

Shipbuilding Industry





International Market

The world shipbuilding industry currently benefits from the market of 60 million gross tonnage (GT) of annual building in 2017. The value of global orders is estimated to grow to about USD 650 billion in 2026 (Businesswire). Three Asian shipbuilding giants, China, Japan, South Korea, have almost 90% of global market share, followed by EU. Other countries, are competing for the remaining 5% of new building orders.

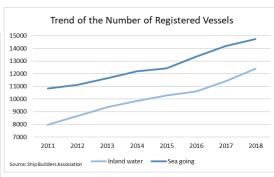
While three Asians and EU seeks for orders of larger vessels (more than 50,000 deadweight tonnage: dwt) in general, an opportunity exists for other countries to enter the smaller vessel segment.



Bangladeshi shipbuilding industry has been exploring export market opportunity in the niche segment of small vessels (below 12,000 dwt). The industry has started accumulating a track record of building orders from international ship owners. Export value has increased, from USD 5.7 million in 2012-13 to USD 30.0 million in 2017-18.

Domestic Market

In Bangladesh, almost 90% of fuels, 70% of cargos and 35% of passengers are moved by waterways, bringing about a domestic demand for huge vessels. Domestic demand has been arowina constantly over the past decade. Locally number of vessels registered increased with average annual growth rate of 5.39% on average, owing to steady economic and trade developments, and activated infrastructure projects. Annual market value of local shipbuildina currently reaches about USD 1 billion, and the demand growth is forecasted to remain steadily.



Domestic market has two segments. One is for inland waters vessels, and another is for ocean-going vessels. These segments have almost same size, and the number of registered vessel for each segment currently amounts to 13,000.

Bangladesh shipbuilding industry has to largely rely on domestic demand over the short and mid term, and leverage the building experiences of the higher quality domestic vessels to deepen capability of building export-quality vessels, and thus to realize more international orders.



Outline of the Industry

Position of the industry: Bangladeshi shipbuilding is the upcoming player in global market, and competitive enough for the smaller vessel segment benefiting from relatively cost competitive engineers and workers. Experiences of export building exists for the vessel types of MPV and passenger ferry, but still remains limited. Accordingly, the industry largely works for the orders from domestic market.

Shipyard and production: Industry association reports around 100 ship builders and over 120 registered shipyards of varying size, located mostly on the river banks. With the current limitations of sites and low river draft across the country, it is possible to build vessels of size up to 15,000-20,000 dwt, being relatively smaller by the competing nations. Annual gross production reaches 250,000 GT at present, of which 185,000 GT are said for domestic orders.

Although some shipyards have export capability, those equipped with modern building facilities (such as computer-based machining) and building control experiences along with international "class" standards a few remain represented by Western Marine, Ananda shipyards). Annual building capacity for export orders is estimated as more or less 20 vessels currently.

Majority of local shipyard production is directed to domestic market. Vessels for inland water usage are largely built in local shipyards. On the other hand, domestic demand for ocean-going vessels have been met by overseas shipyards as well.

Vessel types built locally for domestic usage include MPV, container, bulker, tanker, dredger, tug as well as passenger ferry, and ranges from 1,000 to 20,000 dwt in size. Smaller vessels for domestic usage, inland waters in particular, are usually built without application of "class" standards.

Materials/ components: Shipbuilding is a material and component intensive industry. Shipbuilding industry in Bangladesh depends on import for most of materials and components. Over 80% of materials and components are imported for either export or ocean-going vessels, while vessels for inland waters has broadened local supply basis more up to 50 to 60%.

According to the industry, materials such as steel pipe, heavy metal-casted parts like propeller and anchor, components of engine, generator, transformer, and a certain types of fixture including sanitary equipment, furniture, upholstery, etc., generally rely on import. On the other hand, steel plate, angle steel, cable, paint, become procurable from local suppliers.

Bangladesh is well known for **ship breaking and recycling industries**, which are generally located close to shipbuilding yards, where arc furnace is usually installed to handle scrap materials. This enables local ship builders to procure steel materials with ease for body building for inland water vessels in particular.



Potentials and Advantages of Bangladeshi Shipbuilding Industry

Potentials and advantages of Bangladeshi shipbuilding industry lies in growing domestic market, competitiveness for international small vessel segment, and availability of skilled engineers and workers. The World Bank Group estimates that Bangladeshi shipbuilding grows at 10-15% per annum on average for the next decade.

Growing domestic market: Ship builders can expect growing domestic demand of various types of vessels for usage in inland and coastal water, and ocean-going vessels for regional cargo shipping, owing to steady economic/ population growth, trade expansion, and ongoing/ scheduled infrastructure projects (that would increase demand for inland water shipment). Vessel types of fuel tankers, bulkers, cargo feeders, dredgers, tugs as well as passenger ferries would be increasingly demanded. The World Bank estimates that almost 300 to 400 vessels be additionally demanded over the next decade. As the Bangladeshi shipbuilding industry is not able to deliver classed vessels in sufficient quantity, some of demands shall be met by Chinese industry.

Competitiveness for international small vessel segment:

Bangladesh has potential to compete for small vessel segment up to 12,000 dwt (MPVs, cargo feeders and passenger ferries for regional services) in international market, since labor cost matters more as vessel size is smaller. Bangladeshi shipbuilding can enjoy labor cost competitiveness of 20 to 30% relative to other countries, according to a local trade body.

Labor cost competitiveness of 20 to 30% relative to other countries

A few local shipyards have already track record of building export quality vessels along with the class standards, however, capability to build classed vessels needs to be diffused widely together with expansion of the suitable shipyard facilities.

Availability of skilled engineers and workers: Bangladesh has competitively-priced skilled engineers and semi-skilled workers. Tailor-made training opportunity for shipbuilding is also available under the cooperation between the government and industry association, which generates 6,000 workers every year and matches over 70% of them with job opportunities in the industry.

Availability of shipbuilding cluster: Bangladeshi shipyards are agglomerated along with the banks of major rivers in Narayanganj and Chittagong in particular, mostly combined with ship breaking and recycling yards. These areas have relative convenient access to the utilities (power and gas) and supporting industries such as suppliers of steel materials, components and fixtures.



Investment Opportunity

Shipyard development involving technical assistance for "classed" shipbuilding: Bangladesh is an alternative and prospective place for building small size vessels clustered below 25,000 dwt, or 12,000 dwt realistically (given the current limitation of shipyards and low river draft across the country), which can foresee the growing demand either from domestic or international markets. FDI or joint-venture is most expected to enhance both capacity and capability of local industry to build class ships along with international standards, through:

- Development of new shipyards, or expansion/ renovation of the existing ones,
- Upgrade of shipyards with modern facilities such as computer-based machining, bending, welding, shot blasting as well as heavy lifting required for steelworks and component assembling for relatively larger vessels,
- Technical assistance of more sophisticated shipbuilding along with international class standards and improved productivity.

A case of joint-venture:

A notable record of joint-venture between local and foreign ship builders exists in Bangladesh. **Highspeed Shipbuilding Engineering Company Ltd.** and a Japanese ship builder formed joint-venture, involving technical assistance for building

of international class ships.

Ship maintenance and repair services: Another area of investment opportunity lies in maintenance and repair services, which are more labor-intensive than building new ships. Since many vessels ply Bangladeshi waters, there would be general chances to benefit from this shipping traffic. This would require further development of dry docks (or renovation of the existing breaking/ recycling docks) to accommodate such vessels as required for overhaul with sufficiently deep river draft.

Supply of parts, components and fittings: There are another potential areas for investment, backward linkage development. FDI or joint-venture by overseas suppliers could contribute largely to reduce dependence on imported materials and components, and enhance locally added value for vessels both for domestic and export markets. Suppliers of steel pipes, engines, generators, compressors, transformers, metal works (flanges, valves, propellers, anchors, etc.) could be promoted locally.

Vocational training business on shipbuilding: Vocational training business on shipbuilding and marine engineering is expected to be enriched further, possibly through FDI or joint-venture (with the existing educational or training institutes), since the industry reports a scarcity of skillful engineers and welders especially for the higher quality and more sophisticated vessels.



National Industry Policy 2016

The National Industry Policy 2016 sets the following three goals; i) to improve socio-economic condition of Bangladesh through concerted efforts of public-private initiative for rapid industrialization and employment generation; ii) to raise contribution of industry to GDP from 29% to 35% by 2021; and iii) to ensure accomplishing inclusive growth by increasing quality employment generation through industrialization. In the National Industry Policy, shipbuilding industry is designated as one of the priority sectors for industrial promotion.

A few Bangladeshi ship builders have experienced to produce vessels for export. The number of vessels for overseas market has been growing, and the industry is recognized as one of the potential export-oriented industries (the Seventh Five-year Plan). Accordingly, sector-specific incentive and support schemes are rendered to the vessels that are built for export.

Regulations related to Shipbuilding

- <u>Inland Shipping Ordinance 1976</u> sets definitions of vessels that ply in domestic inland water. National standards for such vessels are stipulated as Bangladesh's Domestic Vessel Code.
- Merchant Shipping Ordinance 1983 sets definitions of all Bangladeshi vessels except those plying in inland water, i.e. ocean-going vessels. Such vessels need to be certified with the "class" standards by internationally recognized accreditation bodies.

Sector-specific Investment Incentive and Restriction

Incentive: Reduced tax rate on export income: 5% for publicly-listed company and

10% for non-listed company (SRO-132-AIN/ 2013)

5% import duties on raw materials used for building ship in local market 10% export subsidy on export of ships (FE Circular-31, August 2017)

Restriction: No specific restriction exist upon the entry of foreign investors.

Supporting Institution

Skill training institute for shipbuilding industries, operated by Association of Export Oriented Ship Building Industries (AEOSIB) AEOSIB established an institute of skills training for shipbuilding industries and operate the Skills for Employment Investment Program (SEIP) rendered to unskilled workers in the industry. Trainings are undertaken at shipyards and educational institutes in Dhaka and Chittagong.



Industry Association

Ship Builders Association (BSA)	A trade body for ship builders of vessels for usage of transportation in the inland water in particular, and engaged in market development, skills development of workers.
Association for Export Oriented Ship Building Industry (AEOSIB)	A trade body for ship builders of vessels for export market in particular, and engaged in market development, skills development (through a training institute), policy advocacy and membership services.

Shipbuilding Companies in Bangladesh

Major ship builders in Bangladesh ranges from larger to medium scales, and build vessels both for domestic and export markets. Among them, Western Marine Shipyard, Ananda Shipyards, High Speed Shipbuilding & Engineering are the largest in building operation.

Name of company	Location of shipyard/ dock	Export experience
Ananda Shipyards & Slipways Ltd.	Meghna Ghat, Narayanganj	0
Western Marine Shipyard Ltd.	Kolagaon, Patiya, Chittagong	0
Khulna Shipyard Ltd.	Khulna	0
Narayanganj Engineering & Shipbuilding Ltd.	Nabigonj, Bandar, Narayanganj	
Karnafuly Shipyard (PVT) Ltd.	Chittagong	
Khan Brothers Shipbuilding Ltd.	Hosendi Bazar, Gazaria	
High Speed Shipbuilding & Engineering Company Ltd	Meghna Ghat, Narayanganj, Chittagong	
Meghna Shipbuilders & Dockyard Ltd.	Meghna Ghat, Narayanganj	
Dockyard and Engineering Works Ltd.	Kadamrasul, Narayanganj	
Chittagong Dry Dock Ltd.	East Patenga, Chittagong	
Bashundhara Steel & Engineering Ltd.	Katuail, Konda, Keraniganj	
TK Shipyard Ltd.	Meghna Ghat, Munshiganj	
Prime Ship Building Ltd.	Gazzaria	

Bangladesh Investment Development Authority "BIDA is Your Gateway to Investment in Bangladesh"



BIDA undertakes the functions of investment promotion and facilitation, and policy advocacy in accordance to the Industry Policy and provides inquiry/ consultation/licensing facilitation services to the investors outside the jurisdiction of other investment authorities (BEZA, BEPZA, High-tech Park Authority). Those investors registering with BIDA for their investment projects are able to benefit from the following key incentives and privileges:

Catagory	Notos
Category	Notes
Tax holiday	 Phased Corporate Income Tax (CIT) exemption for 26 designated sectors/products (effective since July 2019), depending on location of factories Phased CIT exemption for private IPPs (which construct powerhouse after June 2016) and full CIT/ capital gain tax exemption for PPP projects Full CIT exemption for ICT/ software industry
Tax rebate	Applicable for manufacturing industries of which factories i) are located, ii) move, iii) have already operated, outside Dhaka City
Import duty exemption	On capital machinery/ sparesVAT exemption for imported capital machinery/ spares
Other tax exemption	 On interest payable on foreign loans On royalty/ technical license fees obtained from foreign company/ expert On personal income tax for foreign technician One capital gain from the transfer of shares of listed public companies
Non-tax incentives	- Accelerated depreciation for newly established industries in lieu of tax holiday on their factory, machinery and plant

^{*} The above may be subject to revision upon annually enacted Finance Act and individual regulations. Exportoriented industries regardless of their locations can benefit from additional privileges and facilities.

Bangladesh Economic Zones Authority "BEZA is a smart way for business in Bangladesh"

incentive



BEZA develops and manages economic zones in view of generating more spillover effects of investment for industrialization of Bangladesh. Currently a number of economic zones are being developed throughout nation to cater for investment needs of both foreign and local investors, utilizing a variety of development schemes including BEZA's own initiative, private initiative, public-private-partnership and bilateral agreement with foreign government. The investors tenanted in economic zones are able to benefit from the following key incentives and privileges:

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Fiscal incentive	 Phased Corporate Income Tax (CIT) exemption for 10 years VAT exemption for imported machinery/ construction material, and utility expense Duty exemption for imported vehicle Duty exemption for import/ export of goods/ materials with bonded warehouse facility Personal Income Tax exemption for expatriate salary Tax exemption for dividend/ royalty and technical license fees, etc. Exemption of local government tax/ land development tax Exemption from registration fee on land transfer/ loan document, stamp duty on loan document/ lease of land and space
Non-fiscal	A variety of privileges and facilities are available.

^{*} The above may be subject to revision upon annually enacted Finance Act and individual regulations.

(see the website of BEZA: http://www.beza.gov.bd/)