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# MONGLA SEAPORT – ITS INCREASING CAPABILITY AND FUTURE PROSPECT

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ABSTRACT

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The objective of this study is to assess the increased capabilities of the Mongla Sea Port in Bangladesh during 2008-2021. It also attempts to identify the prospects associated with the seaport. Data indicate that

the port incurred losses for several consecutive years at the beginning of the 21<sup>st</sup> century. However, the scenario has been changing since 2008. On average, the port handles about 20 percent of the total trading activities of Bangladesh by applying 40 percent of its total capacity. The study findings indicate that Mongla Port is getting an economical hub day by day for taking initiatives like ongoing development projects and much other futuristic planning. Government has the attention on Mongla port to contribute its potentialities in the regional and national economy of the country.

**KEYWORDS:** Sea Port, GDP, Maritime, Economic Activity, Infrastructure, MPA, Trade, Export Processing Zone (EPZ), Padma Bridge.

## 1. INTRODUCTION

The sea is known traditionally as a superhighway. Around 95% of the world's merchandise and 70% of industrial raw materials are transported through the sea. The economy of Bangladesh largely depends on the sea trade. Bangladesh has a maritime history of more than 4000 years back. Foreign trade accounts for 38% of the nation's GDP and last five years statistics say about 33% of foreign trade has got maritime dependency [Rashid et al., 2019].

A seaport plays an important role in the international trade and economic growth of a

country. It acts as a gateway connecting continents and transferring goods between maritime and land-based modes. A seaport provides vital opportunities, such as the increase in the flow of trade, foreign exchange, employment, transportation, formation of main transport routes, and other infrastructures.

The performance of a Seaport depends on its Cargo handling, earning revenue, labor and capital, equipment expenditure, waiting and service time turnaround time, etc. [UNCTAD., 1976]. The number of cargo and container handling, cost of cargo handling, turnaround time, and export-import trend are some operational indicators to measure port performance [Deshmukh., 2003]. Furthermore, some studies measure port performance based on a port, such as infrastructure, equipment, governance structure, and integration in logistic networks. Besides these, earning revenue or financial statement also are considered to measure the performance of a port.

In contrast, a port has great opportunities to contribute to the global supply chain. The huge activities of a seaport also create employment opportunities [Zeybek et el., 2008]. A study [Carbone et al., 2003] highlights the necessity of transitory storage in ports and the presence of well-organized transport services to make ports potentially attractive places for logistic activities. Another study [Larissa et al., 2005] argues that ports act as the engines behind regional economic development since it involves a variety of economic activities. Investment in seaports reduces the unemployment problem, increases land values, infrastructural opportunities, and technological development [Caglak., et al., 2011].

For international trade like many other countries of the world, Bangladesh also has to depend mostly on seaports. Mongla seaport is situated in the southwest part of Bangladesh. The port provides many facilities and services to the various shipping lines and other concerned agencies with shore-based facilities. It plays a strategic role in the national defense, economy, and trade of Bangladesh. Since its establishment in 1950, this port has been playing an important role in the international trade and commerce of the country. However, it has been passing a very crucial time since the beginning of the 21<sup>st</sup> century.

Only 10 percent of the capacity of MSP was used at the beginning of the century. Another source [Chung et al., 1993] states that only 20 percent spare capacity of Mongla sea port is used. The performance of the Mongla seaport has declined over time. To overcome the declined trade since 2010 the MPA has taken a few steps to develop the user facilities. As

a result, being the pandemic situation all over the world, the Mongla port authority has received the highest number of ships in the financial year 2020-2021 and thereby earned so far the highest revenue since its establishment in the financial year 2020-2021. In contrast, the port has a great prospect to contribute to the economy. If this port runs efficiently, the regional and national economy will be benefitted and many other countries in the world, particularly the SAARC countries will be benefited through using this port.

#### 2. History of the Mongla Port

British, Portuguese, Dutch, Chinese, and Arakanese came across a flourishing trading system in South Asia, which linked the business centers of East Bengal with Kolkata/Calcutta through the river routes of Mongla and the Sunderban. After the partition of the country, the economic aggression of West Pakistan and the expansion of trade in the southern part of the country. A British merchant ship "City of Lyons" first entered the port and anchored at Joymonirgol on 11 Dec. 1950, thus making the auspicious beginning of cargo handling operation at the anchorage. On March 17, 1951, the anchorage was shifted near Chalna Bazar, 22 km upstream. But as the anchorage site was found unsuitable for operation, further investigations were undertaken for selecting a suitable site. In 1953, Sir Claude English came to the then East Pakistan for surveying the Channel of Chittagong Port who was also assigned with the responsibility of surveying Pussur- Sibsa river basin to find out a suitable site for the anchorage. In his survey report, submitted in 1954, Sir Claude English recommends that the anchorage site be shifted to Mongla, about 16 km. downstream from Chalna Bazar. Accordingly, on June 20, 1954, the Directorate of Chalna Anchorage was shifted to Mongla between Mongla Nulla and Pussur River. Thereafter a series of studies were undertaken and the present site was selected for constructing permanent port facilities finally, five jetties were constructed with necessary backup facilities including handling of containers in 1978. The port directorate was then changed to an autonomous body called, Chalna Port Authority and placed under the Ministry of Shipping from 1978. On 24 March 1982 Chalna Port Authority was again renamed as Port of Chalna Authority and at last, the port found its present name Mongla Port Authority on 8 March 1987. The graphical time line of the Mongla sea port is shown in the Figure 1.

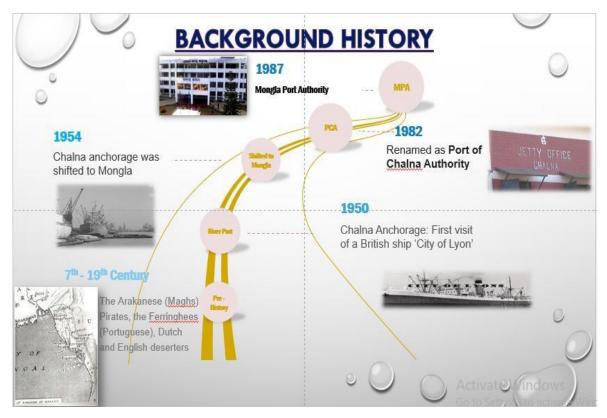


Figure 1: Graphical representation of the Mongla port history.

## 3. Contribution of the Mongla Seaport

The economical impact of Mongla Port is gradually increasing and that can be seen from revenue growth, increase in the number of ship handling, and increase in the capacity of cargo and container handling. The Mongla Port Authority collects all these data and shown in Figure 2,3, and 4. The data trend shows the continuous growth of the port in very areas. The Covid-19 hit 2000-2021 also shows the growth and that indicates the importance of this port for Banladesh and its economy.

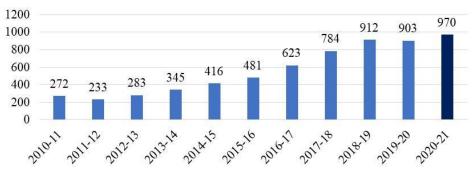


Figure 2: Ship Handling of Mongla Port from the year 2010 to 2021.

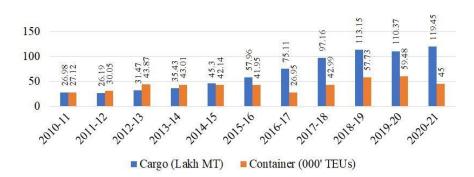


Figure 3: Cargo and Container Handling of Mongla Port from the year 2010 to 2021.



Figure 4: Revenue of Mongla Port from the Year 2010 to 2021.

## 3.1 Geographical Location and Access of the Mongla Port

Mongla Port is situated in the south-western part of Bangladesh at Bagerhat District in Khulna Division. The distance from Khulna is about 60 km. This area is about 145 km upstream from the Bay of Bengal and Protected by the Mangrove forest of Sundarban. Mongla is located at East Coast India, Bay of Bengal in Bangladesh at coordinates N 22° 30' 01.23"- E 089° 35' 25.79". Geographically, this port holds a lucrative position. It is connected to the capital city through the Padma bridge and is only 170 km away from it shown in Figure 5.

The distance between Mongla port to the capital is the lowest among all the ports. This is a positive factor for developing the activities of a port. Due to having this advantage, Mongla port is gaining attention from national and international traders as well. Mongla port has various points for serving a different purpose. A channel from the permanent jetty to swatch of no ground is 131 km shown in.

The construction of the Padma Bridge shown in Figure 6 will have a huge economic impact on the country. With the completion of the construction, the Mongla seaport going to guide a new horizon as well as neighboring countries India, Bhutan, and Nepal will be highly benefitted from it. It is going to open the door of economic development at home and abroad together. Similarly, it will change the fate of people in 21 districts under the southwest belt of the country. At the same time, revenue-earning will increase 400 times. With this aim, the authorities concerned have started working to increase the capacity of the port and excavate the channel.

Despite the opportunity to transport goods over short distances and at a low cost, the Mongla Port has not been able to exploit the potential due to a lack of shallow channels and capacity. However, an effort to remove the obstacles is going on. After the excavation of the outer bar of the port, the excavation work of the inner bar is going to start.

If the Padma bridge is open in 2022, traders will be more interested in Mongla Port than Chattogram Port. When the construction of the Padma bridge will be completed, communication with any part of the country will be easier and faster. As a result, neighboring countries India, Bhutan, and Nepal will be highly benefited by using Mongla Seaport. Mongla seaport would be the closest port for the Seven Sisters along with Nepal and Bhutan as well as its use would be increased.

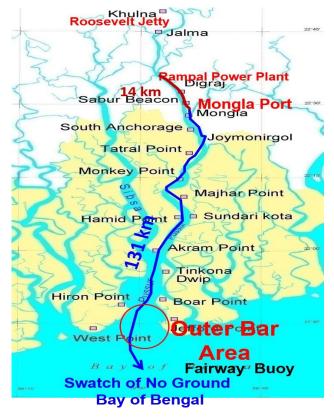


Figure 5: Geographical location of the Mongla port.



Figure 6: The Padma bridge.

Bangladesh will be benefited economically when the Padma bridge will be launched. It will create employment facilities for the people and businesses will be expanded. If development continues, the port will be able to accommodate 10,000 ships by 2050 and Mongla will become the busiest port in the region.



Figure 7: Mongla to Khulna Rupsha Railway Bridge.

Khulna–Mongla Port Railway is a 65 km broad gauge railway under construction. This will connect the country's main railway with Mongla Port. The under- constructed Rupsha Rail Bridge is on this proposed line shown in Figure 7. This project will enrich the trade communication system in our country. All national and international trade will get a new diversification through this way. Mongla EPZ (Export Processing Zone) will be benefitted exponentially with the completion of this project. Mongla, the southwestern region will catch the attraction of investors as a rising business hub of the country.

The closest airport to the Mongla port is located at Jashore. It is about 1.5–2.0 hrs by road. To facilitate business travelers, investors, and customers for both the port and EPZ, a new

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airport, Khanjahan Ali Airport, has been planned at Failahat. This is about 21 km from Khulna. Work on the airport should proceed at the earliest opportunity to improve the transportation network for business travelers. Both Mongla Port and Mongla EPZ (Export Processing Zone) have also expressed the need for this airport.

Mongla Export Processing Zone (EPZ) will become the key center of economic activities in the southern region of Bangladesh, according to the executive chairman of the Bangladesh Export Processing Zones Authority (BEPZA). The exports from Mongla Export Processing Zone (EPZ) increased 16 times in the past 10 years. Investments also witnessed an eleven-fold rise, while about 4,500 people make a living in the zone.



Figure 8: Mongla Export Processing Zone (EPZ).

Mongla EPZ was established on 289 acres of land in 1998 in line with the decision of the present Awami League Government. There are 236 industrial plots where a few empty plots are left. There has been great industrialization within the zone. The process of bringing in the raw materials is being done using the Mongla Port. For this reason, the use of Mongla Port is on the rise. In 2008, EPZ drew investments worth Tk 450 million but investments witnessed a significant rise in 2018 as the port town EPZ drew Tk 5.1 billion worth of investments – an increase of eleven-fold in the last 10 years. With the increased capacity of Mongla EPZ, the activities of Mongla Port will increase significantly.

## 3.2 Current State and Future Development Plan of the Mongla Port

Mongla Port Authority (MPA) has a master plan to drive development and growth. This master plan established the conceptual framework which provides a road map consisting of

several projects. In this project, 75 numbers of equipment are currently enlisted. There are two basic categories; container and cargo handling equipment and civil construction work equipment. All the equipment is equipped with modern facilities and technology-based safety arrangements. At present Mongla Port can handle ships having no cranes. Such ship handling is a milestone for Mongla port and is already used to unload the Metro Rail train. All these equipment with variable capacity can be the way of reaching towards the aim. With the completion of this project, the handling capabilities of Mongla port will have risen rapidly which will catch the attraction of foreign traders. The installed electric crane and Vessel Traffic Management and Information System (VTMIS) system are shown in Figure 9 and 10 consecutively.



Figure 9: Procurement of essential equipment of Mongla Port Authority.

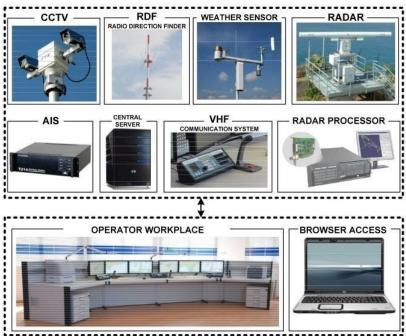


Figure 10: Inauguration of the Vessel Traffic Management and Information System (VTMIS).

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In this project, four points of location have been chosen including Mongla, Hiron Point, Harbariya, and Hamid Point. Infrastructures development works are going on includingtower building, control room setup, and many more. After the project, Mongla port can achieve the control of traffic for better efficiency and surveillance over the port activities.



Figure 11: Procurement of Service vessels for Mongla Port Authority.

Under this project scope, Mongla Port Authority is going to procure Tug boats, Buoy Laying vessels, Search and rescue vessels, and Pilot and mother vessels shown in Figure 11. All of these vessels will guide foreign ships and make the turnaround time reasonable for the stakeholders. These items will give a complete thrust to the movement of Mongla Port development.

Siltation is the most dominant factor for incoming ships. Heavy siltation decreases the desirable draft and the lack of dredging declines the number of ships handled per year. After the implementation of the project, the main channel of Mongla port will be able to accommodate more large merchant ships entering and leaving the port, which is of great significance for enhancing the port's throughput capacity and promoting economic prosperity and development of the southwestern part of Bangladesh.

This project will create a clean eco-friendly image for port users all over the world. During the voyage of a ship from one port to another, different types of wastes are generated because of day to day operation of the ship and the livelihood of the crews, which fall under the scope of the international convention for the prevention of pollution from ships. It is seen that almost 1000 nos. of ships are calling into Mongla port every year and is gradually increasing day by day. Waste oil and other materials generated through incoming ships that hamper the environment can be managed by this project. Oil spillage vessels and waste collection and management systems will keep the environment safe systematically.



Figure 12: Installation of Surface water treatment plant for Mongla Port Authority.

As the salinity of water in the region of Mongla Port is very high, therefore, this project can fulfill the demand of supplying safe water within this region. It will be a landmark development of the Mongla Port Authority.

In this project, some important construction works are included such as container terminal, container terminal yard, and container handling yard construction. At present, cargo and container handling capacity is not up to the mark in comparison with modern seaports around the world. A container terminal having all facilities with a digitalized monitoring system is enlisted in the infrastructure segment of this project. This will create a container networking process where the time of handling a container can be optimized. The construction of the container terminal yard can be highly effective. A container having its recognition number can be easily sorted out. All containers will be categorized according to the purpose of storing items. So, all this arrangement will augment the dynamicity and capability of handling of this port as well. In addition, Mongla Port is working to establish an automation system that is under process for implementation. With the completion of this project, all programs going to develop into the automation process. It will create an environment where the traders around the world will be highly motivated to take the service for their export and import from this port.

#### 4. CONCLUSIONS

Globalization and successive breakdowns in trade barriers have stimulated incredible growth in marine transportation. A seaport plays an important role in the international trade and economic growth of a country. It acts as a gateway connecting continents and transferring goods between maritime and land-based modes. A seaport provides vital opportunities, such as an increase in the flow of trade, foreign exchange, employment, transportation, formation of main transport routes, and other infrastructures.

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