

*Moutusi Islam***MARITIME SECURITY CHALLENGES FOR BANGLADESH:
RESPONSE OPTIONS****Abstract**

The paper is an attempt to identify and analyze the maritime security challenges that are faced by Bangladesh and the possible response options. Maritime security is a vital issue in the contemporary world. It has become multipronged as against the earlier narrow view of defence against military attacks and the protection of a nation's sovereignty at sea. Bangladesh faces many maritime security challenges that have both traditional and non-traditional characteristics such as great power rivalry; piracy and armed robbery; trafficking of arms, drugs and people; illegal fishing and poaching; marine pollution; natural disasters and climate change; and finally, resource management. Therefore, Bangladesh needs to focus on developing effective capacity building in areas i.e., regulatory frameworks, institutional structures, human resource, technology and infrastructure, maritime diplomacy, with a view to ensuring its maritime security.

Keywords: Maritime Security, Traditional Maritime Security, Non-traditional Maritime Security, Capacity Building

1. Introduction

Today oceans and seas have transformed into critical areas for security, trade, environment and maritime geopolitics resulting into the shifting of political centre of gravity from land to oceans. Consequently, maritime security has become a major concern for a significant number of states and other international actors. Traditionally, maritime security has been theorized and interpreted from a conservative viewpoint, excluding non-traditional security issues, focusing on themes such as great power politics, geostrategy or international regime-building.¹ However, Sam Bateman points out, "maritime security is a basic requirement of all coastal and island states which involves policies and operations to deal with threats both of a traditional military nature, as well as the ones of a non-traditional nature".²

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¹ Christian Bueger and Timothy Edmunds, "Beyond Seablindness: A New Agenda for Maritime Security Studies", *International Affairs*, Vol. 93, No. 6, 2017, p. 1293.

² Sam Bateman, "Maritime Security Governance in the Indian Ocean Region", *Journal of the Indian Ocean Region*, Vol. 12, No. 1, 2016, p. 9.

Hence, the contemporary understanding of maritime security debate incorporates both conventional and non-conventional issues.

Despite being a maritime state, maritime security of Bangladesh is relatively an unexplored phenomenon. As Abul Kalam observes, “Bangladesh does not carry an enduring maritime legacy in its strategic formulations or in policymaking but the Bengalis have significant historical legacies as seafarers, boat-makers, traders and shipbuilders”.³ An Indian Ocean littoral state, Bangladesh has 710 km long coastline along the ocean via the Bay of Bengal. The country’s prolonged disputes over maritime claims with neighbouring Myanmar and India were resolved through the respective judgments given by the International Tribunal for the Law of the Sea (ITLOS) and the Permanent Court of Arbitration (PCA). A new maritime-centric Bangladesh has emerged following the verdicts. Its current maritime geography is 1,18,813 sq km.⁴ The country’s rights over 200 nautical miles of Exclusive Economic Zone (EEZ) have also been established. Its continental shelf now extends up to 354 nautical miles; it has sovereign rights there on all living and non-living resources. This opening in the south is a crucial point for the country’s international trade and commerce, as well as for the extraction and exploration of marine resources. At the same time, it has been exposed to a number of threats both traditional and non-traditional in nature to its maritime domain. Therefore, how these challenges can be tackled has become a prime concern for Bangladesh.

Given this backdrop, this paper is an endeavour to understand maritime security challenges for Bangladesh. It also evaluates response options to deal with these challenges. The paper uses qualitative method. It examines existing literature that come from varieties of sources e.g., books, journal articles, government and non-government policy papers and documents, newspapers and internet-based articles. In addition, data and ideas have been collected through expert interviews. For the convenience of the discussion, the paper is organized into five sections including introduction and conclusion. Section two explores the concept of maritime security in a comprehensive manner. Section three highlights the contemporary maritime security challenges for Bangladesh. Section four analyzes the response options to ensure maritime security of Bangladesh. The fifth section concludes the paper.

³ Abul Kalam, “Maritime Destiny of Bangladesh: Legacies and Prospects”, *BIISS Journal*, Vol. 36, No. 4, 2015, p. 293.

⁴ M. Gulam Hussain, Pierre Failler, A. Al Karim and M. Khurshed Alam, “Major Opportunities of Blue Economy Development in Bangladesh”, *Journal of the Indian Ocean Region*, Vol. 14, No. 1, 2018, p. 2.

2. Understanding Maritime Security

The concept of maritime security is elusive and open to different interpretations. Initially coined in the 1990s, the concept has received growing attention due to the intensification of concerns over maritime terrorism since 2000, the rise of modern piracy off the coast of Somalia and elsewhere, maritime crimes such as human trafficking, and the increasing significance in recent years of the so-called 'blue economy' and issues relating to maritime environmental protection and resource management.⁵

The root of maritime security, on the other hand, is as old as the use of the oceans, with nations devising their own customs and practices to safeguard their multifarious marine related interests in the seas and oceans.⁶ Inspired by the philosophy of *Mare Liberum* (1618) of Hugo Grotius, few maritime powers of the past aspired to possess influence over the use of oceanic resources.⁷ Later on, Alfred T. Mahan's argument that 'one who controls the seas holds the decisive factor in modern politics and warfare' provided the powerful maritime powers of the time with a body of ideas, views and thoughts on maritime strategy with immense practical and operational values.⁸ Subsequently, the international community felt the need for change in the general outlook towards the ocean. The UN initiative in creating a new ocean regime to ensure that all nations benefit from the uses of the oceans and extraction of their resources was a remarkable event. This implied a series of negotiations starting from the Geneva Convention on the Law of the Sea (1958-60) to 1982 United Nations Convention on the Law of the Sea (UNCLOS) on various important facets of ocean regime. Following the end of the Cold War, Chapter 17 of Agenda 21 of the Rio Summit, an important international 'soft law', placed the entire oceanic affairs in a newer perspective dealing with the protection of the oceans and the sustainable use of their living resources. The era is also marked by the emergence of various sources of non-traditional maritime security threats. The contemporary maritime security complex consists of four domains, each of which incorporates a series of variously cross-cutting security concerns⁹: i) national security, which is the traditional use of naval military power to defend commercial shipping lanes and the national territory; ii) marine environment concerning environmental and safety regulations regarding marine pollution and health protection; iii) economic development which includes trade by sea, the exploitation of oil and other non-living

⁵ Christian Bueger and Timothy Edmunds, op. cit., p. 1293.

⁶ Abul Kalam Azad, "Maritime Security of Bangladesh", in Mufleh R Osmani and Muzaffer Ahmad (eds.), *Security in the Twenty First Century: A Bangladesh Perspective*, Dhaka: BIIS, 2003, p. 165.

⁷ Ibid, p. 166.

⁸ See, Alfred T. Mahan, *The Influence of Sea Power Upon History, 1660-1783*, Boston: Dover Publications, 1987.

⁹ Christian Bueger and Timothy Edmunds, op. cit., p. 1299.

resources, as well as fisheries; and iv) human security which implies the absence of security (insecurity) of individuals, people in communities, or citizens of states. So, the complex and cross-cutting nature of maritime security makes it difficult to provide a concrete definition.

Perhaps one universally agreed aspect of maritime security is that it is a fluid concept which has no definite meaning and varies depending on the actor who is defining it. However, it can be defined as comprising those issues pertaining to the sea which have a critical bearing on a country's security.¹⁰ In Thean Potgieter's view, "maritime security deals with the prevention of illicit activities in the maritime domain which could be linked directly to the national security efforts of a specific country, or it could cover regional and international efforts to enforce maritime security".¹¹ Christopher Rahman notes, "the concept of maritime security focuses on five inter-related areas: security of the sea itself; ocean governance; maritime border protection; military activities at sea; and security regulation of the maritime transportation system".¹² Therefore, maritime security can be regarded as addressing a range of traditional and non-traditional issues with a view to securing the maritime space.

The majority of international actors define the concept in terms of threats and illicit activities those pose a risk to peace and order.¹³ *The United States (US) Naval Operations Concept (2010)*, listed ensuring the freedom of navigation, the flow of commerce and the protection of ocean resources, as well as securing the maritime domain from nation-state threats, terrorism, drug trafficking and other forms of transnational crime, piracy, environmental destruction and illegal seaborne immigration.¹⁴ *The 2008 UN Secretary General's Report on Oceans and the Law of the Sea* identifies, illicit trafficking of arms and weapons of mass destruction, illicit traffic of narcotics and psychotropic substances, and smuggling and trafficking of persons by sea as threats to shipping companies, militaries, and law enforcement.¹⁵ *The UK National Strategy for Maritime Security (2014)* listed terrorism, disruption to trade or freedom of navigation, cyber attack against UK's maritime infrastructure, arms proliferation, drugs and people smuggling as maritime security risk.¹⁶ *The*

¹⁰ Rahul Roy Chaudhury, *India's Maritime Security*, New Delhi: IDSA and Knowledge World, 2000, p. 1.

¹¹ Thean Potgieter, "Maritime Security in the Indian Ocean: Strategic Setting and Features", *Institute of Security Studies Paper*, No. 236, 2012, p. 1.

¹² Christopher Rahman, *Concepts of Maritime Security: A Strategic perspective on Alternative Visions for Good Order and Security at Sea, with Policy Implications for New Zealand*, New Zealand: Centre for Strategic Studies, 2009.

¹³ Christian Bueger, "What is Maritime Security?", *Marine Policy*, Vol. 53, 2015, p. 162.

¹⁴ "Naval Operations Concept 2010: Implementing the Maritime Strategy", 2010, available at <https://fas.org/irp/doddir/navy/noc2010>, accessed on 10 October 2019.

¹⁵ Secretary-General of the United Nations, *Oceans and the Law of the Sea*, New York: United Nations General Assembly, 2015.

¹⁶ UK Government, *The UK National Strategy for Maritime Security*, London: UK Government, 2014, p. 17.

European Union (EU) Maritime Security Strategy (2014) included nine threats which are mostly similar to UK's. However, it also added "external aggression and armed conflict between states related to maritime dispute, potential security impacts of natural disasters, extreme events and climate change on the maritime transport system and in particular on the maritime infrastructure, environmental risks and illegal archeological research" as maritime security risks and threats.¹⁷ This approach of 'listing threats' by the international actors, however, creates a dilemma in regards to the threats and illicit activities that should be included or excluded.

Although maritime security has become a core concern for major international actors, the study is still scattered in International Relations. Hence, theorizing maritime security is rather difficult. However, three schools of thought in regards to the study of maritime security can be identified. Maritime security is mainly regarded as a matter of 'sea power' in the realist school of thought.¹⁸ The concept of 'sea power' aims at laying out the role of naval forces and elaborating strategies for their use. According to Geoffrey Till, "in peacetime, sea power is associated with countries securing the ability to conduct transport and trade via the sea. In wartime, sea power describes the agency of navies to attack other navies or other countries sea transportation means".¹⁹ Natalie Klein sees maritime security as "the protection of a state's land and maritime territory, infrastructure, economy, environment and society from certain harmful acts occurring at sea".²⁰ This school of thought has tended to prioritize 'top-down' or structural influences on international order at sea, including global power shifts, changing threat perceptions, naval modernization and changes in naval capabilities.²¹ Conversely, liberal school emphasizes on the role of various international regimes governing activities at sea.²² The promotion of a "stable maritime regime" based on UNCLOS principles is the main concern. Therefore, upholding and implementing the Convention is a central consideration. In the absence of world government, the creation of such a regime requires that states consent to these rules and practices through negotiation.²³ This perspective has been further

¹⁷ European Union, *European Union Maritime Security Strategy*, Brussels: European Union, 2014, p. 7-8.

¹⁸ Eric Grove, *The Future of Sea Power*, London: Routledge, 1990; Alfred T. Mahan, op. cit.; K. M. Panikkar, *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London: George Allen & Unwin Ltd; Geoffrey Till, *Seapower: A Guide for the Twenty-First Century*, London: Frank Cass, 2004.

¹⁹ Geoffrey Till, *Seapower: A Guide for Twenty-First Century*, Milton: Routledge, 2018, p. 10.

²⁰ Natalie Klein, *Maritime Security and the Law of the Sea*, Oxford: Oxford University Press, p. 11.

²¹ Jo Inge Bekkevold and Geoffrey Till, *International Order at Sea*, UK: Palgrave Macmillan, p. 7.

²² Michael Leifer, "The Maritime Regime and Regional Security in East Asia", *The Pacific Review*, Vol. 4, No. 2, 1991; Sam Bateman, "Building Good Order at Sea in Southeast Asia: The Promise of International Regimes", in Kwa Chong Guan and John K. Skogan (eds.), *Maritime Security in Southeast Asia*, London: Routledge, 2007, pp. 97-116.

²³ Robert L. Freidheim, "A Proper Order for the Oceans: An Agenda for the New Century", in Davor Vidas and Willy Ostreng (eds.), *Order for the Oceans at the Turn of the Century*, The Hague: Kluwer Law International, 1999, p. 538.

advanced by the maritime legal scholars like James Kraska and Raul A. Pedrozo who have defined maritime security as a “stable order of the oceans subject to the rule of law at sea”.²⁴ On the other hand, the constructivist school of thought focuses on how the concept of maritime security comes to be through actions, interactions and perceptions. They are against the idea of accepting maritime security as a given list of threats. Very few constructivists have influenced the debate on maritime security with few exceptions.²⁵ According to Christian Bueger, “the mapping of the concept of maritime security is based on the converging frameworks that must adhere to the general traditional concepts and at the same time, identify commonalities that will allow for a gradual incorporation of wider issues”.²⁶ He has identified three frameworks for how to deconstruct concepts of maritime security by various actors: first, the matrix framework, incorporating the concepts of marine safety, sea power, blue economy and resilience; second, the securitization framework, examining the inter-relationship between the maritime threats and divergent political interests and ideologies; and third, the practice theory that examines the true intentions and actions of actors involved in the maritime security arena.

There are four characteristics of maritime security²⁷: first, maritime security challenges are interconnected; second, most maritime security issues cannot be understood as problems of the marine environment alone rather they are invariably interlinked with challenges on land as well; third, maritime security issues often transcend clear boundaries of governmental responsibility or state competence. Finally, maritime security is inherently cross-jurisdictional.

3. Contemporary Maritime Security Challenges for Bangladesh

Adopting a comprehensive approach to maritime security, exploring the trends in both traditional and non-traditional maritime security issues facing Bangladesh is emphasized by many scholars that offer one to get a better understanding of how various states, non-state actors, and transnational forces have put enormous challenges to maritime security of Bangladesh.²⁸ So, from a comprehensive maritime security

²⁴ James Kraska and Raul A. Pedrozo, *International Maritime Security Law*, Leiden: Martinus Nijhoff Publishers, 2013, p. 1.

²⁵ See, Barry J. Ryan, “Security Spheres: A Phenomenology of Maritime Spatial Practices”, *Security Dialogue*, Vol. 46, No. 6, 2015, pp. 568-584; James A. Malcolm, “Responding to International Terrorism: the Securitization of the United Kingdom’s Ports”, *British Journal of Politics and International Relations*, Vol. 18, No. 2, 2016, pp. 443-462; Christian Bueger, op. cit., pp. 159-164.

²⁶ Christian Bueger, Ibid.

²⁷ Christian Bueger and Timothy Edmunds, op. cit., pp. 1300-1301.

²⁸ See, Abul Kalam Azad, op. cit., pp. 159-229; Lailufar Yasmin and Md. Rezwanaul Haque Masud, “Maritime Security in the Indian Ocean Region: Bangladesh Cognition”, in ASM Ali Ashraf (ed.), *Intelligence, National Security and Foreign Policy*, Dhaka: BILIA, 2016, pp. 169-182.

perspective, a number of maritime security challenges dominate the maritime area of Bangladesh. These include great power rivalry, maritime piracy and armed robbery, trafficking and smuggling, illegal fishing and poaching, marine pollution, natural disasters and climate change and resource management. The discussion below will further illustrate these challenges.

3.1 *Great Power Rivalry*

The growing economic and strategic significance of the Bay of Bengal has led to the unprecedented jostle for influence by the major powers, including China, India, US and Japan. China's economic and security interests have resulted in a greater Chinese presence and engagement in the Bay of Bengal. With its Maritime Silk Route (MSR), China has initiated a new era of maritime connectivity and cooperation.²⁹ As a part of Belt and Road Initiative (BRI), it has established economic relations with the Bay of Bengal countries through infrastructure projects such as port development, power plant construction, railway and road building in the littoral countries. However, MSR is perceived as a strategy to establish its own maritime and naval influence across the breadth of the Indian Ocean.³⁰ Indian strategic planners worry that Chinese influence in these Indian Ocean outposts could turn them into military bases that would enable China to "encircle" India.³¹ China's activities in the Bay have been one of the most decisive factors influencing India's interest in the Bay.³² At present, India is undertaking a major modernization drive for its navy and is increasing bilateral and multilateral naval ties in the Bay of Bengal. Most importantly, India is increasingly aligning with the US-Japanese coalition in the Bay of Bengal.

The US has appeared to be the principal actor in the emerging strategic dynamics in the Indian Ocean region in general and the Bay of Bengal in particular. The US is keenly interested to check the rise of any peer competitor capable to threaten US vital interests or her allies in the region.³³ The primary concern for the US in Asia is mainly China's growing military capabilities and assertiveness. It is

²⁹ David Brewster, "The Bay of Bengal: The Maritime Silk Route and China's Naval Ambitions", *The Diplomat*, 14 December 2014, available at <https://thediplomat.com/2014/12/the-bay-of-bengal-the-maritime-silk-route-and-chinas-naval-ambitions/>, accessed on 30 November 2019.

³⁰ Anasua Basu Ray Chaudhury and Pratanashree Basu, "Meeting with China in the Bay of Bengal", *Journal of the Indian Ocean Region*, Vol. 12, No. 2, 2016, p. 148.

³¹ Nilanthi Samanayake, *The Long Littoral Project: Bay of Bengal A Maritime Perspective on Indo Pacific Security*, Washington, D.C.: CNA Corporation, 2012, p. 5.

³² David Brewster, "China and India at Sea: A Contest of Status and Legitimacy in the Indian Ocean", *Australia India Institute*, 2015, p. 16.

³³ Md. Jahan Shoieb and Md. Muhibbur Rahman, "Emerging Strategic Landscape in the Bay of Bengal and Maritime Capability Building of Bangladesh", *BIISS Journal*, Vol. 35, No. 1, 2014, p. 31.

pursuing partnership building with the littoral countries. The growing involvement with India in the Bay of Bengal security matters shows that the country prioritizes the Bay of Bengal as a significant outpost in its Indo-Pacific strategic calculation. On the other hand, some recent developments indicate that Japan also intends to become an important security player in the region. Due to maritime disputes with China and remilitarization drive, the country has started to modernize the Japanese Coast Guard (JCG) by surpassing JCG budget to the self-imposed 1 per cent of GDP limit. Thereby strengthening overall Japanese maritime capability is at the frontlines of Japan's diplomacy and strategy for the Indo-Pacific.³⁴ Besides, it has taken up various infrastructure projects in the littorals (i.e. India, Myanmar and Bangladesh) that are now being complimented by a maritime security programme that will make Japan an important security player.

Such power rivalry often makes smaller neighbours vulnerable. Bangladesh is not an exception. The safety of both seaborne trade and energy transportation are fundamental for Bangladesh's economy, since almost 90 per cent of the export depends on sea trade as well as 100 per cent of its energy requirements travels by sea.³⁵ So, any possible unrest among the major powers in this region would severely affect its maritime interest. Besides, experts argue that the geo-political rivalry of the major states has led to the lack of support for the Chinese-funded deep sea port project in Sonadia.³⁶ Therefore, the glimpses of the consequences of power rivalry have already been seen by the country with the politics around building deep sea ports. So, great power rivalry poses threat to maritime security of the country.

3.2 *Maritime Piracy and Armed Robbery*

Illicit activities like armed robbery, petty theft and piracy remain major concern for Bangladesh. The sea robbers of the country are in some way different from worldwide maritime piracy as they are not like Somalian pirates in their *modus operandi*. Bangladeshi pirates do not have the capacity to venture into deep sea and commit piracy; they are often limited to armed robbery, minor theft and banditry in ships, both foreign and domestic. According to the International Maritime Bureau (IMB), most of the reported incidents of piracy and armed robbery against ship of Bangladesh are at Chattogram anchorages and approaches, and the robbers continue

³⁴ Jay Tristan Tarruela, "How Abe Remade the Japan Coast Guard", *The Diplomat*, 24 January 2019, available at <https://thediplomat.com/2019/01/how-abe-remade-the-japan-coast-guard/>, accessed on 20 November 2019.

³⁵ "Bangladesh Free to Explore Resources in Bay: PM", *The Daily Star*, 11 December 2012.

³⁶ Wade Shepard, "Bangladesh's Deep Sea Port Problem", *The Diplomat*, 07 June 2016, available at <https://thediplomat.com/2016/06/bangladeshs-deep-sea-port-problem>, accessed on 05 November 2019; Muinul Islam, "The Deeper Politics of Deep Sea Ports", *The Daily Star*, 04 November 2019.

to target ships at anchor.³⁷ Thousands of Bangladeshi fishermen have been attacked, killed, or taken hostage off the coast of the port of Chattogram. Cox’s Bazar District Fishing Trawler Owner Association (DFTOA) estimated that from 2010 to 2014 pirates killed at least 411 fishermen and wounded at least 1,000.³⁸ The statistic shows the number of total ship piracy and armed robbery incidents in Bangladesh from 2009 to 2018 (see Table 1). The number of actual and attempted attacks decreased significantly in 2016 due to the efforts by the Bangladesh government. However, since 2017 piracy attacks have jumped three-fold to 11 which is a major concern.

Table 1: Piracy and Armed Robbery in Bangladesh

| Year | Actual and Attempted Attacks |
|------|------------------------------|
| 2009 | 19 |
| 2010 | 24 |
| 2011 | 14 |
| 2012 | 11 |
| 2013 | 6 |
| 2014 | 16 |
| 2015 | 10 |
| 2016 | 2 |
| 2017 | 11 |
| 2018 | 11 |

Source: Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), *Annual Report 2018- Piracy and Armed Robbery against Ships in Asia*, Singapore: Information Sharing Centre, 2018.

3.3 *Trafficking of Arms, Drugs and People*

The sea is the main medium for the illegal movement of people and goods and the Bay of Bengal is not an exception. Illegal trafficking of arms, drugs and people is evident in Bangladesh’s maritime waters. Trafficking of arms in Bangladesh is no longer confined to air and land spaces as sea routes are being used for the purpose. Cox’s Bazar, Chattogram port and some of the offshore areas are the most convenient transit points

³⁷ ICC International Maritime Bureau, *ICC-IMB Piracy and Armed Robbery Against Ships Report 2018*, London: ICC International Maritime Bureau, 2018, p. 19.

³⁸ “Non-Conventional Maritime Threats for Bangladesh Security”, *Banglanews24*, 09 October 2016, available at <https://www.banglanews24.com/open-forum/article/56143/Non-Conventional-Maritime-Threats-for-Bangladesh-Security>, accessed on 30 October 2019.

from which the illegal arms find their way to the local market.³⁹ From 2012 to 2019, Bangladesh Navy and Coast Guard have seized several fishing crafts loaded with arms in Cox’s Bazar’s coastal area.⁴⁰ Trafficking of consumer goods, narcotics and drugs like Yaba coming from the neighbourhood is another threat to social stability affecting proper growth and sound development of the youth in Bangladesh. The smugglers are using the Bay of Bengal and its adjacent rivers as a route for smuggling Yaba and other narcotic drugs from Myanmar to Bangladesh. Besides, the trend to move in South-East Asia and Europe among the people of Bangladesh is high, due to which Prevention and Suppression of Human Trafficking Act was formulated in 2012.⁴¹ The discovery of mass graves of smuggled victims in 2015 in Malaysia and Thailand brought the issue in limelight. Simultaneously, the illegal migration of Rohingya people via sea routes in Bangladesh has become a daunting challenge for the country.

3.4 *Illegal Fishing and Poaching*

Illegal fishing and poaching is also a major concern. The fisheries sector plays a very important role in the national economy, contributing 2.73 per cent to the Gross Domestic Product (GDP).⁴² Fish supplements about 60 per cent of Bangladeshi people’s daily animal protein intake.⁴³ More than 17 million people, including about 1.4 million women depend on fisheries sector for their livelihoods through fishing, farming, fish handling and processing.⁴⁴ A survey of the United Nations Development Programme (UNDP) stated that, “of the estimated annual sustainable yield of 3,89,000 metric tons of fish and shrimp, only about 1,18,000 metric tons are successfully harvested.”⁴⁵ It ranked 47th among 152 countries in the Illegal Fishing Index 2019,⁴⁶ which is resulting to the increase in the number of critically endangered, threatened and vulnerable fish species.⁴⁷ Since 2014, 43 Indian

³⁹ Abul Kalam Azad, “Maritime Security of Bangladesh: Facing the Challenges of Non-Traditional Threats”, *BISS Journal*, Vol. 30, No. 2, 2009, p. 9.

⁴⁰ Syed Munir Khasru and Raisat Noor, “Maritime Security in Bay of Bengal: Potential Challenges and opportunities”, *IPAG*, 31 October 2019, available at <https://www.ipag.org/maritime-security-in-bay-of-bengal-potential-challenges-and-opportunities/>, accessed on 16 December 2019.

⁴¹ Reaz Ahmad and Jamil Mahmud, “Human Trafficking from Bangladesh: Kingpins remain unpunished”, *The Daily Star*, 30 July 2017.

⁴² Parimal Chandra Paul, Md. Shaheed Reza, Md. Nazrul Islam and Md. Kamal, “A Review on Dried Fish Processing and Marketing”, *Research in Agriculture, Livestock and Fisheries*, Vol. 5, No. 3, 2018, p. 381.

⁴³ Md. Mostafa Shamsuzzaman et al., “Fisheries Resources of Bangladesh: Present Status and Future Direction”, *Aquaculture and Fisheries*, Vol. 2, No. 4, 2017, p. 145; *National Fish Week, Compendium*, Department of Fisheries, Ministry of Fisheries and Livestock, Government of Bangladesh, 2016.

⁴⁴ Bangladesh Foreign Trade Institute, *Study on Sector Based Need Assessment of Business Promotion Council-Fisheries Products*, Dhaka: BFTI, 2016, p. 1215.

⁴⁵ Nahela Nowshin, “Bangladesh’s maritime security needs beefing up”, *The Daily Star*, 08 March 2015.

⁴⁶ “Bangladesh 47th in illegal fishing index”, *The Financial Express*, 06 March 2019.

⁴⁷ Abu Siddique, “Increase in catching fish threatens the existence of many species”, *Dhaka Tribune*, 23 July 2018.

fishing vessels, 4 Sri Lankan vessels, 8 Myanmar and 1 Thai fishing trawler were captured by Bangladesh Navy while fishing illegally in Bangladesh sea area and handed over to the appropriate authority.⁴⁸ Bangladesh Navy and Coast Guard from time to time apprehend foreign fishing vessels of different origins. Nevertheless, their capability is constrained by the lack of surveillance and monitoring vessels.

3.5 *Marine Pollution*

Another notable maritime security challenge for Bangladesh is marine pollution. Marine pollution can be simply defined as affecting the quality of the marine environment by releasing waste into the sea. Bangladesh was listed among the top polluters of the world's oceans ranking 10th in polluting the oceans in 2010.⁴⁹ It experiences marine pollution originating from both land- and sea-based sources. Oil/chemical spills from transportation of oil and accidents in the sea is a major marine based source of pollution. Repeated oil spills from foreign and local ships in the Port of Mongla are creating a severe threat to the world's largest tidal halophytic mangrove forest, the Sundarbans.⁵⁰ The other sea-based sources of marine pollution include shipping, fishing activities, legal and illegal dumping at sea. On the other hand, a major land-based source of pollution is ship-breaking and repairing activities which pose a threat to both terrestrial and marine environment as well as to public health. The World Bank has estimated that within 2030 large amount of hazardous materials are likely to accumulate in Bangladesh.⁵¹ A number of the present scrapping facilities are located in the direct vicinity of significant fisheries. It has been reported that the fish stocks have seriously deteriorated following the establishment of scrapping activities.⁵² In addition, Bangladesh faces the worst case scenario of sea pollution due to plastic. According to a report titled "Plastic Waste Inputs from Land into the Ocean", Bangladesh dumped 0.79 million metric tons of plastic waste into the oceans in 2010.⁵³ A survey conducted by the Ministry of Environment, Forest and Climate Change found that plastic waste constitutes more than 60 per cent of the litter found in the beaches of Bangladesh.⁵⁴

⁴⁸ "Blue Economy- Perspective Bangladesh Navy", Bangladesh Navy Website, 2018, available at <https://www.navy.mil.bd/BLUE-ECONOMY-PERSPECTIVE-BANGLADESH-NAVY>, accessed on 21 October 2019.

⁴⁹ "Study: Bangladesh a major polluter of the world's oceans", *Dhaka Tribune*, 15 September 2018.

⁵⁰ Upal Aditya Oikya, "Marine Environment Pollution: A Landscape and Legal Framework", *Daily Asian Age*, 26 December 2016.

⁵¹ Maria Sarraf, Frank Stuer-Lauridsen, Milen Dyojgerov, Robin Bloch, Susan Wingfield and Roy Watkinson, *The Ship Breaking and Recycling Industry in Bangladesh and Pakistan*, Washington, D.C.: The World Bank, 2010, P. 5.

⁵² Md. M. Hossain and M. M. Islam, *Ship Breaking Activities and Its Impact on the Coastal Zone of Chattogram Bangladesh: Towards Sustainable Management*, YPSA: Chattogram, Bangladesh, 2006, p. 31.

⁵³ Jenna R. Jambeck, Roland Geyer, Chris Wilcox and Theodore R. Siegler, "Plastic Waste Inputs from Land into the Oceans", *Science*, Vol. 347, No. 6223, 2015, p. 769.

⁵⁴ Department of Environment, *National Status including Database, Proposed Recycling Enterprise and Interventions on Marine Litter*, Dhaka: Ministry of Environment, Forest and Climate Change, 2018.

The land-based sources of pollution also include industrial waste from production facilities in coastal areas, pesticides and fertilizers from agriculture, municipal waste and sewage disposal. All these have resulted in local pollution affecting the marine environment and associated organisms. Experts point out that currently Bangladesh has no ocean governance or policy to protect the marine resources from pollution.⁵⁵ Besides, scientific studies on marine pollution are rare in Bangladesh and more research and monitoring activities are necessary to make a realistic assessment of the current situation.

3.6 *Natural Disasters and Climate Change*

The Bay of Bengal is prone to some of the world's worst natural disasters. Bangladesh is one of the most vulnerable countries in the world to cyclones and floods, particularly in the country's coastal areas. Cyclones and associated storm surges and floods have led to almost all the nearly 520,000 natural disaster deaths recorded over the past 40 years.⁵⁶ These events also have the potential to cause significant economic damage. Cyclone Sidr in 2007 cost an estimated US\$ 1.7 billion in damages and losses.⁵⁷ The country's extreme vulnerability to hydro-meteorological hazards, including storm-induced tidal flooding, is likely to increase due to climate change.

Climate change or sea level rise is also one of the major crises which will highly affect littorals like Bangladesh. The Intergovernmental Panel on Climate Change (IPCC) estimates that global sea-level rise as a result of climate change will be 0.6 meters or more by 2100.⁵⁸ According to IPCC, "almost 60% of the projected increase in the annual number of people flooded in coastal populations will occur in South Asia, along the coasts from Pakistan, India, Sri Lanka and Bangladesh through to Myanmar".⁵⁹ A report of the Climate Change Cell reveals that the range of sea level rise on Bangladesh's coast over the past 30 years is 6-21 mm/year which is much higher than the global average.⁶⁰ Climate change affects natural systems, which in turn has negative impacts on human systems, which can engender, or contribute to engender, the occurrence of maritime crimes which is applicable for Bangladesh as well.

⁵⁵ Md. Wahidul Alam and Xu Xiagmin, "Marine Pollution Prevention in Bangladesh: A way Forward for Implement Comprehensive National Legal Framework", *Thalassas: An International Journal of Marine Sciences*, Vol. 35, No. 1, 2019, p. 17.

⁵⁶ Kazi Amdadul Hoque, "Reducing the impact of disaster", *The Daily Star*, 13 October 2019.

⁵⁷ "Bangladesh gets \$95 mln W.Bank loan for post-cyclone aid", *Reuters*, 06 July 2006.

⁵⁸ Intergovernmental Panel on Climate Change, *Climate Change 2007- Impact, Adaptation and Vulnerability*, Cambridge: Cambridge University Press, 2007.

⁵⁹ *Ibid.*

⁶⁰ Ministry of Environment and Forests, *Assessment of Sea Level Rise on Bangladesh Coast through Trend Analysis*, Dhaka: Ministry of Environment and Forests, 2016, p. 53.

3.7 Resource Management

Natural resources such as petroleum, carbon and marine fisheries in the Bay of Bengal are significant components of future economic development of Bangladesh. In terms of fisheries, there are about 475 species of fish in the coastal areas of Bangladesh,⁶¹ accounting for about 2.73 per cent of the country's GDP and about 4.9 per cent of its total export earnings.⁶² However, majority of these fishermen lack the resources and capital to explore the huge potential of aquatic resources. Besides, Bangladesh has the potential to become one of the biggest sources of offshore hydrocarbon reserves. The discovery of the Krishna Godavari and Mahanandi Basins of India with potential reserve of 100 trillion cubic feet of gas (200 trillion cubic feet according to unofficial estimates) indicates that the prospect of hydrocarbon reserve in Bangladesh's part is probably high.⁶³ These enormous potential has driven the country to pursue 'Blue Economy' outlook for its economic development. However, the country is normally dependent on foreign technologies for exploring the natural resources specially exploring the petroleum and natural gas in the Bay of Bengal. It requires comprehensive technological and technical knowhow for effectively exploring, drilling and extracting marine resources. So, effectively managing these vast marine resources is one of the maritime security issues for Bangladesh.

4. Response Options for Bangladesh

Discussions of responses to maritime security outline a rather broad and incongruent mix of diverse policy proposals. However, the majority of the existing literature put emphasis on varied level of capacity building.⁶⁴ Bangladesh should also put emphasis on capacity building with a view to ensuring maritime security. Maritime security capacity building can be defined as "activities which are directed at the empowerment of governments and coastal communities to efficiently and efficaciously govern and sustainably exploit the maritime domain".⁶⁵ Hence, maritime capacity building implies a holistic agenda of change and reform in institutions, governance, procedures and management across a wide range of different policy

⁶¹ Department of Fisheries, *Yearbook of Fisheries Statistics of Bangladesh 2017-18*, Bangladesh: Ministry of Fisheries, Vol. 35, 2018, p. 129.

⁶² Parimal Chandra Paul, Md. Shaheed Reza, Md. Nazrul Islam and Md. Kamal, op. cit., pp. 381-390.

⁶³ Jack Detsche, "Bangladesh: Asia's New Energy Superpower?", *The Diplomat*, 14 November 2014.

⁶⁴ See, Andrew Forbes, *Maritime Capacity Building in the Asia-Pacific Region*, Australia: Sea Power Centre, 2010; Christian Bueger, Timothy Edmunds and Robert McCabe, "Into the Sea: Capacity-building Innovations and the Maritime Security Challenge", *Third World Quarterly*, 2019; Christian Bueger and Timothy Edmunds, *Mastering Maritime security: Reflexive Capacity Building and the Western Indian Ocean Experience*, UK: Safeseas, 2018.

⁶⁵ Christian Bueger, Timothy Edmunds and Robert McCabe, op. cit., p. 1.

sectors.⁶⁶ According to Chapter 37 of Agenda 21, “capacity building encompasses the country’s human, scientific, technological, organisational, institutional and resource capabilities”.⁶⁷ Sam Bateman points out three elements of capacity: human resources, institutions and enabling environment.⁶⁸ The paper identifies five main elements of maritime capacity, which are illustrated in table 2. The remainder of this section presents the findings of Bangladesh’s current maritime capacity elements along with considerations how the particular capacity could be developed.

Table 2: Elements of Maritime Capacity and Relevant Definitions⁶⁹

| | |
|---------------------------------------|---|
| Regulatory Frameworks | Regulatory frameworks are the relevant laws, regulations, plans, procedures and guidelines necessary to perform assigned tasks and achieve desired objectives. |
| Organizational Structures | Organizational structures are individual teams, units, departments, overall organisational structure and leadership with specific responsibilities to perform or support assigned tasks and achieve desired objectives. |
| Human Factors | This includes assets like personnel, education, research, training, intelligence, skills. |
| Technology and Infrastructure (T & I) | T&I include major items of equipment, supplies, facilities and systems that comply with relevant standards necessary to perform assigned objectives and tasks. |
| Maritime Diplomacy | Maritime diplomacy encompasses a spectrum of activities, from cooperative measures such as port visits, exercises and humanitarian assistance to persuasive deployment and coercion. ⁷⁰ |

4.1 *Regulatory Frameworks*

Bangladesh first needs to formulate a national Maritime Security Policy (MSP). The implementation of such a policy will eventually lead to the development of a much-needed maritime strategy for the country. National maritime strategies are a relatively new tool for organizing maritime security. Nevertheless, several countries and organisations i.e., Indonesia, Seychelles, US, EU, African Union

⁶⁶ Christian Bueger and Timothy Edmunds, op. cit., 2018, p. 8.

⁶⁷ Although this description relates to capacity for managing and protecting the marine environment and its resources, it can be usefully extended to capacity building for maritime security. See, UN Conference on Environment and Development (UNCED), “Chapter 37: National Mechanisms and International Cooperation for Capacity Building in Developing Countries”, Agenda 21, Rio de Janeiro, 1992.

⁶⁸ Sam Bateman, “Capacity Building for Maritime Security Cooperation: What are We Thinking About?”, in Andrew Forbes (ed.), *Maritime Capacity Building in the Asia-Pacific Region*, Australia: Sea Power Centre, 2010, p. 11.

⁶⁹ Most of the definitions are inspired by Department of Homeland Security, *National Preparedness Guidelines*, Washington, DC: US Department of Homeland Security, 2007.

⁷⁰ Christian Le Miere, *Maritime Diplomacy in the 21st Century: Drivers and Challenges*, London and New York: Routledge, 2014, p. 6.

(AU) have drafted their own maritime policies and strategies. For example, “Global Maritime Fulcrum (GMF) of Indonesia, “Comprehensive Maritime Plan of Action” of Seychelles, “A Cooperative Strategy for 21st Century Sea Power” of the US, “European Union Maritime Security Strategy” of EU, “Africa’s Integrated Maritime Strategy” of the AU provide a comprehensive maritime policy and strategy framework of the respective countries.

Besides, it is necessary to formulate and strengthen legal frameworks to better integrate maritime security considerations. According to Sam Bateman, “in the field of maritime security and safety, the articulation and enactment of sound and effective legislation is extremely important”.⁷¹ Bangladesh currently possesses few laws governing maritime affairs.⁷² There are many areas where there are no laws at all, e.g., marine pollution, collision, maritime crimes, marine insurance. Besides, the whole maritime sector has been struggling with age-old unenforced laws which are inherently vague. With a view to reducing the existing gap, the government is going to enact the Bangladesh Marine Zone Act, 2019 to declare and determine maritime zones and suppress piracy, armed robbery and theft and make provisions for punishment. It will be a full-fledged law and would also help protect rights on the maritime resources.⁷³ The new law has been made after reviewing the old one enacted in 1974 to safeguard resources and interests in the maritime areas.

At the international level, Bangladesh has become a party to a number of maritime treaties that have enhanced its standing in maritime law protocols, such as UNCLOS (ratified in 2001),⁷⁴ the UN Convention against Transnational Organized Crime (ratified in July 2011),⁷⁵ the International Labour Organization Maritime Labour Convention (ILO-MLC, ratified in November 2014),⁷⁶ International Convention for the Safety of Life at Sea (SOLAS, accession in November 1981).⁷⁷ However, the Bangladesh government needs to take necessary measures to implement the conventions at national level.

⁷¹ Sam Bateman, “Capacity Building for Maritime Security Cooperation: What are We Thinking About?”, op. cit., p. 17.

⁷² S. M. Mohiuddin Hasan, “State of Maritime Laws in Bangladesh”, *The Daily Star*, 31 December 2011.

⁷³ Rear Admiral M Khurshed Alam, cited in Deepak Acharjee, “New ocean governance law soon”, *The Independent*, 24 January 2019.

⁷⁴ United Nations Convention on the Law of the Sea (UNCLOS), United Nations Treaty Collection, available at <https://treaties.un.org/pages>, accessed on 10 November 2019.

⁷⁵ United Nations Convention against Transnational Organized Crime, United Nations Treaty Collection, available at <https://treaties.un.org/pages>, accessed on 10 November 2019.

⁷⁶ International Labour Organization (ILO), “Ratifications of Maritime Labour Convention (MLC), 2006”, available at <https://www.ilo.org>, accessed on 06 November 2019.

⁷⁷ “List of SOLAS Signatory Nations”, available at <http://www.cruiselaws.com>, accessed on 06 November 2019.

4.2 Organisational Structures

Establishing new institutions and strengthening existing organizational structures are essential element of maritime capacity building. Bangladesh does not have a single body which is tasked with monitoring the execution of policies related to maritime security issues across agencies. There are many state actors that play a key role in assessing maritime security priorities and addressing maritime threats to Bangladesh (see Table 3). The list should not be regarded as comprehensive; it is rather a selection of some agencies identified as important actors in implementing and executing maritime policies and regulations in Bangladesh.

Table 3: Ministries and Agencies and their Key Functions

| Ministry/Agency | Key Functions |
|---|---|
| Ministry of Foreign Affairs (Maritime Affairs Unit) | Earlier Ministry of Foreign Affairs had a Unit called “UNCLOS” which dealt with the issues of Law of the Sea. But the scope of the unit became larger after the creation of Maritime Affairs Unit (MAU) in 2012 which has the responsibility of establishing the country’s maritime rights and coordinating programmes on the maritime boundary. ⁷⁸ |
| Ministry of Power, Energy and Mineral Resources | A small administrative cell, Blue Economy Cell (BEC), was created in 2017 under the Energy and Mineral Resources Division of the Ministry of Power, Energy and Mineral Resources which is acting like an adviser and coordinator and tasked with multi-disciplinary works such as collecting ocean fisheries resources, hydrocarbon resources and exploration of tourism opportunities. ⁷⁹ |
| Ministry of Fisheries and Livestock | The main objectives are: increasing fishery resources and production; enhancing export of fish, fishery and livestock products; maintaining ecological balance, conserving biodiversity. ⁸⁰ |
| Ministry of Shipping | The mission is: modernization of sea ports, river ports and land ports, conservation of navigability of waterways, creation of efficient workforce in the maritime sector, safe and affordable transportation of passengers and goods and facilitation of international trade. ⁸¹ |

⁷⁸ Deepak Acharjee, “Maritime Affairs Unit on the Cards”, *The Independent*, 21 August 2016.

⁷⁹ Aminur Rahman Rasel, “Blue Economy Cell Starts its Journey”, *Dhaka Tribune*, 06 January 2017.

⁸⁰ “Aims and Objects”, Ministry of Fisheries and Livestock, Government of the People’s Republic of Bangladesh, available at <https://mofl.gov.bd/site/page/80def8e3-21f4-4e54-8dc3-9f7619db8658/Aims-and-Objectives>, accessed on 17 November 2019.

⁸¹ “Vision and Mission of the Ministry of Shipping”, Ministry of Shipping, Government of the People’s Republic of Bangladesh, available at <https://mos.gov.bd/site/page/e554cf3c-a3a7-45a0-9818-028ed42c9eb1/Vision-and-Mission->, accessed on 17 November 2019.

| | |
|--|--|
| Bangladesh Navy | Bangladesh Navy is primarily tasked to defend the country from threats emanating on, above and under the sea; promote and protect our maritime interest, assisting in maritime governance and contribute to the diplomatic objective of our nation. ⁸² |
| Special Warfare Diving and Salvage (SWADS) | It was formally created in 2009 with 150 commandos and 200 divers recruited from Bangladesh Navy, primarily tasked with special reconnaissance, anti-piracy, counter-insurgency, counter-narcotics, counter-terrorism, covert insertions/extractions, hostage rescue and personnel recovery, hydro-graphic reconnaissance, intelligence gathering, raid and underwater demolition. ⁸³ |
| Bangladesh Coast Guard | The role of the Coast Guard is to preserve the country's interests at sea, protect fisheries, prevent illegal immigration through the sea, control pollution, control piracy, prevent smuggling, trafficking of illegal arms, drugs and narcotics, carry out disaster relief, search and rescue operations, preserve forests and conduct surveillance over the country's maritime areas. ⁸⁴ |
| Bangladesh River Police | Headed by a Deputy Inspector General (DIG) of police, a unit of Bangladesh Police comprising 747 policemen started working as a separate river police unit on November 13, 2013 with the main goal to provide safety and security in all inland waterways and ensure the maximum environmental standards on these routes. ⁸⁵ |

Source: Compiled by the Author.

The plethora of agencies and governing bodies in the case of Bangladesh creates disintegration of responsibilities and increase governance costs of effectively monitoring Bangladesh's maritime space. Therefore, for integrated policy planning and coordination, a National Maritime Commission/Council (NMC) seems to be crucial as a unifying interagency/ministerial body with monitoring cells. Like the Planning Commission, the Prime Minister herself ought to chair NMC, authorize conceptual labeling and affix dynamism to maritime policy coordination/integration.⁸⁶ So, the necessity of an organisation is a must to bring together policy and operational agencies, to ensure the proper outcome from the overall activities.

⁸² "Vision and Mission of Bangladesh Navy", Bangladesh Navy Website, available at <https://www.navy.mil.bd/VISION-AND-MISSION>, accessed on 10 November 2019.

⁸³ Eric Sof, "Bangladesh SWADS", Spec Ops Magazine, 20 October 2012, available at pecial-ops.org/864/bangladesh-swads-special-warfare-diving-salvage/, accessed on 18 November 2019.

⁸⁴ "Aim and Purpose of Bangladesh Coast Guard", Bangladesh Coast Guard Website, available at <http://coastguard.gov.bd/site/page/e47f5581-c68f-4584-8867-970e1a34a0f6/->, accessed on 10 November 2019.

⁸⁵ "Vision of River Police", River Police Website, available at <http://www.riverpolice.gov.bd/vision.php>, accessed on 02 October 2019.

⁸⁶ Abul Kalam, 2016, op. cit., p. 41.

4.3 *Human Factors*

Human resource remains one of the most important dimensions of effective maritime governance. The same holds true for the bureaucracies in charge of Bangladesh's maritime security. The officers of the Bangladesh Navy are trained at the Bangladesh Naval Academy in Chattogram. It has initiated numerous joint training exercises (see Table 5) which enhance professionalism and readiness within the Bangladesh Navy for joint military environments and contingencies. Research and education are important to raise public awareness on maritime issues. Maritime education in Bangladesh started in 1952 through the establishment of National Maritime Institute (NMI). Besides, since inception, the Bangladesh Marine Academy (BMA) has trained over 3,000 professionals who excelled in sea careers worldwide, and remitted a significant amount of foreign currency home.⁸⁷ The Marine Fisheries Academy has produced 1,300 graduates which is operated by the Fisheries Ministry for the sole purpose of educating cadets to serve the expanding fishing fleets⁸⁸ In addition, in recent times, the government has taken various initiatives as it opts to build a sea-based scientific community. For instance, establishment of Bangabandhu Sheikh Mujibur Rahman Maritime University (BSMRMU)⁸⁹, Bangladesh Oceanographic Research Institute (BORI)⁹⁰ and Bangladesh Institute of Maritime Research and Development (BIMRAD)⁹¹ are welcoming steps to the creation of marine scientific community. Such institutions for maritime learning and marine resources development are in service show significant accomplishment. However, there is a lack of required dedication, visible productivity and monitoring mechanism which is needed to overcome.

4.4 *Technology and Infrastructure*

The merit of utilizing technologies and infrastructures for maritime security is undeniable. Table 4 highlights, in broad numbers, the total number of existing assets at Bangladesh's disposal for maritime security by agency. Bangladesh's defence spending as a percentage of its GDP is around 1 per cent. In 2009, the Bangladesh government adopted a long-term modernization plan for its armed forces

⁸⁷ Ghulam Suhrawardi, "Why we need a maritime policy", *The Daily Star*, 07 March 2016.

⁸⁸ Ibid.

⁸⁹ Bangabandhu Sheikh Mujibur Rahman Maritime University (BSMRMU) was established in 2013, the 37th public university of the country. It is the first maritime University in Bangladesh, the 3rd maritime university in South Asia and the 12th maritime university in the world.

⁹⁰ Bangladesh Oceanographic Research Institute (BORI) in Cox's Bazar under the Ministry of Science and Technology, is the country's first and only national institution on maritime science and oceanography.

⁹¹ Bangladesh Institute of Maritime Research and Development (BIMRAD) was established in 2018 which is patronized by Bangladesh Navy.

called Forces Goal 2030.⁹² The plan includes the modernization and expansion of all equipment and infrastructures and providing enhanced training with a view to building Bangladesh Navy as a deterrent, three-dimensional force.⁹³ Several programmes have been taken to turn the navy into a balanced and strong force by 2030.

Table 4: Information on Existing Assets

| Actor | Assets |
|-------------------------|---|
| Bangladesh Navy | 110 vessels in active service ⁹⁴ and 21,281 active personnel ⁹⁵ |
| Bangladesh Coast Guard | 47 surface ships and craft and 3,339 personnel ⁹⁶ |
| Bangladesh River Police | 747 policemen ⁹⁷ |

Source: Compiled by the Author.

As of 2019, the Bangladeshi Navy has hundred and ten surface ships, craft and boats, including six guided missile frigates, two patrol frigates, six guided missile corvettes, thirty-eight minor surface combatants of various types (including offshore patrol vessels, coastal patrol boats, missile boats and minesweepers), thirty auxiliaries and amphibious landing craft and thirty-two small response boats as surface assets.⁹⁸ Submarine branch is equipped with two diesel-electric attack submarines.⁹⁹ The naval aviation wing operates both fixed-wing aircraft and rotorcraft. The promising modernization scheme of the navy is a pragmatic and timely initiative which requires further strengthening in the coming years. However, the positive scenario is not reflected in other maritime forces. Bangladesh Coast Guard lacks adequate resources particularly high powered ships and other vehicles. At the same time, the river police cannot perform its duty due to lack of adequate number of modern water vessels, sophisticated arms and other equipment.

⁹² Shakil Bin Mustaq, “Bangladesh’s Ambitious Military Modernization Drive”, *The Diplomat*, 09 January 2018, available at <https://thediplomat.com/2018/01/bangladeshs-ambitious-military-modernization-drive/>, accessed on 30 October 2019.

⁹³ “Navy to be developed as 3-dimensional force: PM”, *The Daily Star*, 12 April 2010.

⁹⁴ “Bangladesh Navy Ships”, available at <https://web.archive.org/web/20190225223925/http://www.navy.mil.bd/ships.php>, accessed on 20 November 2019.

⁹⁵ Anisul Huq, Minister for Law, Cited in “Bangladesh Armed Forces Total Personnel 2,04,596”, *Bangladesh Protidin*, available at <https://www.bd-pratidin.com/national/2017/06/07/238265>, accessed on 20 November 2019.

⁹⁶ “Bangladesh Coast Guard to be doubled in size”, available at <https://www.bdmilitary.com/border-security/bangladesh-coast-guard-to-be-doubled-in-size/>, accessed on 30 November 2019.

⁹⁷ Md Esraf Hossain, “River Police to be Modernized”, *The Daily Sun*, 04 January 2018.

⁹⁸ “Bangladesh Navy Ships”, op. cit.

⁹⁹ “Bangladesh first 2 submarines commissioned”, *The Daily Star*, 13 March 2017.

Strengthening maritime infrastructure should be given priority as well. To address the existing infrastructure gap, Bangladesh Navy is setting up a new base at Rabanabad in Patuakhali named BNS Sher-e-Bangla, which will be the largest naval base of the country. The base will have submarine berthing and aviation facilities.¹⁰⁰ Another full-fledged base, named BNS Sheikh Mujib, is under construction in Khilkhet of Dhaka.¹⁰¹ Besides, the government has taken initiative to upgrade Chattagram and Mongla ports and construct deep sea ports. The construction of two deep-sea ports in Payra and Matarbari is underway. It is believed that the deep sea ports will not only enhance geo-economic position of Bangladesh, it will also serve as the major strategic outpost for the country's maritime security¹⁰² In addition, an underwater expressway tunnel namely Karnaphully tunnel is under construction in Chattagram.¹⁰³

4.5 *Maritime Diplomacy*

There is no alternative to pursuing maritime diplomacy vigorously as tangible international cooperation is essential for ensuring maritime security. It is an activity no longer confined to just navies, but in the modern era, it is pursued by coast guards, civilian vessels and non-state groups.¹⁰⁴ Cooperation with neighbouring countries and international community is needed to maintain good order at the sea. Therefore, Bangladesh should actively engage with the Indian Ocean Rim Association (IORA), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and Indian Ocean Naval Symposium (IONS) in developing regional maritime security shared vision. Besides, Bangladesh Navy regularly exercises with various foreign navies at bilateral and multilateral levels. These exercises help to project Bangladesh's military capabilities and increase interoperability between the participating navies which is part of maritime diplomacy.

¹⁰⁰ Deepak Acherjee, "Patuakhali to get biggest naval base with aviation facilities", *The Independent*, 16 February 2017.

¹⁰¹ "Prime Minister Hasina commissions naval base BNS Sheikh Mujib", *The Daily Sun*, 06 November 2018.

¹⁰² Riasat Noor, "Bangladesh in the bay", *Dhaka Tribune*, 29 January 2019.

¹⁰³ "PM launches mining work of Karnaphuli Tunnel in Chattogram", *Dhaka Tribune*, 24 February 2019.

¹⁰⁴ Christian Le Miere, *Maritime Diplomacy in the 21st Century: Drivers and Challenges*, London and New York: Routledge, 2014, p. 6.

Table 5: Selected Bilateral and Multilateral Maritime Diplomacy by Bangladesh Navy

| Type | Description |
|--------------|---|
| Bilateral | <p>Bangladesh-US: Bangladesh Navy and the US Marine Corps engage in regular bilateral exercise. The largest of these are CARAT and Ex Tiger Shark.¹⁰⁵</p> <p>Bangladesh-India: Bangladeshi and Indian Navy jointly launched a six-day coordinated anti crime patrol of the two navies called CORPAT in specified areas of their maritime boundaries in June 2018 which is the first of such joint patrol by the two navies.¹⁰⁶</p> |
| Multilateral | <p>Milan: biennial multinational exercise, ‘Milan’ involving navies from the Indian Ocean Region, Asia-Pacific and Southeast Asia, aims to enhance interoperability and standard operating procedures for disaster management. Bangladesh Navy has sent an Offshore Patrol Vessel (OPV) to every MILAN multinational naval exercise since 2010.¹⁰⁷</p> <p>Ferocious Falcon: BNS Bangabandhu participated in Exercise Ferocious Falcon, a Multinational Crisis Management Exercise, held at Doha, Qatar in November 2012, while BNS Somudra Joy participated in the same exercise in 2015.¹⁰⁸</p> <p>IMMSAREX: Bangladesh arranged the international exercise to increase regional cooperation between the 23 member states and nine observer nations of the Indian Ocean Naval Symposium (IONS) in November 2017 known as the IONS Multilateral Maritime Search and Rescue Exercise 2017 (IMMSAREX 17).¹⁰⁹</p> |

Source: Compiled by the Author.

5. Conclusion

A comprehensive approach towards maritime security shows that Bangladesh’s maritime security challenges cover the entire range from piracy, illegal fishing and poaching, all the way to major power strategic contest. The emerging economic and strategic significance of the Bay of Bengal has resulted into the competition for regional influence by major powers. Such power competition creates vulnerability and hampers Bangladesh’s maritime interest. On the other hand, the country faces a number of non-traditional security threats. Piracy and armed robbery remains a major concern and demonstrate an increasing trend in the number of

¹⁰⁵ “Joint exercise by US, Bangladesh navies begins”, *The Daily Star*, 06 November 2018,

¹⁰⁶ “Bangladesh, Indian navies launch joint maritime patrol”, *Dhaka Tribune*, 27 June 2018.

¹⁰⁷ “Warship BNS Dhaleshwari leaves for India”, *The Independent*, 05 March 2018.

¹⁰⁸ Nurul Islam Hasib, “Bangladesh displays military capabilities in Qatar ‘Ferocious Falcon’ drills”, *bdnews24.com*, 13 May 2015, available at <https://bdnews24.com/bangladesh/2015/05/13/bangladesh-displays-military-capabilities-in-qatar-ferocious-falcon-drills>, accessed on 11 November 2019.

¹⁰⁹ Tarek Mahmud, “President inaugurates 32- nation naval exercise”, *Dhaka Tribune*, 28 November 2017.

attacks in recent years. Besides, Bangladesh faces challenges in protecting marine environment from marine pollution. Without appropriate control measures, coastal and marine ecosystem are largely unprotected due to land-based and sea-based sources of pollution. In addition, Bangladesh is highly susceptible to natural disasters and will be among the countries of the world that might be dramatically affected by the consequences of climate change, including rising sea levels and warming ocean temperatures. Management of the potential marine resources has also entered into the list of maritime security concerns.

There can be little doubt that Bangladesh should give greater attention to ensuring its maritime security. And the key to such endeavour lies in developing credible capacities. The process of capacity building is complex and has many dimensions. However, the paper identified five elements of Bangladesh's maritime capacity building. Bangladesh needs to formulate policies and necessary laws that will help to curb maritime security challenges. The monitoring mechanism is essential to govern and in doing so it is suggested to create a National Maritime Commission/Council which shall be central to every action initiated, promulgated, implemented and monitored. Besides, there is no alternative to developing maritime human resource. In this regard, personnel with appropriate education and training are essential. Substantial importance should be given to modern equipment, technologies and maritime infrastructures. Moreover, lacking indigenous expertise, Bangladesh has to seek partnership with foreign countries and continue pursuing maritime diplomacy. Bangladesh will be able to face the emerging maritime security challenges with effective maritime capacity building.