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2021-06

Alam , M W , Xiangmin , X , Ahamed , R , Mozumder , M M H & Schneider , P 2021 , ' Ocean governance in Bangladesh: Necessities to implement structure, policy guidelines, and actions for ocean and coastal management ' , Regional Studies in Marine Science , vol. 45 , 101822 . https://doi.org/10.1016/j.rsma.2021.101822

http://hdl.handle.net/10138/343319
https://doi.org/10.1016/j.rsma.2021.101822

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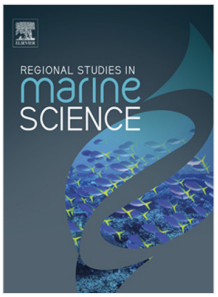

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PII: S2352-4855(21)00214-0
DOI: https://doi.org/10.1016/j.rsma.2021.101822
Reference: RSMA 101822

To appear in: *Regional Studies in Marine Science*

Received date : 24 July 2020
Revised date : 30 April 2021
Accepted date : 1 May 2021

Please cite this article as: M.W. Alam, X. Xu, R. Ahamed et al., Ocean governance in Bangladesh: Necessities to implement structure, policy guidelines, and actions for ocean and coastal management. *Regional Studies in Marine Science* (2021), doi: https://doi.org/10.1016/j.rsma.2021.101822.

Research Article

Ocean governance in Bangladesh: Necessities to implement structure, policy guidelines, and actions for ocean and coastal management

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ABSTRACT

After the permanent demarcation of Exclusive Economic Zone boundaries with Myanmar and India through the International Tribunal for the Law of the Sea and the United Nations Convention on the Law of the Sea, Bangladesh has exclusive rights to exploit and to explore marine resources across 118,813 km^2 in the Bay of Bengal. To reap economic benefits from maritime space, the government of Bangladesh recently emphasized the development of a blue economy. Maritime economic activities, including shipping, trade, fishing, fishing industries, mineral extraction, exploitation of hydrocarbons, salt production, production of renewable energy, and marine and coastal tourism, are key elements of the maritime interests of policymakers. However, the safety of maritime activities also raises concerns that include shipping accidents, smuggling, and illegal fishing, which pose threats to maritime interests. Enhancing blue economic growth and protecting marine and coastal environments are essential to ensure maritime security. Therefore, in the framework of a comprehensive ocean governance approach, we suggest establishing a separate Ministry of Ocean Affairs with essential functions to formulate an integrated coastal and marine strategy, to address the policy guidelines, and to implement action plans for coastal management in Bangladesh.

Keywords: Comprehensive approach; Ocean governance; Bangladesh; Policy guidelines; Integrated coastal and marine management approach

1. Introduction

Bangladesh, one of the largest deltas in the world with a total area of 147,570 km^2 (Ahsan, 2013), is part of the Bengal Basin and one of the most extensive geosynclines worldwide (Sarwar and Woodroffe, 2013). The country is primarily dominated by the Ganges-Brahmaputra-Meghna (GBM) Basin (Becker et al., 2020; Zaman et al., 2017), which contains more than 230 rivers (ECDS Cell, 2017) and is connected to extensive flood plains, a dynamic system of estuaries and islands, and a coastal sea (Barange et al., 2018). Bangladesh has a population of approximately 164.6 million (Bangladesh Bureau of Statistics, 2018), which is estimated to reach 193 million by 2050, according to medium-variant projections (UN, DESA, PD, 2019). Increasing population trends increase human activity, which depends on the environment and natural resources systems. However, industrialization and other human activities have caused environmental pollution in oceans worldwide.

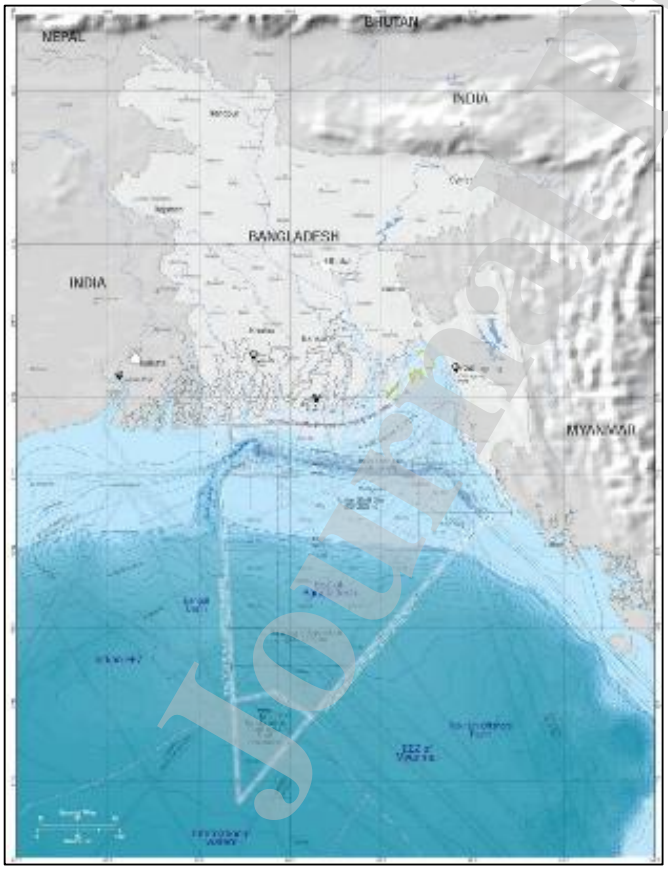

Fig. 1. Maritime area of Bangladesh (Chowdhury, 2017)

The marine environment of Bangladesh is situated on the coast of the Bay of Bengal (BoB), which is the northeastern extension of the Indian Ocean (IHO, 1953; Hossain et al., 2014). Bangladesh received 118,813 km^2 of maritime area in the BoB (**Fig. 1**) after the final dispute settlements with Myanmar and India in 2012 and 2014, respectively (Islam and Mostaque, 2018).

Bangladesh owns a maritime area almost as large as its land area and a wider shallow shelf region extending for more than 100 nautical miles. The shelf region is three to four times wider than the global average (approximately 65 km) and provides a vast shallow-water fishing area per unit length of coastline larger than that of India or of Myanmar (Hossain et al., 2017). Coastal Bangladesh is one of the most productive global regions for ecosystem services (Hasan et al., 2018). Bangladesh has approximately 710 km of coastline (Ahsan, 2013), which covers 32% of the country and contains a population of more than 35 million people (Mahmuduzzaman et al., 2014). Livelihoods in the coastal area include agriculture, fishing and aquaculture, salt farming, forest resources, and nearshore transportation. Fisheries are significant BoB coastal economic hubs, and the fishing industry provides a significant number of job opportunities (FAO, 2017). The domestic tourism industry in Bangladesh has grown significantly along the BoB coast in Chattogram, Cox's Bazar, Saint Martin, Kuakata, and the Sunderbans. According to transportation opportunities, Chattogram is the busiest seaport on the BoB peninsula and handled more than two million containers in 2015 (SeaNews, 2016). The BoB contains significant untapped oil and gas reserves (Wazed, 2017) that are among the many in the Asia-Pacific region (Detsch, 2014). Few offshore platforms operate in the BoB, and the Sangu platforms in Bangladesh were closed in 2013 (Offshore, 2013). Moreover, numerous marine plants, invertebrates, and minerals have immense global economic value.

The coastal and marine environment of Bangladesh is perturbed by rapid urbanization, deforestation, and unplanned extraction of marine and coastal resources. Severe natural disasters and extreme climate change events include cyclones, storm surges, warming trends, coastal erosion, tidal surges, ocean acidification, floods, sea-level rise, salinity intrusion, and manufactured hazards (e.g., soil erosion, high arsenic content, waterlogging, and various forms of

pollution) (Rahman et al., 2010; Rashid and Hoque, 2015; Islam and Shamsuddoha, 2018; Awal and Islam, 2020; Das et al., 2020; Alam et al., 2017; Hasan, 2010; Alam and Xiangmin, 2017; Hussain and Hoq, 2010; Alam et al., 2018; Sarker et al., 2019). Bangladesh does not have a specific national policy to restore marine resources and security. However, considering the rapidly changing the use of ocean space, an action plan is urgently needed for better manage the resources to ensure maximum economic benefits. The above-mentioned factors indicate the importance of national ocean governance in Bangladesh for improving national wellbeing.

In recent years, ocean governance has become a vital part of comprehensive diplomacy. In 1974, the United Nations Environmental Program (UNEP) initiated the Regional Seas Program (RSP) to deal with the protection, conservation, and sustainable use of the global marine and coastal environment (Ojha, 2015). Chapter 17 of Agenda 21 of the United Nations Conference on Environment and Development (UNCED) of 1992 highlighted the necessity of a comprehensive approach for adopting the protection, sustainable development, and management of marine and coastal areas (Grip, 2017). However, maritime activities represent the land–sea interface and feature numerous human activities; therefore, oceans have different behavior patterns with vast and multiple dimensions. The maritime domain, national and international actors, and divergent missions with different codes of conduct characterize the complex oceanic system. Developing a comprehensive approach for Bangladesh regarding ocean governance guidelines is essential to turn difficulties into opportunities. Maritime security, seaport infrastructure, shipping, shipbuilding, ship recycling, fishing and aquaculture, offshore petroleum, sea minerals, renewable energy, tourism, marine and coastal protection, marine biodiversity, pollution prevention, disaster management, hydrographic surveys, and marine education and research are preliminary sectors for suggested ocean governance in Bangladesh. The overall scope is to maintain good order at sea and

along the coast, to operate competent and comprehensive institutions, to ensure a safe and productive environment based on an understanding and sustainable valuation of potential benefits, and to develop an excellent outline for comprehensive ocean governance in Bangladesh.

2. Importance of ocean governance in Bangladesh

The environment and resources of the ocean play a vital role in developing the blue economy (UNCTAD, 2014), which is the sustainable use of ocean resources for economic growth, improved livelihoods, jobs, and ocean ecosystem health (World Bank, 2017). The blue economy provides food, energy, transportation, mineral, water, leisure, and health from the ocean, and the marine resources of Bangladesh can be tapped to enhance the economy (Hossain et al., 2014). Based on a scientific and socio-economic perspective, marine resources can be classified as small-scale vs. industrial, high input-output ratio vs. low or medium input-output ratio, rapid return vs. long term return, single vs. multiple use, environment-friendly (green) vs. environmentally damaged (red/orange), public sector vs. private/foreign sector, and according to other economic feasibility and socio-demographic indices (Hossain et al., 2014). The ocean produces 70% of atmospheric oxygen through the photosynthetic activity of phytoplankton (Sekerci and Petrovskii, 2015), contains approximately 96.5% of global water (Williams, 2014), and supports 80% of global biodiversity (Abdullah et al., 2013). The global ocean is a part of human culture, heritage, economy, civilization, and society (Lee, 2019; Henderson, 2019) and has a profound significance for tourism, mineral extraction, recreation and transportation. Coastlines also include beaches and cliffs, coral reefs, islands, mangrove forests, ports, and harbors. The importance of the global ocean makes it the 'lungs of the Earth'; however, the marine environment is deteriorating due to the unsustainable utilization and exploitation of ocean resources and the release of pollutants into the ocean. Several studies have suggested ways to preserve the marine and coastal environment of

Bangladesh from deteriorating agents, which directly or indirectly affect the environment (Islam and Shamsuddoha, 2018; Hasan, 2010; Alam and Xiangmin, 2017; Alam et al., 2018). As the maritime area contains vital biological and economical diversity, national ocean governance can play a vital role in the preservation of national resources through strategic discipline. This policy underlines the visions which ensure optimum usage of the Bay of Bengal.

Table 1. Marine resources of Bangladesh (Hossain et al., 2014)

Marine Resorces	Living Resources	Fisheries Resources: Marine fish, Shrimp, Crabs, Lobstar, Mussels
		Others living Resources: Marine algae, Marine plants, Marine Animals etc.
	Non-living Resources	Water, Salt and Brine, Oil and gas, Minerals etc.

3. Shortcomings and weaknesses of national ocean governance laws

Bangladesh has the exclusive rights to explore and to exploit the marine resources in the BoB after the ocean boundary verdicts in 2014; therefore, managing marine resources and security in the Bay of Bengal is imperative. Maritime Bangladesh is rich in biotic and abiotic resources (**Table 1**) that include numerous fish and other marine animals and plants, unexploited oil and gas fields, and other sea-bed resources. However, the country lacks an appropriate ocean governance mechanism or marine policy that is essential to restore and to protect marine resources and to guarantee maritime safety (Alam and Xiangmin, 2017; Hussain et al., 2017). Few of the government bodies, NGOs, and private authorities that implement national acts on marine environmental protection in Bangladesh work to integrate ocean governance and marine end coastal management (**Table 2**).

Table 2. Relevant marine pollution authorities and policies in Bangladesh (Hossain et al., 2016; Alam and Xiangmin, 2018)

Authority	Policies and Remarks*
The Department of Environment (DOE)	The Environment Conservation Act, 1995. The Environment Conservation Rules, 1997. The Environment Conservation Act (Amendment) 2010. The Environment Court Act, 2010
The Department of Shipping (DOS)	Bangladesh Merchant Shipping Ordinance, 1983. The Marine Environment Conservation Act, 2004 (Not enacted yet)
The Department of Fisheries (DoF)	The Marine Fishery Ordinance, 1983
The Chittagong Port Authority	The Port Authority Act, 1976
The Mercantile Marine Department	The Bangladesh Merchant Shipping Ordinance, 1983
The Department of Explosives	The Rule 38 of the Petroleum Rules, 1937. The Explosives Act, 1884
Ministry of Environment and Forest (MoEF)	Ship-breaking and Hazardous Waste Management Rules, 2010
The Ministry of Industries	Ship Breaking Industries Policy, 2011
The Ministry of Foreign Affairs	Maritime Act, 2018 (Draft)
The Bangladesh Navy	*Government Organization, inspects vessel ensures that overall issues related to maritime activity
Bangladesh Environment Lawyers Association (BELA)	*An NGO, Actively Advocacy, directed several beach-breaking activities like pollution and health issues.

The Territory Waters and Maritime Zones Act of 1974 was the first instrument to declare Bangladeshi territorial waters and maritime zones in the BoB (Alam and Faruque, 2010). Bangladesh contrived the Coastal Zone Policy (2005) to develop a management framework for coastal and maritime areas but paid little attention to the impacts of climate change (e.g., sea-level rise) or the challenges of coastal infrastructure development (Rahman and Rahman, 2015). In 1983,

the Marine Fisheries Ordinance was enacted as the first comprehensive legal instrument for exploiting, conserving, and managing national marine fisheries resources (Marine Fisheries Ordinance, 1983). The ordinance was replaced by the Marine Fisheries Act of 2020. The Bangladesh Petroleum Act (1974) highlights the execution of petroleum operations without hampering ecology, the environment, or other maritime and sea-bed resources (The Bangladesh Petroleum Act, 1974). The Chittagong Port Authority Act of 1995 and The Mongla Port Authority Act of 1995 separately regulate the operation of national ports. The Bangladesh Shipping Corporation Order of 1972 provides for better operation and development of shipping and ocean transport services (Bangladesh Shipping Corporation Order, 1972). The Bangladesh Shipping Corporation Act of 2017 was formulated to repeal and to re-enact the Bangladesh Shipping Corporation Order of 1972 to provide safe and proficient maritime trade services through international waterways and to enhance regional cooperation and business transactions (Ministry of Shipping, 2018). The Bangladesh Merchant Shipping Ordinance of 1983 is a comprehensive law for the maritime shipping sector that places the Department of Shipping under the Ministry of Shipping (The Bangladesh Merchant Shipping Ordinance, 1983). The Bangladesh Environment Conservation Act of 1995 (Amendment 2000, 2002) and The Environment Conservation Rules of 1997 were critical foundations for environmental protection and for the establishment of the Department of the Environment under the Ministry of Environment and Forests. These acts and rules are the central government branches dedicated to environmental conservation and protection and to the control and mitigation of environmental pollution (Alam et al., 2018; Mohammad, 2012; Department of Environment, Ministry of Environment and Forest, 2010; Ministry of Environment and Forests, 1997). The naval wing of the Armed Forces Division is entrusted with maintaining the sovereignty and territorial integrity of the oceanic realm, as empowered by the Navy Ordinance

of 1961 (Amendment 1977). The Coast Guard Act of 1994 charges the Bangladesh coast guard with protecting the marine environment and maritime safety (Alam et al., 2018). In 2018, the Bangladesh government published a draft of the Maritime Act, which needs further revision to properly implement marine environmental protection and maritime safety. Considering the shortcomings of the present legal provisions and the lack of cross-sectoral coordination and integration, a comprehensive approach to ocean governance structure is needed to project national economic growth and sustainable development.

4. Suggested structure of ocean governance in Bangladesh

Laws, institutions, and their practical implementation are essential elements for comprehensive ocean governance worldwide. Legal elements are collected from international and regional conventions and programs that establish ocean management rules and norms. In contrast, the United Nations Convention on the Law of the Sea (UNCLOS) is more prominent when incorporated into national legislation. An institution ensures coordination and cooperation among stakeholders in the implementation of legal elements, and assuming targets and goals for the formulation of the policy approach is essential for focusing on long-term sustainability. The ocean governance structure should consider the direct development of maritime activities for the optimum use of maritime zones under national jurisdiction and beyond to further national interests in an integrated, balanced, and sustainable manner for national socio-economic well-being. The existing strengths and challenges of the oceanfront should be weighing factors. A well-calculated maritime vision with comprehensive objectives and goals should be placed in the ocean governance structure based on the principles of the Sustainable Development Goals (SDGs) of the Agenda 2030. These include SDG-2 “Zero Hunger,” SDG-6 “Clean Water and Sanitation,” SDG-11 “Sustainable Cities and Communities,” SDG-13 “Climate Action,” SDG-14 “Life Below

Water," and SDG-15 "Life on Land". SDG-14 primarily focuses on the protection of the marine and coastal environment from pollution and addresses the future impacts of ocean acidification. To improve the conservation of marine ecosystems and their resources, international and regional frameworks can help mitigate the challenges of the present ocean environment. The participation of relevant stakeholders should be included in the policy vision and incorporated with an efficient organizational structure to coordinate, to monitor, and to evaluate the all-encompassing activities of marine affairs. Adaption to change, policy accountability, capabilities, values, norms, solid working bodies, and integration with stakeholders are essential components of a comprehensive structure (**Fig. 2**).

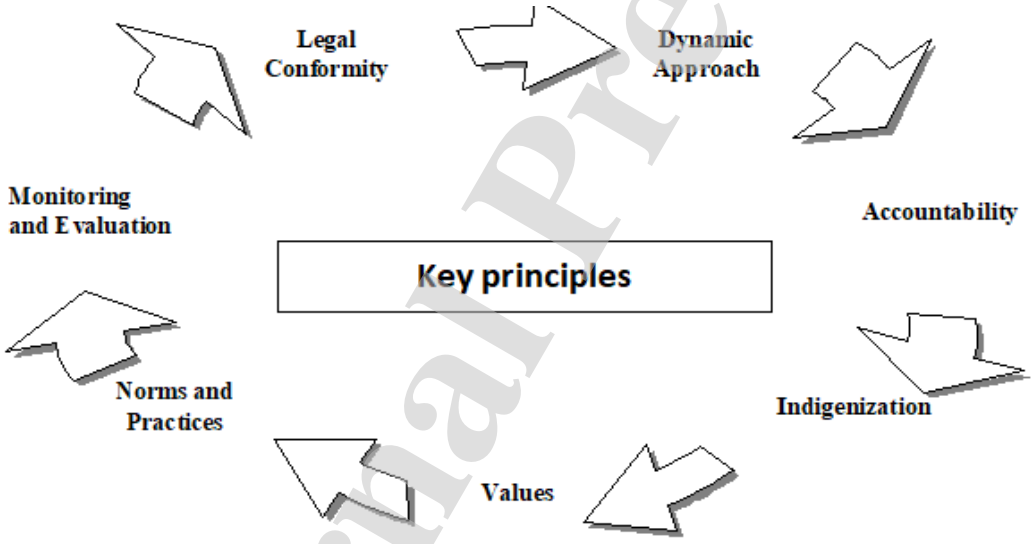

Fig. 2. Fundamental principles of ocean governance structure

The layout and content of the suggested ocean governance structure is categorized into four segments that consider the above-mentioned fundamentals (**Fig. 2**). The first segment covers the mission, vision, objectives, goals, and guiding principles. The second segment contains the maritime domain and discusses sea area, geography, resources, economy, and sources and impacts of marine pollution. The third segment contains the challenges, implementation, and monitoring

mechanisms of the proposed approach. The last segment establishes detailed policy guidelines for stakeholders and key actors.

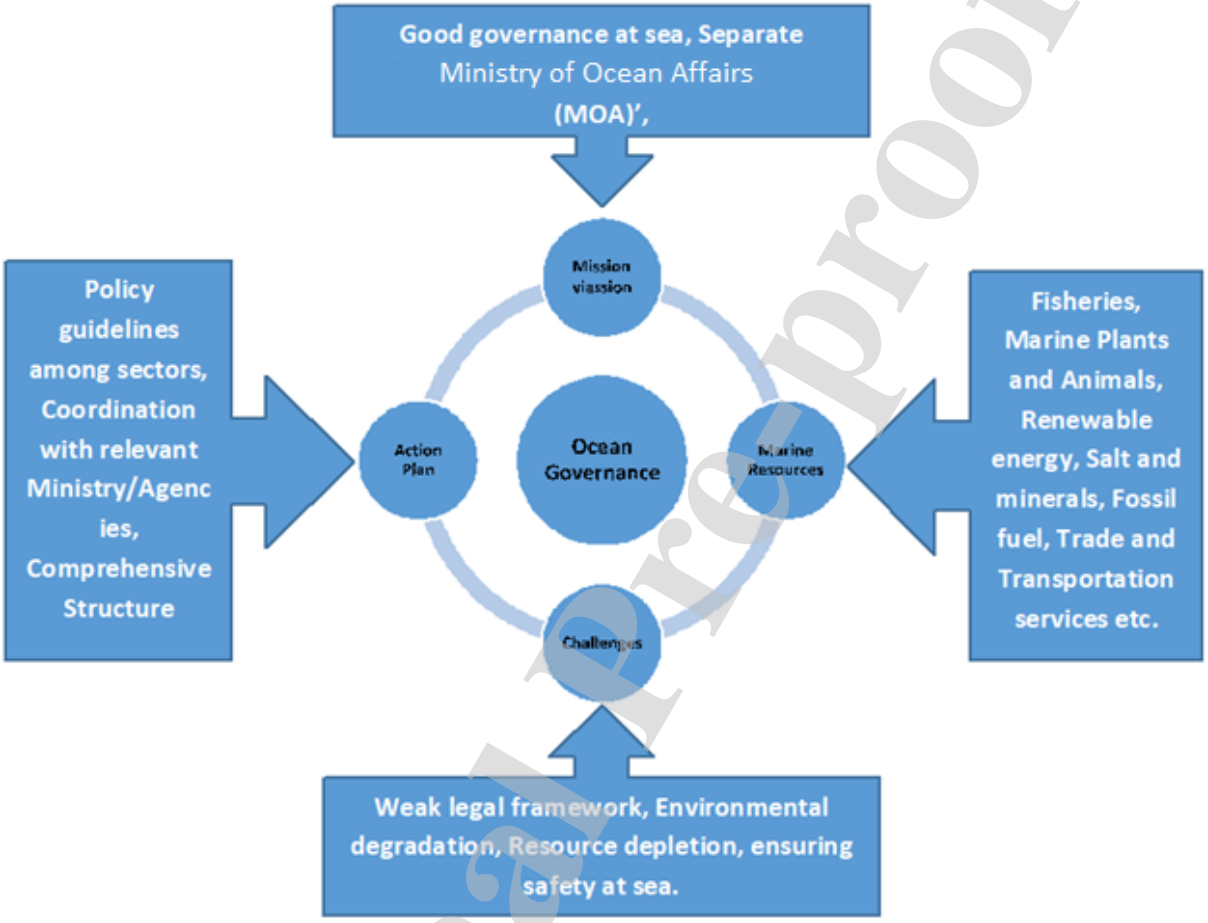

Fig. 3. Layout and content of the proposed ocean governance in Bangladesh.

Promoting economic growth, ensuring maritime security, controlling maritime areas under national jurisdiction, creating new marine research opportunities, ensuring marine environmental protection and sustainability, and fostering regional and international cooperation are the key objectives for the proposed ocean governance approach (**Fig. 3**). Most countries have a separate ocean-related ministry for the sustainable exploration and exploitation of marine resources. Bangladesh requires a separate maritime ministry or proposed Ministry of Ocean Affairs (MOA) with an organizational structure to implement the proposed ocean governance approach.

Bangladesh can learn from neighboring countries, such as India and China, and from other successfully implemented approaches—such as the 2002 EU Recommendation on Integrated Coastal Zone Management and the 2008 Marine Strategy Framework Directive of the European Union. The Ministry of Earth Science-MES (India) and the Ministry of Natural Resources (MNR) (China) govern diverse ocean-related activities, including integrated ocean governance implementation (Islam, 2015). The above-mentioned ministries emphasize the growth of the blue economy and sustainable marine environmental protection through maritime institutions. The MNR (former State Oceanic Administration-SOA) implemented an integrated marine environmental protection law in 1983 (Chun, 2018). The proposed MOA in Bangladesh can function directly under the Office of the Prime Minister of the People's Republic of Bangladesh and can be headed by a senior government secretary, experienced academician, or senior officer of the Bangladesh Navy with a related background and strong maritime administration capabilities.

5. Functions of the proposed MOA

The primary functions of the MOA are to advise the government on maritime activities to set benchmarks for the development of ocean governance and to produce guidelines for national agencies and stakeholder actions regarding marine discipline. The MOA should maintain a database of maritime issues and should coordinate, monitor, and evaluate target-based achievements. The MOA could be divided into Maritime Safety, Blue Economy, and Marine Environment Divisions under the Department of Oceanic Administration. The Maritime Safety Division is primarily coordinated with oceanic security matters between government departments, ministries, or stakeholders (**Fig. 4**). Short-and long-term policies will analyze the implementation of marine safety units by identifying the strengths and weaknesses of the present law and order. Additionally, the MOA will disseminate information to inform the nation on current developments

in the sector and will attempt to establish a cooperative mechanism with international agencies and to pursue national maritime interests worldwide. The Blue Economy Division will establish policies and coordinate activities related to exploring economic contributions of different maritime areas and will formulate a national action plan to achieve present targets. The Marine Environment Division will execute a plan for the preservation of the ocean ecosystem and its biology and will be responsible for initiating actions to perform scientific other research for technological development and protection of the marine environment. A database management system of hydrographic and oceanographic activities, including marine resource extraction, will be initiated under the supervision of the division. Further research and training institutes in this sector will coordinate and formulate action programs to develop related human resource capacities.

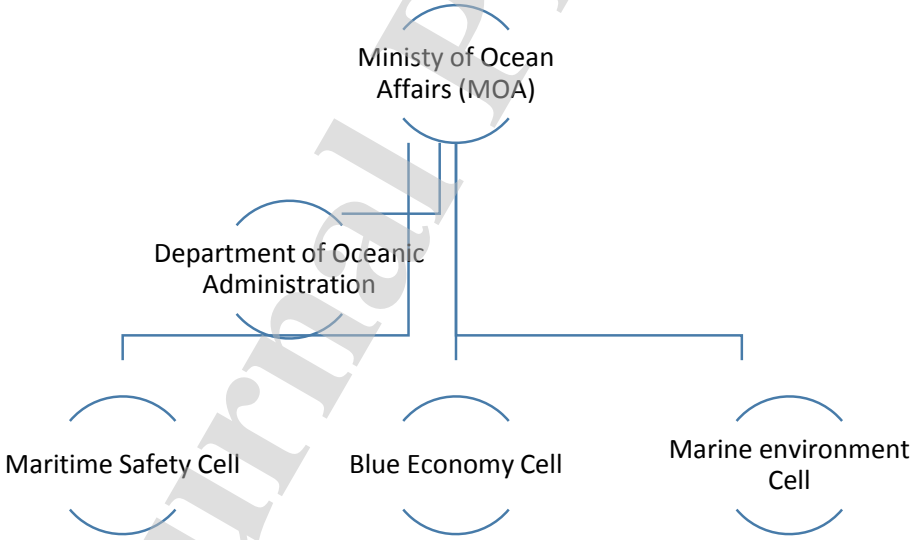

Fig. 4. Proposed structure of the MOA in Bangladesh.

6. Suggested comprehensive policy guidelines with action plan

To operate the MOA, an advisory committee for ocean management is required to address the scope and effectiveness of ocean governance (**Fig. 5**). The committee chairman will be the

Honorable Prime Minister, and the secretary of a leading ministry will be the vice-chairman of the committee. Other related ministries and institutions are members of the committee. Scholars, experts, and researchers on maritime issues will be focal persons and key actors in policy formulation and implementation. The policy guidelines are similar for all sectors, each of which disseminates specific goals for target implementation and undertakes capacity-building programs with an appropriate code of conduct.

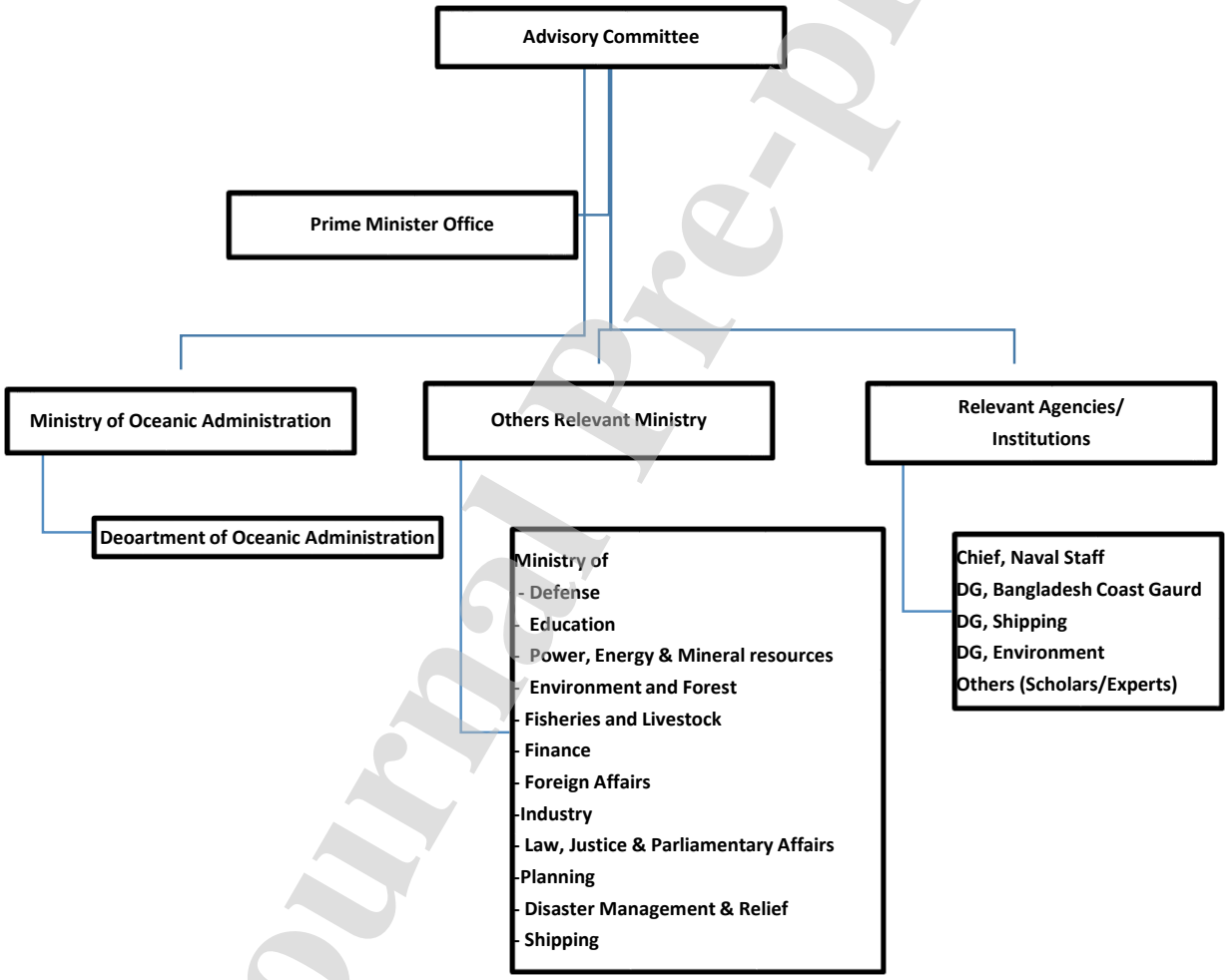

Fig. 5. Organogram of the advisory committee of ocean governance.

The proposed department of oceanic administration under the MOA will be responsible for the action plan. The Maritime Safety Division will be responsible for maritime safety, seaport

management, and the shipping industry (including shipbuilding and ship recycling). The importance of the Maritime Safety Division is highlighted by the vital role of seaports (e.g., Chittagong Port, Mongla Port, and Payra Port) and shipping-related industries in economic development in Bangladesh (Finance Division, Ministry of Finance, 2019; Failler et al., 2019). There are no current alternatives to the shipbuilding and readymade garment industries for national branding. Relevant concerned ministries and agencies will coordinate the action plan to formulate policy guidelines (**Table 3).** The Ministry of Shipping, Ministry of Defense, Bangladesh Navy, Bangladesh Coast Guard, and Ministries of Law, Justice, and Parliamentary Affairs are crucial stakeholders of the Maritime Safety Division to implement the action plan. Shipping, fisheries, tourism, aquaculture, and energy are key sectors for the Blue Economy Division; relevant stakeholders include the ministries of Industry, Fisheries and Livestock, Ministry, Energy and Mineral Resources, Planning, Foreign Affairs, and Finance. To turn the Bay of Bengal into a hub of economic expansion and prosperity, marine resources and maritime services should be developed in a sustainable way to meaningfully contribute to expanding potential sectors, such as pharmaceutical and agro-based industries to enhance foreign trade and exchange. A comprehensive marine environmental protection policy is needed in Bangladesh to preserve and to protect marine and coastal environments. The Ministries of the Environment, Forest and Climate Change, Education, Disaster Management and Relief, Shipping, Defense, and Foreign Affairs; the Bangladesh Navy and Coast Guard; and the Departments of the Environment and Shipping can play a vital role.

Table 3. Action plan of suggested ocean governance under the MOA

Sectors	**Relevant Ministry/Agencies**	**Action Plan**

Maritime Safety	Ministry of Shipping; Ministry of Defense; Bangladesh Navy; Bangladesh Coast guard; Ministry of Law, Justice and Parliamentary Affairs;	*Maritime Security:* - Develop regional and international cooperation to take adequate measures to ensure the safety of the vessels. - Empower the Bangladesh Navy and the Coast Guard to perform as leading maritime security agencies. *Sea Ports Management:* - Take efficient measures to develop a capable and safe transport network worldwide. - Create favorable conditions for all vessels' registration and guarantee the safety of seafarers. *Shipbuilding and Ship-recycling:* - Promote favorable economic and environmental conditions for the betterment of the shipbuilding and Ship-recycling industry. - Implement appropriate administrative measures and safety regulations for the laborers to encourage these activities.
Blue Economy	Ministry of Industry; Ministry of Fisheries & livestock; Ministry of Power, Energy & Mineral resources; Ministry of Planning; Ministry of Foreign Affairs; Ministry of Finance;	Shipping: - Set up maritime trade growth and economic benefits, offering blue employment opportunities for the near future. - Container traffic is projected to be double by 2030. Living Resources: - Maintain different fishing zones by considering species, breeding season, migration pattern, stock availability. - Carry out research and development to promote the consumption of marine resources, including fish, mollusks, marine plants. Non-living Resources - Undertake geological exploration and develop contingency plans in the operation of offshore petroleum and sea minerals.

		- Take steps towards exploring the sea and coast for non-conventional, alternative, and renewable energy sources. Marine Tourism: - Ensure the mechanisms to attract investment, and formulate strategies to strengthen eco-tourism. - Devise the sea-beaches management and undertake eco-friendly projects for the tourism potentials.
Marine Environment	Ministry of Environment, Forest and Climate Change; Ministry of Education; Ministry of Disaster Management and Relief; Ministry of Shipping; Ministry of Defense; Ministry of Foreign Affairs; Bangladesh Navy, and Coast Guard; Department of Environment & Department of Shipping;	Marine and Coastal Protection - Draw up strategies for the protection and conservation of marine and coastal environment. - Implement laws and regulations to prevent, reduce and control pollution of the coastal and marine environment. - Endorse legislation, identify and prepare the inventory of cultural, archeological, and heritage properties. Climate Change and Disaster Management: - Devise an action plan to reduce the vulnerability of Bangladesh to climate change. - Develop and implement local emergency and contingency plans concerning maritime disaster and risk management. - Structure and develop the National Tsunami Warning Center. Oceanography Research and Education: - Develop the proper structure of the 'Bangladesh National Center for Ocean Information Service.' - Disseminate the maritime safety information, appropriate navigation, and regular hydrographic surveys among the respective organizations' members. - Create and promote interdisciplinary programs like marine biotechnology, blue or green economics, human resource development in the maritime sector.

7. Conclusion

Bangladesh has recently emphasized achieving blue growth by expanding economic frontiers to its maritime region. Enhanced economic activities are likely to exert more pressure on already stressed marine ecosystems and require proper and comprehensive evaluation and balancing. Well-regulated functional ocean governance is also needed if Bangladesh is to achieve SDG-14 for the conservation and sustainable use of the oceans, seas, and marine resources for sustainable and responsible development. The suggested comprehensive policy and guidelines for ocean governance under the MOA presented in this paper can provide the basis for good governance through the implementation of integrated planning and administration. To ensure the proper management of marine resources and maritime security, Bangladesh needs to implement a strategic action plan based on the demands and inputs of relevant ministries, stakeholders, and effective institutions. Promoting economic growth, ensuring marine safety and surveillance, and controlling maritime and coastal areas under national legislation is the best solution for formulated ocean governance. Finally, the governance framework will help create opportunities through research, education, and maritime awareness to ensure good governance at sea in Bangladesh.

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Authors statement

Dear Editor,

I am a corresponding author interested to submit my revised manuscript titled **'Ocean governance in Bangladesh: Necessities to implement structure, policy guidelines, and actions for ocean and coastal management'** in your reputed journal. As ocean governance is an important part of marine science, so I think this journal is appropriate for publishing my article.

On behalf of our authors, I want to state that, the authors have done all actions regarding the reviewer's and Editor's suggestions and revisions of the revised manuscript (RSMS-D-20-00267R3). English is edited extensively by a professional English editing services (Elsevier). I will appreciate the editor's suggestions regarding the edited manuscript for implement the article from any point.

With thanks

(Corresponding Author)

Conflict of Interest

I am Dr. Md. Wahidul Alam, Associate Professor, Department of Oceanography, Faculty of Marine Sciences and Fisheries, University of Chittagong, Bangladesh interested to publish my research article in your reputed journal. I want to mention that, on behalf of all authors there are no conflicts of interest exist regarding the publication of the article.

With regards

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