



Contemporary Maritime Security Threats: Bangladesh Perspective

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ABSTRACT

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Maritime Security is one of the latest concerning phenomenon in Geopolitics. The Ocean is a vital resource for the global economy in human civilization. Most of the littoral states are dependent on maritime routes. In the context of global politics, several great powers have highly extended their strategies in the Bay of Bengal. Bangladesh is a highly populated littoralbased country with limited maritime resources. As a result, maritime health is frequently decreasing due to unplanned littoral infrastructure, ocean contamination, and unauthorized fishing. In recent times, a few modern littoral states have discovered the new economic concept of the blue economy which is reducing poverty and creating livelihood facilities for vulnerable people. The aim of this study is to identify and describe the contemporary maritime security threats faced by Bangladesh. This study highlights the conventional and non-conventional threats, for instance, legacies of maritime boundary disputes, great power rivalry, dealing with the extra regional and global powers, naval modernization in the Bay of Bengal, regional security of sea lanes of communication (SLOC), piracy, maritime terrorism, IUU fishing, natural disasters, environmental pollution and climate change, smuggling of arms, drug trafficking, illegal immigration and human trafficking, presence of death zones, etc. This study has been conducted using a qualitative and quantitative approach based on secondary data. The collected data have been described using descriptive statistics. This study also shows a theoretical framework for maritime security in the light of realism, liberalism and constructivism perspectives

INTRODUCTION

Today, modern world has faced in the maritime security threats under the several interest group. Indeed, maritime security has become a main issues for huge number of countries and other actors. Conventionally, it has been theorized and described from the conservative perspective and non-conventional issues focus on state rivalry and strategic variable building. Bangladesh has 710 km extended coastline with the maritime pathway via the Bay of Bengal as an Indian maritime littoral state. Bangladesh had declared rivalry over ocean allegation with India and Myanmar was a standard solution through the international tribunal for the law of the sea(ITLOS). Its present ocean geography is almost 118,813 sq km. Bangladesh's rights over 200 nautical miles of exclusive economic zone(EEZ) have also been founded. Its present expands almost 354 nautical miles, there are prospect on numerous living and non-living property. The southern maritime corner is opening the significant zone for the international bilateral trade and commerce, as well as the expansion of ocean property. But it has been revealed to the several conventional and non-conventional threats in the major point of ocean domain. The practical response have several ocean security challenges variable co-ordination for instance drug smuggling, sabotage and piracy. That response joints crisis management, intelligence gathering, risk describing, risk circulation, physical security steps and systemization. The significance of ocean security can be steeped in the socio economic promotion, territorial uniting and quality of human life. The issues of ocean security is significant for it due to bilateral trade and investment through the sea path way have massive number of littoral zones on which the numerous people livelihood depends. The world bank predicted that sea level will increase by 25 cm in 2050 and 1 m in 2100; almost 17 per cent land affecting by the rise of sea level. Every year, Bangladesh face several crisis in agriculture, fisheries, island, ecosystem sector through the rising sea level. "It is not possible for Bangladesh alone to take measures against the rising sea level, as it has been an increasing ramification of global emissions in which Bangladesh does not have any part. It is the duty of world body to proclaim this cause as emergency as feasible" - Honourable prime Minister Sheikh Hasina Republic of Bangladesh.

Objectives

- ❖ Identify contemporary maritime security challenges faced by Bangladesh.
- ❖ Highlight both conventional and non-conventional threats, for instance, legacies of maritime boundary disputes, great power rivalry, dealing with the extra regional and global powers, naval modernization in the Bay of Bengal, regional security of sea lanes of communication (SLOC), piracy, maritime terrorism, IUU fishing, natural disasters, environmental pollution and climate change, smuggling of arms, drug trafficking, illegal immigration and human trafficking, presence of death zones, etc.
- ❖ This study also shows theoretical perspectives on maritime security under the three schools of thought.

Research Questions

- What are the contemporary maritime security threats faced by Bangladesh?
- How do the three schools of thought offer definite perspectives on the study of maritime security

LITERATURE REVIEW

"According to Thean potgieter, maritime security deals with the averting of illegal activities in the maritime domain, which can be directly related to the national security efforts of a specific country or can cover regional and international efforts to enforce maritime security".

METHODOLOGY

Secondary Data:

Briefings and research reports produced by CSOs, NGOs, INGOs, a Maritime University, National, and International research organisation, including WHOI, BIISS, BIOS, GSO, MBART, CMRE, NOAA, PML, Hugo observatory, Daily newspapers, etc.

Conceptual Background:

The concept of maritime security is elusive and shortage diverse descriptions. In 1990, the concept was approved achieving attention because of the effective concerns over ocean terrorism since 2000, the increase of significant piracy off the littoral of Somalia and ocean convict such as human trafficking. The United Nations initiative was making a modern maritime regime to ensure that all beneficial parts from the uses of maritime remarkable resources. The maritime security issues were started bilateral solution from Geneva convention on the law of the sea(1958-60)to UNCLOS(1982) on diverse significant event of maritime regime. Each zone of present maritime security consists diverse complex security concerns for instance national security, ocean environment and marine health protection, economic promotion, non-living property and human security. The Several experts agreed that maritime security has no exact meaning due to dependent on diverse actors. "Christopher Rahman observes that the concept of maritime security focuses on five interrelated areas: security of the sea itself, ocean governance, maritime border protection, military activities at sea, and security regulation of the maritime transportation system". In 2008, UN Secretary-General's Report on oceans and the law of the sea identifies, illicit trafficking of arms and weapons of mass destruction, illegal traffic of narcotics and psychotropic substances and smuggling and trafficking of persons by sea as threats to shipping companies, militaries and law enforcement. However, maritime security in the Bay of Bengal is significant to ocean stability in the regional perspective. In the BoB, particularly Bangladesh are facing with diverse issues of corruption, lack of provision in different sectors, lack of socio-economic reforms, climate change, great power rivalry and other issues.

Theoretical Approaches to Maritime Security:

The three Schools of thought are regarding the study of ocean security under the theoretical perspective. According to the realism, maritime security is the main concept of "sea power". This concept purpose at laying out the role of naval forces and interpreting strategy for their use. According to Geoffrey Till, "During peacetime, sea power is associated with states saving the capability to lead trade and transport through the sea. In the war time, this power interpreting the authority of navies to encounter other states navies. Natalie Klein views maritime security as the prevention of a country and ocean territory, economy, infrastructure, environment and society from definite harmful affairs happening at ocean. This theory has pertinence to the functional influence on international order at ocean, joining global power shifts, changing challenges in perspective, naval development etc.

Table 1. Realism, Liberalism, Constructivism

	Realism	Liberalism	Constructivism
Primary Objectives	National Security, Accumulation of Power	Rule of law at sea, Legal framework for ocean management	Deconstruct concepts of maritime security
Major Actors	Naval forces	Maritime regimes	Humans, Naval forces, maritime regimes
Main instruments/Strategies	Military deterrence	Rule of law, International law, UNCLOS	Capability Building
Modern Theorists	Geoffrey Till	James Kraska, Raul Pedroza	Christian Bueger

[Source: BIIS]

According to the Liberalism, the role of diverse international regimes linked activities in the ocean. The development of a perpetual maritime regime depends on UNCLOS principles is the major concern. In the absence of global governing body, the making of such a regime needs that countries consent to these formulas and exercises through solution. On the other hand, according to the constructivist view, focus on the origin of maritime security term, communication and perception. The Several constructivists have affected the opposition mood on ocean security with few diverse. According to Christian Bueger, "the quantity of perception of ocean security is dependent on the accurate frameworks that attach to general conventional concepts and while

selecting commonalities that will permit for extended issues. He has selected three frameworks for the system of deconstructing perceptions of ocean security by diverse actors for instance, matrix framework, securitization framework, and practice theory.

Conventional & Non-conventional Maritime Security Threats for Bangladesh:

Adopting a inclusive process to maritime certainty, surveying the movements in both conventional and non-conventional maritime security affairs, looking towards Bangladesh is highlighted by several experts that present one to obtain well perception of how diverse states, non-state players and conventional drives have posed extensive threats to ocean safety of Bangladesh. So, from a inclusive maritime security outlook, a large number of maritime soundness threats influence the maritime zone in Bangladesh. These comprise legacies of maritime boundary disputes, great power rivalry, dealing with the extra regional and global power, naval modernisation in the Bay of Bengal, regional security of sea lanes of communication (SLOC), piracy, maritime terrorism, IUU fishing, climate change and natural disaster, environmental pollution, smuggling of arms, drug trafficking, illegal immigration and human trafficking, presence of death zones. The discourse below will further explain these threats.

Legacies of Maritime Boundary Disputes:

Bangladesh has a strong ocean legacy. Very few know this! To understand the states role in the maritime space, it is important to see it as a maritime nation. Bangladesh has an ocean area of 118,813 sq km with a coastline of 710 km. Geographically, Bangladesh is on the beach of the Bay of Bengal. India and Myanmar are two important neighbours for Bangladesh in BoB. In 2010, Bangladesh gradually engaged in the global context to the BoB ocean boundary conflict. Bangladesh lodged a litigation against India and Myanmar at the permanent court of arbitration, and International Tribunal for the law of the sea(ITALOS). Myanmar criticized in ITLOS case 16 for an equally different way, obeying 232 degree latitude and longitude from the Naff River outfall. Bangladesh proclaimed that(para 213), on account of the exact geography of its littoral in the northern part of the Bay of Bengal. ITLOS would apply anglebisector method in establishing the maritime boundary between Bangladesh and Myanmar. ITLOS final decision (paragraphs 500-505) states that the boundary line along 215 degree latitude and longitude shall progress until it stretches out the area where the rights of third states can be devastated. Though the tribunal in Hamburg awarded 111,631 sq km area of the Bay of Bengal to Bangladesh. India had claimed the 162-degree latitude and longitude point from main zone of Hariabhabha delta. We argued based on general declaration in article 76 of UNCLOS 3 on dependent bathymetric geography of the Bengali evidence process. On that argument India has no right anywhere to the east of swatch of No Ground, as grounds from Indian Territory do not reach there. The verdict issued by the PCA in The Hague on the ocean controversy between India and Bangladesh, on 7 July 2014 is roughly shown by the point. This verdict (article 509) has settled three boundary points from the land

boundary terminal. According to the finding, Bangladesh extinct only 6,135 sq km, out of India's claim on a 25,602 sq km region.

Table 2. Maritime Zones Under UNCLOS

Maritime Zones Under UNCLOS			
Internal Waters	Archipelagic Waters	Territorial Sea (12 nm)	
Contiguous Zone (24 nm)	Exclusive Economic Zone (200 nm)	Continental Shelf (350 nm)	High Seas

[Source: U.N. Database]

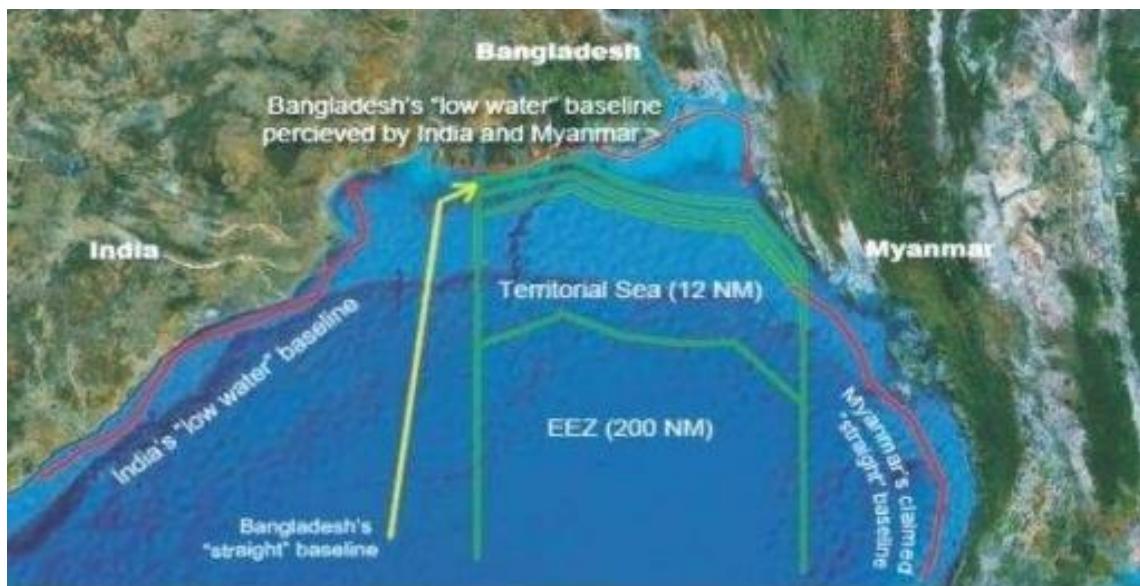


Figure 1. Territorial Sea Baselines

Great Power Rivalry:

The increase in size economic and judicious importance of the Bay of Bengal has contributed to the unequalled competition for ramification by the major powers, including China, India, U.S and Japan. China's diverse interests have extended in the Bay of Bengal for instance, economic interest, security interest. China has contributed to new era of ocean communication specially maritime silk route (MSR). China has promoted economic ties with BOB states under the BRI. It has significance initiative for China, given vast infrastructure projects in diverse sectors for instance sea port improvement, power plant promotion, railway and marine road establishing in the coastal states. Actually, marine silk route is the strategic system to establish own ocean and naval ramification on the Indian ocean. Indian marine policymakers are worried due to Chinese ramification military based ocean situation in Indian maritime zone.

Now a days, India is emphasizing to its major Navy modernization and rising multilateral and bilateral maritime ties in the Bay of Bengal. Most significantly, India is rising bilateral engagement with U.S.-Japan coalition in the Bay of Bengal. The U.S has arrived to be the major strategic actor in the IOR and the BOB, especially. The United States is actively concerning to protect any capable threat party against their own interests or their spouse countries in the region. Recently, U.S is vital concerned about Chinese military development in the Bay of Bengal. It is following bilateral relation building in the coastal states. The rising participation with India in the BOB protection issues evident the state emphasizes in the BOB as an important subjective in the indo-Pacific strategic mechanism. On the other hand, present improvements select that Japan also seems to become significant protection agent in the littoral area. Due to ocean arguments with China and remilitarization position, the state has begun to promotion the Japanese coast Guard (JCG) and self budgeted to 1% of GDP limitation. The Japanese ocean capability is strengthening the legal frontlines of Japan's diplomacy in the indo-pacific. Power conflict often create serious hazards in neighbours littoral states. Bangladesh is not different part in this situation. Bangladesh is dependent on sea transportation process due to almost 90% export import completed through the sea. The number of experts seems that the power conflict of the several countries has supervise to the lack of assistance the Chinese financial supported deep marine port project in Sonadia. So, great power rivalry give rise to challenges ocean security of the state.

Table 3. Real and Potential GDP Growth, 2022

Real GDP Growth %	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bangladesh	7.9	8.2	3.5	5	6.4	6.7	7.2	7.2	7.1
India	6.5	3.7	-6.6	8.9	8.2	6.9	7	7	6.5
Sri-Lanka	3.3	2.3	-3.6	3.6	2.6	2.7	2.8	2.8	2.8

[Source: IMF, Compiled by the Author

Naval Modernization in the Bay of Bengal:

Bangladesh took delivery of two renovated submarines from China, granting the former the second Bay of Bengal navy to receive an undersea power. The maritime delimitation settlements, rather than preventing the necessity for naval power accumulation, seem to have increased it on the coastal property of the Bay of Bengal. While the ocean controversies frequently rising in the South China sea and the indo-pacific region, following of naval modernization. The Bay of Bengal is the significant place of water with rising controversy over ocean description, something majorly regulating the states themselves the maritime property elevated laying beneath the seabed. Bangladesh Navy's policies are determined and inclusive looking for a number of modern frigates and corvettes, submarines, new patrol crafts, diverse ship, and war fare crafts. But Bangladesh Navy's is faces recent fundamental

problems due to naval modernization for instance, modern Chinese and U.S ship creates maritime security issues in the Bay of Bengal. Bangladesh Navy and Coast Guard several statement proclaim that the external anti-ship missiles and seabed security protocol cannot be ensured due to naval modernization. It can be arise the serious influence in diverse sphere. Such as the rise in militarization, increase of sea power conflict, rise of environmental worried, and diverse bilateral concerns. The establish of naval Power can be increase regional conflicts military rivalry. Maritime activities are rising in the Bay of Bengal due to naval development which ocean challenge. Finally, assessment could be that the Bangladesh Coast Guard and Navy is development which ocean challenge. Finally, assessment could be that the Bangladesh Coast Guard and Navy is contributing importantly to promoting to reduce negative impacts of naval modernization.



Figure 2. [Source: Infographic, TBS]

Dealing with the Extra-Regional and Global Power:

The geopolitical mechanism of extra-regional and global powers remains one of the important variables in the Bay of Bengal. The competition is taking place in two major steps, both rivalry and approaching in nature. The primary step among regional powers, between India and China, and several mid-sized powers of the Bay countries, for instance, Bangladesh and Myanmar is vastly seen as having a strong conflictual nature. The second step of this struggle is concerning several extra-regional powers, for instance, Australia, Japan, the European union, and the United States. In this step, the struggle is more effective with one another, particularly more rivalry with China. They are establishing modern types of protection frameworks, for instance, Quadrilateral security dialogue, AUKUS and several strong bilateral bonds in the Indo-Pacific region. Under this framework, two divisions are created between U.S. and its allies and potential alignment with China may emerge into a cold war. Several times, China, being both, Bangladesh and Myanmar's major military hardware supplier, provided two min-class submarines to Bangladesh Navy, and India provided a submarine to Myanmar. While China has built ports in Sri Lanka and Myanmar, Bangladesh is establishing its deep seaport with Japanese assistance. In 2023, The United States and other western aligns have been concerned due to Russian Naval fleet berthing in Bangladesh after half a century. As a result, several regional powers are frequently concerned with Bay of Bengal in the Bangladesh region. While the United States may remember the supervisor indeed the conventional conflict between China and India can differ more prominent. India is the conventionally dominant regional power and

active role in assisting military facilities to Bangladesh. China and India both perceive the Bay of Bengal as an important zone in their struggle over diverse sector, such as energy resources, shipping lanes. The struggle stemming from China and India expanding their regional sectors of ramification in each others backyards can output in skirmishes over energy and marine communications, not to mention along with political ramifications in the vulnerable non-Bay of Bengal littoral countries. In present time, the only many-sided bilateral military practice held among India, Japan, the United States, and recently Australia also taken place in the Bay of Bengal.



Figure 3. [Source: <https://www.chinausfocus.com/>]



Figure 4. [Source:
<https://www.airuniversity.af.edu/JIPA/Display/Article/2980896/>

Regional Security of Sea Lanes of Communication (SLOC):

Bangladesh is an ocean based nation with highly dependent on sea lane trade with foreign business partner. Almost 98% of goods and products are transported through the seaport under the Bay of Bengal. It is important to secure its sea lanes of communications along the ocean area from any maritime-based functions facing diverse threats. The Bangladesh government is emphasizing the ocean affairs and developing it to security policy issues. The security images are integrating the national trading policy and expanding bilateral trade and investment spheres through the sea lane via the Bay of Bengal. Though Bangladesh has a huge productive role in ocean activities, the Bay of Bengal zone is prone to diverse strategic hazards. The Bay of Bengal makes two compound sea lanes of communications(SLOCS): the first route, like Japan, China, and the South China Sea through the Strait of Malacca, and the second route, like Iran and Saudi Arabia. Besides business and financial routes of contact, the seaport zone creates significant strategic contention in the IOR. Because of its strategic vantage level, this zone has become the big view for

powerful world states like China, the U.S.A., India, and Japan. Several maritime experts say that a risk based system to describe ocean safety threats in the SLOC is necessary. They emphasize the significance of general views of hazards in the coastal zone. Although theoretical views suggest risk-based system to SLOC safety leading to identifying the fundamental features of challenges and quantifying the loss and damage collaboration. While countries comfort agree to sign agreement about the hazards they jointly face in the ocean sphere, several states indefinite about the character of challenges to national safety.



Figure 5. [Source: Infographic, Financial Express]

Piracy:

Piracy is great concern for people in the littoral region. According to the RECAAP report, pirates charged the oil and chemical tanker Wawasan Topaz, LNG tanker BLPG Sophia and STI magister several times in 2022. Worried people said that the CTG port as piracy free is now at challenge due to these current piracy reports. The RECAAP records phenomena of piracy into several types. The culprits were not armed and the gang did not injure. More than half of CAT-4 occurrences joined 1-3 men who run off vacant handed upon being glimpsed by the gang. In 2006, The international maritime Bureau proclaimed that Chattogram seaport as the most serious global port with visible pirate charges. There were 47 phenomena of piracy in the seaport in 2006. In 2012, IBM eliminated Bangladesh from its short list of dangerous pirate prone countries. According to Cox's Bazar District Fishing Trawler owner's Association (DFTOA), pirates murdered almost 411 fishermen and injured almost 1,000 from 2010 to 2014. Although piracy decreased in 2016, the major concern for littoral region habitats was almost 11 attempted charges in 2018.

Table 4. 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
2019	9
2020	5
2021	7
2022	8

[Source:- ReCAAP Annual Report 2022]

Maritime Terrorism:

One growing worry is the rise in ocean safety warnings almost 60 states in the global context. Bangladesh is known as one among states. Maritime terrorism is non-traditional ocean challenge. It is progressively appearing in global security warnings. Sailing security challenges is uncomplicated, whether accessing through maritime areas, thanks to technological facilities available. Bangladesh maritime area is also attracting hotspot for armed Robbery and piracy related phenomena. If we observe the total number of phenomena related to robbery in the main ocean joints the Bay of Bengal has almost 10 phenomenon. The Suritec report exposed that the initial appearing seaport challenges will happen in Bangladesh. In the first half of 2022, Bay of Bengal had 5 major robbery related phenomena. As a result, Maritime terrorism is a major concern in the littoral region for Bangladesh.



Figure 6. [Source: United Nations Office on Drugs and Crime]

IUU Fishing:

Illegal fishing is also a major warning. The fisheries sphere plays a significant role in the national financial development, almost 2.73 per cent donating to the state GDP. Almost 60 per cent of Bangladeshi peoples regular animal protein intake is from fish. Almost 17 million people, integrating about 1.4 million women, rely on the fisheries sphere for their source of income through farming and fish handling. The United Nations Development program reported that of almost 389,000 metric tons of shrimp and fish annually defendable yield, only 118,000 metric tons are completely gathered. In 2023, Bangladesh ranked 59th out of 152 states in the world illegal fishing Index. This index exposed the dangerous challenges and vulnerable fish species. Since 2022, 45 fishing vessels of India, 5 crafts of Sri Lanka, 12 crafts of Myanmar, and 1 crafts of Thiland were captured by the Bangladesh Navy while fishing illegally in littoral region of Bangladesh. Bangladesh coast Guard sometimes takes into custody illegal foreign fishing trawler in the Bay of Bengal region. As a result, this issue is major warning in the Bangladesh maritime perspective.

Table 5. IUU Fishing Ranking of Bangladesh

	2019 (IUU Score: 2.41)	2021 (IUU Score: 2.20)	2023 (IUU Score: 2.33)
World Ranking	47 th out of 152 countries	85 th out of 152 countries	59 th out of 152 countries
Asia Ranking	15 th out of 20 countries	18 th out of 20 countries	12 th out of 20 countries
East Indian Ocean Ranking	6 th out of 9 countries	7 th out of 9 countries	3 rd out of 9 countries

[Source:- IUU Fishing Index]

Smuggling of Arms:

Illegal arms smugglers use ocean seaports in the maritime trading zone to stow away their elements. For Bangladesh, illegal arms smuggling in the littoral area is another maritime safety challenge. Actually, Bangladesh has accomplished diverse phenomena for a long time. For instance, in 2004, Bangladesh police had captured a variety of illegal arms, containing AK47 rifles, rocket launchers, strike units, submachine guns, 2000 grenades and 300,000 bullets. These serves were being unpacked from MV Khazar Dan and FB Amanat at the urea fertilizers jetty of Chittagong. It was found out that the arms cargo was led by Assam-based militant group United Liberation Front of Assam. In the period 2012-2022, Bangladesh Coast Guard and Navy have also captured diverse filled with arms in Cox's Bazar's littoral zone

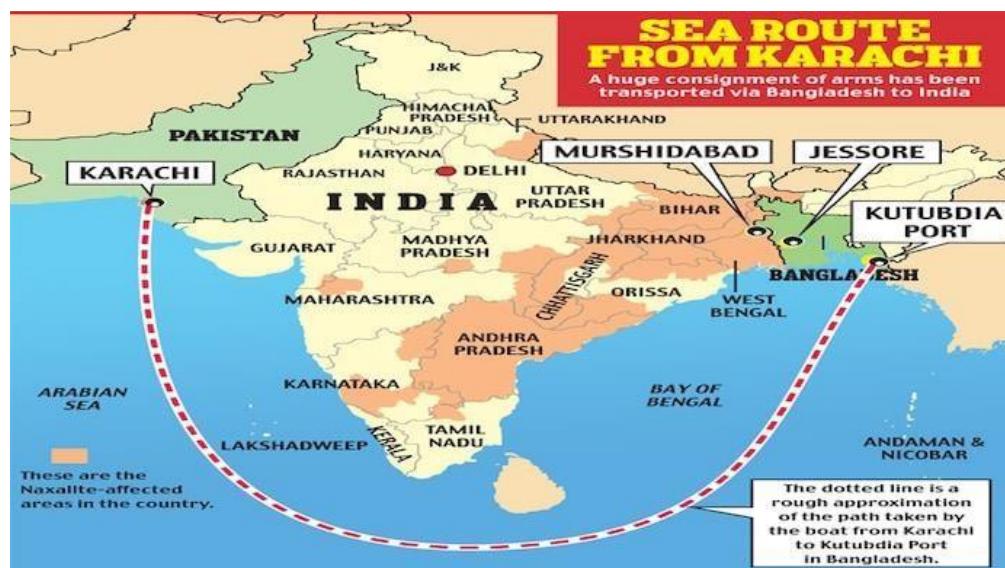


Figure 7. Arms Smuggling Sea Route
[Source: National Maritime Foundation]

Drug Trafficking:

In the Bay of Bengal, drug traffickers and global terrorist community from time to time activities hand in hand which creates difficult task for the security agencies of Bangladesh to protect. The state's maritime zone is integrated with Pakistan's 'Golden Crescent'. It is also dividing the oceanic zone with Myanmar's 'Golden Triangle'. These zones create important safety challenges as they have lengthily been observed as the showing ground of illicit drug trafficking. In this context, our country rests an important safety challenge as drug peddlers can use Bay of Bengal as the place of drug provide in the global markets. Through Bay of Bengal, traffickers from India and Myanmar are Smuggle yaba and other illegal drugs and narcotics to the Bangladesh.



Figure 8. Drug Trafficking Routes
 [Source: VIVEKANANDA International Foundation

Illegal Immigration and Human Trafficking:

Immigration is the common incident of human civilization. But, in the present millennia this incident has evolved in diverse offenses. Human Trafficking by maritime route become an offenses to gain a global existence by achieving economic facilities through the illicit entry of single body into a country where they don't have an inhabitant. Bangladesh is recently one of the top hotspot for emerging illegal immigrants in European countries. In the first quarter of the year (2022), almost 8,989 illicit Bangladesh migrants engaged in European countries through the maritime route, according to Frontex. According to international refugee organisation, Last two decades almost 160,000 Bangladeshis have been sufferers of illicit human trafficking through Bay of Bengal routes. Almost 1500 people died in the illegal maritime journey. From March 2019 to march 2020, almost 15000 put down phenomenon of human trafficking in the Bay of Bengal although the actual total likely much higher. According to The UN High Commissioner for Refugees (UNHCR), since the year 2020, almost 2,300 Rohingyas have tackle maritime journeys abroad through the Bay of Bengal.



Figure 9. Illegal Immigration
[Source: The Financial Express (TFE)]

Environmental Pollution:

Another remarkable maritime safety challenge for Bangladesh is ocean environment contamination. Marine pollution can be simply described as influencing the good situation of ocean environment by releasing misuse into the sea. Bangladesh was written down among the high polluters of global context maritime rating 10th in contaminating marine in 2010. It experiences ocean pollution rising sea and land based sources. Oil or chemical-based pollution in the maritime area is caused by transit calamity. Frequently, oil based calamity from local and foreign ships in the Mongla port create a serious challenge to the global largest tidal halophytic mangrove forest, the Sundarbans. Other ocean-based contaminations include IUU fishing and illegal dumping at marine points. The world bank has approximated that the massive amount of challenging elements are assemble in Bangladesh by 2030. Bangladesh faces the bad scenario of ocean contamination because of plastic. According to the Ministry of Environment, Forest and climate change, it is approximated that almost 60% plastic waste found the marine beaches of Bangladesh. Several experts have found that Bangladesh currently lacks a consistent maritime policy to prevent the ocean resources from contamination



Figure 10. Marine Pollution
[Source: Tech Explorist]

Natural Disasters & Climate Change:

The Bay of Bengal is vulnerable to some of the world's worst natural calamities. Bangladesh is one of the dangerous state in the global context to cyclones, floods, especially in the states littoral zones. All the natural calamities directed to almost 520,000 natural calamity deaths written down over the past four decades. In 2007, cyclone sidr cost an approximated U.S. \$1.7 billion in losses and damages. Climate Change is another major crisis which will highly attack coastals like Bangladesh. The intergovernmental panel on climate change(IPCC) approximates that world sea Level increase resulting of climate change will be 0.6 meters. According to IPCC, almost 60% of total increases in the annual number of littoral population affected by diverse natural calamity. The climate change cell indicated that the definite scope of sea level increase on Bangladesh's coast over the 3 decade almost 6-21 mm per year which is too much highest in the global context. Climate change works on natural procedure which in revolves has negative ramifications on human circulation which donate to induce the phenomena of maritime offenses and the associated occurrence which is relevant for Bangladesh as well.



Figure 11. [Source: Global Climate Risk Index-2021]

Presence of Death Zone:

The team of global scientists, Bristow et al. (2016) has invented a dead area in the Bay of Bengal with dimensions that are excessively of Bangladesh and depths of 70 meters and below the lowest number of oxygen level. Although Bay of Bengal is a diverse conflict on the presence of dead zone there, some defendable reports on the structure of the dead zone located in the main point of Bay of Bengal and meanwhile extended to a vast 6,000 (sq.k.) creates a danger for the global context. Generally, when the super abundance of plant and algae broadly decrease the water's oxygen levels, making a "dead zone" where aquatic life cannot persevere. If we run down the invented dead zone, it will frequently extend. Namal Rajapaksa emphasized in his study that the spread of this dead zone would have a serious ramifications on number of diverse nations for instance, the dead zone is situated south of Bangladesh. It is clear that Bangladesh is one of the states that will face serious ramifications of the recently invented dead zone in the Bay of Bengal. In Bangladesh, the condition will be specially difficult and meanwhile maritime health problems the state faces. A large number of coastal population is directly or indirectly joined in farming and fisheries. The decreased oxygen levels in the maritime water because of the dead zone can destroy ocean life, reduce fish catch and disorder the food chain, which can create a strong threat of vulnerable people and communities who rely on the Bay of Bengal for their living and food safety. As a result, the presence of the death zone is dangerous happening in Bangladesh maritime perspectives.



Figure 12. Approximate Location of the Dead Zone
[Source: <http://dx.doi.org/10.18289/OEF.2020.044>]

CONCLUSIONS AND RECOMMENDATIONS

An inclusive method towards maritime security provides that Bangladesh's maritime security threats cover the vast range from piracy, illicit fishing, and great power rivalry. The geopolitical significance of the Bay of Bengal has resulted in the diverse regional power competition. Power struggle poses vulnerabilities and obligates Bangladesh maritime interest. On the other hand, Bangladesh faces a number of non-conventional security challenges. Piracy, arms smuggling, human trafficking remains a main issues and show a rising trend in the several attacks in recent decades. Additionally, Bangladesh faces threats in preventing ocean environment from maritime contamination. Without exact control steps, littoral and ocean ecosystem are vastly unprevented because of sea-based contamination. In addition, Bangladesh is high vulnerability ranking to natural disasters and highly affected by climate change. However, this paper identified diverse maritime security threats of Bangladesh which creates a largely concerning issues in maritime security. Besides, this paper shows that theoretical framework diverse focussing zone, for instance, national security, military dissuasion, rule of law at maritime zone, poses a legal framework for marine management, Maritime communication perception, and cling to UNCLOS principles. We don't want to fight with anyone. We want peace. But we want to develop our forces with modern technology- keeping pace with the times so that we can properly face any attack" - Sheikh Hasina

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