infrastructure to ensure international quality of all other exports products.

8. Increased single product dependence in exports:

Over the past two decades, country's export trade has relied heavily on a single commodity, posing a serious risk to a country's economy. In the last decade (2009-2018), average annual export of the country were USD 29,797 million, of which 81% were readymade garments, 14.5% manufactured goods and 4.5% were agricultural products. In terms of dependence on a single product in total exports, this dependence is many times higher in Bangladesh than in other potential countries of Asia. In the 2017-18 financial year, share of single product in total exports were 16.4% in India, 17% in Thailand, 18.1% in Pakistan, 21.8% in Indonesia, 38.1% in Vietnam, 44.8% in Philippines and 83.49% in Bangladesh.

In order to overcome single product dependence in exports, it is necessary to increase standard production of agricultural and other manufactured products beside readymade garments and everything necessary should be done to explore the market of those products, so that, if there is any stagnation in readymade garment industry in future, it can be compensated by increasing export of other products.

9. Lagging behind in service exports:

In terms of service exports, Bangladesh still lags far behind the developing countries in the world and in South Asia, even compared to many less developed countries. Export of services in proportion to GDP in 2018, Bangladesh accounted for 1% of GDP, Myanmar 7.4%, Cambodia 21.4%, Ethiopia 5.6%, Nepal 6.2%, Afghanistan 3.8% and Bhutan 7% of GDP.

10. Limited Export Market Range:

12 countries that account for 75-80% of Bangladesh's export trade are the United States, Germany, Britain, Spain, France, Italy, Japan, Canada, Netherlands, Poland, India and China. On an average, 75-80% of total annual exports are exported to these 12 countries and remaining 20-25% are exported to other countries. Total exports in FY 2018-19 were USD 40,535 million, of which 16.96% to USA, 15.23% to Germany, 10.28% to Britain, 6.30% to Spain, 5.47% to France, 4.05% to Italy, 3.37% to Japan, 3.30% to Canada, 3.15% to Netherlands, 3.15% to Poland, 3.07% to India, 2.05% to China and 23.62% to other countries.

11. Lack of Obligation to Obtain International Certification in Export Oriented Industry: International Certificate of Manufacturing Organization is the recognition of quality products by the organization, which is foremost consideration in the field of product verification in international market. Due to lack of obligation to obtain international certification for export-oriented industries in Bangladesh, most of the products in the world market are devalued and rejected, which is one of the major obstacles to export growth.





12. Insufficiency of International and Regional Trade Cooperation Agreements: About 60% of total export trade of Bangladesh is handled under ongoing trade agreements with Europe and America in international arena. Although there are three trade agreements (APTA, SAFTA and BIMSTEC) are in force in Asia, Bangladesh's exports under these agreements are below 10% of total exports.

13. Failure to avail adequate benefits under ongoing Trade Cooperation Agreements: It can be said that Bangladesh has been able to avail very few of the benefits provided under ongoing International and Regional Trade Cooperation Agreements. Although almost all Bangladeshi products have duty free access to the European market, Bangladesh has been able to take a very little advantages of this opportunity except for garments alone. In FY 2018-19, total exports of Bangladesh to European market amounted to USD 16.3 billion, of which USD 15.3 billion were for readymade garments and USD 1.00 billion for other products. Same is true for exports to US market, volume of exports of other products to the big American market, except garments, is very small.

In addition, although more than 10,000 products have full / partial duty-free access under the three major regional trade agreements (APTA, SAFTA and BIMSTEC), Bangladesh has been able to take advantage of this very little compared to other member countries. According to 2015-16 financial year, Bangladesh's exports under regional trade agreements amounted to USD 3,309 million, which was only 9.39% of the country's total exports of that year. Imports under regional agreements in that fiscal year amounted to USD 34,764 million, which were about 81% of the country's total imports at that time and a trade deficit under regional agreements in that fiscal year were USD 31,455 million .

14. A small number of top business organizations in the country and limited activities of those organizations in business development:

Current top four business organizations in the country are: -

- Federation of Bangladesh Chambers of Commerce and Industries (FBCCI).
- ii) Dhaka Chamber of Commerce and Industry (DCCI).
- iii) Foreign Chamber of Commerce and Industries (FCCI); and
- iv) Metropolitan Chamber of Commerce and Industry (MCCI)

Business organizations in all countries have always play a leading role in the development of overall trade and Industry in the country. Notable activities of business organizations in expanding business are:-

- To bring existing problems in the field of trade and Business to notice of the Government and giving practical advice to the Government for proper solution of all those problems.
- To advise the government on ways to make proper use of banking sector for development of industry and commerce in the country including advise on adjusting duties and tariffs based on international demand for export expansion.
- To take necessary initiatives to expand trade with those countries through detailed discussions with business delegates from different countries and sending delegates to different countries for assessing possibility of trade with all those countries and motivate the government and business community to exploit trade potentials with those countries.





- To advise the government to sign new trade and economic cooperation agreements with countries with trade potentials for Bangladesh and to provide necessary guidance to business community to make full use of the facilities provided under existing trade agreements.
- To activate business community by raising awareness in the business community for development of industry and trade in the country through seminars, symposiums etc.; and
- Provide full cooperation to the business community through embassies of the countries concerned in resolving various issues arising out of international trade, such as non-delivery of goods as per contract in case of import, supply of substandard or expired goods and cancellation of shipments for trivial reasons in export and withholding of payment.

It is worth mentioning that, firstly, there are only a handful of top business organizations in our country, and secondly, apart from being somewhat active during national budget period, no other significant activities of these organizations in development of industry and trade in the country are noticeable.

15. Inadequate research and technology exchange activities for expansion and development of export sector:

Both products and services are equally important for expansion and development of export sector. Production of quality exportable goods in the country to increase export of goods and technology development for improving service quality to increase service exports and increase research activities in development of technology is essential. Moreover, in order to increase demand of our country's products and services in international market, it is very important to increase excellence of manufacturing and services sector through conducting joint research activities and technology exchange with different countries. Needless to say, neither research nor technology exchange is enough in our country yet.

- 16. Administrative Inefficiency, Bureaucratic Complexity and Procrastination: Due to administrative inefficiency and bureaucratic complexities at various levels of administration delaying important government clearances and decisions for trade, Bangladesh's progress in various trade indicators has been stalled year after year. As a result, despite government's best efforts, is failing to attract adequate foreign investment in industrial and trade sectors, which is one of the major obstacles to the country's overall economic development.
- **17. Bribery, corruption, nepotism and non-cooperation in government offices:** Due to bribery, Corruption, nepotism and non-cooperation in government offices for providing services are increasing cost of production in industrial sector beside making difficult trade and commerce in the country and seriously threatening the country's image in international arena, which is another major reason for not growing foreign investment in industrial and trade sectors as expectation.
- **18.** Lack of low quality training and specific guidelines for entrepreneurship development: In the current competitive world, it is very difficult to survive in any business except good entrepreneurs. Advanced training is required to create good entrepreneurs and at the end of the training specific guidelines, so that trainees can start business quickly under guidance of training provider, for example, collect necessary licenses for starting business, office for running business, raising initial capital, selecting products for export business,





collecting real ideas by visiting potential export markets and collecting orders for exports is very important. Ongoing entrepreneurial training program in Bangladesh is very generous, which does not guarantee the creation of good quality entrepreneurs under any circumstances.

19. Lack of obligation on banks to finance exports: In a low-income country like Bangladesh, providing necessary capital for business has always been a major challenge for all. Since there is no obligation on banks to finance export, if there is no prior relationship, banks generally do not agree to finance in contrast to export agreement in all cases. Volume of exports would have been much higher undoubtedly, if trained entrepreneurs and experienced traders had been obliged to provide 100% financing by the banks as opposed to export contracts.

20. Lack of adequate promotion of Bangladeshi products in international arena: Bangladesh is a least developed country and its industrial and technological capabilities are limited and for all these reasons, it is natural that demand and value of Bangladeshi products in international market is low. In order to overcome this situation, besides ensuring production of international quality products in the country, widespread promotion of Bangladeshi products in international arena will make the products of this country well known all over the world is guaranteed. Regrettably, Bangladesh is still far from this reality.

21. Inadequate diplomatic efforts to achieve quotas and duty-free access of Bangladeshi products to different countries:

European market alone has 100% duty and quota-free access of Bangladeshi products, although Bangladesh has been able to utilize this facility very little in other non-garment products. GSP facility for Bangladesh has been withdrawn in the US market since 2013. Despite receiving full or partial tariff benefits on many products in a number of Asian countries under regional agreements, Bangladesh has been able to use this facilities very little. Due to lack of increased diplomatic activities with different countries, it is not being possible to realize adequate trade benefits.

22. Extensive efforts of the government and business organizations to expand export market: As industry and technology of Bangladesh has not yet become sufficiently advanced and introduction of Bangladeshi products in the world market is very limited, it is certain that without joint efforts of government and business organizations and extensive diplomatic engagements with potential export-oriented countries will be difficult to grow Bangladesh's export market rapidly. It is a matter of frustration that although government is keenly interested in expanding export market, diplomatic contacts with various countries have not increased in this regards and activities of the country's top business organizations in expanding export market are not so noticeable, this picture is clear in analysis of overall situation of the country's export trade.

23.Inadequate government support to address risks of export-oriented industries: Lack of government obligation to produce quality exportable goods to increase the country's ability to survive in international competition, insufficient government support to limit production costs and inadequate cash incentives against export of promotional goods and services have resulted no significant progress in exports of goods and services.





K) Recommendations for development of export sector:



In order to accelerate economic development of the country by continuing development activities along with payment of import bills and refund of foreign loans and to meet the challenges of 2041, reducing poverty to zero through ensuring employment of the growing workforce, expansion and diversification of export sector is the only option to ensure sustainable dynamism of the country's economy.

Over the past two decades, country's export sector has become dependent on a single commodity (Readymade Garments), which is increasingly putting the export sector at risk as well as leading the country's overall economy to risk. Despite adequate cheap labor and favorable natural environment, export growth of agricultural and industrial products other than readymade garments in the country's export sector till date have been declined rather than increased. Misery of the export sector is not visible as export growth of readymade garments is somewhat upward. It is now clear that in the near future - India, Vietnam, Pakistan, Sri Lanka and many more countries will be added in the garment industry as competitor of Bangladesh. Therefore, in order to meet the challenges ahead, it is very important to fully modernize the readymade garment sector as well as implement effective initiatives to substantially increase exports of other agricultural and industrial products as an alternative to ready-made garments, so that country's export sector is not threatened under any circumstances

Bangladesh's participation in export trade is still far behind the potential countries in the world and even in South Asia. According to WTO report 2021, Bangladesh ranks 52th in the list of 100 major exporting countries and at that time Bangladesh's participation in the world's total export trade was only 0.2%. Moreover, due to lack of underdeveloped technology and skills, Bangladesh's export earnings in service sector is very negligible and it is important to strive for its rapid development. In order to fulfill future dream of the country, it is very important to take all possible steps to overcome the dependence on single commodity in exports by expanding both export trade in goods and services and to increase Bangladesh's participation in international trade.

In order to expand export sector and diversify exports, government has already formulated "EXPORT POLICY 2018-21", main objectives of which are as follows:



Recommendations for expansion and development of export sector:

Strategies for Economic Development of Bangladesh



- 1. Achieve exports of \$60 billion by 2021, \$50 billion from RMG;
- 2. Ensure product and market diversification with a view to achieve MIC status by 2021;
- 3. Ensure compliance and best-practices to enhance exports;
- 4. Assist exporters in different forms;
- 5. Promotion of Bangladeshi goods worldwide
- 6. Attract FDI in export sector for high-value products;

Areas that have been emphasized for development and change in implementation of Export Policy 2018-21 are: -

- 1. Policy support including bonded warehouse, duty draw back, low cost capital for raw material imports etc;
- 2. Improve ease of doing business ranking; One stop shop(OSS) system for investors:
- 3. Capacity building and automation of trade related bodies to ensure better and faster services:
- 4. National single Window for customs clearance;
- 5. Encouraging exporters-CIP, Export Trophy,
- 6. Participating in International trade fairs, exchange business delegation;
- 7. Economic diplomacy-negotiation for market access and Free trade agreements.

1. Implementation of effective initiatives aimed at building exportoriented industries with adequate modern technology in the country:

Supply of quality products at competitive prices is one of the major conditions of international market. In this age of advanced technology, it is impossible to ensure supply of quality products at competitive prices without modern technological industries. Therefore, in order to increase export earnings, it is very important to implement a long-term plan to build an adequate modern technology industry in the country within a specified period of time and things that need to be emphasized in implementation of this goal are: -

- I. In addition to increasing flow of long-term loans at low interest to establish export-oriented industries, adequacy of working capital supply for smooth operation of running industries.
- II. Attracting investment with attractive incentives and concessions to increase domestic and foreign investment in export oriented industries.
- III. While issuing clearance for setting up of new industries, giving priority to agro-based industries as well as to introduce a policy of balancing all kinds of industries in EPZ and other industrial areas, so that all types of industries can grow proportionately in the country.
- IV. In order to maintain quality of products produced, products of all export oriented industries must be brought under compulsory international quality control system.
- V. Ensuring lucrative survival of all export-oriented industries by providing adequate cash subsidies, taxes, VAT and other benefits similar to those of China and other exporting countries to address risks of export-oriented industries.





- VI. To increase research activities for development and use of technology in the country as well as to ensure expansion of technology through rapid commercialization of invented technology and to ensure adequate allocation in the national budget this purpose.
- VII. Taking initiative to establish adequate industries for production of raw materials for all types of industries in the country in the form of facilities provided in case of export oriented industries.
- VIII. Obligation on all commercial banks to provide equal opportunities to facilitate export financing for export of all types of products.

2. Taking initiatives to increase administrative skills in improving quality of services in the areas related to business facilitation:

It is very important to increase administrative skills and improve quality of service in all important areas related to business facilitation to expand trade and attract domestic and foreign investment in the country, such as starting a business, permitting construction work, electricity connection, property registration, obtaining loans, providing protection to minority investors, paying taxes, border trade, contract enforcement etc. This is because domestic and foreign investment largely depends on the quality and time of services provided in the areas related to business facilitation.

Quality of services depends entirely on the administrative integrity and efficiency of the concerned departments. Lack of administrative integrity and efficiency and procrastination in public sector of Bangladesh is a very old disorder, with which suffering and grievances of people of the country are endless and so far, international agencies have been raising objections in this regard during all the governments. All matters relating to business facilitation are covered by the service sector and progress of service sector depends entirely on administrative efficiency, on which depends quality and speed of services. Needless to say that increase of administrative efficiency depends solely on the policy, attitude, efficiency, foresight and courage of the government. If ministries are run efficiently on the basis of pragmatic policies through strict control at top level of government, development of administrative skills at all levels in all sectors of the country is bound to take place, which has not been fully implemented under any government till now

Government should be much more active and rigorous in improving overall situation in the following areas to create a conducive environment for business and trade by improving quality and speed of services at all levels by improving administrative skills in the overall service sector of the country.

- I. Ensure implementation of pragmatic policies of the government in bringing efficiency and dynamism at all levels of administration.
- II. To open the door for honest and competent leadership in the administration by ensuring appointment and promotion based on honesty and merit at all levels.
- III. In government policy, creation of conducive environment for business and trade should be given priority.

First Edition: August, 2022

IV. Making administrative officers up-to-date through advanced training.





- V. In order to create an attitude of service among government officials on the basis of honesty, to carry out publicity and campaigns and proper evaluation of honest and competent persons.
- VI. Introducing one-stop and online based services in all areas to end bureaucratic complexity.
- VII. Implement strict stance of government and zero tolerance policy to prevent bribery and corruption.
- VIII. Introduce the provision of severe punishment by treating negligence in government work, delay and taking shelter of corruption as obstruction of government work.

3. Development of adequate infrastructure and logistical support to achieve global trade capacity:

Infrastructure development (Road, Railroad, airport, seaport, utility and port capacity) is most important to ensure dynamic trade through acquisition of trade capacity. In terms of trade potentials, Bangladesh still lags far behind the developing countries of the world. By 2018, Bangladesh ranks 120th out of 140 countries in terms of trade capacity, 100th out of 160 countries in terms of logistical support capacity and 109th out of 140 countries in terms of infrastructure development. Bangladesh is one of the countries lagging behind in international trade due to underdeveloped infrastructure and inadequate logistical support.

So, in addition to allocating adequate budget for development of overall infrastructure of the country for acquisition of trade capabilities, it is very important to increase official skills for development of logistical infrastructure and logistical support services, such as customs capability, rapid shipping, tracking and tracing and other logistical capabilities.

4. Implement action-oriented initiatives to capture existing export market as well as explore new export markets:

About 60-65% of Bangladesh's exports are executed to America and Europe and remaining 35-40% are exported to Canada and South Asian countries. In FY 2018-19, 16.96% of Bangladesh's total exports were to USA, 47.63% to Europe and 35.41% to Canada and South Asian countries. Bangladesh is lagging behind in exports to Europe, America and Asia due to lag in product quality, competitive prices, official incompetence, lack of diplomatic activity, branding, international publicity and global trade capacity. Although all Bangladeshi products have duty free access to European countries, rate of export of goods to Europe other than garments has not increased at all in the last five years. Moreover, despite Bangladesh has duty-free access to more than 10,000 products in many South Asian countries under multiple regional trade cooperation, exports to those countries have so far accounted for under10 percent of total exports.

It is impossible to increase export earnings without making full use of existing facilities provided by the existing export partner countries and expanding new export markets, which requires implementation of action-oriented initiatives, such as: -





- . To motivate entrepreneurs to set up modern technology industries to reduce cost of production and to ensure production of quality products, so that it will be easy to survive in the competition in international market.
- II. To bring products of all export oriented industries under international quality control system and to make it compulsory to get international certification for all type of export oriented industries.
- III. Making export training readily available in the country for development of official skills of exporters as well as to strengthen training for development of documentation of concerned officials of government agencies involved in export documentation.
- IV. To increase diplomatic activities for realization of duty free and quota free entry of Bangladeshi products in different countries.
- V. Increase exhibition and trade fair of Bangladeshi products adequately through Bangladesh embassies located in different countries.
- VI. To implement massive initiatives to branding and popularize Bangladesh and Bangladeshi products through massive publicity and campaigns in international arena.
- VII. Introduce adequate training among exporters, banks and officials of government agencies involved in export activities to avail trade benefits under trade and economic cooperation agreements with various countries.
- VIII. Taking initiative to rectify if export is disrupted due to any section or subsection of ongoing trade agreements.
 - IX. Increase diplomatic activities for Bangladesh to be included as a new member in other existing trade and economic agreements at regional and international level and to sign new agreements if necessary. It is to be noted that in case of signing new agreement, participation of persons experienced in international trade is very important in drafting the agreement, so that no clause or sub-clause goes against interests of the country.

5. Taking initiatives for development of service sector and increase export of services:

Over the past few decades, service sector (micro, small and medium) has become the backbone of global economy and has established itself as one of the most attractive parts of international business. Exports of goods as well as services serve as one of the sources of growth in overall trade of the country. In terms of service exports, Bangladesh still lags far behind the developing countries in the world and in South Asia, even compared to many less developed countries. In 2018, export of services in proportion to GDP, Bangladesh accounted for 1% of GDP, while in Myanmar it was 7.4%, Cambodia 21.4%, Ethiopia 5.6%, Nepal 6.2%, Afghanistan 3.8% and Bhutan 7%.

In order to accelerate overall development of the country, it has become imperative for Bangladesh to focus on increasing investment and employment in service sector as well as increasing export of services, as lion's share of development activities are related to service sector. Development of service sector on the one hand, will save a lot of foreign exchange every year by reducing import of services for developmental activities, on the other hand, export of services will increase the image of Bangladesh worldwide beside increasing country's export income at a





significant rate. Moreover, technology, research and skills are among the topics on which development and progress of service sector depends. As a result, along with development of service sector, country will make great strides in technology, research and skills, which will take the country's service sector to another level as well as enrich the country with technology and develop technological, efficient and high quality human resources in the country. Therefore, in order to increase export of services by upgrading service sector to international level, extensive development is required in the following areas:-

- a. Development of technology and technical skills.
- b. Increase research activities.
- Exchange of technology and experience with technological developed countries.

6. Enhancing international competitiveness by providing adequate government support to address export risks:

Imposes government obligation to produce quality export goods to enhance capabilities to survive in international competition and to fully ensure taxes, VAT and other conventional benefits to keep production costs limited as well as initiatives to increase exports of various products and services by introducing adequate cash incentives (currently running in limited form) as opposed to exports of all types of promotional products and services in the light of different countries.

7. Taking effective initiatives to increase export of food and agricultural products:

Bangladesh is an agricultural country and everyone knows that the soil and climate of this country are favorable for agriculture. Since the country is still lagging behind in industry and technology, it is important to use agricultural products as the main export tool to increase export earnings, as well as to promote other products on a priority basis, needless to say that Bangladesh has been always failing in this regard. However, a large portion of export earnings of many developed countries of the world comes from export of food and agricultural products. In 2017, exports of food and agricultural products amounted to USD 1,167 billion in the world, of which 8.8% exported by the United States, 7.7% by the Netherlands, 5.4% by China and 5.6% by Germany. All of these countries are industrialized, but they also hold top position in export of agricultural products.

Although Export Policy 2018-21 prioritizes export of agricultural products and speaks of several opportunities in its favor, it does not have a specific outline or plan to increase export of agricultural products. As a result, although Bangladeshi traders have been trying for a long time to increase export food and agricultural products but are failing to capture international market at desired level. Among major challenges in exporting agricultural products from Bangladesh are:-

- Not being able to supply quality products as per demand of importing countries.
- b. Underdeveloped packaging.
- c. Prompt shipment problem; and
- d. Not being able to capture foreign markets by collecting export orders.





8. Necessary steps to increase export of agricultural products:

In order to increase export of agricultural products, it is necessary to go deeper into all these problems and unravel the causes of failure and formulation and implementation of separate policies for practical solution of all problems, for which it is necessary:-

- i. Setting up a separate " Agri Export Promotion Cell" (AEPC) under Export Promotion Bureau and setting up a branch office of this cell in every district town to carry out activities for development of export of agricultural products
- ii. Conduct regular export training: Introduce special training system on regular export of agricultural products through AEPC head office and district offices on collection of export orders from different countries, collection of quality agricultural products for export, advanced packaging, rapid shipping, documentation and collection of export capital from banks etc.
- iii. At the end of training, under direction and co-operation of AEPC office, trainees will collect necessary documents- such as Trade Licence, TIN Certificate, ERC, VAT Registration and other necessary documents for starting business.
- iv. Then make small teams of 2/3 of the trainees through AEPC office and determine which products will be easy for each team to start business initially and in which countries those products can be exported.
- v. Before starting business, each team should travel at least one of the countries designated for export by that team for reviewing overall market situation of that country, type of product stored in the market and warehouses there, quality of goods, demand of any product and type of packaging etc., so that one can take detailed ideas by self-observation and at the same time collect at least some initial export orders within their convenience and affordability through direct discussion with different buyers should be emphasized. AEPC offices will provide necessary guidance and assistance to the traders in this regard, such as:
 - a) Bangladesh embassies in different countries should have a government obligation to provide all possible assistance to Bangladeshi businessmen traveling for business purposes, including liaising with Bangladeshi traders living in those countries in contact with importers, warehouses and retailers.
 - b) **Procurement of Export Products:** Needless to say, it is not possible for agricultural products collected from the market alone to be fully international standard under any circumstances. In this case, it is necessary to introduce separate production system for export through mutual understanding between exporters and farmers, which will be collected by the exporters from farmers at a fair price. Traders will produce products with the help of any upazila Agriculture Officer as per their demand in collaboration with local farmers at their convenience. Agricultural officers of the country should be obliged to give full cooperation to the traders in this regard.
 - c) To ensure 100% export financing by the banks for export of all types of agricultural products.





- d) Exemption of tax and VAT on export of all types of agricultural products as well as introduction of cash incentives, so that traders can easily capture international market.
- e) Introduce separate export trophies and CIP to encourage export of agricultural products.
- f) To prevent perishable agricultural products brought to airport for the purpose of export, setting up separate cold storage at each airport with sufficient space for storage perishable agricultural products till lifting to Biman.
- g) It is urgent to procure multiple small / medium sized cargo aircraft at public and private levels for speedy transportation of agricultural products to different countries, which will undoubtedly make great strides in delivering goods as per demand of different countries besides protecting goods from spoilage due to transportation problems.



Chapter: 5.10

Development of Power & Energy Sector.







Development of Power & Energy Sector.

Topics Covered in the Chapter

A) Electricity:

- 1. Installed capacity and maximum Generation.
- 2. Power generation and distribution capacity.
- 3. Demand, production and deficit.
- 4. Per capita generation and consumption.
- 5. Bangladesh's position on electricity consumption.
- 6. Sector based use of electricity.
- 7. Transmission and distribution loss.
- 8. Bangladesh's position in terms of system loss.
- 9. Renewable Energy.
- 10. Use of fuel in power generation.
- 11. ADP Allocation for Dev. of Power Sector.
- 12. Future forecast of power generation and demand.
- 13. Subsidies in the power sector.
- 14. Future plans of the govt. for power sector.

B) Fuel:

- 1. Overall situation of primary fuel resources.
- 2. Use of primary fuel in the country.
- **3.** Per capita fuel consumption.

1. Natural Gas:

- a) History of discovery of natural gas in Bangladesh.
- b) Bangladesh's position in natural gas reserves.
- c) Gas extraction and use.

- d) Bangladesh's position on per capita gas consump.
- e) Gas usage by sector.
- f) Revenue generation from natural gas.
- g) Bangladesh's position in natural gas revenue.
- h) Estimates of future demand for natural gas.
- i) Recommendations for Gas Sector development.

2) Coal:

- a) Overall situation of coal in Bangladesh.
- b) Coal extraction and use.
- c) Bangladesh's position in coal consumption.
- d) Scenario of coal import in the country.
- e) Things to do to increase coal extraction.

3) Fuel Oil:

- a) Fuel oil situation in the country.
- b) Demand and extraction of oil.
- c) Bangladesh's position in fuel oil production.
- d) Consumption of oil.
- e) Fuel oil imports in the Country.
- f) Subsidies on import of crude oil.
- C) Recommendations for Development of Power & Energy Sector.







A) Electricity:

Electricity is an essential factor in the overall social and economic development of a country in the present civilization. Use of electricity has become essential from industry to every aspect of daily life. Importance of electricity in the economic development of the country is therefore immense. For a long time since independence, Bangladesh has lagged far behind the neighboring countries in terms of electricity and fuel. Bangladesh's progress in this area has been stagnant due to failure of previous governments to increase power productivity and insufficient investment in the power and energy sectors. As a result, country's overall economic progress, including industrial development, has been severely hampered and lagged behind.

Electricity:

According to Global Electricity Generation Ranking 2020, Bangladesh ranks 49th in the list of 100 countries, while India is 3rd, Japan 5th, South Korea 10th, Indonesia 20th, Thailand 23rd, Vietnam 24th, Malaysia 28th, Pakistan 32nd and Philippines is 36th in that ranking Figure-5.10 (1).

In order to reach the list of middle-income countries by 2021 and high-income countries by 2041, power sector will have to achieve SDG-7 (Ensure access to affordable, reliable, sustainable and modern energy) goals by 2030. However, present government has identified power generation as part of development and has achieved unimaginable success in power generation in the last 10 years. Government has taken a number of practical steps to achieve self-sufficiency in power generation, including increasing investment in power sector and making progress in fuel sector.

Figure-5.10 (1): According to Global Rankings 2020, Position of Bangladesh and a few other countries in South Asia in power generation:-



Source: Indexmundi.com

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1) Installed capacity and maximum Generation :

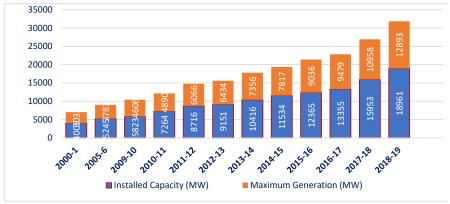
Although power generation capacity of Bangladesh was limited to 5,719 MW and maximum generation of 4,162 MW till FY 2008-9, scenario has started to change since present government came to power. During fiscal year 2009-10, highest generation of electricity was 4,606 MW as against installed capacity in the country was 5,823 MW, during fiscal year 2018-19, highest generation stood at 12,893 MW as against installed capacity of 18,961 MW. During these 10 years, power generation capacity of the country has increased by 13,138 MW (225.62%) overall, an average increase of 1,313.8 MW (22.56%) per annum. Figure-5.10(2).

Installed capacity and maximum generation:





Figure-5.10(2): Scenario of power generation against installed capacity in the country during period from 2000-1 to 2018-19:-



Source: Researchgate

2) Power generation and distribution capacity:

Total generation capacity of power plants commissioned by 2020 stands at 20,813 MW, distribution on the basis of used fuel stands at 524 MW based on coal (2.52%), gas based 11,502 MW (55.26%), liquid fuel (HFO) 5,508 MW (26.46%), HSD 1,855 MW (8.91%), Imported 1,160 MW (5.57%), Hydro power 230 MW (1.11%) and Solar power 35 MW (0.17%) **Figue-5.10** (3).

Distributed by sector, 9,568 MW (47%) in public sector, 7,884 MW (43%) in private sector, 771MW (4%) in joint ventures and 3,160 MW (6%) is imported.



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and distribution capacity:

Power generation

Figue-5.10 (3): Production and Distribution Capacity of Power Plants under BPDB till October 2020: -

Fu	el based I	nstalled Capacity	Sector based Installed Capacity			
Fuel Type	No. of Plants	Installed capacity (MW)	%	Sector	Capacity (MW)	%
Coal	3	524	2.52	Public Sector	9,568	47
Gas	64	11,502	55.26	Private Sector	8,884	43
HFO	56	5,507	26.46	Joint Venture	771	4
HSD	10	1,855	8.91	Import	1,160	6
Imported	-	1,160	5.57			
Hydro	1	230	1.11			
Solar	4	35	0.17			
Total:	138	20,813	100	Total:	20,383	100

Source: BPDB and Powercell Note: Excluding Captive Power & Renewable Energy.





3) Demand, production and deficit of Electricity:

Analysis of electricity demand and production in the country during last two decades (2000-2019) shows that demand for electricity in the country increased by an average of 7.39% per annum during period from 1999-00 to 2010-11 and during period from 2011-12 to 2018-19 increased by an average of 8.76% per annum. On the other hand, production deficit during period from 1999-00 to 2015-16 was about 21% per annum as compared to demand for electricity in the country and during period from 2016-17 to 2018-19, production deficit was 5.20% per annum. Therefore, it is clear that in recent times both demand and production of electricity in the country has increased and production deficit has narrowed considerably compared to demand, which is undoubtedly a big success towards achieving Source: BPDB Annual Report self-sufficiency in electricity.

Figure-5.10 (4): Scenario of power generation and deficit against demand in the country during period from 1999-0 to 2018-19:-

Fiscal Year	Maximum Demand	Max. Peak	Defic	iency
	(MW)	Genera MW tion (MW)		%
1999-00	3,149	2,665	484	15.3
2003-04	4,259	3,592	667	15.60
2008-09	6,066	4,162	1,904	31.39
2009-10	6,454	4,606	1,848	28.6
2010-11	6,765	4,890	1,875	27.7
2011-12	7,518	6,066	1,452	19.3
2012-13	8,349	6,434	1,915	22.94
2013-14	9,268	7,356	1,912	20.6
2014-15	10,283	7,817	2,466	23.9
2015-16	11,405	9,036	2,369	20.7
2016-17	10,500	9,479	1,021	9.72
2017-18	11,500	10,958	542	4.71
2018-19	13,044	12,893	151	1.16

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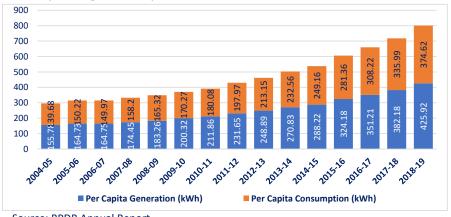
production and deficit of **Electricity:**

Demand,

4) Per capita power generation and consumption :

During the last decade (2010-2019), per capita generation and consumption of electricity in the country has almost doubled. During fiscal year 2009-10, per capita consumption of electricity was 170.27 kWh as against per capita generation of 200.32 kWh in the country, while in the period of 2018-19, per capita consumption has increased to 374.62 kWh as against per capita generation of 425.92 kWh. During this period, average per capita consumption of electricity was 254.34 kwh as against average per capita production of electricity was 293.53 kwh per annum. During ten years from F.Y 2009-10 to 2018-19, per capita electricity production in the country has increased at an average annual rate of 8.82% and per capita consumption has increased at an average rate of 8.56% per annum Figure-5.10 (5).

Figure-5.10 (5): Scenario of per capita production and use of electricity in the country during financial year 2004-5 to 2018-19:-



Source: BPDB Annual Report

Per capita power generation and consumption:



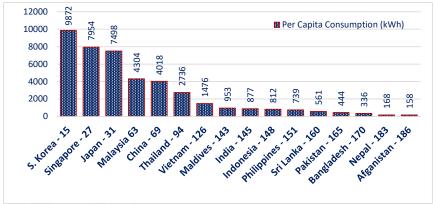


Bangladesh's position on per capita electricity consumption

5) Bangladesh's position on per capita electricity consumption:

Bangladesh still lags behind all other countries in South Asia except Afghanistan and Nepal in terms of per capita power consumption. According to Global Rankings 2020, Bangladesh ranks 160th out of 217 countries in terms of per capita electricity consumption. In that ranking, position of Pakistan is 165, Sri Lanka 160, Philippines 151, Indonesia 148, India 145, Maldives 143, Vietnam 126, Thailand 94, China 69, Malaysia 63, Japan 31, Singapore 27 and South Korea is in 15th place. According to that ranking, per capita electricity consumption (kWh) is 158 in Afghanistan, 183 in Nepal, 336 in Bangladesh, 444 in Pakistan, 561 in Sri Lanka, 739 in Philippines, 812 in Indonesia, 877 in India, 953 in Maldives, 1,476 in Vietnam, 2,736 in Thailand, 4,018 in China, 4,304 in Malaysia, 7,498 in Japan, 7,954 in Singapore and 9,872 kWh in South Korea [Figure-5.10 (6)].

Figure-5.10 (6): According to Global Ranking 2020, per capita electricity consumption in Bangladesh and other South Asian countries:

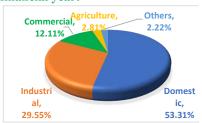


Source: Indexmundi Note: Higher Rank is lower position.

6) Sector based use of electricity:

As per FY 2018-19, 53.31% of electricity generated in the country is used in residential sector, 29.55% in industry, 12.11% in commercial sector, 2.81% in agriculture and 2.22% in other sectors **Figure-5.10** (7).

Figure-5.10 (7): Use of electricity in different sectors as per 2018-19 financial year: -



Source: Energy and Mineral Resources Div.

Sector based use of electricity:

7) Transmission and distribution loss:

System losses have more or less in almost all countries in the world. There is no alternative to limiting system losses in order to restore order in power sector and make the sector profitable. However, Bangladesh

Figure-5.10 (8): Scenario of transmission and distribution loss of electricity in the country during financial year 2009-10 to 2019-20:



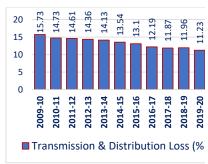
Transmission and distribution loss:

Bangladesh's position in the world in terms of system loss of Power:

Strategies for Economic Development of Bangladesh



has been aware of this since long time and is working hard to reduce system losses, although Bangladesh's position in this regard is still far behind that of many countries in the world. Overall system loss of electricity in the country in 2009-10 was 15.73%, which has came down to 11.23% in 2019-20. If current efforts to reduce system losses continue, it is hoped that system losses will be further reduced in future [Figure-5.10 (8)].

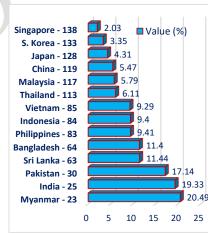


Source: Powercell

8) Bangladesh's position in the world in terms of system loss of Power

Bangladesh still lags far behind many countries in South Asia in terms of controlling system loss of electricity. According to the Global Rankings 2014, Bangladesh ranked 64th out of 138 countries in terms of system loss of electricity. Among other South Asian countries in that ranking, Myanmar ranks 23rd, India 25th, Pakistan 30th, Sri Lanka 63rd, Philippines 83rd, Indonesia 84th, Vietnam 85th, Thailand 113th, Malaysia 117th, China 119th, Japan 128th. Korea is 133rd and Singapore is in 138th rank. System loss of electricity at that time was 20.49% in Myanmar, 19.33% in India, 17.14% in Pakistan, 11.44% in Sri Lanka, 11.40% Bangladesh, in 9.41% Philippines, 9.40% in Indonesia, 9.29% in Vietnam, 6.11% in Thailand, 5.79% in Malaysia, 5.47% in China, 4.31% in Japan, 3.35% in South Korea and 2.03% in Singapore [Figure-5.10 (9)].

Figure-5.10 (9): According to the Global Rankings 2014, position of Bangladesh and other South Asian countries in the list of 138 countries in terms of power system loss: -



Source: Indexmundi Note: Higher Rank is Higher Position

First Edition: August, 2022

9) Renewable Energy:



Bangladesh is at considerable risk in terms of fuel security, as about 73% of the primary fuel used in the country is import dependent. In this situation, the only way





Renewable Energy

to address this great problem is to increase production and use of renewable energy along with adequate exploration and extraction of oil, gas and coal in the country. Needless to say, Bangladesh has remained at a very early stage till date in terms of production and use of renewable energy, which is only 0.01% of the total electricity generation by 2019. In order to improve this situation, Sustainable and Renewable Energy Development Authority (SREDA) has developed a guideline to increase production under net metering, where target of 2000 MW solar power generation by 2021 has been set.

Scenario of renewable energy consumption in the country by the end of 2021:

Technology	Off-grid (MW)	On-grid (MW)	Total (MW)
Solar	348.43	198.50	546.93
Wind	2.00	0.90	2.90
Hydro	-	230.00	230.00
Biogas to Electricity	0.69	-	0.69
Biomass to Electricity	0.40	ı	0.40
Total:	351.52	429.40	780.92

Source: SREDA

10) Use of fuel in power generation:

Lion's share of electricity generated in the country is based on gas and oil. Approximately 71.80% of total electricity generated by the F.Y 2019-20 is gas based, 4.20% coal based, 13.40% liquid fuel based, 1.20% water based, 9.30% import based and 0.10% renewable energy based production. During FY 2008-9, gas based electricity production in the country was 88.44%, coal based production was 4.02% and liquid fuel based production was 5.93%. Although use of gas in power generation is to be gradually reduced keeping in mind the shortage of fuel in the country, use of gas in power generation has decreased by 16.64% in the last 12 years period from 2008-2019, by an average of 1.39% per annum only and liquid fuel-based production has increased rather than decreased overall by 7.47%, an average annual increase of 0.62%. Coal-based production remains at the same level during this period.

Figure-5.10 (10): Information on the use of different types of fuels in power generation during F.Y 2008-09 to 2019-20:-

Financial	Total Generation	Fuel Based (%)						
Year	MKWh	Gas	Coal	Liquid Fuel	Water	Renewable Energy	Import	
2008-09	26,533	88.44	4.02	5.93	1.61	-	-	
2009-10	29,247	89.21	3.53	4.76	2.50	i	-	
2010-11	31,355	82.12	2.49	12.61	2.78	i	-	
2011-12	35,118	79.15	2.52	16.13	2.21	Ī	-	
2012-13	38,229	78.12	3.02	16.51	2.34	Ī	-	
2013-14	42,195	72.42	2.46	18.35	1.39	5.37	-	
2014-15	45,836	69.44	2.05	19.90	1.23	7.37	-	
2015-16	52,193	68.63	1.62	20.57	1.84	7.32	-	
2016-17	57,276	66.44	1.76	21.96	1.71	8.13	-	
2017-18	62,676	63.31	2.70	24.72	1.63	7.63	0.01	
2018-19	70,533	68.49	1.74	19.07	1.03	9.62	0.05	
2019-20	71,419	71.80	4.20	13.40	1.20	9.30	0.10	

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Source: Power Division Annual Report

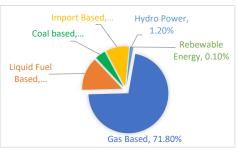
Use of fuel in power generation:





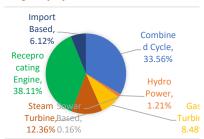
Graphical presentation of Fuel based and Technology based electricity generation by the end of financial year 2019-2020.

Figure-5.10(10)A : Fuel Based Electricity Production capacity by the end of F.Y 2019-20:-



Source : Power Division Annual Report

Figure-5.10(10)B: Technology based ased Electricity Generation capacity by the end of F.Y 2019-20:-



Source: Power Division Annual Report

11) Annual Allocation for Development of Power Sector:

Figure-5.10 (11): Scenario of allocation and implementation of annual development allocation in power sector in the last decade: -

Fiscal	ADP Allocation		Disbursement		
Year	Amoun	Growt	Amount	%	
	t	h Rate			
		(%)			
2008-9	2,677	-	2,298.73	86	
2009-10	2,644	-1.21	2,024.54	77	
2010-11	5,982	126.22	5,912.82	98.85	
2011-12	7,208	20.50	7,179.65	99.61	
2012-13	8,803	22.13	8,868.01	101	
2013-14	7,928	-9.94	7,916.84	99.85	
2014-15	8,277	4.39	8,330.86	100.65	
2015-16	15,476	86.98	15,514.76	10.25	
2016-17	16,223	4.82	16,702.60	102.96	
2017-18	24,947	53.78	25,810.61	103.46	
2018-19	24,836	-0.45	23,145.11	93.19	
2019-20	24,827	-0.04	23,238.25	93.49	
-					

Source: Powerdivision

In recent years, annual development allocation in power sector has increased several times as compared Although past. annual development allocation in this sector was limited to Tk 9,000 crore till FY 2014-15, this picture has completely changed since FY 2015-16. In 2015financial year, annual development allocation stood at TK.15,476.21 crore, in 2016-17 financial year TK.16,222.72 crore, in 2017-18 financial year TK.24,947.44 crore, in 2018-19 financial year TK.24,836.42 crore and in 2019-20 financial year TK. 24,826.78 crore. During five-year period from 2015-16 to 2019-20, annual development allocation in power sector was an average of Tk 21,261.93 crore per annum and ADB implementation rate in power sector has been above 95 per cent in recent years [Figure-5.10 (11)].

12) Future forecast of power generation and demand in the country:

It is natural that use of electricity at individual and collective level will increase substantially with the progress of overall economy of the country, government needs to be adequately prepared to deal with that situation. According to estimates of the Institute for Energy Economics and Financial Analysis (IEEFA), country's total electricity production and net demand will increase by an average of 9% and

Annual Allocation

Power Sector:

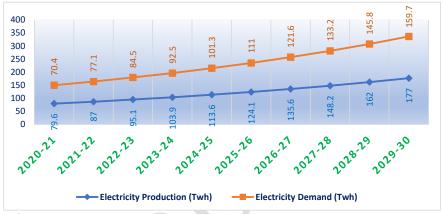
for Development of





9.2% per annum respectively by 2030, accordingly, country's electricity production will stand at 177 Twh and demand will be 159.7 Twh by 2030 [Figure-5.10 (12)]. However, present government has already adopted a long-term plan to meet the demand for electricity in future and is moving ahead with that plan to achieve self-sufficiency in power generation.

Figure-5.10 (12): Forecast of power generation and demand in the country by 2030: -



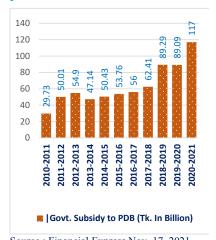
Source: IEEFA

Future forecast of power generation and demand in the country:

13) Subsidies in the power sector:

Subsidies in the power sector have already been established as part of regular expenditure of the national budget of Bangladesh and as one of the lossing sectors of the national economy. In particular, over the past decade, production costs have been steadily rising due to increase in gas and imported liquid fuel based power generation instead of using coal discovered in the country to generate electricity. On the other hand, government is being forced to sell electricity to the people at subsidized rate with huge losses to keep the price of electricity affordable, as a result, amount of subsidy in this sector has been steadily increasing. During period of F.Y 2010-11 to 2020-21, average annual subsidy in the power sector was TK.63.61 billion annually, in the fiscal year 2010-11 it was TK. 29.73 billion, which stood at TK. 117 billion in the fiscal year 2020-21.

Figure-5.10 (13): Scenario of subsidy in the power sector during period 2010-11 to 2020-21:-



Source: Financial Express Nov. 17, 2021

First Edition: August, 2022

Subsidies in the power sector :

14) Future plans of the government for development of power sector:

In order to meet challenge of reaching the list of high-income countries by 2041, government has formulated a comprehensive power system master plan (PSMP) 2016 to ensure electricity for all by 2021 and to achieve self-sufficiency in electricity





Future plans of government for development of power sector:

by 2030, which is currently under implementation. According to PSMP 2016 estimates, country's power generation capacity will increase to 24,000 MW by 2021, 40,000 MW by 2030 and 60,000 MW by 2041. According to that estimates, per capita power generation will be 510 KWh by 2020, 700 KWh by 2021, 815 KWh by 2030 and 1475 KWh by 2041 **Figure-5.10** (14):.

Figure-5.10 (14): Scenario of future power generation plan as per PSMP 2016:

SL No.	Description	Year 2020	Year 2021	Year 2030	Year 2041
1	Power generation capacity (MW)	22,787*	24,000	40,000	60,000
2	Electricity Demand (MW)	14,800	19,000	33,000	52,000
3	Transmission line (Ckt. KM)	12,119	12,000	27,300	34,850
4	Grid Substation Capacity (MVA)	44,340	46,450	120,000	261,000
5	Distribution line (KM)	560,000	515,000	526,000	530,000
6	Power Generation per capita (KWh)	510	700	815	1475
7	Access to electricity	96%	100%	100%	100%

Source: Power division annual report * with captive & RE



Overall situation of primary fuel resources in Bangladesh:

1) Overall situation of primary fuel resources in Bangladesh:

Bangladesh still relies heavily on imports in terms of natural energy resources. Among notable commercial fuel resources in Bangladesh are natural gas, produced and imported coal and oil, imported LPG and LNG and electricity. About 27% of the country's total fuel demand is met through domestic production and remaining 73% through commercial imports. About 63% of commercial fuels depend on natural gas and remaining 37% on imported oil and coal.



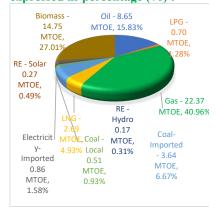


Figure-5.10 (15): Accounts of the country's primary fuel in the fiscal year 2018-19:-

SL	Name	Unit	Total	
			MTOE	%
1	Oil (Crude + Refined)			
	in K ton	8,650	8.65	15.83
2	LPG in K Tone	699	0.70	1.28
3	Natural Gas in Bcf	965	22.37	40.96
4	LNG in Bcf	116	2.69	4.93
5	Coal (Imported) K ton	5,754	3.64	6.67
6	Coal (Local) in K ton	803	0.51	0.93
7	RE (Hydro) in MW	230	0.17	0.31
8	RE (Solar) in MW	368	0.27	0.49
9	Electricity (Imported)			
	in MW	1,160	0.86	1.58
10	Total Comm. Energy		39.85	72.99
11	Biomass		14.75	27.01
12	Total Primary Energy		54.60	100.00

Source: Energy and Mineral Resources Division

Figure-5.10 (16): Primary fuel used in financial year 2018-19 expressed as percentage (%):-

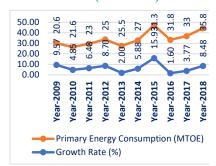


Use of primary fuel in the country:

2) Use of primary fuel in the country:

Over the past decade, country's economy has expanded as well as industrial and trade sectors, which has led to a steady increase in the use of primary fuels in recent years. Analysis of primary fuel used for the period of 2009-2018 shows that during this period, average fuel consumption in the country was 27.46 MTOE per annum and usage increased by an average of 8.63% per annum in this period. During this period, primary fuel consumption in the country has been (MTOE) 20.6 in 2009, 21.6 in 2010, 23.00 in 2011, 25.00 in 2012, 25.5 in 2013, 27.00 in 2014, 31.3 in 2015, 33.00 in 2016 and 35.8 MTOE in 2017 [Figure-5.10] (17)].

Figure-5.10 (17): Scenario of increase in annual primary fuel consumption in the country during the last decade (2009-2018):-



Source: Energy and Mineral Resources Division

First Edition: August, 2022

3) Per capita fuel consumption:

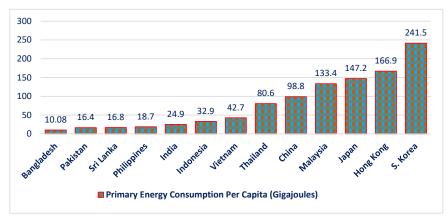
To date, Bangladesh lags far behind most countries in the world and almost all countries in South Asia in terms of per capita fuel consumption. According to 2019 estimates, per capita primary fuel consumption (Gigajoules) was 10.8 in Bangladesh, 16.4 in Pakistan, 16.8 in Sri Lanka, 18.7 in Philippines, 24.9 in India, 32.9 in Indonesia, 42.7 in Vietnam, 80.6 in Thailand, 98.8 in China, 133.4 in Malaysia, 147.2 in Japan, 166.9 in Hong Kong and in South Korea it was 241.5 Gigajoules [Figure-5.10(18)].





Per capita fuel consumption:

Figure-5.10 (18): Scenario of per capita primary fuel consumption in Bangladesh and other countries in South Asia by 2019:-



Source: BP(World Energy Analysis)

1) Natural Gas



A) History of discovery of natural gas in Bangladesh:

The then Burma Oil Company discovered the first gas field in East Bengal in 1955. Later, Shale Oil Company and Pakistan Petroleum discovered seven more large gas fields in the 1960s,. Commercial use of natural gas began in the country in the early 1959.

During first government of Bangladesh under the leadership of Bangladesh Hetroleum Rules 1974 in collaboration with Dr. Kamal Hossain (then Minister for Fuel) and established Bangladesh Oil, Gas and Mineral Resources Company "Petrobangla".

In 1980, Petrobangla started exploring for oil and gas in the country and discovered 9 (nine) large gas fields. First commercial oil facility was established in Haripur in 1986 under supervision of Petrobangla. (Wikipedia)

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History of discovery of natural gas in Bangladesh:







Since first discovery in 1955, till today (June 2019), total number of discovered gas fields in the country is 27 (Onshore- 25 + Off-shore-2), out of which 20 gas fields have come under production by June, 2019. Extractable reserves of the discovered gas fields were 26.69 TCF, after lifting for the last 18 years, amount of reserves stood at 11.76 TCF by June, 2019 as per the government.

Summary of the country's gas sector by June, 2019 is furnished hereunder:-

SL No.	Particulars	Total	
1	Total number of Gas Fields	27	
2	No. of Gas fields under production	20	
3	No. of Wells where gas producing from	112	
4	Present Gas production capacity	2,750 MMcfd	
5	Average Gas production rate	1,744 – 2,750 MMcfd	
6	Annual Production by NOC	385.34 Bcf (40%)	
7	Annual Production by IOC	575.43 Bcf (60%)	
8	Total Recoverable reserve at the time of	28.69 Tcf	
	invention		
9	Cumulative production till June, 2019	16.93 Tcf	
10	Recoverable Reserve as of June, 2019	11.76 Tcf	

Source: Energy and Mineral Resources Division report

B) Bangladesh's position in the world in terms of natural gas reserves:

There is considerable controversy over the availability of natural gas in the country. Initially, although country's gas reserves were estimated at 39 trillion cubic feet in 1955, but in the international rankings 2018, Bangladesh's gas reserves revalued at 186 billion cubic meters and Bangladesh was ranked 45th out of 102 countries in terms of gas reserves. In that ranking, other South Asian countries, such as China ranks 10th, Indonesia 13th, India 23rd, Malaysia 24th, Vietnam 28th, Myanmar 30th, Pakistan 31st, Thailand 44th and Philippines 51st position [Figure-5.10(19)]

Figure-5.10(19): According to international ranking 2018, position of Bangladesh and a few other countries in South Asia in terms of gas reserve:-



Source: Worldpopulationoverview.com

First Edition: August, 2022

C) Gas extraction and use:

Gas is the only natural resource in Bangladesh, which is being extracted and used on a commercial basis and is generating revenue in this sector. Although natural gas was discovered in Bangladesh in 1955, some gas extraction started from 1960.

Bangladesh's position in the world in terms of natural gas reserves:





Gas extraction and use:

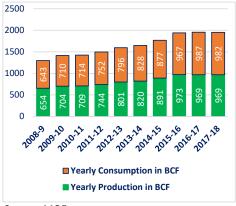
Bangladesh's

capita gas

position on per

consumption:

Figure-5.10(20): Scenario of extraction and use of natural gas in the country during period from 2008-9 to 2017-18:-



Source: MOF

Basically, commercial use of gas has been started in the country since 1980 which has expanded after 1990. Until 1990, annual extraction and use of gas was limited to 170 billion cubic feet, which gradually increased to 969 billion cubic feet by 2018 [Figure-**5.10(20.** According to international rankings 2018, Bangladesh ranks 32nd out of 113 countries in grass extraction and use, while Malaysia ranks 30th, Pakistan 21st and Indonesia 20th, South Korea 19th, India 14th, Thailand 13th, Japan 5th and China is 3rd in that ranking.

D) Bangladesh's position on per capita gas consumption :

Bangladesh lags far behind many countries in the world and most of the countries in South Asia in terms of per capita natural gas consumption. According to the Global Rankings 2019, Bangladesh ranks 81st out of 214 countries in terms of per capita gas consumption. Singapore is one of the leading countries in South Asia in terms of per capita gas consumption ranks 15th place, followed by Japan is 32nd among other countries in South Asia, Malaysia is ranked 34th, South Korea 37th, Thailand 42nd, Pakistan 77th, China 82nd, Indonesia 84th, Vietnam 91st, Myanmar 92nd, India 101st and Philippines is ranked 105th position [Figure-5.10(21)].

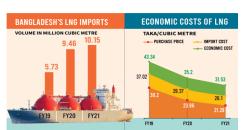
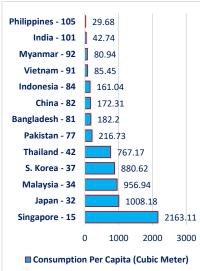


Figure-5.10(22): Use of gas in different sectors as per 2016-17 financial year:-

Figure-5.10(21): According to Global Rankings 2019, position of Bangladesh and other South Asian countries in terms of per capita gas consumption:-



Source: Indexmundi Note: Higher ranking means lower position

E) Gas usage by sector:

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Among the sectors in which natural gas is being used till now in





Gas usage by sector:

Domestic CNG Use 5% Electricity 16% 40% Commerci al Use 1% Industries 17% ∟ Captive Fertilizer Power 5% 16%

Source: MOF

Bangladesh are electricity, captive power, fertilizers, industrial plants, homes and vehicles. According to 2016-17 financial year, 40% of extracted gas is being used in power sector, 16% in captive power, 17% in various industries, 16% in home as fuel, 5% in fertilizer production, 5% in CNG supply for vehicles and commercial export is 1% [Figure-5.10(22)].

F) Revenue generation from natural gas:

After commercial use of natural gas has been on the rise since 1980 in the country, government started earning some revenue in this sector, which has been expanded after 1990. At present, annual revenue from gas sector is below 1% of GDP on average, which was 0.36% of GDP in FY 1999-00, 1.19% in 2010-11 and 0.53% in 2017-18 **Figure-5.10(23)**. Due to gradual decline in natural gas reserves and failure to discover new gas fields in line with domestic demand in recent times, gas connections at the individual and institutional level have been limited since 2015, resulting in a gradual decline in government revenue from gas sector in this period.

Figure-5.10(23): Scenario of revenue earnings (net) in proportion to GDP from natural gas over the last two decades:-



Source: Globaleconomy.com

G) Bangladesh's position in terms of natural gas revenue :

Bangladesh lags behind all the developing countries in South Asia except India and the Philippines in terms of revenue from natural gas. According to 2018 international rankings, Bangladesh ranks 33rd out of 136 countries in terms of gas revenue. Among other South Asian countries, Malaysia ranks 13th, Indonesia 24th, Thailand 26th, Pakistan 31st, Vietnam 32nd, Philippines 49th and India 61st position in that ranking. Gas revenue in 2018 was 0.53% of GDP in Bangladesh, which was 2.99% in Malaysia, 1.04% in Indonesia, 0.87% in Thailand, 0.61% in Pakistan, 0.58% in Vietnam, 0.17% in the Philippines and 0.05% in India [Figure-5.10 (24)].

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Revenue generation from natural gas:



Bangladesh's position in terms of natural gas revenue:

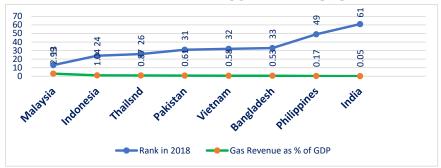
Estimates of future demand for natural gas in the country:

Recommendations:

Strategies for Economic Development of Bangladesh



Figure-5.10(24): As per global ranking 2018, position of Bangladesh and other countries in South Asia in achieving gas revenue in proportion to GDP:-

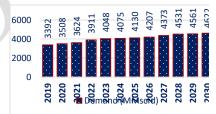


Source: Globaleconomy.com

H) Estimates of future demand for natural gas in the country:

As natural gas is one of the major sources of fuel in Bangladesh, use of gas in various sectors has been steadily increased in recent years. Till 2018-19, supply of gas against estimated demand of 3,392 MMscfd in the country was 3,331 MMscfd including imported LNG. In view of growing demand for natural gas in the country's fuel sector, according to government's estimate, demand for gas in the country will stand at 4,622 MMscfd by 2030 Figure-5.10(25).

Figure-5.10(25): Scenario of estimated demand for natural gas in the country by 2030:-



Source: EMRD

I) Recommendations for Gas Sector Development:



Use of natural gas as fuel in various sectors of the country has been steadily increased during last couple of years. In order to meet this growing demand, gas extraction has been relatively high in the last few years, resulting in depletion of extractable gas reserves. During June - 2019, amount of extractable gas reserves in the country were as follows: -

During June, 2019, country's gas reserves were ...11.76 TCF





Needless to say, with growth of industrialization in the country, demand for gas in industry and other sectors will increase further in future and in that case current gas reserves will be depleted in the next 12-14 years. If new gas fields are not discovered in the country quickly and amount of extraction cannot be increased through use of advanced technology, there will be severe shortage of gas in future, which will cause great chaos in the country's fuel sector and severely hamper the overall economic progress of the country. Therefore, in the rapid development of gas sector:

Recommendations for Gas Sector Development:-

- a) In order to meet future demand of gas, discovered gas fields which have not yet been brought under extraction, should proceed in gas extraction through use of advanced technology from those gas fields, so that more production is possible.
- b) To allocate sufficient funds in the national budget for conducting large scale survey activities in both water and land areas of the country by skilled foreign institutions with a view to expeditious discovery of new gas fields.
- c) Conducting studies to explore possibility of long-term import of gas through pipelines from neighboring countries as well as conducting survey for making LNG imports more affordable.
- d) Permanent closure of residential and commercial gas connections until new gas fields are discovered.
- e) From now on, affordable alternative fuels should be sought out in both residential and commercial sectors, which will be capable of meeting future fuel demand in the country.

2) Coal:



A) Overall situation of coal in Bangladesh:

Coal is the second largest natural resource in Bangladesh. Although coal as a fuel is harmful to environment, its use as a fuel in power generation and brick kilns is widespread worldwide. The first coal mine was discovered in Bangladesh in 1962.



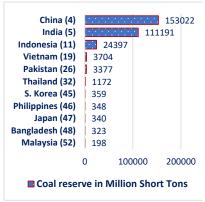


Overall situation of coal in Bangladesh:

Subsequently, coal has been discovered in total 5 mines, including 4 more, according to latest estimates, which have an estimated reserves of 7,962 million metric tons (proven and measured reserves of 3,300 million metric tons), most of which have not yet become under production. Amount of coal reserves discovered in the country till now is 390 million Metric tons **Figure-5.10(27)**. Bangladesh ranks 60th out of 130 countries in the international ranking 2018 in coal mining. According to various research information, Bangladesh has a large amount of undiscovered coal reserves, which cannot be extracted through conventional mining.

Needless to say, discovery of this undiscovered coal as soon as possible to meet the future fuel demand will undoubtedly

Figure-5.10(26): According to International Ranking 2017, position of Bangladesh in the list of 190 countries with discovered coal:-



Source: Globaleconomics.com

bring positive results for the country's economy. Although amount of coal discovered so far is less, quality of coal discovered in Bangladesh is good according to various local / foreign survey and demand for this coal is also sufficient. Details of coal reserves discovered so far in the country are given in the following table:-

Figure-5.10(27): Major coal fields and reserves in Bangladesh by 2014:-

Coal fields	Year of discovery	Depths of coal seam (in meter)	No. of coal seam	Reserve (Millio n ton)	Status
Jamalganj (Joypurhat)	1962	640-1158	7	5,450	Mining not feasible economically
Barapukuria (Dinajpur)	1985	118-506	6	390	Underground mine started production
Khalashpir (Rangpur)	1989	257-451	8	685	Undeveloped
Dighipara (Dinajpur)	1995	250	7	865	Undeveloped
Phulbari (Dinajpur)	1997	152-246	1	572	Open pit mine feasibility study undertaken in 2004
Total:			29	7,962	

Source: CPD and Banglapedia Note: Measured and probable Reserve of Coal is 3,300 Million M.T

B) Coal extraction and use:

Although coal has been discovered in 5 mines in Bangladesh till date, except for Barapukuria mine, four other mines have not yet come under production. As a result, Bangladesh lags far behind other countries in South Asia in terms of coal extraction and use. As consumption has increased in recent years compared to coal production, deficit is being filled through imports. Information on coal extraction and use in the country during financial year 2008-9 to 2017-18 is displayed through [Figure-5.10(28)].

Figure-5.10(28): Scenario of annual coal extraction and use in the country during F.Y 2008-9 to 20117-18:-



Source: BCMCL

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Coal extraction and use:



Bangladesh's

position in terms of

coal consumption:

Strategies for Economic Development of Bangladesh



C) Bangladesh's position in terms of coal consumption:

Figure-5.10(29): According international ranking 2018, position of Bangladesh and other countries in South Asia in terms of coal consumption :-



Source: Ceicdata

Note: Higher Rank indicates Lower Position.

Bangladesh lags far behind South Asian countries in terms of coal consumption. According to International Ranking 2018, Bangladesh ranks 60th out of 130 countries in coal consumption, followed by India at 2nd, Japan 6th, South Korea 8th, Indonesia 12th, Vietnam 16th, Thailand 20th. Malavsia Philippines 28th, and Pakistan at 38th position. According to estimates of 2018, coal consumption in that year was 452.22 million MT in India, 117.47 million MT in Japan, 88.21 MMT in South Korea, 61.56 MMT in Indonesia, 34.28 MMT in Vietnam, 18.5 MMT in Thailand, 21.12 MMT in Malaysia, 16.28 MMT in Philippines, 11.6 MMT in Pakistan and 2.13 MMT Bangladesh [Figure-5.10(29)].

D) Scenario of coal import in the country:

Due to fact that the reserves of discovered coal and annual extraction of coal in Bangladesh is less than domestic demand, deficit is to recover by importing a lot of coal every year. During period from 2007-08 to 2016-17 financial year, coal have been imported on an average of 1,489.4 thousand short tons (TMT) every year,

Scenario of coal import in the country:

which were 1,058 TMT in FY 2007-08, 1,415 TMT in FY 2008-9, 1,109 TMT in FY 2009-10, 1,301 in FY 2010-11, 1,088 in FY 2011-12, 1,318 in FY 2012-13, 945 in FY 2013-14, 2,200 in FY 2014-15, 1,363 in FY 2015-16, and 3,097 TMT in the financial year 2016-17 [Figure-5.10(30)].

In view of the growing demand for coal in the country, discovered coalfields should be brought under production as soon as possible. This is because a large amount of foreign exchange goes out of the country every year to import coal, which could have been spent on other development works.

Figure-5.10(30): Scenario of coal import in the country during financial year 2006-7 to 2017-18:-



Source: Globaleconomy.com

First Edition: August, 2022

E) Things to do to increase coal extraction:

Main source of fuel in Bangladesh is natural gas, which is being widely used in power generation. According to BPDB, by June 2019, 2.52% of the country's installed power generation capacity is coal-fired, 55.26% gas-powered, 26.46% liquid-fueled and 15.76% run with renewable and other fuels. By June 2019, country's gas reserves is 11.76 TCF, which will be depleted in the next 12-14 years if current trend of use continues. In this reality, there is no alternative but to address the situation in future by expanding coal based power plants in the country by discovering new coal fields and increasing coal extraction.



Things to do to increase coal extraction:

Strategies for Economic Development of Bangladesh



5 coal mines discovered so far in Bangladesh have reserves of 7,962 million metric tons, although estimated measured reserves are 3,300 million metric tons, which, if properly extracted, will reduce use of gas in future by increasing use of coal and current stored gas can be used three times over. But disappointing thing is that most of the coal reserves cannot be extracted under ongoing extraction method, as a result, out of 5 discovered coalfields, coal is being extracted only in Barapukuria mine till now.

According to various sources, quality of coal discovered in Bangladesh is good, which can be used as fuel in other industries besides power generation. Since oil, gas and coal reserves in Bangladesh are much lower than those of fuel rich countries, it is important to use modern methods instead of conventional extraction methods to ensure adequate extraction of already discovered coal to meet fuel demand. Moreover, in order to extract sufficient coal from the coalfields, if it is not possible to extract coal from the mines in conventional way, all those mines can be exploited using "coal gasification" technology to utilize discovered reserves.

3) Fuel Oil:

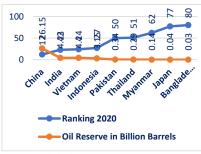


A) Fuel oil situation in the country:

With development of the economy, demand for fuel oil in the country is also increasing tremendously, but compared to that, there is no internal source of fuel oil. Despite small quantity of fuel oil discovered in Bangladesh so far, extractable reserves are only 0.03 billion barrels.

According to International Ranking 2020, Bangladesh ranks 80th out of 186 countries in terms of fuel oil reserves, while China is ranked 12th, India 23rd, Vietnam 24th, Indonesia 27th, Pakistan 50th, Thailand 51st, Myanmar 62nd and Japan 77th position in that list. According to International Census 2020, Fuel oil reserves in South Asian countries, 26.15 billion barrels in China, 4.42 billion in India, 4.40 billion in Vietnam, 3.15 billion in Indonesia, 0.34 billion in Pakistan, 0.29 billion in Thailand, 0.14 billion in Myanmar, 0.04 billion barrels in Japan and 0.03 billion barrels in Bangladesh [Figure-5.10(31)].

Figure-5.10(31): According to International Ranking 2020, fuel oil reserves in South Asian countries:-



Source: Globaleconomy.com

First Edition: August, 2022

Fuel oil situation in the country:

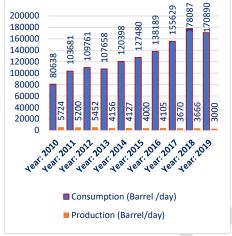




Demand and extraction of oil:

Bangladesh's position in fuel oil production:

Figure-5.10(32): Scenario of daily demand and extraction of fuel oil in the country during 2010-2019:-



Source: Indexmudi and ciecedata

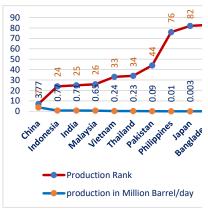
B) Demand and extraction of oil:

Production in Bangladesh is very small compared to daily demand for fuel oil, resulting in a huge gap annual demand between and production, which is met by regular fuel through import of oil Bangladesh Petroleum Corporation (BPC). During period of 2010-2019, average daily demand of fuel oil in the country were 1,29,242 barrels, against which average production were only 4,310 barrels. During this period, demand for fuel oil in the country has increased by an average of about 9% per annum. Daily demand and production of fuel oil in the country during 2010-2019 displayed through [Figure-5.10(32)].

C) Bangladesh's position in fuel oil production:

In terms of production and use of fuel oil, Bangladesh lags far behind many countries in the world and almost all countries in South Asia. According to International Ranking 2019, Bangladesh ranks 83rd out of 100 countries in terms of fuel oil production and 74th out of 210 countries in terms of fuel oil consumption. According to Oil Production Ranking 2019, China is ranked 7th, Indonesia 24th, India 25th, Malaysia 26th, Vietnam 33rd, Thailand 34th, Pakistan 44th, Philippines 76th and Japan at 82nd position. According to that ranking, daily production of fuel oil (million barrels) is 3.77 million in China, 0.77 in Indonesia, 0.71 in India, 0.65 in Malaysia, 0.24 in Vietnam, 0.23 in Thailand, 0.09 in Pakistan, 0.01 in Philippines, 0.0032 in Japan and 0.003 million barrels in Bangladesh [Figure-5.10(33)].

Figure-5.10(33): According to Oil Production Ranking 2019, position of Bangladesh and other countries in South Asia:-



Source: Indexmundi.com Note: Higher Rank indicates lower position

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D) Consumption of oil:

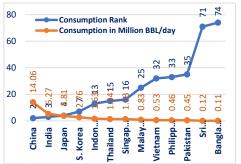
According to Oil Consumption Ranking 2019, Bangladesh ranks 74th in the list of 210 countries. Among other south Asian countries, China ranked 2nd, India 3rd, Japan 4th, South Korea 7th, Indonesia 13th, Thailand 15th, Singapore 16th,





Consumption of oil in the country:

Figure-5.10(34): According to Oil Consumption Ranking 2019, position of Bangladesh and other countries of South Asia:



Source: International Energy Agency (IEA) Note: Higher Rank indicates lower position Malaysia 25th, Vietnam 32nd, Philippines 33rd, Pakistan 35th and Sri Lanka ranked 71st position. According to that ranking, daily consumption of fuel oil (million barrels) 14.06 in China, 5.27 in India, 3.81 in Japan, 2.76 in South Korea, 1.63 in Indonesia, 1.34 in Thailand, 1.33 in Singapore, 0.83 in Malaysia, 0.53 in Vietnam, 0.46 in Philippines, 0.45 in Pakistan, 0.12 in Sri Lanka and 0.11 million barrels in Bangladesh [Figure-5.10(34)].

E) Fuel oil imports in the Country:

Along with economic progress of the country, standard of living of people is increasing and number of private vehicles and public transport is increasing in line with everything. As a result, demand for petroleum in the country is constantly increasing, as well as increasing quantity of petroleum imports. Quantity of petroleum imports in the country was 24.88 lakh metric tons in FY 2010-11, which has increased to 82.82 lakh metric tons in FY 2018-19. During period from 2010-11 to 2019-20 financial year, Diesel, octane and jet fuel imports increased by an average of 9.03% per annum. Average annual import of refined and crude fuel oil during this period were: -

- a. Crude oil averages 12.43 lakh metric tons per year.
- b. Diesel, octane and jet fuel averaged 39.53 lakh metric tons.
- **c.** Furnace oil averages 5.43 lakh metric tons per year.

Figure-5.10(35): Scenario of import of crude oil and other petroleum products in the country during period from 2009-10 to 2018-19:-

		Refined	Oil
F. Year	Crude Oil Lac MT	Diesel, Octane & Jet Fuel (Lac MT)	Furnac e Oil (Lac MT)
2010-11	14.09	24.88	2.31
2011-12	10.83	34.10	6.81
2012-13	12.92	28.27	8.04
2013-14	11.77	31.58	10.16
2014-15	13.03	34.04	6.92
2015-16	10.93	33.37	3.35
2016-17	13.88	38.71	5.21
2017-18	11.72	48.92	6.51
2018-19	13.58	82.82	3.19
2019-20	11.52	38.65	1.76

Source: Bangladesh Petroleum Corporation

First Edition: August, 2022

Demand for fuel oil in the country as a whole has been increasing at an average of about 9% per annum. In future, as the size of the country's economy grows, so will the industrial and transportation sector and demand for fuel oil will increase proportionately. Achieving self-sufficiency in fuel oil production is crucial for future economy of the country. Therefore, keeping future in mind, level of exploration of oil, gas and other mineral resources should be increased, extensive exploration, especially in the newly occupied waters of the Bay of Bengal, is likely to yield positive results in this case.

Fuel oil imports in the Country





Subsidies on

crude oil:

F) Subsidies on crude oil:

About 73% of fuel oil used in Bangladesh is import based, which is imported through Bangladesh Petroleum Corporation (BPC). Price of fuel oil fluctuates in the international market and often rises abnormally due to crisis, but it is not possible to keep the price of fuel in the domestic market consistent with international market regularly. As a result, BPC faces in this case huge losses every year, which government pays as a subsidy. Amount of this subsidy during FY 2009-10 to 2014-15 was TK. 900 crore in FY 2009-10, TK.4,000 crore in FY 2010-11, TK.8,550 crore in FY 2011-12, TK.13,558 crore in FY 2012-13, TK. 2,478 crore in FY 2013-14 and Tk. 600 crore in FY 2014-15. Due to fall of fuel price in the international market during financial year 2015-16 to 2019-20, there was no need for any subsidy in this sector.

Figure-5.10 (36): Scenario of Government Subsidy on Fuel Oil during FY 2009-10 to 2014-15:-



Source: MOF

C) Recommendations for Development of Power & Energy Sector:



In order to build a sustainable economy of a country, availability of electricity and fuel security is foremost. Due to various reasons, there was a lot of stagnation in the power sector of the country till 2008-9. At that time it was possible to distribute electricity among a small number of people with a limited number of power plants, limited grid capacity, shortage of transmission and distribution lines and a limited grid substation capacity. But in the post-2010 period, as a result of the government's efforts and increased investment in development of power sector, some discipline has begun to return to the sector and by 2020, power generation and distribution system has regained much stability. As a result, number of power plants in the country stood at 138 by 2019, which was 26 by 2009. At this time, maximum production stood at 12,379 MW against grid capacity of 23,548 MW, which was





Recommendations

3,268 MW against grid capacity of 4,942 MW in 2009. By 2019, 98% of the country has come under electrification, which was 47% by 2009 **Figure- 5.10 (37).** Moreover, keeping in view the future progress of the country's economy, present government has undertaken future plans to increase power generation to meet future demand, where power generation target has been set at 24,000 MW by 2021, 40,000 MW by 2030 and 60,000 MW by 2041.

Figure-5.10 (37): Over the last decade (2009-2019) progress in the power

sector of Bangladesh :-

Particulars	Up to 2009	Addition during the period	2019	Remarks
No. of Power Plants	27	+ 111	138	
Grid Capacity (MW)	4,942	+ 18,606	23,548	
Highest Generation (MW)	3,268	+ 9,625	12,893	
Power Import	-	+ 1,160	1,160	
Total Consumers (Million)	10.8	+ 27.6	38.4	
Transmission Line (CKT KM)	8,000	+ 4,379	12,379	Till May 29, 2019
Distribution Line (KM)	260,000	+ 326,000	586,000	
Grid Sub-station Capacity (MVA)	15,870	+ 31,434	47,304	
Access to Electricity	47%	+ 51%	98%	
Per Capita Generation (kWh)	220	+ 292	512	Fiscal Year 2019-20
System Loss	14.33%	- 3.10%	11.23%	Fiscal Year 2019-20
ADB Allocation (BDT Billion)	2,677	+ 24,960	27,637	Fiscal Year 2020-21

Source: Powercell

Despite progress made in the country's power sector over the past decade, Bangladesh still lags far behind in terms of per capita power generation and consumption. According to Global Rankings 2020, Bangladesh ranks 170th out of 217 countries in terms of per capita electricity consumption. According to that ranking, per capita electricity consumption (kWh) is 336 in Bangladesh, 444 in Pakistan, 561 in Sri Lanka, 739 in Philippines, 812 in Indonesia, 877 in India, 953 in Maldives, 1,476 in Vietnam, 2,736 in Thailand, 4,018 in China, 4,304 in Malaysia, 7498 in Japan, 7,954 in Singapore and 9,872 in South Korea [Figure-5.10 (6)].

On the other hand, Bangladesh still relies heavily on imports in terms of natural energy resources. Among notable commercial fuels in the country are natural gas, extracted and imported coal and oil, imported LPG and LNG. About 27% of total fuel demand of the country is met through domestic production and remaining 73% through commercial imports. About 63% of commercial fuels depends on natural gas and remaining 37% on imported oil and coal.

Needless to say, in order to achieve the goal of 2041, requires a major revolution in the overall economy in future including industry and commerce, which will take the development of overall economy to the desired level with increase of GDP and per capita income of the country. Among other important conditions for this, is the development of "power and fuel" sector is an inevitable issue. This is because, as the size of economy will be expanded in future, demand for electricity and fuel in industrial sector and at individual level will continue to increase, which is essential for Bangladesh to have overall preparedness to deal with.

Judging from that perspective, country's power and energy sector is still quite immature, underdeveloped and risky enough to ensure future economic development of the country, in order to meet the challenges ahead, integrity and





restructuring are essential in many policy-making and institutional issues of this sector, which are as follows: -.

- 1. About 85% of the country's power plants are gas and oil based, with about 73% of all those fuel being met through commercial imports. During financial year 2019-20, approximately 71.80% of electricity generated in the country is gas based, 4.20% coal based, 13.40% liquid fuel based, 1.20% water based, 9.30% import based and 0.10% renewable energy based production **Figure-5.10** (10). Needless to say, an import-based fuel-dependent economy is extremely risky for sustainable development.
- 2. Although use of gas in power generation is to be gradually reduced keeping in mind the shortage of fuel in the country, use of gas in power generation during period of 2008-09 to 2019-20 has decreased by 16.64% overall, an average decline of 1.39% per annum only and instead of declining liquid fuel-based production, it has rather increased by 7.47% overall, an average increase of 0.62% per annum. During this period, coal-based production remains at almost same level **Figure-5.10 (10)**.
- 3. Despite having adequate coal reserves in Bangladesh, recent increase in gas and oil based power generation without emphasis on extraction and utilization of those coal, has resulted in steady increase in power generation costs, which is having a severe negative impact on low income people and manufacturing industries.
- 4. Due to increase in production cost, government has to sell this electricity to the people at a huge loss at subsidized price, resulting the amount of subsidy in this sector has been continuously increased in recent years. During financial year 2010-11 to 2020-21, average amount of subsidy in the power sector was Tk. 63.61 billion per annum, which was TK.29.73 billion in the F.Y 2010-11 and which has stood at TK.117 billion by the F.Y 2020-21 Figure-5.10(13). Needless to say, if one of the most important sectors of the country is to run on loss and continues to be dependent on subsidies, then development and expansion of that sector is a big challenge for all time.
- 5. As the amount of gas reserves discovered in the country is rapidly depleting and pace of discovery of new gas fields is slow, on the other hand, liquid fuels are completely dependent on imports, in that case, increasing production and use of renewable energy in power generation has become essential for Bangladesh. By the year 2019, use of renewable energy in power generation is only 0.01% of total electricity generation.
- 6. Expansion and modernization of Transmission & Distribution (T&D) Systems Management is required to keep pace with the increase in power generation, so as to increase efficiency in power distribution as well as reduce transmission and distribution losses to a certain extent and increase use of technology in this sector in order to facilitate adding electricity to the national grid generated by renewable fuels. In addition, T&D Systems Management expansion, modernization and skill development needs:-
 - To evaluate the effectiveness of private sector participation in this sector.
 - b) To take necessary initiatives to attract domestic / foreign investment in this sector; and





- To take necessary initiatives for modernization and enhancement of efficiency of T&D institutions.
- 7. To build necessary and sustainable infrastructure for rapid development of power and energy sector and to facilitate domestic / foreign investment for this purpose.
- 8. Increase renewable fuel production in the country to achieve self-reliance in the fuel sector and ensure fuel security by adequately increasing its use in power generation.
- 9. Increasing private sector investment in power sector in the interest of making electricity prices competitive.
- 10. Following advice of international organizations in development and expansion of this sector.





Chapter: 5.11

Sustainable Infrastructure Development.







Sustainable Infrastructure Development.

Topics Covered in the Chapter

- A) Infrastructure Development.
 - 1. Current picture of Bangladesh in infrastructure development.
 - 2. Bangladesh's position in overall infrastructure development.
 - 3. Summary of visible infrastructure in the country by 2018.
- B) Why is infrastructure development essential for Bangladesh?
- C) Government initiatives in infrastructure development.
 - 1. Ongoing Mega projects on infrastructure development.
- D) Short brief of 10 mega projects under implementation.
- E) Progress in achieving SDG 9 in development of sustainable infrastructure.
- F) What should be country's overall infrastructure in future?
- G) Obstacles to development of infrastructure in the Country.
- H) Sectors that require extensive expansion of infrastructure.
 - 1. Expansion and development of road communication system.
 - 2. Railroad development and expansion of rail network.
 - 3. Modernization and capacity building of airports.
 - 4. Improvement of service quality, management and communication system of land ports.
 - 5. Modernization and capacity building of seaports.
 - 6. Increasing power generation and distribution capacity.
 - 7. Infrastructural development to explore new gas fields and increase gas extraction.
 - 8. Development of infrastructure in education, health and other important sectors.
 - 9. Sustainable infrastructure development in other sectors.







A) Infrastructure Development:

Infrastructure means basic facilities and services that help in the economic development of the country and improvement of living standards of people by mobilizing economic activities of the country. One of the criteria for sustainable development of any country is overall infrastructure development of that country. Overall infrastructure of a country consists of its communications, Ports, electricity, water, fuel, education and health systems, also known as social overhead capital. These facilities do not directly produce goods and services, but expand pace of the economy by simplifying every aspect of life, including the country's industrial trade and agriculture. Overall infrastructure is divided into two parts, such as hard infrastructure and soft infrastructure.

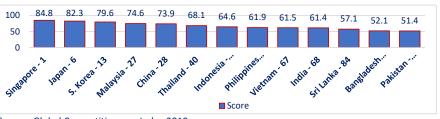
- Hard Infrastructure: All those visible capital assets that directly contribute
 to social and economic development of the country. For example Country's
 communication and transportation system, Port, telecommunication system,
 electricity, water and other services.
- **Soft Infrastructure:** Soft infrastructure is the rule of thumb associated with management of solid infrastructure. For example- computer software, financial system, institutional infrastructure etc.

In general, overall infrastructure is divided into two parts, such as economic infrastructure and social infrastructure.

- **Economic Infrastructure:** Infrastructure that are directly involved in production, distribution and economic processes, such as communication and transportation systems, Ports, telecommunications systems, electricity, water and other services.
- Social Infrastructure: All such infrastructures indirectly contribute to the development of society besides achieving social objectives, such as education, health, sanitation, etc.

Needless to say, as previous governments did not pay attention to development of sustainable infrastructure in the country, so far Bangladesh has lagged far behind in terms of overall infrastructure in the world, even compared to almost all countries except one or two in South Asia. According to Global Competitiveness Index 2019, Bangladesh ranks 105th out of 141 countries in terms of overall infrastructure development. In that list, Singapore ranks 1st among other countries in South Asia, Japan 6th, South Korea 3th, Malaysia 27th, China 28th, Thailand 40th, Indonesia 50th, Philippines 64th, Vietnam 67th, India 68th, Sri Lanka 84th and Pakistan is in 110th position [Figure-5.11(1)].

Figure-5.11 (1): Position of Bangladesh and other countries in South Asia in 2019 in Infrastructure Development:-



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Source: Global Competitiveness Index 2019

Infrastructure Development:





1) Current picture of Bangladesh in infrastructure development:

Amount of investment in overall infrastructure development in the country stood at USD 6.00 billion by the FY 2016-17, which was USD 2.00 billion during FY 2011-12 (The Independent, March 26, 2019). During these five years period, investment in infrastructure development has increased by USD 4.00 billion, an average of USD 0.80 billion per year. Scenario of overall physical infrastructure of the country by the financial year 2017-18 is highlighted in the following chart: -

Overall Infrastructure of the Country Upto Financial Year : 2017-18				
International Airport	03 Nos.			
Domestic Airport	7 Nos.			
Road	3.33 Lakh KM			
Rail Road	2,956 KM			
Land Port	23 Nos.			
Sea Port	1 No.			
River Port	2 Nos			
Power Production Capacity	11,623 MW /Day			
Gas Production Capacity	969 BCF			

Source: MOF

2) Bangladesh's position in overall infrastructure development:

Bangladesh's position in various areas of infrastructure development, such as roads, railways, land ports, seaports and airports is still far behind in the world and even that of most South Asian countries. According to Global Competitiveness Report 2018, Bangladesh ranks 109th in the list of 140 countries in various fields of infrastructure development. Among other countries in South Asia on that list, South Korea is ranked 6th, China 29th, Thailand 60th, India 63rd, Sri Lanka 65th, Indonesia 71st, Vietnam 75th and Pakistan was in 93rd position.

Figure-5.11 (2): According to the Infrastructure Development Rankings 2018, position of Bangladesh and a few other countries in South Asia in the list of 140 countries in various fields of infrastructure development: -

		Sc	ores in V	arious Index	æs	
Country	Infrastructure Ranking	Overall Infrastructure	Roads	Railroads	Port	Air
South Korea	6	91.3	78.8	81.4	72.8	80.6
China	29	78.1	59.7	59.0	58.6	60.7
Thailand	60	69.7	55.9	27.4	51.5	66.8
India	63	68.7	57.4	57.9	60.4	64.1
Sri Lanka	65	68.6	46.7	38.6	51.1	57.3
Indonesia	71	66.8	48.1	61.4	54.1	66.7
Vietnam	75	65.4	36.0	39.2	46.4	47.4
Pakistan	93	59.0	49.1	46.4	51.3	52.3
Bangladesh	109	53.4	35.2	40.9	40.9	45.5

Source: Global Competitiveness Report, 2018 Note: 1. Upper Ranking indicates lower position

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Current picture of Bangladesh in infrastructure development:

Bangladesh's progress in various areas of infrastructure development:



Summary of visible

infrastructure in

the country by

2018:

Strategies for Economic Development of Bangladesh

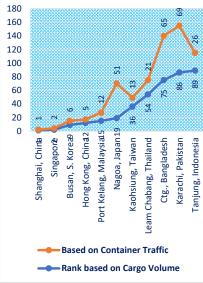


3) Summary of visible infrastructure in the country by 2018:

- Airport: Three international and seven domestic.
- Roads: 3.33 lakh km in total, of which National Highway is 3.5 thousand km, remaining are upazila, union and village level road ghats.
- Railways: There are a total of 2,956 km of railways in the country by the financial year 2017-18, which are connected only to the major cities and river ports of the country, most of the cities of the country are not connected by rail.
- Land Ports: There are about 23 land ports in Bangladesh, combining big and small, on different borders, through which imports and exports from neighboring countries are carried out on a regular basis. All these land ports and roads associated with these ports are very old and dilapidated.
- Sea ports: By 2020, number of seaports in Bangladesh Chittagong and Mongla seaports, moreover, Paira seaport is currently under construction. However, about 90 percent of the country's import and export activities have to be completed through Chittagong seaport. According to World Port Ranking 2015, Chittagong Port was ranked 75th in terms of cargo volume and 65th in terms of container traffic among 100 most important ports in the world. In that ranking, Shanghai Port, China was in the first place and Singapore was in second place from both sides.
- Power: Although there was a shortage of electricity in the country till 2010, power generation in the country has increased significantly after the period of 2010. During F.Y 2009-10, maximum daily production was 4,606 MW as against installed



Figure-5.11 (3): Position of South Asian Ports staying at the forefront of Global Port Ranking 2015:-



Source: World Shipping Council

Figure-5.11 (4): According to Global Rankings 2018, position of Bangladesh and a few other countries in South Asia in terms of per capita electricity consumption:

Rank Cour	try	Average Electricity Consumption per Capita (KWH)
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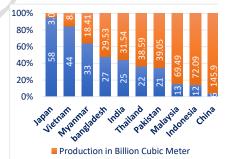
capacity of 5,271 MW, which has increased to 11,623 MW per day maximum production by the FY 2018-19 against installed capacity of 18,089 MW. By 2018, 90% of population in the country has been electrified and at that time per capita electricity generation in the country was 464 kWh/hour (CPD study). According to CIA World fact Book, per capita average electricity consumption (KWH) by 2017 is 351 in Bangladesh, 471 in Pakistan, 4,232 in Malaysia, 2,404 in Thailand, 1,058 in Indonesia. 9,720 in South Korea, 7,371 in Japan, 1,181 in India and 4,475 in China [Figure-5.11 (4)].

1	China	4,475
3	India	1,181
5	Japan	7,371
9	S. Korea	9,720
14	Taiwan	10,632
18	Indonesia	1,058
23	Thailand	2,404
27	Malaysia	4,232
35	Pakistan	471
45	Bangladesh	351

Source: CIA Factbook

Natural Gas: Bangladesh has also made significant progress in the field of natural gas extraction. Volume of lifting of Gas in the country in the FY 2009-10 was 703.6 billion cubic feet, which stood at 968.7 billion cubic feet in the FY 2017-18. By 2018, Bangladesh ranks 27th out of 215 countries in gas extraction and 32nd in gas consumption. In terms of gas production among other countries in South Asia, China ranks Indonesia 12th, Malaysia Pakistan 21st, Thailand 22nd, India 25th, Myanmar 33rd, Vietnam 44th and Japan was in 58th position.

Figure-5.11 (5): Position of Bangladesh and other South Asian countries in the list of 215 countries in gas extraction in 2018:-



Source: Indexmodi

• ICT Infrastructure:

Summary of development of ICT infrastructure in the country by 2019:

- i) Hi-Tech Park: Construction of Bangabandhu Hi-Tech Park, Kaliakair has been completed by 2019 and at least 12 more IT / Hi-Tech Paks are under construction at district level.
- ii) Software Technology Park: Janata Tower Software Technology Park, Dhaka and Sheikh Hasina Software Technology Park, Rajshahi.
- iii) IT Training and Incubator Center: Sheikh Kamal IT Training and







- iv) Incubator Center, Natore, IT Training and Incubator Center, Rajshahi and IT Training and Incubator Center, Khulna.
- v) Tier-IV Data Center, Kaliakair.
- vi) Electronics City, Sylhet (under construction).

B) Why is infrastructure development essential for Bangladesh?

Infrastructure is one of the driving forces or engine of a country's economic development, which plays an important role in the overall development of a country including production, distribution and poverty alleviation. In developed countries, therefore, tendency to enrich the country with fixed capital through adequate investment in infrastructure development is widely noticeable. Bangladesh is a developing country, which is moving forward with the aim of reaching middle income countries by 2021 and high income countries by 2041. Sustainable infrastructure development is essential for achieving a certain level of overall social and economic development of Bangladesh for realization of this great dream. Important aspects of infrastructure development in Bangladesh are described below:

- 1. Infrastructure is one of the driving forces of economic development, sustainable infrastructure development is essential for sustainable economic development.
- 2. Achieving SDG-9 through sustainable infrastructure development is mandatory for Bangladesh to get a place in the list of middle-income countries by 2021 and high-income countries by 2041.
- 3. Due to low investment in infrastructure development in the past, Bangladesh has lagged behind many countries in terms of infrastructure. It is important to fill up this gap by increasing investment in infrastructure development.
- 4. Infrastructure is one of the criteria to measure economic condition of any country. It is therefore important to increase the country's fixed capital by increasing investment in infrastructure development.
- 5. Infrastructure plays a major role in the overall development of the country including production, distribution and poverty alleviation, so, infrastructure development is essential to bring economic dynamism.

In a word, economic and infrastructure development are inextricably linked. For this reason, infrastructure development is considered as key to economic development. In order to continue economic progress of the country to meet challenges of 2041, it has become imperative for Bangladesh to develop overall infrastructure at desired level

C) Government initiatives in infrastructure development :

Present government has identified infrastructure development as one of the driving forces of social and economic development and is moving forward with the formulation of a five-year plan and SDG financing strategy as part of a long-term strategy and plan for infrastructure development. According to 7th Five Year Plan (2016-2020), Bangladesh had plan to invest more than 5% per annum as proportion to GDP in development of infrastructure . During period from financial year 2014-

First Edition: August, 2022

Why is infrastructure development essential for Bangladesh?





government initiatives in infrastructure development:

15 to 2019-20, annual development expenditure (ADP) of the country has increased an average of about 19%. Average annual development expenditure on infrastructure development during this period was TK. 1,212.67 billion, which was 5.3% in proportion to GDP.

A number of medium-sized projects have already been implemented for overall infrastructure development, with more than 10 mega projects under implementation in various sectors and talks are underway with China and other donor countries to undertake more mega projects this purpose.

Figure-5.11 (6): Scenario of annual development Expenditure and Growth during Fiscal Year 2014-15 to 2019-20:-

	2014	2015	2016	2017	2018	2019	Average in 5 years.
ADP Exp. (TK. In Billion)	712	871	1071	1482	1583	1557	1,212.67
As % of GDP	5.0	4.8	5.0	5.3	5.5	5.7	5.3
Growth %	25.13	22.33	22.96	38.38	6.82	-1.64	19.00%
a) Average ADP Exp. during last 6 years TK. 1,212.67 Billion b) Average ADP Exp. as % of GDP – 5.3% c) Average growth during this period – 18.99%							

Source: BD Economic Review

1) Ongoing Mega projects on infrastructure development:

Present government has placed special emphasis on overall infrastructure development in the country. According to 7th Five Year Plan (2016-20), annual expenditure on infrastructure development has been estimated at about 4.2% of GDP. In this continuity, several mega projects are being implemented on development of infrastructure in the country since 2016 and more mega projects are being planned for development of infrastructure in different sectors. According to Asian Development Bank, fixed capital investment in Bangladesh has increased by more than 30% of national budget since 2016.

According to various research reports, projects that have already been completed in development of infrastructure in the country and all mega projects that are under implementation in different sectors, if these projects are completed, country's GDP will be increased by at least 3% -4%.

Figure-5.11 (7): Ongoing mega projects in infrastructure development in power and communication sector by 2021:-

SL	Name of the Project	Estimated Cost	Sector	Timeline of
				completion
1	Rooppur Newclear Power Plant	USD 12.65 Billion	Power Sector	By 2025
	(2400 MW)			
2	Rampal Coal Power Plant	USD 5.00 Billion	Power Sector	By 2021
3	Matarbari Power Plant	USD 4.40 Billion	Power Sector	By 2024
4	Padma Multipurpose Bridge	USD 3.65 Billion	Communication	By 2025
5	Padma Rail Link	USD 4.63 Billion	Communication	By 2024
6	Karnafully Underwater Tannel	USD 2.49 Billion	Communication	By 2022
7	Chottagram-Cox's Bazar	USD 2.13 Billion	Communication	By 2022
	Railway Link			
8	Dhaka Elevated Express Way	USD 1.63 Billion	Communication	By 2022
9	Dhaka – Ctg. Express Railway	USD 11.40 Billion	Communication	By 2022
10	Dhaka Metro Rail Project	USD 2.82 Billion	Communication	By 2021





-11	Moheskhali LNG Terminal	USD 179.5 Million	Power Sector	By 2019
12	Payra Deep Sea Port	USD 98.5 Million	Communication	By 2021
13	Hazrat Shahjalal Int'L Airport	USD 42.10 Million	Communication	By 2022
	Extension			

Source: Databd.co

D) Short brief of 10 mega projects under implementation:

1) Rooppur Nuclear Power Plant Project:

Rooppur 2400 MW Nuclear Power Plant Project is a unique addition to Bangladesh's power sector, which will be the country's first nuclear power plant and through which Bangladesh has entered the nuclear world.

The idea of setting up a nuclear power plant in Bangladesh started in 1961 during the then East Pakistan. After independence of Bangladesh, talks had been going on with China and Russia on this issue. Finally, Russia proposed in 2009 to set up a full-fledged nuclear power plant in Bangladesh, so that Bangladesh gives consent. In its continuity, Bangladesh Government signed a full-fledged agreement with Russia in May 2010 on construction and operation of nuclear reactors in Bangladesh, under which one of the country's attractions "Rooppur Nuclear Power Plant" is being constructed at a cost of USD 12.65 billion at Ruppur union of Ishwardi upazila in Pabna district.

Rooppur Nuclear Power Plant Project :

Summary of Rooppur Nuclear Power Plant Project: -

Reactor	Model	Gross	Cons.	Compl
		MWe	started	etion
Rooppur-1	VVER-	1200	Nov.,	2023
	1200/V-523		2017	
Rooppur-2	VVER-	1200	July,	2024
	1200/V-523		2018	

Source: World Nuclear Organization

Demand for electricity in Bangladesh's expanding economy is constantly increasing. Nuclear fuel is being used In developed countries long ago in power generation at affordable prices. There is no doubt that the Rooppur Nuclear Power Plant will play a major role in meeting growing power demand of the country.



Rooppur Nuclear Power Plant

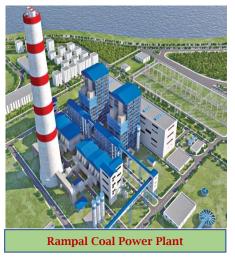
2) Rampal Coal Power Plant:

"Rampal Coal Power Plant Project" is being constructed on 1,834 acres of land in Rampal upazila of Khulna's Bagerhat district at a cost of about USD 5.00 billion. The project has a generating capacity of 1320 MW electricity, which is planned to be completed by 2021. The large-scale





Rampal Coal Power Plant Project:

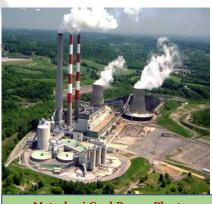


project is being constructed by Bangladesh India Power Company Limited (BIFPCL), which is (50:50) joint venture between National Thermal Power Corporation of India and Bangladesh Power Development Board.

As the project is located near the Sundarban, environmentalists have been demanding that Sundarban's environment be ruined due to this project. However, government has calmed the environmentalists by promising to comply with all UNESCO terms to protect environment.

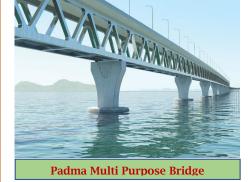
3) Matarbari Coal Power Plant:

The Ultra Super Critical Coal Powered Power Plant with a capacity of 1200 MW is being set up on 1500 acres of land in Matarbari area of Maheshkhali upazila in Cox's Bazar district. Proposal for this project was presented in September 2011, which was passed in the ECNEC meeting on August 2, 2014. Estimated cost of this project is Tk 35,984 erore (USD 4.40 billion), of which JICA has financed Tk 28,939 erore. Work of this mega project set up under supervision of Coal Power Generation Company Bangladesh Limited (CPGCBL) is planned to be completed by 2024.



Matarbari Coal Power Plant

Matarbari Coal Power Plant Project:



Padma Multipurpose Bridge Project:

4) Padma Multipurpose Bridge:

The Padma Multipurpose Bridge, built with the government's own funds, is a major milestone in development of road communication infrastructure in Bangladesh. The bridge built at an estimated cost of USD 3.65 billion, will connect most of the south and southwest of the country directly to the capital, which will play a major role in the economic development of people living in those areas and pace of country's overall economy will increase.





The 6,150-meter-long and 18-meter-wide bridge located in the basins of Padma, Brahmaputra and Meghna rivers, currently under construction, is planned to be opened for traffic by 2022, which will be the country's largest bridge.

5) Padma Bridge Rail Link Project:

Padma Multipurpose Bridge has a fourlane road on the upper deck and a single broad gauge rail line on the lower deck, which will cover an area of about 169 km in southwestern part of the country on four routes and will establish direct rail links between the capital and Jessore. Construction of the country's largest rail link, funded by China, is estimated to cost



Padma Bridge Rail Link Project:

of USD 4.83 billion and is scheduled to be completed by mid-2024. As a result of establishment of Padma rail link, development of communication system with the capital of south-western part of the country will be ensured as well as marketing of goods in the region will be much easier. As a result, farmers of this region will get a fair price for their products and there will be a huge expansion of trade and commerce in the region, which will undoubtedly play a major positive role in the overall economy of the country.

6) Karnafuli Underwater Tunnel:

Foundation stone of the 9.1 km long Karnafuli Tunnel, which runs along the Karnafuli River in Chittagong city, was laid in 2016 at an estimated cost of USD 2.49 billion. In February 2019, the Hon'ble Prime Minister Sheikh Hasina of the present government inaugurated excavation work of the tunnel, which is planned to be completed by 2022.

Due to construction of this tunnel, radical changes will become in the communication system of Chittagong with Bandraban, Rangamati and Cox's Bazar districts and will bring great progress in the economy of these regions. Needless to say, Karnafuli Tunnel

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Karnafuly Under Water Tannel

Karnafuli Underwater Tunnel :

flowing through the bottom of Karnafuli river is the first underwater tunnel in the country, which is another major milestone in development of communication infrastructure of the country.





7) Ctg.-Cox's Bazar Rail Link Project:

To develop communication and transport system with Chittagong city of tourist center Cox's Bazar and Chandnaish, Satkania, Louhagarh, Ramu and Ukhia of South Chittagong, 103.48 km long (single line dual gauge railway track) "Chittagong-Cox's Bazar rail line" has been undertaken, which is planned to be completed by 2023. Established for development infrastructure in communication and transport sector, the project will play a major role in development of trade, commerce, investment and tourism in Chittagong and its adjoining areas. Cost of this mega project is estimated at USD 2.13 billion, of which USD 1.618 billion will be provided by Asian Development Bank and remaining USD 512 million Bangladesh's own funding. The project is planned to be completed in two stages: -

In the first step: Establishment of railway line from Dohazari to Chandnaish, Satkania, Louhagarh, Ramu, Ukhia and Cox's Bazar.

In second step: Establishment of railway line from Cox's Bazar to Myanmar Border.



Project Summary:

- 1 New Construction of 103.477 km Single Line Dual Gauge Railway Track (Dohazari to Cox' Bazar):
- 2 Construction of 09 Railway Station, namely Dohazari, Satkania, Lohagara, Harbang Chakaria, Dulahazra, Islamabad, Ramu and Cox's Bazar
- 3 Construction of 4 Large bridges (over 100 m), 3! Major bridges (50 m to 100 m) and 145 culverts
- 4 Construction of Elephant Crossing (underpas and overpass)
- 5 Construction of Modern Computer Based Inte Locking (CBI) signaling system
- 6 Construction of an ICONIC station building a Coax's Bazar.

Source: Ministry of Railway Report

Chittagong Cox's Bazar Rail Link Project :

Dhaka Elevated Expressway :



8) Dhaka Elevated Expressway:

In order to alleviate growing traffic congestion in Dhaka city, an estimated 23 km elevated expressway construction project has been undertaken from Hazrat Shahiala International Airport through Kuril, Mohakhali, Banani. Teigaon, Magbazar, Kamalapur, Sayedabad and Jatrabari to Kutubkhali (Dhaka-Chittagong Highway Link). The project is being implemented on the basis of public-private partnership between Bangladesh Bridge Authority and Italian-Thai Development Public Company Limited. Work of this under construction mega project with cost of USD 1.63 billion began in 2011 and is scheduled to be completed by 2021, although there is still some uncertainty about completion of work on time.



Dhaka - Chittagong

Express Railway:

Strategies for Economic Development of Bangladesh



If the "Dhaka Elevated Expressway" project is implemented, bypass facility will be increased for faster movement of vehicles, which will play a significant role in reducing traffic congestion in the northern and southern parts of Dhaka as well as covering this part of Dhaka with improved communication network.

9) Dhaka – CTG. Express Railway:

The project "Dhaka-Chittagong via Comilla / Laksam High Speed Rail Line" has been undertaken to improve Dhaka-Chittagong transport system and reduce travel time, which was approved by the Ministry of Planning on March 18, 2017. Feasibility study of this project, which is approximately 230 km long, has already been completed and Development Project Plan (DPP) of this project was approved at the ECNEC meeting in 2020. Cost of this mega project is estimated at Tk 97,000



Dhaka - Ctg. Express Railway

crore (USD 11.40 billion) in development of communication infrastructure. Launch of first electric high speed train in the history of the country will make it possible to travel from Dhaka to Chittagong in just 73 minutes, which will not only revolutionize communication system of Bangladesh, but also enter the world of advanced communication system, which will undoubtedly add new dimensions to the country's trade, commerce and investment.

Dhaka Metro Rail Project:



10) Dhaka Metro Rail Project:

Although Dhaka Metrorail project has been proposed for a total of 5 routes (MRT Line 1,2,4,5 and 6), Dhaka Urban Transport Network Development Survey (DHUTS 1) evaluated Strategic Transport Plan (STP) and decided to implement MRT Line - 6 Uttara to Motifheel in the first phase, which is estimated cost about USD 2.82 billion, MRT Line - 6 is currently being implemented, which is planned to be completed by the end of 2021. The line will carry 24 trains from both directions with a capacity to travel about 60,000 passengers per hour.

First Edition: August, 2022

Dhaka Metro Rail is undoubtedly a unique addition to development of modern communication system, in terms of communication infrastructure which will undoubtedly play an important role in reducing traffic congestion in this densely populated city as well as joining Bangladesh in the modern world.





E) Achieving SDG - 9 in development of sustainable infrastructure:



In order to reach the list of middle-income countries by 2021 and highincome countries by 2041, achieving SDG 9: "Resilient Infrastructure, Sustainable Industrialization and Innovation" is essential for Bangladesh.

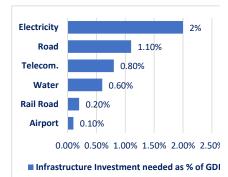
Resilient Infrastructure: Infrastructures are primarily classified into two broad heads namely, hard infrastructures like roads, airports, sea ports or river ports, railroads etc. and soft infrastructures like education system, healthcare system, law and order situation, financial system, form of government, financial service and government responses to the civil emergency etc. of a country.

Government has increased investment in infrastructure development with SDG 9 target in mind. Since 2016, fixed capital investment in the country has increased by more than 30% of annual budget. At present, at least 10 mega projects are being implemented in power and communication sector for infrastructure development and about 40 percent of annual development program has been allocated for implementation of these mega projects in FY 2017-18.

Bangladesh's overall development is still far behind that of potential economies of South Asia. To get overall infrastructure development a place in the list of high income countries by 2041, Bangladesh needs to increase expenditure at prescribed level in proportion **GDP** develop infrastructure in order to achieve SDG 9. According to Global Infrastructure Outlook 2017, Bangladesh's infrastructure development gap during period of 2016-2030 is USD 192.00 billion and to meet investment gap, infrastructure development in Bangladesh during period of 2016-2030 is required in proportion to GDP - electricity by 2.0%, Roads by 1.1%, telecom by 0.8%, water 0.6%, railways by 0.2% and airports by

0.1% [Figure-5.11 (8)].

infrastructure Figure-5.11 (8): In order to achieve SDG 9, Bangladesh needs to invest in in the period of 2016-2030 in proportion to GDP (%): -



Global Infrastructure Outlook 2017

First Edition: August, 2022

Progress in achieving SDG 9 in development of sustainable infrastructure:





Figure-5.11 (9): Bangladesh's latest progress in achieving SDG 9 by the financial year 2017-18: -

		Periods						
Indicato r	Particulars	2000	2005	2010	2015	2017	2018	
9.1.1a	Road density per 100 square KM	14.09		14.41	14.48	14.45	14.61	
9.2.1	Manufacturing value added as a proportion of GDP (%)	15.76	16.13	17.75	20.16	21.01	21.71	
9.2.1	Manufacturing value added per capita (constant 2010 US \$)	2380	2635	2774	2607	3877	4210	
9.2.2	Manufacturing employment as a proportion of total employment	7.3	11.03	12.46	16.4	14.4	14.4	

Indicato r	Particulars	Periods						
		2012	2013	2014	2015	2016	2017	
9.5.2	Researchers (in full-time equivalent) per million inhabitant	5.56	5.66	5.69	5.98	6.16	-	
9.a.1	Total official international support (official development assistance plus other official flows) to infrastructure (In Million USD)	813.10	1167.40	1580.20	1247.20	1736.56	-	
9.c.1	Proportion of population covered by a mobile network by technology	99	99	99	99.4	99.46	99.49	

Source: SDG Profile 2018

F) What should be country's overall infrastructure in future?

In recent times, Bangladesh has emerged as one of the fastest growing economies in South Asia. Bangladesh is moving forward with the goal of reaching middle income countries by 2021 and high income countries by 2041, which is really a big challenge. Another big challenge for Bangladesh is to sustain GDP growth in the coming years. In order to address all these major challenges, it is imperative to build a sustainable economy by increasing size and volume of the economy through increasing dynamism of the country's economy and ensuring improvement in the quality of life of people. As infrastructure development has gained worldwide recognition as a driving force for sustainable economic development, Bangladesh needs to move forward to realize the future dream to ensuring sustainable economic progress through sustainable infrastructure development. Therefore, it is necessary to make the country self-sufficient in terms of infrastructure and increase fixed capital of the country by adopting and implementing future investment plans in infrastructure development through assessing current infrastructural situation of each sector of the country.

What should be country's overall infrastructure in future?

However, although Bangladesh has lagged behind in infrastructure development for a long time but the present government has given special importance to infrastructure development and has undertaken many big projects in infrastructure development, several projects have already been implemented and plans are afoot to undertake more big projects. To accelerate infrastructure development, annual revised ADP allocation growth averaged 21.02% during last five years (FY 2015-16 to 2019-20) **Figure-5.11 (10.**





Needless to say, it is not possible to develop infrastructure in the country at desired level by relying on ADP allocation alone, which requires low interest and easy terms foreign loans. At the same time, it is necessary increasing revenue collection to increase domestic financing for development activities, as it is never possible to conduct development activities at desired level being completely dependent on foreign loans. Moreover, preparation and implementation of projects at the right stage for development of infrastructure as required in each sector is another important issue, as the level of necessity of project is paramount in measuring economic viability of any project.

Figure-5.11 (10): Scenario of revised ADP allocation by sector during financial year 2015-16 to 2019-20:-

SL	Economic Sectors		Fi	nancial Year	(TK. In Crore)	
		2015-16	2016-17	2017-18	2018-19	2019-20
1	Agriculture	4,410.05	5,741.6	5,283.52	6,918.24	6,623.53
2	Rural Dev. & Institutions	9,046.13	10,761.43	16,722.00	15,154.25	15,777.91
3	Water Resources	2,609.49	3,342.11	4,147.31	5,000.87	6,552.79
4	Industries	1,711.35	974.12	1,563.55	2,046.27	3,238.10
5	Power	15,478.21	13,447.57	22,340.32	23,225.36	23,631.78
6	Oil, Gas & Natural Resources	1,068.17	1,067.87	1,346.48	2,209.12	2,417.07
7	Transport	19,212.13	27,360.23	37,513.22	38,099.58	47,431.92
8	Communication	1,434.82	1,915.79	937.44	2,021.01	1,739.64
9	Water Supply & Housing	11,092.38	14,391.17	15,146.83	20,371.84	26,839.25
10	Education & Religion	10,101.74	12,845.97	14,186.56	15,468.65	20,429.10
11	Sports & Culture	261.00	314.19	318.61	653.66	587.93
12	Health & Family Welfare	5,556.47	5,655.33	9,607.51	10,902.07	10,108.40
13	Mass Media	117.98	176.00	219.65	250.39	171.25
14	Social Welfare & Women dev.	424.48	347.19	431.86	649.71	798.0€
15	Public Administration	2,327.43	2,344.55	2,118.91	4,964.3	5,137.49
16	Science & Technology	1,808.38	5,472.04	12,593.18	13,353.63	16,790.43
17	Labour & Employment	421.29	450.77	356.25	464.3	544.37
18	Others	3,918.50	4,092.07	3547.80	5,246.75	4,101.56
	Total:	91,000.00	1,10,700.00	1,48,381.00	1,67,000.00	1,92,921.00
	Yearly Growth Rate (%)	21.33	21.65	34.04	12.55	15.52

Source: MOF

G) Obstacles to development of infrastructure in the Country:

Despite Infrastructure Development being driving force of the country's overall economic development, even after 50 years of independence, Bangladesh still lags far behind the developing countries of South Asia in terms of infrastructure. Needless to say, not realizing the importance of investing in infrastructure for overall development of the country, excessive reliance on donor countries for financing, technology and skilled manpower for infrastructure development and due to lack of will and political commitment of previous governments in developing overall infrastructure of the country, Bangladesh has lagged behind in infrastructure development. Moreover, due to various geographical and natural reasons, infrastructure development in this country is relatively difficult, time consuming and costly which has further delayed the sector.

Some of the major obstacles to infrastructure development in Bangladesh:-





1. Due to its geographically low nature, waterlogging and numerous small and large rivers, infrastructural development in Bangladesh is difficult and costly.

- 2. Due to limited scope of the economy, it is very difficult to ensure adequate annual development allocation for infrastructure development. As a result, most of the infrastructure development is dependent on foreign loans.
- 3. Due to technological backwardness, Bangladesh is completely dependent on foreign technology and technicians for infrastructure development, which greatly increases the project cost.
- 4. Due to vastness and roughness of most of the rivers, many important projects become quite expensive, making it difficult to get adequate foreign loans for implementation.
- Most of the country's infrastructure destroy every year due to floods and other natural disasters, which is very expensive and time consuming to repair.
- 6. Due to various unreasonable conditions in case of project loans, it is not possible to take many foreign loans, as a result many important projects are not implemented.
- 7. After a certain period of project implementation, all those projects need to be repaired and developed, which has not yet become a trend to be fully followed up in Bangladesh. As a result, even after a long time of implementation of many large projects, those are gradually becoming unusable due to lack of repair and development.

Figure-5.11 (11): Scenario of Annual Development Allocation during period from 1990-91 to 2019-20:-



Source: BD Economic Review

First Edition: August, 2022

- 8. Bureaucratic complexity increases both time and cost of project approval and implementation, which has a large negative impact on that project.
- 9. Due to bribery and corruption, it is not possible to ensure quality work in most projects, resulting in problems within a few years of implementation.
- 10. Lack of will and political commitment of previous govt. in infrastructure development.



Obstacles to development of infrastructure in the Country:





H) Sectors that require extensive expansion of infrastructure:



It is fact that Bangladesh lags far behind most countries in the world and in South Asia in terms of infrastructure development. Although investment in infrastructure development has increased in the country since 2010 under present government and several mega projects are being implemented in the power, communications, port development and telecommunication sectors, however, in order to meet the challenges of 2041, timely development of backward overall infrastructure is essential, as it is impossible to achieve desired economic progress without infrastructure development. Development of all sectors related to economic development depends on the infrastructural adequacy of all those sectors. For example, in order to develop health services in the country, increasing number of quality hospitals and hospital beds in proportion to population, quality training of health workers and expansion of pharmaceutical industry etc. are essential. Similarly, development of education sector requires establishment of adequate schools, colleges and universities in the country as well as training of teachers and improved curricula, which are part of infrastructure of the education sector.

Therefore, sustainable infrastructure development in all sectors related to social and economic progress is essential to ensure the country's desired economic progress to meet the challenges ahead, only then will desired level of return come from each sector, which will ensure sustainable social and economic development in the country. In a word, without development of sustainable infrastructure in every sector, no sector is able to make desired contribution to the overall economic progress, this is the traditional rule for economic progress.

Following is a summary of the areas where infrastructure development should be further strengthened in the context of Bangladesh:-

1. Expansion and development of road communication system:

Improved communication and transportation system is one of the most important means of expanding trade and commerce in the country and keys to economic development. By the financial year 2017-18, there are a total of

First Edition: August, 2022

Sectors that require extensive expansion of infrastructure:





3.33 lakh km of roads in the country, of which National Highway is 3.5 thousand km (1.05%), rest are upazila, union and village level road ghats. Most of the roads in rural and remote areas are dilapidated due to lack of regular repairs. By 2017, although road density in the country is 14.61 km against per 100 sq km, but amount of highways in the country is only 1.05% of total roads, which is very inadequate for quality communication and transportation for a populous country like Bangladesh. Therefore, in order to meet challenges ahead, it is necessary to increase perimeter of highways in the country several times as well as to bring roads in rural and remote areas under regular repairs.

2. Railroad development and expansion of rail network:

Importance of rail communication in the economy of the country is considered in case of transport of passengers and goods as well as roads. Railways play an important role in transporting goods, especially from far and wide at low cost, as a result, important cities and ports in most countries are brought under rail connectivity. As of 2017-18 financial year, there are total of 2,956 km of railways in the country, which are connected only to the major cities and river ports of the country, most cities of the country are not connected to the railways. In the interest of industrial development, it is necessary to take steps to bring all district towns of the country under rapid rail connectivity in order to reduce transportation cost.

3. Modernization and capacity building of airports:

Airport is the only medium for quick international and domestic communication. Currently there are three international and seven domestic airports in the country. Most of international transit is done through Dhaka Shahjalal International Airport alone, Chittagong Airport is second and Sylhet Airport is in third position in terms of transit. In future, along with expansion of industrial sector across the country, transit through two other international airports besides Dhaka will also increase and accordingly, transit and other capabilities of those two airports need to be increased rapidly. Moreover, to make the Cox's Bazar a tourist attraction, Cox's Bazar Airport must be turned into an international airport, so that foreign tourists can come and go directly to Cox's Bazar. There is no doubt that this step will significantly increase revenue of tourism sector.

4. Improvement of service quality, management and communication system of land ports:

There are about 23 land ports in Bangladesh at different borders, through which imports and exports from neighboring countries are carried out on a regular basis, which is one of the major sources of revenue for the country. Infrastructure, management of land ports and roads associated with all these ports are very old and dilapidated. Considering importance of increasing revenue in the country, development of overall infrastructure, management and communication system of land ports is very important.

5. Modernization and capacity building of seaports:

Rivers and seaports are one of the main means to bring dynamism in import and export trade and facilitate transportation of domestic goods. There are





two seaports in Bangladesh, Chittagong and Mongla seaports, moreover, Payra seaport is currently under construction. Of these, about 90 per cent of the country's imports and exports have to be completed only through the Chittagong seaport, where container traffic is one of the biggest problems. According to World Port Ranking 2015, Chittagong Port is ranked 75th in terms of cargo volume and 65th in terms of container traffic among 100 most busiest ports in the world. Therefore, in order to meet future challenges, beside increasing scope, improving management and performance of Chittagong Port through complete modernization to bring dynamism in import and export trade in the country and to attract foreign investment, it is necessary to increase efficiency of Mongla and Payra seaports several times by modernizing them.

6. Increasing power generation and distribution capacity:

By the F.Y 2018-19, maximum daily generation of electricity were 12,893 MW as against installed capacity of 18,961 MW. By the year 2018, 90% of population in the country has been electrified and at that time per capita electricity generation in the country was 464 kWh/hour (CPD study). According to CIA World fact Book, average per capita electricity consumption (KWH) was 351 in Bangladesh by 2017, at that time which was 471 in Pakistan, 4,232 in Malaysia, 2,404 in Thailand, 1,058 in Indonesia. 9,720 in South Korea, 7,371 in Japan, 1,181 in India and 4,475 in China.

Despite Bangladesh's progress in power sector over the past decade and country's current power situation is better than any time before, Bangladesh still lags far behind the countries with potential economies in terms of per capita power generation and utilization. Therefore, there is no doubt that per capita power generation and consumption needs to be further increased in order to achieve desired development of the country's economy through increasing industrialization in future.

7. Infrastructural development to explore new gas fields and increase gas extraction:

Natural gas extraction amounted to 968.7 billion cubic feet in the 2017-18 financial year. According to International Rankings 2018, Bangladesh ranks 27th out of 215 countries in gas extraction and 32nd in gas consumption. Among other South Asian countries in terms of gas production, China ranks 6th, Indonesia 12th, Malaysia 13th, Pakistan 21st, Thailand 22nd, India 25th, Myanmar 33rd, Vietnam 44th and Japan 57th. Therefore, in order to meet challenge of 2041, to increase use of natural gas in industrial production, adequate investment in this sector is required to discover new gas fields as well as to increase gas production in a phased manner.

8. Development of necessary infrastructure in education, health and other important sectors:

Adequate infrastructure at village and city level for education, health and human resource development has not yet been developed in Bangladesh. As a result, Bangladesh lags far behind other countries in terms of higher education, research, technology & innovation and self-employment. It is







essential to develop education and health infrastructure in line with other developing countries in the world, otherwise, Bangladesh will fall further behind in this case.

9. Sustainable infrastructure development in other sectors, including: -

- A) Adequate infrastructural development in water resources and river governance management.
- B) Construction of adequate infrastructure for human resource development.
- C) Construction of necessary infrastructure for rapid expansion and development of the industrial sector.
- D) Construction of necessary infrastructure for rapid expansion and development of ICT sector.
- E) Construction of necessary infrastructure for development and expansion of maritime economy.
- F) Construction of necessary infrastructure for decentralization of SME sector at upazila level.
- G) Adequate infrastructure development to facilitate revenue collection system.
- H) Expansion of infrastructure required for standard development of administrative system.
- Infrastructure development to facilitate government services and expand digital system.
- J) Infrastructural development to curb corruption and establish rule of law.

First Edition: August, 2022

K) Development of rural infrastructure with adequate civic amenities.







Increase Foreign Investment.







Increase Foreign Investments.

Topics Covered in the Chapter

- A) Increase Foreign Investments.
 - 1. What is Foreign Direct Investment (FDI)?
 - 2. Importance of FDI in economic development.
 - 3. Sectoral Domestic and Foreign Investments.
 - 4. Sources of foreign investments.
 - 5. Bangladesh's position in South Asia in terms of foreign investments.
- B) FDI Stock Position
 - 1. Overall FDI stock position.
 - 2. Sector based FDI stock.
 - 3. Country-wise FDI stock position.
 - 4. Bangladesh's position in Global FDI Ranking and Stock Position.
 - 5. Employment under FDI.
- C) Assessment of overall FDI situation of the Country.
- D) Initiatives of government to attract foreign investment.
- E) Recommendations on attracting foreign investments.







A) Increase Foreign Investments:



Increase Foreign Investments: Foreign investment has been working as one of the major driving forces in the world in terms of industrialization, economic prosperity and structural changes. Foreign investment therefore plays a unique role in enriching economies of developing countries especially like Bangladesh, through exchange of technologies, including increasing GDP growth through industrialization, job creation and long-term capital formation. According to World Bank Report 2019, to achieve SDG target by 2030, Bangladesh needs an average investment of USD 12.5 billion per year in both public and private sectors, a large portion of which will come from foreign investment.

1) What is Foreign Direct Investment (FDI)?

According to the International Monetary Fund (IMF), FDI refers to investments made to acquire a lasting interest in enterprises operating outside the economy of the investor (Ridgeway, 2004). IMF also considers an investment to be classified as FDI if investor holds a partial ownership share of at least 10% and exercises a significant amount of management control. This is similar to way in which the Organization of Economic Co-operation and Development (OECD) defines FDI. According to the OECD (2012), "A foreign direct investment enterprise is an enterprise resident in one economy and in which an investor resident in another economy owns, either directly or indirectly, 10% or more of its voting power if it is incorporated or the equivalent for an unincorporated enterprise" (Researchgate)

Expansion and development of industrial sector is one of the prerequisites for creation of new employment and overall economic development in the country. This is because, expansion of industrial sector creates new jobs as well as increase productivity, make stronger and more sustainable the country's overall economy by increasing exports and raise sufficient foreign exchange after meeting domestic demand beside playing a major role in boosting the country's GDP growth and building long-term capital in the country. Needless to say, rapid expansion and development of industrial sector requires adequate domestic and foreign investment and to attract investment, requires improved infrastructure, investment climate,



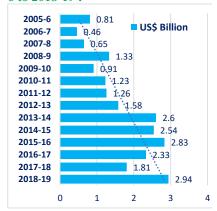


political stability and assurance of profitable investment. Although both domestic and foreign investment in the country's industrial sector was very limited till 2005, picture had started changing gradually after 2005 and since the present government came to power and adopted pragmatic policies to increase investment in the country, level of domestic / foreign investment in various sectors in the country has increased significantly in the post-2010 period. Amount of foreign direct investment in Bangladesh was USD .45 billion in 2004, according to World Investment Report 2019, foreign investment in Bangladesh was USD 3.61 billion in 2018, which is the highest ever.

Analysis of industrial sector of the country for the period from F.Y 2005-06 to 2018-19 shows that amount of foreign investment in the country till financial year 2009-10 was below USD 1.00 billion per year in average. Foreign investment in the country's industrial sector has been steadily increasing since 2010, with USD 1.23 billion in FY 2010-11, USD 1.26 billion in FY 2011-12, 1.58 billion in FY 2012-13, 2.6 billion in FY 2013-14, 2.58 billion in FY 2014-15, 2.83 billion in FY 2015-16, 2.33 billion in FY 2016-17, 1.81 billion in FY 2017-18, and 2.94 billion in FY 2018-19. During this period (from F.Y 2010-11 to 2018-19), average foreign investment in the country was 2.003 billion US dollars per year [Figure-5.12 (1)].

Same pattern is seen in the growth of domestic investment during this period, for example, although domestic investment was below USD 3.00 billion in average till FY 2009-10, but this scenario has started changing gradually from FY 2010-11, Foreign investment rises to USD 6.277 billion in F.Y 2010-11, 7.137 billion in FY 2011-12, 6.081 billion in FY 2012-13, 5.446 billion in FY 2013-14, 8.307 billion in FY 2014-15, 11.561 billion in FFY 2015-16. 13.062 billion in FY 2016-17, 16.663 billion in FY 2017-18 and 15.334 billion in FY 2018-19. During fiscal year 2010-11 to 2018-19, domestic investment was average USD 9.246 billion per year [Figure-5.12 (2)].

Figure-5.12 (1): Scenario of coming foreign direct investment to the country during financial year 2005-6 to 2018-19:-



Source: World Bank Data

Figure-5.12 (2): Scenario of domestic and foreign investment in industrial sector during period 2010 to 2019: -

Financial Year	Local	Foreign In	vestments	Total Investments (Local + Foreign)	
	Investment	Value	As % of GDP		
2005-6	2.730	0.81	1.17	3.54	
2006-7	3.130	0.46	0.64	3.59	
2007-8	1.294	0.65	0.82	1.94	
2008-9	3.118	1.33	1.45	4.45	
2009-10	2.588	0.91	0.88	3.49	
2010-11	6.277	1.23	1.07	7.51	
2011-12	7.137	1.26	0.98	8.40	
2012-13	6.081	1.58	1.19	7.66	
2013-14	5.446	2.60	1.74	8.05	



importance of

FDI in economic

develop-ment:

Strategies for Economic Development of Bangladesh



2014-15	8.307	2.54	1.47	10.85
2015-16	11.561	2.83	1.45	14.39
2016-17	13.062	2.33	1.05	15.39
2017-18	16.663	1.81	0.73	18.47
2018-19	15.334	2.94	1.07	18.27

Source: World Bank and BIDA

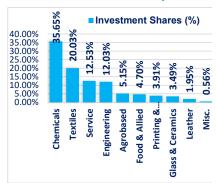
2) importance of FDI in economic development:

Modernization Theory states that FDI can positively contribute to economic growth in developing countries. According to Modernization Theory, demand for capital formation in developing nations can be met by FDI through capital investment which can augment economic growth (Firebaugh, 1992). Modernization Theory also suggests that FDI transfers knowledge, technologies, managerial skills, and ideas which can contribute to the economic development of the recipient country (Mengistu & Adams, 2007). This concept is supported by Mello (1999) who concluded that foreign investment is an important element to fill the resource gap in many developing nations. For instant, FDI has enabled economic growth in South and East Asia by increasing capital formation (Fry, 1999).

3) Sectoral Domestic / Foreign Investments :

Over the past decade, sector-based domestic investment analysis has shown that Chemicals, Textiles, Services and Engineering are the first priority sectors, Agro-based, Food & Allied, Printing & Publication and Glass & Ceramics are the second priority and Leather, NEC and other sectors have been identified as third priority sectors to the investors. In terms of sectoral investment in FY 2018-19, 35.85% in Chemicals Sector, 20.03% in Textiles. 12.03% 12.53% in Services, Engineering, Agrobased 5.15%, Food and Allied 4.70%, Printing and Publication 3 .91%, Glass & Ceramics 3.49%, Leather 1.95% and in other sectors 0.56% Figure-5.12 (3.

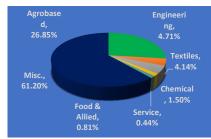
Figure-5.12 (3): Scenario of domestic investment in different sectors in 2018-19 financial year:-



Source: BIDA

In case of sector based foreign investment in FY 2018-19, agro-based 26.75% has been identified as the first priority sector, Textiles 4.14% and engineering 4.71% are second priority and chemical 1.50% and food & allied 0.81% are third priority sectors. In this case, highest investment in various sectors is 61.20% Figure-5.12 (4).

Figure-5.12 (4): Scenario of foreign investment in various sectors in 2018-19:



Source: BIDA

First Edition: August, 2022

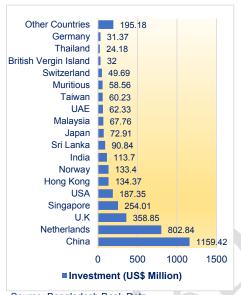
Sectoral Domestic / Foreign Investment :





Sources of foreign investment:

Figure-5.12 (5): Scenario of country-based foreign investment coming in 2019:



Source: Bangladesh Bank Data

4) Sources of foreign investments:

Number of countries investing in Bangladesh's industries and other sectors is more or less 25 till today, out of which 17 countries have been steadily increasing their investment level every year, those are - China, Netherlands, UK, Singapore, USA, Hong Kong, Norway, India. R. Korea, Sri Lanka, Japan, Malaysia, UAE, Taiwan, Mauritius, Switzerland and British Virgin Islands are some of them. China, Netherlands, UK and Singapore are among the countries those have comparatively invested more in recent years. In 2019, China's net investment in Bangladesh is about USD 1,159.42 million, Netherlands USD 802.84 million, United Kingdom 358.85 million and Singapore 254.01 million Figure-5.12 (5).

Figure-5.12 (6): Scenario of country-based net foreign investment during period from 2010-11 to 2018-19:-

O a servatura	Periods								
Country	2010	2013	2015	2016	2017	2018	2019		
China	5.70	16.69	49.84	61.40	68.58	1,029.90	1,159.42		
Netherlands	40.98	38.52	97.77	88.87	90.04	691.92	802.84		
U.K	74.22	104.84	273.55	330.32	313.87	370.58	358.85		
Singapore	13.22	77.12	135.17	673.05	701.04	171.06	254.01		
USA	45.95	52.83	224.60	217.74	208.71	174.25	187.35		
Hong Kong	40.10	48.93	93.40	98.46	111.70	169.78	134.37		
Norway	-	-	107.27	160.26	187.41	108.10	133.40		
India	10.51	26.00	82.79	79.20	95.41	121.46	113.70		
S. Korea	19.42	73.69	131.39	151.33	178.50	72.97	-		
Sri Lanka	4.87	20.70	69.33		24.85	61.32	90.84		
Japan	9.82	79.00	77.74	48.26	44.47	58.40	72.91		
Malaysia	-	97.73	40.43	38.62	46.15	92.74	67.76		
UAE	17.93	36.41	56.23	-	1	55.50	62.33		
Taiwan	3.37	13.34	55.06	45.84	27.28	51.74	60.23		
Muritious	-	10.64	1	32.37	53.72	67.54	58.56		
Switzerland	-	-	31.17	26.30	21.69	49.31	49.69		
Bermuda	1	-	1	-	28.69	37.31	32.00		
British Vergin Islands	5.30	33.50	32.92	41.93	41.51	44.17	24.18		
Thailand	-	-	31.74	35.17	58.69	-	31.37		
Germany	-	10.58	-	21.87	24.84	26.22	-		
Other Country	51.13	192.57	243.47	181.73	127.66	159.03	195.18		
Total :	342.52	933.09	1,833.87	2,332.72	2,454.81	3,613.30	3,888.99		

First Edition: August, 2022

Source: Bangladesh Bank



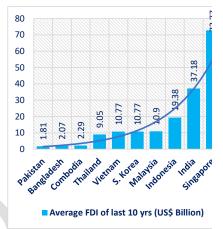


Bangladesh's position in South Asia in terms of foreign investment:

5) Bangladesh's position in South Asia in terms of foreign investments:

Over the past decade, foreign investment in Bangladesh has increased more than ever before, for example, in 2010, amount of foreign investment in Bangladesh was USD 1.23 billion, it has gradually increased every year and in 2018, amount of foreign investment in the country stood at USD 2.94 billion, which is the highest ever. Over the past decade (2010-2019), foreign investment in Bangladesh averaged USD 2.07 billion a year, followed by 2.29 billion in Cambodia, 9.05 billion in Thailand. 10.77 billion in Vietnam, 10.77 billion in South Korea, 10.9 billion in Malaysia, 19.38 billion in Indonesia, 37.18 billion in India and 72.77 billion in Singapore [Figure-5.12(7)] . Needless to say, Bangladesh still lags far behind in the world and even many countries in South Asia, in attracting foreign investment.

Figure-5.12 (6): Scenario of average foreign investment in the last decade in Bangladesh and some other countries in South Asia: -



Source: World Bank Data

First Edition: August, 2022

Figure-5.12 (7): Scenario of foreign investment (in USD billion) in Bangladesh and some other countries in South Asia during last decade: -

Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	10 years Average
Pakistan	2.02	1.33	0.86	1.33	1.89	1.67	2.58	2.50	1.74	2.22	1.81
Bangladesh	1.23	1.27	1.58	2.60	2.54	2.83	2.33	1.81	2.94	1.60	2.07
Combodia	1.40	1.54	1.99	2.07	1.85	1.82	2.48	2.79	3.21	3.71	2.29
Thailand	14.75	2.47	12.90	15.94	4.98	8.93	2.81	8.23	13.21	6.32	9.05
Vietnam	8.00	7.43	8.37	8.90	9.20	11.80	12.60	14.10	15.50	-	10.77
S. Korea	9.50	9.77	9.50	12.77	9.27	4.10	12.10	17.91	12.18	10.57	10.77
Malaysia	10.89	15.12	8.90	11.30	10.62	9.86	13.47	9.37	8.57	-	10.90
Indonesia	15.29	20.57	21.20	23.28	25.12	19.78	4.54	20.51	18.91	24.58	19.38
India	27.40	36.50	24.00	28.15	34.58	44.01	44.46	39.97	42.12	50.61	37.18
Singapore	55.32	49.16	55.31	64.39	68.70	69.78	70.72	97.77	91.04	105.4 7	72.77

Source: World Bank Data









1) Overall FDI stock position:

Over the past decade, overall FDI stock position in the country has gradually increased. Overall FDI stock of the country was USD 5,139.19 million in 2009, which has been gradually increased to USD 5,969.46 million by 2010, 6,219.09 million in 2011, 6,250.86 million in 2012, 8,363.06 million in 2013, 9,340.23 million in 2014, 12,501.13 million in 2015, 13,446.14 million in 2016, 14,466.57 million in 2017, 15, 791.34 million in 2018 and USD 18,680.21 million by 2019. During this period, average annual growth rate of FDI stock was 14.97% [Figure-5.12 (9)].

Figure-5.12 (9): Overall stock position at the end of the year during financial year 2009-10 to 2019-20:-



Source: Bangladesh Bank Data

FDI stock position:

Sector based FDI stock position:

Figure-5.12 (10): Sector based FDI stock position by the end of 2019:-



2) Sector based FDI stock:

Sector-wise FDI stock analysis shows that by the end of 2019, FDI stocks in various sectors of the country amounted USD to 18,680.21 million in total, of which, gas and petroleum sector has highest amount of USD 3,720 million. Followed by Textile 3,299 million, Power 2,904 million, Banking 2,284 million, Food and Allied 1,187 million, Tele-communications 911 million. Trading 408 million. Leather and Leather Products 400 million, Agri & Fishing 285 million, I.T 267 million and 3,016 million in other sectors respectively [Figure-5.12 (10)].

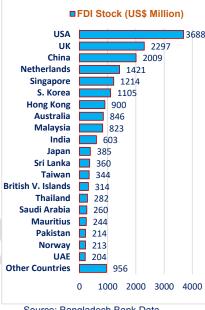




3) Country-wise FDI stock position:

In case of country-based stock positions, by 2019, United States tops the list of investing countries in Bangladesh with USD 3,688 million. U.K is in second position in this case with investing USD 2,297 million, China third with 2,009 million, Netherlands 4th with 1,421 million, Singapore 5th with 1,214 million and South Korea is in 6th position with investing USD 1,105 million. Among other investing countries, Hong Kong USD 900 million, Australia 846 million, Malaysia 823 million, India 603 million, Japan 385 million, Sri Lanka 360 million, Taiwan 344 million, British Virgin Islands 314 million, Thailand 282 million, Saudi Arab 260 million, Mauritius 244 million, Pakistan 214 million, Norway 213 million, UAE 204 million and other countries 956 million dollars [Figure-5.12 (11)].

Figure-5.12 (11): Country-wise FDI stock position by the end of 2019:-



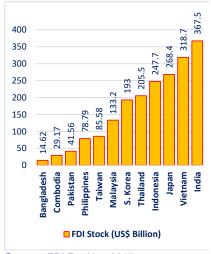
Source: Bangladesh Bank Data

Country-wise FDI stock position:

4) Bangladesh's position in Global FDI Ranking and Stock Position:

To date, Bangladesh has lagged far behind in the world, even most countries in South Asia in attracting foreign investment. According to FDI Ranking 2017, published by Wikipedia based on data from CIA World Factbook, Bangladesh ranks 89th in the list of 128 countries. where Cambodia 69th, Pakistan 59th, Philippines 50th, Taiwan 46th, Malaysia 40th, South Korea 29th, Thailand 28th, Indonesia 24th, Japan 22nd, Vietnam 20th, India 9th and China is in 4th position in that list. During that period, FDI stocks was USD 14.62 billion in Bangladesh, 29.17 billion in Cambodia, 41.56 billion in Pakistan, 78.79 billion in Philippines, 85.58 billion in Taiwan, 133.20 billion in Malaysia, 193 billion in South Korea, 205.50 billion in Thailand, 247.70 billion in Indonesia, 268.40 billion in Japan, 318.70 billion in Vietnam, 367.50 billion in India and 1,514 billion in China [Figure-5.12(12)].

Figure-5.12 (12): FDI Stock Position in Bangladesh and in other South Asian countries by December 2017:-



Source: FDI Ranking 2017

First Edition: August, 2022

Bangladesh's position in Global FDI Ranking and Stock Position:

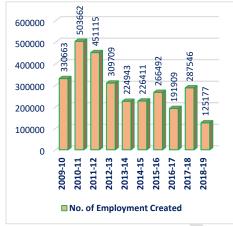




Employment

under FDI:

Figure-5.12 (13): Scenario of creating new employment in the projects under FDI during financial year 2009-10 to 2018-19:-

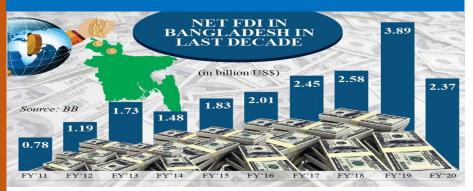


Source: BD Economic Review and BIDA

5) Employment under FDI:

Foreign investment plays a unique role in strengthening the country's economy increasing by industrialization, productivity, GDP growth and fixed capital as well as reducing unemployment and increasing per capita income by creating new jobs at various levels. During financial year 2017-18, 0.29 million new jobs were created in the projects under FDI, which is 0.48% of total labor force during that period. As per Ministry of Finance, during last one decade (2009-10 to 2018-19), number of working people has increased at different stages in FDI funded projects (Managerial, technical, supervisory and skilledunskilled Jobs) by about 2.90 million, an average of 0.29 million per year [Figure-5.12 (13)]..

C) Assessment of overall FDI situation of the country:



A review of Bangladesh's investment position over the past decade, FDI stock position and latest position in the global FDI rankings, it is clear that foreign investment in Bangladesh has increased more than ever before, but it is not enough at all for Bangladesh to reach middle income countries by 2021 and high income countries by 2041. Because trend of foreign investment in Bangladesh is still very low compared to most of the countries in South Asia. Over the past decade (2010-11 to 2019-20), foreign investment in Bangladesh has averaged USD 2.07 billion a year. At the same time, foreign investment in other South Asian countries averaged USD 2.29 billion in Cambodia, 9.05 billion in Thailand, 10.77 billion in Vietnam, 10.77 billion in South Korea, 10.9 billion in Malaysia, 19.38 billion in Indonesia and 37.18 billion in India and average of 72.77 billion in Singapore [Figure-5.12(8)].





Assessment of overall FDI situation of the country:

During that period, FDI stock position was USD14.62 billion in Bangladesh, 29.17 billion in Cambodia, 41.56 billion in Pakistan, 78.79 billion in Philippines, 85.58 billion in Taiwan, 133.20 billion in Malaysia. 193 billion in South Korea, 205.50 billion in Thailand, 2467.70 billion in Indonesia, 268.40 billion in Japan, 318.70 billion in Vietnam, 367.50 billion in India and USD 1,514 billion in China [Figure-5.12(12)].

Although there are more or less 25 countries investing in Bangladesh's industries and other sectors, 17 of them continue to increase their investment every year and only five countries (USA, UK, China, Netherlands and Singapore) dominate lion's share of investment. Moreover, foreign investment in Bangladesh has so far been limited to a few specific sectors, with Agro-based being first priority, Textiles and Engineering second priority and Chemicals, Food and Allied has been identified third priority sector.

But it is also true that foreign investment has become more competitive in recent times than ever before. According to World Investment Report 2019, recent global policy on global export development and growth was not as favorable for trade and investment as before, which has had a negative impact on global cross-border productive investment in this time. As a result, global FDI trend in 2018 fell by about 13% to USD 1.3 trillion, which is the lowest since onset of global financial crisis, which has been identified as a major obstacle to increasing international investment in the past. (Financial Express - December 31, 2019)

So, reviewing overall situation of foreign investment in Bangladesh, it can be said that the current trend of foreign investment in Bangladesh and amount of foreign investment is in no way compatible with other neighboring developing countries and which is absolutely inadequate for realizing the future dream of Bangladesh. Therefore, in realizing the future dream of Bangladesh to attract foreign investment in this period of competition, it has become imperative for Bangladesh to achieve industrial and technological prosperity by attracting foreign investment in the light of other developing countries as well as increasing foreign investment through attractive offers and incentives.

D) Initiatives of government to attract foreign investment:

Bangladesh is offering foreign investment opportunities in South Asia on the most attractive terms and conditions. According to Industrial Policy 2016, all sectors of Bangladesh economy are open to foreign private investment and there are no barriers for investors shares. Foreign investors can easily invest in Bangladesh by availing huge tax exemptions, financial incentives and other benefits applicable to investment in Bangladesh. In order to attract foreign investment under the Industrial Policy 2016, government has reformed Board of Investment in 2016 and established BIDA and under this effort, various incentive packages for investors, legal protection, signing of investment and bilateral agreements with different countries, tax holiday benefits and has taken many necessary steps to create a conducive business environment, summary of which is as follows: -





Investment Facilities:

Private investment from overseas sources is welcome in all areas of the economy with the exception of the four reserved sectors, which can be made either independently or through venture on mutually beneficial terms and conditions. Foreign investment is, however, especially desired in the following major categories of industries:

- > Export oriented industries
- ➤ Industries in the Export Processing Zones (EPZs)
- ➤ High technology products that will be either import substitute or export oriented.

1) Facilities/Incentives:

- I. For foreign direct investment, there is no limitation pertaining to foreign equity participation, i.e. 100 percent foreign equity is allowed. Non-resident institutional or individual investors can make portfolio investments in stock exchanges in Bangladesh. Foreign investors or companies may obtain full working loans from local banks. The terms of such loans will be determined on the basis of bank-client relationship.
- II. A foreign technician employed in foreign companies will not be subjected to personal tax up to 3 (three) years, and beyond that period his/her personal income tax payment will be governed by the existence or non-existence of agreement on avoidance of double taxation with country of citizenship.
- III. Full repatriation of capital invested from foreign sources will be allowed. Similarly, profits and dividend accruing to foreign investment may be transferred in full. If foreign investors reinvest their repatriable dividends and or retained earnings, those will be treated as new investment. Foreigners employed in Bangladesh are entitled to remit up to 50 percent of their salary and will enjoy facilities for full repatriation of their savings and retirement benefits.
- IV. (d) Foreign entrepreneurs are, therefore, entitled to the same facilities as domestic entrepreneurs with respect to tax holiday, payment of royalty, technical know-how fees etc.
- V. (e) The process of issuing work permits to foreign experts on the recommendation of investing foreign companies or joint ventures will operate without any hindrance or restriction. Multiple entry visa" will be issued to prospective foreign investors for 3 years. In the case of experts," multiple entry visa" will be issued for the whole tenure of their assignments.

2) Other Incentives:

- Citizenship by investing a minimum of US \$ 500,000 or by transferring US\$ 1,000,000 to any recognised financial institution (Non-repatriable).
- Permanent residentship by investing a minimum of US\$ 75,000 (non-repatriable).
- Special facilities and venture capital support will be provided to exportoriented industries under "Thrust sectors". **Thrust Sectors** include Agro-based industries, Artificial flower-making, Computer software and information technology, Electronics, Frozen food, Floriculture, Gift

First Edition: August, 2022

Steps taken by the government to attract foreign investment:





items, Infrastructure, Jute goods, Jewellery and diamond cutting and polishing, leather, Oil and gas, Sericulture and silk industry, Stuffed toys, Textiles, Tourism.

3) Investment Protections / International Agreements:

- Legal Protection: The policy framework for foreign investment in Bangladesh is based on 'The Foreign Private Investment (Promotion & Protection) Act. 1980,' which ensures legal protection to foreign investment in Bangladesh against nationalisation and expropriation. It also guarantees non-discriminatory treatment between foreign and local investment, and repatriation of proceeds from sales of shares and profit.
- International Agreements: Bangladesh has concluded bilateral agreements for avoidance of double taxation and investment treaties for promotion and protection of investment with the following countries:
- Bilateral agreements: Belgium, Canada, China, Denmark, France, Germany, India, Italy, Japan, Poland, Romania, Singapore, South Korea, Sri Lanka, Sweden, Thailand, The Netherlands, United Kingdom (including Northern Ireland). Negotiations are ongoing with U.S.A, Iran, Philippines, Qatar, Australia, Nepal, Turkey, Indonesia, Cyprus, Norway, Finland and Spain.
- Investment treaty: Belgium, Canada, France, Germany, Iran, Italy, Japan, Malaysia, Pakistan, Philippines, Poland, Republic of Korea, Romania, Switzerland, Thailand, The Netherlands, Turkey, United Kingdom, USA, Indonesia. Negotiations are ongoing with India, Hungary, Oman, Maldova, DPRK, Egypt, Austria, Mauritius, Uzbekistan.

In addition, Bangladesh is a signatory to MIGA (Multilateral Investment Guarantee Agency), OPIC (Overseas Private Investment Corporation) of USA, ICSID (International Centre for Settlement of Investment Disputes) and a member of the WIPO (World Intellectual Property Organization) permanent committee on development co-operation related to industrial property.

4) Incentives to Non-Resident Bangladeshis (NRBs):

Investment of NRBs will be treated on par with FDI. Special incentives are provided to encourage NRBs to invest in the country. NRBs will enjoy facilities similar to those of foreign investors. Moreover, they can buy newly issued shares/debentures of Bangladeshi companies . A quota of 10% has been fixed for NRBs in primary public shares. Furthermore, they can maintain foreign currency deposits in the Nonresident Foreign Currency Deposit (NFCD) account.

5) RELAXATION / LIBERALISATION OF EXCHANGE CONTROL REGULATIONS:

Bangladesh 'Taka' is convertible for current external transactions. Individuals/firms resident in Bangladesh may conduct all current external transactions, including trade and investment related transaction, through banks in Bangladesh authorised to deal in foreign exchange (Authorised Dealers) without prior approval of the Bangladesh Bank. Non-resident direct investment in industrial enterprise in Bangladesh and non-resident portfolio investment through stock exchanges in Bangladesh also do not require prior approval of the Bangladesh Bank. Remittance of post-tax dividend/profit on non resident direct or portfolio investment do not require prior





approval. Sale proceeds, including capital gains on non-resident portfolio investment may also be remitted abroad without prior approval. Repatriation of sale proceeds of non-resident investment in unlisted companies is allowed by Bangladesh Bank on the basis of the net asset value of the shares of the company. Investors may obtain relevant procedural details by contacting any Authorised Dealer bank in Bangladesh.

To facilitate investment, prior approval of Bangladesh Bank is no longer required for:

- Remittance of profits to their head offices by foreign firms and companies operating in Bangladesh.
- issuance of shares to non-residents against investment for setting up industries in Bangladesh.
- Remittance of dividends on such shares to the non-resident investors.
- Portfolio investment by non-residents including foreign individuals/enterprises in shares and securities through stock exchanges in Bangladesh.
- Remittance of dividends on portfolio investment by non-residents through stock exchanges in Bangladesh.
- Remittance of sale proceeds, including capital gains of portfolio investments of non-residents through stock exchanges in Bangladesh.
- Remittance of principal and interest instalments on loans/suppliers credits
 obtained by industrial units from foreign lenders with approval of the
 BOI. 100% foreign owned (Type A) industrial units in the EPZs (Export
 Processing Zone) do not require prior permission of BOI for such foreign
 borrowing.
- Remittance in repayment of principal and payment of interest of such loans.
- Remittance of technical fees and royalties against technical assistance/royalty agreements in conformity with BOI guidelines.
- Remittance of savings of expatriate personnel at the time of their leaving Bangladesh, out of the salaries and benefits stated in their employment contracts as approved by BOI.
- Extension of term loans by banks on normal banking considerations to foreign firms operating in Bangladesh, subject to compliance of the instruction of GFET-2009, Vol-1, chapter-16, para 4(B).
- Extension of working capital loans to all foreign owned/controlled industrial and trading firms/companies by banks on the basis of bank customer relationship and normal banking practice.
- Obtaining of interest-free repatriable short-term foreign currency loans by foreign firms investing in Bangladesh from their head offices or any other sources through any authorised dealer.

6) General facilities/incentives:

• Tax holiday:

Tax holiday facilities are provided in accordance with existing laws, which will be available for 5 or 7 years depending on the location of the industrial enterprise.

• Accelerated depreciation:

Industrial undertakings not enjoying tax holiday will enjoy accelerated depreciation allowance up to 100 per cent of the cost of the machinery or





plant if the industrial undertaking is set up in any municipal areas and 80 per cent in the first year and 20 per cent in the second year if the Industrial undertaking is set up elsewhere in the country.

• Tax exemption :

- Tax exemption on royalties, technical know-how fees received by any foreign collaborator, firm, company and expert.
- ii) Exemption of income tax up to 3 years for foreign technicians employed in industries specified in the relevant schedule of the income tax ordinance.
- iii) Tax exemption on income of the private sector power generation company for 15 years from the date of commercial production.
- iv) Tax exemption on capital gains from the transfer of shares of public limited companies listed with a stock exchange.

7) Concessionary duty on imported capital machinery:

Import duty, at the rate of 5% ad valorem, is payable on capital machinery and spares imported for initial installation or BMR/BMRE of the existing industries . The value of spare parts should not, however, exceed 10% of the total C & F value of the machinery. For 100% export oriented industries, no import duty is charged in case of capital machinery and spares. However, import duty @ 5% is secured in the form of bank guarantee or an indemnity bond will be returned after installation of the machinery.

Value Added Tax (VAT) is not payable for imported capital machinery and spares. (Source: Bangladesh bank)

E) Recommendations for attracting foreign investments:



Needless to say, despite government's considerable efforts to increase foreign investment, due to overall readiness and government initiatives of Bangladesh to attract foreign investment are not up-to-date, foreign investment coming in Bangladesh less than other neighboring developing countries. This is because, it is not possible for Bangladesh to meet the target of 2041 with foreign investment of USD 2.07 billion per annum in place of average USD 12 billion per annum in SDG target, unless real progress is made in this situation.





Recommendations for attracting foreign investments .

Most important factor in attracting foreign investment is overall preparation, such as infrastructure development at all levels (communications, water, electricity, gas, port infrastructure, favorable business environment, security and profitable investment assurance and establish rule of law), which must be progressive and up-to-date compared to other competing countries. Next step in this regard is investment incentives and opportunities. If overall preparation is not strong and sustainable, no matter how much incentives are given, there will still be uncertainty in attracting desired investment.

It may be mentioned that 10 mega projects are under implementation in various sectors for infrastructure development and many more small, large and medium projects have been implemented in the meantime. Moreover, many new projects are being undertaken under the Seventh Five-Year Plan for overall infrastructure development of the country. It is hoped that in the near future, Bangladesh will be able to reach a competitive position in terms of infrastructure.

Therefore, in order to achieve desired goal of 2041 by accelerating economic progress of Bangladesh, there is no alternative to increase domestic investment as well as increase export earnings and employment by accelerating industrialization through adequate foreign investment. In that case, Bangladesh will undoubtedly have to reach a competitive position with other developing countries in South Asia in attracting foreign investment. Which requires competitive overall preparation as well as ensuring competitive investment incentives and other opportunities. Therefore, in order to make ongoing process of the government more expeditious and effective, current preparations and ongoing facilities can be made more realistic and up-to-date to attract FDI in the light of the following recommendations:-

- 1. Increase adequate investment in development of overall infrastructure, such as Road, water, rail and air communication and other infrastructures.
- 2. To ensure supply of gas, electricity and water as per demand, taking more timely measures to utilize these resources.
- 3. Modernization of port system, increase efficiency and number of ports.
- 4. Accelerate development initiatives on business facilitation indicators and introduce one-stop services in all areas of business services to improve service quality.
- 5. To ensure a developed and safe business environment in the country.
- To ensure adequate security for safe placement and free movement of foreign investors, incoming technicians, officials, employees and other tourists.
- 7. Introduce quality specialized medical care at affordable prices for persons involved in foreign investment and for other tourists.
- 8. Improving quality of tourism for foreigners to enjoy holidays, improving communication with tourist spots and ensuring their leisure facilities according to their needs, If necessary, creating a separate "Foreign Amusement Zone" with adequate facilities for foreigners to enjoy holidays at tourist centers.
- 9. Adequate increase of quality hotels, motels, dishes and other facilities like accommodation for foreigners in all district towns of the country.
- 10. Modernization of visa system, so that persons involved in investment and other tourists do not suffer to get visa.
- 11. Opportunity to open showrooms, branch offices and manufacturing units of well-known and expensive brands and companies on easy terms, so that any





- well-known and expensive company can easily transfer their business in this country.
- 12. Restructuring tariffs and customs duties in line with other competing countries.
- 13. Facilitation of company formation, fund transfer, dividend remittance etc.
- 14. To keep salaries and allowances of all foreign officers, employees and technicians working in the foreign funded projects tax free under existing rules.
- 15. Ensure recruitment and training of a certain number of Bangladeshi technicians in each foreign-funded project, so that trained persons can improve the quality of local invested projects later.
- 16. Development of adequate infrastructure and communication system of already established economic zones in different parts of the country and open fully for setting up of factories as well as setting up of more economic zones on various islands in the Bay of Bengal.
- 17. In the current global and regional context, investment opportunities have been created in Bangladesh from India, China, Japan, South Korea and for other countries. Taking advantage of this opportunity to jointly implement mega projects with those countries in various sectors for development of infrastructure and development of new emerging islands.
- 18. Arrangements for promotion and publicity of investment environment and opportunities in Bangladesh in foreign medias.
- 19. Taking steps to organize and inspire foreign investors to invest in Bangladesh through Bangladeshi embassies in different countries.
- 20. To provide honorable citizenship on easy terms to good quality investors as well as VIP and CIP status.
- 21. To run separate clubs with international standard facilities for foreign investors in Dhaka, Chittagong and other divisional cities under government initiative.

First Edition: August, 2022





Chapter: 5.13

Extraction & Utilization of Natural Resources







Extraction & Utilization of Natural Resources.

Topics Covered in the Chapter

- A) Natural Resources.
- B) Bangladesh's position in terms of natural resources.
- C) Natural resources available in Bangladesh.
 - 1. Classification of natural resources.
- D) Utilization of natural resources in economic development.

Summary of some of the areas that are lagging behind in extraction of significant surface natural resources of Bangladesh and utilizing those resources in economic development:-

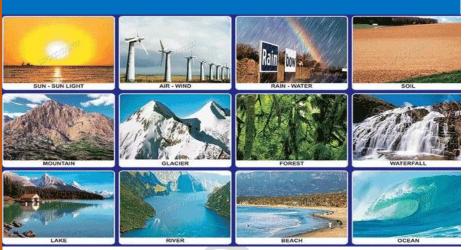
- 1. Lagging behind in Marine Fishing.
- 2. Lagging behind in extraction and utilization of forest resource.
- 3. Lack of proper management of water and river resources.
- 4. Inadequate utilization of water areas in the Bay of Bengal.
- 5. Lack of proper development of islands on the Bay of Bengal.
- 6. Failure to utilize hilly areas in economic development.
- 7. Lagging behind in tourism development despite attractive natural beauty.
- 8. Not being able to utilize working youth properly.
- E) Mineral resources.
- F) Recommendations for Extraction and use of mineral resources.

Natural Resources Animal Resources Crude Oil Forest Resources Precious Metals, Minerals, Rocks Water Resources Land Resources Wind Power and Solar Energy Natural Gas





A) Natural Resources:



Natural resources abound everywhere in the kingdom of nature. Every country in the world has more or less natural resources and it is widely used in the economic development of the country by extracting those resources according to their own capacity. The more countries rich in natural resources are able to ensure their extraction and proper utilization, the faster the country achieves economic prosperity. Middle East countries, for example, have been able to achieve economic prosperity through proper use of their natural oil and gas resources.

Due to its geographical location, Bangladesh is endowed with multifaceted natural resources, including mineral resources, fisheries and forest resources, fertile soil, numerous small rivers and hills across the country, Sundarbans, newly gained water areas in the Bay of Bengal, New islands emerging in the heart of Bay of Bengal and huge human resources are notable abundant natural resources of Bangladesh, through proper use of all these resources, there are huge potentials for economic prosperity of this country. However, a universal UN agenda on the use of natural resources is "addressing issues related to climate change in the process of socio-economic development, is one of the pillars of sustainable development." Out of the 17 thematic goals, 13, 14 and 15 (Climate Action, Underwater Life and Earth Life) are related to addressing the impacts of climate change. Any development effort without resolving all these climate related issues can fail. However, Bangladesh government has already taken a number of important steps in relation to climate change, which include:-

Natural Resources:

- 1) Climate pollution management.
- 2) Forests and sustainable rural development.
- 3) Enhancing regional cooperation on environmental partnership resources.
- 4) development of maritime economy; and
- 5) Large scale afforestation.

Keeping in mind the United Nations universal agenda on climate, present situation and future prospects of Bangladesh in extraction and use of natural resources are highlighted below.





B) Bangladesh's position in terms of natural resources:

According to Natural Resources & Resilience Performance Rank 2019, Bangladesh ranks 83rd out of 113 countries in terms of natural resources. According to that ranking, Myanmar is 15th among other countries in South Asia in terms of natural resources, Thailand 46th, Pakistan 53rd, China 69th, Malaysia 74th, Vietnam 94th, India 98th, Philippines 108th and Indonesia is ranked 110th. It should be noted that although India, Philippines and Indonesia are behind Bangladesh in terms of natural resources, they are far ahead of Bangladesh in terms of natural resource extraction and income from natural resources. In 2018, earning from natural resources as compared to GDP was 6.59% in Myanmar, 2.01% in Thailand, 1.13% in Pakistan, 1.58% in China, 7.54% in Malaysia, 0.66% in Bangladesh, 4.32% in Vietnam, 2.27% in India, 1.47% in Philippines and 4.78% in Indonesia [Figure-5.13 (1)].

Bangladesh's position in terms of natural resources:

Now it remains to be seen whether all natural resources that are available within the geographical limits of this country, how many resources have already discovered, whether adequate extraction of discovered resources and its proper commercial use is being ensured and what steps are being taken for quick discovery of undiscovered resources? Moreover, how much of other natural resources, such as the mountains. Sundarbans, sea, newly conquered sea areas and newly emerging islands in the Bay of Bengal are being utilized to the full extent and what is government's plan to utilize all these resources for future economic needs? Because in this age of technological excellence, it will be difficult to survive in the present competitive world if economic diversification cannot be ensured.

Figure-5.13(1): Position of Bangladesh and other countries in South Asia in terms of natural resources and earnings from natural resources as compared to GDP in 2018:-



Source: Globaleconomy.com and GFSI

First Edition: August, 2022

C) Natural resources available in Bangladesh:

Due to its geographical location, Bangladesh has a heavenly climate and natural environment, fertile soil, numerous river channels, beels and hills which is rich in multifaceted natural resources. It is only a matter of time before sustainable development of the country's overall economy if proper use of all those resources are ensured. However, due to fact that our focus on this vast resource of nature has not been properly documented, our knowledge, technology and capabilities in extraction and utilization of natural resources have not been enhanced. As a result, use of natural resources in the economic development of the country has remained very limited till date. For example, despite its immense potentials, agricultural sector of this country is still very old-fashioned, despite having a very energetic youth





Natural resources available in Bangladesh: working force, this huge manpower cannot be fully utilized by building them efficiently, despite being rich in abundant marine resources, it is not being possible extracting those resources properly and while there are numerous mineral resources in the water and on land, it is still not being possible to ensure adequate extraction and utilization of those resources till now. As a result, Bangladesh still lags far behind the countries of South Asia in terms of extraction of natural resources and income from natural resources. In 2018, income from natural resources based on GDP was 7.54% in Malaysia, 6.59% in Myanmar, 4.78% in Indonesia, 4.32% in Vietnam, 2.27% in India, 2.01% in Thailand, 1.58% in China, 1.47% in the Philippines, 1.13% in Pakistan and 0.66% in Bangladesh [Figure-5.13(1)].

1) Classification of natural resources:

Natural resources that Bangladesh is rich in can be divided into two parts, such as surface natural resources and underground natural resources / mineral resources.

A) Among surface natural resources, notable are :-

- Geographical location and natural environment.
- 2 Fisheries and forest resources.
- 3 Fertile soil and favorable climate of this country.
- 4 Numerous small /big rivers across the country.
- Sundarban, rich in natural resources
- 6 Occupied water areas in the Bay of Bengal.
- 7 Islands that awaken in the Bay of Bengal.
- 8 Numerous hills and hilly areas.
- 9 Abundant working population.
- 10 Favorable environment for agriculture and industry.

First Edition: August, 2022

B) Underground natural / mineral resources:

Bangladesh is rich in underground natural / mineral resources, including natural gas, fuel oil, coal, limestone, hard rock, gravel, stone, glass sand, construction sand, plain, brick clay, peat and heavy mineral resources of beach sand are notable, although, only natural gas has been extracted and used on a large commercial basis till now and has been able to contribute to the national economy.

D) Utilization of natural resources in economic development:

Use of natural resources on the surface:

Bangladesh is quite rich compared to other countries in South Asia in terms of surface natural resources, although due to our indifference to natural resources, technical and other limitations in extraction, Bangladesh still lags far behind in adequate extraction of those resources and utilization them for economic development. As a result, expansion of the country's economy for a long time has been limited to readymade garments, remittances sent by workers working abroad and a few other specific areas. For example, backwardness of manufacturing industries, backwardness of agriculture despite endless potentiality, inability to enrich the economy by utilizing the river and water resources of the country through improved management, inability to utilize vast waters in the Bay of Bengal, not being able to fully utilize the hills and hilly areas for economic development, not being able to bring under economic development by rapid development of rising chars in the Bay of Bengal, not being

Utilization of natural resources in economic development:





able to engage huge working youth in the overall development of the country by making them skilled, lagging behind in forest resource extraction, despite its beautiful natural beauty and heritage, lagging behind in tourism development and in many other cases, it is not being possible to ensure proper extraction and utilization of natural resources.

Following is a summary of some of the areas that are lagging behind in extraction of significant surface natural resources of Bangladesh and utilizing those resources in economic development:-

1) Lagging behind in Marine Fishing:



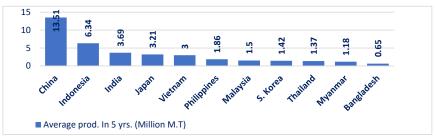
Lagging behind in Marine Fishing .

By increasing fishing, it is possible to earn a lot of foreign exchange by exporting surplus fish abroad in addition to meeting the demand for animal protein in the country, which plays a major role in expanding the export sector. Although Bangladesh has shown considerable success in freshwater fish production in recent years, compare to that it has not made progress at all in the field of marine fishing. Although Bangladesh has vast facilities and water resources for marine fisheries, Bangladesh is still lagging behind in this regard. During the last 20 years (1999-00 to 2018-19), average marine fishing rate in the country was 5.24 lakh metric tons per annum and average annual growth during this period was 3.90%, which is much less than other fish catching countries in the world and almost all countries in Asia. During 2014-2017 period, average annual marine fishing in Bangladesh was 0.65 million MT, it was 1.18 MMT in Myanmar, 1.37 MMT in Thailand, 1.42 MMT in South Korea, 1.50 MMT in Malaysia, 1.86 MMT in Philippines, 3.00 MMT in Vietnam, 3.21 MMT in Japan, 3.69 MMT in India, 6.34 MMT in Indonesia, and 13.51 million MMT in China (Details in Chapter-3.9).





Figure-5.13 (2): Scenario of average marine fish catch in Bangladesh and some other countries of Asia during 2014-2018 period:



Source: FAO Report 2020

2) lagging behind in extraction and utilization of forest resource :



Importance of forest is immense in economic development and protection of environment in the country. Forests directly contribute to supply of firewood, supply of industrial raw materials, protection of biodiversity and natural balancing. Moreover, important and valuable works like expansion of forest based industries in the country, creation of employment and protection of land through natural ecosystems, water control and soil formation etc. are done through forests, whose financial value exceeds billions of dollars annually.

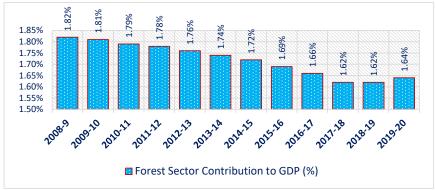
lagging behind in extraction and utilization of forest resource:

As of 2015, share of forest land in Bangladesh is only 11% of the total land area, which was at that time 22.1% in China, 27% in Philippines, 32.1% in Thailand, 44.2% in Myanmar, 47.6% in Vietnam, 53% in Indonesia and 53.6% in Cambodia. Due to relatively small amount of forest land in Bangladesh and lack of adequate development of forest based industries such as paper, pulp, furniture and other forest related industries in the country, financial scope and employment in this sector is still very limited. As a result, contribution of forest sector to GDP is very limited till now. During FY 2008-9 to 2019-20, contribution of forest sector to GDP was limited between 1.62% - 1.82%, which is an average of 1.72% per annum (**Details in Chapter-5.14**).





Figure-5.13 (3): Contribution of Forest Sector to GDP during FY 2008-9 to 2019-20:-



Source: BD Economic Review

3) Lack of proper management of water and river resources:



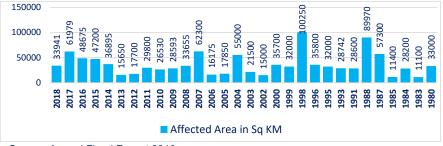
Lack of proper management of water and river resources: Agricultural activities as a whole and many environmental issues are directly related to water, which has a huge impact on the livelihood of people and overall economy of the country. Just as water is essential for agriculture, so water crisis severely disrupts agriculture. In order to ensure development of agricultural sector as well as overall economic development of the country through conservation and proper use of water resources, there is a need for improved and sustainable water and river resource management in the country. The key to water and river resource management is to protect country's agriculture and farmers by successfully protecting the country from floods during monsoon season and to conserve sufficient water for cultivation in dry season. At present, major sources of water conservation are various rivers, canals, lakes, ponds and irrigation projects. Great potentials of improving the living standards of large population of the country and overall economic progress lies in controlling the water of the country's rivers through improved and proper management and ensuring proper utilization of water for cultivation, industry and other purposes. (Details in Chapter-5.15).



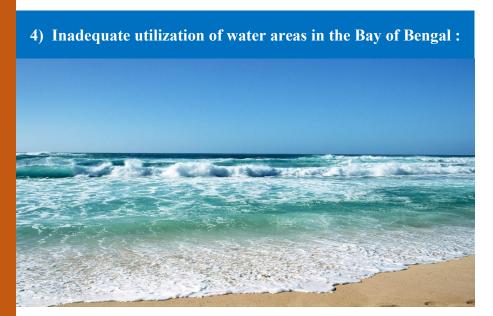


Due to lack of effective water and river governance management, severity of floods in the country is increasing. According to Disaster Management Report, there were 297 natural disasters in Bangladesh between 1972 and 2017, of which about 28.98% were floods. According to various sources, average annual flood damage in Bangladesh is about US\$ 2.2 billion, which is 1.5% of the annual GDP.

Figure-5.13 (4): Amount of land affected by large scale floods in Bangladesh during period of 1980 to 2018 (sq km): -



Source: Annual Flood Report 2018



Like green economy, blue economy is also a part of overall economy, which has a huge impact on sustainable economic development in the country. Overall economy of many countries in the world are made up of green and blue economy, which are increasing the growth and speed of economy of those countries. For example, Australia, China, EU member states, America and many other countries are constantly enriching their economy by developing maritime economy.

According to World Bank study, Bangladesh's maritime economy is rich in potentials, including tourism, fisheries and aquaculture, marine transport, shipbuilding and shipbreaking and a wide variety of minerals. What will be the impact of maritime economy on overall progress of the country in future, will depend





Inadequate utilization of water areas in the Bay of Bengal:

entirely on adequate extraction of those resources and their proper utilization. South Asian countries are more or less blessed by the Bay of Bengal, which has created huge potentials for maritime economy in this region. A significant portion of economic zone of the Bay of Bengal fall within the present water territory of Bangladesh. The vast water areas under jurisdiction of Bangladesh are rich in abundant valuable natural resources, among them are about 500 species of marine fish and animals, innumerable mineral resources, oil, gas and many other potentials. Myanmar has already discovered huge gas in their water territory, same possibility is also strong in Bangladesh water area. According to various journals, Bangladesh has valuable mineral resources such as uranium and thorium in its adjacent seas and there are 13 heavy mineral rich silt in the adjacent areas of Bangladesh, among them Elamite, Garnet, Colemanite, Zircon, Reptile and Magnetite are more valuable than gold according to them. If all those mineral resources are properly extracted, billions of dollars of assets will undoubtedly be acquired (Details in Chapter-5.17).

5) Lack of proper development of islands on the Bay of Bengal:



An island is a body of land that grows on the river or sea, which is a treasure trove of natural resources adorned with the beauty of nature. Many islands and island states of the world have attracted attention of the world due to their beauty and resources and have become hub of tourism, among them are:-

- 1. Maldives
- 2. Bora Bora, French Polynesia
- 3. Palawan, Philippines
- 4. Sevchelles
- 5. Santorini, Greece
- 6. The Cook Islands
- 7. Bali. Indonesia
- 8. The Dalmatian Islands, Croatia
- 9. Fiji
- 10. Kaua'i, USA

- 11. Koh Samui, Thailand
- 12. St. Lucia, The Caribbean
- 13. Capri, Italy
- 14. Ko Phi Phi, Thailand
- 15. Whitsunday Islands, Australia
- 16. Sardinia, Italy
- 17. St. Barts, The Caribbean
- 18. Mallorca, Spain

First Edition: August, 2022

- 19. The Bahamas
- 20. Lofoten Islands, Norway

Lack of proper development of islands grown up on the Bay of Bengal:





There are about 32 small and large islands / chars in the Bay of Bengal and other river basins in Bangladesh and many more new chars are growing. Some of islands are hundreds of years old and have been inhabited for a long time, although those islands still do not have adequate access to quality of life. Islands that have waken up in the last 20/30 years are still not fully populated. Main reasons for this is that since all those islands have sprung up in the Bay of Bengal, there is a lack of fresh drinking water, inadequate communication system, lack of facilities for human settlement and insecurity etc.. If government strives for rapid development of those islands and ensures adequate allocation in the national budget this purpose, gradually bringing each island under rapid development and build there afforestation, expansion of tourism and development of economic zones in those islands, then there will be rapid settlement of population as well as increased urbanization.

Following is a list of small and large islands / chars in the Bay of Bengal by 2021:-

In western part	In northern part	In eastern part		
 Ashar Char. Andar Char. Char Lakshi. Char Manika. Nijhum Island. Ramnabad Island. Char Montaz. Rangabali Char. Dublar Char. Burir Char. Pakhir Char Dimer Char. Char Bagala. 	 Bhola. Ballar Char. Sondhip Urir Char. Soma Island. Hatia Island. Monpura Island. Char Chakuchia. Char Nizam. Char Kukri Mukri. Dhal Char Char Gazi. Char Fayezuddin. 	 St. Martin Island. Chera Island. Jalia Island. Kutubdia. Mheshkhali Island. Sonadia Island. 		

Combined area of islands / chars that have arisen so far in Bangladesh till now is about 5000 sq km. In the last one decade, about a dozen new islands have sprung up in the water territory of bay of bengal. Officially, combined area of chars that have arisen in the Bay of Bengal after 2007 is about 125,360 acres (507 sq km). According to CEGIS, an average of 32 sq km of land is submerged in the river every year due to erosion of Padma and Meghna rivers in the country and about 52 sq km of land in the Bay of Bengal and other river basins is re-awakened due to carrying of silt with flood. As a result, an average of about 20 square kilometers of new land is being added to the mainland every year. Accordingly, amount of land that has increased in the country during last 100 years is 2,000 square kilometers. Below is a brief description of the famous islands / chars of Bangladesh.





Brief description of famous islands of Bangladesh:

1. Sowndhip:

The island is located at the mouth of the river Meghna on southwest coast of Bay of Bengal under Chittagong district. Approximately the island with 50 km long and 15 km width have a population of about 4 million by 2021. Soil of this island is very fertile and there are lot of sand here. Lack of communication, electricity, education, health and other facilities to improve quality of life are still inadequate on this island. However, during the tenure of present Awami League government, installation of power lines and fiber optic cables under the sea has given impetus to development on this island.



Brief description of famous islands of Bangladesh:

2. Bhola:

Bhola is the largest and oldest island in Bangladesh with an area of about 1,221 sq km. The island, under Bhola district of Barisal division is about 500 years old with a population of about 1.6 million by 2021. The oldest island in the country is famous for its beauty and is called the queen of island in Bangladesh. It is only 6 feet above sea level. The island is famous for its abundant buffalo, buffalo milk and yoghurt.



3. Hatiya Island:

There are at least 19 chars on Hatiya Island in Noakhali district under Chittagong division. The island, which arose in the middle of eighteenth century at the mouth of the Meghna River and Bay of Bengal in the south and east side with an area about 2,100 sq. Km. By 2021, it has a population of over 6 lakhs. Boats, launches or steamers are the main means of transportation to this island. The island still lags far behind in terms of civic amenities compared to age and potentials. There are many places of interest and heritage in this diverse island which have great potentials for tourism development.







4. Maheshkhali Island:

The island located in Maheshkhali upazila under Cox's Bazar district covers an area of 362.18 sq km. About more than 200 years old, it is the only island in Bangladesh with mountains. Other three smaller islands in Maheshkhali Upazila are Sonadia, Matarbari and Dhublaghata. The island has already become famous for producing betel, dried fruits, shrimp, salt and pearls.



5. Saint Martin:

The island is located 120 km away from Cox's Bazar district and covers an area of about 17 sq km in the Bay of Bengal. Stunning natural beauty of this island, crystal clear waters of the sea and coral reefs have already established it as one of the major tourist attractions. It is important to bring the island under rapid economic activities through development and reform.



6. Kutubdia Island:

Kutubdia is another island in Kutubdia upazila of Cox's Bazar district, covering an area of 216 sq km. It is thought to have been discovered the island in the early 1400s and settlement began in the middle of the 1500s on this island. According to various sources, by 2021, about one and a half million people live on this island. The island with stunning natural beauty has beautiful beaches, country's largest wind power plant and lighthouse. This island is famous for salt cultivation



7. Nijhum Island:

The small island consists of a few chars in Hatia upazila under Noakhali district has an area of approximately 14,050 acres. Wildlife sanctuaries have sprung up on this island of natural beauty, where there are various wild animals as well as hundreds of species of birds and lots of Chitra deer. It is said that there are more than 40,000 Chitra deer on the island.







8. Sonadia Island:

Sonadia Island is located in Maheshkhali upazila under Cox's Bazar district. Surrounded by beaches on three sides, this beautiful island has an area of 9 sq. Km. It is estimated that the island began to be inhabited in the early 1800's, and by 2021, population is estimated to be about 2,000 here, whose main occupation is fishing. Maheshkhali and Sonadia are located side by side, the island has great potentials for tourism and economic development.



9. Monpura Island:

Surrounded by the Bay of Bengal in south and Meghna River on the other three sides under Bhola district of Barisal division, this small island is full of natural beauty. There is a lack of adequate communication and other facilities on this island for building a large population. Along with development of tourism, possibility of forming an economic zone on this island could be explored.



10. Chhera Island:

The island, wake up about 5 kilometers south of St. Martin, is about 5 kilometers in size, which was discovered in 2000. There are huge coconut trees, natural stones and corals in this island with natural beauty. About one-third of the island is submerged during high tide, which floats at low tide, making it a rare and unimaginable sight in the eyes of travelers. The island has great potential for tourism expansion and development.



11. Shah Pari Island:

This small Island is located near St. Martin's Island in Teknaf at Bangladesh-Myanmar border. Despite lack of communication, education, health and other facilities, by 2021, there are about 40,000 people living on this island, whose main occupation is fishing and salt farming. Grown up in the Bay of Bengal, this island is unique in its natural beauty, where there is endless potentials for tourism development.







12. Dhublar Char:

Dhublar Char consists of more or less 10 chars along Sundarbans on the southern border of Bay of Bengal. Area of this island, which is several hundred years old, is about 61 square kilometers. Many fishing families live on this beautiful island, whose main occupation is fishing and making dry fish. In addition to fishermen living on this island, fishermen from different parts of the country gather here to catch hilsa during the season. Main attraction of this island is Hindu Rashmela held in November every year. Despite being very old, civic amenities have not yet expanded here. This is undoubtedly a good place to build tourism and settlements by bringing it under rapid development.



13. Char Kukri Mukri:

The island is located at a distance of about 120 km from Bhola. During 1989-90, Forest Department started large scale mangrove afforestation here. There are currently 8,565 hectares of forest area in this island, of which 217 hectares are wildlife sanctuaries and remaining 4,810 hectares are under arable land. Agriculture and fishing are the main occupations of the islanders of this island. Surrounded by the unique beauty of nature, communications and other civic amenities of this island should be substantially enhanced, as well as possibility of tourism development and establish economic zones should be explored.



14. Vashan Char:

The island is situated in Hatia upazila under Noakhali district about 36 km from the shores of Bay of Bengal, which is about 116 sq km in area. The island woke up in 2006, now Rohingya rehabilitation is going on there. It is important to build a berry dam on the island to prevent tidal water. There is huge potentials for tourism development in this beautiful island.







15. Dhal Char:

"Dhal Char" is located in Monpura police station of Char Fashion upazila under Bhola district of Barisal division. The small island, which wake up on the bank of the Meghna River, now has a population of about 13,000. Due to continuous erosion in the eastern part of the char for high tide of Meghna river, size of the char is gradually decreasing, which could have saved the char effortlessly if erosion had been stopped. This char has great potential for tourism development.



6) Failure to utilize hilly areas in economic development:



There are about small to large 84 hills in Bangladesh, of which Keukaradong is known as the highest hill. Chottogram Hill Tracts are the uninterrupted hilly regions of the country, consisting of Rangamati, Bandarban and Khagrachhari districts, with a combined area of 13,294 sq km, about one tenth of total area of the country. By 2021, total population living in this region is about 1.6 million, lion's share of which are tribal. Zoom and other farming on hills are the main sources of livelihood for people of this region. Due to underdeveloped communication system, people of this region are lagging far behind in all aspects of life -like health, education, housing etc. Economy of this region is on the brink of collapse due to long-running strife and civil war and violence and terrorism are daily companions there. Due to inadequacy of communication system, development activities of the government have hardly taken off here, although during the tenure of present government, a couple of projects have been implemented for development of communication system and activities for power, education and health expansion are going on.

According to CDRB Survey 1999, combined land in Hill Tracts areas is 32.85 lakh acres, of which 20.47 lakh acres are forest land, which is 62.31% of total land area



Failure to utilize hilly areas in economic development:

Strategies for Economic Development of Bangladesh



of hill tracts and more than 40% of total forest land of the country. Amount of cultivable land is very small there, 9 percent of total land or 3.0 lakh acres only **Figure-5.13 (5).**

Figure-5.13 (5): Land Use Pattern in Hill Tracts:-

'000' Acers

Land Use Pattern	Banderban	Khagrachari	Rangamati	Total
Total Area	1,107	667	1,511	3,285
Not for Cultivation	580	167	8	755
Forest	305	371	1,371	2,047*
Cultivable Waste	117	40	15	172
Total Cropped Area	90	64	146	300*
Net Cropped Area	63	42	109	214

Source: CDRB Report 1999

Since there is scarcity of cultivable land in hilly areas, but main occupation of inhabitants there is agriculture, that's why standard of living of people living there is forced to decline, unless some other means of employment or income can be provided to them. Moreover, how much contribution is keeping from one tenth of total land area (hilly forests) to GDP is also a matter of observation. In fact, most of the hills in the country are treeless, due to absence of trees in most parts of those hills, soil of many hills is gradually turning to rock and are becoming unfit to grow trees. In reality, Bangladesh is far behind in terms of forest resource extraction. On top of that, if all the hills gradually become incapable of growing trees, it will be difficult to retain forest resources in future as well as maintain ecological balance, far-reaching effects of which will inevitably lead to large-scale changes in the country's climate, which will lead to a major catastrophe in the overall social and economic situation

Therefore, time has come to take steps to make the hill areas economically viable and improve living standards of people living there. Since our land is limited and have limitations in the field of technology, in order to ensure rapid expansion of the country's economy in future, it is necessary to extract maximum product from every piece of land and add it to the national economy. Particularly, this policy should be strictly implemented to meet the target of 2041. It would be serious stupidity to walk path in future relying solely on export of readymade garments and remittances sent by workers working abroad.

Following steps can be taken to make the hills and hilly areas of the country economically prosperous:-

- 1) A large quantities of seeds of different types of trees every year will have to scatter by Helicopters in a planned manner in the hills of hilly areas, so that a large number of trees can grow in inaccessible hills. Which will ensure development of extensive forestry and forest industry in the country.
- 2) To set up laboratories there for development of hills and increase forest resources in the hills.
- 3) To bring hilly areas under cultivation in a planned way through Agriculture department and to undertake large scale cultivation of various fruits, cashew nuts, spices (such as black pepper, cardamom, cinnamon, ginger, turmeric





- etc.), so that, increase income of people living in those areas as well as to meet the demand for fruits and spices in the country.
- To take and implement necessary initiatives for building farms for poultry, cows, goats etc. on commercial basis there.
- 5) To take necessary steps to develop communication system of the capital and other regions with hilly areas and develop necessary infrastructure like health, education, housing, etc. there, so that more and more people are interested to live there, who will enrich those areas.
- 6) Introduce ration card system, old age allowance and government provident fund facility under savings for every family living in hilly areas.
- 7) To make education free till graduation for people living in hilly areas.
- 8) To increase number of hotels, motels and other facilities for expansion of tourism in the attractive spots.
- 9) To develop administrative structure in the hilly areas and play active role of the government in selection of local representatives; and
- 10) Increase government support for spread of hill culture.



A land of great natural beauty is Bangladesh. This riverine country has a long history, unique heritage and culture with its lush nature, warm climate, variety of seasons, innumerable lots of hills surrounded by greenery, natural springs and lakes, diverse Sundarbans and the largest beaches in the world. At least I don't know whether there is another country in the world with such an attractive natural beauty for tourism. Almost all countries of the world, big and small, have been using tourism as one of the tools for economic development of the country and by making tourism industry attractive for attracting tourists from all over the world as well as achieving unimaginable success in other related sectors like hotels, motels, health, education etc. Although Bangladesh has made some progress in the tourism sector in recent times, it has not yet been fully possible for Bangladesh to make tourism known in international arena by utilizing immense potential of tourism sector. As a result, tourism sector of this country is lagging far behind in terms of revenue, employment and global rankings till now. According to **Travel and Tourism Competitiveness Report 2019**, Bangladesh ranks 120th out of 140 countries,



Lagging behind in tourism development despite attractive natural beauty:

Strategies for Economic Development of Bangladesh



followed by Japan 4th, China 13th, South. Korea 16th, Singapore 17th, Malaysia 29th, Thailand 31st, India 34th, Vietnam 63rd, Philippines 75th, Sri Lanka 77th, Cambodia 98th, Nepal 102th and Pakistan is in 121nd position (**Details: Chapter-5.17**).

Figure-5.13(6): Position of Bangladesh and other countries in South Asia in tourism as per Gebal Tourism Rankings 2019: -



Source: Travel and Tourism Competitiveness Report, 2019 Note: Lower Rank indicates higher position.

8) Not being able to utilize working youth properly:



In evaluation of the Global Human Development Index, Bangladesh has not made significant progress in human development in recent years. According to HDI Index 2000, Bangladesh ranks 146th out of 189 countries, by 2010, situation has somewhat improved to 129th. But, by 2015 it had deteriorated again to 142nd place and by 2019 it had reached at 135th place. During period of 2015-2019, Bangladesh has made progress only 7 steps in the field of human development.

By 2019, Bangladesh is lagging far behind all other countries in South Asia in terms of human resource development except Afghanistan, Pakistan and Myanmar. According to HDI Rank 2019, Bangladesh ranks 135th out of 189 countries,



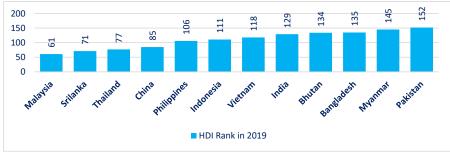
Not being able to utilize working youth properly:

Strategies for Economic Development of Bangladesh



followed by Malaysia 61st, Sri Lanka 71th, Thailand 77th, China 85th, Philippines 106th, Indonesia 111th, Vietnam 118th, India 129th and Bhutan 134th position.

Figure-5.13 (7): Position of Bangladesh and other countries of South Asia in human resource development by 2019:-



Source: UNDP Note: Higher value indicates lower rank

E) Mineral resources:



Adequacy of mineral resources in Bangladesh:

Archaeologically, Bangladesh occupies a large part of the Bengal Basin, consisting of about 12% sedimentary rock, 8% surviving Pleistocene residium and 80% uncontrolled sand, silt and clay. Being located in a different geological environment, Bangladesh is rich in various important mineral resources, such as natural gas, coal, limestone, hard rock, gravel, stone, glass sand, construction sand, plain, brick clay, peat and rich in heavy mineral resources of beach sand. On the way to oil and gas emissions, the third barrel rocks are producing natural gas and oil in Bangladesh.

Economy of Bangladesh has been continued to grow well in recent years, resulting in a steady increase in the scope of industrialization and trade in the country. Mineral resources are widely used in industrial raw materials, construction work, road development and fuel and energy production. In that sense, mineral resources are not only important for the country's economy, but also necessary for economic development.



Mineral resources

Strategies for Economic Development of Bangladesh



There are many uses of mineral resources in the economic development of the country, some of which are as follows: -

- a) Industrial raw materials: Mineral resources are the main raw materials of many industries. For example, silica sand and limestone are widely used as raw materials in water purification, glassware, ceramics utensils, construction work and golf course & sports field and clay is widely used as a raw material for cement.
- b) Sources of fuel and energy: Natural gas is one of the sources of fuel in power generation, industry and residential.
- c) Materials for construction and development work: Hard rock, construction sand, gravel are the main components of Building and construction of roads and other development works.

However, it is true that Bangladesh is not very rich in terms of mineral resources and many of the discovered mineral resources are inadequate and of low quality and we do not have yet neither proper concept nor technology to extract and use those mineral resources. As a result, among mineral resources discovered so far in Bangladesh, it has not yet possible to properly ensure commercial extraction and use of mineral resources other than natural gas, for example peat. (Source: Journal, various research papers and own analysis)

Following is a brief description of important mineral resources discovered so far in Bangladesh:-



HARD ROCK

HARD ROCK:

Hard rock is commonly known as a basement or a basement of crystals, which is a solid rock like granite or marble. In Madhyapara of Dinajpur district, a huge amount of hard rock has been found at a depth of 128 feet in the ground, which was discovered in 1998 and has been excavated since 2007. Moreover, a lot of hard rock has been found at a depth of 171-265 meter at Ranipukur and Pirganj in Rangpur, at 2,150 meter depth in Bogra, at 600-667 meter depth in Joypurhat and Jamalganj and at 615 meter depth in Rajshahi. In addition, Tetulia and Panchagarh in Dinajpur district and many places in greater Chittagong, such as Kaptai, Alikadam, Ukhia, Teknaf and on the surface of St. Martin have adequate stocks of construction materials such as belders and gravel.

Lime Stone :

Limestone is the main raw material of cement. Moreover, it is also used in making paper, steel, sugar, glass and lime. First limestone was found in St. Martin's Island in Bangladesh in 1957. Then in 1958, Geological Survey of Pakistan (GSP) surveyed the area and identified 1.80 million tons of Shelley and Caroline limestones over an area of 0.60 sq km, quality of which was not very good. Later during







Lime Stone

period of 1951-1957 small size limestone was found in Tekerhat area of Sunamgani district. GSP confirms the existence of limestone at 30-100 meter depth of ground in the region, which has a reserve of about 17 million metric tons of limestone over an area of 0.77 sq km. In some places, especially in Larghat area, this limestone is located at 8-10 meters depth of the surface.

Sub-surface limestone was first discovered in 1967. Later, in 1974, the then government of Bangladesh allowed extraction of limestone from this mine in a special way. Ouantity of limestone stored in this mine are about 270 million metric tons covering an area of 6.7 sq KM.

PEAT:

Peat can be used as domestic fuels, in brick kilns and boilers. There are Peat in the north-eastern, central and southwestern parts of Bangladesh covering an area of about 550 sq km in the wetlands of Madaripur, Gopalgani, Sunamgani, Sylhet, Brammanbaria and Kishoreganj with an estimated reserves of more than 170 million metric tons. However, due to lack of commercial use of peat in the country, peat production has not started yet.



GLASS SAND:

Glass sand is one of the main components of glass making. In Bangladesh, there are large reserves of this sand in Sherpur, Shahjibazar and Teliapara in Habigani, Chauddagram in Comilla and Hathazari in Chittagong . Moreover, glass sand has been found on the surface of soil at Madhyapara in Dinajpur district and Khalishpur in Rangpur. Geological Survey of Pakistan (GSP) first discovered glass sand in 1960 at Sribardi in Sherpur district. There has approximately 0.64 million metric tons of glass sand reserves covering an area of 0.596 sq km in 30 lenses of 0.15-2.13 m thick. Moreover, there has a stock of 0.40 million metric tons of glass sand of 0.15-1.80 m thick covering an area of 0.9811 sq. km in Habiganj.



glass sand

White clay

Netrokona, Sherpur and Chittagong districts of Bangladesh have large stocks of white clay. Moreover, there are white soil reserves in Madhyapara, Barapukuria, Dighipara of Dinajpur district and Patnitala of Naogaon district. It is used in ceramic factories in Bangladesh by mixing it with high quality imported clay as the exposed plain is not good in terms of quality.



White clay







Garnet

Magnetite

Reserve of Heavy Minerals :

SL	Minerals	Reserve (M. Ton)
1	Zircon	158
2	Rutile	70
3	Ilmenite	10,25,558
4	Kyanite	96,709
5	Garnet	90,745
6	Magnetite	80,599
7	Monazite	17,352

Source: Journal of Environmental Agricultural Science.

Moreover, other mineral resources, such as beach sand, brick sand and various construction materials (construction sand, gravel) are in abundance in Bangladesh. (Source: Banglapedia)

F) Recommendations for Extraction and use of mineral resources:



Minerals and Energy Resources

Mineral resources are very important for every country, proper use of which plays a unique role in the economic progress of the country. Economically developed all countries of the world have achieved economic prosperity by ensuring proper use of mineral resources. For example, United States, Russia, Saudi Arabia and United Arab Emirates and many countries in the world,

Although Bangladesh is small in size, quantity of mineral resources found here is not small at all. But the country lacks both practical knowledge and technology to enrich the country's economy through commercial extraction and proper use of those acquired mineral resources. As a result, despite being rich in many mineral resources, Bangladesh has so far been able to extract and use a few resources on a commercial basis, including natural gas in large quantities and coal, oil, hard rock,



Recommendations for extraction and use of mineral

resources:

Strategies for Economic Development of Bangladesh



limestone and a few other items in partially. Moreover, in recent times, searching for new mineral resources in the country has become very limited and no new mineral resources have been discovered in the country in the last one decade.

Every mineral resource have potentials, proper use of which requires realistic planning and skills to enrich the country's economy, which is very important for Bangladesh for reaching in to high-income countries by 2041. In order to build Bangladesh as a country of sustainable economy, it is very important to prioritize adequate extraction of mineral resources and proper utilization of those resources, which will play a major role in the socio-economic development of the country. A far-sighted and effective mineral resources policy is much needed at this moment to enrich the country's economy by ensuring commercial extraction and proper use of mineral resources discovered so far and to present a modern and developed state to future generations through discovery of more mineral resources.

Recommendations for development of mineral resources:-

- 1. Formulate a far-sighted and realistic "Mineral Resources Policy" under which exploration, extraction and proper use and security of mineral resources in the country will be ensured.
- Strengthen training to acquire institutional and technical skills in mineral resource extraction and management, especially development of personal and institutional skills in mining and environmental issues, gas and petroleum engineering, environmental management and pollution control.
- 3. To exchange technologies with different countries for development of mineral resources and to strengthen joint research activities in the country with different countries for this purpose.
- 4. To ensure commercial extraction of mineral resources already discovered and their proper utilization as well as to conduct exploration activities by good quality domestic and foreign companies for discovery of new mineral resources.
- 5. Exploration of export market for export of mineral resources abroad.





Chapter : **5.14**

Forest and Environmental Development.







Forest and Environmental Development.

Topics Covered in the Chapter

- A) Forest resources.
- B) Short brief of Country's different type of Forests.
 - 1. Hill Forests
 - 2. Mangrove Forests
 - 3. Sundarbans
 - 4. Plain Shal Forest
- C) Evaluation of Forest Sector of Bangladesh.
 - 1. Natural forest statistics of the country.
 - 2. Bangladesh's position in South Asia in terms of forest area.
 - 3. Types and classification of forests in Bangladesh.
- D) Importance of forest in Economic and Environmental Development.
- E) Contribution of forest sector to GDP.
- F) Employment in the forest sector.
- G) Government initiatives to forest and Environmental Development.
- H) Achieving SDG-15 targets in forest sector development.
- I) Recommendations on forest and environmental development.







A) Forest resources:

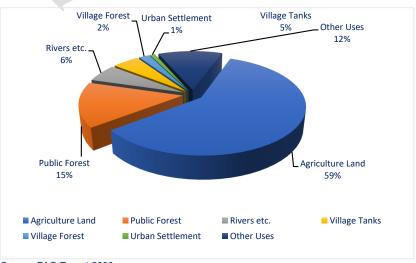
Forests is an essential natural protection system in protecting human and animal life and maintaining the balance of environment. Forests act as carbon protection and carbon sinks to protect nature and life, generate oxygen, which is essential for survival of life on Earth. In addition, hydrological cycle control, planetary climate control, water purification, wildlife habitat, reduction of global warming, toxic gases and noise pollution reduction, soil conservation and Protects natural environment and makes the earth livable by prevention of natural disasters such as floods, storms and landslides. For this reason, at least one-third of the total land area of a country needs to be forested, which can play a role in protecting lives and environment of that country.

By 2020, amount of classified forest in Bangladesh is approximately 1.12 million hectares, which is about 16.6% of total land area, of which classified government forestry is 14.9% and remaining 1.8% is rural forestry. On the basis of topography, forests of Bangladesh can be divided into three parts, 1) hill forest 2) plain Sal forest; and 3) mangrove forest, according to FAO Report 2000, amount of which is as follows: -

Hill Forest 508,991 Hectare 45.08% Mangrove Forest 489,872 Hectare 43.70% Plain Sal Forest 121,884 Hectare 10.90%

By the year 2000, total area of Bangladesh is 147,000 sq km, of which agricultural land is 59%, government forest 15%, river and wetland 6%, village tanks 5%, rural forest land 2%, urban settlement 1% and 12% used in other purpose.

Figure-5.14 (1): According to 2000 census, total land area of the country (as a percentage): -



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Source: FAO Report 2000

Forest resources:





B) Short brief of Country's different type of Forests:

1. Hill Forests:

Forests located in hilly and mountainous areas are hill forests, consisting of summer evergreen and semi-evergreen vegetation. About half of total forest area of the country is hilly forest. Rangamati, Bandarban, Khagrachhari, Chittagong, Cox's Bazar and Sylhet's Maulvi Bazar and Habiganj have hilly forests. All these forests are maintaining the balance of environment with different species of trees, bamboo, cane, shrubs and biodiversity. These forests are one of the major sources of wood, bamboo, cane and various medicinal plants to meet the demand of local fuels and industries.



2. Mangrove Forests:

There are two types of mangrove forests in Bangladesh, Sundarban and coastal char forests.

3. Sundarbans:

Sundarbans is one of the largest mangrove forests in the world covering an area of 140,000 hectares in the basins of Ganges, Brahmaputra and Meghna rivers bordering the Bay of Bengal, 60% of which is in Bangladesh and 40% in India. Sundarbans is generally divided into three zones - lightly saline, moderately saline and saline zone. To the northeast of forest lies the slightly saline zone, which receives a supply of fresh water from the Ganges. Moderately saline zone is located in the middle of the forest and rest of the forest is saline zone.

Sundarbans is a highly productive mangrove wetland, importance of this forest is immense in terms of ecology, social, economic, biodiversity and environment. Sundarbans contributes a lot to the economy of Bangladesh, which is the center of livelihood of many local people and Sundarbans is the meeting place of huge biodiversity.



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Short descriptions on different type of Forests:





4. Plain Shal Forest:

It is a "tropical moist digitized" type of forest, covered by a species of tree called shawl. Shal Forest is commonly found more in Southeast Asia from Assam to Punjab, eastern districts of central India and in the hills of West Bengal. Most of Sal forests are located in the central and lowlands of Bangladesh, although size of these forests has become more limited than in the past.

Shal Forests covers an area of about 1,21,000 hectares in Bangladesh, which is about 32% of total forest area of the country. Most of Sal forests of this country are located in Gazipur, Tangail, Mymensingh, Jamalpur, Comilla, Dinajpur, Thakurgaon, Rangpur and Rajshahi districts. Most of large Sal forests are located in the greater Mymensingh and Tangail district.



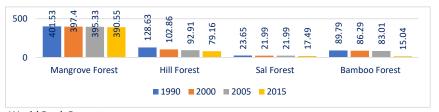
C) Evaluation of Forest Sector of Bangladesh:

1) Natural forest statistics of the country:

Total land area of Bangladesh is more or less 147,57,000 hectares, by 2015, total plantation area in the country was approximately 24,91,555 hectares (16.8%), which, government plans to increase to 20% by 2020. In the last 50 years, about 209,000 hectares of land has been afforested in the coastal areas of the country and about 45,000 hectares of land has come under cultivation from forest during this period. Every year, tree planting programs has been continued in the country through public and private initiatives. Although there is no shortage of government efforts to protect forests, amount of natural forests in the country is steadily declining. According to the World Bank, total amount of natural forest land in the country during 1990s was 6,43,600 hectares, which has decreased to 502,280 hectares in 2015. During these 25 years, amount of natural forest land in the country has decreased by 141,320 hectares overall, an average of 5,752.80 hectares per year.

Natural forest statistics of the country:

Figure-5.14 (2): Scenario of natural forest contraction in the country during 1990-2015:



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World Bank Report



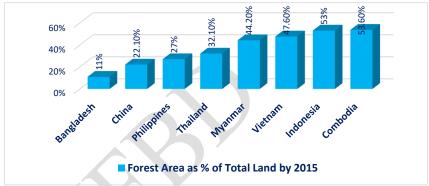


Bangladesh's position in South Asia in terms of forest area:

2) Bangladesh's position in South Asia in terms of forest area:

Amount of natural forest cover in Bangladesh is continuously decreasing. In 1990, amount of natural forest land in the country was 643,600 hectares, which has decreased to 502,280 hectares by 2015. Due to deforestation, cultivation, construction of houses, setting up of industries and many other reasons, amount of forest land in the country is continuously declining. As a result, proportion of forest land in Bangladesh is much less than that of many countries in South Asia. As of 2015, share of forest land in Bangladesh is 11% of total land area, followed by 22.1% in China, 27% in Philippines, 32.1% in Thailand, 44.2% in Myanmar, 47.6% in Vietnam, 53% in Indonesia and 53.6% in Combodia at the same time.

Figure-5.14 (3): Rate of government forest land as percentage of total land area of Bangladesh and some other countries in South Asia by 2015:-

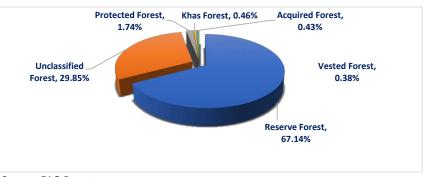


Source: FAO Report 2015

3) Types and classification of forests in Bangladesh:

According to 1999 report of the Forest Department, total amount of forest land in the country was about 2.48 million hectares, of which government forest land is about 2.21 million hectares and private forest land is 0.27 million hectares. Of the 2.21 million hectares of forests in the public sector, reserve forest is 67.14%, unclassified state forest is 29.85%, protected forest is 1.74%, khas forest is 0.46%, acquired forest is 0.43% and vested forest is 0.38%.

Figure-5.14 (4): Classification of total forest land in the country by classified and unclassified:-



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Source: FAO Report

Types and classification of forests in Bangladesh:





D) Importance of forest in Economic Development:

Contribution of forest to the economic development of a country and protection of environment is manifold. Forests directly contribute to supply of firewood, supply of industrial raw materials, and maintenance of biodiversity and natural balancing. Moreover, important and valuable works like expansion of forest based industries and job creation in the country and protection of land through natural ecosystems, water control and soil formation etc. are done through forests, whose financial value exceeds billions of dollars every year.

Following are some of the major priorities of forest for economic development and protection of environment of a country:-

- Mangroves and coastal forests protect coastal areas from extensive damage of tidal waves, sea storms, cyclones and other natural disasters in response to climate change risks.
- There is no alternative to planting more trees and creating afforestation to solve the problem of excess carbon emissions in the air, as trees improve climate by absorbing carbon.
- In addition to supplying firewood, forest also provides raw materials for industry, such as bamboo for paper industry, wood for furniture and a variety of forest-based industries in the country. Moreover, forests directly contribute to the country's economy by creating employment opportunities.
- Forests bring huge financial benefits to the country by preventing land erosion, water control and soil formation through natural ecosystems.

E) Contribution of forest sector to GDP:

Due to relatively small amount of forest land in Bangladesh and lack of adequate development of forest based industries such as paper, pulp, furniture and other forest related industries in the country, financial scope and employment in this sector is still very limited. As a result, contribution of forest sector to GDP is very limited till date. Analysis of forest sector participation in GDP during period from 2008-9 to 2019-20 shows that contribution of forest sector to GDP during this period was limited to 1.62% - 1.82% per annum, which is 1.72% on average.

Figure-5.14 (5): Contribution of forest sector to GDP during period from F.Y 2008-9 to 2019-20 is highlighted below:-



First Edition: August, 2022

Source: BD Economic Review

Importance of forest in economic and environmental development:

Contribution of forest sector to GDP:





F) Employment in the forest sector:

Due to insufficient expansion of forest and forest related industries in the country, employment in this sector is very limited till date, which is much less than many countries in South Asia and which has remained in the same position for a long time. This stagnation has arisen mainly due to lack of effective initiatives of the previous governments to expand forest related industries and increase investment in this sector. According to information of 2011, proportion of total employment in the forest sector at that time was 0.1% in Bangladesh, 0.1% in India, 0.3% in Sri Lanka. 0.4% in South Korea, 0.5% in Vietnam, 0.5% in Indonesia, 0.6% in Thailand, 0.6% in Japan, 0.7% in Bhutan and 1.7% in Malaysia.

Employment in the forest sector:

Figure-5.14 (6): Scenario of employment in the forest sector in proportion to working population of Bangladesh and some other countries in South Asia during period of 1990 to 2011:-

Country	Year (Employment as % of total labor force)					
	1990	1995	2000	2005	2010	2011
Malaysia	2.4	2.9	2.2	2.1	1.8	1.7
Bhutan	1.5	1.3	2.6	1.0	0.9	0.7
Japan	1.1	0.9	0.8	0.6	0.6	0.6
Thailand	0.2	0.3	0.4	0.6	0.6	0.6
Indonesia	0.6	0.6	0.6	0.5	0.4	0.5
Vietnam	0.1	0.1	0.3	0.4	0.5	0.5
S. Korea	0.6	0.5	0.4	0.4	0.4	0.4
Sri Lanka	0.3	0.3	0.3	0.3	0.3	0.3
India	0.2	0.2	0.1	0.1	0.1	0.1
Bangladesh	0.1	0.1	0.1	0.1	0.1	0.1

Source: FAO Report 2011

G) Government initiatives to forest and Environmental Develop. :

Bangladesh is one of the countries that are at the top of environmental risk due to global climate change. Due to geographical location, low land, poverty, underdeveloped infrastructure and lack of knowledge to deal with climate issues, this problem is becoming more and more prevalent in Bangladesh. Among environmental problems that Bangladesh is currently facing are increased metallic pollution and salinity in groundwater, increased storms, cyclones and glows, warming, excess rainfall and rising sea levels, which could cause massive social and economic losses of Bangladesh in future. Overall progress of the country can be said to be impossible without a realistic solution to all these problems in the long run. In order to deal with all these far-reaching problems in a realistic way, a long-term and effective plan and adequate investment are required to implement that plan.

It is to be hoped that the present Government is implementing EFCC CIP 2016-2021 to address the problems of Environment, Forests and Climate Change, main objective of that project is to alleviate poverty in the country by improving the ecosystems of environment, forest and meteorological sectors, improve quality of



Government steps in forest and environmental development:

Strategies for Economic Development of Bangladesh



environment and health related sectors and increase resilience of climate change. EFCC CIP is a strategic framework to address identified issues of this sector by increasing national and international investment in the priority areas of EFCC sector in Bangladesh, which identifies the priority areas of EFCC sector and determines the amount of investment by the Government of Bangladesh and its development partners. EFCC CIP is a measure and framework related to climate change, which Bangladesh has presented along with UNFCCC (United Nations Framework Convention on Climate Change) .

Following is a summary of EFCC CIP 2016-21 plan:-

Figure-5.14(7): Total estimated cost of EFCC CIP 2016-21, existing financing and financing gap:-

		Financing Proposal (US\$ Million)					
No.	Program Title	CIP	Existing	Financing	Gap		
		Total	Financing	Gap	(%)		
1.1 1.2	r 1 : Sustainable Development and managem Enhance sustainable management and socioeconomic benefits from Forests. Biodiversity Conservation	885.0 538.5	54.2 44.9	830.8 493.6	94%		
1.3	Sustainable management of wetlands, rivers and marine ecosystems. Soil and groundwater management Total (Pillar 1):	693.1 343.5 2,460.1	490.5 52.8 642.3	202.6 290.7 1,817.8	29% 85% 74%		
Pilla	r 2 : Environmental Pollution Reduce and C	ontrol :					
2.1	Reduce Industrial Pollution	651.6	65.0	586.0	90%		
2.2	Reduce Municipal and household pollution.	2,869.2	1,040.5	1,828.7	64%		
2.3	Reduce pollution from agriculture and others	196.6	3.3	195.3	98%		
	others						
	Total (Pillar 2):	3,719.4	1,108.8	2,610.6	70%		
	Total (Pillar 2):	ion of Clim	ate Change :	,			
3.1	Total (Pillar 2): r 3: Adaption and Resilience to, and Mitigat Disaster risk reduction	ion of Clim 1,654.7	ate Change : 724.1	930.6	56%		
3.1	Total (Pillar 2): r 3 : Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development	1,654.7 2,202.4	724.1 1,705.5	930.6 496.9	56% 23%		
3.1	Total (Pillar 2): r 3: Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development	1,654.7 2,202.4 783.3	724.1 1,705.5 455.6	930.6 496.9 327.7	56% 23% 42%		
3.1 3.2 3.3	Total (Pillar 2): r 3 : Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development	1,654.7 2,202.4	724.1 1,705.5	930.6 496.9	56% 23% 42% 86%		
3.1 3.2 3.3 3.4 Pilla Deve	Total (Pillar 2): r 3 : Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development Increase resilience at community level Total (Pillar 3): r 4 : Environmental Governance, Gender, Helopment:	1,654.7 2,202.4 783.3 251.6 4,892.0	724.1 1,705.5 455.6 36.2 2,921.4	930.6 496.9 327.7 215.4 1,970.6	56% 23% 42% 86% 40 %		
3.1 3.2 3.3 3.4 Pilla Deve	Total (Pillar 2): r 3 : Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development Increase resilience at community level Total (Pillar 3): r 4 : Environmental Governance, Gender, Helopment: Improve Legislative, Regulatory and Policy framework	1,654.7 2,202.4 783.3 251.6 4,892.0	724.1 1,705.5 455.6 36.2 2,921.4	930.6 496.9 327.7 215.4 1,970.6	56% 23% 42% 86% 40 %		
3.1 3.2 3.3 3.4 Pilla Deve	Total (Pillar 2): r 3: Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development Increase resilience at community level Total (Pillar 3): r 4: Environmental Governance, Gender, Helopment: Improve Legislative, Regulatory and Policy framework Improve stakeholders participation and gender equality in EFCC sectors.	1,654.7 2,202.4 783.3 251.6 4,892.0	724.1 1,705.5 455.6 36.2 2,921.4	930.6 496.9 327.7 215.4 1,970.6	56% 23% 42% 86% 40%		
3.1 3.2 3.3 3.4 Pilla Deve	Total (Pillar 2): r 3: Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development Increase resilience at community level Total (Pillar 3): r 4: Environmental Governance, Gender, Helopment: Improve Legislative, Regulatory and Policy framework Improve stakeholders participation and gender equality in EFCC sectors. Improve Organizational capacity for evidence based decision making.	1,654.7 2,202.4 783.3 251.6 4,892.0 (uman and	724.1 1,705.5 455.6 36.2 2,921.4 (Institutional	930.6 496.9 327.7 215.4 1,970.6 capacity	56%		
3.1 3.2 3.3 3.4 Pilla Deve	Total (Pillar 2): r 3: Adaption and Resilience to, and Mitigat Disaster risk reduction Sustainable Infrastructure development Mitigation and Low Carbon development Increase resilience at community level Total (Pillar 3): r 4: Environmental Governance, Gender, Helopment: Improve Legislative, Regulatory and Policy framework Improve stakeholders participation and gender equality in EFCC sectors. Improve Organizational capacity for	1,654.7 2,202.4 783.3 251.6 4,892.0 (uman and)	724.1 1,705.5 455.6 36.2 2,921.4 Institutional	930.6 496.9 327.7 215.4 1,970.6 capacity	56% 23% 42% 86% 40% 92%		

Source: FAO Report (EFCC: Environment, Forestry and Climate Change CIP: Country Investment Plan)





H) Achieving SDG-15 targets in forest sector development:



SDG Target 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. In 2015, SDG Target 15 was included in "SDG Goal 2030", which is directly related to the forest sector. Things that are compatible with SDG Target 15 are: -

- To ensure proper conservation, restoration and sustainable use of natural and domestic freshwater ecosystems and related services by 2020 in compliance with international agreements.
- Ensure sustainable management of all types of forests as well as stop deforestation, restore degraded forests and increase adequate afforestation and forest cover worldwide.
- Taking significant steps by 2020 to prevent destruction of natural habitats, protect biodiversity and conserve threatened and endangered species of animals.
- Taking urgent steps to protect protected plants and animals and to prevent trafficking; and
- Appropriate assessment and utilization of natural ecosystems and biodiversity in national planning, development processes and poverty alleviation strategies.

Achieving SDG-15 targets in forest sector development:

I) Recommendations on forest and environmental development:

Importance and contribution of forest to accelerate overall economic development of the country and protect environment and biodiversity is unlimited. Forest related industries such as paper, furniture, handicrafts and other forest related industries should be given more importance to increase economic flow and employment in this sector through development and expansion of forest resources, as potentials for development of forest sector is very bright in Bangladesh. Development of forest sector alone is largely possible to solve the problems of environment and climate change.

Recommendations on forest and environmental development:

Hopefully, present government seems to be sincere enough in developing the country's forests and forest resources. National Forest Policy 2016 (Draft) has been formulated for development of the forest sector with a strong commitment to expand forest sector and conserve biodiversity, as well as to bring 20% of mainland under afforestation by 2035. Moreover, Forest Masterplan 2016-21 is being implemented for rapid development of this sector, main objectives of which are as follows: -





- 1. To bring 20% of the geographical area of the country under forest and tree cover with minimum canopy density of 50%.
- 2. To conserve remaining natural Sal, hill and mangrove forests and to prevent further degradation or deforestation.
- 3. Strengthen conservation of wildlife and biodiversity
- 4. Creation of a strong coastal shelterbelt of climate resilient plantations on newly accreted char lands and other unused public lands.
- 5. To improve the socioeconomic condition of the forest dependent communities.
- 6. To develop forest products industries and occupations in order to generate more employment opportunities.
- 7. To strengthen applied forestry research including on current and emerging issues like impacts of climate change, so that informed interventions can be planned and implemented.
- 8. To strengthen the forestry sector institutions in order to enable them to deliver on all the goals.

Recommendations:-

Above steps of the present government in development of forest sector are undoubtedly far-reaching, which will play a major positive role in sustainable development of this sector in future and will address problems of the country's environment and climate change undoubtedly. In addition to above steps taken by the government for development of forest, environment and climate change, following steps to further increase involvement of forest sector in economic development of the country will greatly increase dynamics of development in this sector.

- 1. Most of the country's hills and mountain forests are treeless. Bringing all the hills and hilly areas of the country under afforestation by Helicopter scattering of seeds in remote hilly areas.
- 2. Provide training to the people living in the hilly areas to cultivate local and foreign fruits, spices, such as -cardamom, cinnamon etc. in the hills and hilly areas.
- 3. To bring the islands growing in the Bay of Bengal under rapid afforestation and to develop potential tourism and economic zones there.
- 4. To increase level of research in development of forest and forest related industries in the country.
- 5. Advanced training and knowledge sharing with different countries to enhance institutional skills in forest management.
- 6. To take necessary initiatives to increase the rate of higher education in forest management in the country.
- 7. Adequate increase in both the efficiency and manpower of the forest department.
- 8. In order to reduce carbon emissions for environmental development, besides increasing forest cover in the country, more efforts should be made to protect environment in urbanization, river governance and establishment of industrial plants.
- 9. Work in coordination with international organizations on environmental development and climate risk mitigation; And
- 10. Since Bangladesh is one of the top countries in the world at risk due to climate change, Bangladesh needs to be more proactive in international arena in terms of compensation.





Chapter : 5.15

Effective
Management of
Water & River
Resources.







Effective Management of Water & River Resources.

Topics Covered in the Chapter

- A) Floods and other Natural Disasters in Bangladesh.
 - 1. Types of natural disasters occur in Bangladesh.
 - 2. Bangladesh's position in terms of risk of natural disasters.
 - 3. Reasons for increasing severity of floods in Bangladesh.
- B) Water sources and water related disasters.
 - 1. Two main sources of water in Bangladesh, surface water and ground water.
 - 2. Demand and supply of water in dry season.
- C) Overall picture of water resources Management in Bangladesh. C) Overall
- D) Recommendations on permanent solution of floods.







A) Floods and other Natural Disasters in Bangladesh:

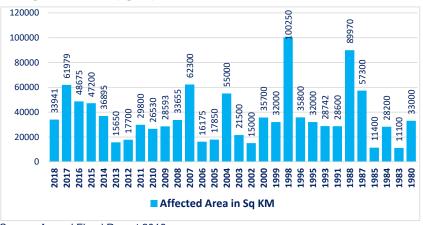
Due to its geographical and complex topographic features and abundance of rivers, Bangladesh is one of the disaster prone and flood prone areas in South East Asia. Apart from the Ganges, Brammaputra and Meghna river originating from the Himalayas, numerous small and large rivers are scattered all over the country. Due to low terrain, most parts of the country are inundated during monsoon season. On top of that, water flowing from the Himalayas joins Indian waters and enter Bangladesh, causing severe floods all over the country, especially in the central and southern parts of the country, damaging thousands of houses, millions of hectares of crops and destroy numerous roads and other rural infrastructure and thousands of families are thrown to poverty losing everything almost every year due to river erosion, which has been destroying living standards of countless people as well as damaging overall economy of the country.

On the other hand, most of the country's rivers dry up during summer season as well as water of rivers entering Bangladesh through India is blocked by Farakka and other dams, resulting in severe disruption of agriculture in the central and southern parts of the country, which is having a serious negative impact on food production and food security in this country. According to Bangladesh Disaster Management Report, there were 297 natural disasters occurred in Bangladesh between 1972 and 2017, of which about 28.96% were floods. According to various sources, average annual flood damage in Bangladesh is about USD 2.2 billion, which is 1.5% of annual GDP.

In addition to above losses, water borne and other diseases plague the affected areas in the post-flood period and many domestic animals die due to lack of fodder every year. During monsoon season, water level in the rivers rise abnormally, causing extensive erosion in different areas and every year innumerable houses and cultivable lands are lost in the riverbed. As a result, hundreds of families living on the banks of the river lost everything and sat on the road.

cultivable lands are lost in the riverbed. As a result, hundreds of families living on the banks of the river lost everything and sat on the road.

Figure-5.15(1): Amount of land affected by large scale floods in Bangladesh during 1980 to 2018 (sq km): -



First Edition: August, 2022

Source: Annual Flood Report 2018

Floods and other natural disasters in Bangladesh:

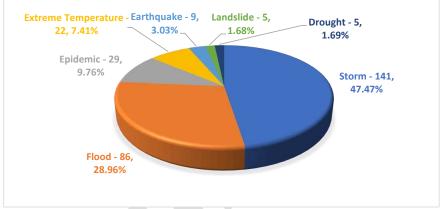




1) Types of natural disasters occur in Bangladesh:

Due to its geographical location, Bangladesh has a record of almost all types of natural disasters, including storms 47.47%, floods 28.96%, Epidemic 9.76%, extreme temperature 7.41%, earthquake 3.03%, landslide 1.68% and drought 1.69%.

Figure-5.15(2): Number and rate of different types of natural disasters that occurred in Bangladesh from 1972 to 2017:-

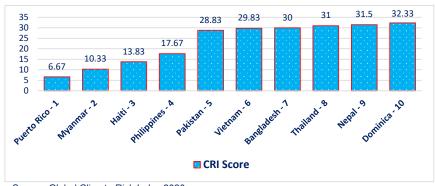


Source: Omniscience Journal, Volume 8

2) Bangladesh's position in terms of risk of natural disasters :

Bangladesh is one of the 10 most risky countries in the world in terms of natural disaster risk. During period of twenty years from 1999-2018, Bangladesh has been affected by natural disasters a total of 191 times. During this period, among other South Asian countries, Myanmar has been attacked 55 times, Pakistan 152 times, Nepal 180 times, Vietnam 226 times and Philippines 317 times. According to Global Climate Risk Index 2020, Bangladesh ranks 7th in terms of risk of natural disasters during period of1999-2018. Puerto Rico tops the list, Myanmar second, Haiti third, Philippines fourth, Pakistan fifth, Vietnam sixth, Bangladesh seventh, Thailand eighth, Nepal ninth and Dominica is in tenth position.

Figure-5.15 (3): Position of 10 most risky countries in the world in terms of risk of natural disasters during period of 1999-2018:-



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Source: Global Climate Risk Index 2020

Types of natural disasters occur in Bangladesh:

Bangladesh's position in terms of risk of natural disasters:





3) Reasons for increasing severity of floods in Bangladesh:

Floods and waterlogging are a major problem in many countries of the world, especially in geographically low land countries. This problem has been exacerbated several times due to low land of Bangladesh, numerous small rivers, heavy rains and multiple rivers originating from the Himalayas and entering Bangladesh over India. Moreover, regular excavation to maintain navigability and width of major rivers, unplanned urbanization and occupying and filling of rivers and canals are also responsible for this. As a result, floods, waterlogging and other natural disasters have become a natural problem in the country, which is one of the major obstacles to the overall economic development of the country by causing severe damage to agriculture, housing, roads and other rural infrastructure every year.

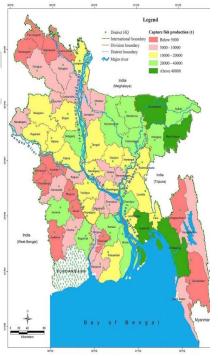
Causes of floods and waterlogging in Bangladesh are divided into two parts:
a) Natural and b) Man-made.

Natural causes :-

- 1. Low land and low elevation above sea level.
- 2. Number of rivers and wetlands is high.
- 3. Excessive rain.
- 4. Rivers flowing over India carry excessive amount of water during monsoon season.

Man-made causes : -

- 1. Illegal occupation and filling of rivers and canals.
- 2. Obstacles in water drainage due to not dredging the rivers regularly.
- 3. Unplanned urbanization.
- 4. Rising sea level as a result of global environmental disasters.
- 5. Construction of dams and water controlling by India.
- 6. Not constructing permanent dams in the affected areas.



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Reasons for increasing severity of floods in Bangladesh:





B) Water sources and water related disasters:

1) There are two main sources of water in Bangladesh, surface water and ground water.

Surface water: There are two natural sources of surface water in Bangladesh, rain water and water flowing from India and Myanmar through various rivers and tributaries. During monsoon season, local rainwater and water from neighboring countries gather an estimated 800,000 million cubic meters of water in three main rivers, Ganges, Jamuna and Brammaputra. As a result, those areas are heavily inundated and flooded, destroying crops, houses, roads and other infrastructure every year. Moreover, due to increased water levels of other rivers at that time, causing floods in different parts of the country. Bangladesh has experienced four types of floods, such as: -

- "Monsoon floods" are caused by abnormal water levels in major rivers during monsoon season.
- Local floods due to waterlogging in the eastern and northern rivers.
- Floods across the country due to heavy rainfall during June- August period; and
- Floods caused by high tide and storm sources in coastal areas.

Groundwater: Whole country is dependent on groundwater for drinking and cultivation in rural and urban areas of Bangladesh in dry season except some hilly areas. There are plenty of groundwater here, but according to BUET research 2004, there is a shortage of safe drinking water for a variety of reasons, such as: -

- Level of arsenic in water is relatively high.
- Excess amount of dissolved iron.
- Salinity in coastal waters.
- Gradual decrease in groundwater level; and
- Rock / Stone layer in hilly areas.

For all these reasons, it can be said that Bangladesh is rich in rainfall and riverine and despite accumulation of a lot of water, crisis of healthy drinking water is imminent in future.

2) Demand and supply of water in dry season:

About 80% of population of this agriculturally dependent country is engaged in agriculture and allied occupations. Population of the country is constantly increasing and size and scope of the country's agricultural sector is growing in tandem with the population. As a result, demand for water in agricultural sector is constantly increasing. Although there are plenty of water in the rivers during monsoon season, while river water dries up in dry season, there is a shortage of water for agriculture, which is completely met by groundwater.

Main sources of natural water in the country are major rivers and tributaries. Although 80% of Bangladesh is located in the floodplain of the Ganges, Jamuna and Brahmaputra basins, only 7-8% of the country is located in this basin. Due to low basin, water flow of all those rivers in dry season is totally dependent on the water distributed under river management with India. As a result, due to lack of water in

First Edition: August, 2022

Water sources and water related disasters:





Demand and supply of water in dry season:

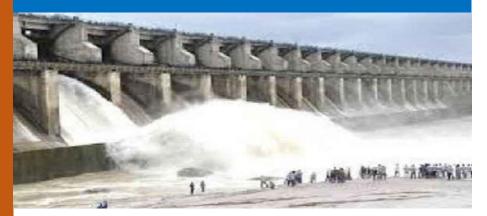
dry season, country's agricultural sector has become completely dependent on groundwater at that time, which is risky in maintaining groundwater levels.

As a result of construction of Farakka Dam on the Ganges River by India, main flow of water into Bangladesh is controlled by India during dry season. During January-May (five months), Ganges water are shared between the two countries under inter-agreement signed between Bangladesh and India in 1977, Which is highlighted in the following table:-

10 day period		Total supply at Farakka (cusecs)	Amount for	India	Amount for Bangladesh	
			cusecs	%	cusecs	%
January	1-10	98,500	40,000	40.6	58,500	59.4
, and the second	11-20	89,750	38,500	42.9	51,250	57.1
	21-31	82,500	35,500	42.4	47,500	57.6
Februar	y 1-10	79,250	33,000	41.6	46,250	58.4
	11-20	74,000	31,500	43.2	42,000	56.1
	21-28/29	70,000	30,750	43.9	39,250	57.6
March	1-10	65,250	26,750	41.0	38,500	59.0
	11-20	63,500	25,500	40.2	38,000	59.8
	21-31	61,000	25,000	41.0	39,250	59.0
April	1-10	59,000	24,000	40.7	35,000	59.3
_	11-20	55,500	20,750	37.4	34,750	62.6
	21-30	55,000	20,500	37.3	34,500	62.7
May	1-10	56,500	21,500	38.1	35,000	61.9
	11-20	59,250	24,000	40.5	35,250	59.5
	21-31	65,500	26,750	40.8	38,750	59.2

Source: PRIO Report 2013

C) Overall picture of water resources Management in Bangladesh:



Agricultural activities are fully and many environmental issues directly related to water, which has a huge impact on the livelihood of people and overall economy of the country. As water adequacy is essential for agriculture, accordingly water scarcity severely disrupts agricultural work. In order to ensure development of agricultural sector and overall economic development of the country through conservation and proper use of water resources, there is a need for improved and sustainable water and river resource management in the country. The key to water and river resource management is to protect the country's agriculture and farmers by successfully protecting the country from floods during monsoon season and to





Overall picture of water resources management in Bangladesh:

conserve enough water for cultivation in dry season. Currently, main sources of water conservation are various rivers, canals, lakes, ponds, lakes and irrigation projects.

One of the major complications of water management in Bangladesh is water flow from India during monsoon season cause floods and waterlogging all over the country, Farakka Dam built on the Ganges, creates a severe water crisis in Bangladesh during summer season. As a result, cultivation in surrounding region of Ganges are severely disrupted and farmers there suffered indescribable losses every year. Reducing flood propensity by ensuring Improved water and river management as well as conserving adequate water for dry season, there is no alternative but to improve the quality of life of the people living in lowlands and riverside areas of the country both in summer and monsoon seasons by protecting them from this catastrophe. Needless to say, more or less rules and regulations have so far been formulated in water and river management during various governments and water and river management activities have been continued in the major rivers of the country under those regulations, which include: -

- National Water Policy (1999);
- Coastal Zone Policy (2005);
- Coastal Development Strategy (2006);
- National Water Management Plan 2011; and
- Bangladesh Water Act 2013.

Great potentials of improving living standards of large population of the country and overall economic progress lies in controlling water of the country's rivers through improved and proper management and ensuring proper utilization of water for agriculture, industry and other purposes. Proper utilization of water resources needs to be ensured through rapid drainage in the monsoon season and development of adequate water conservation systems for cultivation in the summer season. Which requires regular dredging to maintain navigability and width of the country's major rivers and proper management of rivers through construction of permanent dams in eroded areas, development of drainage systems and effective agreement in proper distribution of river water entering into Bangladesh through neighboring countries. Otherwise, floods and river erosion in monsoon season and lack of water in summer season will not easily cure the suffering of people of this country. Moreover, it has become very urgent to look at alternative measures to find a long lasting solution of country's water and flood problems without relying solely on bilateral agreements. Because, in the experience so far, it can be said that India will never give a chance to a permanent solution to water problem of Bangladesh through bilateral agreement.







D) Recommendations on permanent solution of floods:

Due to fact that Bangladesh is a flood prone region, floods have been a major problem in the large areas and people of Bangladesh for centuries, which happens almost every year. On an average, about one third of the country is inundated by flood every year, which cause a lot of damage to agricultural sector as well as destroying countless houses, roads and other infrastructure causing major disruptions in the livelihoods of huge people and usual development of the country's economy is being severely hampered. In order to sustain overall progress of the country, especially to face the challenges of 2041, to keep usual development of the country's economy intact, every region of the country must be made economically important, which requires a permanent solution to flood problem.

In order to ensure a long lasting solution to flood problem in the country, it is necessary to take major steps for development of infrastructure as well as ongoing processes in flood control, which requires long-term planning and a large amount of budget.

Recommendations on permanent solution of floods:

Needs for permanent solution to the flood problem in the country:--

- 1. **Infrastructure development:** Construction of permanent dams to prevent river erosion, flooding and change the flow of rivers.
- 2. **River dredging:** To conduct regular dredging activities in rivers and tributaries to maintain the flow of rivers and increase reservoir capacity.
- 3. Canal excavation: excavation and re-excavation of adequate number of canals in those areas for rapid drainage of flood water from low lying areas.
- 4. **Prevent erosion:** Erosion is another cause of waterlogging. Creating awareness among farmers through local agricultural offices to prevent erosion and encourage them to follow the rules and regulations in farming.
- 5. **Basin-based joint activities:** Conduct joint activities with India to control the flow in the Ganges, Jamuna and Brahmaputra basins and if necessary, to solve this problem permanently through alternative arrangements.
- Redemption of rivers and canals: Completely vacate and re-excavation of Illegally occupied rivers and canals in different places to disrupt flow of water.
- 7. **Planned Urbanization:** Urbanization in a planned way ensuring proper drainage system.
- 8. **Maintaining environmental balancing:** As a result of destruction of environmental balancing, excess rainfall, drought and other natural disasters are increasing in the country. Therefore, it is important to make efforts at both government and private levels to maintain environmental balancing.
- 9. **Conducting large-scale surveys:** Implementing mega projects to solve this problem in the light of different countries by conducting large-scale surveys to find a permanent solution to water problem; and
- 10. Capacity Building: To take necessary steps to achieve greater capacity in dealing with natural disasters.





Chapter: 5.16

Development and Expansion of Tourism Industry.



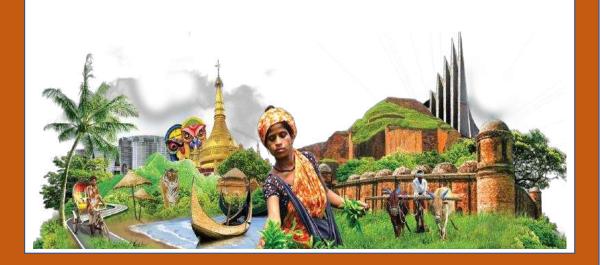




Development and Expansion of Tourism Industry.

Topics Covered in the Chapter

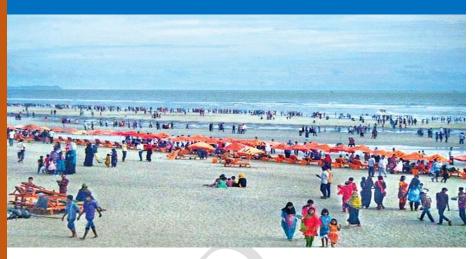
- A) Tourism Industry of Bangladesh.
 - 1. Statistics of foreign tourist arrivals in the Country.
 - 2. Comparative position of South Asian countries in tourist arrivals.
- B) Annual Revenue in Tourism
- C) Share of tourism in GDP and employment.
- D) Future prospects of tourism industry in Bangladesh.
 - 1. Why can't Bangladesh?
 - 2. Taking exceptional Initiatives.
 - 3. Preferred Tourist Centers.
- E) Recommendations for Dev. & Expansion of Tourism Industry.







A) Tourism Industry of Bangladesh:



The "Tourism Industry" is one of the fastest growing single industries in the world today. Many countries of the world has been able to ensure unimaginable progress of the country's economy by expanding tourism industry and using this industry as one of the sources of employment and foreign exchange earnings. There are many countries in the world where lion's share of the country's economy is heavily dependent on tourism. Among countries that earned more than 20% -30% of GDP from tourism sector in 2019, Macau, Maldives, Aruba, British Virgin Islands, US Virgin Islands, Bahamas, Canada and Vanuatu are among them. According to World Tourism Organization (WTO), during five-years period from 2015-2019, about 10.4% of global economy has flowed into the tourism sector and one out of every 5 new jobs has been created in this sector. By 2019, total employment in the tourism sector stood at 319 million.

Tourism Industry of Bangladesh:

Bangladesh is a paradise of unique natural beauty. The lush green nature of this riverine country, warm climate, variety of seasons, innumerable small hills surrounded by greenery, natural springs and lakes, diverse Sundarbans and this country owns the world's largest beaches have a long history, unique heritage and culture. Another such country in the world with such attractive natural beauty for tourism is rare. Almost all the countries of the world, big and small, have been using tourism as one of the tools for economic development of the country and by making tourism industry attractive for attracting tourists from all over the world as well as achieving unimaginable success in other related sectors like hotels, motels, health, education etc. Although Bangladesh has made some progress in the tourism sector in recent times, it has not yet been fully possible for Bangladesh to make tourism known in international arena by utilizing immense potentials of tourism sector. As a result, tourism sector of this country is lagging far behind in terms of revenue, employment and global rankings till now. According to Travel and Tourism Competitiveness Report 2019, Bangladesh ranks 120th out of 140 countries, followed by Japan 4th, China 13th, South. Korea 16th, Singapore 17th, Malaysia 29th, Thailand 31st, India 34th, Vietnam 63rd, Philippines 75th, Sri Lanka 77th, Cambodia 98th, Nepal 102th and Pakistan is in 121nd position.





Figure-5.16 (1): Position of Bangladesh and other countries in South Asia as per Global Tourism Rankings 2019: -

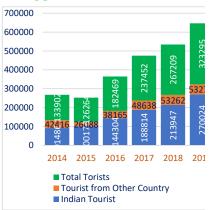


Source: Travel and Tourism Competitiveness Report, 2019 Note: Lower Rank indicates higher position.

1) Statistics of foreign tourist arrivals in the Country:

Number of tourists are increasing rapidly worldwide. According to World Tourism Organization (WTO), 1.5 billion tourists traveled worldwide in 2019, which is growing at a rate of about 4% each year. But compared to that, Bangladesh lags far behind in attracting foreign tourists. According to Bangladesh Tourism Board, people who visit Bangladesh business and other purpose, of which 70-80% of tourists are from India, remaining 20-30% are from China, America, Japan, Malaysia, South Korea, Australia, Canada, Germany, Nepal and Saudi Arabia. During 2014-2019, number of foreign tourists in Bangladesh were 133,902 in 2014, 126,264 in 2015, 182,469 in 2016, 237,452 in 2017, 267,209 in 2018 and 323,295 in 2019 [Fig.-5.16 (2)].

Figure-5.16 (2): Scenario of foreign tourist arrivals in Bangladesh during period of 2014-2019: -



Source: Bangladesh Tourism Board

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Statistics of foreign tourist arrivals in Bangladesh:







Comparative position of South Asian countries in tourist arrivals:

2) Comparative position of South Asian countries in tourist arrivals:

Thailand is at the forefront of Southeast Asia in terms of tourist attractions. According to the World Bank, number of tourist arrivals in Thailand in 2017 was 38.18 million. At that time, number of tourist arrivals was 31.19 million in Japan, 17.42 million in India, 15.81 million in Indonesia, 15.50 million in Vietnam, 15.35 million in South Korea, 14.67 million in Singapore, 6.20 million in Cambodia, 2.33 million in Sri Lanka, 1.48 million in Maldives, 1.17 million in Nepal and 0.27 million in Bangladesh [Figure-5.16(3)].

Figure-5.16 (3): Scenario of foreign tourist arrivals in South Asian countries during period of 2014 to 2016:-

Visitors in Million

Country	2014	2015	2016	2017	2018
Bangladesh	0.13	0.13	0.18	0.24	0.27
Nepal	0.79	0.54	0.75	0.94	1.17
Maldives	1.21	1.23	1.29	1.39	1.48
Sri Lanka	1.53	1.80	2.05	2.12	2.33
Combodia	4.50	4.78	5.01	5.60	6.20
Singapore	11.86	12.05	12.91	13.90	14.67
S. Korea	14.20	13.23	17.24	13.34	15.35
Vietnam	7.87	7.94	10.01	12.92	15.50
Indonesia	9.44	10.41	11.52	14.04	15.81
India	13.11	13.28	14.57	15.54	17.42
Japan	13.41	19.74	24.04	28.69	31.19
Thailand	24.81	29.92	32.53	35.59	38.18

Source: World Bank and BPC

B) Annual Revenue in Tourism:

Bangladesh's tourism sector is largely dependent on domestic tourists till today. Due to lack of international standard facilities in the country's tourism sector, arrival of foreign tourists in Bangladesh is very low. Foreigners come to this country only for a short period of time for business, and that too from a small number of countries.

Figure-5.16 (4): Scenario of Annual Average Revenue in tourism of Bangladesh and some other countries in South Asia for period of 2014 to 2016:-



Source: CEIC Data

As a result, country's tourism sector has not expanded yet as expected and Bangladesh's income from tourism is still very low compared to many countries in South Asia. During five-year period from 2014-2016, average annual income of Bangladesh in tourism sector was USD 245 million, at that time average income of Nepal in tourism sector was USD 533 million, in Sri Lanka it was USD 3,447 million, in Indonesia 13,296 million, in Malaysia 19,904 million and in Vietnam 18,994 million [Figure-5.16 (4)].

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Annual Revenue in Tourism:







Figure-5.16 (5): Scenario of revenue generation in the tourism sector of Bangladesh and some countries of South Asia during 2014-2016:-

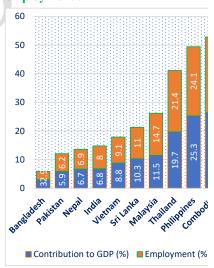
		Periods		(USD Million)		5 year
Country	2014	2015	2016	2017	2018	Average
Bangladesh	154	150	214	348	357	245
Nepal	472	544	393	551	703	533
Sri Lanka	2,431	2,981	3,518	3,925	4,381	3,447
Indonesia	11,567	12,054	12,566	14,691	15,600	13,296
Malaysia	22,009	17,705	19,825	19,116	20,864	19,904
Vietnam	10,876	15,586	18,238	22,839	27,431	18,994

Source: CEIC Data

C) Share of tourism in GDP and employment:

Due to inadequate expansion of the tourism sector in Bangladesh, its contribution to the country's **GDP** is very small employment in tourism sector is still very limited in proportion to the country's total employment. According to World Tours and Travels Report 2020, share of tourism in GDP of Bangladesh in the fiscal year 2019-20 was only 3%, at that time which was 5.9% in Pakistan, 6.7% in Nepal, 6.8% in India, 8.8% in Vietnam, 10.3% in Sri Lanka, 11.5% in Malaysia, 19.7% in Thailand. 25.3% in Philippines and 26.4% in Cambodia. Moreover, in terms employment, Bangladesh's tourism sector is still in its infancy, as of 2019, employment in Bangladesh's tourism sector was only 2.9% of the country's total employment, but in Pakistan it was 6.2%, which was 6.9% in Nepal, 8.0% in India, 9.1% in Vietnam, 9.7% in Indonesia, 14.7% in Malaysia, 21.4% in Thailand, 24.1% in Philippines and 26.4% in Cambodia [Figure-5.16 (6)].

Figure-5.16 (6): During F.Y 2019-20, share of tourism sector of Bangladesh and other countries in South Asia in terms of GDP and employment:-



Source: WTTC

First Edition: August, 2022

Share of tourism in GDP and employment:

D) Future prospects of tourism industry in Bangladesh:

People usually travel in their leisure time to enjoy natural beauty as well as to know the culture and heritage of different countries and peoples and to enjoy nature and the world by observing architectural, historical and archeological monuments of different countries. Bangladesh is much richer than many other countries in the world in terms of natural beauty and patterns, history, heritage and cultural richness. The endless green nature of this country, rivers, canals and hills have always fascinated the traveling thirsty. World's largest beach and the historic Sundarban is





located in this country. Moreover, Bangladesh and Bengali Nation have a rich history and heritage, which may be one of the sources of thirst for travel of tourists from all over the world, all that is needed is to present these traditions to the international arena by making them attractive.

Numerous tourist spots with natural beauty and historical monuments are scattered all over the country, which have a huge opportunities to be benefited financially of this country by attracting foreign tourists by developing them in an attractive way.

In addition, tourist spots that have already become well-known in the country and abroad, such as Cox's Bazar, Potenga and Kuakata beaches, St. Martin's, Rangamati, Kaptai, Bandarban, Sitakunda Chandranath hills, Sylhet's tea gardens and there are many more attracting places that have potentials to create huge jobs in the tourism sector as well as open the door to immense potential for the overall economic development of the country, by making them well-known in the international arena through adequate publicity and campaigns by development of their infrastructure, communication beautification. security.



Cox's Bazar beach.

Future prospects of tourism ndustry in Bangladesh:



Patenga beach.

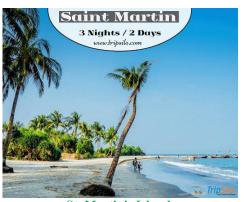
1) Why can't Bangladesh?

If a country like Sri Lanka can earn an average of USD 3.5 billion a year in tourism, Bangladesh should go ahead with a several times higher revenue target, as Bangladesh is much richer than many other countries in Southeast Asia in terms geographical location, environment, history and heritage and much more attractive in terms of natural beauty. However, in order to attract foreign tourists, it is important to ensure quality development in other sectors directly related to it, such as communication. security. hotels. motels, restaurants, education and health, as security and quality services are more desirable than money for travel thirsty people.

2) Taking exceptional Initiatives:







St. Martin's Island.



Chandranath Dham, Sitakunda.

Needless to say, a country like Bangladesh needs to get enough momentum at this moment to meet huge cost of building this national architecture. But, it is also true that if once Bangladesh can be branded through construction of this national architecture, its benefits can be enjoyed for decades. For example, if an estimated USD 5.00 billion would be spent to build such a national architecture, another 3.00 billion upgrade to international standards of at least 10 tourist spots in different places of the country and 2.00 billion for publicity and campaign with total expenses of USD 10.00 billion. If a minimum of 2.0 million foreign tourists visiting the country each year and spending an average of USD 2,000

Since we are still lagging behind in industry and technology, it is necessary to attract global tourists by branding our country in international arena by implementing exceptional measures for rapid expansion of tourism sector. For example, "Eiffel Tower" in France, "Taj Mahal" in India, "Statue of Liberty" in the United States, "Twoin-Tower" in Malaysia, "Svdnev Opera" in Australia and the "Buri Khalifa" in Dubai have become wonderfully successful in attracting tourists from all over the world by highlighting existence of their respective countries. In this case, Bangladesh can take initiative to brand Bangladesh in international arena bv constructing "Bangabandhu Eiffel Tower" in the style of France or "Bangabandhu Statue of Liberty" in the style of America to keep memory of Bangabandhu forever as architect of independence. However, whatever type of architecture is constructed this purpose, it must be completely exceptional and distinct in the light the current world. construction cost of this monument must be consistent with exceptional architectures of the world.



Jaflong, Sylhet.





per tourist, Bangladesh's annual revenue from tourism would be USD 4.00 billion, besides increasing employment and income from other related sectors. This will require attracting foreign investment on easy terms and manpower trained in English and tourism, which is just a matter of time.



3) Preferred Tourist Centers:

Tourist destinations that have opportunity to take the tourism industry of this country to another level by upgrading them to international standard are: -

- Cox's Bazar, Patenga and Koyakata beaches.
- 2. St. Martin's Island:
- 3. Faizlake in Chittagong:
- 4. Sitakunda Chandranath Hills:
- 5. Rangamati, Bandarban, Kaptai Lake and Khagrachari:
- 6. Savar National Memorial, Ahsan Manzil and Lalbagh Fort.
- Jaflong, Madhabkund Jharna, Lauyachhara Rain Forest and Srimangal Tea Garden in Sylhet:
- 8. Lalmai, Mainamati and Shalban Bihar.
- 9. National Parliament Building.
- 10. Chittagong Port Area.



Madhabkund Jharna, Sylhet.



Svlhet Tea Garden.

First Edition: August, 2022

E) Recommendations for Dev. & Expansion of Tourism Industry:

At present, tourism is one of the most developed and popular industries in the world, which is recognized as one of the most attractive industries for developing the country's economy by attracting foreign tourists by making its own culture, history and traditions flourish and attractive. Countries which are lagging behind especially in terms of industry and technology but are rich in natural beauty, architectural monuments and traditions, tourism industry is playing a major role in economic development of those countries. From that angle, tourism is undoubtedly a very useful and promising industry for development of economy of Bangladesh. Apart from benefiting Bangladesh financially through development of tourism industry, it also has a unique opportunity to attract foreign investment in industry and trade by tarnishing its image in international arena, which is the time to start working on that now.





tourism industry, hoping that people of this country will enjoy its benefits in the near future. Identifying thinking of the government in development and growth of tourism industry as positive, following recommendations for rapid development of tourism industry have been put forward: -

Although it is late, government has recently started thinking about development of

Recommendations

- To adopt an action-oriented government plan for rapid expansion of tourism industry and to expand scope of work by further strengthening "Bangladesh Tourism Corporation".
- 2. Develop infrastructure and communication system of at least 10 already known tourist centers, enhance their beauty, strengthen security system and upgrade them to international standard by setting up adequate hotels, motels and restaurants there.
- 3. To build at least one architecture in the country that is able to make Bangladesh famous and taking initiative to brand Bangladesh through its wide publicity in international arena. For example, to keep the memory of Bangabandhu as the architect of freedom forever, initiative can be taken to brand Bangladesh in the international arena by building "Bangabandhu Eiffel Tower" in the style of France or "Bangabandhu Statue of Liberty" in the style of America.
- 4. To ensure rapid expansion of tourism sector by attracting domestic and foreign investment on easy terms.
- 5. Develop communication system of divisional cities of the country with tourist centers developed for foreign tourists and ensure connection of those tourist centers with airport.
- Establishment of adequate number of international standard hotels, motels and restaurants in district and divisional cities at public and private levels and proper supervision of quality control.
- Provide adequate security for foreign tourists as well as adequate recreation facilities in the light of other touristoriented countries for leisure.

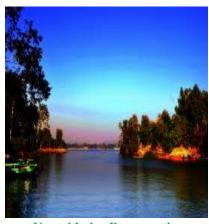
Notable Tourist places in Bangladesh:



Jatiya Sangsad Bhaban.



National Memorial, Savar.



Kaptai Lake, Rangamati.





- 8. Besides introducing international health insurance facilities for foreign tourists, provision of specialized hospitals in the divisional cities, so that tourists can get better medical services at fair prices.
- 9. To improve the quality of tourism services, introduce advanced training systems in the country to improve English language skills of people engaged in management, guides and other service providers and create skilled manpower in tourism management.
- 10. Taking initiative to attract foreign tourists by conducting extensive publicity and campaigns in the international arena.
- 11. Gaining reputation in international arena by ensuring political stability as well as establish rule of law in the country, so that foreign tourists feel comfort and enthusiasm to visit Bangladesh.
- 12. To transport tourists from the airport to hotel, motels with standard transport arrangements and variety of dishes.
- 13. Facilitate visa issuance and visa renewal for foreign tourists.
- 14. Making arrangements to open showrooms of well-known and expensive brands in all divisional cities, so that foreign tourists can shop as per their demand.
- 15. If necessary, separate **"foreign zones"**, clubs, swimming pools and other recreations with international facilities for foreign tourists should be introduced in major tourist destinations.



Kokuyakata Sea-Beach.



Lalbag Kella, Fhaka



Jaflong, Sylhet

First Edition: August, 2022





Chapter: 5.17

Development and Expansion of Blue Economy







Development and Expansion of Blue Economy.

Topics Covered in the Chapter

- A) Bangladesh in the Era of Blue Economy.
 - 1. Definition of Marine Economy / Blue Economy.
 - 2. Scope of Maritime Economy of Bangladesh.
- B) Use of Blue Economy in Economic Development.
- C) Future Prospects of Blue Economy in Bangladesh.
 - 1. Shipping and Port Facilities.
 - 2. Marine Fisheries.
 - 3. Aquaculture.
 - 4. Expansion of Tourism Industry.
 - 5. Energy sector development
 - 6. Marine Biotechnology and Genetic Resources.
 - 7. Submarine Mining.
 - 8. Development of shipbuilding and ship recycling industry.
- D) Preparations of Bangladesh for Development of Blue Economy.
- E) Recommendations on Development of Blue Economy.







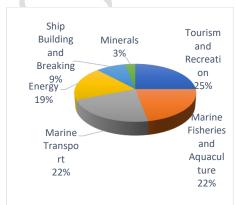
A) Bangladesh in the era of Blue Economy:

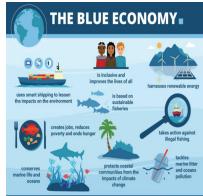
Like green economy, blue economy is also a part of the overall economy of a country, which has a huge impact on sustainable economic development of a country. Overall economy of many countries in the world are combinations of green and blue economy, which continues to expand and accelerate the economy of those countries in parallel. For example, Australia, China, European Union countries, America and many more countries are constantly enriching their overall economy through development of maritime economy.

Great opportunities for Blue economy are now on the doorstep of Bangladesh. International Arbitration Management has completed settlement and demarcation of Bangladesh's disputed maritime boundaries with Myanmar in 2012 and with India in 2014. Bangladesh now has a sea area of about 1,18,813 sq km in the Bay of Bengal, including 200 nautical miles exclusive economic zone and 354 nautical miles of sea level (Continental Shelf) . Time has come to make the country's economy prosperous by utilizing this vast sea areas in a planned and practical way.

According to World Bank study, Bangladesh's maritime economy is rich in potentials, including tourism, fisheries and aquaculture, marine transport, energy, shipbuilding and shipbreaking and minerals. What will be the impact of maritime economy on the overall progress of the country in future will depend entirely on the adequate extraction of these resources and their proper use. Potential sectors of Bangladesh's maritime economy are highlighted through the following figure:-

Composition of Blue Economy in Bangladesh (% of Gross Value added based on 2014-2015):-





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Source: World Bank Report

1) Definition of Marine Economy / Blue Economy:

The "Blue Economy" is a developing global initiative which is related with sustainable maritime development of coastal countries. This idea was first strongly addressed at the 2012 Rio + 20 UN Sustainable Development Conference. The theory of blue economy is to ensure sustainable development of the country's

Bangladesh in the era of Blue Economy:



Definition of Marine Economy / Blue Economy :

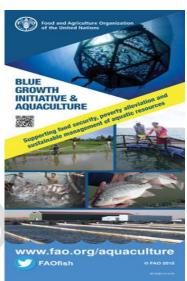
Strategies for Economic Development of Bangladesh



economy through proper use of the oceans and exploitation of all natural resources located there and proper utilization of extracted resources, which is as important as the green economy. This idea is very new for Bangladesh and South Asia.

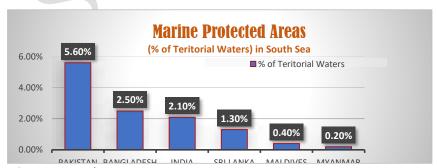
Most common definitions of blue economy for a proper analysis of this theory are :-

- The sum of economic activities in ocean-based industries, and the assets, goods, and services of marine ecosystems (OECD's 2016 report")
- 2. "A sustainable ocean economy, where economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy" (Economist Intelligence Unit 2015); and
- 3. "Comprising the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable" (World Bank and UN DESA 2017)



2) Scope of Maritime Economy of Bangladesh:

At present, Bangladesh has more marine protected areas than any other country in South Asia except Pakistan, which includes Pakistan 5.6%, Bangladesh 2.5%, India 2.1%, Sri Lanka 1.3%, Maldives 0.4% and Myanmar 0. 2% as shown in the following graph:-



Source: Researchgate

Bangladesh Marine Areas: Maritime boundaries of Bangladesh have been determined in accordance with Section 4 (2) of the Bangladesh Maritime Zone Act 2018 (Draft), which is highlighted below:

The Territorial Sea Baseline (TSB) of Bangladesh, from which the breadth of the Territorial Sea is measured seaward, enclosing those waters, which as a result of their close inter-relationship with the land, have the character of internal water shall consist of series of geodesics joining the base points at –





Scope of Maritime Economy of Bangladesh:

- a) Land Boundary Terminus(LBT)(210 38'40.2"N, 890 09'-20.0"E);
- b) Putney Island (210 -36'-39.2"N, 890 -22'-14.0"E);
- The appropriate base point located along the furthest seaward extend of the low water line at Dakshin Bhasan Char (210 -38'-16.0N", 900 -47'-16.5"E); and
- d) Finally ending at base point at Cox's Bazar (210 -25'-51.0"N, 910 -57'-42.0"E);
- e) The TSB South of Cox's Bazar from base point (d) 210 -25'-51.0"N, 910 -57'- 42.0"E) shall be normal baseline i.e. the low water line along the coast up to Teknaf point and Southern end of St. Martin's Island as marked on the large scale chart officially recognized by Bangladesh.

B) Use of Blue Economy in Economic Development:



Maritime economy is having a major impact on employment, resource mobilization, national income and living standards in many countries. This promising sector has become the focal point of economic development of many countries and is enriching the country's economy through its development.

Proper development of the marine economy requires proper planning, adequate investment, exploration and extraction of resources and proper use of extracted resources. Proper coordination of these factors plays a unique role in making the maritime economy fully operational. In many countries of the world, there is a provision to identify participation of maritime economy in the national economy through calculation and statistics of separate income and expenditure of maritime economy. The United States has taken initiatives to incorporate the benefits of maritime economy into GDP long ago. Later in 2008, Australia, Canada, France and UK took similar initiatives. Following is a picture of participation of marine economy in the national economy of some countries:-

SL	Country	Particulars
1	USA	Contribution to GDP in 2013 US\$ 359 billion, which is more than 2%
2	China	Total GVA in 2010 US\$ 239 billion, which is 4% of GDP.
3	Australia	Contribution to GDP in 2012 AU\$ 47.2 billion
4	European Union	Total GVA of EURO 500 billion annually, employing over 5 millio
		people.
5	Ireland	Total GVA of EURO 3.37 billion in 2016, which is 1.7% of GDP.
6	Mauritius	10% of GDP on average during the period from 2012-2014.

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Source: World Bank Data

Use of Blue Economy in Economic Development:





C) Future Prospects of Blue Economy in Bangladesh:



Future Prospects of Blue Economy in Bangladesh:

South Asian countries are more or less blessed by the Bay of Bengal, which has created huge potentials for maritime economy in this region. A significant portion of economic zones of Bay of Bengal belong to present water areas of Bangladesh. The vast water areas under jurisdiction of Bangladesh are rich in valuable natural resources, including about 500 species of marine fish and animals, abundant mineral resources and abundant potentials of oil, gas and other resources. Myanmar has already discovered a large gas fields in its water areas, a possibility that is also strong in Bangladesh boundary. However, in January 2022, large-scale reserves of gas were also discovered in the Bangladesh part, according to experts, amount of reserves there can be about 17-103 TCF. According to various newspapers and journals, water areas around Bangladesh have valuable mineral resources such as uranium and thorium and there are 13 heavy mineral-rich silt in the adjacent areas of Bangladesh, including Elamite, Garnet, Colemanite, Zircon, Reptiles and Magnetite, according to them, which are more valuable than gold. If all these mineral resources are extracted properly, billions of dollars of wealth will undoubtedly be acquired.

Although 27 sectors have been identified internationally under maritime economy, among the potential sectors for Bangladesh considering various contexts and watersheds are 1) Shipping and Port Facilities 2) Fisheries and Aquaculture 3) Tourism 4) Energy 5) Marine Biotechnology; and 6) Submarine mining are among them.

Maritime economy opens the door to sustainable development in both conventional and promising sectors. Following is a summary of the potential sectors for Bangladesh:-

1. Shipping and Port Facilities: At present, about 80% of the world's trade is conducted by sea through ports, which is constantly increasing. Business benefits for coastal countries in providing shipping, transport and port related services in international trade are constantly expanding, which Bangladesh can utilize extensively through development of maritime skills, which includes:-





- Expansion and development of shipping business on domestic and international routes.
- Introduce Coastal Shipping / Feeder Service among neighboring countries.
- Port development and establishment of new ports.
- Introduce passenger ferries on specified sea-routes.
- Expansion and development of inland shipping network.
- 2. Marine Fisheries: Marine fishing is a lucrative occupation for developing countries. Fish not only meets the nutritional needs of people, fish exports occupy a large part of export earnings of many countries of the world. At present, about 350 million jobs are in the marine fisheries sector, about 90 percent of which are in developing countries. There is tremendous opportunity to increase export earnings through commercial fishing in Bangladesh's unfettered waters, which includes:-
 - Extraction of marine fish and other aquatic animals.
 - Development and expansion of mariculture system in the coast and deep sea. (Cultivation, management, and harvesting of marine organisms in their natural environment (including estuarine, brackish, coastal, and offshore waters) or in enclosures such as pens, tanks, or channels.)
- 3. Aquaculture: At present aquaculture is the fastest growing food sector in the world, supplying about 47% of the total fish caught in the world. According to FAO Report 2020, total aquaculture fish production in 2018 were 82.10 million MT, of which 30.80 million MT (37.52%) was marine aquaculture and 52.30 million MT (62.48%) produced in internal aquaculture. As in other countries, aquaculture in the sea areas of Bangladesh is undoubtedly suitable for production and processing of fish and other marine aquatic animals.
- 4. Expansion of Tourism Industry: Tourism is the third largest sector next to chemicals and fuels in the world. Marine and coastal tourism is one of the branches of tourism. Marine and coastal tourism plays a significant role in the economy of many developing countries. According to Tourism Report 2019, revenue from the tourism sector in 2018 was USD 1.7 trillion in the world, an increase of 4% over 2017. There is a wonderful opportunity to greatly enrich the country's tourism sector through development of beaches, standard development of islands located in the Bay of Bengal, development of underwater tourism, increasing the number of passenger ships and pleasure boats.
- 5. Energy sector development: A large portion of the world's energy is located in the waters. According to various international sources, about half of the world's oil reserves are located in deep water. In 2018, crude oil production from global offshore fields accounted for more than 33% of total production in that years, which could reach at 34% by 2025. At the same time, amount of gas extracted from offshore fields is more than 50%. Moreover, level of offshore electricity generation from sea air has increased at a significant rate in recent times. Following facilities are available for offshore energy generation in Bangladesh:





- Offshore oil and gas extraction.
- Marine based power generation.
- Blow Energy (Osmosis) and Biomass Production.
- Production and extraction of sea salt.
- Collection of construction sand, gravel etc. from coastal areas.
- Extraction and management of marine genetic resources.
- 6. Marine Biotechnology and Genetic Resources: According to various sources, by 2024, global marine biotechnology market size will be USD 775 billion. Marine Biotech will continue to play an important role in ensuring global clinical development and food security in future. In 2017, there were more than 35 drugs obtained from the sea in clinical development. In addition to fish and shellfish, one of the natural resources of the marine economy, genetic resources are crucial for gene sequencing technology to determine the capabilities of other marine organisms.
- 7. Submarine Mining: Extraction of other important mineral resources from the sea except sand and gravel has just started worldwide. In this situation, International Beach Authority is issuing licenses for international seabed exploration under the Mineral Code Rules. Annual turnover of global marine minerals is expected to reach at USD10 billion by 2030. In this situation, coastal countries need to be ready to reap the best benefits from their own maritime borders.
- 8. Development of shipbuilding and ship recycling industry: Bangladesh has already come a long way in the shipbuilding industry and already has built several ships. Moreover, shipbreaking industry has been going on in Sitakunda of Chittagong for a long time. At present, due to increase in maritime range, new horizons have been opened for Bangladesh in development of shipbuilding, shipbreaking and ship repair industries, which, with proper utilization, has a unique opportunity to go a long way in expanding Bangladesh's shipbuilding and repair industry.

In addition to the above possibilities, adequate expansion of maritime economy will expand the overall economy of the country to a large extent and the contribution of this sector to employment, increase in per capita income and GDP will undoubtedly play a large role in the overall economic development, which are essential for Bangladesh to meet the challenges of 2041

D) Preparations of Bangladesh for Development of Blue Economy:

As it took a long time to resolve the dispute over Bangladesh's maritime boundaries, previous governments did not think about it at all. Finally, during the tenure of the present government, a long-running dispute with India and Myanmar over maritime boundaries has been resolved, which has opened new horizons in the overall economic development of Bangladesh. In the meantime, government has begun working on developing the blue economy and in some cases, formulating policies and action plans for extraction and utilization of marine resources, which includes:



Preparations of Bangladesh for Development of Blue Economy:

Strategies for Economic Development of Bangladesh



- Bangladesh Maritime Zone Act 2018 (Draft).
- Bangladesh Delta Plan 2100 for the next century.
- An independent Blue Economy Cell has been formed to ensure proper coordination of blue economy activities among all government and private sector maritime stakeholders.
- Bangladesh Ocean Research Institute (BORI); and
- Bangabandhu Sheikh Mujibur Rahman Maritime University (BSMRMU) was set up in 2013 for maritime higher education and research.

Bangladesh Action plan for blue economy in the 7th Five Years Plan.

The FYP focuses on three themes, one of which aims to implement "a sustainable development pathway that is resilient to disaster and climate change; entails sustainable use of natural resources; and successfully manages the inevitable urbanization transition"—consistent with the definition of the blue economy concept (GED 2015). The 7th FYP calls for the following twelve actions to be undertaken "to create and maintain a prosperous and sustainable blue economy:"

- protecting and managing the fisheries for the present and the future generations,
- developing a strong renewable energy sector using ocean and atmospheric forces
- III. maintaining existing (e.g., ship building) and developing new maritime industries; TOWARD A BLUE ECONOMY: A PATHWAY FOR 40 SUSTAINABLE GROWTH IN BANGLADESH
- IV. extending fishing areas using new technologies and methods even beyond EEZ in the international waters,
- V. developing a strong human resources base for domestic utilization, and export to foreign job markets,
- VI. substantially increasing fisheries production and export earnings through improved aquaculture and introduction of mariculture.
- VII. creating a competitive tourism industry, including ecotourism and marine cruises.
- VIII. increasing revenue from shipping, commerce by expansion of domestic fleet, destinations, transshipment, transit provisions, linking sea-ports.
- IX. give special priority to anticipated Climate Change impacts on all relevant matters, and adjust policies and plans,
- X. maintain the inland river systems and ecosystems for fishery, sediment transport, and inland shipping,
- XI. building a solid science, research and education base and
- XII. along with other coastal areas, establishment of a marine academy in Khulna

These twelve national actions areas are supported by three strategic policies, strategies, and plans currently under development. Three major initiatives include:

• Bangladesh's Integrated Coastal and Ocean Management Policy (ICOMP)

- Bangladesh's National Sustainable Development Strategy (NSDS)
- Bangladesh's Climate Change Strategy and Action Plan (BCCSAP)









Recommendations on Development of Blue Economy:

Like the green economy, blue economy is equally important in the economy of any country, especially in the coastal countries which have opportunity to develop blue economy, it is a great blessing in the overall economic development of those countries. Because, value, significance and potentials of marine resources is not less than land resources in any case, but much more in certain fields and from that angle Bangladesh is quite fortunate. Newly acquired territorial water areas of Bangladesh and the aquatic, minerals and other valuable resources located there have opened up new horizons for overall economic development of Bangladesh. How efficiently Bangladesh will be able to mobilize and utilize those resources depends on the pace of the country's overall economy in future, especially to bring dynamism to the country's economy to meet the challenges of 2041, which is of immense importance. Long-term and realistic planning is required to properly utilize this immense potential for overall development of the country, which will give new momentum to the country's economy in future by fully utilizing the country's maritime potentials.

However, government has already taken some initiatives for development of this sector and some more plans are in the process. Since the concept of blue economy is new to Bangladesh, it is natural for the government taking time to take practical steps in this regard.

Following recommendations are presented to make the steps taken by the government for development of blue economy more expeditious and effective through extraction and utilization of marine resources: -

- 1. To formulate and implement a far-sighted, sustainable and environment-friendly maritime policy in the light of the context of Bangladesh and maritime policy of other countries for development of overall economy of the country through extraction and proper use of marine resources.
- Increase investment in both public and private sectors in the construction of marine infrastructure and extraction and development of marine resources, such as :-
 - Purchase of adequate modern equipment and fishing trawlers for extraction of marine fish.
 - Advanced training on deep sea fishing, conservation and export.
 - Conduct exploration activities by good quality foreign survey companies in discovery of oil, gas and other mineral resources at the bottom of sea.







- Steps in bio-power generation; and
- Exploring other possibilities in extracting marine resources.
- Increase research activities in extraction, use and development of marine resources.
- 4. Ensure full security on the own maritime boundaries and on all resources discovered and undiscovered within the sea boundaries.
- 5. Working through formation of regional alliances with countries Concerning extraction, conservation, development and security of marine resources.
- 6. Taking necessary steps for development of shipping and related business by increasing port facilities and setting up new ports, such as-
 - Expansion and development of shipping business on domestic and international routes.
 - Introduce Coastal Shipping / Feeder Service in neighboring countries.
 - Port development and establishment of new ports.
 - Introduce passenger ferries on specified sea-routes.
 - Enhancing Inland Water Transport Network.
- 7. To enrich the country's tourism sector through quality development of Marine Tourism in Bangladesh: -
 - Beach development.
 - To bring newly developed islands in the Bay of Bengal under tourism with quality development.
 - Underwater tourism development.
 - Increasing the number of passenger ships and pleasure boats; and
 - Taking necessary steps for development of this sector.
- 8. Proper utilization of applicable facilities for offshore energy production in Bangladesh, such as:-
 - Offshore oil and gas exploration and extraction at sea.
 - Marine based power generation.
 - Blow Energy (Osmosis) and Biomass Production.
 - Production and extraction of sea salt.
 - Extraction and management of marine genetic resources.
- 9. Development of marine biotechnology and extraction of genetic resources.
- 10. Extraction of valuable mineral resources from the bottom of the sea in the process of submarine mining.
- Development and expansion of ship building, ship breaking and ship repair industries.

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Chapter: 5.18

Increase Revenue Mobilization.







Increase Revenue Mobilization.

Topics Covered in the Chapter

- A) Increasing government revenue Earnings.
 - 1. What is government revenue?
 - 2. Why is it important to increase government revenue collection?
- B) Size, Expansion and Deficit of National Budget.
- C) Ongoing Revenue System of the Country.
 - 1. Revenue collection on target basis.
 - 2. Share of Income Tax in Collected Revenue.
 - 3. Bangladesh's position in terms of national budget and revenue Earnings.
- D) Govt. Operating / Non- Development Expenditures.
 - 1. Government Operating Expenses.
 - 2. Government Spending as per Ministries.
- E) Balance among government revenue, expenditure and debts.
 - 1. Overall picture of government debts and liabilities.
 - 2. Government Revenue, Expenditure and Debt to GDP Ratio.
- F) Annual Development Program (ADP).
 - 1. Sector wise ADP allocation.
 - 2. Implementation rate of annual development allocation.
- G) Assessment of ongoing revenue sector of the country.
- H) Recommendations to increase government revenue.







A) Increasing government revenue Earnings:

1) What is government revenue?

The term "Public Revenue" refers to government revenues. It collectively covers income generated from sources such as taxes, fees, duties, tariffs, sale of public goods and services, profits or dividends from public enterprises, interest on loans, among other sources (http://www.ujp.gw.uk; Taylor, 1984, Buchanan, 1960; Pigou, 1982).

A country's national revenue collection system is the key to efficient public administration and financial management of that country, which plays a key role in keeping the country's development activities afloat by fulfilling budget deficit from internal sources. There is no alternative to increasing government revenue collection to meet government operational expenditure, human resource development, development and expansion of business and infrastructure and civic services.

2) Why is it important to increase government revenue collection?

In each country of the world, expenses for running the government and development activities of the country are met by the revenue earned from internal sources (income tax, VAT, duties and other revenues). The stronger the economy of a country, the easier the revenue collection system in that country, as well as adequate revenue collection and budget preparation with revenue surplus ensuring balance between government revenue and expenditure in the state budget is a feature of that country. Because, deficit budgets always expose weak revenue system of any country. Due to this reason, rate of revenue collection in the developed and developing countries of the world is comparatively much higher. For example, in 2019, rate of revenue collection as proportion to GDP in European countries are above 40 percent on average. Among developing countries in South Asia at that time, Japan accounted for 33% of GDP, followed by 22.1% in China, 18.6% in Maldives, 18% in Philippines, 17.5% in Vietnam, 17.2% in Thailand, 13.3% in Singapore, 12.5% in Malaysia, 10.3% in Bhutan and 9.1% in Bangladesh [Figure-5.18(1)]. In other words, rate of government revenue collection in Bangladesh is still much lower than most countries in the world. In order to increase government's financial capabilities and investment in development activities in future, it is very important to increase sufficient revenue collection from internal sources.

Figure - 5.18 (1): Scenario of Tax revenue collection in terms of GDP in Bangladesh and some developed and developing countries of the world in 2019:



Source : OCED Data

Increasing government revenue Earnings:





B) Size, Expansion and Deficit of National Budget:

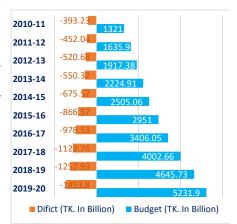
Over the past decade, size of the country's economy has expanded considerably, resulting in the size of national budget multiplying several times, as well as increasing budget deficit. For example, deficit against the national budget of Tk. 132,170 crore during financial year 2010-11 was Tk. 39,323 crore (29.75%) and deficit against the national budget of Tk 523,190 crore in the fiscal year 2019-20 stood at Tk 145,380 crore (27.79%). During these 10 years, size of the national budget has increased by about 295.75%, while budget deficit has increased by 330.82%. In other words, size of the national budget is increasing rapidly along with expansion of the country's economy, at the same time budget deficit is also increasing in parallel.

Size, Expansion and Deficit of National Budget

Average annual budget deficit is about 25% to 30% of the total budget. In 2010-11 fiscal year, deficit was TK. 393.23 billion (29.75%) against the budget of TK. 1,321.7 billion and in the 2019-20 fiscal year, deficit was TK. 1,453.80 billion (27.79%) against the budget of TK. 5,231.9 billion. Average rate of budget deficit during this period was 27.72% per annum [Figure-5.18(3)].

Needless to say, This huge deficit has to be filled every year by loans and grants from various donors under various from 2010-11 to 2019-20:difficult terms and by taking loans in large quantities from banking and nonbanking sectors internally, which is having a huge negative impact on the internal credit flow and banking sector of the country as well as disrupting normal flow of the country's economy. If sufficient revenue were collected, budget deficit would be reduced on the one hand. and dependence on foreign loans and aid to deal with the budget deficit would also be reduced, which would be a great progress in achieving economic independence of the country.

Figure-5.18 (2): Size of National **Budget and Budget Deficit during F.Y**



Source: BD Economic Review

Figure-5.18 (3): Summary of National Budget for the last one decade (2010-11 to 2019-20) at a Glance :-

Description	(Taka in Billion) Financial Year								
Description	2010-11	2012-13	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	
Annual Budget	1,321.70	1,917.38	2,505.06	2,951.0	3,406.05	4,002.66	4,645.73	5,231.90	





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4 Davisson :								
1. Revenue :								
A. NBR Tax Revenue :								
	210.05	353.00	F60.96	649.71	719.40	051.76	1 007 10	1 120 12
i) Income Tax	210.05		560.86			851.76	1,007.19	1,139.12
ii) Value Added Tax	270.92	404.66	550.13	642.63	727.64	912.54	1,105.54	1,230.67
iii) Customs & Other Duties	<u>244.93</u>	<u>364.93</u>	<u>386.21</u>	<u>471.36</u>	<u>584.48</u>	<u>717.6</u>	<u>849.28</u>	<u>886.21</u>
Sub-total :	725.90	1,122.59	1,497.20	1,763.70	2,031.52	2,481.90	2,962.01	3,256.00
B. Non-NBR Sources	34.52	45.65	55.72	58.74	72.50	86.22	97.27	145.00
C. Non-tax Revenue	168.05	228.46	276.62	261.99	323.50	311.79	333.52	377.10
Total Revenue (A+B+C) :	928.47	1,396.70	1,829.54	2,084.43	2,427.52	2,879.90	3,392.80	3,778.10
` '								
2. Expenditures :								
A Openstina Francisco diterra								
A. Operating Expenditures :								
i) Non-dev. Revenue Exp.	605.21	761.94	971.88	1,294.62	1,490.15	1.656.81	2,003.28	2,208.64
ii) Non-dev. Capital exp.	105.56	121.79	260.10	1,294.62	267.78	268.75	307.47	323.28
iii)Domestic & Foreign Int.	147.09	233.02	310.43	351.09	399.51	414.57	513.40	570.70
Sub-total :	857.86	1,116.75	1,542.41	1,845.59	2,157.44	2,340.13	2,824.15	3,102.62
B. Development Exp.	427.70	601.37	863.45	1,025.59	1,170.27	1,590.13	1,796.69	2,116.83
C. Loans, Adv. & Food A/C.	36.14	199.26	99.20	79.82	78.34	72.40	24.89	12.45
C. Loans, Adv. & Food A/C.	30.14	133.20	33.20	73.02	70.54	72.40	24.03	12.40
Total Expenditures :	1,321.70	1,917.38	2.505.06	2.951.00	3,406.05	4,002.66	4,645.73	5,231.90
Total Expolatatoo :	, ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,		,	, -	,
Budget Deficit (2 – 1) :	-393 23	- 520 68	-675 52	-866 57	-978 53	-1 122 76	-1 252 93	-1 453 80
Budget Deficit (2 – 1) :	-393.23	- 520.68	-675.52	-866.57	-978.53	-1,122.76	-1,252.93	-1,453.80
, ,	-393.23 29.75	- 520.68 27.16	-675.52 26.97	-866.57 29.37	-978.53 28.74	-1,122.76 28.05	-1,252.93 26.97	-1,453.80 27.79
Budget Deficit (2 – 1) : Deficit as % of budget :						,	•	·
, ,						,	•	·
Deficit as % of budget :						,	•	·
, ,						,	•	·
Deficit as % of budget : Deficit Financing :						,	•	·
Deficit as % of budget : Deficit Financing :						,	•	·
Deficit as % of budget :	29.75	27.16	26.97	29.37	28.74	28.05	26.97	27.79
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants	29.75	27.16 125.40	26.97 180.69	29.37	28.74 307.89	28.05 464.20	26.97 500.16	27.79 638.48
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing:	29.75	27.16 125.40	26.97 180.69	29.37	28.74 307.89	28.05 464.20	26.97 500.16	27.79 638.48
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel	29.75 108.34 48.09 156.80	27.16 125.40 60.44 230.00	26.97 180.69 62.06 312.21	29.37 243.34 58.00 385.23	28.74 307.89 55.16 389.38	28.05 464.20 55.04 282.03	26.97 500.16 40.51 420.29	27.79 638.48 41.68 473.64
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	29.75 108.34 48.09	27.16 125.40 60.44	26.97 180.69 62.06	29.37 243.34 58.00	28.74 307.89 55.16	28.05 464.20 55.04 282.03 321.49	26.97 500.16 40.51 420.29 291.97	27.79 638.48 41.68 473.64 300.00
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel	108.34 48.09 156.80 80.00	27.16 125.40 60.44 230.00 140.84	180.69 62.06 312.21 120.56	29.37 243.34 58.00 385.23 180.00	307.89 55.16 389.38 226.10	28.05 464.20 55.04 282.03	26.97 500.16 40.51 420.29	27.79 638.48 41.68 473.64
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	26.97 180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	26.97 180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57 ======	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57 ======	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57 ======	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68	180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57 ======	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76	26.97 500.16 40.51 420.29 291.97 1,252.93	27.79 638.48 41.68 473.64 300.00 1,453.80
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel	108.34 48.09 156.80 80.00 393.23 	27.16 125.40 60.44 230.00 140.84 520.68	26.97 180.69 62.06 312.21 120.56 675.52 =======	29.37 243.34 58.00 385.23 180.00 866.57 =======	28.74 307.89 55.16 389.38 226.10 978.53 ======	28.05 464.20 55.04 282.03 321.49 1,122.76 ======	26.97 500.16 40.51 420.29 291.97 1,252.93 ======	27.79 638.48 41.68 473.64 300.00 1,453.80 =======
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel Total (TK. In Billion):	108.34 48.09 156.80 80.00 393.23	27.16 125.40 60.44 230.00 140.84 520.68 ======	180.69 62.06 312.21 120.56 675.52	29.37 243.34 58.00 385.23 180.00 866.57 =======	307.89 55.16 389.38 226.10 978.53	28.05 464.20 55.04 282.03 321.49 1,122.76 ======	26.97 500.16 40.51 420.29 291.97 1,252.93 ======	27.79 638.48 41.68 473.64 300.00 1,453.80 ======
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel Total (TK. In Billion): a) Budget Size Increased (%)	108.34 48.09 156.80 80.00 393.23 	27.16 125.40 60.44 230.00 140.84 520.68 Seed as % 2012-13	180.69 62.06 312.21 120.56 675.52 ======= 6 of Las 2014-15	29.37 243.34 58.00 385.23 180.00 866.57 ====== t Year: 2015-16 17.80	307.89 55.16 389.38 226.10 978.53 ======	28.05 464.20 55.04 282.03 321.49 1,122.76 =======	26.97 500.16 40.51 420.29 291.97 1,252.93 ======	27.79 638.48 41.68 473.64 300.00 1,453.80 =======
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel Total (TK. In Billion):	108.34 48.09 156.80 80.00 393.23 	27.16 125.40 60.44 230.00 140.84 520.68	26.97 180.69 62.06 312.21 120.56 675.52 =======	29.37 243.34 58.00 385.23 180.00 866.57 =======	28.74 307.89 55.16 389.38 226.10 978.53 ======	28.05 464.20 55.04 282.03 321.49 1,122.76 ======	26.97 500.16 40.51 420.29 291.97 1,252.93 ======	27.79 638.48 41.68 473.64 300.00 1,453.80 =======
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel Total (TK. In Billion): a) Budget Size Increased (%) b) Increased Revenue (%)	108.34 48.09 156.80 80.00 393.23 	27.16 125.40 60.44 230.00 140.84 520.68 300.00 17.21 17.98	26.97 180.69 62.06 312.21 120.56 675.52 ====== 6 of Las 2014-15 12.59 9.25	29.37 243.34 58.00 385.23 180.00 866.57 ====== t Year: 2015-16 17.80 13.93	28.74 307.89 55.16 389.38 226.10 978.53 ====== 2016-17 15.42 16.46	28.05 464.20 55.04 282.03 321.49 1,122.76 ====== 2017-18 17.52 18.64	26.97 500.16 40.51 420.29 291.97 1,252.93 ====== 2018-19 16.07	27.79 638.48 41.68 473.64 300.00 1,453.80 ====== 2019-20 12.62 11.36
Deficit as % of budget : Deficit Financing : A. Foreign Borrowing B. Foreign Grants C. Domestic Borrowing: i) Banking Channel ii) Non-banking Channel Total (TK. In Billion): a) Budget Size Increased (%)	108.34 48.09 156.80 80.00 393.23 	27.16 125.40 60.44 230.00 140.84 520.68 Seed as % 2012-13	180.69 62.06 312.21 120.56 675.52 ======= 6 of Las 2014-15	29.37 243.34 58.00 385.23 180.00 866.57 ====== t Year: 2015-16 17.80	307.89 55.16 389.38 226.10 978.53 ======	28.05 464.20 55.04 282.03 321.49 1,122.76 =======	26.97 500.16 40.51 420.29 291.97 1,252.93 ======	27.79 638.48 41.68 473.64 300.00 1,453.80 =======

Source : BD Economic Review





C) Ongoing Revenue System of the Country:

Revenue structure of Bangladesh is quite complex and regulated and centralized by the National Board of Revenue, which is spread across many agencies, departments and ministries and consists of direct and indirect taxes. Direct taxes levied on income and profits and indirect taxes consists of VAT, import & export duties, excise duty, supplementary duty and other taxes and duties. Revenue sector of the country is divided into two parts, namely tax revenue (NBR tax and non-NBR tax) and non-tax revenue. NBR tax system is administered under IT Ordinance and IT Rules 1984, S.R.O, Gazette, Circular and Orders under the NBR, which includes:-

- 1. Personal and corporate taxes.
- 2. VAT
- 3. Supplementary duty and excise duty.
- 4. Customs duty.
- 5. Other taxes (travel tax, property tax, turnover tax, gift tax, air ticket tax) etc.

The National Board of Revenue plays a major role in revenue collection in Bangladesh. Revenue earnings of this country is basically divided into three categories, namely NBR tax, non-NBR tax and non-tax revenue. NBR tax is further divided into three categories, namely income tax, VAT and customs and other duties. All other income collected by various agencies, departments and ministries other than direct taxes collected by the NBR in the revenue sector is considered as non-NBR tax, such as - Narcotics Duty, Land Revenue, Non-Judicial Stamp, Land Registration Fee, Vehicle Tax etc. Other income derived from various ministries, departments and agencies besides NBR and non-NBR tax, such as dividends, interest, administrative fees, penalties, levies and other income are treated as non-tax revenue.

Brief summary of the administrative picture of revenue collection in Bangladesh:

Revenue Collection Structure of Bangladesh

Excluding Grants, Loan and Food Account Transactions



NBR Tax



- Taxes on Income and Profit
- Value Added Tax (VAT)
- ➤ Import & Export Duty
- Supplementary Duty
- Other Taxes and Duty

Non-NBR Tax



- Narcotics and Liquor Duty
 Taxes on Vehicle (Ministry
- Taxes on Vehicle (Ministry of Communication)
- Land Revenue (Ministry of Land)
- Stamp Duty (Non Judicial) (Ministry of Law and Parliamentary Affair)

Non Tax Revenue



- Dividend and Profit
- Interest, Penalties and Forfeiture
- Receipts for services rendered
- Rents, Lease and Recoveries
- Toll and Levies
- Non-commercial Sales
- Defense Receipts

First Edition: August, 2022

Others non-tax Revenue Receipts

Ongoing Revenue System in the Country:







1) Revenue collection on target basis:

Based on revenue targets set in the national budget, Board of Revenue, in collaboration with the Ministry of Finance, takes steps to collect revenue for the concerned financial year. Analysis of revenue collection based on the targets of national budget during past and present governments shows that, although there has been a significant deficit in the past compared to revenue collection target in the country, this picture has changed a bit since 2010-11 financial year, however, in most of the cases, it was not possible to achieve more than 80-90 percent of targets [Figure-5.18(4)].

In the last decade, although revenue collection has been almost 100% of targets in FY 2009-10, 2010-11 and 2011-12, but 96.40% in FY 2012-13, 89.41% in FY 2013-14, 86.20% in FY 2014-15, 85.84% in 2015-16, 82.90% in 2016-17, 80.26% in 2017-18 and 76.22% in FY 2018-19 [Figure-5.18 (5)].



Figure-5.18 (4): Rate of NBR revenue, tax revenue and total revenue in proportion to GDP during financial year from 2009-10 to 2018-19 (%): -



Figure-5.18 (5): Rate of revenue collection based on the revised targets in proportion to GDP during period from 2009-10 to 2018-19 financial year:-

(TK. In Billion)

Fiscal Year	Revenue Target		(Collectio	n	Achieve ment	As % of GDP			
Teal	rarget	NBR Tax	Non- NBR Tax	Total Tax Revenue	Non-Tax Revenue	Total Revenue	ment	NBR Revenue	Tax Revenue	Total Revenue
2009-10	794.61	620.42	27.43	647.85	131.69	779.54	98.10	7.78	8.12	9.77
2010-11	928.47	794.03	32.29	826.32	132.42	958.74	103.26	8.67	9.02	10.47
2011-12	1,183.85	950.59	36.34	986.93	186.45	1,173.38	99.12	9.01	9.35	11.12
2012-13	1,396.70	1,091.52	41.21	1,132.73	213.63	1,346.36	96.40	9.10	9.45	11.23
2013-14	1,674.59	1,208.20	46.11	1,254.31	243.00	1,497.31	89.41	8.99	9.33	11.14
2014-15	1,829.54	1,357.01	48.20	1,405.21	171.77	1,576.98	86.20	8.95	9.27	10.41
2015-16	2,084.43	1,536.27	56.44	1,592.71	196.48	1,789.19	85.84	8.88	9.21	10.34
2016-17	2,427.52	1,716.56	64.38	1,780.94	231.36	2,012.30	82.90	8.69	9.01	10.18
2017-18	2,879.90	2,023.13	66.11	2,089.24	222.29	2,311.53	80.26	9.10	9.40	10.40
2018-19	3,392.80	2,238.92	77.12	2,316.04	270.00	2,586.04	76.22	8.83	9.13	10.20
2019-20	3,778.10									
Courses MD	D. Natar Da	Tana		l on Original	Dudmak					

Source: NBR Note: Revenue Target are based on Original Budget



2) Share of Income Tax in Collected Revenue:

The National Board of Revenue plays a major role in revenue collection and about 80-85 percent of total revenue is NBR collected revenue. Remaining 15-20 percent of revenue is collected by various ministries and agencies. In analysis of data of the last one decade (2010-2019), it is observed that average annual revenue collection in the three major categories were as follows: -





A) NBR tax -

1. Income tax -28 60% 2. VAT -30.70%

3. Customs Duty - <u>24.20%</u> 83.50% B) Non-NBR tax 3.20% C) Non-tax revenue 13.30%

> 100.00% **Total:**

From the above information it is clear that the lion's share of revenue of Bangladesh comes from income tax, VAT and customs duties collected by the NBR.

It is worth mentioning that share of direct Figure-5.18 (6): Rate of income tax tax in the revenue collected by NBR is comparatively much less, averaging 28.60%. To date, Bangladesh's position in terms of income tax collection compared to GDP is lowest in the world and in South Asia. According to 2019 records, rate of income tax collection in Bangladesh as a ratio of GDP was 9.1%. At that time among other South Asian countries, it was 32% in Japan, 27.4% in South Korea, 22% in China, 18.6% in Maldives, 18% in Philippines, 17.5% in Vietnam, and 17.2% in Thailand. In European countries, this rate is above 40% on average [Figure-5.18(1)]. During financial year 2010-11 to 2019-20, rate of income tax collection in proportion to revenue collected by NBR fluctuated between 28% and 36%, averaging 32.45% [Figure-5.18(6)].

collection as compared to revenue collected by NBR during financial year from 2010-11 to 2019-20:-



First Edition: August, 2022

Figure-5.18 (7): Comparative Figure of Revenue Collection by NBR for the period from 2010-11 to 2019-20 and ratio of tax revenue to total revenue: -

Year	NBR Revenue	NB	R Revenue	(in Billion T	āka)	NBR Revenue	Income Tax as % of NBF
	target	Income Tax	VAT	Duty	Total NBR Revenue	as % of GDP	Collection
2010-11	725.90	221.05	282.74	252.21	756.00	8.67	29.24
2011-12	918.70	260.61	343.04	320.05	923.70	9.01	28.21
2012-13	1,122.59	353.00	404.66	364.93	1,122.59	9.10	31.45
2013-14	1,360.90	443.70	458.77	347.53	1,250.00	8.99	35.50
2014-15	1,497.20	493.93	489.98	383.32	1,367.24	8.95	36.13
2015-16	1,763.70	542.45	560.81	451.93	1,555.19	8.88	34.88
2016-17	2,031.52	538.12	635.62	542.82	1,716.56	8.69	31.35
2017-18	2,481.90	656.45	788.94	618.18	2,064.07	9.10	31.80
2018-19	2,962.01	729.00	876.80	633.82	2,238.92	8.83	32.56
2019-20	3,256.00	730.04	848.53	605.52	2,184.09	9.10	33.43

Source: NBR

Share of Income Tax in Collected Revenue:



Bangladesh's position in terms

of size of national

budget and

Earnings:

revenue

Strategies for Economic Development of Bangladesh



3) Bangladesh's position in terms of national budget and revenue Earnings:

According to the Global Ranking 2019, Bangladesh ranks 65th out of 226 countries in terms of budget size and amount of revenue. Among other countries in South Asia, China is 2nd, South Korea 13th, India 19th, Indonesia 27th, Cambodia 38th, Thailand 42nd, Vietnam 48th, Malaysia 51st, Singapore 52nd and Pakistan is in 55th position [Figure-5.18(8)].

Bangladesh still lags behind South Asia in terms of revenue collection in proportion to GDP. Analysis of revenue collection of Bangladesh and a few other countries in South Asia during period of 2010-2018 shows that average rate of revenue collection as percentage of GDP during this period was 10.36% in Bangladesh, 12.49% in India, 12.82% in

Figure-5.18 (8): According to the Global Ranking 2019, position of Bangladesh and a few other countries in South Asia among 226 countries in terms of budget size and amount of revenue.



Source: Photius.com

Note: Lower Rank indicates higher position

and Sri Lanka, 13.95% in Indonesia, 15.63% in Cambodia, 18.50% in Nepal, 18.87% in Malaysia, 19.67% in Thailand, 20.44% in Bhutan 24.76% in South Korea [Figure-5.18(9)].

Figure-5.18 (9): Scenario of revenue collection (%) in proportion to GDP in Bangladesh and some other countries of South Asia during 2010-2017: -

		Period												
Country	2018	2017	2016	2015	2014	2013	2012	2011	2010	Average				
Bangladesh	9.6	10.2	10.21	9.84	10.87	11.16	11.15	10.46	9.74	10.36				
India		12.86	13.21	12.42	11.55	12.61	12.6	11.5	13.18	12.49				
Sri Lanka	13.37	13.74	14.05	13.29	11.37	11.86	12.03	12.95	12.74	12.82				
Indonesia	12.99	12.18	12.47	12.97	14.62	15.01	15.47	15.4	14.46	13.95				
Combodia	22.17	18.56	17.37	16.58	16.58	13.75	12.64	11.55	11.47	15.63				
Nepal		22.9	21.5	19.33	18.45	17.45	15.99	14.89	14.9	18.18				
Malaysia	16.1	16.07	17	18.62	19.94	20.95	21.41	20.34	19.44	18.87				
Thailand	19.46	19.12	19.81	20.55	19.69	20.61	18.94	19.81	19	19.67				
Bhutan	22.17	18.67	18.8	19.63	19.92	20.46	21.32	20.96	22	20.44				
S.Korea	27.52	26.19	25.76	24.81	24.99	26.12	26.65	20.69	20.1	24.76				

Source: World Bank

D) Govt. Operating / Non- Development Expenditures:

According to nature of national budget of the country, government expenditure is divided into three categories, namely- operating expenditure / non-development expenditure, development expenditure and loans, advance and food account. Operating expenses is further divided into three categories, namely, expenditure on



Government

Expenditure:

Strategies for Economic Development of Bangladesh



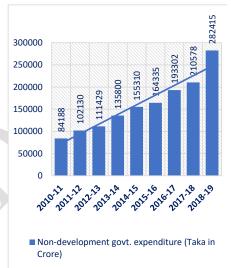
goods and services / revenue expenditure, non-development capital expenditure and interest on domestic and foreign loans.

1) Government Operating Expenses:

Along with increasing scope of the country's economy, size and manpower of administrative jurisdiction, capital expenditure in non-development sector, interest on domestic and foreign loans expenditure on development activities also increasing. Government's operating expenditure in FY 2010-11 was Tk. 84,188 which gradually increased to Tk. 282,415 crore in FY 2018-19. Over the past decade, government operating expenses have increased overall (282,415-84,188) = TK. 198,277 crore,which has increased by an average of TK. 22,025 crore per annum or 19.53% annually [Figure-5.18(10)].

During period from F.Y 2010-11 to 2018-19, government expenditure in budget ratio fluctuated between 59% and 65%. During this period, government expenditure as percentage of GDP ranged from 13% to 14% [Figure-5.18 (11)].

Figure-5.18 (10): Scenario of government Expenditures / non-development expenditure as per revised budget for the period from F.Y 2010-11 to 2018-19: -



Source: BD Economic Review

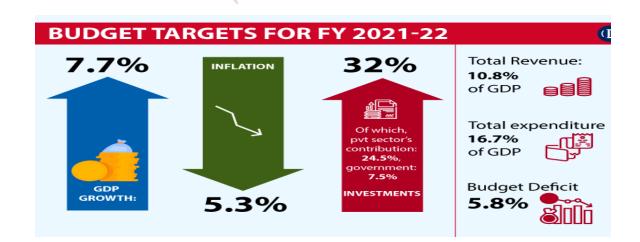






Figure-5.18 (11): Based on revised budget, scenario of government expenditure, government expenditure in proportion to budget (%) and government expenditure in proportion to GDP during period from F.Y 2010-11 to 2019-20:-

				Financi	al Year			
Description	2010-11	2012-13	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Annual Budget	1,321.70	1,917.38	2,505.06	2,951.0	3,406.05	4,002.66	4,645.73	5,231.90
Expenditures :								
Operating Expenditures :								
i) Recurrent Expenditure ii) Non-dev. Capital exp. iii)Domestic & Foreign Int. Sub-total :	605.21 105.56 147.09 857.86	761.94 121.79 233.02 1,116.75	971.88 260.10 <u>310.43</u> 1,542.41	1,294.62 199.88 <u>351.09</u> 1,845.59	1,490.15 267.78 399.51 2,157.44	1,656.81 268.75 414.57 2,340.13	2,003.28 307.47 <u>513.40</u> 2,824.15	2,208.64 323.28 <u>570.70</u> 3,102.62
Govt. Exp. as % of Budget	64.91	58.24	61.57	62.54	63.34	58.46	60.79	59.30
Govt. Expenditures as % of GDP	13.86	14.40	14.00	13.77	13.45	13.56	14.30	14.75

Source: MOF and other sources.

Government Spending as per Ministries:

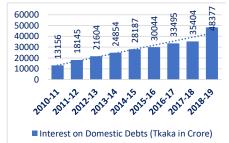
2) Government Spending as per Ministries:

In case of distribution of government expenditure according to Ministry, combined expenditure of 6 (six) important ministries is about 45% -50% of total government expenditure. For example, combined expenditure of these 6 (six) ministries in FY 2010-11 was 49% of the total government expenditure, 46% in FY 2011-12, 50% in FY 2012-13, 45% in FY 2013-14, 43% in FY 2014-15, 50% in FY 2015-16, 47% in FY 2016-17, 47% in FY 2017-18 and 39% in FY 2018-19. These 6 (six) important ministries are: -

- 1. Ministry of Defense.
- 2. Ministry of Home Affairs
- 3. Ministry of Primary & Mass Education
- 4. Ministry of Education
- 5. Ministry of Health
- 6. Ministry of Agriculture

Another major sector of government spending is interest on internal debt, which is averages about 17% -18% of total expenditure. In F.Y 2010-11, interest on internal loans was 18% of government spending, 19% in 2011-12, 18% in 2012-13, 18% in 2013-14, 18% in 2014-15, 17% in 2015-16, 17% in 2017-18 and 18% in F.Y 2018-19. During this period, interest on domestic loans has increased by an average of about 18% per annum.

Figure-5.18 (12): Scenario of increase in interest on domestic loans during financial year 2010-11 to 2018-19:-



Source: BD Economic Review



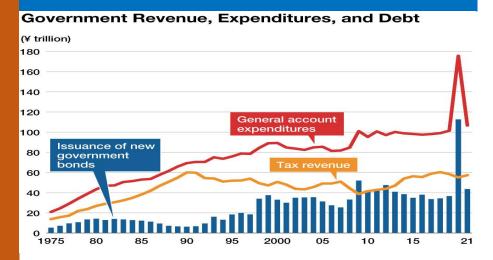


Figure -5.18 (13): Scenario of government spending / non-development expenditure as per Ministry based on adjusted budget during financial year 2010-11 to 2018-19: -

01					Financia	al Years	;		(Taka in C	crore)
SL	Particulars	2010- 11	2011- 12	2012-13	2013-14	2014- 15	2015- 16	2016- 16	2017- 18	2018-19
1	President's Office	11	11	12	13	15	20	19	22	23
2	National Parliament	105	113	134	164	200	238	294	298	298
3	Prime Minister's Office	181	177	208	255	325	359	418	585	487
4	Ministry of Defense	9,131	11,961	13,276	14,934	17,463	20,241	22,526	24,438	26,750
5	Ministry of Home Affairs	6,352	7,358	8,302	10,153	11,638	14,855	17,451	20,237	22,231
6	Ministry of Primary & Mass Education.	4,936	5,267	5,537	7,435	8,084	11,600	11,535	12,687	14,154
7	Ministry of Education	8,431	8,658	9,290	11,215	12,055	16,001	20,669	21,586	23,768
8	Ministry of Health	4,881	5,114	5,507	6,139	6,976	9,690	9,911	11,314	12,242
9	Ministry of Agriculture	7,393	8,238	13,726	10,947	10,846	9,327	8,604	8,728	11,951
10	Other Ministries & Divisions	23,402	22,902	24,827	28,271	34,936	36,966	43,483	48,359	55,376
11	Interest on Domestic Debt	13,156	18,145	21,604	24,854	28,187	30,044	33,495	35,404	48,377
12	Interest on Foreign Debt	1,422	1,651	1,743	1,686	1,738	1,625	1,863	2,516	2,963
13	loans and advances of Finance Division.	5,287	12,532	7,263	19,734	22,847	13,369	23,034	24,404	63,795
То	tal Non-dev. Expenditures :	84,188	102130	111,429	135,800	155,310	164,335	193,302	210,578	282,415
Υ	early increase of Exp. (%):	7.75	21.31	9.11	21.87	14.37	5.81	17.63	8.94	34.11
	Total Exp. of 6 Ministries	46,596	55,638	60,823	67,062	81,714	90,696	98,990	111,096	41,124
	Exp. of 6 min. as % of total	46	50	45	43	50	47	47	39	46
	erest on Domestic Debt as % of total Expenditures	18	19	18	18	18	17	17	17	18

Source: BD Economic Review

E) Balance among government revenue, expenditure and debts :



In the last decade (2010-2019), size of the national budget has increased by 295.75% overall, an average of 16.52% per annum, as well as budget deficit has increased in parallel to an average of 15.66% per annum. During this period, budget deficit in





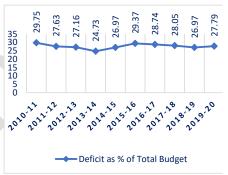
proportion to size of budget averaged 27.72%. As the size of budget and deficit have increased in parallel, amount of budget deficit has also increased in parallel in line with increasing budget size. For example, in 2010-11 financial year, size of the national budget was TK. 1,321.70 billion with deficit of TK. 393.73 billion, in proportion to budget which was 29.75%. In the fiscal year 2019-20, size of national budget stood at TK. 5,231.90 billion with deficit amounting to TK. 1,453.80 billion, which was 27.79% of budget [Figure-5.18(14)].

1) Overall picture of government debts and liabilities:

As budget deficit has become a normal trend in Bangladesh, it has become a rule to cover this huge deficit of the national budget with loans and grants from various domestic and foreign sources every year. Among sources of finance to meet budget deficit, loans from foreign sources averaged 31.82%, foreign grants averaged 7.94% and loans from domestic sources (banking and nonbanking) averaged 60.94%. As a result, amount of government debt to various domestic and foreign organizations has been gradually increasing. Total debt of the government in 2010-11 was USD 40.455 billion, which at that time was 35.49% of GDP or USD 267 per capita. In the fiscal year 2019-20, total debt of the government stood at USD 91.524 billion, which is 33.99% of GDP, or USD 567 per capita. During this 10 years period, overall debt of the government has increased by USD 51.069 billion or an average increase of 5.12% per annum, of which about 61% is derived from domestic sources (banking and nonbanking), which poses a major risk to overall financial system of the country. [Figure-5.18 (15)].

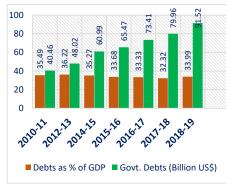
Needless to say, if current trend of borrowing from domestic sources continues, it will pose a major threat to the country's banking system in future, which could threaten the country's overall economy through creating pressures on internal credit flows and country's banking system.

Figure-5.18 (14): Scenario of budget deficit in proportion to size of budget for the period from 2010-11 to 2019-20 (%): -



Source: BD Economic Review

Figure-5.18 (15): Scenario of government total debt and debt in proportion to GDP during financial year 2010-11 to 2018-19: -



Source: World Bank, Koema.com and countryeconomy.com

First Edition: August, 2022

Overall picture of government debts and liabilities:





Figure-5.18 (16): Scenario of revenue earnings, expenditure and overall debt of the government on the basis of national budget during financial year 2010-11 to 2019-20: -

	Financial Year										
Description	2010-11	2012-13	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20			
Annual Budget	1,321.70	1,917.38	2,505.06	2,951.0	3,406.05	4,002.66	4,645.73	5,231.90			
Revenue :											
i) Income Tax ii) VAT iii) Customs Duties iv) Other Revenues	210.05 270.92 244.93 202.57	353.00 404.66 364.93 274.11	560.86 550.13 386.21 332.34	649.71 642.63 471.36 320.73	719.40 727.64 584.48 396.00	851.76 912.54 717.6 398.01	1,007.19 1,105.54 849.28 430.79	1,139.12 1,230.67 886.21 522.10			
A. Total Revenue :	928.47	1,396.70	1,829.54	2,084.43	2,427.52	2,879.90	3,392.80	3,778.10			
Expenditures :											
i) Operating Expenditures: ii) Development Exp. iii) Loans, Adv. & Food A/C.	857.86 427.70 36.14	1,116.75 601.37 199.26	1,542.41 863.45 99.20	1,845.59 1,025.59 79.82	2,157.44 1,170.27 78.34	2,340.13 1,590.13 72.40	2,824.15 1,796.69 24.89	3,102.62 2,116.83 12.45			
B) Total Expenditures :	1,321.70	1,917.38	2,505.06	2,951.00	3,406.05	4,002.66	4,645.73	5,231.90			
C) Budget Deficit (B-A) :	-393.23	- 520.68	-675.52	-866.57	-978.53	-1,122.76	-1,252.93	-1,453.80			
Deficit as % of budget :	29.75	27.16	26.97	29.37	28.74	28.05	26.97	27.79			
Deficit Financing :											
i) Foreign Borrowing ii) Foreign Grants iii) Domestic Borrowing: Total:	108.34 48.09 236.80 393.23	125.40 60.44 <u>370.84</u> 520.68	180.69 62.06 432.77 675.52	243.34 58.00 <u>565.23</u> 866.57	307.89 55.16 615.48 978.53	464.20 55.04 603.52 1,122.76	500.16 40.51 <u>712.26</u> 1,252.93	638.48 41.68 <u>773.64</u> 1,453.80			
D) Govt. debt (Billion US\$)	40.455	48.024	60.985	65.470	73.411	79.964	91.524	-			
Debt as % of GDP	35.49	36.22	35.27	33.68	33.33	32.32	33.99	-			
Debt per Capita (US\$)	267	310	395	419	465	501	567	-			
	Incr	eased as	% of Last	Year :							
	2010-11	2012-13	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20			
➤ Budget Increased (%)	16.12	17.21	12.59	17.80	15.42	17.52	16.07	12.62			
➤ Increased Revenue (%)	16.85	17.98	9.25	13.93	16.46	18.64	17.81	11.36			
➤ Increased Budget Deficit (%)	14.45	15.18	22.75	28.28	12.92	14.74	11.59	16.03			

Source: World Bank, Koema.com and countryeconomy.com



2) Government Revenue, Expenditure and Debt to GDP Ratio:

Increasing size and scope of government expenditure means increasing development activities in the country and increasing size of the national budget. But for this, it is important to increase amount and scope of revenue, otherwise increasing government spending means increasing amount of government debt.

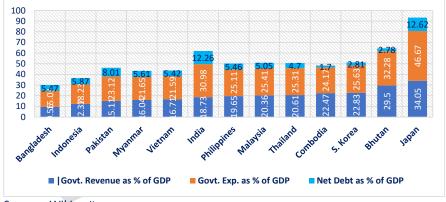




Government Revenue, Expenditure and Debt to GDP Ratio: Bangladesh lags behind almost all countries in South Asia in terms of government revenue and expenditure compared to GDP. According to World Economic Outlook 2020, Government revenue and expenditures to GDP ratio at that time was 9.56% and 15.03% respectively in Bangladesh, 12.37% and 18.23% in Indonesia, 15.11% and 23.12% in Pakistan, 16.04% and 21.65% in Myanmar, 16.71% and 21.59% in Vietnam, 18.73% and 30.98% in India, 19.65% and 25.11% in the Philippines, 20.36% and 25.41% in Malaysia, 20.61% and 25.31% in Thailand, 22.47% and 24.17% in Cambodia, 22.83% and 25.63% in South Korea, 29.50% and 32.28% in Bhutan and 34.05% and 46.67% in Japan [Figurer-5.18 (17)].

On the other hand, government net debt to GDP ratio in Bangladesh is much higher than most of the countries in South Asia. As of 2020, net debt to GDP ratio in Bangladesh was 5.47%. Among other South Asian countries, the rate was 5.87% in Indonesia, 8.01% in Pakistan, 5.61% in Myanmar, 5.42% in Vietnam, 12.26% in India, 5.46% in Philippines, 5.05% in Malaysia, 4.70% in Thailand, 1.70% in Cambodia, 2.81% in South Korea, 2.78% in Bhutan and 12.62% in Japan.

Figure-5.17 (17): According to World Economic Outlook 2020, rate of government revenue, expenditure and net debt to GDP ratio to Bangladesh and other South Asian countries:



Source: Wikipedia

F) Annual Development Program (ADP):

One of the prerequisites for overall economic development of the country is development of overall infrastructure, such as communication, electricity, water and sewerage, fuel and other infrastructure related to improving quality of life. Keeping in view the future development of the country, adequate investment is required to build long-term infrastructure based on the size, volume and population of the country in addition to meeting running expenditures of the government. Therefore, just as it is important for the government to increase adequate revenue collection, it is also important to increase investment in long-term infrastructure development for overall sustainable development of the country by reducing government expenditure as much as possible. According to January 2019 report of Asian Infrastructure Investment Bank (AIIB), Bangladesh needs to invest an average of USD 24 billion a year in infrastructure development to become a middle-income country by 2021, of which investment has already made USD 2.9 billion in 2014, 3.8billion in 2015,



Annual Development Program (ADP):

Sector wise annual development program:

Strategies for Economic Development of Bangladesh



15.5 billion in 2016, 31.4 billion in 2017 and USD 46 billion in 2018. According to a 2014 report by the World Economic Forum, Bangladesh's investment in infrastructure development during 2010-2020 required USD 145.00 billion, an average of USD 13.173 billion a year, or 11.56% of GDP, of which, transport sector accounted for 4.92% of GDP, 1.24% in power sector, 4.24% in ICT and 1.19% in water development. Moreover, Bangladesh needs to invest several times more in infrastructure development to realize its dream of reaching the list of high-income

countries by 2041. According to Oxford Economics, to reach the list of high-income countries by 2041, Bangladesh needs to invest another USD 608.00 billion in infrastructure development during 2016-2040. If current trend of investment in infrastructure development continues, investment deficit will remain at USD 191.00 billion by 2040. According to that report, by 2040, size of Bangladesh's GDP will be USD 879 billion and annual growth will be an average of 5.7%.

According to Oxford Economics, Bangladesh's current trend in infrastructure development and amount of investment required to meet the 2041 target are highlighted through [Figure-5.18 (18)].

Figure-5.18 (19): Scenario of implementation of sector wise annual development program as per financial year 2016-17: -



Source: BD Economic Review

countries by 2041. According to Oxford Economics, to reach the list of high-income countries by 2041, Bangladesh needs to invest another USD 608.00 Bangladesh and Investment Estimates billion in infrastructure development Needed to Meet the 2040 Target:



Source: AIIB Report 2019 and OXFORD Economic Report 2017

1) Sector wise ADP allocation:

During the tenure of the present Awami League government, five sectors that have received most importance in allocating and implementing sectoral development are transport, electricity, water supply, education and rural development. During financial year 2010-11 to 2016-17, on an average, about 70 per cent of development expenditure was spent in these five sectors, of which transport sector is in first place, during this period, an average of 24.40% of combined expenditure was spent in this sector. Electricity is second with 23.74% of combined expenditure, education is third with combined expenditure of 18.34%, rural development is fourth with combined expenditure of 17.43% and water supply is fifth with 16.09% of combined expenditure. Agriculture, science & technology, health and water resources sectors are in second important





stage in ADP implementation and in third stage is oil and gas, communications, public administration and industrial sectors. Needless to say, allocation of development expenditures in these four sectors of third stage has remained at a very low level as compared to need.

Figure-5.18 (20): Scenario of implementation of sector wise integrated development program for the period from F.Y 2000-01 to 2017-18:

			F	inancial Yea	ır		
Sector	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Transport	3,847.10	5364.03	8208.10	10197.61	13701.29	16660.23	21657.86
Power	6,189.92	7179.65	8868.01	7843.99	8230.78	15558.46	18136.89
Water Supply & Housing	3,062.41	4000.82	4325.37	5085.47	8325.17	12564.44	16118.00
Education & Religious	4,879.22	4660.74	6461.72	7954.45	8840.21	9957.88	11773.89
Rural Development	4,398.16	4905.58	6771.38	7138.77	8399.26	8924.60	10669.09
Agriculture	2,093.36	2423.37	2696.17	3420.05	3927.78	4867.51	5506.41
Science & Technology	137.91	124.83	260.51	1413.66	4584.38	1959.82	4806.82
Health & Family Welfare	2,865.20	2966.33	3508.84	3717.52	4128.24	4438.29	4382.74
Water Resources	1,155.26	1268.40	1593.42	1833.62	1922.27	2482.45	3030.41
Oil, Gas & N Resources	990.02	746.02	1629.82	1832.38	1879.71	2008.34	2435.90
Communication	261.80	839.65	685.81	631.62	1237.72	1764.13	2269.82
Public Administration	820.59	716.59	880.80	895.62	1174.12	1195.07	1895.64
Industries	344.78	932.95	1713.71	2374.66	1366.53	1356.58	1031.46
Social Welfare	277.74	292.13	391.21	408.62	342.93	382.11	314.34
Sports & Culture	342.69	132.87	172.79	262.51	162.75	252.87	300.44
Labour & Employment	34.49	104.44	295.81	336.01	484.13	355.03	282.79
Mass Media	88.59	56.84	53.96	106.23	102.00	119.78	149.02
Block	1,218.20	1304.63	1518.53	1460.76	2405.81	2219.75	2323.00
Total ADP Exp. :	33,007.44	38019.8 5	50035.27	56913.45	71215.08	87067.34	107084.55

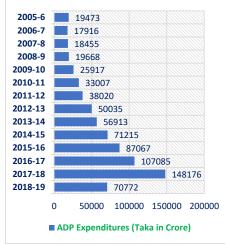
Source: BD Economic Review

2) Implementation rate of annual development allocation:

Due to insufficient revenue collection, it **Figure-5.18** has not been possible under any government till now so far to ensure adequate annual development allocation as per demand in various sectors. Until F.Y 2010-11, annual development allocation was always limited to 25-30 per cent of budget and ADP implementation rate was limited to 90 per cent. However, after the current Awami League government came to power, size of national budget has been gradually increasing since 2010-11 financial year and picture of annual development allocation has begun changing.

In 2010-11 financial year, size of revised national budget was TK. 130,011 crore and annual revised

Figure-5.18 (21): Scenario of implementation of annual revised development allocation during period from 2005-6 to 2018-19:-



Source: MOF Note: * up to March 2019

First Edition: August, 2022

Implementation rate of annual



development allocation:

Strategies for Economic Development of Bangladesh



development allocation was TK. 35,880 crore, in proportion to budget which

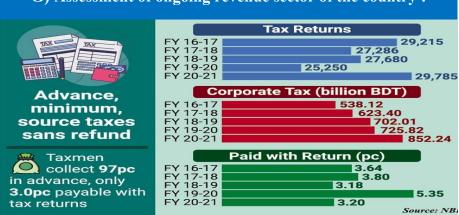
was 27.60%. In 2018-19 financial year, revised size of national budget stood at TK. 442,541 crore and annual development allocation at TK. 167,000 crore, which was 37.74% of budget. During these nine years period, size of revised national budget has increased by TK. 312,530 crore and adjusted annual development allocation has increased by TK. 131,120 crore, which means that average annual ADP has increased by TK. 14,569 crore in this period. ADP allocation was more than 32% of revised budget and implementation rate was above 95% during this period. During last nine years, ADP allocation has increased by an average of 4.59 percent annually.

Figure-5.18 (22): Rate of Annual Revised Development Allocation and Implementation for the period from 2005-6 to 2018-19:-

	Revised		ADP Allocation	n (Revised)		Actual A	DP Exp.
F. Year	Budget (TK in Crore)	TK. In Crore	Allocation as % of Budget	Growth %	As % of GDP	Taka in Crore	%
2005-6	61,058	21,500	35.21			19,473	90.57
2006-7	66,836	21,600	32.32	-8.22		17,916	82.94
2007-8	93,608	22,500	24.04	-25.63		18,455	82.02
2008-9	94,140	23,000	24.43	1.64		19,668	85.51
2009-10	110,523	28,500	25.79	5.55		25,917	90.94
2010-11	130,011	35,880	27.60	7.02		33,007	91.99
2011-12	161,213	41,080	25.48	-7.67		38,020	92.55
2012-13	189,326	52,366	27.66	8.54		50,035	95.55
2013-14	216,222	60,000	27.75	0.33		56,913	94.86
2014-15	239,668	75,000	31.29	12.77		71,215	94.95
2015-16	264,565	91,000	34.40	9.92		87,067	95.68
2016-17	317,174	110,700	34.90	1.47		107,085	96.73
2017-18	371,495	148,381	39.94	14.44		148,176	99.86
2018-19	442,541	167,000	37.74	-5.52		70,772*	42.38

Source: MOF Budget Summary Note: * up to March 2019

G) Assessment of ongoing revenue sector of the country:



In terms of revenue and expenditure, Bangladesh still lags far behind in the world even compared to many countries in South Asia. Among notable sources of revenue in Bangladesh are income tax and VAT collected from individuals and organizations, customs duties against imports and exports and revenue from various





Assessment of the ongoing revenue sector of the country:

sources. Although revenue collection target has been set in the national budget, it has not been possible to collect more than 70% -75% of target during the tenure of any government. Due to insufficient increase in revenue earnings, it is not being possible to overcome dependence on foreign loans for development activities.

Along with population growth in the country, domestic consumption and demand are also increasing, resulting, size and scope of the country's economy is gradually expanding and in line with all this, size and manpower of public sector is increasing, as well as increasing government expenditure, but compared to overall situation amount and scope of revenue is not increasing. Moreover, it has become demand of time to conduct some development activities by own finance without being completely dependent on foreign loans. Due to insufficient revenue collection, beside increasing size of national budget, amount of budget deficit is increasing in parallel and amount of domestic and foreign debt is increasing every year to meet this deficit, which stood at USD 91.524 billion (USD 567 per capita) by 2018-19 financial year [Figure-5.18 (16)].

In order to reach high-income countries by 2041, in addition to increasing the size of national budget in the coming days, much more importance should be given to increase revenue targets and meet revenue collection targets. Because, dream of conducting development activities with own finance without increasing revenue collection is absurd and as long as adequate development activities are not carried out with own financing, dream of a developed country will remain elusive for us.

Figure-5.18(23): Scenario of Collection of NBR tax revenue in proportion to total revenue during period from F.Y 2010-11 to 2019-20:-

				Financi	al Year			
Description	2010-11	2012-13	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Total Revenue :	928.47	1,396.70	1,829.54	2,084.43	2,427.52	2,879.90	3,392.80	3,778.10
NBR Tax Revenue :								
i) Income Tax	210.05	353	560.86	649.71	719.4	851.76	1,007.19	1,139.12
ii) As % of Total Revenue	22.62	25.27	30.66	31.17	29.64	29.58	29.69	30.15
i) Value Added Tax :	270.92	404.66	550.13	642.63	727.64	912.54	1,105.54	1,230.67
ii) As % of Total Revenue	29.18	28.97	30.07	30.83	29.97	31.69	32.58	32.57
i) Customs Duties	244.93	364.93	386.21	471.36	584.48	717.6	849.28	886.21
ii) As % of Total Revenue	26.38	26.13	21.11	22.61	24.08	24.92	25.03	23.46
Sub-total :	725.9	1,122.59	1,497.20	1,763.70	2,031.52	2,481.90	2,962.01	3,256.00
As % of Total Revenue	78.18	80.37	81.83	84.61	83.69	86.18	87.30	86.18

Source: BD Economic review





H) Recommendations to increase government revenue :



THE TOTAL LOSS AMOUNT EQUIVALENT TO



In context of growing economy of the country and to meet challenges of achieving target of 2041, it is essential to increase administrative efficiency and administrative infrastructure of the government in future as well as increasing its own funding for development activities to build a sustainable economy in the country. In context of growing economy of the country, it is natural that government spending will continue to rise in the coming days, as well as increase its own funding for development activities, which will require additional revenue. Otherwise, budget deficit will continue to grow, and tendency of borrowing from domestic sources to address budget deficit will increase widespread, so that possibility of increasing government expenditure as well as chaos in the financial sector cannot be ruled out. Therefore, in the changing situation in future, it is essential to achieve financial capacity of the government to run the government efficiently, which requires adequate increase in revenue earnings. It is to be noted that on an average, about 32% of government revenue in Bangladesh is earned from income tax, 31% from VAT, 24% from customs duty and 13% from other sources.

Recommendations to increase government revenue:

The only way to increase revenue is to increase scope of income tax and VAT by increasing tax rate in realistic manner. But government cannot increase income tax revenue if it wants to, which requires favorable environments and universal income tax collection system, setting realistic tax targets and ensuring efficiency and accountability of tax collecting institutions, favorable business environment and political stability in the country. Among issues that should be given utmost importance in increasing revenue are: -

- 1. To set realistic revenue targets in the national budget, which can be achieved.
- 2. Distribution of income tax collection targets on the basis of capacity among institutions engaged in revenue collection and in those institutions:
 - Taking steps to develop institutional capacity.
 - Adequate training in skills development of officers and employees.

First Edition: August, 2022

• End of bureaucratic complexity and procrastination.



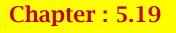


- Taking necessary steps to prevent corruption.
- Ensuring transparency and accountability.
- One stop service in all cases.
- 3. Introduce a simple, understandable and improved tax system that is consistent with taxpayers' ability to pay, so that there is more pressure on rich and less on poor.
- 4. In case of individual taxpayers, tax rate and tax-free income limit should be kept at a reasonable level, exact number of people who are capable to pay tax but avoid paying taxes should be given importance to determine.
- 5. In case of corporate tax, keeping tax rate at reasonable level in the light of other countries, determining exact number of such organizations that are showing profitable organizations as a loosing concern and running business but do not file regular tax returns.
- 6. In order to increase tax revenue, practical basis of the recommendations proposed in "Chapter 5.19 Modernization of the Tax System" leaves room for justifying.
- 7. in case of VAT collection, in addition to increasing scope of VAT, it is very important to look into whether there is any additional pressure on the VAT paying organization or whether VAT evasion is taking place in collusion with the concern officer.
- 8. In order to increase revenue from tariffs, it is important to focus on increasing flow of trade and commerce in the country as well as expanding industrial sector and increasing productivity. This is because, if productivity in industrial sector increases, there will be dynamism in import and export trade, as well as increase in revenue from tariffs.
- 9. There is no doubt that "Cutting of Government Spending" policy will work to reduce pressure on revenue.

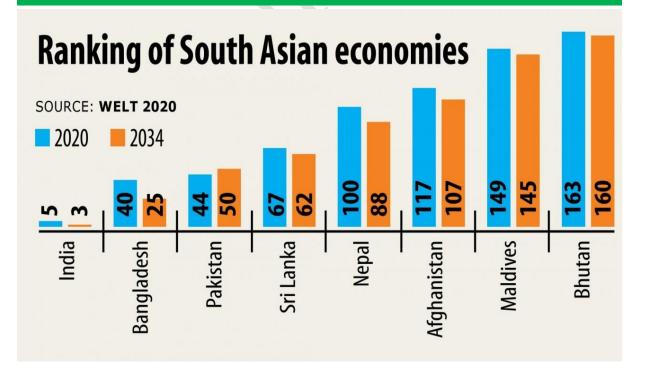
First Edition: August, 2022







Simplification of Tax System.







Simplification of Tax System.

Topics Covered in the Chapter

- A) Simplification of Tax System in the Country.
 - 1. Collection of tax under existing law.
 - 2. Is amount of tax collected consistent with overall economy of the country?
 - 3. Scenario of growth/deficit of Income Tax Collection.
 - 4. Worldwide personal or corporate tax rates.
- B) Evaluation of existing income tax system in the country.
- C) Recommendations on simplification of tax collection system.
 - 1. In case of individual taxpayers.
 - 2. In case of corporate tax







A) Simplification of Tax System in the Country:

One of the features of an improved tax system is that it is simple, understandable to all and consistent with taxpayers' ability to pay, so that there is more pressure on rich and less on poor. It should be rationally progressive in order to reduce wealth inequality between rich and poor class in the society. The more favorable business environment prevails in the country, the more trade and commerce will expand and ability to pay taxes among citizens will increase more. Therefore, prerequisite for increasing government's revenue from people through tax is to take necessary steps for adequate development of business and trade in the country, among those are infrastructure development, uninterrupted supply of electricity, water and gas and development of business environment, so that people's ability to pay taxes increases. Otherwise, reluctance of citizens to pay taxes and tendency of avoiding taxes will never diminish and government targets for revenue collection is always bound to fail. For example, average tax rate in European countries is above 40 percent of GDP, compared to 9.1 percent in Bangladesh. However, no one is reluctant to pay taxes there, because people have ability to pay taxes as prescribed by the government.

Simplification of Tax System in the Country:

Due to complexity of the country's conventional tax law, income tax collection system is also quite complex. As a result, people in this country are usually not interested in paying income tax spontaneously and for those who file regular tax returns, their suffering is also extreme due to complexity and gaps in the tax law. It is well known that government is losing thousands of crores of money in revenue every year due to arbitrariness, bribery, corruption and dishonest tax assessment of a class of officials and employees of the concerned department. Needless to say, Bangladesh's economy is expanding rapidly, trade and commerce are expanding in the country, as a result, purchasing power of people are increasing as well as increasing financial well-being and living standards. For good reason, besides expanding trade and commerce in the country, ability to pay taxes at individual and institutional level will increase and revenue earnings of the country will also increase, but in reality revenue of the government is not increasing in comparison.

Income tax is a globally recognized revenue collection system that has always been in place, is present and will continue to be so. Almost all countries in the world depend on revenue earnings in income tax sector for government expenditures and internal development. Therefore, income tax system of the country should be simple and understandable to the public, so that every citizen of the country understands the conventional tax regulations and becomes accustomed to pay income tax on their own initiative.

In addition, income tax collection system should be such that government does not have to depend on one's will to collect a fair amount of tax in a realistic manner

Figure-5.19 (1): Scenario of NBR and non-NBR revenue during period from F.Y 2009-10 to 2018-19:-







and no one can own black money through tax evasion. Because black money is always a serious threat to the country's economy and is smuggled whenever it gets a chance. If the country's revenue collection system is bureaucratic or incomprehensible, no matter how much the country's economy expands, it is universally acknowledged that the government's revenue will never increase to desired level.

Revenue analysis for the period from F.Y 2009-10 to 2018-19 shows that during this ten-year period, NBR achieved an annual average of 91.99% of the revenue target, an average of 83.65% of the country's total revenue and tax revenue, an average of 27.07% in proportion to total revenue [Figure-5.19 (2)].

Figure-5.19 (2): Scenario of NBR and non-NBR revenue collection during period from F.Y 2009-10 to 2018-19: (Taka in Billion)

Fiscal Year		NI	BR Reve	enue		Non- NBR Revenue	Total Revenue (National	NBR Achieve ment	NBR Revenue as % of Total Revenue	Income tax as % of total Revenue
	Revenue Target	Tax	VAT	Duty	Total					
(1)	(2)	(3)	(4)	(5)	(6=3+4+5)	(7)	(8 =6+7)	(9)	(10)	(11)
2009-10	610.00	174.28	217.62	228.51	620.42	159.12	779.54	101.71	79.59	22.36
2010-11	725.90	234.20	280.24	279.60	794.03	164.71	958.74	109.39	82.82	24.43
2011-12	918.70	291.34	345.73	313.53	950.59	222.79	1,173.38	103.47	81.01	24.83
2012-13	1,122.59	377.10	391.29	323.13	1,091.52	254.84	1,346.36	97.23	81.07	28.01
2013-14	1,360.90	438.49	437.26	332,45	1,208.20	289.11	1,497.31	88.78	80.69	29.29
2014-15	1,497.20	483.54	490.14	383.33	1,357.01	219.97	1,576.98	90.64	86.05	30.66
2015-16	1,763.70	523.47	560.81	451.99	1,536.27	252.92	1,789.19	87.10	85.86	29.26
2016-17	2,031.52	538.12	635.62	542.82	1,716.56	295.74	2,012.30	84.50	85.30	26.74
2017-18	2,481.90	623.40	786.94	612.79	2,023.13	288.40	2,311.53	81.52	87.52	26.97
2018-19	2,962.01	729.10	876.10	633.82	2,238.92	347.12	2,586.04	75.59	86.58	28.19
Average	1,547.44				1,353.67	249.47	1,603.14	91.99	83.65	27.07

Source: NBR Note: NBR Revenue target is based on Original Budget.



Tax collection system in Bangladesh is conducted under the Income Tax Ordinance 1984. Pursuant to Section 75 of this Ordinance, every person shall file or cause to be filed, with the Deputy Commissioner of Taxes, a return of income of the income year-

- a) if his total income during any income year exceeds maximum amount that is not chargeable to tax under this Ordinance; or
- b) if such person was assessed to tax for any one of the three years immediately preceding that income year;

There is no way for the income tax authorities to know whether someone's income has exceeded tax-free limit in any income year, until the person files a tax return. Moreover, how many people in this country have an idea whether one's income has exceeded non-taxable limit in any income year? Even so, then how many people have mentality to disclose it honestly, that is now in question.



Collection tax under existing law

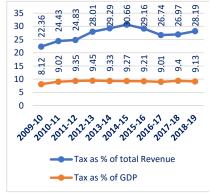
Strategies for Economic Development of Bangladesh



That is why tax authorities have to conduct a survey every year to find new taxpayers through massive arrangements, to organize tax fairs and how much more. But the question is whether adequate tax revenue is being collected even after so many initiatives? It is often said that due to complexity of the conventional tax law, common people are afraid of getting caught in the tax trap, so, many people refrain from paying tax even though they want to.

For example, according to HIES 2016, number of households in the country were 39.33 million, of which 28.36 million live in rural areas and 11.07 million live in urban. According to the estimates of that time, 25.73% (2.85 million) of urban households and 5.32% (1.51 million) of rural households live in pucca / building houses and this number is increasing every year. According to calculation of the same period, average monthly income of the top 5% of households in the country was TK. 45,172 (TK. 32,561 in rural and TK. 56,439 in Urban). Only those who are financially viable live in a pucca / building house in the current context. Judging from that angle, even if only financially sound families living in the city file tax returns, at least 2.85 million returns are expected to be filed in 2016-17 fiscal year, which will increase every year. whereas according to NBR and other sources, in 2016-17, 2017-18, 2018-19 and 2019-20 Only 1.53 million, 1.9 million, 2.1 million and 2.2 million tax returns were filed respectively.

Figure-5.19 (3): Tax revenue in proportion to total revenue collected during period from F.Y 2009-10 to 2018-19 and tax revenue in proportion to GDP: -



Source: NBR

Figure -5.19 (4): Scenario of filing tax return at individual level during period from F.Y 2013-14 to 2019-20



Source: CPD research and other media





Is amount of tax

with overall

country?

economy of the

collected consistent

Strategies for Economic Development of Bangladesh



2) Is amount of tax collected consistent with overall economy of the country?

Over the past decade (2010-2019), country's GDP growth has averaged 6.69%, size of national budget has quadrupled and per capita income which was USD 781.15 in 2010, it stood at USD 1855.74 by 2019. It should be accepted that size and expansion of the country's economy and income and purchasing power of people at individual level are now better than ever before. But has tax revenue increased compared to that?

Tax revenue collection in 2009-10 was TK. 174.28 billion, while in FY 2018-19 it stood at TK. 779.54 billion. At intervals of 10 years, total revenue collection from taxes has increased by TK. 554.82 billion overall, an average increase of TK. 55.48 billion per annum. Whereas, by the end of 2019, number of bank accounts in the country stood at 10,66,000, where by March 2020, amount of accumulated deposit was TK. 12.10.498 crore.

As on December 2019, number of bank accounts with deposits of more than TK. 1.00 crore were 83,839, as of December 2006, number of such account were 8,867, of which:

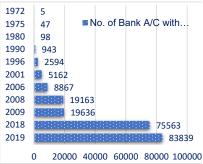
43,595 accounts with more than TK. 1-5 crore. 439 accounts with more than TK. 25-30 crore. 256 accounts with more than TK. 30-35 crore. 175 accounts with more than TK. 35-40 crore. 314 accounts with more than TK. 40-50 crore. 1,042 accounts with more than TK. 50 crore.

During period from 2007 to 2019, number of bank accounts worth crores of taka have increased in the country by an average of 5,767 per annum. As on December 2019, accumulated deposits of 83,839 bank accounts with deposits of over TK. 1.00 crore amounted to TK. 5,26,997 crore, an average of TK. 628,58,216 in each. Amount of total deposits in those accounts with crores of money was 43.54% of total deposits of all bank accounts in the country at that time (Bangladesh Bank).

Tax rate applicable for individual taxpayer in 2018-19 assessment year :-

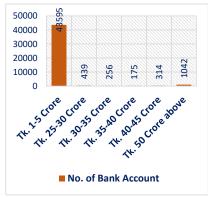
SL	Total Income	Tax Rate
1	On up to TK. 250,000	Nil
2	On next TK. 400,000	10%
3	On next TK. 500,000	15%
4	On next TK. 600,000	20%
5	On next TK. 30,00,000	25%
6	On remaining income	30%

Figure-5.19 (5): Scenario of increasing bank account with more than TK. 1.00 crore since 1972 to December, 2019 in the country:-



Source: Bangladesh bank Report and Daily Star

Figure-5.19 (6): Number of bank accounts which have deposited more than 1 crore by December, 2019:-



Source: Bangladesh Bank









Suppose, out of 83,839 bank accounts with over TK. 1.00 crore deposited, 20,000 are corporate accounts and remaining 63,839 are Individual accounts. As per tax rate shown above, average amount of tax per person stands at TK. 184,17,465 /= against deposited amount of TK. 626,56,217 in each individual account, accordingly:

		TK. in Crore
1	Tax payable against 63,839 Individual accounts (184,17,465 X 63,839)	117,575 crore
2	Against 20,000 corporate accounts -	
	According to various sources, corporate tax was collected in that year	27,375 crore
3	By the end of 2019, number of bank accounts in the country were 10,66,000.	
	Excluding bank accounts with deposited over TK. 1.00 crore, if tax are collected	
	at an average of TK. 50,000 from 30% of the remaining bank account, then tax	
	revenue earnings in that assessment year stands at (982,161 X 30% X 50,000)	1,473 cror
4	Total tax revenue as per above calculation in 2018-19 asstt. year stands	146,423 crore
5	Actual tax collection in 2018-19 asstt. Year were	72,910 cror
6	Less tax collection in 2018-19 asstt. Year were	73,513 cror

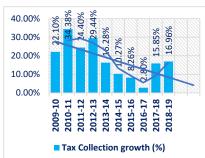
Needless to say, as the country's overall economy is booming, it is natural that number of bank accounts with crore amount of money will continue to increase day by day. However, it is important that tax revenue collected in each financial year should be consistent with consolidated transactions of all bank accounts of the country in that year, as the amount of bank transactions at both individual and institutional levels are related to income, which is the main consideration in determining taxable income.

Note: Above example is presented only to illustrate overall tax collection situation in the country.

3) Scenario of growth/deficit of Income Tax Collection:

Due to various complications in Income tax collection, National Board of Revenue has been able to meet their targets in a very few fiscal years. Average annual growth rate of Income tax collection in the last decade was 18.07%, which was 22.10% in 2009-10, 34.38% in 2010-11, 24.40% in 2011-12, 29.44% in 2012-13, 16.28% in 2013-14, 10.27% in 2014-15, 8.26% in 2015-16, 2.80% in 2016-17, 15.85% in 2017-18 and 16.98% in 2018-19. Although growth rate of Income tax collection fluctuated between 22% and 34% during period from F.Y 2009-10 to 2012-13, , but growth in other years was limited to 8% -16% in that period [Figure-5.19 (7)].

Figure-5.19 (7): Scenario of growth in Income tax revenue collection during period from 2009-10 to 2018-19:-



Source: NBR

Scenario of growth/ deficit of Tax Collection: Due to fear and reluctance among general public to pay tax, despite organizing large scale tax fairs every year and various legal measures throughout the year, no major progress has been made in collection of Income tax. Deficit is still above the target of about 22 per cent per annum and amount of this deficit is gradually increasing. Income tax collection deficit was 9.21% in F.Y 2013-14 compared to target, deficit was13.79% in FY 2014-15, 19.43% in FY 2015-16, 25.20% in FY 2016-17, 26.81% in FY 2017-18, 27.61% in FY 2018-19 and 35.91% in FY 2019-20 [Figure-5.19 (8)].





Figure-5.19 (8): Scenario of deficit in Income tax collection by NBR as compared to target during financial year 2013-14 to 2019-20:-

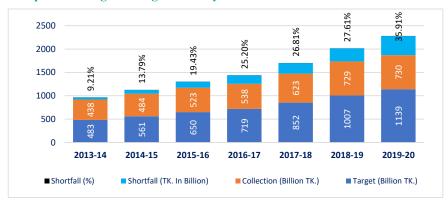


Figure-5.19 (9): Scenario of Income tax collection in proportion to total revenue collected during financial year 2009-10 to 2018-19 and growth of income tax collection during this period:

	Reven	ue		Income Tax	
Fiscal Year	Total Revenue (TK. In Billion)	Yearly Increase %	(TK. In Billion)	As % of total Revenue	Yearly growth %
2009-10	779.54	17.57	174.28	22.36	22.10
2010-11	958.74	22.99	234.2	24.43	34.38
2011-12	1,173.38	22.39	291.34	24.83	24.40
2012-13	1,346.36	14.74	377.1	28.01	29.44
2013-14	1,497.31	11.21	438.49	29.29	16.28
2014-15	1,576.98	5.32	483.54	30.66	10.27
2015-16	1,789.19	13.46	523.47	29.26	8.26
2016-17	2,012.30	12.47	538.12	26.74	2.80
2017-18	2,311.53	14.87	623.40	26.97	15.85
2018-19	2,586.04	11.88	729.10	28.19	16.96

Source: NBR

4) Worldwide personal or corporate tax rates:

According to latest amendment by 2020, individual tax rate in South Asia is 55.95% in Japan and second highest 45% in China. India is next with 42.74%, in South Korea 42%, 35% in Pakistan. Thailand. Philippines and Vietnam, 30% in Indonesia, Malaysia, Bangladesh and 25% Myanmar, 24% in Sri Lanka, 22% in Singapore and 20% in Cambodia [Figure-5.19 (10)].

Corporate tax rate in South Asia is highest in Pakistan at 35% and second highest in Japan at 30.62%. Followed by Philippines and India at 30%, 28% in Sri Lanka, 25% in South Korea, Myanmar, Indonesia and Bangladesh, 24% in Malaysia, 20% in Vietnam, China, Cambodia and Thailand and 17% in Singapore [Figure-5.19 (11)].

Figure-5.19 (10): Rate of personal tax in South Asian countries in 2020: -



Source: KPMG





Worldwide personal or corporate tax rates:

As of 2020, global average corporate tax rate is 21.32% in Asia, 20.27% in Europe, 21.77% in EU member Countries, 28.45% in Africa, 25.85% in North America, 27.23% in South America, 23.75% in Oceania, 23.59% in OECD countries and world average is 24.18%. Regionally, average tax rate for individuals at that time was 28.67% in Asia, 31.30% in Europe, 37.41% in EU member states, 31.77% in Africa, 35% in North America, 32.32% in South America, 33.40% in Oceania, 41.22% in OECD member countries and 31.16% average in the world [Figure-5.19 (12)]. In other words, Bangladesh is in the middle position in South Asia in terms of both individual and corporate tax rate.

Figure-5.19 (11): Corporate tax rate of South Asian countries in 2020: -



Source: KPMG

Figure-5.19 (12): According to data of 2020, average corporate and individual tax rate in the world regionally: -

Region	Avg. Corporate Tax Rate (%)	Avg. Individ Tax Rate (%
Asia	21.32	28.67
Europa	20.27	31.30
EU Region	21.77	37.41
Africa	28.45	31.77
North America	25.85	35.00
South America	27.23	32.35
Oceania	23.75	33.40
OECD	23.59	41.22
World Average	24.18	31.16

TAX Section 1

First Edition: August, 2022

Source: KPMG

B) Evaluation of existing income tax system in the country:

In the practical analysis of existing income tax system, it is clear that income tax collection and annual growth in this case is not commensurate with the country's population, per capita income and government expenditure, resulting, deficit budget has been established as one of the features of national budget in this country. Due to complexity of the existing income tax law, incomprehensibility and delay in resolving tax related issues, there is always working a fear among general public about income tax, so, tendency of people to pay income tax spontaneously less in this country. Such fears among people about payment of income tax indicate that it will have a huge adverse effect on the future growth of tax revenue, which may appear as one of the obstacles to meet the country's growing government operating costs and development activities in future.

Major weak points of the existing income tax collection system are :-



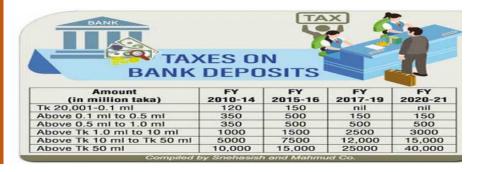
Evaluation of existing income tax system in the country:

Strategies for Economic Development of Bangladesh



- 1. It is difficult to gauge extent to which income tax rates and tax-exempted incomes are consistent with the country's overall economic situation and how effective it is in reducing wealth inequality between rich and poor.
- Income and assets shown in tax return are very much based on estimates and although there is a rule to show all bank accounts of an assessee in the return, in reality it is rarely done, so it does not reflect actual income and assets of an assessee.
- 3. It is difficult to identify a taxpayer who is eligible to pay tax under the tax law until and unless an individual or organization voluntarily files an income tax return, and it is up to an individual to decide whether or not to file an annual income tax return. As a result, number of taxpayers in the country and amount of tax revenue collected is not increasing at desired level.
- 4. There are enough scope of tax evasion or avoiding tax paying in collusion with tax authorities due to gaps in the tax law and cleverness of tax payers. As a result, government targets for collection of tax revenue have been always failed and deficit in tax collection has steadily increased in recent years based on targets of the Board of Revenue.
- 5. Countless citizens avoid paying taxes despite their will and ability due to complications and delays in tax payment process, harassment by the collecting authorities, bribery in tax office, corruption and sufferings.
- 6. Due to complexity of tax payment process, in most cases it is not possible to pay taxes without help of a tax lawyer, which is an additional cost and hassle for ordinary taxpayers.
- 7. Although it is mandatory for a company / organization to submit an audit report with tax return, it does not have a scope to verify whether audit report reflects actual financial condition of the organization. As a result, even most profitable companies are passing through tax assessment process as a losing concern.
- 8. Many factors related to income and expenditure of individuals and organizations in the tax assessment process depend on satisfaction or discretion of the assessing authority. For example, in case of individuals, family expenses and other income can be increased / decreased at discretion of the authority and in case of an organization, arbitrary deduction of claimed administrative and other expenses on the basis of audit report etc. If audit report is dependent then cost claimed in the return is actual cost, on the other hand, if audit report is not fully acceptable to law, then what is the basis of this audit report?

Therefore, in order to increase revenue of the country in future, it is necessary to ensure adequate revenue collection by identifying income tax as the main revenue of the country by making tax collection system simple and easy to understand for all.







C) Recommendations on simplification of tax collection system:



Existing Income-tax law provides for filing of tax returns for individual taxpayer in an Universal /Self Assessment/Normal manner in the specified circle with details of income, expenditure and assets of the respective income year and audit report in case of companies or institutions. In context of this country, it is possible for very few taxpayers to properly prepare and submit their own tax returns by overcoming obscure rules and regulations of the existing Tax law. Majority of taxpayers have to prepare and submit income tax returns through consultants, so that there are additional costs involved.

Due to gaps and weaknesses in the tax law, in most cases, there are enough examples of furnishing fictitious information instead of actual information about the taxpayer's income, expenditure and assets in most of submitted returns. As a result, on the one hand, actual financial condition of the taxpayer is not reflected before the Tax authority, on the other hand, tax levied on the basis of those returns submitted with fictitious information is not the actual revenue receivable by the government. In this system, government is deprived of a large amount of actual revenue every year, as well as actual income and assets are not reflected in the taxpayer's record due to furnishing of fictitious information in the returns. Taking advantage of existing loopholes and weaknesses in the tax law, a class of unscrupulous people are able to build a mountain of illicit wealth and black money without paying fair tax by hiding their real income and assets from tax authorities and government with the opportunity to white black money in the budget every year with legitimacy of thousands of crores of money earned in dishonest ways. Which not only disrupts normal flow of economy inside the country, but also increases inflation in the country as well as increasing money laundering abroad.

Recommendations on simplification of tax collection system:

According to the rules of existing Tax law, bank account of taxpayer submitted with return is considered as the main document in determining income of all categories taxpayers. But, there are many individuals or organizations who have more than one (in many cases 3/4/5/6 or more) bank accounts, which never come to notice of the tax authorities. While in some cases at tax assessment stage examines the source of money deposited at bank submitted with return and verify whether it is consistent with real income of the taxpayer, in most cases, acceptance of taxpayer's claimed expenditures depends on discretion of the tax authority. As a result, if there is no





proper negotiation with the tax authority at tax assessment stage, increase or decrease of actual income of taxpayer is a casual and common occurrence in this country which later led to appeal, tribunal and even high court. It is unrealistic to expect that someone will come to pay taxes voluntarily after overcoming so much sufferings.

However, if tax collection process can be introduced in the country in a simple manner as per understanding of general public with provision of filing income tax returns only where necessary instead of compulsory filing of income tax returns for all, a system of tax deduction at a rate determined by NBR from money deposited in the running bank accounts with all banks of the country could be introduced, by which on the one hand, fear of income tax among common people would be removed, on the other hand, government would be able to collect a fair amount of revenue every year certainly. This will require stricter restrictions on cash transactions in excess of a certain amount.

By maintaining existing income tax law, it is possible to collect income tax in a way that is accessible to all and easy for everyone through a few minor changes in the existing law. For example, if total income of a person in any income year exceeds non-taxable limit specified for that year, he is obliged to file a tax return, no one seems to have ever objected to this, only disagreement being in terms of suffering and long formulation.

According to existing Income Tax law, it is mandatory for the taxpayer to file bank statements along with tax return. This is because bank statement is considered as one of the basic documents at tax assessment stage to verify the veracity of income shown in tax return with money deposited in the taxpayer's bank account in the relevant financial year. It is proven that regardless of whether the taxpayer is an individual or an organization, except for financial cash transactions of the relevant income year, all remaining transactions are possible only through bank. Only things to be seen whether all bank accounts transacted by the taxpayer have been brought to notice of the tax authority.

If maximum limit of each cash transaction regardless of category of taxpayer either Individuals or organizations across the country in every case is fixed at TK. 10,000/=, all income and transactions of taxpayers in the relevant financial year are bound to be reflected in the bank statements. If provision is made to deduct advance tax at a fixed rate after exceeding non-taxable limit on deposited amount in all types of bank accounts (savings and current) running in each bank through instructions of the Central Bank, there is no doubt that tax collection system will be much easier and hassle free and amount of tax collection will increase at a significant rate. In case of advance tax deduction, it is necessary to divide volume of transaction into several levels instead of deducting AIT at a flat rate on total transaction, provision should be made for AIT deduction at lower rates for lower volume and higher rates for higher volume of transactions, so that AIT deducted by banks remain consistent with tax rate applicable for individuals and organizations in the relevant assessment year.

At the end of the year, concerned banks will issue certificates in favor of money deducted from each bank account. If tax deducted from various sources (bank and other sources) of any assessee in the relevant income year seems to be more than amount of fair tax collectively, he will file tax return for that year and claim refund / adjustment of excess deducted amount, otherwise there is no need to file tax return





by any assessee. In this case, tax authority should refund or adjust additional deducted amount to the assessee within maximum of two months. Moreover, in this case, some additional coordination may be required with the Central Bank in case of tax collection related activities of the Board of Revenue.

With the following amendments in the existing Income Tax Law, there is an opportunity to significantly increase the amount of tax collection by making tax collection system easier and more accessible:-

A) In case of individual taxpayers:

- 1) In addition to continuing provision of deducting advance tax at various sources under existing law, introduce provision of tax deduction on deposited amount in savings accounts held in each bank at a rate applicable for the relevant income year after exceeding non-taxable limit applicable for the corresponding assessment year. In this case, instead of deducting tax at flat rate on total transactions, it is necessary to divide volume of transactions into several levels and make provision for tax deduction at different rates, so that tax deducted by banks remain consistent with actual tax payable by the assessee. At the end of the year, every bank and other institution will issue certificate in support of deducted amount in favor of the assessee under existing rules. Note that surcharges and other charges on deposits under existing rules will remain excluded of this deduction.
- 2) Not making it mandatory for everyone to file an annual income tax return, only if tax deducted from bank and other sources of any assessee in the relevant income year more than tax applicable for him for that year or if any other mistake or irrationalities occur, In that case, if an assessee wishes, will seek refund / adjustment of excess deducted amount by filing tax return in the relevant circle under existing rules at the end of year. Tax authority will refund or adjust additional deducted tax within 60 days after determining final tax by verifying information shown in the return. If any taxpayer is not satisfied with assessment at this stage, he will submit appeal before Appellate Joint Commissioner of Taxes under existing rules.
- 3) Bank accounts in the name of expatriates and remittances sent by them will remain tax free as per existing rules.

B) In case of corporate tax:

- 1) Banks will deduct tax at a rate prescribed by the NBR on the money deposited by each institution in their current accounts, which will remain consistent with actual tax payable by the institution on the basis of corporate tax rate applicable for that year and issue certificates in support of deducted amount at the end of the year.
- 2) Companies will file regular tax returns along with audit reports under existing tax law, if consolidated amount of tax deducted by banks and other authorities in the relevant assessment year exceeds actual amount of tax payable by that institution, claim a refund or adjustment and if less, balance amount to be paid with tax return. Tax authority will solve this issue within six months.







C) To impose restrictions on maximum limit of cash transaction of TK. 10,000 / = (ten thousand) on both Individuals / institutions in the whole country and to impose obligation to complete all transactions by check.

As a result of above changes in the existing tax law, Government and people will be benefited as follows: -

- Actual amount of tax will be collected from taxable income of all individuals and organizations of the country as per rules. There is no need to conduct a survey to find new taxpayers every year.
- Suffering and harassment of taxpayers due to complexity, procrastination and loopholes in the Income Tax Law will be stopped, transparency in tax collection will come, people's fear about income tax will be removed and government will be able to collect actual revenue from people.
- Since tax will be deducted from money deposited in each bank account at rate applicable for that assessment year after exceeding non-taxable limit for the respective year, chances of black money generation in the country will become limited.
- In many cases sale and purchase of property is registered at a price lower than actual price, resulting of which government is deprived of due revenue
 By recalling this method, as all transactions will be done through bank, actual revenue will definitely be collected on the money transacted in such
- In addition to reducing hassle of tax collection, NBR tax collection cost will be greatly reduced.

First Edition: August, 2022



Chapter: 5.20

Increase Savings, Investments and Reserve.







Increase Savings, Investments and Reserve.

Topics Covered in the Chapter

- A) Increasing savings and investment.
- B) Importance of domestic savings in Economic development.
- C) Bangladesh's position in S. Asia in Domestic Savings.
- D) Domestic Capital Formation.
- E) Domestic Investments.
- F) Foreign exchange reserves.
 - 1. i) Definition of Foreign Exchange Reserve.
 - ii) Reserve Management and Why is it Important?
 - iii) Objective of Foreign Exchange Reserve Management.
 - iv) Optimal Level of Foreign Exchange Reserves.
 - 2. Foreign exchange reserve situation in Bangladesh.
 - 3. Overseas employment and remittance flow.
 - 4. Why increasing foreign exchange reserves in Bangladesh is so important.
 - 5. Bangladesh's position in South Asia in terms of foreign exchange reserves.
- G) Balance of Payments.
- H) Recommendations on increasing savings and investments.







A) Increasing savings and investment:



Increasing savings and investment:

National savings of a country means the sum of savings in private and public sector of that country. This is equal to income less consumption and government expenditures of any country. Increasing national savings means increasing capital mobility at individual and government levels, which means increasing investment, which directly contributes to the growth of employment, per capita income and livelihood of people and accelerates achievement of GDP growth in the country. Savings and investment are the basic requirements for economic growth and development in any nation. Savings and investment have been considered as two macro-economic variables for achieving price stability and promoting employment opportunities thereby contributing to sustainable economic growth (Shimelis, 2014). Therefore, in order to increase capital at individual and collective level and ensure sustainable development in the country, it is essential to increase national savings at a significant rate in proportion to GDP in order to increase investment.

National savings, which consist mainly of family sector, private corporate sector, public sector and foreign investment. Satisfactory national savings and investment of a country is the manifestation of economic stability of that country. Domestic public and private investment depends on national savings, which is directly linked to the country's economic growth. That means, savings, investment and growth are tied to the same formula. Process of economic development therefore depends on adequate savings and level of investment in the manufacturing sector. Reliable estimates of savings and investments of a country is crucial to measuring the growth of that country. In addition to stability of macro-economy, inflation, government investment, exchange rate, income and assets, etc. play an important role in determining savings and investment.

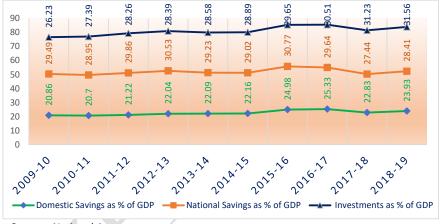
In order to accelerate economic progress of a developing country like Bangladesh, it is important to increase national savings and investment in the manufacturing sector at a high rate, which will play an important role in increasing domestic production. To increase national savings, it is necessary to increase domestic savings and investment. Among factors on which growth of internal savings in private sector depends - adequate employment opportunities, high per capita income, education, social and business environment are notable among them, of which Bangladesh has limitations in almost all areas. It is fact that domestic investment in the country will remain stagnant until there is a substantial increase in domestic savings in private and public sectors.





Analysis of savings and investments for the period from F.Y 2009-10 to 2018-19 shows that during these ten years, ratio of domestic savings to GDP fluctuated between 20%-24%, national savings 27%-30% and investment 26%-31%. In FY 2009-10, internal savings in the country was 20.86% of GDP and national savings was 29.49%, in FY 2018-19, which stood at 23.93% and 28.41% of GDP respectively. On the other hand, investment in GDP ratio was 26.23% in FY 2009-10, which stood at 28.41% in FY 2018-19. Domestic investment growth averaged 15.81% during this period. During these ten years period, neither savings nor investment have increased to desired level.

Figure-5.20 (1): Scenario of Domestic and National Savings in proportion to GDP and investment during financial year 2009-10 to 2018-19: -



Source: National Accounts

B) Importance of domestic savings in Economic development:

Savings is a process by which an economy saves a portion of its income from production process, which it uses to increase future income. Savings play a fundamental role in structural reform of the country's socio-economic development, which is essential for building a sustainable economy. Hong Kong and some other countries including South Korea, Taiwan and Singapore have proven that despite low per capita GDP growth, domestic savings is possible and effective in sustainable development. In these countries, on average, about 30% of GDP is kept in internal savings, which has ensured sustainable economy in those countries.

In developing countries like Bangladesh, there is no substitute for higher domestic savings and investment to ensure a sustainable economy by achieving rapid growth, as saving tendencies increase investment and productivity and keep consumption at optimum level, which directly contributes to GDP growth. Factors that are important to increase internal savings and investment in Bangladesh, includes: -

- 1. Increases productivity in the country due to money saved is invested in productive sector, which directly contributes to GDP growth.
- 2. As a result of savings trend, level of consumption in the country remain at right level.

First Edition: August, 2022

Importance of internal savings in sustainable Economic development:





- Due to savings, overall capital increase in the country, which creates strong foundation in the country's economy.
- 4. This increase sustainable trend in the country's overall economy, which is a symbol of the country's economic stability.
- 5. Saved money is useful in times of economic hardship and when there is a financial deficit in development activities.

In the last decade (from F.Y 2009-10 to 2018-19), it is observed by analyzing investment and savings to GDP ratio, during intervals of these ten years, size of the country's GDP has increased several times, but savings and Investment has not increased compared to that.

Figure-5.20 (2): Scenario of consumption, savings and investment in the country during financial year 2009-10 to 2018-19: -

(TK. In Billion)

										in Dimon,
Items		Financial Year								
	2009-10	2010- 11	2011- 12	2012-13	2013-14	2014- 15	2015- 16	2016-17	2017-18	2018-19
1) GDP (TK. In Billion)	7,975	9,158	10,552	11,989	13,437	15,158	17,329	19,758	22,505	25,362
Consumption : i. Public ii. Private	405 5,911	467 6,803	532 7,781	614 8,734	717 9,751	819 10,980	1,021 11,979	1,185 13,569	1,431 15,935	1,598 17,696
2) Total Consumption	6,316	7,270	8,313	9,348	10,468	11,799	13,000	14,754	17,366	19,294
3) Yearly Growth (%)	12.44	15.10	14.35	12.45	11.98	12.71	10.18	13.49	17.70	11.10
4)Consumption (% of GDP)		79.30	78.78	77.96	77.91	77.84	75.02	74.67	77.17	76.07
Investment : i. Public ii. Private	373 1,721	482 2,030	608 2,374	796 2,607	880 2,960	1,034 3,345	1,155 3,983	1,465 4,564	1,794 5,235	2,071 5,934
5) Total Investment	2,094	2,512	2,982	3,403	3,840	4,379	5,138	6,029	7,029	8,005
6) Yearly Growth (%)	13.31	19.96	18.71	14.12	12.84	14.04	17.33	17.34	16.59	13.89
7) Investment (% of GDP)	26.23	27.39	28.26	28.39	28.58	28.89	29.65	30.51	31.23	31.56
8) Domestic savings (% of GDP)	20.86	20.70	21.22	22.04	22.09	22.16	24.98	25.33	22.83	23.93
9) National Savings (% of GDP)	29.49	28.95	29.86	30.53	29.23	29.02	30.77	29.64	27.44	28.41

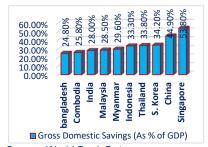
Source: BD Economic Review

C) Bangladesh's position in S. Asia in Domestic Savings:

Bangladesh's position in South Asia in internal savings:

Bangladesh lags behind other developing countries in South Asia in terms of domestic savings in proportion to GDP. According to World Bank Report 2019, rate of domestic savings in proportion to GDP was 24.8% in Bangladesh, which was 25.8% in Cambodia, 28% in India, 28.5% in Malaysia, 29.6% in Myanmar, 33.3% in Indonesia, 33.8% in Thailand, 34.2% in South Korea, 44.9% in China and 53.8% in Singapore. During this period, rate of internal savings was 34% in average in the Asia-Pacific region [Figure-5.20(3)].

Figure-5.20 (3): Scenario of domestic savings in proportion to GDP in Bangladesh and a few other countries in South Asia in 2019: -



Source: World Bank Data





D) Domestic Capital Formation:

Domestic capital refers to increase in financial resources at individual and government levels over a period of time. It is very important for a country to increase its domestic capital in order to increase productivity, because only through increasing productivity can employment, per capita income, improvement of living standards and overall economic development be possible. Domestic capital formation depends on the flow of domestic savings and investment.

Domestic Capital Formation:

During financial year from 2010-11 to 2018-19, domestic gross capital formation in Bangladesh as percentage of GDP fluctuated between 27% and 31%, which is estimated to be TK. 8,005,334 million in F.Y 2018-19, according to GDP which is 31.56% (public 8.17% and private 23.40%).

Figure-5.20 (4): Scenario of Domestic Gross Capital formation in Bangladesh during financial year 2010-11 to 2018-19:-

Financial	Publ	lic	Priva	ite	Total			
Year	TK. In Million	% of GDP	TK. In Million	% of GDP	TK. In Million	% o		
2010-11	481,504	5.26	2,029,788	22.16	2,511,292	27		
2011-12	608,020	5.76	2,374,233	22.50	2,982,253	28		
2012-13	796,211	6.64	2,607,486	21.75	3,403,697	28		
2013-14	879,912	6.55	2,960,024	22.03	3,839,936	28		
2014-15	1,033,929	6.82	3,344,722	22.07	4,378,651	28		
2015-16	1,154,916	6.66	3,983,470	22.99	5,138,386	29		
2016-17	1,464,719	7.41	4,563,583	23.10	6,028,302	30		
2017-18	1,794,172	7.97	5,235,183	23.26	7,029,355	31		
2018-19(p)	2,071,192	8.17	5,934,143	23.40	8,005,334	31		

Source: National Accounts

E) Domestic Investments:



Bangladesh has already obtained UN recognition for fulfilling maximum conditions to become a middle-income country, which is expected to be effected in 2024. The goal is now to achieve SDG 2030 target to reach the list of high-income countries by 2041, which includes increasing employment by increasing domestic and foreign





Domestic investments:

investment in industrial and infrastructure development and achieving a certain level of GDP growth. With this goal in mind, government has already formulated the 8th Five Year Plan (2021-2025), in which GDP growth in the 2024-25 fiscal year has been set at 8.5%.

To achieve set target of GDP growth, increasing employment and per capita income and improving living standards in the country by increasing adequate investment in industrial and infrastructure development is essential. For achieving 8.5% GDP growth target in F.Y 2024-25 requires investment in GDP ratio of 36.99%, which is 31.75% in FY 2019-20. In the 8th Five Year Plan, investment target for FY 2024-25 has been set at TK. 64.96 trillion (81% in private sector and 19% in public sector), which in FY 2019-20 was 74.42% in private sector and 25.58% in public sector. By 2025, government has planned to meet investment target by increasing investment in private sector to 27.35% (which was 23.63% in 2019-20 fiscal year).

Domestic investment analysis shows that average growth rate of domestic investment during period from F.Y 2011-12 to 2019-20 has been 15.09% and private sector investment has been hovering between 22% -23% of GDP for more than a decade. Private sector investment in the country has been stagnant for a long time due to insufficient savings growth in private sector. Among other reasons for stagnation of investment in private sector are:

- 1. Poverty and financial insolvency.
- 2. Employment crisis.
- 3. Capital constraints at individual level.
- 4. Land restrictions.
- 5. Inadequacy of electricity, gas and water connection.
- 6. Not imposing corporate tax in terms of reality.
- 7. Lack of conducive business environment.
- 8. Limited opportunities for long-term financing.
- 9. Lack of investment knowledge and skills at individual level.
- 10. Underdeveloped investment environment.

Therefore, it is not enough just to set investment targets, but to implement them properly is a big challenge.

Figure-5.20(5): Scenario of Domestic Investment (Billion Taka) and Investment to GDP Ratio during FY 2011-12 to 2019-20:-

	Investment	As % of tota	al Investment	As % of GDP				
Financial Year	TK. In Billion	Private %	Public %	Total %	Private %	Public %		
2011-12	2,982	79.61	20.39	28.26	22.50	5.76		
2012-13	3,403	76.61	23.39	28.39	21.75	6.64		
2013-14	3,840	77.09	22.91	28.58	22.03	6.55		
2014-15	4,379	76.39	23.61	28.89	22.07	6.82		
2015-16	5,138	77.39	22.61	29.65	22.99	6.66		
2016-17	6,029	75.70	24.30	30.51	23.10	7.41		
2017-18	7,029	74.48	25.52	31.23	23.26	7.97		
2018-19	8,005	74.57	25.43	31.57	23.54	8.03		
2019-20(P)	8,879	74.42	25.58	31.75	23.63	8.12		

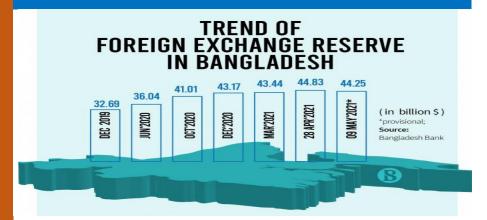
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Source: National Accounts and BD Economic Review.





F) Foreign exchange reserves:



1. Foreign Exchange Reserve:

i) Definition of Foreign Exchange Reserve:

Foreign exchange reserves are external resources that are available and controlled by monetary authorities for direct financing of external imbalances, balance of payments, for indirectly regulating the magnitude of such irregularities through intervention in the currency market with the aim of acting on the exchange rate, and for other purposes (IMF 2013).

ii) Reserve Management and Why is it Important?

Reserve management is a process that ensures that adequate official public sector foreign assets are readily available to and controlled by the authorities for meeting a defined range of objectives for a country or union. In this context, a reserve management entity is normally made responsible for the management of reserves and associated risks. Typically, official foreign exchange reserves are held in support of a range of objectives including to:

- support and maintain confidence in the policies for monetary and exchange rate management including the capacity to intervene in support of the national or union currency;
- limit external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis or when access to borrowing is curtailed and in doing so;
- provide a level of confidence to markets that a country can meet its external obligations;
- demonstrate the backing of domestic currency by external assets;
- assist the government in meeting its foreign exchange needs and external debt obligations; and

First Edition: August, 2022

• maintain a reserve for national disasters or emergencies.

Foreign exchange reserves:





iii) Objective of Foreign Exchange Reserve Management:

Reserve management should seek to ensure that: (i) adequate foreign exchange reserves are available for meeting a defined range of objectives; (ii) liquidity, market, and credit risks are controlled in a prudent manner; and (iii) subject to liquidity and other risk constraints, reasonable earnings are generated over the medium to long term on the funds invested. (Source: IMF)

iv) Optimal Level of Foreign Exchange Reserves:

As the matter is controversial, clear cut definition on this issue is difficult. However, the first attempt at determining or calculating the optimal foreign exchange reserves, is found in Heller's (1966). Heller's research and evaluation of the optimal size of foreign exchange reserves is devised on the precautionary motives. In his view, the determination of the optimal level of foreign exchange reserves is particularly important following three parameter settings:

- Costs of adjustment to external imbalances (measured as the propensity to import),
- The cost of holding liquid foreign exchange reserves (measured as the yield spread between the yield on the foreign exchange reserves that are consistent with the adopted reference portfolio and the yield on domestic bonds); and
- The likelihood that there will be a need for foreign exchange reserves of a certain size or value (which is based on historical data or past external imbalances).

These rules imply that foreign exchange reserves held at a level that are equivalent to :-

- Quarterly imports (as counter shocks on the current account)
- From 5% to 20% of the monetary aggregate M29 (in order to maintain confidence in the local currency in the case of developing currency crisis);
 and
- The value of all debt obligations falling due in the next twelve months (in case of sudden interruption or suspension of short-term capital inflows).

Alternatively, the accumulation of foreign reserves can be a "byproduct" of the Government, or a strategy that is focused on maintaining undervalued national currency with the aim of encouraging exports. In this case, the foreign exchange reserves are not motivated by the need to harmonize consumption and prevent external shocks, but they are more a result of activities of sterilization of the foreign exchange market (Heller 1966). (Source: Researchgate)

2) Foreign exchange reserve situation in Bangladesh:

There are three main sources of foreign exchange earnings for Bangladesh, namely:

- 1. Remittances sent by the workers working abroad.
- 2. Export Earnings.; and
- 3. Foreign loans and grants.

Until 2008-9 financial year, country's foreign exchange reserve was limited to single digits. Export earnings and remittances sent by workers abroad have been steadily





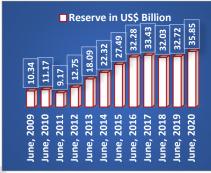
Foreign exchange reserve situation in the country:

increasing since FY 2008-9, beside foreign exchange reserves have been increasing in the country. At the end of F.Y 2008-9, reserves amounted to USD 10.34 billion, which stood at USD 35.85 billion at the end of F.Y 2019-20.

During six years from FY 2008-9 to 2013-14, reserves increased by an average of USD 1.997 billion per annum and during next six years from FY 2014-15 to 2019-20, reserves have increased by an average of USD 2.225 billion annually.

If current trend of foreign exchange reserves in the country continues, reserve inequality of Bangladesh with other developing countries in Asia is expected to be eliminated in the near future, but the only way to do that is to increase exports and foreign employment.

Figure-5.20 (6): Scenario of progress in foreign exchange reserves in Bangladesh during period of F.Y 2008-9 to 2019-20:

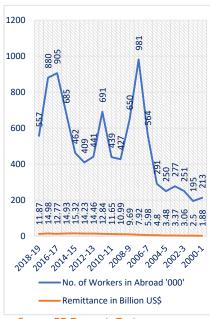


Source: Indexmodi and Bangladesh Bank

3) Overseas employment and remittance flow:

In recent years, both number of Bangladeshi workers working abroad and remittances sent by them have increased, which is having a positive impact on the country's foreign exchange reserves. An analysis of data over the past two decades shows that during fiscal years 2000-1 to 2005-6, average number of workers working abroad were 246,000 and their remittances averaged USD 3.18 billion a year. During fiscal years 2006-07 to 2009-10, average number of workers working were 655,500 and remittances averaged USD 8.64 billion a year. During fiscal years from 2010-11 to 2017-18, average number of workers working abroad were 614,000 and their remittances averaged USD 13.90 billion a year and in the financial year 2018-19 (up to March) number of workers working abroad were 557,000 and remittances were USD 11.87 billion. Information on the number of workers working abroad and remittances sent by them for the period from F.Y 2000-01 to 2018-19 is furnished through [Figure-5.20 (7)].

Figure-5.20 (7): Scenario of workers working abroad and remittances sent by them during F.Y 2000-1 to 2018-19:



Source: BD Economic Review

First Edition: August, 2022

Overseas employment and remittance flow:





Why increasing foreign exchange reserves in Bangladesh is so important?

Bangladesh's position in South Asia in terms of foreign exchange reserves:

4) Why increasing foreign exchange reserves in Bangladesh is so important?

Since it is now almost certain that Bangladesh will reach middle income countries by 2024 and is moving towards the goal of reaching high income countries by 2041, Bangladesh's position in terms of economic security should be consistent with that level of countries, one of the criteria of which is foreign exchange reserves. After reaching middle-income country in 2024, benefits of a low-income country will no longer be applied to Bangladesh, which will then be greatly limited in case of foreign investment, loans and grants from donor agencies and duty-free access to trade and commerce in different countries. To continue development activities in the country at that time, it is natural that there will be additional pressure on the foreign exchange reserves.

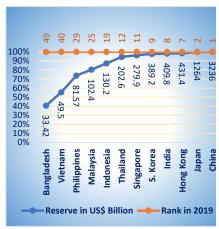
Although country's foreign exchange reserves have steadily increased in recent years due to increase in export earnings and remittances sent by workers working abroad, Bangladesh's reserves are still lowest of all developing countries in South Asia. As of 2019, reserves in Vietnam is 1.46 times that of Bangladesh, which is 2.44 times in Philippines, 3.06 times in Malaysia, 3.90 times in Indonesia, 6.06 times in Thailand, 8.38 times in Singapore, 11.65 times in South Korea, 12.26 times in India, 12.91 times in Hong Kong, 37.82 times in Japan and 96.83 times in China [Figure-5.20(7)]. Therefore, in order to deal with unexpected economic situation in future and to further accelerate development activities in the country, foreign exchange reserves should be substantially increased in line with other developing countries, which will enable to notify presence of prosperous economy of Bangladesh in the world.

5) Bangladesh's position in South Asia in terms of foreign exchange reserves :

In terms of foreign exchange reserves, Bangladesh is lagging behind almost all countries in South Asia except one or two. In January 2019, Bangladesh was ranked 49th out of 193 countries in the Global Foreign Exchange Reserve Rankings, followed by Vietnam at 40, Philippines at 29, Malaysia at 25, Indonesia at 19, Thailand at 12, Singapore at 11, South Korea at 9th, India at 8th, Hong Kong 7th, Japan 2nd and China was in 1st position.

At that time, Bangladesh's reserves were USD 33.42 billion, followed by Vietnam at 49.50 billion, Philippines at 81.57 billion, Malaysia at 102.40 billion, Indonesia at 130.20 billion, Thailand at 202.60 billion, Singapore at 279.90 billion, South Korea 389.20 billion, India 409.80 billion, Hong Kong 431.40 billion, Japan 1,264 billion and China 3,236 billion [Figure-5.20(8)].

Figure-5.20 (8): Global ranking position of Bangladesh and other developing countries of South Asia on the basis of foreign exchange reserves during January 2019: -



Source: Indexmodi Note: Higher Rank indicates lower position

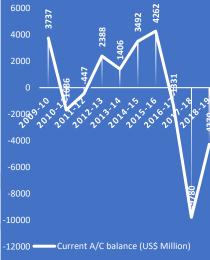




G) Balance of Payments:

Just as a country's current account surplus reflects a country's strong economy, accordingly a negative current account balance reflects a country's unfavorable trade balance and limited foreign exchange earnings. Analysis of the country's current account turnover over the past decade shows that despite a current account surplus of USD 3,737 million in 2009-10 financial year, current account deficit in F.Y 2010-11 and 2011-12 was USD 1,686 million and USD 447 million respectively. Then for four consecutive years (FY 2012-13 to 2015-16) current account surplus was USD 2,388 million, USD1,406 million, USD 3,492 million and USD 4,262 million respectively. Then there is again current deficit balance from FY 2016-17, such as deficit of USD 1,331 million in FY 2016-17, USD 9,780 million deficit in F.Y 2017-18 and USD 4,270 million deficit in FY 2018-19 (till February 2019) Figure-5.20 (9).

Figure-5.20 (9): Current account balances of the country for the period from FY 2009-10 to 2018-19:-



Source: BD Economic Review

First Edition: August, 2022

Payments:

Balance of

Figure-5.20 (10): Scenario of Balance of Payments for the period from FY 2009-10 to 2018-19:-

				Fir	Financial Years				(In Million US\$)			
Particulars	2009-10	2010-11	2011- 12	2012-13	2013- 14	2014- 15	2015- 16	2016- 17	2017-18	2018- 19*		
1) Trade balance	- 5,152	-9,935	-9,320	-7,009	-6,794	-6,965	-6,460	-9,472	-18,258	-10,695		
2) Services (net)	-1,240	-2,612	-3,001	-3,162	-4,099	-3,186	-2,708	-3,288	-4,574	-2,370		
3) Primary Income	-1,484	-1,454	-1,549	-2,369	-2,635	-2,252	-1,915	-1,870	-2,392	-1,922		
Current Transfer: a) Workers Remittance b) Other Transfer	10,987 626	11,513 802	12,735 688	14,338 590	14,116 818	15,170 725	14,717 628	12,769 530	14,982 462	10,410 307		
4) Current Transfer	11,613	12,315	13,423	14,928	14,934	15,895	15,345	13,299	15,444	10,717		
5) Current A/C Balance	3,737	-1,686	-447	2,388	1,406	3,492	4,262	-1,331	-9,780	-4,270		
6) Capital Transfer	488	642	482	629	598	496	464	400	292	156		
Financial A/C: a) FDI (Net) b) Others (net)	913 -1,551	775 -124	1,191 245	1,726 1,137	1,432 1,381	3,697 -2,430	3,787 -2,843	4,691 -444	4,381 4,695	3,847 -124		
7) Financial A/C:	- 638	651	1,436	2,863	2,813	1,267	944	4,247	9,076	3,723		
8) Errors and Omission	-722	-263	-977	-752	666	-882	-634	-147	-473	-108		
9) Overall balance	2,865	-656	494	5,128	5,483	4373	5,036	3,169	-885	-499		

Source: BD Economic review and Bangladesh bank Data

*Up to February, 2019

BALANCE OF PAYMENTS IS THE FINANCIAL MEASURES OF A COUNTRY.





H) Recommendations on increasing savings and investments:



Savings increase domestic investment by increasing capital and economic capacity at individual and collective level, which plays a direct role in creating employment, productivity, per capita income and people's living standards and accelerates overall economic development in the country. Developed and developing countries of the world have been deeply following this policy of increasing domestic investment by ensuring high national savings in proportion to GDP and have been able to ensure sustainable dynamism of the economy. In developing countries like Bangladesh, where high unemployment rates, low per capita incomes, high living costs and social and economic uncertainty are rampant, savings at individual level are relatively difficult there, which is one of the major obstacles to increasing domestic investment in the country. If it is not possible to increase domestic investment at a significant rate by increasing savings at individual and collective level in future, it is certain that Bangladesh will have to face enough momentum to meet the situation after becoming a middle-income country in 2024 and to achieve the target of 2041. Although government has set target of 8.5% GDP growth in FY 2024-25 in the 8th Five Year Plan to meet the future situation, to achieve that target, investment requires in GDP ratio of 36.99% in FY 2024-25, which was 31.75% in FY 2019-20. Government has set plan to meet investment target by increasing investment in private sector to 27.35% by 2025 (which was 23.63% in 2019-20 fiscal year). It is to be noted that private sector investment in Bangladesh has been hovering between 20% and 23% of GDP for more than a decade.

Recommendations on increasing savings and investments:

Therefore, there is no alternative to increasing high domestic investment to build a sustainable economy in the country in future, which requires ensuring high domestic and national savings, which is a really a big challenge for a developing country like Bangladesh. Because, all favorable conditions on which growth of internal savings depends, all of them are insufficient in Bangladesh. However, there is no alternative but to be succeeded in this case with best possible coordination. Following recommendations have been put forward to accelerate the government's initiatives and efforts to increase savings and investment at desired level in the country to meet the challenges ahead:-





A) To increase domestic savings:

- Strengthen training system at village level in agriculture and agro-related fields, such as fish farming beside agriculture, poultry and poultry farming, fruit and vegetable farming etc., so that every rural family can be financially self-sufficient and have chance to save some money after meeting daily expenses.
- 2. Taking necessary initiatives for expansion of handicraft and cottage industries at village level as well as expansion of SME sector at upazila level, so as to increase employment at village level and reduce poverty.
- 3. For expansion of technical education in the country, making 2 years technical education compulsory after secondary level for those who are unable to pursue higher education, so that every person will be able to earn money by engaging in self-employment on his own initiative, which will solve unemployment problems at individual level as well as playing a major role in increasing per capita income and savings in private sector.
- 4. To expand opportunities for individual and family savings in national savings schemes, such as savings certificates, prize bonds, post office savings, etc., as well as increasing interest rates and provide full income tax rebate on profits.
- 5. Effectively control inflation and commodity prices to limit cost of living in all areas of urban and rural, so that individuals and families have opportunity to save money by meeting daily expenses.
- 6. Taking government initiatives to limit expenditure in education, health, housing, electricity, gas, water, etc., so that people with limited income have opportunity to save some portion of their income after meeting living expenses.
- To run massive publicity and campaign in all medias with the aim of increasing savings trend among people.
- 8. Imposing obligation to keep family small both at village and city level, so that members of each family remain under their financial control and have opportunity to some savings by meeting daily expenses.

B) To increase domestic investment:

- 1. To ensure a conducive environment for business and investment in the country.
- 2. Strengthen family savings system in the whole country for purpose of rising capital at individual level and ensuring bank loans on easy terms to alleviate shortage of capital.
- 3. Making connection of electricity, gas and water affordable and easily available, so that housing, business and industrial establishments get connection easily and quickly.
- 4. Imposition of corporate tax and VAT rates on all types of business establishments on a realistic basis, which will not a problem for organization to pay and which will play a helpful role in increasing investment in private sector.
- 5. Making banks and other financial institutions interested in long-term financing, so as to increase investment in manufacturing sector.
- 6. To impose obligations on all banks for providing working capital to continue production in the manufacturing industries.





- 7. Increasing involvement and responsibility of the financing bank to ensure profitable management of the financed institution, so that no institution can easily fall sick, which will do a great job in reducing investment risk of both the entrepreneur and bank.
- 8. Strengthen training system at government and private level to increase investment knowledge and skills at individual level.
- 9. Providing tax and VAT benefits to small and medium investors to survive as well as to provide additional benefits in importing raw materials and machinery.
- 10. In addition to increasing range of stock market, taking necessary steps to maintain market stability, so that ordinary investors are attracted to invest in the capital market and can be benefited.
- 11. Ensuring adequate cash incentives on exports and other government facilities to ensure survival of every export-oriented industry in international competition, so as to reduce investment risk in exportoriented industries.
- 12. Taking necessary initiatives to build a skilled workforce suitable for industrial sector.
- 13. To continue government's efforts for development and expansion of trade and commerce with different countries through availing duty free access facilities, signing bilateral trade agreements at regional and international level and utilization of Bangladesh embassies in different countries for expansion and development of trade and industry in the country.
- 14. Resolving bureaucratic complexities, suppression of corruption and establishment of rule of law, which has been one of the major obstacles to expansion of trade and commerce in the country for decades.

First Edition: August, 2022





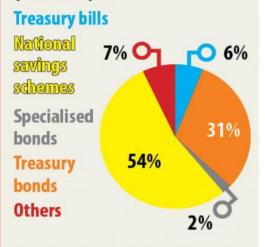


OUTSTANDING FOREIGN DEBT BY CREDITOR (FY2018)

In million dollars

World Bank (IDA)	14,202
Asian Development Bank	8,848
Japan	4,705
China	1,997
Short-term debt	1,947
Guarantees (SOE)	4,030
Others (bilateral and multilateral)	6,593

DOMESTIC DEBT BY TYPE (FY2018)



SOURCE: IMF





Limiting Government Liabilities.

Topics Covered in the Chapter

- A) Government Liabilities.
 - 1. Foreign outstanding debt situation.
 - 2. Domestic Outstanding Debt situation.
 - 3. Comparative analysis of domestic debts of Bangladesh and other South Asian Countries.
 - 4. Bangladesh's position in terms of government debts.
- B) Inflation Situation.
- C) Comments on government liabilities.







A) Government Liabilities:



Govt. Liabilities:

Since the economy of Bangladesh is not strong enough and internal resources and revenue generation are relatively inadequate, it has become a tradition since independence to recover budget deficit with loans from various internal sources and foreign donors. However, underdeveloped and developing countries around the world heavily rely on foreign loans for development activities. These loans are taken from various donor agencies at low interest rates for long term to transfer technology, develop skills and meet overall cost of the projects. Foreign debt is only relieved when country invests those loans in developmental activities to making the country's economy self-sufficient by increasing productivity in the country and is possible to repay the loan installments and interest on time. Otherwise, those debts will become a big burden for people of the country, as happened in case of Sri Lanka.

As of 2018, government debts in Bangladesh was USD 91,524 million (33.99% of GDP), of which about 56% is domestic debt and remaining 44% is foreign debt. According to a joint publication of the World Bank and International Monetary Fund (IMF) 2019, Bangladesh is in a risk-free position in terms of foreign debt. However, tendency for government borrowing from domestic sources has increased exponentially in recent years, which will increase risk of inflation in the country as well as declining investment in private sector.

Figure-5.21 (1): Amount of total domestic / foreign government debt of Bangladesh during last decade (2009-2018), in proportion to GDP (%) and amount of debt per capita:

First Edition: August, 2022

Debts	Financial Years									(USD Million)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Gross Public Debts	40,455	40,283	44,620	48,024	54,486	60,985	65,470	73,411	79,964	91,524	
Debt as % of GDP	39.54	35.49	36.62	36.22	35.82	35.27	33.68	33.33	32.62	33.99	
Debt Per Capita	271	267	292	310	348	395	419	465	501	567	

Source: Countryeconomy.com



Foreign outstanding

debt situation:

Strategies for Economic Development of Bangladesh

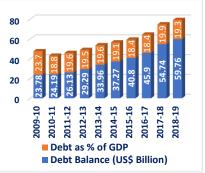


1) Foreign outstanding debt situation:

By the end of 2018-19 fiscal year, Balance of Bangladesh's foreign debts stood at USD 59.76 billion, which is about 19.3% of GDP. All these loans have been taken against various development projects under multilateral and bilateral loan agreements. In recent years, there has been a tendency in Bangladesh to take some foreign loans for development of trade and business in private sector. Approximately 5% of outstanding foreign loans during this period are short term and remaining 95% are long term loans.

Review of foreign debts arrear over the past decade (2009-2018) shows that amount of foreign debts outstanding in 2009-10 was USD 23.78 billion, which has stood at USD 59.76 billion in FY 2018-19. During this period, total amount of foreign debts has increased by USD 35.98 billion, an average increase of 3.60 billion (10%) per annum. Ratio of foreign debts to GDP was 23.6% in the fiscal year 2009-10, which stood at 19.3% in the fiscal year 2018-19. During this period, ratio of foreign debts to GDP ratio averaged 19.83% [Figure-5.21 (2)].

Figure-5.21 (2): Scenario of outstanding foreign debts at the end of the year during period from F.Y 2009-10 to 2018-19:-



Source: Bangladesh Bank Data

First Edition: August, 2022

Figure-5.21 (3): During the last decade, amount of foreign debts outstanding at the end of year, current account receipt and ratio of outstanding debts to GDP ratio : -

									(US\$	Billion)	
Items		Financial Year									
	2009- 10	2010- 11	2011- 12	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
External Debt in :											
Public Sector	22.13	22.61	24.53	26.47	29.44	29.45	32.00	35.36	40.77	45.51	
Private Sector	1.65	1.58	1.60	2.82	4.52	7.82	8.80	10.54	13.97	14.25	
a) Total External Debt :	23.78	24.19	26.13	29.29	33.96	37.27	40.80	45.90	54.74	59.76	
b) Growth Rate (%)	5.31	1.72	8.02	12.09	15.94	9.75	9.47	12.50	19.26	9.17	
c) Current A/C Receipt	30.61	37.68	40.35	44.62	48.03	49.85	52.62	51.24	56.72	64.05	
➤ Current A/C Receipt											
(As % of Debt)	128.70	155.71	154.4	152.3	141.4	133.8	129.0	116.6	103.6	107.2	
➤ Debt as % of GDP	23.70	18.8	19.6	19.5	19.6	19.1	18.4	18.4	19.9	19.3	

Source: Bangladesh Bank Data

2) Domestic Outstanding Debt situation:

According to World Bank and other international organizations, about 56% of Bangladesh's total government debts by 2018 were domestic debts, more than half of which were National Savings Certificates, one-third of them were Treasury bonds and rest were specialized and other bonds. A review of status of domestic outstanding debts over the past decade (2009-2018) shows that amount of domestic



Outstanding Debt

Domestic

situation:

Comparative analysis of domestic debts of Bangladesh and other South Asian Countries:-

Strategies for Economic Development of Bangladesh

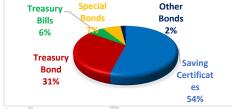


debts in FY 2009-10 were TK. 3.707 trillion, which stood at TK. 14.417 trillion in FY 2018-19. During this period, total amount of domestic debts increased by TK. 10.71 trillion, an average increase of TK. 1,707 trillion (16.17%) per annum. Rate of domestic debts to GDP ratio was 36.19% in FY 2009-10, which stood at 46.94% in FY 2018-19. During this period, domestic debts as percentage of GDP increased by an average of 1.08% per annum [Figure-5.21 (4)].

According to joint Debt Sustainability Analysis Report 2019 of the World Bank and IMF, by 2018, 54% of total domestic debts were savings certificates, 31% treasury bonds, 6% treasury bills and 2% other bonds [Figure-5.21(5)].

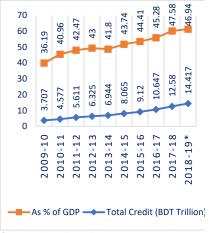
As per budget target for FY 2020-21, government has set a target of borrowing TK. 109,983 crore from banking and other sources, of which TK. 84,980 crore from banking sources and TK. 25,003 crore from other sources. According to Bangladesh Bank Report September 2020, TK. 12,879 crore has been withdrawn against this loan during July-September 2020 period.

Figure-5.21 (5): Classification of Internal Debts of 2018:-



Source: World Bank Data

Figure-5.21 (4): Scenario of Gross Domestic Debts and debts as percentage of GDP at the end of year during 2005-2016: -

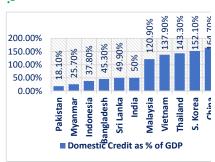


Source: World Bank Data

3) Comparative analysis of domestic debts of Bangladesh and other South Asian Countries:-

Depending on the size of economies of developing countries of South Asia, domestic debt trend and debts to GDP ratio is relatively high in Bangladesh and Sri Lanka. According to World Bank Report 2019, during this period, domestic debt rate to GDP ratio was 18.1% in Pakistan, 25.7% in Myanmar, 37.8% in Indonesia, 45.3% in Bangladesh, 49.9% in Sri Lanka and 50% in India. At the same time, among other developing countries in South Asia, domestic debt rate to GDP ratio was 120.9% in Malaysia, 137.9% in Vietnam, 143.3% in Thailand, 152.1% in South Korea, 164.7% in China and 174.9% in Japan [Figure-5.21 (6)].

Figure-5.21 (6): As per 2019, ratio of domestic debts to GDP ratio (%) of developing countries in South Asia



Source: World Bank Data





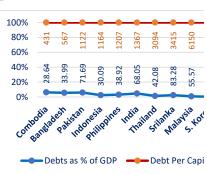
4) Bangladesh's position in terms of government debts :

Despite a slight increase in the government's borrowing from domestic source in recent years, Bangladesh is still in a much better position than other developing countries in South Asia in terms of total government debts and per capita debts, which is comforting for the country's economy. However, it should be kept in mind that since Bangladesh is dependent on foreign loans for development activities, reduction in foreign debts means a decline in development activities, which is fatally detrimental to the country's economic progress. In this case, it is especially important to consider timely payment of loan installments from internal sources.

Bangladesh's position in terms of government debts:

According to 2018 data, government debts to GDP ratio was 28.64% in Cambodia, 33.99% in Bangladesh, 71.69% Pakistan, 30.09% in Indonesia, 38.92% in Philippines, 68.05% in India, 42.08% in Thailand, 83.28% in Sri Lanka, 55.57% in Malaysia and S37.68% in South Korea. At that time, per capita government debts (US) dollar) was 431 in Cambodia, 567 in Bangladesh, 1,122 in Pakistan, 1,164 in Indonesia, 1,207 in Philippines, 1,367 in India, 3,094 in Thailand, 3,415 in Sri Lanka, 6,150 in Malaysia and 11,902 in South Korea [Figure-5.21 (7)].

Figure-5.21 (7): As of 2018, scenario of government debts to GDP and per capita debts in Bangladesh and some other countries in South Asia:

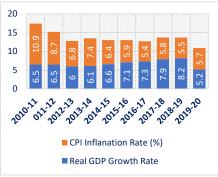


Source: Countryeconomy.com

B) Inflation Situation:

Inflation Situation:

Figure-5.21 (8): Scenario of GDP growth and inflation in the country during financial year 2010-11 to 2019-20:-



Source: National Accounts

Over the past decade, inflation situation in the country has been at a tolerable level in line with GDP growth, which is comforting for the country's overall economy. In FY 2010-11, country's real GDP growth was 6.5%, in contrast inflation rate was 10.9%. In FY 2019-20, inflation rate stood at 5.7% as against real GDP growth of 5.2%. During this period, GDP growth rate averaged 6.74% and inflation rate averaged 6.85% [Figure-5.21 (8)].









Comments on govt. liabilities:

Being able to limit government liabilities is positive for the overall economy of the country. But, in order to continue the country's development progress, Bangladesh needs foreign loans to finance large development projects. Compared to other developing countries, Bangladesh is in a better position to get more foreign loans for development activities. Since foreign loans are taken at low interest rates and for long period, it is necessary to take advantage of this opportunity to undertake larger projects in various sectors including infrastructure development with foreign funding to accelerate overall economic progress of the country to meet the challenges of 2041. However, tendency to borrow from domestic sources should be curtailed, as large government debts from domestic sources is likely to hinder the flow of internal debts as well as create chaos in the country's financial sector, which will have a serious negative impact on private sector investment.







Chapter: 5.22

Corruption Control and Establishment of Rule of Law.







Corruption Control and Establishment of Rule of Law.

Topics Covered in the Chapter

- A) Controlling Corruption.
 - 1. Bangladesh's position in South Asia in corruption.
 - 2. Overall situation of corruption in the country.
 - 3. Rate of victims of bribery and corruption.
- B) Approaches and types of corruption.
 - 1. Approaches to corruptions.
 - 2. Types of corruption.
- C) Reasons why corruption is so irresistible in Bangladesh.
- D) Effects of corruption on economic and social Development.
- E) Recommendations on Effective Control of Corruption.







A) Controlling Corruption:

Corruption is a heinous social disorder. This disease has been developing around the world for centuries and its violence has been continuing. There is no fixed rules or places for corruption. This disorder extends from small institutions to state level, which is one of the major obstacles to overall development of a country, social justice and poverty alleviation.

Definition of corruption is very broad and an unresolved issue. Corruption, in short, is defined as "Taking bribes or forcing bribes through abuse of power for personal gain, embezzlement of other's money or property, fraud, negligence of duty, nepotism and harassment in providing services." In a broad sense, "corruption is a painful disorder in countries around the world, originating from social and moral degradation, rampant from individual level to national level, from which relentless efforts are being made worldwide to get rid of."

Corruption is a very common issue in Bangladesh, which can be said to be rampant at present. Apart from making the country's industry and trade difficult due to irresistible bribery and corruption at all levels, government is losing thousands of crores of money in revenue every year from various sectors and due to this so-called bribery and corruption government's development activities in all sectors are being severely hampered.

Five decades have already passed since independence, there has been significant progress in the country's overall economy and living standards of people in recent times, but it is a matter of great regret that Bangladesh has not made any progress in the past in terms of corruption. In the Global Corruption Perceptions Index 2005, Bangladesh was ranked 158th out of 158 countries, which means that the country was at the peak of corruption at that time. In 2010, Bangladesh's position was 143rd out of 178 countries and in 2015 it was 139th, from 2016 to 2019, Bangladesh's position in corruption fluctuated between 143-149. It means, during five-years of 2015-2019, level of corruption in the country was almost Note: Higher Rank indicates lower position irresistible [Figure-5.22 (1)].

Figure-5.22 **Position (1)**: Bangladesh in Global Corruption Perception Index (CPI) during period of 2005-2019:-



Source: CPI Index

Bangladesh's position in South Asia in corruption:

According to Global Corruption Perception Index (CPI) 2019, Bangladesh ranks behind all countries in South Asia. According to ranking of that time, Bangladesh was ranked 146 out of 180 countries, while Singapore ranked 4th, Hong Kong 18th, Japan 20th, Bhutan 25th, South Korea 39th, Malaysia 51st, China 80th, India 80th, Indonesia 85th, Vietnam 96th, Thailand 101st, Nepal 113rd, Philippines 113th, Pakistan 120th, Maldives 130th and Myanmar was 130th position.



Bangladesh's position in South Asia in corruption:

Strategies for Economic Development of Bangladesh



According to CPI Index 2019, position of Bangladesh and other South Asian countries among 180 countries in terms of corruption:-



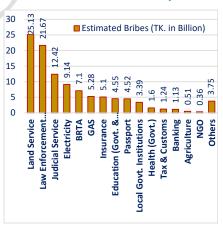
Source: CPI Index 2019 Note: Higher Rank indicates lower position

2) Overall situation of corruption in the country:

lion's share of corruption usually occurs in providing services. According to TIB report published in 2017 on corruption in service sector of the country, estimated amount of bribery and corruption in service sector of the country in that year was TK. 106.89 billion, of which, highest amount of bribery and corruption has taken place in the land services sector amounting to TK. 25.13 billion. In this case, in second and third place were law enforcement agencies at TK. 21.67 billion and judicial services at TK.12.42 billion respectively [Figure-5.22 (2)].

For each bribe exchange, service recipient has to pay a certain amount of benefits, which is usually several times the amount of bribe. For example, with an average benefit of TK. 1,00,000 / - per TK. 10,000 / = bribe, government's financial loss in the service sector alone amounted to TK. 1,068.89 billion against bribery and corruption of TK. 106.89 billion that year, which is more than one-third of the national budget of that fiscal year.

Figure-5.22 (2): According to TIB report 2017, estimated amount of bribery or illegal transactions in different sectors of the country:-



Source: TIB Report 2017



First Edition: August, 2022

3) Rate of victims of bribery and corruption (%):

According to the TIB report 2017, an average of 66.5% of people across the country have been victims of bribery and corruption in that year while taking services, most of those have been victims of bribery and corruption by law enforcement agencies

Overall picture of corruption in the country:



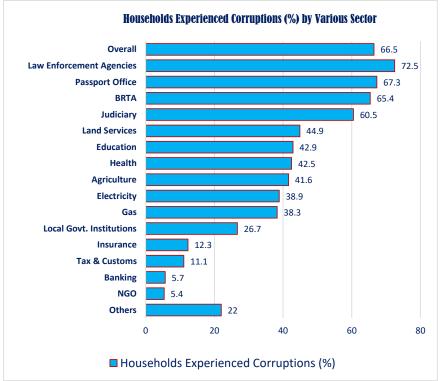
Rate of victims of bribery and corruption:

Strategies for Economic Development of Bangladesh



72.5%. In this case, second, third and fourth positions were 67.3% by the Passport Department, 65.4% by the BRTA and 60.5% by the judiciary authority. Followed by Land Services 44.9%, Education 42.9%, Health 42.5%, Agriculture 41.6%, Electricity 38.9%, Gas 38.3%, Local Government Institutions 26.7%, Insurance 12.3%, tax and customs 11.1%, banking 5.7%, NGO 5.4% and in other sectors 22%.

Figure-5.22 (3): According to TIB report 2017, rate of population victims of bribery and corruption while seeking services in various sectors (%): -



Source: TIB Report 2017

Needless to say, above data is only a survey of the country's service sector on bribery, corruption and nepotism. Amount of massive economic looting that are constantly happening in the country, such as, thousands of crores of money are smuggled out of the country every year, irregularities of thousands of crores of money in the banking sector, corruption and debt defaulters, large amount of tax evasion and money laundering through under and over invoicing, huge amount of illicit money earned through terrorism and extortion and rampant corruption and nepotism that are constantly happening in the society, were not possible to be included in this survey and will never be possible. As a result, in addition to increasing violence of black money in the country, competition to capture the country's economy is increasing. A 1997 study by the Bangladesh Institute of Development Studies found that about 40% of the national economy of this country is covered by black economy, which has been growing abnormally year after year despite opportunity to white black money in the national budget every year.





B) Approaches and types of corruption:



1) Approaches to corruptions:

Corruption occurs in many ways, but most common are bribery / exchanging money outside the rules, reluctance to perform one's duties, misconduct and harassment, fraud, nepotism, embezzlement and influential interference. According to the TIB Survey Report 2017, among corruptions that took place in Bangladesh at that time, bribery was 49.8%, reluctance to perform duties 39.9%, malpractice and harassment 6.9%, fraud 3.5%, nepotism 2.7. %, embezzlement 2.6% and influential intervention 2.5% [Figure-5.22 (4)].

Most common forms of corruption that normally happen in this country are: -

Money laundering: According to a report by Swiss Bank, in 2016, deposits of Bangladeshi nationals in Swiss banks were CHF 667.5 million (TK.53.40 billion) and at the same time deposits of Indian nationals in that bank were CHF 670 million, although GDP size of India is about 10 times larger than GDP size of Bangladesh. Although rate of foreign deposits in Swiss bank was less than 1 percent in 2016, deposits of Bangladeshi nationals have increased by about 20 percent that year. (Financial Express 27/7/2017).

Debt defaulters: According to Bangladesh Bank information, amount of defaulted loans in the country by the end of 2017 was TK. 74,303 crore, which was TK. 62,172 crore in the previous financial year, which is 9.31% of total outstanding loans in the country at that time.

Under and Over-invoicing: According to various sources, about 10% of total import and export trade of the country are done through under and over-invoicing, through which huge amount of money is smuggled abroad besides evading tax. In 2017-18 financial year, size of the country's import and export trade was USD 90,668 million. Amount of trade-based money laundering in that fiscal year as 10% amounted to USD 9,067 million (TK. 76,163 crore).

Irregularities and Corruption in the Banking Sector: According to CPD Study 2018, amount of combined losses due to irregularities and corruption in the banking sector of the country during financial years from 2013-14 to 2017-18 was Tk. 22,201 crore.

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Approaches and types of corruption





2) Types of corruption:

Types of corruption are somewhat controversial, but according to type of corruption that normally takes place, corruption can be divided into following categories: -

- 1) Corruption at individual level.
- 2) Institutional corruption.
- 3) political corruption; and
- 4) State corruption.

Needless to say, all forms of corruption at all levels in Bangladesh are now rampant, despite having strong will, which is a challenge and a matter of time for the government to bring it under control.

Figure-5.22 (4): Rate of corruption in Bangladesh that happens in different ways: -



Source: TIB Survey 2017

C) Reasons why corruption is so irresistible in Bangladesh:

Although corruption occurs in almost all countries, but type of corruption varies depending on the country and economy. Generally, corruption is more prevalent in underdeveloped and low-income countries and in developed economies nature of corruptions are somewhat different from least developed countries. In underdeveloped economies, corruption is almost open and rampant at all levels of government, but in developed countries, corruptions occur in a very limited and confidential situation. One of the reasons why corruption has become so widespread and irresistible in an underdeveloped society like Bangladesh are:

- 1. Political instability in the country.
- 2. Lack of conviction in state policy to curb corruption.
- 3. Leaders and workers of the party in power become corrupt.
- 4. Rule of law is not fully enforced in the country.
- 5. Lack of adequate prevention measures to effectively curb corruption.
- 6. Lack of honesty and morality among people due to underdeveloped economic environment and low standard of living.
- 7. Lack of professional ethics and rules in the country.
- 8. Not emphasizing moral education and patriotism in the education curriculum.
- 9. Widespread income inequality and unequal distribution of wealth widen the gap between rich and poor in society.
- 10. Not working the administration fully under control of the government.
- 11. Lack of honest people at top and policy making level of the administration.

First Edition: August, 2022

12. Lack of proper political commitment to build a corruption free society.

Reasons why corruption is so widespread and irresistible in Bangladesh:





D) Effects of corruption on economic and social Development:



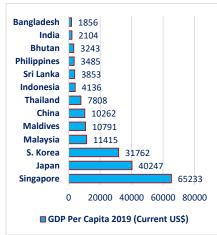
The country with a very small land area is densely populated, socially and economically which is still far behind and about one-third of the country's population still live below poverty line. By 2019, per capita income of this country stood at USD 1,856, which is lowest than almost all countries of South Asia except a few countries at that time [Figure-5.22 (5)].

However, in recent times, rise of the ready-made garment sector and remittances from workers working abroad have emerged as a boon for the country, which, if properly utilized, possibility of Bangladesh rising out of poverty in the near future and reaching a position of special dignity is now at our doorstep. Present government has been able to realize the issue properly and is working to reach middle income country by 2024 and high income country by 2041 by taking advantages of this possibility.

Adverse effects of corruption on economic and social Development:

Now problem is unbridled corruption at all levels of the country, which has gradually become irresistible. Past governments did not care this irresistibility of corruption, which today has taken face-to-face position as one of the major obstacles to development of the country and the nation. This irresistible corruption is not only hampering ongoing development activities of the country, financial loss of thousands of crores of money of the country through bribery, corruption and nepotism, rising of black money, in addition to tarnishing image of the country in international arena, it has given rise to extreme social degradation in the country. If it is not possible to get out of that predicament quickly, all future dreams are bound to be shattered.

Figure-5.22 (5): Per capita income in Bangladesh and other South Asian countries by 2019:-



Source: World Bank Data

First Edition: August, 2022

Among the areas where economic and social development are severely hampered due to irresistible corruption in the country are: -





- 1. Due to impact of corruption at highest levels of government increased, country's development activities are severely hampered.
- 2. In a corrupt society, practice of illegal income increases, resulting in increased violence of black money in the country.
- 3. In a corrupt society, morality is lost, violence escalates and social stability is completely destroyed.
- 4. As a result of being ahead in the index of corruption, image of the country in international arena is greatly tarnished.
- 5. Recognition as a corrupt country reduces domestic and foreign investment, as a result, development of the country is seriously hampered.
- In a corrupt society, official protocols become very useless, resulting in collapse of administrative system and subordinate officers do not pay attention to seniors.
- As a result of increasing people's tendency towards illegal income, people's interest in education decrease and rate of education in the country decline.
- 8. In a corrupt society, it is difficult to get government services without bribery, which reduces the quality of government services at all levels.
- 9. Violence of incompetent, corrupt and black money holders increase and state power gradually fell to knees to that group.
- 10. In a corrupt society, rule of law is abolished due to violence of black money, so, hope for justice in that society is difficult.
- 11. Political instability persists in a corrupt country, resulting in frequent power shifts in state power, which is one of the major obstacles to long-term development of a country.
- 12. As honesty and morality are lost, forming a developed nation in a corrupt country is almost impossible.
- 13. As it is not possible to maintain political stability and orderly continuity of power shifting in corrupt countries, it is very difficult to implement long-term development plans in those countries.
- 14. In a corrupt country, armed forces are usually greedy for power, so there is a possibility of seizing power by armed forces any time, which is a serious risk in maintaining continuity of democracy in a country.
- 15. As the economy of a corrupt country being needy, other country can not trust that country and is not interested in signing regional and bilateral agreements to increase trade and other cooperation with that country.
- 16. People in corrupt countries usually run after money and have no interest in acquiring knowledge, science and technology to keep pace with the progressive world.
- 17. Most importantly, people of a corrupt country usually do not follow the principles of ethics, as a result of which people of that country become distrustful and inferior in international arena.







E) Recommendations on Effective Control of Corruption:

SAY NO TO CORRUPTION

Recommendations on Effective Control of Corruption:

At present, rate at which corruption has been established at all levels of the country, it is very important to get out of this awful situation quickly in the interest of overall development of the country. Therefore, in order to build a corruption-free Bangladesh, it has become essential to take strict and practical steps to effectively curb corruption by finding out real causes of corruption in the state policy first and foremost. This requires political and social commitment to eradicate corruption, which will go deeper into this problem and help find realistic solutions to its effective suppression by identifying real causes and areas of this widespread corruption. In order to build a prosperous country by ensuring smooth development of the country's economy and preventing social degradation, it is urgent to move towards the goal of building a non-violent and corruption-free society by taking bold steps to establish rule of law everywhere for effective suppression of bribery and corruption in every field and eradication of corruption from root, otherwise, this virulent virus is enough to gradually pollute the whole nation and ruin all achievements of the country.

Recommendations for building a fearless and corruption free society through effective suppression of bribery and corruption and establishment of rule of law in the country are as follows: -

- 1. Social, political and state commitment to build a corruption free society.
- 2. Considering utmost importance of anti-corruption in the state policy, to adopt a firm conviction and zero tolerance policy in its effective suppression.
- 3. To establish rule of law in the country as well as to get out of the culture of injustice.
- 4. Responsible behavior of both government and opposition party to maintain political stability in the country.
- 5. Strict control at field level from high command of the party, so that leaders and workers of the party do not become corrupt and take advantages.
- 6. There should be adequate number of corruption monitoring and investigation agencies with adequate manpower in addition to law enforcement agencies for field monitoring and effective suppression of corruption in the field. For example, anti-corruption activities are currently being carried out only with the limited scope and manpower. In order to effectively curb corruption, it is necessary to increase working territory and





- manpower of the ACC, or to establish more such regulatory bodies and introduce strict and comprehensive surveillance of corruption at field level.
- 7. Uncertain economic environment makes people depraved. Therefore, in order to effectively curb corruption, it is very important to ensure economic stability of people at all levels by taking steps for increasing people's income and improving their quality of life.
- 8. Educated people are also getting involved in corruption all times. In order to change this situation, it is necessary for every profession to have specific ethics and rules, which if violated, it is mandatory to be punished.
- 9. By incorporating moral education and patriotism in the education curriculum and making this education compulsory from primary level, so that every citizen of the country develops with morality and patriotism and takes pride in identifying himself as a Bangladeshi.
- 10. Extensive income inequality and unequal distribution of wealth make the gap between rich and poor visible in society and create class divisions among people. In order to settle this class division, people became desperate to develop their fortunes by making illegal income through corruption. Therefore, it is very important to ensure equitable distribution of wealth in the society to prevent corruption.
- 11. In a corrupt society, people become extremely greedy for money and people in the administration become addicted to illicit earnings without heeding rules and regulations, which can be a challenge to control for the government. Therefore, entire administrative mechanism should always be under strict control of the government.

12. In case of government recruitment:

- a) In addition to ensuring appointment of honest, competent and experienced patriots at top and policy making level of administration, to fulfill written commitment from the employed officer to keep himself and all officers and employees of his department free from bribery and corruption, because if top officer of a department becomes corrupt, all officers and employees of that department are bound to become corrupt gradually.
- b) Making mandatory for all levels of officers and employees to submit annual wealth statement before the government.
- 13. Establishment of "National Economic Intelligence Agency" to collect information at field level on corruption and assets acquired by illegal means, activities of that agency will be to collect evidence of bribery, corruption, irregularities and ill-gotten wealth at government and private level and hand it over to the ACC or government designated agency for further action, but this authority itself will not be able to take any action.

Following is an idea about notable functions of that authority:-.

- a. Verification and collection of information related to bribery, corruption, irregularities, living inconsistent with income, purchase of anonymous property, secret investment etc. at government and private level.
- b. Collecting evidence and handing it over to the ACC or government designated agency for further action.





- ACC or government-designated agency will take legal action on the basis of information submitted to them.
- d. Whether ACC or government designated agency has taken appropriate legal action against all irregularities submitted by the economic intelligence agencies will remain under regular supervision of the concerned ministry.
- e. Bringing all government offices under CCTV and other modern information collection networks and giving access to these networks to officials in charge of economic intelligence agencies.
- f. To provide adequate training to officers and employees of the organization for collecting information against irregularities and corruption.
- g. Provision of severe punishment if any officer or employee of this organization is involved in irregularities and corruption.

It is to be noted that activities of this organization can be carried out at affordable cost by recruiting required number of manpower from existing employees working in the departments for collecting internal information of different departments and by hiring additional officers and employees to work at field level.

Bangladesh, a country of immense potentials

618





Chapter: 5.23

Administrative Reforms & Development.







Administrative Reforms & Development.

Topics Covered in the Chapter

- A) Administrative Reforms and Development.
 - 1. What is administrative reform and why?
 - 2. Current administrative Structure in Bangladesh.
- B) Assessment of Ongoing Administration System.
- C) Notable administrative reforms in Bangladesh.
- D) Why is administrative reform essential in Bangladesh?
- E) Major weaknesses in the current administrative system.
- F) Recommendations for development of country's administrative system.

State of the Administrative Accountability in Bangladesh





A) Administrative Reforms and Development:



Administrative Reforms and Development: Administrative system of a country acts as one of the main foundation for social and economic progress, delivery of quality government services and establishment of rule of law in the country. Main objective of improved governance is to ensure social and economic progress in the country through proper implementation of government agenda, proper control and effectiveness of government as a whole, chain of command at all levels of administration, controlling of law-and-order situation and control of administration at field level. Improved and up-to-date administrative system means rule of law and social security in the country, ensuring uninterrupted economic progress, quality government services and ensuring a well-established democratic environment.

Present administrative system of Bangladesh is basically an oppressive administrative system inherited from the British rule, which Pakistani ruling class had used as a tool of exploitation by changing and expanding according to their own interests and in the post-independence during military and civilian regimes after several times motive-driven reforms it has come to present stage, considering present and future context which is considered as a very old-fashioned and conventional. As a result, bureaucratic complexities, procrastination, bribery, corruption, grouping, arbitrariness, inter-cadre quarrels, etc. in all areas of institutional and non-institutional have become widespread in the ongoing administrative system, which is severely hampering overall progress of the country by creating complications in establishing rule of law and democracy and delivery of public services in the country, with which civil society, donor agencies and NGOs have been constantly raising objections. Because, a chaotic administrative system cannot guarantee of orderly social system in any country.

In order to improve overall administrative system and facilitate government services, public administration system in this country has not been fully reformed as required till now during the tenure of any government. Although recommendations of the reform commissions / committees formed at different times for development of public administration in the country have been partially implemented in some cases, most of the recommendations in this regard have not been implemented. For example, although reports of Pay and Service Commission







formed in 1977 and Administrative Reform and Restructuring Committee of 1982 were effective, but many distortions were observed in this regard.

In the evaluation of various international organizations in terms of administrative efficiency, transparency and accountability, Bangladesh is still lagging behind in the world and even almost all countries in South Asia. According to World Bank Report 2019, Bangladesh's score in the "Government Effectiveness" were 23.56, which is lowest among South Asian countries. Among leading countries in this regard, score of Bhutan were 64.90, Thailand 65.87, Malaysia 79.33, South Korea 88.46 and Japan 93.75. In 5 (five) notable cases in this list, combined score of Bangladesh were 110.26, which is lowest among South Asian countries. Among leading countries in this regard, Bhutan's combined score were 319.98, Malaysia 331.62, South Korea 406.56 and Japan 440.82 [(Figure-5.23 (1)].

Figure-5.23(1): In State of Governance Indicators 2019, position of Bangladesh and other South Asian Countries:

	Percentile Rank in 2019					
Country	Govt. Effectiveness	Regulatory Quality	Rule of Law	Control of Corruptions	Voice & Accounta- bility	Total Scores
Bangladesh	23.56	15.38	27.88	16.35	27.09	110.26
Pakistan	25.96	27.40	26.44	21.15	23.15	124.10
Vietnam	53.85	41.83	53.37	34.13	11.82	195.00
China	71.63	42.79	45.19	43.27	6.40	209.28
Philippines	54.81	55.29	34.13	31.25	47.29	222.77
Sri Lanka	48.08	47.60	53.85	44.23	43.84	237.60
Indonesia	60.10	51.44	42.31	37.98	52.71	244.54
Thailand	65.87	60.58	57.69	39.42	24.14	247.70
India	59.62	48.56	52.40	47.60	57.64	265.82
Bhutan	64.90	39.42	72.60	91.83	51.23	319.98
Malaysia	79.33	73.56	73.08	62.50	43.35	331.82
S. Korea	88.46	82.21	86.06	76.92	72.91	406.56
Japan	93.75	88.46	90.38	89.90	78.33	440.82

Source: World Bank Report 2019

However, matter of hope that Bangladesh has achieved enviable economic progress in the post-2010 period, despite massive problems in administrative field, limitations and chaos. During this period, besides achieving unimaginable progress in agriculture, export earnings and remittance inflows have increased considerably and about a dozen mega projects are being implemented for infrastructure development in various sectors including power, communication and fuel, which, if implemented, is expected to lead to a large rise in GDP. Moreover, commendable progress has been made in various social and economic indicators during this period. As a result, in recent times, Bangladesh as an emerging economy has been able to respond quite well in international arena. In recognition of all this progress, in February 2021, United Nations recognized Bangladesh for fulfilling SDG targets to reach middle-income country, which means that in 2024, Bangladesh will be officially added to the list of middle-income countries. Next dream of Bangladesh is to reach high-income countries by 2041.





Needless to say, in addition to retaining all these achievements of the past, it is now essential to develop and modernize administrative system in Bangladesh to get a place in the list of developed countries in near future. Because it is impossible to form a developed country and nation without improved administrative system.

1) What is administrative reform and why?

Administrative reform is a strategic process of rationalizing and updating administrative system of a country, which ensures standard development of administrative system and simplification of government services through distribution and coordination of responsibilities between bureaucratic process and field administration as well as accelerates establishment of rule of law. In elaborate, administrative reform means planned, intentional and methodical use of authority to change the structure and procedural system of public bureaucracy. The attitudes and behavior of the public bureaucrats may also be a matter of change in order to boost and speed up organizational effectiveness and attain nation's development goals. Administrative reform is defined "as the deliberate use of authority and influence to apply new measures to an administrative system so as to change its goals, structures, and procedures with a view to improving it for developmental purposes" (UN 1983, 1).

Main objectives of administrative reforms are :

- Effectively strengthen administrative structure to implement government agenda.
- Coordinating between policy formulation and decision making process.
- Systemic reforms within government institutions to improve quality of services
- Making delivery of government services easy and affordable by modernizing administrative system; and
- Strengthen administrative system by building effective and efficient economic and ethical management processes at all levels of administration.

Among fundamental progresses made in the administrative system through administrative reforms are: -

- Due to development of law and policy framework improves decision making environment.
- 2. Active participation of civil society in policy formulation and implementation increases.
- 3. Transparency and accountability in government working processes are improved; and
- 4. Standard progress is made in public service delivery system.

Needless to say, for all these reasons, civil service reform is the foremost consideration as part of administrative reform. For centuries, every country has been trying to address socio-economic, political and technological challenges through administrative reforms and Bangladesh is also no exception. Since independence, Bangladesh has been pursuing administrative reforms under various governments, although due to a lack of political commitment, bureaucratic complexities, corruption and grouping in administration and for other multiple reasons, it has repeatedly stumbled upon to building a modern administrative system. In a

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What is adminis-trative reform and why?





developing country like Bangladesh, administrative reform is very important to accelerate overall development by building an efficient and professional administration system. Although 50 years have passed since independence, Bangladesh is still lagging behind in establishing rule of law and building a modern and integrated administrative system to make it easier for government services to reach the doorsteps of people.

Attempts to introduce reforms of administrative system of Bangladesh are artificially influenced by the history, tradition and culture of this country. Until 1947, Bangladesh was part of the British Empire, which was later ruled by the Pakistani ruling class. Since independence in 1971, the country has been governed by elected and un-elected / military governments at various times. During the tenure of each government, constitution has been amended for fulfilling their own purposes, which has had a huge negative impact on public administration in the country and has made the quality of governance and public services questionable.

So, in order to accelerate and consolidate the pace of socio-economic development of the country by building a modern, efficient and up-to-date administrative system and to make public administration easier by bringing administration to the doorsteps of people, a major reform in public administration is required. Only a far-sighted political commitment and strong initiative can gift such an effective administrative reform to the people of this country based on the views of citizens at all levels.

2) Current administrative Structure in Bangladesh:

Current administrative system of Bangladesh is a form of governance developed by different nations and groups in this country for long time in the past. Bangladesh was under British rule as part of the Indian subcontinent until 1946 and was part of Pakistan from 1947-1971. After independence in 1971, parliamentary system of government was introduced in Bangladesh, with Prime Minister as the head of government and President as the head of state. But later, facing increasing economic, social and political crisis, system of presidential rule was introduced through amendment of the constitution, which lasted till 1991. In 1991, system of government of Bangladesh again returned to parliamentary form through amendment of the constitution

At present, there are basically two-tier administrative system running in Bangladesh. All Ministries and Departments are centrally placed in the Secretariat, which is basically acting as the center of policy formulation, implementation and for final approval. By 2021, there are 39 ministries and more than 52 departments are in operation in the country. Minister is the Political Head of each Ministry and Secretary is the Administrative Head, who work with assistance of Joint Secretaries, Deputy Secretaries, Senior Assistant and Assistant Secretaries. Cabinet is the joint decision-making body of the entire government under the Prime Minister's Office. The cabinet is headed by the Prime Minister and consists of about 25 ministers, 7 advisers, 18 state ministers and 3 deputy ministers.

On the other hand, divisions representing central Ministries and Departments, Government agencies working at Districts, Upazilas, Pourasabhas, City Corporations and Union level are engaged in general administrative, delivery of services and implementing development projects at field level. Besides, there are more than 178 departments who are responsible for proper implementation of

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Present of administrative Structure in Bangladesh:





development programs of the government. There are also autonomous bodies and corporations, which are basically established under presidential orders, ordinances and laws.

Following is the administrative structure in the country by 2021:-

Administrative Structure						
1	Area of the Country	147,610 km ²				
2	Divisions	8 nos.				
3	Districts	64 nos.				
4	Upazila	522 nos.				
5	City Corporation	12 nos.				
6	Powra Shova	330 nos.				
7	Union Council	4,576 nos.				
8	Wards	41,184 nos.				

B) Assessment of Ongoing Administration System:

Fifty years have already passed since independence in 1971. In this long journey, governance system of this country has reached today's position by surpassing several military and various civilian regimes. The country has been governed by the civilian government from 1971 to mid 1975, by military government from 1975-1990 and once again have been governing by the civilian government since 1991. In order to consolidate and perpetuate power under different regimes, various self-serving administrative reforms have been initiated at various times, which has largely corrupted the overall governance of the country and in many cases made it more opaque, inefficient and corrupt. As a result, country's public administration system almost collapsed by the end of 1980, to cope with the situation, various donor agencies were forced to finance various projects under the country's structural administrative reform plan at that time.

Evaluation of Ongoing Administration System:

Various international organizations have so far conducted a number of surveys to review the effectiveness and development of overall administrative system in Bangladesh, among them, most notably in this regard were Public Administration Efficiency Study by USAID in 1999 and World Bank's study in 1996. In all these reports, issues of civil service structure, administrative efficiency, dynamism, management. merit-based promotion, inter-service dispute resolution. administrative transparency, accountability and decentralization have always been part of reform agenda. Needless to say, all those reports of international organizations and their recommendations for administrative reform have not come to light during the tenure of any government. Although administrative reforms adopted during the tenure of any government played an effective role in administration, next government abolished it out of political vengeance. For example, although upazila system introduced by the Ershad government in 1982 gained considerable acceptance, but was later scrapped by the BNP government in 1991.





According to the World Bank, USAID and other international agencies, current administrative system in Bangladesh is quite outdated and defective, which has been failing to play an effective role in the overall progress of the country and facilitation of government services. According to the opinions of various organizations and information based on various research reports, notable deviations of the current administrative system of Bangladesh are highlighted below (Source: Abu Ilyas Sarkar): -

- 1. Historically, role of government is wide at every stage of public life. As a result, government has to fulfill excessive responsibilities, many of which can be done by the private organizations and private sector.
- Due to lack of development of political consciousness, bureaucracy at administrative level has become widespread, resulting in delays in government decisions as well as suffering of people in access to government services.
- 3. There are questions at all levels about efficiency and effectiveness of government officials / employees in the country.
- As government decision-making process is completely centralized in the ongoing process, power and efficiency of subordinate bodies are very limited
- 5. Issue of political and administrative transparency and accountability in the administrative system is quite vague.
- 6. There is a culture of secrecy in government activities, so much of administrative activities are obscure to the public.
- 7. Ongoing administrative system is a dysfunctional public employment system, where inter-energy competition is widespread, absence of a conducive environment for women in the workplace and lack of link between efficiency and evaluation.
- 8. Practice of corruption among government officials / employees is rampant, main reasons being low wages, moral decay and flexibility of the government in controlling corruption is largely responsible.
- 9. Influence of politicization exist in the civil service. Just as many administrative decisions are political due to political dominance in the administration, similarly, in many cases, implementation of administrative decisions is delayed and has to faces obstacles.
- 10. In the hands of Bangladesh Civil Service (Administration) cadres, dominance of executive branch of executive and judicial authority has been further enhanced, which has undermined independence of the judiciary.
- 11. Government officials / employees as a whole have to face criticism and blame in all cases for providing low quality services. As politicization in administration increases, quality of public service is gradually declining.

C) Notable administrative reforms in Bangladesh:

Since independence in 1971 to 2020, during the tenure of different governments, about 19 important reforms have been made in the administrative sector of Bangladesh, which include development of civil service structure, change of pay structure, manpower control in public and private sector, field administration, SSP, secretariat systems and reforms related to development of administrative structure are notable.





FIGURE-5.23(2): MAJOR ADMINISTRATIVE REFORMS IN BANGLADESH TILL 2020:

Notable administrative reforms in Bangladesh:

SL	Committees / Commissions	Year	Type of Reforms
1	Administrative Re-organization Committee	1971	Organizational set-up for the govt. after Emergence of Bangladesh.
2	Administrative and Service Structure Re-organization Committee.	1972	Civil Service Structure
3	National Pay Commission	1972	Pay Issues
4	Pay and Service Commission	1977	Service Structure and Pay Issues.
5	Martial Law Committee for Examining Organizational set-up of Ministries/ Divisions/ Directorates and other Organizations.	1982	Organizations and Rationalization of Manpower in Public Sector Organization.
6	Committee for Administrative Reform and Re-organization.	1982	Reorganization of District / Upazilla and Other Field Level Administration.
7	National Pay Commission	1984	Pay Issues
8	Secretaries Committee on Administrative Development.	1985	Promotion Aspects.
9	Special Committee to Review the Structure of Senior Service Pool.	1985	Structure of Senior Service Pool.
10	Cabinet Sub-committee.	1987	Review of SSP and Promotions Aspects.
11	Committee to Re-examine the Necessity of Keeping Certain Government Offices in the Light of Changed Circumstances.	1989	Necessity or Otherwise of Keeping Certain Government Offices.
12	National Pay Commission	1989	Pay Issues
13	Commission for Review of Structure of the Local Government.	1991	Structure of Local Government.
14	National Pay Commission	1996	Pay Issues
15	Administrative Re-organization Committee.	1996	Structure and Rationalization of Manpower Across Ministries / Divisions/ Directorates.
16	Local Government Commission	1997	Strengthening of Local Government Institutions.
17	Public Administrative Reform Commission.	2000	Improving Transparency, Efficiency, Accountability and Effectiveness of Public Administration and Institutional & procedural changes, Improvement of Service and Value for Money at all levels of Administration.
18	Regulatory Reform Commission	2007	Review all government rules & regulations and identify those that should be annulled, modified or left unchanged and make suitable recommendations for dynamism into governance, administrative and the economy.
19	National Pay Commission	2009	Pay Issues

Source: ABU ELIAS SARKER, UNDP 1993; USAID 1989; World Bank 1996.





D) Why is administrative reform essential in Bangladesh?

Administrative reform is the systematic reform of administrative system in order to modernize the management of public sector of a country, which is a process of adapting administrative system to domestic and global, social, economic and political environment. Administrative reform is needed in the country to change political ideology, change of government or change the way government is run or to bring changes in the government services process. In a developing country like Bangladesh, cooperation and support of bureaucratic power is very important for a government to stay in power or to prolong its power. This cooperation and support is ensured by increasing bureaucratic opportunities through administrative reforms. In fact, administrative reform is the modernization and up-to-date management of a country's public administration and transformation, expansion and harmonization of administrative process for increasing quality of public services, which plays a leading role in enhancing overall social, economic and political stability of a country and establishing rule of law.

Why is administrative reform essential in Bangladesh?

Public administration system of Bangladesh is an outdated administrative system that was run in continuation of the British rule. With exception of one or two of administrative reforms that have taken place in the country till now, most of them have been politically motivated, which were basically a ploy to get bureaucratic support to keep previous governments in power and consolidate power. Necessary administrative reforms to improve the quality of administration have not taken place during the tenure of any government in this country. As a result, bureaucratic complexity, corruption and nepotism are widely visible in all levels of administrative system and government services of this country, which is constantly being criticized and distrusted in all domestic and international circles. In the evaluation of international organizations, current administrative system of Bangladesh is very weak and inefficient in terms of effectiveness and standards, which lags far behind almost all countries in South Asia.

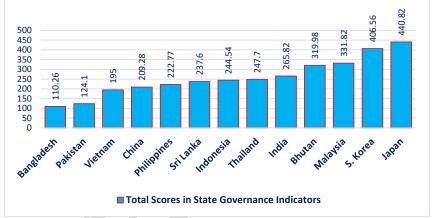
Due to lack of up-to-date and welfare oriented system of administration, not only the people of the country being deprived of real services, it is having a huge negative impact on social stability, trade and investment, resulting of which severely hampering overall social and economic progress of the country. Coordinating and improving the quality of public administration of the country from time to time in keeping with overall progress of the country is a common issue all over the world. 50 years have passed since independence. During gap of these fifty years, tremendous positive progress have been made in political, social and overall economy of the country and meantime, Bangladesh is on the verge of moving from a low-income country to a middle-income country. In order to get place in the list of developed and high income countries by 2041, besides building a sustainable economy in the country, there is no alternative to establishing the rule of law to ensure social and political stability, which requires modern and up-to-date administrative system. It is possible to build a modern and up-to-date administration system in this country only through necessary administrative reforms in the light of advanced expertise in collaboration with internationally renowned consulting firms and donor agencies on the basis of overall cooperation and advice from all quarters.





According to World Bank Report 2019, combined score in 5 important areas of state administration (Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruptions and Voice of Accountability) is 110.26 in Bangladesh, which is the lowest among South Asian countries. In this case, Pakistan's score is 124.1, Vietnam 195, China 209.28, Philippines 222.77, Sri Lanka 237.60, Indonesia 244.54, Thailand 247.70, India 265.82, Bhutan 319.98, Malaysia 331. 82, South Korea 406.56 and Japan 440.82.

Figure-5.23 (3): According to World Bank Report 2019, position of Bangladesh and other countries of South Asia on the basis of combined scores in 5 important areas of state administration:



Source: World Bank Report 2019

E) Major weaknesses in the current administrative system:

Due to lack of timely reforms in public administration system of Bangladesh till now, structural complexities in administration and inefficiencies in policy making and service delivery, procrastination, corruption, nepotism and political influence are widely visible, which is severely hampering overall progress of the country and is acting as one of the obstacles in establishing rule of law in the country. Due to bureaucratic complexity, inefficiency, short-sightedness and corruption at policy-making level in top government institutions, weak administrative system exists at field level. Politicization, recruitment, promotion, distribution of offices in government institutions and lack of transparency and accountability in the management of development activities and influence of political party in these areas has upset administrative system of this country. Due to corruption in high level of administration, proper control and supervision of field level administration is not possible, which is constantly questioning the quality of government services at home and abroad and undermining the achievements of government.

Among notable problems in the administrative system of Bangladesh include :-



Major weaknesses in the current administrative system:

Strategies for Economic Development of Bangladesh



Institutional problems:

- Strong attitude of corruption, nepotism and money laundering among officials / employees.
- Lack of skilled manpower in government institutions.
- Rules for allocating posts on the basis of educational qualifications and skills are missing.
- Frequent and intentional transfer. .
- Lack of inter-coordination between departments.
- Lack of transparency and accountability in government institutions.
- Bureaucratic complexities, inefficiencies and shortsightedness.
- Politicization and party influence in government institutions.
- Improper conduct of officers / employees and illegal activities.
- Irresponsibility in protecting government resources.
- Weakness, inefficiency and procrastination in planning and decision making process.

Political Problems:

- Political interference in administrative work.
- Influence of party in recruitment, promotion, distribution of office and development activities.
- Unwanted influence of local leaders on field level administration.

Social problems:

- Rule of law is not enforced at all levels.
- Lack of participation of people from all levels in government decisions.
- Government control over print, electronics and other media.
- Use of law enforcement agencies in cracking down on opposition parties.
- Lack of awareness about civil rights among general public.
- Lack of social responsibility.

Economic problems:

- Inadequate budget allocation.
- Dissatisfaction among government officials and employees over pay structure.
- Lack of proper and regular audit system in government institutions.
- Non-compliance with international standards and regulations in controlling financial transactions.
- Embezzling money from various organizations.
- Lack of strict position and control of the government against corruption.

Other problems:

- Lack of proper motivation among government officials and employees.
- Provision of promotion on the basis of skill and experience is not in force.

- Dissatisfaction with rank and pay structure in the workplace.
- Inter Cadre quarrel.





 Leadership qualities, ethics and attitude of service are lacking among government officials and employees.

Therefore, one of the challenges for any government is to build a timely, modern and sustainable administrative system through radical reforms to address existing institutional and non-institutional problems in administration in order to accelerate overall development of the country by improving the quality of administrative system and establishing rule of law. Because, quality development is impossible without quality administrative system.

F) Recommendations for development of administrative system:

State of the Administrative Accountability in Bangladesh

Administrative reform is undoubtedly a complex and time consuming matter. In general, aim of administrative reform is to increase administrative capacity for smooth performance of government activities and to improve quality of government services. Effective administrative reform facilitates implementation of government's agenda, strengthening revenue collection and conducting development activities by consolidating the system of governance at central and field levels, which contributes to macroeconomic stability.

Since independence, civil society, NGOs and donor agencies have been advising on necessary reforms to improve quality of administrative system in Bangladesh. In its continuation, about 19 reforms have been implemented in various areas of administration during the tenure of military / civilian governments in the past, although most of those amendments were partial and a tactic to consolidate power. Necessary and complete reforms to modernize the administrative system have not been done during the tenure of any government till date. As a result, institutional and non-institutional problems, bureaucratic complexities, procrastination, bribery, corruption and factionalization are widely visible in existing administrative system, which is questioning accuracy of the country's administrative system at home and abroad. An efficient, standardized and up-to-date administrative system is required to reach in the list of developed countries in the near future through ensuring sustainable social and economic progress in the country, which requires a complete administrative reform. Considering overall context, recommendations for necessary reforms in important areas of ongoing administrative system are as follows: -

Recommendations for development of country's administrative system:

- To take and implement initiatives to establish rule of law and human rights at all levels.
- 2. To ensure opinion and participation of civil society in formulation of laws.





- 3. Establishment of efficient bureaucracy in administrative process.
- Reform and modernization of police department to improve law and order situation in the country.
- 5. Separation of the judiciary from administration.
- 6. To increase efficiency and capacity of government institutions by making necessary reforms.
- 7. Ensuring recruitment, promotion and transfer on the basis of merit and experience and completely stop corruption and grouping in these areas.
- 8. Taking effective steps to stop corruption, factionalism and Inter-conflict at all levels of administration.
- 9. Increasing effectiveness and accountability of administrative system at field
- 10. Decentralization of power to improve quality of administrative system.
- 11. Adopting government's zero tolerance policy on corruption and taking practical steps to curb corruption.
- 12. To fully introduce e-governance system and introducing one stop service in all fields to enhance quality of government services.
- 13. Reducing government control over media and freedom of speech to consolidate democracy
- 14. Adoption and implementation of realistic and effective initiatives for women's development and empowerment.
- 15. To place utmost importance on educational qualifications, experience and patriotism of the candidate while giving nomination in national elections.
- 16. Well-disciplined and modernization of national election system.
- 17. Update on issues related to salary structure, housing and quality of life of government officials / employees.
- 18. In order to stop embezzlement and misappropriation of funds in government institutions, while recording transactions, in addition to fully complying IAS/BS, regular audit system should be introduced.
- 19. Adoption of effective policy for utilization of government resources and their proper protection.
- 20. Introducing system of presenting demands of Opposition in the Parliament in a democratic way without hartal, procession and vandalism in streets.
- 21. Monitoring of food security, food quality and market system and taking and implementing effective measures for its proper control.
- 22. Formulation and implementation of laws with increasing emphasis on vocational education, public health and housing development and achieving food self-sufficiency.





আমার সোনার বাংলা, আমি তোমায় ভালবাসি।



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Long live Bangladesh.

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10. MAPPING OF HEALTH PROFESSIONAL EDUCATION INSTITUTIONS IN BANGLADESH (WHO):

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48. Administrative Reform in Bangladesh: Three Decades of Failure:

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85. EU27 FDI Flows with Bangladesh:

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87. COOPERATION AGREEMENT between the European Community and the People's Republic of Bangladesh on partnership and development:

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90. Prospects for Economic Integration of BIMSTEC: Trade and Investment Scenario:

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122. GLOBAL INFRASTRUCTURE OUTLOOK:

123. INFRASTRUCTURE IN ASIA AND THE PACIFIC:

124. National Sustainable Development Strategy:

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