

PORT AND SHIPPING IN BANGLADESH – AN ECONOMIC APPRAISAL

Rear Admiral Mohammad Shahjahan, NPP, BCGMS, ndc, psc

Abstract

Port and shipping are two vital elements of maritime trade and commerce. Being the nodal point of economic activity and cheapest means of transportation, they play game changing role in national economy and contribute significantly to GDP. Lion share of foreign currency reserve is earned through port and shipping handling import and export. The article observes that the effective use of port and shipping is of paramount importance for overall economy. Therefore, port and shipping can change the fate of a nation. It is like an ocean of opportunity. This paper is an endeavor to focus on the contributions of the ports and shipping sectors of Bangladesh to the national economy.

Keywords: Port, Shipping, Infrastructure, Maritime Trade

Introduction

A port, a primary component of the general transportation system, is rated as the most vital maritime infrastructure, providing staging hub and berthing facilities for shipping. The ports are connected to ships' global economy, while shipping is defined as a physical process of transporting commodities and merchandise principally by sea. The shipping industry embraces all maritime-related business activities taking place within a country's maritime environment: offshore economic activities such as fishing, salvage, towage, aquatic resources, as well as onshore economic activities that include port operation and maritime transport.

The port and the shipping contribute immensely to boost national economic development—directly and indirectly. Some of the contributions are measured in terms of financial and economic indicators, while the role of other positive social and cultural factors, in many cases, remains uncalculated.

As the gateway—staging hub and facilitators of national, regional and international trade—the ports and the shipping sector positively influence both the national and the regional economic development. This industry can generate

substantial business opportunities in terms of goods and services, employment and value-added production effects, contributing positively to economic indicators. The national economy needs to be integrated with the global free-market economy, ensuring door-to-door and timely delivery of goods and services through efficient use of the ports and the shipping for sustainable development as isolated economies cannot secure sustainable growth.

The ports and the shipping industry directly deal with the maritime trade, which handles 92% of import and export, directly contributing to the national exchequer and accelerate economic development. These two sectors also produce skilled human resources, generate ancillary business opportunities, and generate both on board ship and ashore employment for marine professionals. For smooth and easy access to ports, the necessary infrastructures such as bridges, roads, railway, inland waterways, terminals, inland container depots, land port and other structures are also developed. These associated infrastructures support overall socio-economic development.

The ports and the shipping sector generate revenues from customs duties, taxes, detention, demurrage, agency commission, port and river dues, conservancy charges, wharf and space rents, equipment and tug hire charges, and other port tariffs which the users pay in foreign currency. This revenue generation has a direct impact on the economy. Besides, the port and the shipping industry have indirect and induced impacts, too. This paper is intended to evaluate, quantify, and provide an overview of the ports and shipping sector's contributions to the national economy, analyzing the economic indicators.

Economic Indicators

Maritime Dependency Factor (MDF): The MDF of any economy compares the value of the country's international seaborne trade with the gross domestic product (GDP). It is denoted in the percentage of the GDP of the country. The general mathematical principle to measure the MDF is: $MDF = (\text{the Value of Seaborne Trade} \div \text{GDP}) \times 100\%$.¹

Generally, the MDF level varies from country to country, considering the difference in type, size and level of the economy, modes of alternative transport

¹ Halima Begum, "Impact of Port Efficiency and Productivity on the Economy of Bangladesh – A Case Study of Chittagong Port", Dissertation submitted to the World Maritime University, 2003, Available at: https://commons.wmu.se/cgi/viewcontent.cgi?article=1404&context=all_dissertations, accessed on 23 November 2020.

and geographical location. Bangladesh's MDFs during the last ten years are given in the following table:

Year	GDP (mil US\$)	Trade Volume (mil US\$)	MDF (in %)
2010	115280	49,735	43.14 %
2011	128640	65,536	50.95 %
2012	133360	60,870	45.64 %
2013	149990	60,480	40.32 %
2014	172850	72,470	41.93 %
2015	195080	79,793	40.90 %
2016	221420	84037	37.95 %
2017	249710	97527	39.06%
2018	274040	104745	38.22%
2019	302570	109633	36.23%
Average MDF			41.43%

Table-1: Statistics on MDF of Bangladesh²

A country's image regarding external trade and business very much depends on the performance of its ports and shipping industry. These two sectors accelerate the development process as a whole. Singapore, with a vibrant port and shipping sector, is a glaring example in this regard.

An average of 41.43% MDF indicates the impacts of port and shipping on economic development. The port and shipping industry also directly contributes to the economic indicators, human asset index (HAI) and economic vulnerability index (EVI): the three indices measure whether a country is eligible to achieve the status of a Developing Country. In Bangladesh, 98% of its import and export are seaborne, mainly through the principal Chittagong port and the second-largest Mongla port. As an ancient maritime nation, Bangladesh needs to develop its ports and shipping industry to support trade further to make the development sustainable and foster its process to graduate as a developing country from a 'Least Developed' country's status.

² Bangladesh Bureau of Statistics (BBS), "Foreign trade statistics of Bangladesh 2018-19", Ministry of Planning, 2020, Available at: http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/8643ec8b_27a3_41cd_bbd9_9be3479f578e/2020-05-18-08-39-f18cfb579568eda72bf0abaa89b43c3f.pdf, accessed on 28th March 2021.

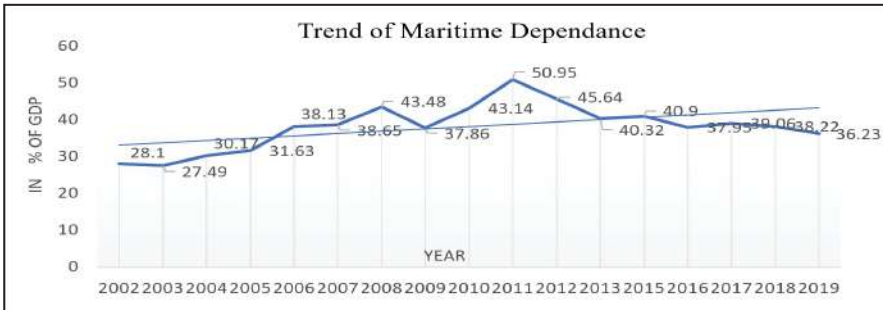


Figure 1: The Trend of Maritime Dependency of Bangladesh³

Macroeconomic Indicators

The ports and the shipping industry has three-pronged impacts on the economy: direct, indirect and induced. These impacts are assessed through economic indicators which are the tools to measure the depth of any economy. Economic indicators, both macro and micro, reflect the overall picture of the economy and the tier of development of a country. The growing GDP and the trade volume indicate more pressure on the ports and the shipping. The following table shows economic indicators, showing sector-wise value addition during the last ten years:

Economic Indicator	Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP (Bil US\$)	115.28	128.64	133.36	149.99	172.85	195.08	221.42	249.71	274.04	302.57
GDP Growth Rate %	5.57	6.46	6.52	6.01	6.06	6.55	7.11	7.28	7.86	8.2
Value Added in agriculture (% of GDP)	17.81	17.71	17.09	16.28	16.11	15.51	14.77	13.41	14.23	12.68
Value added in the industry (% of GDP)	26.14	26.39	26.74	27.64	27.61	28.15	28.77	27.75	33.66	29.65
Value Added in services and others (% of GDP)	56.09	55.90	56.16	56.09	56.28	56.35	56.46	53.48	52.11	52.85

Table-2: Shows Macroeconomic Indicators⁴

³ Ibid.

⁴ H. Plecher, “Share of economic sectors in the GDP in Bangladesh 2019”, Statista, 2020. Available at: <https://www.statista.com/statistics/438359/share-of-economic-sectors-in-the-gdp-in-bangladesh/>, accessed on 22 October 2017.

According to Table-2, the agriculture sector employs nearly two-thirds of the workforce while the service sector generates more than half of the GDP. The ports and the shipping sector are the major contributors to the service sector. The major impediments to the growth include frequent cyclones and floods, inefficient state-owned enterprises, inadequate port facilities, rapidly growing population, and slow implementation of the economic reforms. Inefficiency and corruption, to some extent, stall the desired economic reforms in both the public and private sectors. Despite the COVID-19 pandemic, this sector has shown growth and kept the economy moving forward.

Port and Shipping Infrastructure

The ports of Bangladesh are mostly manual and semi-automated. Considering the existing port infrastructures, the equipment and the commercial fleet, according to the official figures of the Bangladesh Shipping Corporation and two-port authorities, it is evident that the country's ports and the shipping industry has not grown with the same pace of the flourishing economy. The inadequate development of the ports and the shipping sector handicapped Bangladesh from earning vast amounts of foreign currency from freight and container detention charge. The foreign currency lost as the opportunity losses could reduce the existing trade imbalance if we could grasp it. On the other hand, the foreign shipping companies continue to carry growing volumes of our import and export cargos, ultimately contributing to their respective economies. The notable foreign companies operating in Bangladesh are Maersk Lines, CMA-CGM, China Shipping, OOCL and others. The following figure shows Bangladesh's trade volume, the balance of trade and foreign currency reserve:

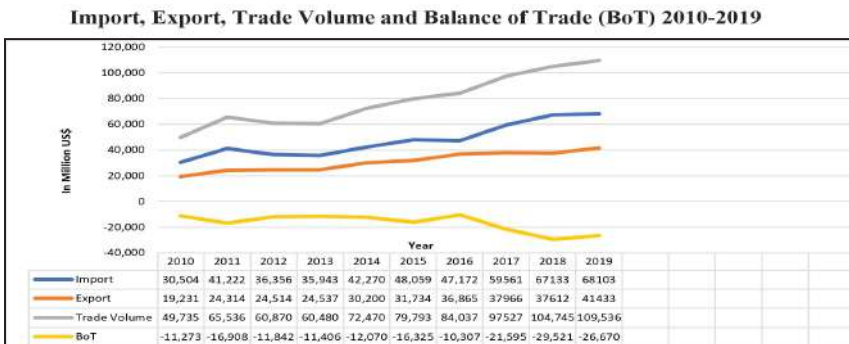


Figure 2: Trade Volume, the Balance of Trade and Foreign Currency Reserve⁵

⁵ BBS, 2020, *op.cit.*

By utilising the flag protection privilege, Bangladesh's shipping and container fleet could earn a huge amount of foreign currency by carrying our own imports and exports cargo.

Among other infrastructural and institutional facilities, the well-placed and efficient port is vital to attract foreign investment. Therefore, ports not only facilitate international trade but also help to improve overall investment and business environment.

To ensure smooth port operations, avoid congestion, reduce Container Dwelling Time (CDT) and port stay of the ship, it is essential to establish new seaports, inland container depot (ICD) and inland container terminal (ICT), and upgrade the existing infrastructures, enhance the capacity of personnel involved in port management, foster connectivity with seaports, upgrade port operations to international standards, digitalise customs procedures, and maintain environment of ports in a harmonised manner. All these measures will generate more revenue and reduce unwanted expenditure. These will also help maintain a healthy foreign currency reserve.

In Bangladesh, domestic, regional and international trade is handled through two seaports, ten land ports and three international airports. The performance of existing port facilities, shipping, terminal, jetty and equipment are inadequate. Due to limited depth, the deep-draft vessels cannot enter the harbour, causing additional charges as the fixed operating cost for more extended port stay and lightering charge. The ports are connected to the hinterland by the railways, the road and the inland waterways. These warrant additional up-gradation of existing handling facilities—the ports and the shipping industry influence all macroeconomic indicators.

Being the central part of the service sector, the ports and the shipping industry conduct import and export, contributing to the national economy. The ports earn huge revenue as port dues, charges, fees, customs duties, value-added tax (VAT) and income tax (IT). On the contrary, the shipping industry can earn huge revenue in foreign currency as freight, detention charges, agency commission, and repair and maintenance charge every year. Besides, Inland and coastal shipping contribute significantly to the economy, contributing approximately one percent to the GDP growth. Bangladeshi seafarers employed in international shipping send huge remittance. The Blue Economy policy of the government, coupled with export diversification strategy, has made the ports and the shipping industry more focused.

Geographical Location

Geographically well-placed and efficient ports can also directly contribute to the regional economy, acting as a regional transit and transshipment hub. Such a port can provide transit and transshipment facilities to neighbouring, landlocked, and geographically disadvantaged countries.

Geographically Bangladesh sits at a strategically important place, connecting South Asia with the Southeast Asian countries. The country is the gateway to the Southeast Asian region and the Far East. Within the South Asian sub-region, Bangladesh's ports and the shipping sector can offer transit and transshipment facilities to the landlocked seven north-eastern states of India, Nepal and Bhutan, which can be extended up to landlocked Yunnan province of China.

The regional connectivity through the Asian Highway, the inland waterways, the coastal and international shipping can open a window of opportunities for the shipping sector, the seaports, and Bangladesh's inland ports. Seaports of Bangladesh can be transformed into sub-regional shipping hub.

Maritime Trade

Direct Impact: Direct impacts consist of the import and export activities, the freight services, the passenger services, towing and dredging, the services and offshore support activities, renting and leasing stevedoring and the shipping agency. The Chittagong Port Authority (CPA) handles nearly 92% of the country's foreign trade. In 2019-20, it handled 2.797 million TEUs of containers, 68.87 million tons of cargo and 3764 sea-going vessels.⁶ The money earned from these operations has a direct economic impact on the economy. The following table shows the direct impact of ports and shipping in economic term:

Direct Revenue Earning on Account of Import and Export Duty and Taxes				
Fiscal Year	Import and Export Tax and Duty (BDT Crore)	Annual Revenue (BDT Crore)	% of Annual Revenue	Average % of Annual Revenue
2010-11	27959.56	79403.11	35.21	29.44
2011-12	31352.78	95058.99	32.98	
2012-13	32312.51	109151.7	29.60	
2013-14	33244.92	120819.85	27.52	
2014-15	38332.48	136723.98	28.04	

⁶ Chittagong Port Authority, "CPA overview 2019-20", 2020.

2015-16	45193.39	155518.72	29.06	
2016-17	54281.87	185003.69	29.34	
2017-18	61278.55	202312.94	30.29	
2018-19	63382.16	223892.42	28.31	
2019-20	60552.23	218408.94	27.72	

Table-3: Direct Impact of Ports and Shipping in Economic Term⁷

Indirect Impacts: The SEZ, EPZ, freight forwarders, C&F agents, shipping agents, oil refinery, cement industry, shipyard, dry dock, fisheries, truck service, railway, ICD, customs, importers, exporters, banks, insurance companies are benefited directly from the port operations. Their survival and prosperity depend on the existence of port activities and expansion. This sector provides job opportunities for millions of people and contributes to the GDP of the country. Bangladeshi seafarers employed in national and international shipping earn substantial foreign currency making their contribution to remittance earnings.

The indirect impact of ports and the shipping industry is import-related, VAT, additional tax realised from the import and export, and the investment on port infrastructures and others. In the last 12 years, it is 33.65 % of total revenue earnings from the country's trade volume. The table below shows the indirect revenue from import and export:

Indirect Revenue from Import and Export at Seaports (BDT Crore)								
Financial Year	Import Duty	VAT	Supplementary Tax	Export Duty	Total Indirect Revenue	Total Annual Revenue	% of Total Annual Revenue	Average % of Annual Revenue
2008-09	9371.23	9181.44	2318.24	-	20870.9	52527.25	39.73	33.65
2009-10	8997.12	10651.2	3203.14	-	22851.5	62042.16	36.83	
2010-11	11576.9	12357.7	3996.23	28.71	27959.6	79403.11	35.21	
2011-12	13153.5	13792.6	4367.71	38.95	31352.8	95058.99	32.98	
2012-13	13259.4	14815.2	4204.46	33.47	32312.5	109151.70	29.60	
2013-14	13575.9	15291.3	4335.77	41.98	33244.9	120819.85	27.52	
2014-15	15349.85	17690.47	5252.42	40.63	29,660.18	157699.70	18.8	
2015-16	18011.80	20587.14	6560.33	39.74	34,268.41	153626.96	22.3	
2016-17	21069.19	25561.09	7628.89	22.7	39,755.65	171656.44	23.16	
2017-18	24319.78	29049.78	7873.11	35.88	45,731.86	202312.94	22.6	
2018-19	24269.52	31400.83	7665.01	55.24	46,815.68	220771.62	21.2	
2019-20	23613.91	30291.4	6644.64	2.28	45,003.5	218408.94	20.6	

Table-4: Indirect Revenue from Import and Export through Ports⁸

⁷ National Bureau of Revenue (NBR), "NBR Annul Report 2010– 2019", 2019, Available at: <https://nbr.gov.bd/publications/all-publication/eng>, accessed on 21 December 2020.

⁸ National Bureau of Revenue (NBR), "NBR Annul Report 2008– 2019", Available at: <https://nbr.gov.bd/publications/all-publication/eng>, accessed on 21 December 2020.

Induced Impact: The induced impacts are the effects of direct and indirect activities on other sectors of the economy. Most importantly, there is a multiplier effect as the incomes generated among port professionals take care of expenses, and these expenditures become revenues to others.

In France and probably in all mature economies, the induced revenues in other sectors amount to about 50% of the newly created revenue.⁹ Since Bangladesh economy is not a mature economy, as it is highly based on agriculture, the degree of induced impact may be less than 50%; but it is still remarkable.¹⁰ However, it will increase further as the services sector is surpassing the agriculture sector in recent years. Induced impacts are hotel and restaurant, food and beverages, tourism, postal services, internet, housing, car rental, amusement services and others.

The Reality of Maritime Economy

Shipping Statistics: The Chittagong port handled 3,092 sea-going vessels in 2017 and earned revenues from the cargo handling service and the ship handling services. On the head of port dues, the CPA earned Tk 138 crore. The port is also a significant source of additional foreign exchange earnings on top of import and export revenues. The CPA earns foreign currency from ship and container handling, too. With the increase in ships and containers, foreign currency income has also been increasing. Statistics on ship handled in Chittagong port is given below:

Year	Ship Handled
2014-15	2566
2015-16	2875
2016-17	3092
2017-18	3664
2018-19	3699
2019-20	3764

Table-5: Ship Handling Statistics¹¹

⁹ Andrew P Goodwin, Presentation on “The Economic Value of Shipping and Maritime Activity in Europe”, Oxford Economics, UK, 2016, Available at: <https://www.oecd.org/sti/ind/Session%201c%20-%20Andrew%20Goodwin%20-%20Presentation%20for%20Website.pdf>, accessed on 26 October 2017.

¹⁰ Halima Begum, 2003, op. cit.

¹¹ Chittagong Port Authority, “Handling Statistics 2020”, 2020. Available at: <http://www.cpa.gov.bd/site/page/db237ba5-1bef-4b10-b54a-cb609169e61c/>, accessed on 28th March, 2021.

Import and Export Volume with Freight

For the last ten years, the import and export volume of Bangladesh from 2010-2019 and projected trade volume for the next ten years, including freight earned by the Bangladesh flag carrier, are appended below:

Freight of Import (CIF) and Export (FOB) Last 10 Years						
Year	GDP (mil US\$)	Export (mil US\$)	Import (mil US\$)	Import Freight (25%) (mil US\$)	Export Freight (25%) (mil US\$)	Total freight in mil US\$
2010	115280	19231	30504	7626	1907	9533
2011	128640	24314	41222	10306	2576	12882
2012	133360	24514	36356	9089	2272	11361
2013	149990	24537	35943	8986	2246	11232
2014	172850	30200	42270	10568	2642	13210
2015	195080	31734	48059	12015	3004	15019
2016	221420	36865	47172	11793	2948	14741
2017	249710	37550	52836	13209	9388	22597
2018	274040	40560	60495	15124	10140	25264
2019	302570	46360	64900	16225	11590	27815
Total Freight Charge for Last 10 Years		315865	459757	114941	48713	163654
Average Import and Export growths were 15.11% and 13.31%, respectively derived from above table.						
Forecast of Freight for Next 10 Years (2017-2026)						
2017		41509	53248	13312	10377	
2018		46737	60107	15027	11684	
2019		52624	67849	16962	13156	
2020		59252	76589	19147	14813	
2021		66716	86455	21614	16679	
2022		75119	97591	24398	18780	
2023		84581	110161	27540	21145	
2024		95235	124351	31088	23809	
2025		107231	140369	35092	26808	
2026		120738	158450	39612	30185	
Total Freight for Next 10 Years		749742	975170	243792	187436	431,228
Derived from above table						

Table-6: Import and Export Volume with Freight¹²

¹² NBR, “NBR Annul Report 2010– 2019”, 2019, op. cit.

The import and export volume of Bangladesh for the last ten years from 2010-2019 was US \$775.62 billion as per Bangladesh Bank statistics, and the average growth rate of import and export was 13.93%. On the other hand, the country's projected import and export volume for the next ten years would be US \$1724.91 billion as derived from above Table-6. If Bangladesh had its vessels, it could earn a considerable amount of revenue as freight. According to the UNCTAD ratio 40/40/20%, in the next ten years, it could be a minimum of 40% of US\$ 775.62 billion—the US \$193.91 billion of total freight cost if freight is considered 25% of C&F value of goods. It means, yearly, it will be US\$ 19.39 billion. Therefore, Bangladesh needs to develop its port and shipping industry with modern equipment and infrastructures.

Tax Earnings from Freight of Import and Export

As calculated from freight of import and export for the projected trade volume of the next ten years, the tax earning would be USD 34,498.26 million at the rate of 8%. It means yearly US\$ 3.45 billion could be earned as the tax of freight as calculated from above Table-6.

Agency Commission Earnings from Freight of Import and Export

The agency commission, as calculated from freight of import and export for the projected trade volume of the next ten years (2017-2026), will be US\$ 1237.33 million at the rate of import 2.5% and export 5%. It means yearly US \$1.24 billion could be earned as agency commission out of freight as calculated from above Table-6.

Tax and VAT on Agency Commission

The total government income as tax and VAT on agency commission, as calculated from freight of import and export for the projected trade volume of the next ten years (2017-2026), will be USD at 8%, will be USD 34683.86 million as calculated from above Table-6. Due to the over and under-invoicing by the dishonest importer and exporter, the country loses vast foreign currency as VAT and tax every year.

Saving Detention Charges

The importers charter ships and hire containers to carry cargo to the desired destinations. The hired containers are kept in Chittagong port for months, sometimes deliberately and sometimes owing to unawareness, causing huge

foreign currency expenditure. Presently the Port of Singapore, the Port Kelang, and Tanjung Pelepas are used as transshipment hubs for Bangladesh and other regional countries. The small feeder vessels carry the containerised cargo to Bangladesh, Myanmar and the Indian ports of Vizag, Kolkata, Haldia, Paradeep and others. As a result, cargo coming from the US Atlantic Coast, Europe, Africa, and the Middle East goes to Singapore for transshipment; travelling a few thousand nautical miles wasting at least 15 days which costs additional expenditure. Sometimes due to loss of time in transit, many RMG exporters have to go for air shipment incurring a huge financial loss.

A deep seaport in Moheshkhali would allow the mother vessels with a capacity of >5000 TEUs to come and save 15 days' which would save huge foreign currency. In 2019, Chittagong port alone handled 2.90 million TEUs of containers. As usual from landing, the first five days are free time. From the 6th day, detention on each container starts. Average Detention rate per TEU of VEGA MARINE (PVT) LTD invoice, Chittagong, dated 19 April 2012, is as per the following Table:

1st Week	2nd Week	3rd Week	4th Week	5th Week to Until 60days	After that Per Day
10	15	25	35	50	70

Table-7: Average detention/Day/TEU in US\$¹³

In 2007, the average CDT was 27 days, and it reduced to 11 days in 2019. Many containers are laying in Chittagong port yard for years as per CPA presentation given to NDC 2016. On average, if an importer pays detention per TEU US\$ 1000. So, detention charges paid by the Businessmen every year are US\$ 1000 x 2.797 million TEUs = US\$ 2.797 Billion.

Fixed Operating Coast (FOC) of Vessels

In 2019, Chittagong port handled 3,764 vessels. Average TAT for container and GC vessels were five days and 15 days, respectively. The average FOC per vessel/day is approximately US\$ 10,000-15,000, depending on the type and size of the vessel as per the statement of Shipping Agents. If Average TAT could be reduced to three days, then 12 Days TAT per ship could be saved. Considering the average FOC per vessel is US\$ 1,20,000, the vessels visiting Chittagong port are paying extra US\$ 1,20,000 X 3764 = US\$ 0.442 Billion.

¹³ VEGA MARINE (PVT) LTD, Invoice, Chittagong, 2012.

Impact on FC Reserve

In terms of freight, tax earning on freight, agency commission, tax and VAT on agency commission, detention, demurrage and FOC of containers and ships due to excessive CDT and port stay, the county could earn and save huge FC every year. Therefore, in 2016, the country could earn and save FC against FOC and demurrage of vessels and detention of containers, in total, is US\$ (17.25 + 3.45 + 1.24 + 1.12 + 3.04) billion =US\$ 24.86 billion derived from the above-mentioned calculations of FOC, Detention Charges, Tax & VAT earnings and Agency commission etc. These expenditures can be reduced significantly by implementing regulatory regimes strictly and developing awareness among the port and customs officials, business community, shipping agents, freight forwarders and other port users.

Sub Regional Economic Potentials

Due to its advantageous geographical location, Bangladesh can play a vital and strategic role in connecting South and Southeast Asia. Accordingly, Bangladesh has undertaken a wide range of programs to upgrade its highway and transport network to facilitate trade and cross-border vehicles. Bangladesh emphasised corridor-based road development to accommodate regional as well as international traffic. In promoting regional cooperation and integration, Bangladesh has deeply been involved in several regional initiatives and identified strategic transport routes under the umbrella of UN-ESCAP, SAARC, SASEC, BIMSTEC and BCIM Forum.¹⁴

It can reach the doorstep of half of the world population within 24 hours by a motor vehicle from Bangladesh, meaning direct access to half of the world market. The Asian highway and inter SAARC connectivity can make Bangladesh tomorrow's world business hub between the SAARC and the ASEAN member states. Bangladesh has the potential for capturing the opportunity of being a sub-regional economic corridor of the regions. The country's strategic geographical location could help offer connectivity through the land, the sea, and the air. However, seaports and shipping will play a pivotal role. The Matarbari Deep Sea Port of Bangladesh has potential to become a sub-regional transshipment hub for the ports like Chittagong, Mongla, Payra, Indian Ports (Kolkata, Holdia,

¹⁴ Centre for Research and Information (CRI), "Bangladesh Development Series Power and Infrastructure for Inclusive Growth", 2018, Dhaka, p.28-33.

Vizag, Kakinada and Andaman), Myanmar Ports (Akyb and Yangon), and Thai port Phuket.

As regional cooperation's objectives expanded to incorporate land and port connectivity, the regional and the international fora may be utilised to transform the ports of Bangladesh into a sub-regional hub. In consolidating regional cooperation, the ports and the shipping can take a leading role by strengthening cooperation. However, the geopolitical issue to be kept in mind is that the country should not fall into the geopolitical trap. Bangladesh has signed agreements with the neighbours bilaterally and also with international bodies to foster trade and commerce. All the regulatory regimes - Ordinance, Policy, Protocols, Agreements and Code of Conduct with neighbours and the international community be implemented to reap the economic benefits.

The seaports of Bangladesh are suitable for offering cost-effective transport facilities to the land-locked Nepal and Bhutan, even the Yunnan province of China. Bangladesh also offers a one-stop service facility for both the local and foreign investors to invest here, manufacture products, sell around the SAARC, ASEAN regions even export to the western countries, either Europe or America, with duty-free market access facilities.¹⁵

Expected Regional Cargo Volume

The potential and target sources of transshipment cargo traffic are Nepal, Bhutan, the north-eastern states of India and Yunnan province of China. They have already expressed a desire to use deep seaport facilities. The GDP and demography of beneficiary countries show the potential for generating a significant volume of cargo traffic. The forecast proportion of general cargo that would be containerised in future is estimated using cargo statistics from 2020 to 2055 are given below:

Items	2020	2030	2040	2050	2055
Low Case					
Total Container Cargo	2,124,717	3,345,321	5,046,804	7,663,308	9,471,385
Medium Case					
Total Container Cargo	2,732,695	4,798,256	7,565,870	11,445,888	14,127,248
High Case					
Total Container Cargo	8,561,114	17,121,348	31,604,136	56,773,250	76,448,949

Table-8: Container Volume and Forecast-Total for All Cases in TEUs¹⁶

¹⁵ Ibid.

¹⁶ Pacific Consultants International, "Techno-Economic Feasibility Study of a Deep Sea Port in Bangladesh, Draft Final Report on Deep Sea Port", Volume 1, Bangladesh, 2009, pp. 2.7.1-15-17.

Bangladesh is situated in a very advantageous geographical location to provide transit and transshipment facilities to its neighbour India and landlocked countries like Nepal and Bhutan, including Yunnan province of China. The country can earn huge foreign currency by using its seaports and inland ports to the neighbours. Freight and fees for transit and transshipment would contribute to GDP. Besides, coastal shipping with neighbours and inland shipping within the country are contributing to the GDP significantly.

Emerging Economic Trend

The Bangladesh economy is heavily reliant on imports. Though more than half of the GDP is generated from this service sector, nearly two-thirds of Bangladeshis are employed in the agricultural sector. The import value is almost 1.5 times higher than the export value as seen from the statistics of NBR given in Table-6. The import items range from food grain to capital machinery. In contrast, export items are limited to a few commodities such as ready-made garments, jute and jute products, tea, pharmaceuticals, leather and leather goods, fish, ceramics, manpower and others.

The RMG, which faces tough competition globally, still contributes over 83% of the total export earning.¹⁷ Any recession in this sector will bring the economy at knees. The latest COVID-19 pandemic significantly cut Bangladesh's RMG export in 2020. Bangladesh needs to diversify its export basket and conduct proactive economic diplomacy. To maintain the BoP trend positive and limit the inflation rate below 6%, the import and the export need to be increased further. The import and export growth rates are climbing up, and remittance has also increased significantly, to US\$ 2050.65 million in Dec 2020.¹⁸

According to the central bank figure, the foreign currency reserve in 2020 has crossed the US \$42.6 billion. According to official projection, the currency reserve is likely to shoot up to the US \$50 billion by 2021.¹⁹ The GDP has grown

¹⁷ Bangladesh Bank, "Bangladesh Bank Quarterly Review on RMG: April-June FY'20", 2020, Available at: <https://bb.org.bd/pub/quaterly/rmg/apr-jun2020.pdf>, accessed on 02 April 2021.

¹⁸ Trading Economics, "Bangladesh Remittances", 2020, Available at: <https://tradingeconomics.com/bangladesh/remittances>, accessed on 02 April 2021.

¹⁹ Trading Economics, "Bangladesh Foreign Exchange Reserves", 2020, Available at: <https://tradingeconomics.com/bangladesh/foreign-exchange-reserves>, accessed on 02 April 2021.

to USD 302.57 billion with an actual GDP growth rate of 8.20% in FY 2019,²⁰ and per capita income has reached \$1909 in march 2019.²¹ Thus, the country is on the list of Next-11 emerging economies, set to graduate as a ‘Developing Country’ from the LDC status. All these positive notes have brightened the external image of Bangladesh. The ports and the shipping sector need to be developed with the more significant endeavour to continue the positive trend and bright credentials.

Geopolitical Importance

Bangladesh’s geopolitical importance to its neighbour is preponderant due to its strategic geographical location. Bangladesh opens to the Indian Ocean through the Bay of Bengal in the south. Thus, it has to look at the current geo-political players of the Indian Ocean which is being gradually militarized. This oceanic region hosts one of the world's busiest and most important shipping lanes, which supplies East Asia with the bulk of its Middle Eastern crude oil. Being the keystone nation in the region, Bangladesh balances India, China, Russia, the UK, the EU, the US, and Japan.

Besides, ports also strengthen a nation's diplomatic relations with other countries. Due to geographic and socio-economic conditions, the port has played a vital role in facilitating international and domestic trade and providing a place for the industry. Moreover, a major port on its national territory is the best possible guarantee of economic and even political independence. A country's image is widened by the modern port facilities, infrastructures and efficiency in the global market. National merchant fleet and liner services carrying national flag overseas act as an ambassador of the country.

Challenges, Constraints and Way Forward

There are numerous challenges and constraints in the ports and shipping industry. The significant challenges are:

- Implementation of appropriate International Commercial Terms (INCOTERMS) for import and export
- Implementation of Rules for the Payment of Import, Export, Freight, and Agency Commission

²⁰ Trading Economics, “Bangladesh GDP”, 2020, Available at: <https://tradingeconomics.com/bangladesh/gdp>, accessed on 02 April 2021.

²¹ The Daily Star, “Per capita income hits \$1,909”, 2021, Available at: <https://www.thedailystar.net/business/news/capita-income-hits-1909-1717606>, accessed on 03 April 2021.

- Shortage of Skilled Manpower
- Port Efficiency and Performance
- Congestion Surcharge in Transshipment Hub Port
- Regional Port Development.

On the other hand, few significant constraints are as follows:

- Geopolitics
- Governance and management Issues
- Utilisation and Development of Port Capacity
- Limited Navigability
- Inadequate Hinterland Connectivity

The way forward to remove those challenges and constraints are:

- Development of well-placed and efficient port with adequate port facilities
- Development of Inland and Coastal Shipping.
- Developing hinterland Connectivity.
- Developing own merchant Fleet, Port and Port Infrastructures (ICT & ICD).
- Transforming Ports to Transit and Transshipment Hub.
- Developing Efficient Shipping Fleet.
- Diversifying the Export Basket.
- Combating Corruption by Developing Digital Port and Shipping Services.
- Policy Initiatives by Government for Port Led Development.
- Implementing Visions 2021 and 2041.
- Maintaining strong economic diplomatic relation.

Besides, the introduction of online services in port, custom, the NBR and all other stakeholders will mitigate the challenges. The UN SDG 2030 gave specific goals and targets for the ports and the shipping sector for global cooperation in terms of trade. The port and the shipping can significantly contribute to Vision 2021 to become Middle Income Country and Vision 2041- to become a Developed Country.

The government policy formulated for the port and the shipping sector-led development will attract investment. Given the complex geopolitics prevailing among the regional and extra global powers, Bangladesh needs to adopt prudent economic diplomacy. A well-placed and efficient port and shipping systems are fundamental requirements for maritime trade and commerce. The growth of ports unerringly boosts a country's economy, a trend already visible in Bangladesh's GDP. Being the vital trade facilitator, the port and the shipping industry generate

colossal employment and ancillary businesses. The ports and the shipping sector of Singapore, China, and the EU have contributed to developing their respective countries and regions. Bangladesh can learn the lesson and utilise its ports and the shipping industry to change the nation's fate. The ports and shipping sector is an Ocean of Opportunity.

Conclusion

The seaports are Bangladesh's real gateway to the outside world since it is landlocked from three sides. The seaports and the shipping sector are rated as the backbone of the country's economy, with direct, indirect and induced impacts. The direct impacts are measured in terms of financial return, while the indirect and induced impacts largely remain unnoticed. The indirect and induced impacts play catalysts' role in the economy.

The ports connect our economy with the global supply chain. As an import-dependent country, Bangladesh depends on its two seaports that handle 92% of total external trade: import and export. The ready-made garment (RMG) industry, which accounts for over 82% of our total export, depends on the seaports for shipping the export items. The ports make Bangladesh's RMG sector, the second biggest in the world, economically viable. In the future, the government's Blue Economic policy would increase Bay-centric economic activities for which vibrant ports and capable shipping industry are a must.

Though Bangladesh ports have enhanced their capacity and performance over the last decade, the ports need urgent up-gradation of the existing handling facilities due to increasing pressure of containers and cargo, both domestic and external. Digitalisation and strict supervision would ensure the smooth operation of the deep seaport by eliminating corrupt practices.

To harness the maximum potentials of the ports and the shipping sector, Bangladesh needs to widen its maritime landscape by building a deep seaport that would host the deep-draft domestic and foreign vessels. An active deep seaport would generate a considerable amount of revenue for the country on the one hand, and generate employment opportunities for the country's shipping sector on the other.

The domestic shipping sector is critical to the economy as the country can carry emergency products by the Bangladesh Shipping Corporation's fleets and the local ships. The Bangladesh shipping sector can earn a considerable amount of foreign currency as freight, detention and demurrage charges, agency commission, and repair and maintenance charges. Besides, Inland and coastal shipping contribute significantly to the economy.

The Bangladeshi seafarers employed in different international shipping companies send vast amounts of remittances back home every year. The local shipbuilding sector employs thousands of skilled, semiskilled and unskilled workforces. Besides, we should encourage the local investors formulating business friendly policies to invest in the port and shipping sector to develop bulk and container vessels, including liner services both in the public and the private sector. The public-private partnership initiative can also be encouraged.

We should also formulate a policy to reduce foreign currency expenditure, discourage unwanted delay of ships and containers, and prevent hoarding in floating vessels. The demurrage and detention charges for the foreign shipping companies should be reduced to make it attractive.

About Author: Rear Admiral Mohammad Shahjahan, NPP, BCGMS, ndc, psc is presently serving as Chairman, Chittagong Port Authority on deputation. He has a long colourful career of thirty-six years in the Bangladesh Navy. A veteran navigator of BN, R Adm Shahjahan commanded different naval ships, including Frigate and important Shore Establishments. He completed Masters in Defence Studies from National University and Masters of Philosophy in Strategy and Development Studies with a Thesis on 'Impact of Port and Shipping on Economic Development of Bangladesh' from Bangladesh University of Professional, Dhaka. R Adm Shahjahan is a thinker of Port and Shipping related issues. He can be reached at shahjahan568@yahoo.com.