

The Impact of Maritime Transport on Economic Growth in Bangladesh A study on Shipboard Management



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Abstract:

The concept "maritime economy" refers to an economic assignment on a marine or sea-based resource base, which would be a relatively modern concept inside the economics profession. The purpose of this research is to investigate the feasibility of an ocean economy in supporting Bangladesh's transformation from a middle-income country to a developed nation, as predicted in 'Vision 2021,' through all of the appropriate exploitation of natural resources. Bangladesh may significantly help speed its economic progress by successfully utilizing maritime advantages, according to the research. In the Bay of Bengal, Bangladesh has a 200-nautical of EEZ (Exclusive Economic Zone) and a 710-kilometre-long coast. Oceans, which stretch approximately three-quarters of the troposphere, perform two essential services. The ocean has become a significant means of communication and transportation since about the beginning of humanity. In addition, it is the world's highest supplier of both sleeping and semi-substances. Although most maritime countries are already becoming progressively mindful of potential marine biodiversity in addition to addressing many more of their businesses' present and future problems. In Bangladesh, the coastline makes an important contribution to the country's overall socioeconomic advancement by stimulating economic growth, particularly in the southern coastal environment. This article analyzes how well Bangladesh can handle the challenges of becoming a developed economy by executing the Sustainability Objectives, mainly based on data analysis (SDGs). The impact of Bangladesh's maritime sector on the economic growth of the country is represented. Additionally, it seeks

to determine the operations' barriers and limitations from many viewpoints. It proposes various strategies to support Bangladesh's long-term economic expansion.

Keywords: Maritime economy, communication and transportation, Bangladesh's, data analysis, economic progress, marine biodiversity, investigate, Sustainability Objectives.

1. Introduction

When governments pondered the possibility of harnessing their maritime resources, the nautical economy concept emerged. Employing the current workforce at all levels, from citizenship to global, gives maritime states a fresh chance to develop their economies. Environmental sustainability increasingly depends on the idea of the marine business. The main natural resources for marine economic growth are marine-based. And each state is accountable for that one of them. Additionally, most of the ground atmosphere is produced by these minerals. For Bangladesh, taking significant steps to guarantee that maritime resources are utilised effectively and competitively is a pastime. Bangladesh may be able to make use of its marine resources by, among other things, conducting oil and gas exploration, fishing, shipbreaking, shipbuilding, collecting minerals like salt, and creating a tourism zone. Numerous crises have afflicted the world, most notably those involving food, fuel, coal, natural gas, and economic systems. The marine economy can negotiate to address these concerns. It is a distinctive method for rebuilding any sensible economy. 70% of our world is shielded from harm by the sea. Approximately 90% of global commodity import-export trade occurs on the ocean. Without a doubt, the maritime sector contributes significantly to the GDP of our nation. Our nation now has a significant marine border. It has opened up a tonne of new possibilities for unrestricted mineral resource prospecting on the ocean floor. Numerous living and non-living things can be found in the water area and under the seabed of our marine zone. However, a trained staff deficit may arise if we want to examine the availability and examine the assets. We might create skilled personnel in these domains by importing superior knowledge of Bangladesh's maritime and oceanography industries. To succeed, Bangladesh must take the required measures to utilise its maritime territorial resources and to offer its workforce learning and innovation opportunities. The lives and economies of people would be greatly impacted if marine and ocean activities were not carried out. The blue economy thus plays a crucial role in the development of the European economy by providing food and other resources, developing the travel and tourism sector, streamlining transportation, and producing and consuming clean energy.

Seven industries make up the EU's blue economy: marine living and non-living resources, marine sustainable power, port operations, shipbuilding and repair, oceanic vehicles, and waterfront tourism. These seven firmly established companies contribute an average of 1.5 per cent of the gross value added to the EU's economy and employ more than 2.2 per cent of its labour force. The industries with the highest value added at factor cost include seaside tourism, marine transportation, and allied businesses. The blue economy's overall value added at factor cost is 45% contributed by coastal tourism and 40% by marine transport and related industries, such as shipbuilding and maintenance and port operations (Figure 1).

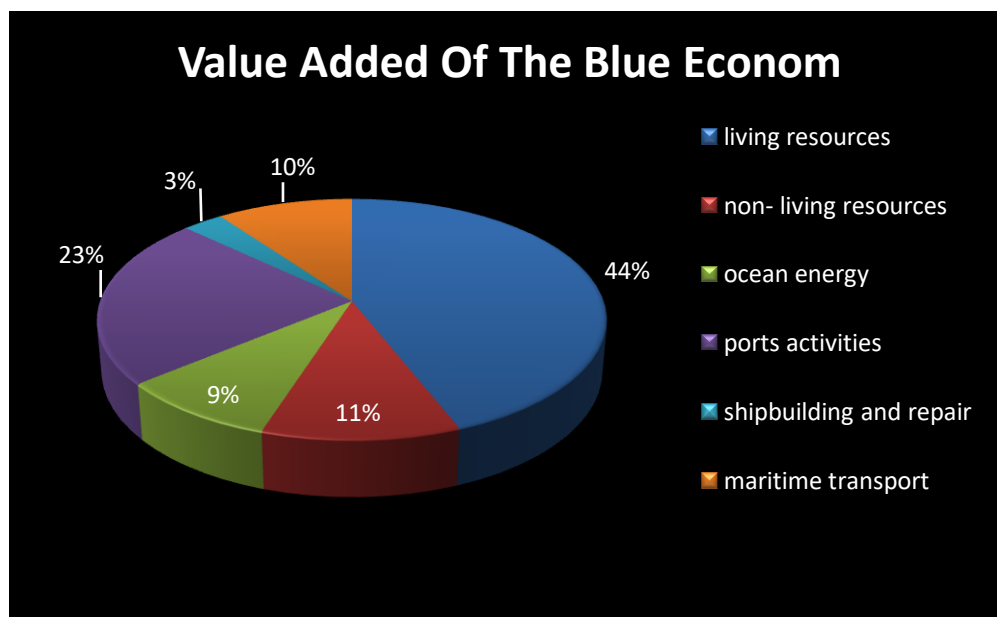


Figure 1 shows value addition with fixed pricing (per cent of total value added of the blue economy,2019).
 (Based on data from Eurostat, the authors' calculations.)

The area employs a significant portion of the blue economy's labour force (64%) whereas maritime transport and closely related industries (shipbuilding and repair, ports activities) only employ 24% of the blue economy's workforce. This is because the waterfront tourism industry requires extensive use of friendliness services, which employ a large number of people (Figure 2). Figure 2. Employment by industry (per cent of total employment in the blue economy, 2019). Based on data from Eurostat, the authors' calculations.²² EU member states engage in maritime transportation. As a result, almost 40% of the world's fleet is controlled by European shipping, along with some of the biggest maritime clusters. The overall gross weight of goods transported by short sea in the EU surpassed 1.8 billion tonnes, according to Eurostat statistics, demonstrating the recovery from the 2009 financial crisis. Costs for both building and maintenance have increased in recent years as ship sizes have grown. harbour activities These new, larger ships have a lesser environmental impact as a result of the European Green Deal. Depending on their geographical region, social structure, and financial characteristics, component states' obligations to the European blue economy change. As expected, independent countries or component states with substantial ocean openings, like Greece, Croatia, Malta, Cyprus, or Portugal, have greater proportions of the blue economy in their public economies. The structure and type of blue activity delivered has the biggest influence on member states' contributions to the EU blue economy, particularly in terms of gross value added. For instance, economies with robust gas and oil industries, which point to high gross investment proportions and low employment intensity, are more likely to contribute to the EU's blue economy's gross value added. However, whether comparing the gross value added or gross investment, coastal tourism-focused countries make greater employee contributions to the EU blue economy. According to a recent statement, the blue economy accounts for about 40% of value contributed and 24% of employment through the oceanic vehicle and associated businesses (shipbuilding, repairs, and port operations). The marine industry encompasses a variety of duties that, when combined with port operations and key hubs, have an impact on improving oceanic trade and business, resulting in economic

growth and the creation of jobs. Because it is regarded as a naturally useful mode of transportation, maritime transportation has an impact on supportable advancement as well as financial development and improvement. Even if marine jobs have an ecological impact, it is less severe than, say, street transport, and as a result, delivery seems to depend on less strict guidelines, according to all sources. Although sea travel has the highest carbon footprint of all modes of transportation, it should be noted that it accounts for nearly 3/4 of all international trade and 33% of all inward trade within the EU. Nevertheless, work would be expected to reduce contamination in the industry given current concerns and laws regarding a decrease in the pollution within the EU, as addressed in the Green Deal.

Examining the impact of marine transportation, associated investment, and air pollution on EU economic development is the goal of this study. We used eight-panel data regression models from 2007 to 2018 for 20 EU countries that use marine transportation. Even though many research publications highlight the significance of marine transportation for global growth patterns, economic success, and international trade, there is less professional literature on the EU in this context than one might anticipate.

2. Literature Review:

Advanced transportation foundations typically ensure returns through the usual macroeconomic efficiency drivers, such as "extension of business movement, advancements, speculations, work market, competition, homegrown and international exchange, and worldwide versatile action, provincial financial turn of events, populace prosperity, ecological wellbeing, and wellbeing." Because it makes up a sizable share of world trade, maritime transportation is critically important to the structure of transportation. Additionally, engaging in international maritime exchange is essential for bringing in foreign currency.

Shipping is a significant industry, and literature about it is common. Various writings on a wide range of subjects relating to marine transportation have been written recently. Although liner delivery and port micromanagement are the focus of many academic studies on sea transportation, overall research trends have changed in recent years away from rules and strategy the board, which had previously attracted attention, and toward skilled and practical oceanic transportation.

Akbulaev and Bayramlie examine how improvements in maritime transportation relate to various facets of economic development in a few Caspian Sea nations (Russia, Azerbaijan, Turkmenistan, Kazakhstan, and Iran), contending that improved maritime transportation facilitates long-term financial developments. Georgina and associates analysed and assessed the financial results of several transportation foundation frameworks (counting oceanic vehicles). For the EU countries between 1990 and 2016, they employed board information relapses with defined repercussions.

With the help of a panel of 40 nations, Khan et al. discovered a link between container port traffic and per capita income. Using the generalised approach of moments, Saidi et al. demonstrated that improving transportation infrastructure enhanced economic growth. The relevance of marine transport for the economy, society, and environment of the Adriatic-Ionian region is assessed by Navis et al. using value estimation approaches to create an integrated assessment tool for comparing maritime transport with other regional drivers. In the Adriatic-Ionian region, the authors assert that, after beach tourism, maritime

transportation is the second most important driver of change. Path and Pretes analyse the effects of five important marine dependency determinants on economic development and point out significant connections between sea reliance and per capita GDP. The phrase "sea dependency" was created by its inventors to define a country's ability to engage in oceanic trade as indicated by its geographic access to important international trade routes. According to Hong, Chu, and Wang's analysis of 31 Chinese provinces, investments in water transportation infrastructure only contribute to economic growth when they reach a certain level of spending. Badulla and Guillotreau assess the effects of different air pollutants and ozone-depleting substance discharges (SO₂, NO_x, CO₂, PM_{2.5}, and PM₁₀) beginning with delivery and transportation, and they conclude that all other things being equal, SO₂ and NO_x are the most harmful air pollutants with the most significant multipliers. For the establishment of more specific laws governing the SO₂ outflows from the delivery area, such as establishing SO₂ Emission Control Areas limits, the designers claim that calculating the gas discharges from maritime vehicles is necessary. Taghvaei et al. created a dynamic log-linear model to investigate the relationships between marine transportation, environmental pollution, and economic development in Iran. The authors found a link between marine transportation, pollution, and economic growth, which provided evidence for the Pollution Haven Hypothesis. The waterfront and marine climate, according to M.S. Hossain (2001), have become more crucial in accomplishing the nation's main objectives for social and economic development. The assessment did, however, place a particular emphasis on fishing assets. article about the population's relationship to the water by L. Creel (2003). A major and expanding share of the world's population lives in coastal regions, where the study revealed that environmental conditions are deteriorating. This is a very problematic issue for developing countries.

3. Methodology :

The research used secondary data analysis to show the current state of Bangladesh's marine sector. Methods of descriptive statistics are employed. Through graphical inspection of secondary data, the study also looks at the trends in various factors. The Importance of the Maritime Economy Oceans covers 72 per cent of our blue planet's surface, from the research proposal for the Maritime Sector. Oceans provide a variety of services to life. Oceans supply sustenance for the whole world's population, as well as being vital for transportation along with economics ("Blue Economy Concept Paper"; 2012). For both the world's most influential tourism sector, the coastline and maritime ecosystem can both be critical elements. The ocean also provides a tremendous amount of renewable "blue energy." Tide, wind, and so on. Furthermore, the ocean is the most important mode of mass transportation.

3.1 Maritime Economy and Bangladesh

The terms "Blue Economy" and "Maritime Economy" have grown trendy in recent years. Figure 3: It is now commonly spoken in Bangladesh as well. Bangladesh is also becoming aware of the magnitude of the problem. After obtaining a large maritime boundary with Myanmar and India, there has been a the surge in interest.

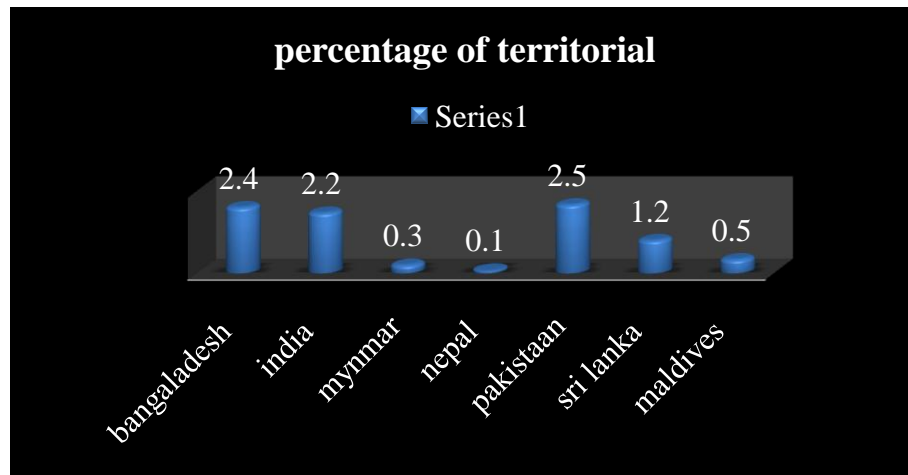


Figure: 3Percentage of territorial (data sources: OECD)

Bangladesh now controls 121,110 square kilometres of maritime space in the Bay of Bengal, including an Exclusive Economic Zone (EEZ). The government has in the past carried out several crucial actions, such as organising to develop a strategy or carrying out decisive actions as soon as a frontier has begun to be crossed. To achieve sustainable development, it is essential to use marine resources effectively and efficiently. Bangladesh is largely dependent on maritime resources and channels because it is a coastal and riverine nation. Prospects for Bangladesh's maritime region (3.2) Bangladesh is wealthy due to its diverse ecological makeup as well as its huge waterways. Due to its physical location and climatic factors, Bangladesh has one of the world's most extensive coastlines. Mangrove forests have a huge impact on coastal areas, which support a large number of fish and other aquatic species with considerable commercial value. The delta plain sculpts Bangladesh. Numerous rivers in Bangladesh span international boundaries. The Bay of Bengal is to the south, and the Himalayan range is to the north. A variety of habitats with significant ecological and economic importance may be found along Bangladesh's 710-kilometre-long coastline, which spans from the point of St. Martin's Island to the Indian Ocean.

3.3 Sector-savvy accents are applied:

- 1) Port facilities, maritime transportation, and shipping: Shipments are one of the main factors that have a big impact on the global economy. Today's ports are essential to the trade and economy of the country. The marine industry, which includes commercial shipping and other services, directly supports about 30 million people in Bangladesh. In the progress of globalisation, maritime channels also contribute significantly. Sea shipping is crucial for Bangladesh's socio-economic prospects as well. because it is both effective and efficient to use the sea for transportation. Compared to other means of transportation, this enables the movement of a wide variety of goods in large quantities at a reduced cost.
- Shipping: The three hard durability principles depend on the shipping industry (social, economic, and environmental). It facilitates the development of the world economy, generates income, and creates employment opportunities, all of which have a considerable positive effect on people's quality of life. This has advantages for the entire nation. Over 90% of Bangladesh's freight transit is done through maritime channels. As a result of globalisation, its significance has increased. The marine shipping industry, or sea-based transportation operations, has recently grown quickly in Bangladesh. Recently, both the export and import industries in

Bangladesh have advanced. Our ports receive a lot of foreign ships. The shipping industry in Bangladesh has advanced significantly, and local maritime firms should be pushed to achieve much more.

- **Coastal shipping/Feeder services:** This type of service involves using medium-sized ships to transport domestic and foreign freight regularly to and from neighbouring countries. Due to its extensive coastline along the Bay of Bengal, Bangladesh's coastal shipping volume is growing. A form of marine point-to-point transit is coastal shipping, also referred to as feeder transport. Containers are distributed via the feeder service from the major hub ports to smaller ports or landlocked countries. These services are very effective and productive. In addition to saving time and money, it also creates a tonne of job opportunities.

Ports: The development of a nation's economy is significantly influenced by its ports. Ports are essential for navigating the modern world and globalisation. Long-term growth depends on the expansion of ports. Ports play a crucial part in Bangladesh's dependence on foreign trade. Bangladesh should focus on making the most of its current capacity in addition to creating deep-sea ports with more modern infrastructure and handling tools. Sonadia, Matarbari, and Payra are currently the sites of numerous initiatives.- **Inland waterway transportation:** Bangladesh is a river-rich country. Several rivers pass through it. It, therefore, has a substantial inland water transportation system. With 1000 landing areas and 21 interior river ports, it is roughly 24,000 kilometres long. For instance, the Pangoan inland container terminal has 55,000 square metres of container yards and a storage capacity of 3,500 TEUs. Additionally, it moves 116,000 TEUs yearly. 80 per cent of the 1.5 million TEUs that pass through Chattogram Port on their way to Dhaka each year arrive there via interior waterways. The main river crossings in Bangladesh serve as the country's main internal waterways. Maintaining connections is crucial for our economic development. Therefore, it is essential to maintain the functionality of these inland waterways. The use of inland canals is undoubtedly more affordable and may create jobs as well.

- **Passenger ferry services:** International ships play a significant role in the links, making hinterland transit noteworthy. Despite the abundance of opportunities, it is a crucial element.
- **Shipbuilding:** The shipbuilding sector contributes to the way things are done now by giving us the tools we need. In Bangladesh, there are close to 300 workshops and shipyards. A lot of them require a lot of tools and infrastructure upgrades. Every year, our nation's dry docks repair about 15 ships, generating a sizable quantity of foreign exchange. Our economic growth is aided by this sector. For it to flourish over time and open up employment prospects, it needs to be properly encouraged.
- **Ship recycling businesses:** The ship recycling industry in Bangladesh has provided vast amounts of resources to steel, shipbuilding, and other industries for more than 20 years. Additionally, it exports to a few other South Asian nations. 80–90% of a ship's scrap metal is made up of steel. Bangladesh has several potentials for this business, hence it should be properly explored.

1) **Fishery:** Aquaculture of high-value fish and shrimp has developed recently into a highly traded, export-focused sector. Mismanagement has recently affected Bangladesh's marine fishing industry. The survival of some of the largest fish populations in the world is in peril. Figure four Coastal shrimp aquaculture is also facing difficulties due to the rising levels of marine pollution. We ought to be careful about this. 350 million jobs are supported globally by marine fisheries.

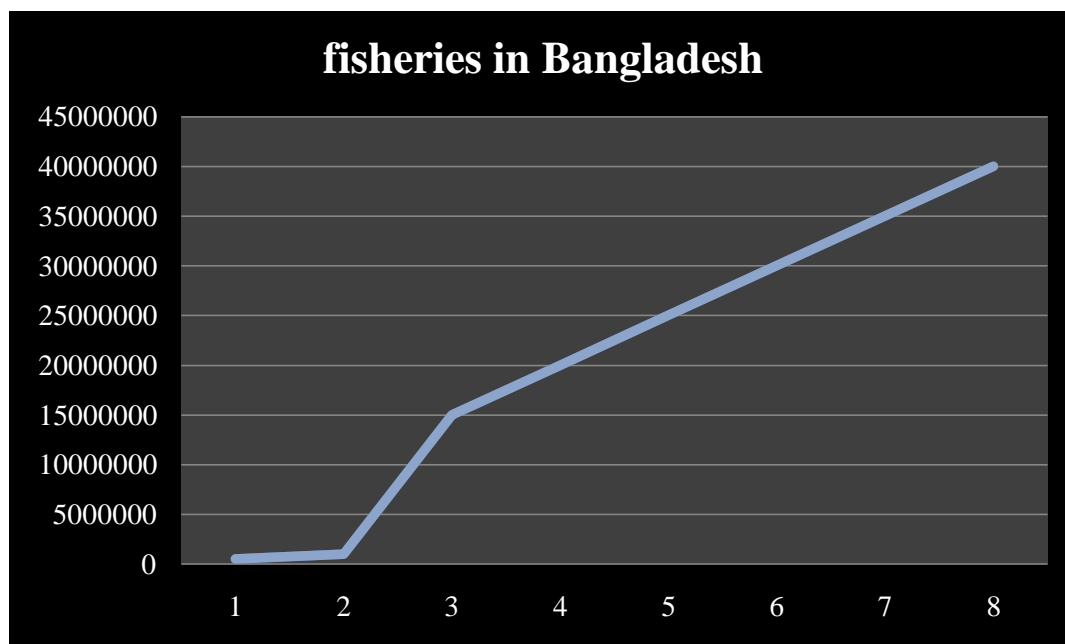


Figure: 4Total productions of fisheries in Bangladesh (1972-2014) in M.T.

This graph demonstrates an upward tendency. Bangladesh is producing more fish, which is a positive sign. This sector generated 3.57 per cent of Bangladesh's national GDP in 2017–18 and contributed 25.30 per cent of the nation's agricultural GDP (MOFL; 2020). Additionally, exports of fish produce about 1.5% of the world's foreign exchange (2017-18). The Yearbook of Fisheries Statistics shows that the COGR for fisheries has increased by 5.28 per cent over the past 10 years (2015-16). In addition, industry predictions state that by 2021, fish production will amount to 5.20 million M.T. (Ibid). This enterprise will supply a significant amount of food while also promoting economic growth in underdeveloped countries like Bangladesh. These days, fish demand is increasing and keeping up with it. Bangladesh must ensure the long-term growth of this sector. Fishing will continue to contribute significantly to the economic and food production of many rising nations. As the demand for seafood develops, Bangladesh must look into ways to continue moving forward from this activity while ensuring sustainable resource management.

Tourism: Tourism is a significant contributor to the world economy. There is a lot of focus on the maritime and coastal environment. The tourist industry's cruise tourism sector is the one that is growing the quickest. 2011 saw a rise in its use. (2012) FCCA Cruise Industry Overview About one in every two visitors goes to the beach (United Nations World Tourism Organization [UNWTO]; 2013). Sustainable tourism is a crucial industry for a developing nation like Bangladesh. It will substantially boost the nation's income and foreign exchange. Tourism along the shore contributes 5% of the global GDP. It has a significant role in Bangladesh's economy. Yachting, marinas, and recreational water activities can all help to increase coastal tourism. 4.4% of Bangladesh's GDP was produced by the travel and tourism industry in 2018.

2) Aquaculture: The aquaculture business provides us with a lot of food and supports many livelihoods. In a variety of aquatic habitats, fish, algae, and other animals are gathered, grown, and raised. An alternative name for it is aquaculture. It is also the area of the food

sector that is expanding the quickest. Currently, 47% of the fish consumed in the United States comes from aquaculture (FAO, Fisheries and Aquaculture Department; 2010). Aquaculture will therefore be important in Bangladesh if some attempts are made.³) Food: For a sizable portion of people, seafood serves as their main source of protein. There are also Bangladeshis involved. On the other side, the ocean is the world's largest source of food, and many people adore seafood.⁴) Marine Renewable Energy: In 2009, offshore fields produced about 32% of the world's crude oil. Furthermore, it is anticipated that this will rise to 34% by 2025. For many years, oil has been the main source of energy. However, the water also provides renewable energy sources including wind, waves, tides, biomass, etc. Whatever the case, there is an increasing need for renewable power. By 2035, the planet will typically have doubled in size. The scenario in Bangladesh is very similar to that in the US. It's something we must acknowledge. The use of waves and currents, coastal biodiversity, and subterranean hydrothermal components were among the methods. On the other side, maritime renewable technology would be advantageous for the environment.

- Maritime surveillance: Sea observation sheds light on concerns related to operations that take place at sea, such as the marine climate, the wellness and security of the oceans, the management of fisheries, trade and financial interests, and general policing measures. Threats like drug and human trafficking, as well as psychological warfare, have recently increased in Bangladesh. It's something we ought to be aware of. A lot of talented labour is needed in this field.

SWOT Analysis of Bangladesh's Maritime Economy

Strengths.

- It's prevalent in fisheries.
- The majority of species are coastal and estuarine.
- Skilled and knowledgeable fishermen.
- Anglers and fishing activity have risen.
- Well-established marketing channels.

Weakness

- There are few species in deeper areas and the open sea. Extremely expensive fishing operations, a lack of ocean observation and data integration, modelling infrastructure, and insufficient support for research and development in the field of marine fisheries studies
- There aren't enough conservation initiatives.

Opportunities

- Keystone habitats including mangroves, salt marshes, and coral reefs are present. There is a distinct maritime border.
- Concern for the oceans is widespread.
- Local and global market demands
- Directly contributing to the SDGs

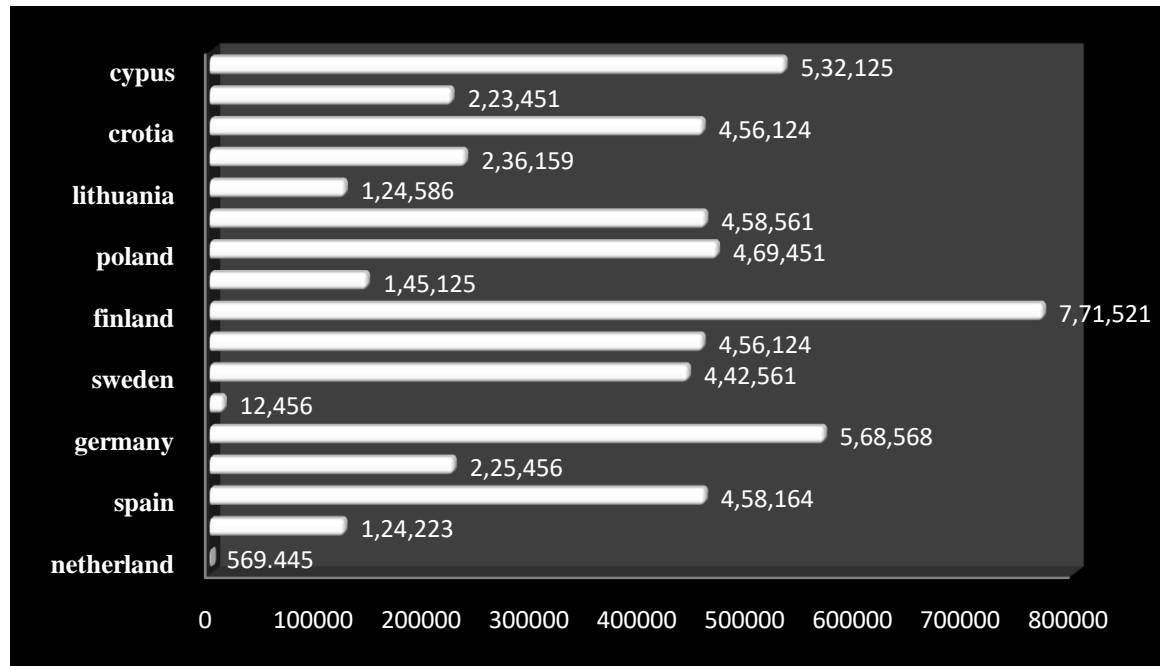
Threats

- Some species travel long distances. Hypoxia, SST, sedimentation, and other variables all contribute to the acidity of the oceans.
- There isn't enough fishing water to use long lines and hooks.

4. Data Description From 2007 to 2018, this report was created utilising an event study technique. We chose this period to create a clear and comparable bridge database after excluding the years for which data is missing. The most recent evidence for maritime transit, as of the time of writing, was from 2018. Brussels, Bulgaria, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, the Netherlands, Poland, Portugal, Slovenia, Finland, and Sweden make up the research sample of 20 EU nations having liner shipping activity. Cyprus and Moldova were excluded from the investigation due to a lack of information. British United Kingdom was also removed from our group because it is no longer an EU member. Europe is already interfering with all EU marine shipping interests, and some shipping lines that historically would have included the UK are all being rebuilt without Ireland. As expected, there are higher concentrations of maritime traffic or activity equivalent to it in the industrialised EU markets, including investments in maritime port infrastructure. The effectiveness and operations of maritime

transportation are significantly influenced by regional and economic considerations. The Netherlands has the highest annual average maximum tonnage of goods transported across all countries between 2007 and 2018 (Figure 3), but it emits much less NO_x from maritime transport than other EU member states (Figure 4), suggesting that it is more

Figure 5. The gross weight of products moved (tons, average yearly value, 2007–2018) in all ports Authors' calculations are based on Eurostat data. According to Eurostat statistics, Spain has the highest amount of NO_x emissions from marine transport in the EU, more than twice as much as Greece, Italy, and France, which are the next most polluting countries (Figure 6). Environmentally friendly because it uses larger, less-polluting vessels.



Between 2007 and 2018, Espuma had the largest average value of the asset in container ships among EU member states, followed by The united states, Germany, and France (Figure 5). Data for Cyprus, Latvia, Poland, as well as the Netherlands, on the other hand, isn't published.

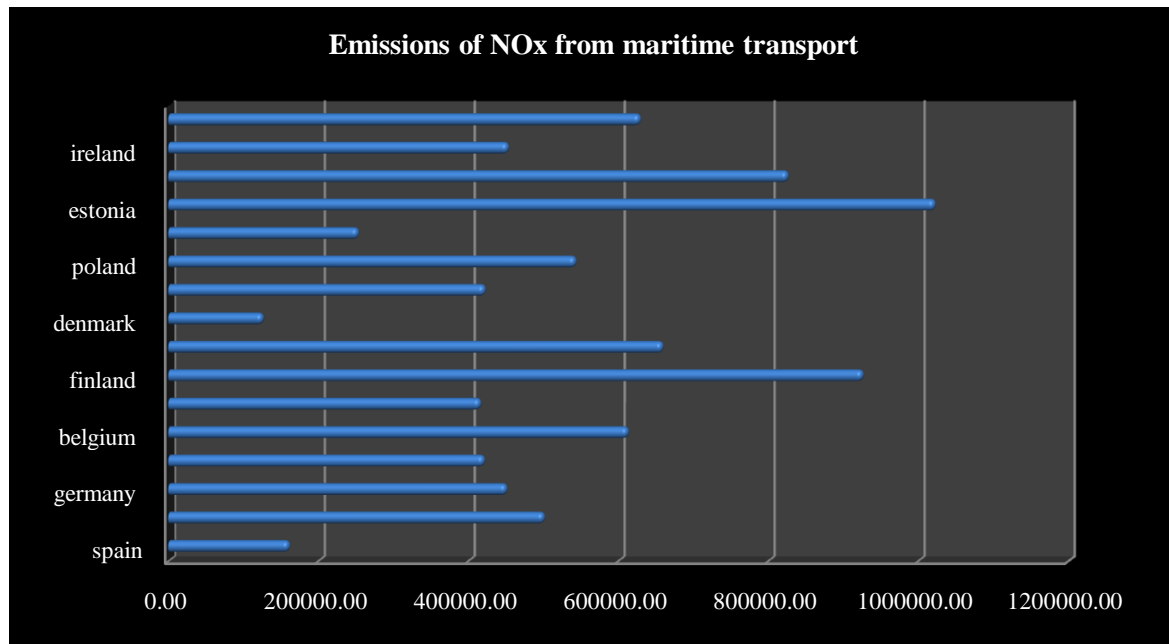


Figure: 6NOx emissions from marine transportation (average values). The authors' calculations are based on Eurostat data.

In terms of the EU's emerging economies, they have a significantly lower intensity of marine travel, which, of course, means that NOx emissions from maritime transport are much lower. When calculating the number of tons of NOx per ton of products moved, however, Greece appears to be the least efficient in terms of marine pollution, followed by industrialized nations like Spain, Sweden, Portugal, and Denmark (Figure 6).

4. Conclusion

According to the report, Bangladesh may advance toward its objective of becoming a developed nation via wise management and use of its marine resources. However, further study is required to fully understand how the "Maritime Economy" might contribute to the expansion of the Bangladeshi economy. Bangladesh has enormous potential to grow its economy using resources from the sea if a balanced approach is taken to protecting the marine ecosystem and marine resources. To reach middle-income status by 2021, Bangladesh must create jobs.

The marine transportation industry and related activities make up more than 40% of the blue economy, which is a crucial component of the European economy and provides a wide range of resources and services. In the current economic and technological climate, it is expected that transportation systems will become more effective, safe, and environmentally friendly. A crucial mode of transportation for supporting international trade, global value chains, resource allocation, and general economic growth and development in maritime transportation. It is believed to have a lower environmental impact than other forms of transportation, such as road transportation, and has a direct and indirect impact on a variety of sectors.

5. References

1. "A Blueprint for Ocean and Coastal Sustainability"; UNESCO, IMO, FAO, UNDP; Paris, 2011.
2. "Bangladesh Ministry of Fisheries and Livestock"; Updated information of 17 February 2020.
3. "Bangladesh Bureau of Statistics Annual Report 2019-2020"; 2020.
4. BasharatHossain, Syed NaimulWadood, "Potential Unexplored? Tourism and Economic Growth of Bangladesh"; February 2020.
5. "Blue Economy Concept Paper"; Rio+20, United Nations Conference on Sustainable Development, Rio de Janeiro, 2012.
6. Bob Hunt, Amanda C J Vincent; "Scale and Sustainability of Marine Bioprospecting for Pharmaceuticals"; Publisher: AMBIO: A Journal of Human Environment; March 01, 2006; Page: 35, 57-64.
7. David Leary, MarjoVierros; "Marine Genetic Resources: A Review of Scientific and commercial Interest"; 2009; Page: 33, 183-194.
8. Dipa Sultana; "Bangladesh Fisheries Sector: Growth Prospects and Opportunities"; Light Castle; April 10, 2019
9. "FAO-Food and Agriculture Organization of the United Nations"; Fisheries and Aquaculture Department; Rome, 2010.
10. European Commission. The EU Blue Economy Report 2020. 2020. Available online: https://blueindicators.ec.europa.eu/sites/default/files/2020_06_BlueEconomy-2020-LD_FINAL-corrected-web-acrobat-pro.pdf (accessed on 25 May 2021).
11. Psaraftis, H.N. The Future of Maritime Transport. In International Encyclopedia of Transportation; Elsevier: Amsterdam, The Netherlands, 2021; pp. 535–539. ISBN 9780081026724.
12. Bai, X.; Zhang, X.; Li, K.X.; Zhou, Y.; Yuen, K.F. Research topics and trends in maritime transport: A structural topic model. *Transp. Policy* 2021, 102, 11–24.
13. Vieth, I.; Merkel, A. Internalization of external and infrastructure costs related to maritime transport in Sweden. *Res. Transp. Bus. Manag.* 2020, 100580.
14. Lane, J.M.; Pretes, M. Maritime dependency and economic prosperity: Why access to oceanic trade matters. *Mar. Policy* 2020, 121, 104180.
15. Akbulaev, N.; Bayramli, G. Maritime transport and economic growth: Interconnection and influence (an example of the countries on the Caspian sea coast; Russia, Azerbaijan, Turkmenistan, Kazakhstan and Iran). *Mar. Policy* 2020, 118, 104005.
16. Georgina, S.C.; Onofrei, M.; Vintila, G.; Armeanu, D.S. Empirical evidence from EU-28 countries on resilient transport infrastructure systems and sustainable economic growth. *Sustainability* 2018, 10, 2900.
17. Khan, H.U.R.; Siddique, M.; Zaman, K.; Yousaf, S.U.; Shoukry, A.M.; Gani, S.; Khan, A.; Hisham, S.S.; Saleem, H. The impact of air transportation, railways transportation, and port container traffic on energy demand, customs duty, and economic growth: Evidence from a panel of low-, middle-, and high -income countries. *J. Air Transp. Manag.* 2018, 70, 18–35.
18. Saidi, S.; Shahbaz, M.; Akhtar, P. The long-run relationships between transport energy consumption, transport infrastructure, and economic growth in MENA countries. *Transp. Res. Part A Policy Pract.* 2018, 111, 78–95.

19. Özer, M.; Canbay, S.; Kırca, M. The impact of container transport on economic growth in Turkey: An ARDL bounds testing approach. *Res. Transp. Econ.* 2020, 101002.
20. Badulla, C.; Guillotreau, P. Maritime transport in the French economy and its impact on air pollution: An input-output analysis. *Mar. Policy* 2020, 116, 103818.