Matarbari Port Development Project (MPDP): Future Gateway to the Country's Booming Trade

Cdre Md. Mostafizur Rahman, (TAS), NGP, afwc, psc, BN



Background

There is no denying that Bangladesh is one of the fastest growing economies in world and the fastest-growing the economy in South Asia. It has achieved steady economic growth of approximately 6% per annum, and the population growth rate has been about 19% in recent years. Accordingly, the export and import volume has increased by more than 10% per year. Considering this strong growth of trade activities recorded in Bangladesh in the recent past, one of the main hindrances to its further economic growth is identified as the lack of a sufficient and reliable gateway port. So, establishing a deep seaport has become strategically essential for Bangladesh, considering its potential impact on economic growth and sustainable development.

About 92% of Bangladesh's total cargo handling volume has been handled at

Chittagong Port. However, Chittagong Port, a port along the Karnaphuli River, cannot accommodate more than 2,400 TEUs sized container vessels due to its limited water depth and sharp bends in the navigable channel The fact keeps negative impacts on the shipping lines' mainline deployment and affects the competitiveness of exporters and importers. Therefore, the development of a deep seaport is considered one of the pressing needs in Bangladesh.

The Perspective of Matarbari Port Development Project

Matarbari Port Development Project (MPDP) is undoubtedly an important Fast Track Project of the Government of Bangladesh. This project is an outcome of the concept of the initiative of "BIG-B" (The Bay of Bengal Industrial Growth Belt) jointly announced by the Premiers of Bangladesh and Japan in September 2014. This project aims to develop a reliable and low-cost logistic network for seaborne cargo, freight handling and transporting facilities to maintain the competitiveness of Bangladeshi products in the global market and make the port a regional trans-shipment hub.

In order to achieve these objectives, a commercial port and new а port connecting road with the national highway (N1) at Matarbari. Moheshkhali and Chakoria area in Chattogram Division will be constructed. On 10 March 2020, the Executive Committee of the National Economic Council (ECNEC) approved the "Matarbari Port Development Project". According to the JICA survey report, the geographical nature of Matarbari in Moheshkhali and Kashima in Japan is almost the same. Therefore, Matarbari port will be built on the "Kashima port" model.

Container Cargo Throughput

Presently, Chittagong Port handles 98% of the country's container cargo, while Mongla Port handles the remaining 2%. Container throughput at Chittagong Port has increased steadily over the years, and the total container throughput in 2021 was a record of 3.2 million TEUs. The container cargo throughput of Bangladesh will substantially increase to 10.1 to 12.6 million TEUS in 2041, according to the study of the Matarbari Port Consultant Team (MPCT).

Bulk Cargo Demand Forecast

Coal: Coal import has reached 1.4 million tons at Chittagong Port and 110 thousand tons at Mongla Port. The import of coal is estimated to increase to supply coal-fired power plants planned in Bangladesh. The coal trans-shipment terminal planned at Matarbari Port is expected to import 9 million tons of coal in 2026, 14 million tons in 2031 and 41 million tons in 2041.

Cement Clinker: The import of cement clinker has increased to meet the demand for cement production. The clinker imported is estimated at about 65 million tons in 2041, half of which would be handled at Matarbari Port.

Steel Products and Scrap Iron, Import

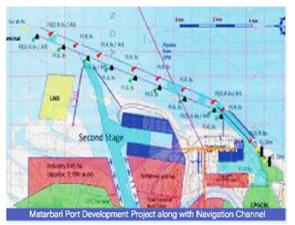
(million tons) -High Case -Low Case 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 MPCT 2025 2030 2035 2040 Dernand Forecast of Import Steel at Matarbari Port

of Vehicles: The import of steel products and scrap iron is estimated to be about 9.9 million tons in 2026 and 17.8 million tons in 2041. Import of vehicles by RO-RO ship is estimated at 90,000 - 2,98,000units in 2041.

Besides, there is a growing requirement for berthing LPG and LNG carrying vessels. Import of crude oil will be carried out by large tankers moored at Single Point Mooring (SPM) that is being constructed in the outer anchorage area of Matarbari Port.

Phases of Construction of Matarbari Port Development Project (MPDP)

Aiming at the ship's navigation into the coal-powered electricity project, the CPGCBL, financed by JICA, created a 14.3-Kilometer-long navigation channel with a width of 250 meters and a minimum depth of water 18.5 meters from the Mean Sea Level (MSL). The Matarbari Port Development Project under CPA has recently widened the existing channel up to 350 meter. Once completed, Matarbari is expected to be the future trans-



shipment hub of this region. The port will help the country handle rising exports and imports and ease the pressureon the Chittagong port.

The port will be constructed in two stages. In the phase-1 of the first stage, the port will have an annual handling capacity of 0.8 million TEUs of containers and 1.7 million tons of bulk cargoes in the first 5 years of operation and be able to accommodate 320-340 m Length Over All (LOA) and 8,000 TEUs container carrying vessels. The port will be connected to the national highway that will have access to



Chattogram, Cox's Bazar and further country places by sea through other seaports and river ports. In the second phase of the first stage, the port will have three jetties ready for container handling and four to six jetties for multipurpose use (Coal, LPG and LNG) by 2028 to 2030 Meanwhile, its container handling capacity will grow to 2.8 million TEUs and cargo

handling capacity will reach 2.5 million tons per year.

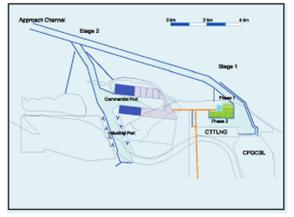
Phase-1 of the First Stage Development (Target Year 2026)

Phase-1 of the first stage of development consists of developing one multipurpose berth with a length of 300m and a back area of 17ha and one container berth with a length of 460m and a back area of 20ha. Phase-1 is expected to be completed by the end of the year 2025.

Phase-2 of the First Stage Development (Target Year 2026-2030)

Phase-2 of the first stage of development will expand the turning basin to the south and add three full-size container berths, with a length of 1,050m and a back area of 50ha. The future expansion area will be used for truck parking, warehouses, logistic park, ancillary services, and further expansion of container berths if necessary. The expansion of the turning the basin to south enables the development of the Coal Trans-shipment Terminal (CTT), LPG & LNG terminal, accommodating 80,000 DWT coal bulkers, LPG VLGC 145,000 to 260,000 cubic meter type LNG carriers.

Second Stage and Industrial Port Development (2030 to 2041)



The second stage of port development is recommended at the face of the Kohelia River, as shown in the figure below. In addition to phases-1 and 2 of the first stage, three full-size container berths are proposed on the west side of the commercial port with a length of 1,050m. On the east side of the commercial port, multipurpose berths and bulk berths are proposed with a length of 1,200m. Stage-2 is tentative and will require further study from the viewpoints of commoises and volume of maritime cargo vessel type and size of call, cost allocation between the industrial port and commercial port, and so forth.

Current Ship Handling Operations by CPA in Matarbari Channel

Bangladesh's first-ever deep seaport at Matarbari in Cox's Bazar has welcomed the very first ship to its harbour on Tuesday, 29 December 2020 morning Interestingly enough, on 29 December 2021, the Matarbari Channel marked the 01 (one) year of ship handling activities, which seems to be one of the outstanding achievements of "Mujib Shotobarsha" by CPA and a prosperous milestone in the national economy With Chittagong Port Authority and Coal Power Generation Bangladesh Company Limited's (CPGCBL) sincere efforts, 49 ship handling activities have been successfully completed through these jetties within the 1st year of operations. A total 71 of seagoing merchant ships carrying the project cargo and 81958 Tons of cargoes have been handled in Matarbari CPGCBL jetes until 15 March 2022 with a steadily increasing revenue.

A Deep Sea Terminal of Maritime Potentials

Bangladesh is a country with a rich maritime history. Since ancient times, many globetrotters, traders and historians have visited and explored this land of maritime opportunities Situated at the North of the Bay of Bengal Bangladesh vows to regain its past maritime glory. The country has observed tremendous growth in every economic sector throughout the last decade. Social and political stability together with economic motivation, has lifted the country from an abyss of uncertainty onto the track of sustainable development. To move fast upon the development track, the Government of Bangladesh has taken steps to build new seaports and modernize the existing ones. Considering the present growth of the country's maritime trade and commerce, building a new deep seeport has become a dire necessity Besides, there would be a huge foreign investment injection, new momentum would be created in the trade and commerce of the country There would be development in infrastructure and communication systems; the employment rate would also be significantly increased. Opportunities for the extraction and use of oil and gas and other sea resources will be expanded Once the Matarbari Port comes into the entire operation, it is expected that the country's first deep seaport will contribute 2% to the growth of the national economy. It goes without saying that the deep seeport is an unlithomable metter in a geopolitical sense. in fine, Port in Matarbaril is now more then a reality, shiting the geopolitical prominence of Bangladesh from one dimension to another.

Writer: Cdre Md Mostafizur Rahman, (TAS), NGP, afwc, psc, BN is the Member (Harbour and Marinel of Chittagong Port Authority.