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**Geopolitics of Confidence and Hope:
Assessing the Strategic Significance
of the Bay of Bengal and Choices
before Bangladesh**

Dr. Lailufar Yasmin
Rubiat Saimum
Afifat Khanam Ritika



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Chief Patron

Admiral M Shaheen Iqbal
NBP, NUP, ndc, afwc, psc
Chief of Naval Staff

Acting Chairman

Rear Admiral Abdullah Al Mamun Chowdhury
BSP, ndc, psc

Editor

Captain M Minarul Hoque, (H), BCGM, psc, BN
Director General, BIMRAD

Associate Editor

Lt Cdr S M Anisur Rahman, (H3), BN
Director (Admin), BIMRAD

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Tel: +8802-9835182

Email addresses : office@bimradbd.org

office.bimrad@gmail.com

Web address : www.bimradbd.org

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Geopolitics of Confidence and Hope: Assessing the Strategic Significance of the Bay of Bengal and Choices before Bangladesh

Dr. Lailufar Yasmin

Professor, Department of International Relations
University of Dhaka, Bangladesh
Email: lyasmin@du.ac.bd

Rubiat Saimum

Lecturer, Department of Maritime Security and Strategic Studies
Bangabandhu Sheikh Mujibur Rahman Maritime University, Bangladesh
Email: rubiat.mlp@bsmrmu.edu.bd

Affat Khanam Ritika

Research Officer
Bangladesh Institute of Maritime Research and Development
Email: ibnatritika@yahoo.com

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Admiral M Shaheen Iqbal
NBP, NUP, ndc, afwc, psc



Message from the Chief Patron

I am extremely delighted to know that Bangladesh Institute of Maritime Research and Development (BIMRAD) is going to publish its maiden Monograph issue. I sincerely acknowledge this arduous effort of BIMRAD in publishing such a unique maritime research work in this issue. I strongly believe that BIMRAD Monograph series will be able to establish a new platform of publishing outcome-based research on maritime affairs.

On the eve of this noble initiative, I would like to humbly pay my deepest tribute to the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman, whose maritime vision was focused on development and economic emancipation of Bangladesh. Under the dynamic leadership and strategic vision of Honourable Prime Minister Sheikh Hasina, Bangladesh has already peacefully delineated its maritime boundary with its neighbours, opening up new possibilities for the best available exploration of its vast living and non-living resources. We have seen an accelerated development in the Blue Economy sector in the recent years, which catalyzed an energized trend in maritime research and development. I hope BIMRAD, as an apex maritime R&D organization, will be able to keep its footprint in the development of the country's maritime knowledge base.

BIMRAD has completed more than four vibrant years while conducting numerous activities aimed at raising awareness and piloting outcome-based research. I am confident that BIMRAD as the nation's prominent maritime think tank will be able to act as a hub of maritime scholars, intellectuals, researchers and institutions to express their views, publish their scholarly articles and policy recommendations on the basis of their research outcomes. I am looking forward to see BIMRAD Monograph being published and circulated on regular basis encompassing quality maritime research works.

I wish every success of BIMRAD in its future endeavours.

M Shaheen Iqbal
Admiral
Chief of Naval Staff
and
Chief Patron
Bangladesh Institute of
Maritime Research and Development



R Adm AA Mamun Chowdhury
BSP, ndc, psc

Message from the Acting Chairman

It gives me immense pleasure to see the maiden issue of 'BIMRAD Monograph'. This was a long cherished dream of BIMRAD to publish a monograph series, which came true with this maiden issue. I hope that the BIMRAD Monograph will establish a new platform for publishing futuristic thinking and innovative research work of maritime scholars of the country.

The ocean is the cradle of life on planet earth. Oceans health is crucial for our ecosystems, indispensable for maintaining a stable climate, and vital to the world economy. Father of the Nation Bangabandhu Sheikh Mujibur Rahman with his prudent vision realized the vast potentials of sea and enacted the Maritime Zones Act 1974. The peaceful solution of maritime boundary delimitation with both neighbouring countries under the dynamic leadership of his well- deserved successor, Honourable Prime Minister Sheikh Hasina, opened up the opportunity to exploit the vast untapped resources. This generates a significant need for additional study on the exploration and utilization of maritime resources in a sustainable manner. I am very optimistic that launching the BIMRAD Monograph series will significantly advance the maritime research of Bay of Bengal and beyond. This avenue of publication will benefit marine researchers, academics, analysts and policy makers.

I am confident that BIMRAD will soon establish itself as a reputable and well-known maritime research institute. I hope that the BIMRAD Monograph will be a resounding success and it will continue to publish insightful maritime academics' research papers.

Rear Admiral Abdullah Al Mamun Chowdhury
BSP, ndc, psc
Acting Chairman
Bangladesh Institute of
Maritime Research and Development

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ACRONYMS

ACCP	Actors, Content, Context, Process
AIIB	Asian Infrastructure Investment Bank
AIS	Automatic Identification Systems
ARF	ASEAN Regional Forum
ARSA	Arakan Rohingya Salvation Army
AUV	Autonomous Underwater Vehicle
BDP 2100	Bangladesh Delta Plan 2100
BGB	Border Guard Bangladesh
BOB-IGO	Bay of Bengal Inter-Governmental Organisation on Coastal Fisheries
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BRI	Belt And Road Initiative
CLCS	Commission on the Limits of The Continental Shelf
CMEC	China Myanmar Economic Corridor
COP	Conference of Parties
CCS	Catch Certification System
ECDIS	Electronic Chart Display and Information Systems
EEZ	Exclusive Economic Zones
FDMN	Forcibly Displaced Myanmar Nationals
GBM	Ganga-Brahmaputra-Meghna
GNSS	Global Navigation Satellite Systems
HADR	Humanitarian Assistance And Disaster Management
ICJ	International Court of Justice
IPS	Indo-Pacific Strategy
IUCN	International Union for Conservation of Nature
IONS	Indian Ocean Naval Symposium
IORA	Indian Ocean Rim Association
IMB	International Maritime Bureau
IMO	International Maritime Organization
IPS	Indo-Pacific Strategy
IUU	Illegal, Unreported and Unregulated
JICA	Japan International Cooperation Agency
LTTE	Liberation Tigers for Tamil Eelam
MRV	Measurement, Reporting and Verification
NAPA	National Adaptation Programme of Action
NTS	Non-Traditional Security
OECD	Organization for Economic Co-Operation and Development
RFMOs	Regional Fisheries Management Organizations
RHMES	Resilient Hull, Mechanical, and Electrical Security
SLOC	Sea Lanes of Communication
SWOT	Strengths, Weaknesses, Opportunities, and Threats
UNCLOS	United Nations Convention on The Law of The Sea

**Geopolitics of Confidence and Hope:
Assessing the Strategic Significance of the Bay of
Bengal and Choices before Bangladesh**

ABSTRACT

The Indian Ocean is currently center-stage in international politics, and policymakers and scholars alike are looking at the prospects and challenges that the region is facing. The interests and directions of the countries of the region as well as of that of extra-regional powers need to be taken into account while formulating grand strategy. This can become challenging when the definition of which countries constitute the Indian Ocean Region (IOR) is itself a matter of dispute, where a broad definition identifies 36 countries belonging to the region, the Indian Ocean Rim Association (IORA) takes a conservative approach by allowing only 23 countries as its members.

For Bangladesh, its rise and stability depend upon understanding the nuances of both regional and international politics surrounding the Indian Ocean region and more specifically in the Bay of Bengal region. Bangladesh's focus on a greater understanding of the region would contribute to determining where its maritime investments are made keeping in view its strategic interests. There are both traditional and non-traditional security (NTS) concerns that need to be navigated within institutional structures as many of these require transnational cooperation. Although a number of international, regional and sub-regional organizations work in the IOR, often their activities seem rather opaque or emerging out of need-based approach. Keeping this general overview in mind, the purpose of this research would be to identify three key areas—

- ❖ Traditional threats in the Indian Ocean region—global (US-China competition) and regional (India-China competition in the Bay of Bengal) perspectives;
- ❖ Non-traditional security (NTS) threats in the region—outlining of these threats both from the Bay of Bengal and Indian Ocean's perspectives; and
- ❖ The existing governance mechanisms—both institutional and semi-institutional arrangements—for the IOR and the Bay of Bengal region.

At the conceptual level, it shall highlight how Indian Ocean region and the Bay of Bengal have emerged as an area of inquiry in the 21st Century and its implications for Bangladesh. As the global attention and finance is both originating from and diverting to this region, stake for Bangladesh is high to promote its locational advantage. The idea of geopolitics of hope provides Bangladesh an opportunity to portray itself as an 'emerging middle power', as scholars are arguing but not unless the country pursues a proactive foreign policy based on informed decisions. Bangladesh needs to create its own strategic vision, pursued through its own institutions and experts. This research plans to expand upon the existing research and policies and to find out new areas of engagements where Bangladesh can uniquely contribute as well as draw further strategic leverage regionally as well as internationally.

1.1. Introduction

The strategic competition of the 21st century has moved to the Indo-Pacific region, so has the strategic significance of the Bay of Bengal, the largest Bay in the world. After the South China Sea, the next strategic theater of strategic competition in the Indo-Pacific region is going to be the Bay of Bengal.¹ The locational reality of the Bay cannot be overlooked given the centrality of the littoral states of the Bay of Bengal, the positions of the sea lanes of communications, and the rise of China and its continuous search to respond to its strategic weakness in the Indo-Pacific articulated as ‘Malacca Dilemma’,² for which an unhindered access to the Bay is valued in its strategy. The Bay of Bengal is emerging not only as an increasing zone of cooperation but has also attracted the strategic shifts of great powers towards the region. The centrality of the Bay of Bengal cannot be placed at the strategic backwater of international politics anymore as it is turning into a region of great power competitions.³ Having said that, existing literature on the Bay of Bengal often stresses on the ‘rising’ significance of the Bay as if the Bay and its adjacent region of South Asia gained a ‘sudden’ strategic importance in contemporary strategic perspective. Such studies often argue that with the rise of China and its quest to reach to the Bay in search for an alternative route to the Indian Ocean bypassing the Malacca Strait have given rise to a fresh look to this maritime region. In other words, the

¹ Kikuchi Tsutomu, Professor of International Political Economy, Aoyama Gakuin University, & Adjunct Senior fellow, Japan Institute of International Affairs (JIIA), in an interview conducted on 19 April 2022.

² Marc Lanteigne, “China's Maritime Security and the ‘Malacca Dilemma’”, *Asian Security*, vol 4, no. 2, 2008, p. 143-161. DOI: 10.1080/14799850802006555; Chen Shaofeng, “China’s Self-Extrication from the ‘Malacca Dilemma’ and Implications”, *International Journal of China Studies*, vol 1, no. 1, 2010, p. 1-24; Yu Zhong, “The Importance of the Malacca Dilemma in the Belt and Road Initiative”, *Journal of Policy Science*, 2016, vol 10, p.85-109.

³ M. Humayun Kabir and A. Ahmad, “The Bay of Bengal: Next theatre for strategic power play in Asia”. *Croatian International Relations Review*, vol 21, no. 72, 2015, p.199-238; Commodore M Zakirul Islam, “Evolving Rivalry in the Bay of Bengal: Strategy Options for Bangladesh”, *NDC E-Journal*, vol 18, no. 2, 2019, p.98-120, Available at: <https://ndcjournal.ndc.gov.bd/ndcj/index.php/ndcj/article/view/266>; C. Raja Mohan, “The Bay of Bengal in the Emerging Indo-Pacific,” ORF, Observer Research Foundation, no. 416, 2020, Available at: <https://www.orfonline.org/research/the-bay-of-bengal-in-the-emerging-indo-pacific/>; Anu Anwar, “Positioning the Bay of Bengal in the Great Game of the Indo-Pacific Fulcrum”, *Journal of Indo-Pacific Affairs*, 2022, p. 115-132.

Indo-Pacific region has turned into a living everyday reality, as pointed out by a policymaker.⁴

The Bay of Bengal, following arguments of such perspectives, remained overshadowed as only a subsystem under the greater region of the Indian Ocean. Both the British and the Indian strategic thinkers during the period of colonization of the Indian subcontinent rather developed strategic thinking on the Indian Ocean on its entirety than looking at individual but separated subsystems that the Indian Ocean held. During the colonial period, the British imperial policy paid attention to the Indian Ocean aka 'British Lake' to prevent any land-based power to gain control from the maritime sphere.⁵ With the development of Indian strategic thinking, Indian Ocean, even during the colonial Raj, began to be increasingly being termed as an 'Indian Lake', much credit goes to K.M. Panikkar for such revival of maritime sphere of the Indian Ocean.⁶ Indian Ocean, the third largest of the oceans, itself can be divided into a number of subsystems depending on the characteristics of its littoral countries. For South Asia, the Bay of Bengal holds an indelible strategic significance because it was through the Bay that the British had entered the region and colonized the subcontinent. While, once the Bay was a hub of interactions, trade, and connectivity between the subcontinent and the other subsystems of the Indian Ocean region, the colonization of the major countries of the modern South Asia had put an end to such activities. The Bay, especially in the cultural imagination of the greater Bengal region, was considered as a kaalapani (literally, black water), crossing of which was seen as a religious sin by the

⁴ Anonymous interview with an official of the Ministry of Foreign Affairs (MoFA), Government of Bangladesh, conducted on 25 April 2022.

⁵ B. Vivekanandan, "Naval power in the Indian Ocean", *The Round Table: The Commonwealth Journal of International Affairs*, vol 65, no. 257, 1975, p. 59-72, DOI: 10.1080/00358537508453158; Chandrashekhar Dasgupta, "War and Diplomacy in Kashmir", 1947-48, (India: Sage Publications, 2002), p. 11; Edward A. Alpers, "On Becoming a British Lake: Piracy, Slaving, and British Imperialism in the Indian Ocean during the First Half of the Nineteenth Century", in Robert Harms, Bernard K Freamon, and David W. Blight (Eds.) *Indian Ocean Slavery in the Age of Abolition* (New Haven & London: Yale University Press, 2013), p. 45-58.

⁶ Ravindra Varma, "The Indian Ocean in India's Strategy and Diplomacy", *The Indian Journal of Political Science*, vol 25, no. 2, 1964, p. 38-49; Vice Admiral MP Muralidharan, "Revival of Maritime Outlook in Modern India: The Role of KM Panikkar", *Indian Defence Journal*, vol 36, no. 2, Apr-Jun 2021, Available at: <http://www.indiandefencereview.com/news/revival-of-maritime-outlook-in-modern-india-the-role-of-km-panikkar/>; Rajeshwari Pillai Rajagopal, "India's Maritime Strategy", in Anit Mukherjee and C. Raja Mohan (Eds.), *India's Naval Strategy and Asian Security* (London & New York: Routledge, 2016), p. 14-36.

followers of Hindu religion.⁷ In the modern sense, the subcontinent saw the rise in political consciousness and the spread of modern education in the Bengal region first, where it was the Bhodroloks (educated elites) who had set such a discourse. Travelling forward in time, Bay of Bengal's strategic significance remained amiss until China's increasing attention to this region and in particular, for Bangladesh, since it has gained an unhindered access to the Bay through settling maritime disputes with Myanmar and India in 2012 and 2014 respectively. Bangladesh, a country almost encircled by India on its three sides with a narrow border with Myanmar on its east, west and north, except on the south, has redefined the concept of neighborhood and as such, included the idea in its foreign policy deliberations. From being a 'victim of geography', Bangladesh now sees its location as a 'blessing of geography'. The country now considers the Bay of Bengal as its third neighbor, which has opened up a new frontier of opportunities for Bangladesh.⁸ With opportunities come unseen threats and concerns too.

A curious observer would find that attention to the Bay of Bengal region and attention of great powers to Bangladesh took a significant surge from the period of 2013-14. As Bangladesh found its third neighbor, so did great powers find Bangladesh. Bangladesh's economic performance and foreign relations were scrutinized to understand how the country, as the 'gatekeeper' of the Bay of Bengal positions itself. Increasing attention to Bangladesh and to the Bay of Bengal is what captures the geopolitics of hope and confidence for Bangladesh coming back to the Bay and a new narrative for Bangladesh. When it comes to the Bay of Bengal, the narrative can be seen making a full circle: the Bay as a hub of activities; with colonialism, the Bay loses its geopolitical centrality; the Cold War and the center of world's political gravity going to the Atlantic and to the Pacific; the Easternization of the world and the rise of the Indo-Pacific; and in the 21st century, the Bay is back!

⁷ Sam George, "Crossing Kala Pani: Overcoming Religious Barriers to Migration." *Diaspora Christianities: Global Scattering and Gathering of South Asian Christians*, 2019, p. 69-83.

⁸ Mohammad Rubaiyat Rahman, "Blue economy and maritime cooperation in the Bay of Bengal: Role of Bangladesh." *Procedia engineering*, vol 194, 2017, p. 356-361.

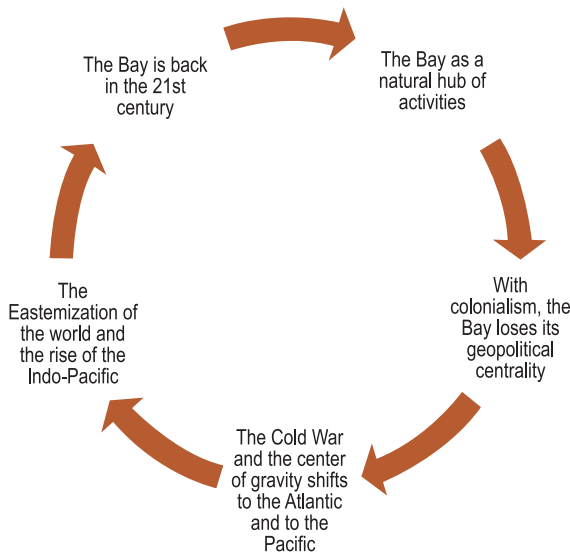


Figure 1. The Centrality of the Bay of Bengal

For Bangladesh, the picture unfolded with a country whose sovereign existence and viability to sustain itself was often questioned at the international level. The silent transformation of the country went unnoticed being placed aside a big neighbor India as well as in a disproportionate region which is dominated by one country yet home to two nuclear powers in Bangladesh's vicinity. The matter becomes more complicated for Bangladesh when the idea of Southern Asia is floated to include three nuclear powers in Bangladesh's region-India, Pakistan, and China.⁹ Despite the phenomenal achievements for Bangladesh-a country not endowed with much natural resource, with a small geographic expanse and a large number of population-Bangladesh has remained in the shadows of its big neighbors, paraphrasing in Parag Khanna's words on India in 2008 "big but not yet important" to "middle power but not yet important".¹⁰ This paper deals with how Bangladesh can change the discourse of "not yet important" using the geopolitics of confidence and hope, where the Bay of Bengal, its third neighbor, has the potential to emerge as a game-changer. It is the geopolitics of confidence and hope

⁹ Eleanor Albert, "Southern Asia's Nuclear Powers, New Geopolitics of China, India, and Pakistan", Council on Foreign Relations, 2015, Available at: <https://www.cfr.org/backgrounder/southern-asias-nuclear-powers>.

¹⁰ Parag Khanna, "The Second World: Empires and Influence in the New World Order", (New York: Random House, 2008), p. 699.

that can ensure Bangladesh's rightful place under the sun for which it needs to map the strategic environment of the region of the Bay of Bengal, locating the potential areas of fragility and recommending policy options for a better preparedness for the country in the coming years. This study identifies three broad areas of research:

- ❖ Traditional threats in the Indian Ocean region-
 - Global hotspot: US-China competition, which has a regional implication in South Asia as well as for Bangladesh; and
 - Regional: India-China competition in the Bay of Bengal and implications for Bangladesh.
- ❖ Non-traditional security (NTS) threats in the region- outlining of these threats both from the Bay of Bengal and Indian Ocean's perspectives; and
- ❖ The existing governance mechanisms-both institutional and semi-institutional arrangements-for both the Indian Ocean and the Bay of Bengal regions.

International political landscape has drastically changed since the study was initiated. It has taken those changes into account and carefully reevaluates the original proposals as demonstrated in the three key areas of research. The study ends with providing policy recommendations in the areas discussed here. This research is divided into six substantive sections, each of which contains sub-sections to elaborate the key issues identified, along with an introduction, a section on methodology and a conclusion. In the six substantive sections, the first section deals with definitional aspects of traditional and non-traditional threats. This section outlines how state system defines which are 'threats' to its existence and how this definition has changed over time and interlinked in a manner that has not been seen before. The next section discusses the centrality of the Indian Ocean and the Bay of Bengal regions in the 21st century. It particularly identifies direct and indirect/extra-regional actors in the Bay of Bengal. The section, in this context, particularly emphasizes on the contemporary nature of international order, which is often identified as one 'in the making' rather than being a stable order like that of the 20th century. While in the 20th century, the locations of power were generally discernible, in the 21st century, they are equally unstable. The third section discusses the global issues that have direct implications for Bangladesh. It identifies the nature of US-China and Sino-Indian rivalries in contemporary context and suggests how Bangladesh needs to be careful in treading through the murky waters of international politics. The fourth broad section identifies understanding on non-traditional security issues and identifies which are relevant

for Bangladesh at this particular juncture to deal with. Because of the varied nature of non-traditional issues, this research applies a common framework as follows-

- a) Understanding the root causes
- b) The existing loopholes in approaching the issues
- c) Possible intervention points to address

The existing co-operative mechanisms and their effectivity are discussed in the fifth broad section. This section also discusses, pointing out the complexity of NTS issues, how they may have wider ramifications on traditional security issues, in light of the evolving Solomon Island issue in the South Pacific Ocean and China's interest to provide technical assistances in rebuilding Kiribati's land purchased in Fiji. These examples would show how the traditional security issues of the maritime domain are intertwined with non-traditional security threats, as evident in the case of politics as unfolding in Maldives. The sixth and the last substantive section discusses on policy recommendations for Bangladesh in the context of the entire discussion. The research concludes by summarizing the key findings of the study and argues why such a comprehensive study is timely and indeed a necessity for the country. It also identifies possible areas of research for Bangladesh to undertake in the context of the Bay of Bengal.

This research, at the very outset, acknowledges its limitations as well. A study with such an expansive scope cannot do justice to all the subthemes to be discussed. Its voluminous nature is its weakness. Nonetheless, this study also takes its strength from the fact that we need to embark upon comprehensive studies from Bangladesh by Bangladeshi researchers on Bangladesh. A local context can best be explained by local researchers who are trained in Western theories and are able to find the loopholes of emulating Western understanding and imposing it on a non-Western context. By doing so, it endangers and omits the local needs and priorities and thereby may fall short of contextualizing such needs and priorities. One glaring example of this would be the higher number of deaths of women than men during the 1991 cyclone in Bangladesh. The cyclone shelters, built following Western prescriptions, failed to take into account of cultural and religious sentiments of the coastal regions of the country and thereby, during the time of cyclone, it was mostly men who took refuge in the shelters, leaving the women unsafe in their abodes. This resulted in gendered death in a natural disaster, parable of which is quite rare. This made the government to reevaluate the scheme and later on rebuilding the shelters keeping local priorities in mind. The point of this discussion is that theoretical knowledge based on Western context may be applied and may yield expected results, but when it comes to their applications in

non-Western context, we need to pay attention to the areas which would be relevant or needed to be tailored according to a particular context. This comprehensive study takes this perspective into consideration and works to build a Bangladeshi knowledge-base. Keeping this context in mind, the next section discusses the methodology of the research.

2.1. Methodology and Structure of the Research

This research has followed qualitative methodology using both primary and secondary data. Through content analysis of existing literature, the study provides a nuanced overview of the existing security scenario of the Indian Ocean and the Bay of Bengal regions and identify gaps that this research makes unique contributions to. As part of primary data collection, one field visit has been carried out in Bhashan Char, where the primary objective was to ascertain the nature of non-traditional threats to Bangladesh emerging from another state actor, having transnational implications. The research has reached out to experts and policymakers both at home and abroad to understand their views on the security architecture of the Bay of Bengal, which has been used extensively throughout the writing. The key informant interviews (KIIs) have provided a comprehensive understanding about the central objective of the study-understanding Bangladesh's policy imperatives in today's strategic environment.

As an approach of interpretation, this study has followed discourse analysis to understand beyond the languages that are used to explain existing studies on the Indian Ocean and the Bay of Bengal regions. It takes into account of existing literature to understand the loopholes and suggest possible short term and long-term solutions to those. To this end, it has reviewed government documents, experts' opinion and other primary open sources and evaluated the nature of existing challenges for Bangladesh. To understand the general pattern that exists in the IOR broadly, and in the Bay of Bengal regionally, this research uses the ACCP model, which is explained as follows:¹¹

¹¹ This section contains the brief outline of the model, which is explained in details in the research paper.

ACCP Model	Traditional Threats	Non-Traditional Threats
Actor	State Non-State	State Non-State
Content	Patterns of alliances; Bangladesh’s emerging geopolitical significance; Bangladesh’s policy options	Terrorism, piracy, Rohingya crisis, transnational organized crimes (TOCs), climate change and its impact on Bangladesh, IUU and so on
Context	Contemporary world order and its implications for Bangladesh	Recognition of how states are connected and therefore, these threats are interconnected
Prevention	What are the cooperative frameworks available to manage traditional threats?	What are the cooperative frameworks available to manage non-traditional threats?

Figure 2. ACCP Model

The research paper uses the SWOT analysis to ascertain the validity of the research.

Strengths	Weaknesses
Opportunities	Threats

It discusses the strength of the research and identifies that being one of the forerunners in its field, this research paper makes a fundamental contribution in understanding traditional and non-traditional threats that exist and may emerge in near future for Bangladesh. A study of this magnitude will have some weaknesses. The principal weakness of the research would be its scope. In terms of the voluminous nature of traditional and non-traditional threats, a single research paper may not be able to do justice to all the issues discussed here. It is in this context, the paper provides the opportunities to find out the issues that demand further scrutiny in a broader canvas. Similarly, this research also points out what are the future threat scenarios that may emerge for Bangladesh in the context of the Indian Ocean and the Bay of Bengal regions.

3.1. The Overlapping of Traditional and Non-Traditional Security Issues: What is in a Name?

A name, a definition is like a sign post. It tells us where we are, the location, the purpose and the nature of an object. While it is easy to put a name, and

thereby ascertain its nature definitively in hard sciences, issues belonging to social sciences can be considered quite changeable and open to interpretation. Contextualization of an issue in social sciences depend much on whose definition it is, or to put it from a critical perspective, whose purpose does it serve, as Robert Cox has put it.¹² The legal definition of a state as an international legal persona stands without any doubt, while how a state defines its security is a much controversial issue.

The Treaty of Westphalia in 1648 created state's impenetrability as a standard of civilization, following which the international system has developed. With the idea of state being the only legal and political representative of a human group who wish to be represented as such within a definite territory with a government and the right to sovereignty (both internal and external), Westphalian state system became omnipotent in the modern world.¹³ States, by virtue of being sovereign, are considered as equal to each other. In this particular understanding, states are indeed like islands or built with invisible walls of separation, as in their security threats are seen as territorial threats that may emanate only from another state actor. Here, state is seen as a unitary actor where its security can be ensured by protecting boundaries through strengthening hard power.¹⁴ Components of hard power are military strength and economic strength, which are tangible elements of power. A state's strength, thus, becomes quantifiable and measurable, which would deter its enemies and protect itself from external attacks. The concept of traditional security threats, thus, refers to threats that challenges the fundamental existence of

¹² Robert W. Cox, "Social Forces, States and World Orders: Beyond International Relations Theory", *Millennium: Journal of International Studies*, vol 10, no. 2, 1981, p. 126–55.

¹³ Stephen D. Krasner, "Sovereignty: Organized Hypocrisy" (Princeton, New Jersey: Princeton University Press, 1992); Daniel Philpott, "Sovereignty: An Introduction and Brief History", *Journal of International Affairs*, vol 48, no. 2, Transcending National Boundaries (Winter 1995), p. 353-368; M.P. Snyman-Ferreira, "The evolution of state sovereignty: a historical overview", *Fundamina*, vol 12, no. 2, 2006, p. 1-28.

¹⁴ The realist assumption of what a state is and how to secure its border emerged since the time of Thucydides and later on reinforced in the writings of scholars like Machiavelli and Hobbes, which became one of the primary pillars of state system. Only a few key texts are mentioned here. Thucydides, *History of the Peloponnesian War*, M. I. Finley (Editor) & Rex Warner (Translator) (London: Penguin Classics, 1972); Niccolo Machiavelli, *The Prince*, (Scotts Valley, California: CreateSpace Independent Publishing Platform, 2014); Thomas Hobbes, *Leviathan*, Christopher Brooke (Editor) (London: Penguin Classics, 2017); Glen Newey, *The Routledge guidebook to Hobbes' Leviathan* (London & New York: Routledge, 2014).

a state.¹⁵ This military-centric view of security developed as the very concept of state emerged as a response to transition from feudalism to modern state system in Europe, when “[w]ar made the state and the state made war”.¹⁶ The centrality of both the state system and understanding of ‘security’ from a military perspective, thus, emerged hand in hand.¹⁷

The universalization of the state system particularly in the 20th century with colonies gaining independence in different continents also pursued this typical understanding of security.¹⁸ The two world wars fought in the 20th century, followed by the Cold War only sealed the conceptualization of security threats to be framed, defined and responded to from a military perspective. The idea of grand strategy, based on overall perspective of securing national interest beyond the border, emerged in the early 20th century despite the idea being introduced in the 19th century albeit in its modern sense. The words ‘strategy’ and ‘grand strategy’ were introduced by Sir Julian Corbett in early 20th century, while the latter concept was elaborated in its fullest sense by Colonel JFC Fuller.¹⁹ In the context of a ‘total war’, how a country’s military and economic resources would be maximized was

¹⁵ Barry Buzan, “An introduction to strategic studies: military technology and international relations”, (Hampshire & London: The MacMillan Press, 1987); Benjamin Miller, “The concept of security: Should it be Redefined?” *Israel's National Security towards the 21st Century*. Routledge, 2014, p. 13-42.; Aleksandar Fatić, “Conventional and unconventional - 'hard' and 'soft' security: the distinction”, *SEER: Journal for Labour and Social Affairs in Eastern Europe*, vol 5, no. 3, 2002, p. 93-98; Attinà Fulvio, “Traditional security issues, in Wang Janwei and Song Weiqing, eds., *China, The European Union, and the International Politics of Global Governance*”, Houndmills, Palgrave MacMillan, p. 175-194.

¹⁶ Charles Tilly, “Reflections on the History of European State-Making”, in Charles Tilly (Eds.) *The Formation of National States in Western Europe* (Princeton, New Jersey: Princeton University Press, 1975), p. 42.

¹⁷ Colin S. Gray, “Strategy for chaos: revolutions in military affairs and the evidence of history”, (London & Portland, Oregon: Frank Cass, 2002); Ewan W. Anderson, “Geopolitics: International Boundaries as Fighting Places”, in Colin S. Gray, Geoffrey Sloan (Eds.) *Geopolitics, geography, and strategy* (London & New York: Routledge, 2013), p. 125-136.

¹⁸ Neta C. Crawford, “Argument and Change in World Politics: Ethics, Decolonization, and Humanitarian Intervention”, (Cambridge: Cambridge University Press, 2004); Peter Sutch and Juanita Elias, “International Relations: The Basics” (London & New York: Routledge, 2007).

¹⁹ Peter Layton, “The Idea of Grand Strategy”, *The RUSI Journal*, vol 157, no. 4, 2012, p. 56-61, DOI: 10.1080/03071847.2012.714193.

the driving force of introducing a ‘grand strategy’.²⁰ Taking a minimalist approach, it is argued that while a grand strategy reflects an overall understanding about national security imperatives, a strategy is both the process and the policymaking on the ground, which has to have adaptive capacities with the changing needs of time and tactics is operationalization of the grand strategy. As the discussion shows, state remains as the primary referent point in this discussion.

As a discipline, International Relations (IR) also emerged to minimize the effect of anarchy in the international system, particularly to respond in a manner so that the horrors of the Great War (World War I) would not be repeated. A number of intellectual endeavors that were undertaken while the World War I was going on was to search for the root cause of war.²¹ The findings of the major studies concluded that it was the lack of a supranational authority at the international system that led to states resorting to war. On one hand, emphasis was placed to introduce more systematic study to understand state behavior through introducing IR as an academic discipline; on the other hand, growing militarization during the interwar period revealed that idealism and appeasement hardly work when it comes to states prioritizing national security.²² Such a realization, only emboldened security to be considered from military perspective till the official end of the superpower rivalry in 1991, which has received a fresh look and is dubbed as the first phase of the Cold War.

The decade of 1990s started with a different kind of euphoria as well as a look back to events unfolding since the decades of 1960s. Concerns about environmental issues may having jeopardizing effects on human health and its long-term implications first caught wider attention with the publication of Rachel

²⁰ M. Howard “Grand Strategy in the Twentieth Century”, *Defence Studies*, vol , no.1, 2001, p.1-10, DOI: 10.1080/71400007; Nina Silove, “Beyond the Buzzword: The Three Meanings of “Grand Strategy””, *Security Studies*, vol. 27, no. 1, 2018, p. 27-57, DOI: 10.1080/09636412.2017.1360073; Richard K. Betts, “The Grandiosity of Grand Strategy”, *The Washington Quarterly*, vol 42, no. 4, 2019, p. 7-22, DOI: 10.1080/0163660X.2019.1663061.

²¹ A number of books investigated the reasons for anarchy and war in international system such as, Norman Angell, *The Great Illusion* (1910); Goldsworthy Lowes Dickinson, *The European Anarchy* (1916) and Goldsworthy Lowes Dickinson, *The Choice Before Us* (1917).

²² David Stevenson, “Armaments and the Coming of War, Europe 1904-1914”, (Oxford: Clarendon Press); Ian Kershaw, “To Hell and Back, Europe 1914-1949”, (New York: Viking, 2015); Michael Howard, “A Thirty Years' War? The Two World Wars in Historical Perspective: The Prothero Lecture”, *Transactions of the Royal Historical Society*, vol 3, 1993, p. 171-184.

Carson's *Silent Spring*.²³ In early 1970s, the period of détente saw global governance under the United Nations (UN) paying attention to issues other than military-centric concept of security where transnational issues may have cross-border security implications. The re-emphasis of security issues with the Iranian revolution and the Soviet invasion to Afghanistan, military-centric security took the lead again. The concept of non-traditional security emerged in its truest sense only in the 1990s, although its conceptual understanding found at the policymaking level. The US President Roosevelt's ideas of how should the international order look like in the post-World War II scenario and what should be the objective of global governance to be manifested by the United Nations (UN) played a significant role here. His ideas centered around four broad concepts of freedom:

1. Freedom of speech
2. From want
3. Of religion
4. From fear

The concept of human security took the broad version of freedom-the main threat consists of all the ills of underdevelopment (freedom from want) and the narrow version emphasized on political violence against most ordinary people, particularly during internal conflicts (freedom from fear). The reference to non-traditional security issues however, operates on a different spectrum, which borders between the concept of human security as well as state-centric security. As NTS, at the end of the day, speaks on transnational nature of threats, government-to government (G2G) collaborations on transnational matters put the state centrality, albeit in a different manner, in this particular discussion of 'security'. The distinction between traditional security and non-traditional security (NTS), however, lies in their focus on referent objects.²⁴ While traditional security typically stresses on state-centric military security threats, non-traditional security focuses on non-military and trans-boundary issues, putting 'human' centric threats at the center of analysis. The notion of 'non-military' threats encompasses a large variety of threats, from piracy to climate change and climate security, from terrorism to transmigration. It is, therefore, a tricky business to define

²³ Rachel Carson, "Silent Spring", (Boston & New York: A Mariner Book, Houghton Mifflin Company, 1962; 40th Anniversary Edition).

²⁴ Mely Caballero-Anthony, and Ralf Emmers. "Understanding the dynamics of securitizing non-traditional security." In *Non-Traditional Security in Asia*, Routledge, 2017, p. 13-24.

‘non-traditional threats’ in a rigorous manner. However, it is possible to reduce NTS to certain characteristics in order to understand it and use it as a theoretical tool for this particular study. First, NTS covers the types of threats which are beyond the traditional functions of the state’s military forces, such as protecting the border and territorial integrity of a state. While subject to change, the core functions of a state’s military are to fight wars and secure boundaries of the state from the invading forces of other state actors. Conceptualizing NTS requires decentering its focus away from the orthodox understanding of state security and exploring threats that may not affect a state’s institutional survival but could adversely impact its population.

Second, NTS is a departure from the realist assumption of security. Realism argues that the state perceives security dilemmas in an anarchic world system and seeks to decrease the relative power gap to attain security vis-à-vis state actors. However, NTS relates to non-state actors and deals with threats that emanate from both state and non-state sources. The transboundary effect of climate change or the transboundary nature of basin system require states connected physically to find out their own mechanisms to cooperate in cases of crises emerging from such proximity. Third, combating NTS requires different sets of capabilities than those of traditional threats. For example, the threat of climate change cannot be dealt with by traditional military power but rather requires a range of legal, political and economic mechanisms to comprehensively address as well as interstate cooperation. The entire spectrum of NTS is transboundary in nature, thus cannot be addressed without involving regional and international governance mechanisms. The rise of regional forums, institutions and dialogues are increasingly being seen as responses to the ‘ungovernable’ nature of NTS in domestic level.²⁵

Theoretically addressing the situation thus requires understanding the non-traditional security issues prevailing in the Bay of Bengal and the greater Indo-Pacific region. The study seeks to explore the major non-traditional security issues in the region and by doing so it tries to identify the cooperative frameworks in the region to address these security threats. In this study, the strengths and weaknesses of the frameworks are also analyzed to identify the prospects of establishing a security community in the region.

²⁵ Erin Zimmerman. "Security cooperation in the Indo-Pacific: non-traditional security as a catalyst." *Journal of the Indian Ocean Region*, vol 10, no. 2, 2014, p.150-165.

4.1. The Centrality of the Indian Ocean and the Bay of Bengal in the International Order: The Future is Asian?

A major shift in security thinking from a maritime point of view started to reemerge in the 21st century. The rise of China and its declaration of the Belt and Road Initiatives (BRI) in 2013 sealed the place of Asia in the security discourse since then. A number of scholars have argued, especially in the second decade of 21st century, how the future looks Asian,²⁶ Easternized,²⁷ and “[T]he world will adapt and be shaped by events in this part of the world, in the same way that places in this part of the world were shaped by events in the West”.²⁸ The American gaze shifted from the Atlantic Ocean to the India Ocean as it declared a change in its two-ocean policy under the Obama Administration in 2009. With the emphasis on the Indian Ocean, the idea of interconnectedness between the Indian Ocean and the Pacific Ocean was revisited. While Karl Haushofer imagined the Indo-Pacific as a whole geopolitical space back in 1920s, the idea took a backseat with the onset of the Cold War. The end of the Cold War saw a rise in emphasis on geoeconomics where strategic issues seem to have been trumped by economic priorities. Economic priorities, however, are inextricably linked with political choices and decisions, which increasingly unfolded with the connectivity of physical spaces, or as Parag Khanna termed it as ‘connectography’.²⁹ In this age, as Khanna has argued, it is not where one country is located, but it is important who the country is connected with. Connectography, therefore, is not only a matter of an economic choice, but also of a political decision. China’s bid to spread its economic arm certainly alarmed the US and its allies, which triggered a tilt towards the region of the Indo-Pacific, which is often identified as the “hallmark of 21st century”.³⁰

²⁶ Parag Khanna, “The Future Is Asian”, (New York: Simon & Schuster, 2019).

²⁷ Gideon Rachman, “Easternization: Asia’s Rise and America’s Decline from Obama to Trump and Beyond”, (New York: Other Press, 2017).

²⁸ Gideon Rachman, in an interview with Nicholas Gordon, “Easternization: “A game-changer for not just the world economy, but also for international politics”, Asian Review of Books, 21 September 2017, Available at: <https://asianreviewofbooks.com/content/easternization-a-game-changer-for-not-just-the-world-economy-but-also-for-international-politics/>.

²⁹ Parag Khanna, “Connectography: Mapping the Future of Global Civilization”, (New York: Random House, 2016).

³⁰ Interview with Ariel Gonzalez Levaggi, Associate Professor, Department of Political Science and IR at Pontifical Catholic University of Argentina, 7 April 2022.

The US Secretary of States Hillary Clinton and John Kerry and President Obama were among the foremost policymakers who introduced and developed the ideas on America's pivot to Asia and the Indo-Pacific in particular.³¹ The Australian policymakers equally invested their research and policies in framing Australia's position in the region.³² Japan also proposed forming an alliance system encircling China but without mentioning it formally. The Quadrilateral Security Alliance or the Quad formed with the US, Japan, Australia and India, keeping a particular threat scenario emerging from the Indo-Pacific, without mentioning it emerging from China. Although the alliance did not meet the expectations at the initial years, from 2018 onward, Quad was revived as a security alliance in the Indo-Pacific region.³³ With the Coronavirus or Covid-19 pandemic, the Quad, under the leadership of US President Biden found its new meaning and purpose.³⁴ The Covid-19 pandemic changed the way the concept of security is

³¹ Michael J. Green & Andrew Shearer, "Defining U.S. Indian Ocean Strategy", *The Washington Quarterly*, vol. 35, no. 2, 2012, p.175-189, DOI: 10.1080/0163660X.2012.666925; Stephen Daggett (Et Al), "Pivot to the Pacific? The Obama Administration's "Rebalancing" Toward Asia", Congressional Research Service, 2012, Available at: <https://sgp.fas.org/crs/natsec/R42448.pdf>, Christopher J. Griffin and Robert Zarate, "What John Kerry is Doing Right and Wrong in East Asia", *The Diplomat*, 2013, Available at: <https://thediplomat.com/2013/04/what-kerry-is-doing-right-and-wrong-in-east-asia/>; Shankari Sundararaman, "Indo-Pacific economic corridor: A vision in progress, ORF Commentaries, Observer Research Foundation", 2017, Available at: <https://www.orfonline.org/research/indo-pacific-economic-corridor-a-vision-in-progress/>; America's Indian Ocean Strategy, Strategic Comments, 23:9, vi-vii, 2017, DOI: 10.1080/13567888.2017.1398535; Nicholas D. Anderson and Victor D. Cha, "The Case of the Pivot to Asia: System Effects and the Origins of Strategy", vol 132, no. 4 (Winter 2017–2018), p. 595-617.

³² Chengxin Pan, "The 'Indo-Pacific' and geopolitical anxieties about China's rise in the Asian regional order", *Australian Journal of International Affairs*, vol 68, no. 4, 2014, p. 453-469, DOI: 10.1080/10357718.2014.884054; Rory Medcalf, "In defence of the Indo-Pacific: Australia's new strategic map", *Australian Journal of International Affairs*, vo. 68, no. 4, 2014, p. 470-483; Rory Medcalf, "An Australian Vision of the Indo-Pacific and What It Means for Southeast Asia", *Southeast Asian Affairs*, 2019, p. 53-60.

³³ William Choong, "The revived 'Quad' – and an opportunity for the US", IISS Blog, 2018, available at: <https://www.iiss.org/blogs/analysis/2018/01/revived-quad>; Tanvi Madan, "The Rise, Fall, and Rebirth of the Quad", *War on the Rocks*, 2017, Available at: <https://warontherocks.com/2017/11/rise-fall-rebirth-quad/>.

³⁴ Huong Le Thu (Ed.), "Quad 2.0: New perspectives for the revived concept: Views from The Strategist Australian Strategic Policy Institute", 2019; Richard Maude, "Explainer: What a Revived Quad Means for the Indo-Pacific", *Asia Society*, 17 March 2021, Available at: <https://asiasociety.org/australia/explainer-what-revived-quad-means-indo-pacific>.

understood and created a bridge between traditional (military) security and non-traditional security as global health governance cannot be ignored in the entire management of a state's functioning.³⁵ The nature of complex interdependence, though the idea emerged since the 1970s, fully unfolded with the pandemic as no one country can remain immune from it in this age of globalization. A country neither can keep its border shut for an indefinite period nor can remain entirely 'open' for business in the face of the crisis that the pandemic unfurled. Ironically, Europe, the epitome of a borderless continent among 27 member countries, saw the return of borders and the enforcement of national boundaries due to uneven capacities of national governments to respond to a crisis of this magnitude.

The geopolitical space of the Indo-Pacific can be marked by several developments. The Quad has widened its scope of activities and not limited to high politics of security issues only. The region is now home to a new security pact-AUKUS-an alliance among Australia, the United Kingdom and the United States-where Australia shall receive technical and technological assistances from the UK and the US in acquiring nuclear-powered submarine. This alliance was built on a sudden declaration of Australia annulling the similar deal it signed before with France and as a result of this, the security environment of the Indo-Pacific region has been redefined for years to come.³⁶ Preparing an Indo-Pacific Strategy or an Indo-Pacific Vision has turned into a hallmark of the

³⁵ "Quad Leaders' Joint Statement: "The Spirit of the Quad"", The White House, 21 March 2021, Available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/12/quad-leaders-joint-statement-the-spirit-of-the-quad/>; Ash Jain, "Why the Quad summit was a strategic success", Atlantic Council, 2021, available at: <https://www.atlanticcouncil.org/blogs/new-atlanticist/why-the-quad-summit-was-a-strategic-success/>; C. Uday Bhaskar, "QUAD 3.0-Challenges and Opportunities", *Journal of Indian Ocean Studies*, vol 29, no. 2, 2021, p. 91-100; Reena Marwah and Lailufar Yasmin, "Japan's Quad: More than a Mechanism for Dialogue", *Journal of Indian Ocean Studies*, vol 29, no. 2, 2021, p. 141-153.

³⁶ Rashi Randev, "Reshaping the Indo-Pacific Construct through Strategic Geopolitical Convergences: AUKUS as a Harbinger of a Multipolar Hegemony in the Region", *Journal of Indo-Pacific Affairs*, 2022, Available at: <https://www.airuniversity.af.edu/JIPA/Display/Article/2904531/reshaping-the-indo-pacific-construct-through-strategic-geopolitical-convergence/>; Rashed Uz Zaman and Lailufar Yasmin, "The shape of the international order: the case study of AUKUS", *Studia Politologiczne*, 2022, DOI: <https://doi.org/10.12688/stomiedintrelat.17420.1>.

strategic environment of the region, which began with the US issuing its first Indo-Pacific Strategy (IPS) paper in October 2019,³⁷ and issuing the second IPS in February, 2022.³⁸ In the meantime, the European Union, the UK, ASEAN have prepared their own vision of the Indo-Pacific keeping their national objectives and priorities in mind. Another development in terms of security concerns in the region is how arms race is now coming to the region of Asia. The nature and characteristics of this arms race is very different than the arms race seen during the Cold War period. The Asian countries who are acquiring new weapons and weapons-technology are often not as dependent as they used to be on non-Asian sources previously. Instead, an unprecedented level of technological advancement in the areas of military equipment is noticeable, which makes weapons production and proliferation dangerous, uncontrollable and difficult to keep under check.

The Indo-Pacific region is transforming into an area of strategic competition and confrontation. The Bay of Bengal is not immune from the heat of this. The geopolitical significance of the Bay lies in being recognized as the next hotspot in the Indo-Pacific region after the South China Sea. As the Bay offers an easy bypass of the Malacca Strait of the Pacific to the Indian Ocean for Northeast Asian powers like China and Japan, strategic engagements of both the countries with South Asia have seen a significant rise. The Bay is the second most significant strategic waterbody of the Indo-Pacific region which has turned global attention to this region. The direct actors in the Bay, however, remains the littorals-Bangladesh, India, Myanmar, Thailand and Sri Lanka. The adjacent maritime neighbors of the Bay are Malaysia, Indonesia and Maldives, while the land-locked countries of South Asia, Bhutan and Nepal remain dependent on Bangladesh and India for their maritime trades and therefore, fall within the category of being in the immediate neighborhood of the Bay.

³⁷ Department of Defense, “Indo-Pacific Strategy Report: Preparedness, Partnerships, and Promoting a Networked Region”, United States, 2019, Available at: <https://media.defense.gov/2019/Jul/01/2002152311/-1/-1/1/DEPARTMENT-OF-DEFENSE-INDO-PACIFIC-STRATEGY-REPORT-2019.PDF>.

³⁸ The White House, “Indo-Pacific Strategy of the United States”, February 2022, Available at: <https://www.whitehouse.gov/wp-content/uploads/2022/02/U.S.-Indo-Pacific-Strategy.pdf>.

Direct Actors	The Littorals: Bangladesh, India, Myanmar, Thailand and Sri Lanka
Adjacent Regional Maritime Actors (Observer States)	Maldives, Indonesia and Malaysia
Adjacent Regional Land-locked Actors	Nepal and Bhutan
Extra-regional Actors	The US, the UK, the EU, China, Japan and the Indo-Pacific nations

Figure 3. Actors in the Bay of Bengal

The regional organization representing the Bay of Bengal, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), considers geographic contiguity in defining the Bay and includes two land-locked countries of South Asia due to the Bay being their only access to the nearest maritime body. Interestingly, however, a number of other organizations considers the geographic expanse of the Bay to reach as far as the Malay peninsula and the northern tip of Sumatra islands. Malaysia and Indonesia, thus, create an overlapping in the understanding of the definition of the Bay of Bengal. For example, the Bay of Bengal Inter-Governmental Organisation on coastal fisheries (BOBP-IGO) includes Bangladesh, India, the Maldives and Sri Lanka as their member states, while Thailand, Indonesia and Myanmar are in the process of discussion to join as members.³⁹ Thus, the definition of the Bay of Bengal, in terms of countries as members, become often overlapping. In terms of having strategic interest in the Bay of Bengal region, the US, Russia, China, the UK, the EU, Australia, Japan and major countries of the world are invested about the activities and issues taking place in the Bay.

5.1.1. The Great Game in the Bay of Bengal and Bangladesh's Place under the Sun

Bangladesh has long been neglected as a country ridden with poverty, underdevelopment and disaster. A country which shares world's fifth largest land border with India, a small border with Myanmar and no access to the vast and open

³⁹ International Waters Governance, "Bay of Bengal", Available at: <http://www.internationalwatersgovernance.com/bay-of-bengal.html>.

southern Bay of Bengal, was written off as a ‘victim of geography’⁴⁰ and ‘land-locked’, often by its own analysts and researchers. The unfettered access to the Bay of Bengal has reshaped such understanding fundamentally. Bangladesh is now often termed as a ‘maritime country’ with a sea area of 1,18,813 sq. km. which is almost equal to the land territory.⁴¹ The coastal zone of Bangladesh with 47,201 km² is 32% of the country consisting of 19 districts. It supports around 35 million people, representing 29% of the population.⁴² The Bay of Bengal lies on a 700km long coastline. The coastline includes Bangladesh’s sovereign possessions of the St. Martin’s Island. Due to the discovery of a substantial amount of natural gas off the Indian and Myanmar coasts and the possibility of more discoveries in the EEZ of Bangladesh, The Bay of Bengal has become a centre of attention of regional and extra-regional powers. The fundamental maritime interests of Bangladesh may be considered as:

- ❖ Political: maintenance of maritime sovereignty and territorial integrity
- ❖ Economic: exploration, exploitation and protection of the living and non-living resources from EEZ and continental shelf
- ❖ Security: security-related interests are protection against seaborne traditional and non-traditional threats, and awareness of nuclear threats

Since 2013 and 2014, the scenario started to change for Bangladesh. Bangladesh’s locational endowment started to being noticed by different actors. That Bangladesh is an actor to be reckoned with was increasingly getting noticed by strategists and policymakers as evident from published materials.⁴³ The US

⁴⁰ Iram Khalid, “Bangladesh water concern”, *South Asian Studies*, vol. 25, no. 1, 2020.

⁴¹ The lawyers and jurists, “Geopolitical Significance of The Bay of Bengal 2.” Available at: <https://www.lawyersnjurists.com/article/geopolitical-significance-bay-bengal-2/>.

⁴² Hafez Ahmad, “Bangladesh Coastal Zone Management Status and Future Trends”, *Journal of Coastal Zone Management*, vol 22, no. 1, Doi:10.24105/2473-3350.22.466, Available at: <https://www.walshmedicalmedia.com/open-access/bangladesh-coastal-zone-management-status-and-future-trends.pdf>.

⁴³ Lailufar Yasmin, “Bangladesh and the Great Powers” (2016), in Ali Riaz and Md. Sajjadur Rahman (Eds.), *Handbook on Contemporary Bangladesh*, (London and New York: Routledge, 2016), p. 389-401; Lailufar Yasmin, “India and China in South Asia: Bangladesh’s Opportunities and Challenges”, *Millennial Asia*, vol 10, no. 3, 2019, p. 322–336, DOI: <https://doi.org/10.1177/0976399619879864>.

Deputy Secretary of State, for example, cited Bangladesh as an Indo-Pacific corridor,⁴⁴ while Bangladesh was identified having a lynchpin position at the mouth of the Bay of Bengal by the Japanese Ambassador in Bangladesh in 2014.⁴⁵ Bangladesh was increasingly being identified as a center of gravity in the Bay of Bengal region. In such a changing geopolitical scenario for Bangladesh, there are areas that Bangladesh have to navigate through in the coming years, which the next section discusses.

5.1.2. Traditional Threat Scenario and Issues for Bangladesh: Global and Local Hotspots

The Indo-Pacific region, as pointed out earlier, has turned into a theatre of strategic competition and confrontation in the 21st century. South Asia, being at the backyard of China and China sharing its territorial border with four of the South Asian countries, cannot remain immune to this strategic landscape. Bangladesh has to chart out its path between two particular bilateral relationships in this wider context—the implications of the US-China relations and that of India-China relations.

As the US-China relations remain paradoxical, closer to home, the state of India-China relations affects Bangladesh on a wider spectrum. It is interesting that while India and China continue to have strategic rivalry, China is India's biggest trading partner, while India is the highest recipient of loans from China-sponsored Asian Infrastructure Investment Bank (AIIB). It is interesting that India continues to be a top borrower of the AIIB since 2017,⁴⁶ and such a transaction did not halt

⁴⁴ Shah Husain Imam, 'Grasping our strategic potential and tapping it'. The Daily Star, 25 April 2014.

⁴⁵ Nurul Islam Hasib, 'Abe visit impetus for Dhaka-Tokyo partnership'. bdnews24.com, 4 September 2014, Available at: <http://bdnews24.com/bangladesh/2014/09/04/abe-visit-impetus-for-dhaka-tokyo-partnership>.

⁴⁶ The Economic Times, "India a top borrower from China-sponsored AIIB in 2017", 11 January 2018, Available at: <https://economictimes.indiatimes.com/news/economy/finance/india-a-top-borrower-from-china-sponsored-aiib-in-2017/articleshow/62461954.cms?from=mdr>; CGTN, "AIIB Development: India becomes largest borrower from the investment bank", 12 July 2019, Available at: <https://news.cgtn.com/news/7a456a4d784d4464776c6d636a4e6e62684a4856/index.html>; Hindustan Times, "With \$4.5 billion in loans, and a \$1 billion more in pipeline, co-founder India is top China-led bank borrower", 28 July 2020, Available at: <https://www.hindustantimes.com/india-news/with-4-5-billion-in-loans-and-a-1-billion-more-in-pipeline-co-founder-india-is-top-china-led-bank-borrower/story-nlJr6S5KxPOLK3L3IxNfaM.html>; ADB, "AIIB processing \$2 billion loan for India to buy COVID-19 vaccines", The Economic Times, 27 October 2021, Available at: <https://economictimes.indiatimes.com/news/economy/finance/adb-aiib-processing-2-billion-loan-for-india-to-buy-covid-19-vaccines/articleshow/87310509.cms?from=mdr>.

in the midst of the border escalation between China and India in 2020.⁴⁷ With the rising tension in Europe, it seems a new type of alliance is in the making, at least for the time being, among India-China-Russia, who are looking forward to working together and making the Asian Century a reality. As Menon writes, “[E]urope is a sideshow to the main theater of geopolitical drama: Asia. Today, the center of gravity of the world economy has moved from the Atlantic to east of the Urals”.⁴⁸ Bangladesh will have to navigate through these murky waters of international politics. Whatever happens in any part of the world, there is an inevitable impact on any country of the world, including Bangladesh, which should be reflected in its foreign policy goals and objectives.

5.1.3. Geopolitics of Confidence and Hope: Strategic Significance of Bangladesh

Bangladesh’s emergence as a sovereign country is only for 51 years. A country, which had to fight against minority’s political and economic coercion to achieve its independence in 1971, was left with virtually no financial resources, weak infrastructure and very little natural resources of its own. As it has been argued widely, Bangladesh’s transformation in the past 51 years has been phenomenal, a sign of continuity in its political, economic and foreign policies. The challenge now would be how to sustain the tempo for the next fifty years, given the international order is in a shaky and tumultuous state. Nonetheless, in this research, emphasis is given using the concept of geopolitics of hope, fear, aspiration and confidence-how Bangladesh has achieved and can continue on the path of creating its geopolitical appeal. This section first orders arguments on how the country creates geopolitics of confidence and hope and later identifies the geopolitics of fear, that is the areas that can be challenging in the coming years.

The idea of size-based identification of a country as a small or big power is associated with Euro-centric analysis of international relations. The concept of ‘small power’ or ‘small state’ (often used synonymously) emerged particularly during Cold War political calculations to identify who can be an ally and a foe and

⁴⁷ Orange Wang, “China-backed AIIB maintained loans to India during border dispute in ‘first major test’”, says president, South China Morning Post, 4 June 2021, Available at: <https://www.scmp.com/economy/global-economy/article/3136109/china-backed-aiib-maintained-loans-india-during-border>.

⁴⁸ Shivshankar Menon, “The Fantasy of the Free World: Are Democracies Really United Against Russia?”, *Foreign Affairs*, 4 April 2022, Available at: <https://www.foreignaffairs.com/articles/ united-states/2022-04-04/fantasy-free-world>.

how to maneuver countries which were geographically small but significant in terms of location. The concept is Euro-centric, as mentioned, because the world was seen from the prism of Europe and the West, where the sizes of countries such as Belgium or the Netherlands did not matter categorizing them into being 'small states'. On the other hand, countries belonging to other continents, freshly emerging from colonialism, consolidating their independence and sovereignty, were often categorized as 'small state' depending on their size. This trend continued although scholars are now working of identifying differing matrixes to understand the concept of 'small state'. while the concept of 'small state' is not impervious to change, such analyses, once again, often overlook to merge a number of identifiers together such as-geographic size, location, size of population, capabilities (both military and economic)-a combination of tangible and intangible sources of power, and thereby, essentially ends up perpetuating the views of the last century. As a corollary to this, the concept of 'middle power' also emerged during the Cold War, to refer to countries who would be better equipped to take part in the bipolar rivalry between the US and Soviet Union.

Capabilities in the 21st century no longer depends entirely on the geographic size of a country rather on a combination of factors. Countries continue to challenge the Cold War assumptions based on their increased economic, political and military capabilities as well as their increased agency in international politics. The so-called small states have been able to show that agency can be created through political will despite relatively smaller size or other markers of being 'small state'. Gambia, for instance, has shown how norms and ideas can guide to a proactive foreign policy, by virtue of which it took Myanmar to the International Court of Justice (ICJ) on the charge of committing genocide against Rohingya community. Few observers have paid attention to this silent transformation happening in international politics where so-called small states, lacking agency, are no longer shying away from asserting themselves on issues that they believe should be brought in the agenda of international community.

Geographic size and location are unchangeable. Acknowledging that, Bangladesh has come a long way to be seen only through the prism of being a 'small state' and being confined within such a category. Its strength of population, changing locational endowment being recognized as the 'Gatekeeper of the Bay of Bengal', sustained economic growth and stability and inclusive foreign policy based on the principle of 'friendship with all, malice to none' have created a new identity for the country. This new identity replaces the former fixation on seeing Bangladesh as a recipient of foreign aid and assistance. Instead, the shifting

identity shows Bangladesh has emerged as a ‘Lender Country’, the second in its region, to provide assistance in its neighborhood. Bangladesh is on its way to clarify its position about the Bay of Bengal as well as the Indo-Pacific region through formulating its own Indo-Pacific Vision, where priorities are given to security, connectivity and sustainable development.⁴⁹ The pandemic and its long-term impact have made Bangladesh to identify how Bangladesh needs both bilateral and multilateral engagements for ensuring its sustained growth. The increasing engagement of great powers with Bangladesh is also a testament to the new reality.⁵⁰ A number of scholars have argued that Bangladesh should play either a ‘balancing act’ or a ‘hedging strategy’ when it comes to deal with great powers. This research rather argues what the contemporary reality requires a self-awareness about Bangladesh’s identity that is lacking in such analyses. Bangladesh has reached at the stage where it can step up, act as a ‘rising middle power’, borrowing Brewster’s term, who is able to shape events, at least in its region. As such a step does not meet the requirements of the traditional definition of ‘middle power’,⁵¹ for the time being, Bangladesh must project itself as an emerging middle power. Semantics and projections do matter for which Bangladesh carefully needs to shed off being boxed as a ‘small state’ through its actions.⁵²

The cautionary approach entails Bangladesh approaches a proactive foreign policy, embraces itself for possible global shocks and identifies challenges

⁴⁹ Anonymous interview with an official of the Ministry of Foreign Affairs (MoFA), Government of Bangladesh, 25 April 2022.

⁵⁰ Interview with Dr. Derek Grossman, senior defense analyst at the RAND Corporation, Washington DC, USA, 6 May 2022.

⁵¹ Robert Keohane, “Lilliputians’ Dilemmas: Small States in International Politics”, *International Organization*, vol. 23, no. 2, 1969, p. 291–310, DOI:10.1017/S002081830003160X; Adam Chapnick, “The middle power”, *Canadian Foreign Policy Journal*, 7:2, 1999, p. 73-82, DOI: <http://dx.doi.org/10.1080/11926422.1999.9673212>; Eduard Jordaán, “The concept of a middle power in international relations: distinguishing between emerging and traditional middle powers”, *Politikon*, vol 30, no. 1, 2003, p. 165-181, DOI: 10.1080/0258934032000147282; Allan Patience, “Imagining middle powers”, *Australian Journal of International Affairs*, vol 68, no. 2, 2014, p. 210-224, DOI: 10.1080/10357718.2013.840557; Jeffrey Robertson, “Middle-power definitions: confusion reigns supreme”, *Australian Journal of International Affairs*, 2017, DOI: <http://dx.doi.org/10.1080/10357718.2017.1293608>.

⁵² Interview with Anu Anwar, Fellow at the Faculty of Arts and Sciences and an Associate in Research at the John K. Fairbank Center for Chinese Studies, Harvard University, USA and Doctoral student at the Johns Hopkins University, USA, 17 April 2022.

ahead. The first and foremost challenges may emanate in the economic front. As Bangladesh is set to join the club of Middle-Income Country category, it may lose a number of trade benefits and quotas that were a part of being in the least-developing country category. The priority of economic diplomacy must be how to continue with such benefits and trade accesses after Bangladesh's economic graduation takes place. At the same time, in a Covid-affected world, Bangladesh needs to enhance its development diplomacy and find out right development partners to ensure a steady supply of foreign direct investment. Bangladesh also needs to diversify its export products and dependency. At present, it is the US and Europe where Bangladesh exports the most, which creates economic and foreign policy dependency on these regions. This needs to be reflected in our policy-planning with regard to finding other options, both in terms of developing more export capacities as well as destinations.

Bangladesh's challenge in terms of its foreign policy would be to emerge as being more self-aware about its strengths and weaknesses so that it can pursue an assertive foreign policy stance. As evident from the current course of discussions that take place in Bangladeshi scholarly circles, Bangladesh's achievements and economic miracles are yet to be accepted as they are. Rather, it is full with self-doubt as the generation that has fought the independence war of 1971 and have tirelessly worked to build the country are quite at awe that their works have paid off. They are yet in somewhat denial that we have acquired an agenda-setting power in both regional and international levels. It is rather the post-1971 generation who are confident about portraying and asserting a different Bangladesh, a more confident Bangladesh. Bangladesh's imprint globally is being recognized where young entrepreneurs and change-makers are promoting Bangladesh's uniqueness. It is foreign scholars who are writing about Bangladesh, its strategic significance and promoting a positive Bangladesh while Bangladeshis of a certain age are rather taking too cautious approaches. This self-doubt is what needs to be transformed into a positive mindset and reflected in Bangladesh's foreign policy posture.

5.2.1. Non-Traditional Threat Scenario and Issues: Numbers Game!

On a theoretical level, the emergence of NTS as a branch of security studies indicates an epistemological shift away from realism. Rather than conceptualizing security solely from the perception of realists, NTS requires security to be comprehended from the viewpoint of liberal institutional school which led to a focus on 'human' instead of state and on 'cooperation' rather than

'conflict'. Globally, the United Nations played a key role in the institutionalization of the concept of 'Human security'.⁵³ The UN Commission on Human Security defined the concept on the basis of two pillars: freedom from want and freedom from fear. The institutionalization of NTS has also reflected on the growing regional entanglements in the Indo-Pacific region. Amitabh Acharya (2001) shows the development of distinct brands of non-conventional security discourses being developed in Asia at the end of cold war. Rather than fully accepting the supposedly 'western' concept of human security, the Asian states developed their own notions of security merging human components with that of the state's security concerns. The Asian concepts such as 'comprehensive security' and 'cooperative security' view non-conventional threats not only threaten the population and individuals but rather threaten the state's survival and stability.⁵⁴ The regional arrangements such as ASEAN and ASEAN Regional Forum (ARF) relied on these concepts to build their regional cooperative mechanisms. Viewing NTS from the purview of state's security and survival has led to the creation of multilateral frameworks distinct from western institutions dedicated to collective security. These multilateral institutions such as ASEAN have in many cases successfully addressed transboundary issues without compromising on core state principles such as 'sovereignty' and 'Independence'.⁵⁵

However, the model of ASEAN has not been replicated in South Asia, where inter-state rivalry and tensions have prevented regional integration and prioritization of non-conventional security. The South Asian Association of Regional Cooperation (SAARC) has failed to comprehensively address the transboundary issues such as irregular migration, smuggling and transnational organized crimes primarily because of the lack of trust between the states and effective transnational mechanisms to address them.

The Bay of Bengal is an interesting case in this regard, the growing geopolitical significance of the region has brought the attention of global and regional powers to the region. The economic engagements in the Bay, thus, necessitates addressing the non-traditional threats such as piracy, maritime

⁵³ Mely Caballero-Anthony, Swee Lean Collin Koh, and Sofiah Jamil. "Rethinking Energy Security: A Non-Traditional View of Human Security." In *Rethinking Energy Security in Asia: A Non-Traditional View of Human Security*, 2012, p. 1-20.

⁵⁴ Amitav Acharya, "Human security: East versus west." *International journal*, vol 56, no. 3, 2001, p.442-460.

⁵⁵ Rubiat Saimum, "ASEAN's Rohingya Dilemma: Limits of Regional Co-operation." In *Charting a Sustainable Future of ASEAN in Business and Social Sciences*, 2020, p. 339-348.

terrorism, IUU fishing and climate change. As an emerging region, to what extent the states in the Bay of Bengal region can collectively address these challenges is an issue of scholarly inquiry. The only existing institutional mechanism in the Bay of Bengal region, BIMSTEC, has seen some recent developments. These developments, however, can only be translated into concrete policy responses if all littoral states agree on the objective of creating regional multilateral cooperative mechanisms to deal with non-traditional threats. This requires states to synchronize their maritime policy with that of the stated objectives of the BIMSTEC. But in reality, political obstacles remained on the ground and major disputes persisted among the littorals of the Bay. The Rohingya issue has been a major impediment of further cooperation between Bangladesh and Myanmar on the issues of transnational drug trafficking, piracy and IUU fishing. The territorial disputes also exist in the maritime domain. In 2014, Bangladesh and India resolved their territorial disputes through International legal disputes settlement mechanisms. However, India disputed some of Bangladesh's claims on its continental shelf at the Commission on the Limits of the Continental Shelf (CLCS).⁵⁶ By disputing such claims, New Delhi has risked taking the issue back to square one. This indicates that the non-traditional security issues in the Bay of Bengal region are also intrinsically related to the traditional security issue. The long-standing bilateral disputes have limited the prospects of prioritizing non-traditional security issues in the region.

The subtitle of this section points to the limitless areas of issues that pose non-traditional security threats for Bangladesh. The study highlights the issues, which are of immediate need to be paid attention to. By doing so, however, it does not neglect the gravity of other issues which remain outside of the discussion of this paper.

5.2.2. Maritime Piracy in Indian Ocean Region

Piracy as a mode of violence for material or political ends, has existed since the dawn of civilization. The history of maritime piracy is as old as maritime trade itself. The proliferation of maritime piracy has a long history across the global oceans. It has been even more prevalent in the Indian Ocean region historically, due to its proximity to global choke points such as Malacca strait, Bab

⁵⁶ Dhaka Tribune, "Bangladesh objects to Indian claims on continental shelf", 2021, Available at: <https://archive.dhakatribune.com/bangladesh/foreign-affairs/2021/09/18/bangladesh-objects-to-indian-claims-on-continental-shelf>

el Mandab and the Hormuz strait. These straits serve key gateways for global trade and energy which increases the vulnerabilities for commercial passages. There are also motives and incentives associated with maritime piracy. Maritime piracy, along with other non-traditional security threats arises from the prevalence of insecurity. The oceans represent around 71% of the world's surface. It is not only difficult but also costly to police and patrol such a vast body of water. The capability gap however is just one dimension of maritime piracy. The systemic causes and overall security situation of the littoral states also impact the maritime security of their oceans. In this section, the overall scenario of maritime piracy issue would be discussed.

5.2.2.1. Definition of ‘Maritime Piracy’

Before trying to broadly understand the impact of the trends of maritime piracy, it is important to define the concept of ‘Maritime Piracy’. The well-accepted operational definition of maritime piracy is rooted in the article 101 of United Nations Convention on the Law of the Sea (UNCLOS). The definition is based on three main principles: ‘(i) committed for private ends, (ii) takes place on the high seas and (iii) done by one ship on another ship’.⁵⁷ This definition however leaves several blank spots on the technical aspects of defining maritime piracy. First, the UNCLOS definition points out that only the incidents that take place in the high seas would be considered ‘maritime piracy’ which leaves the incidents in the territorial waters and Exclusive economic Zones (EEZ) out of the operational definition. Secondly, the definition emphasizes the ‘private ends’, thus omitting political, ideological and state-sponsored events from the definition. Thirdly, the definition maintains that the acts of piracy are committed on ‘one ship by another’, however in many cases of ‘supposed’ maritime piracy, the acts do not fulfil the ‘two-ship’ criteria. In many instances, the acts are committed by using speedboats and smaller vessels especially in cases of piracy events in the horn of Africa region.

The IMO’s Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery against Ships specifically defines ‘Armed robbery’ as ‘any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy, committed for private ends and directed against a ship

⁵⁷ Mazyar Ahmad, “Maritime piracy operations: Some legal issues”, *Journal of International Maritime Safety, Environmental Affairs, and Shipping*, vol 4, no. 3, 2020, p.62-69.

or against persons or property on board such a ship, within a State's internal waters, archipelagic waters and territorial sea'.⁵⁸ Thus, in contemporary international practices, a distinction has been made between 'Armed robbery' and 'maritime piracy' on the basis of geography. Despite being similar in nature, two acts are defined separately. The acts of violence if committed on the high seas are termed as piracy while if occurred within the internal waters or territorial sea are regarded as 'armed robbery'.

The International Maritime Organization strictly abides by the definition provided by the UNCLOS. The limitations in the UNCLOS definition have been addressed by the SUA Convention. However, as the convention has not been signed by many countries, especially in Asia, it remained largely ineffective in the international jurisdiction. In defining piracy, the 'geographical limit' poses a significant challenge. The International Maritime Bureau's (IMB) defined piracy as 'The act of boarding any vessel with an intent to commit theft or any other crime, and with an intent or capacity to use force in furtherance of that act.'⁵⁹ The IMB definition largely tackled the issue of geography, 'two-ship' criteria and intention as it did not specify these factors unlike the UNCLOS definition. In case of the Exclusive Economic Zone (EEZ), the article 58(2) of the UNCLOS postulates that the international maritime laws of the high seas shall be applicable to EEZ as well.⁶⁰ Hence technically the definition of piracy in the context of the high seas is also applicable in the EEZ.

5.2.2.2. The Trends of Piracy in the Bay of Bengal

Piracy has been a constant threat of the maritime security of the Bay of Bengal and the Indian Ocean region. The prevalence of the acts of piracy depends on the strategic significance of the waterways and their proximity to the major Sea Lanes of Communication (SLOCs). Several factors can be attributed to the prevalence of piracy in the maritime domain. The Rand report titled 'Maritime Piracy: Reasons, Dangers and Solutions' explained several reasons behind piracy: the enormous volume of sea-borne trade, the difficulties regarding maritime surveillance, lax coastal and port side security, corruption and weak judicial system and the proliferation of small weapons in the developing world. The weak

⁵⁸ Robert C. Beckman, "Combatting piracy and armed robbery against ships in Southeast Asia: the way forward", *Ocean Development & International Law*, vol 33, no. 3-4, 2002, p. 317-341.

⁵⁹ Dana Dillion, "Maritime Piracy", *The SAIS Review of International Affairs*, vol. 25, no. 1, 2005, p. 155-165.

⁶⁰ Akash Agarwal, "Critical Analysis of Doctrine of Hot Pursuit in Respect of Maritime Piracy", 2020.

states, generally, fail to tackle the piracy and armed robbery of coastal waters, EEZ and territorial sea. The proliferation of the West African region and Somalia are testament to this fact. The other key factor is the general lawlessness in the high seas. The UNCLOS maintains that the high sea is a common heritage of mankind. Article 89 of the UNCLOS states that ‘No State may validly purport to subject any part of the high seas to its sovereignty.’⁶¹ Therefore, the remit of maintaining security at the high seas is not bestowed upon a single state, rather it requires all states to act in a cooperative manner to provide security at the high seas. Moreover, there are no comprehensive global conventions that govern the affairs of states in the high seas which indicates a ‘collective action problem’ in the maritime domain.

According to IMO’s annual reports of 2020 and 2019, most acts of piracy have been committed in the three regions: West Africa, Malacca strait and the South China Sea.⁶² Data on maritime piracy is being collected systematically by the IMB only since 1980s. Following chart shows global data on maritime piracy from 2000-2020.⁶³

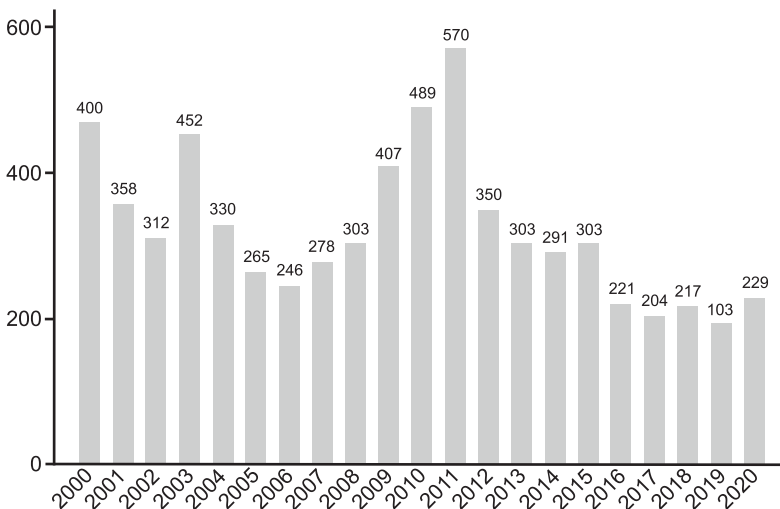


Figure 4. Maritime Piracy Incidents (2000-2020)

⁶¹ UN General Assembly, “Convention on the Law of the Sea”, 10 December 1982, Available at: <https://www.refworld.org/docid/3dd8fd1b4.html>.

⁶² IMO, “Reports on acts of maritime piracy and armed robbery against ships-Annual Report-2020”, International Maritime Organization, 2021.

⁶³ Ibid.

The number of piracy acts, as can be seen from the chart, was the highest in 2011. This led the UN Security Council to adopt a unanimous resolution to counter piracy specifically off the coast of Somalia, which is renewed as Resolution 2608 (2021).⁶⁴ The global hotspot of piracy later on shifted off the coast of Somalia to Asia and specially to Southeast Asia. The nature of piracy took a different turn as it turned into a combination of maritime piracy and terrorism with terrorist groups being active in southern Philippines. In 2020, however, the highest number of piracy in the Asian region took place in the Malacca Strait, with a total of 48 incidents and majority of those taking place in the territorial waters.⁶⁵ These numbers establish two key trends of piracy: first, piracy is prevalent in the busiest commercial passages of the world and secondly, it takes place in the regions where states are the weakest and do not possess the capability to protect the maritime domain from the actions of non-state actors engaged in piracy and armed robbery.

The Bay of Bengal has long been a major hotspot for piracy. A number of pirate gangs were active in the Sundarbans belt of Bangladesh. A joint coordination task force comprised of RAB, Border Guard Bangladesh (BGB), Coast Guard and Forest Department was established to drive out pirate gangs from the Sundarbans in 2012. The joint operations up until 2019 saw 246 successful drives and the arrest of 586 pirates. A general amnesty and financial assistance of Tk. 1,00,000 was also provided to the captured pirates to re-start their lives.⁶⁶ However, there is a climate change angle to the prevalence of piracy in Bangladesh. The climate induced disasters such as increasing salinity and competition over shrinking fish stocks, have pushed many local farmers and fishermen to pursue their luck in piracy on the high sea.⁶⁷ The socio-economic causes piracy thus require more particular focus to investigate these phenomena on the ground.

⁶⁴ The United Nations, "Security Council Renews Authorization for International Naval Forces Fighting Piracy off Coast of Somalia", 2021, Available at: <https://www.un.org/press/en/2021/sc14717.doc.htm>.

⁶⁵ Statista, "Number of piracy and armed robbery attacks allegedly committed in Asia in 2020, by location of incident", 2021, Available at: <https://www.statista.com/statistics/1122021/piracy-attacks-asia-by-location/#:~:text=The%20Malacca%20Strait%20recorded%20the,of%20them%20in%20territorial%20waters.>

⁶⁶ Shaikh Abdur Rahman, "The Untold Stories of Pirate-Free Sundarbans", *The Independent*, 2021, Available at: <https://m.theindependentbd.com/post/272235>.

⁶⁷ Peter Schwartzstein, "Pirates and Climate Change: A Dispatch From The Bangladeshi Sundarbans", *The Center For Climate & Security*, 2022. <https://climateandsecurity.org/2018/06/pirates-and-climate-change-a-dispatch-from-the-bangladeshi-sundarbans/>.

5.2.3.1. Maritime Terrorism in the Indian Ocean and the Bay of Bengal

Maritime terrorism is a mode of terrorism that takes place in the maritime domain against non-combatant targets. Peter Chalk (2008) identified several factors behind the increasing focus of extremist groups in the maritime domain. He maintained that the five factors have influenced the proliferation of terrorism in the maritime domain: first, the inadequate monitoring and surveillance methods have allowed the terror outfits to carry out operations in the high seas and the coastal regions. Second, the availability of specialized equipment and resources to conduct such operations against maritime targets. Third, the massive economic significance of maritime trade has given the non-state actors the opportunity to cause mass economic destabilization. Fourth, maritime terrorism is an effective way to inflict 'mass coercive punishment' and gain attention of enemy audiences and fifth, the shipping industry offers the terror groups the means to freely move weapons and assets from one place to another.⁶⁸

5.2.3.2 Definition of Maritime Terrorism

Maritime terrorism, just as terrorism is a contested concept. Scholars have given several definitions of maritime terrorism. According to Christopher C. Joyner, maritime terrorism is the 'systematic use or threat to use acts of violence against international shipping and maritime services by an individual or group to induce fear and intimidation in a civilian population in order to achieve political ambitions or objectives'.⁶⁹ The lack of agreed definitions, however, has been a problem in defining the acts of terrorism and differentiate it from other types of crimes committed against civilian and non-combatant targets. Council for Security Cooperation in the Asia Pacific Working Group defined maritime terrorism as '... the undertaking of terrorist acts and activities within the maritime environment, using or against vessels or fixed platforms at sea or in port, against coastal facilities or settlements, including tourist resorts, port areas and

⁶⁸ Peter Chalk, "The maritime dimension of international security: terrorism, piracy, and challenges for the United States", vol. 697, 2008.

⁶⁹ Christopher C. Joyner, "Suppression of Terrorism on the High Seas: The 1988 IMO Convention on the Safety of Maritime Navigation", *Israel Yearbook on Human Rights*, vol 19, 1989, p. 343-369.

port towns or cities”.⁷⁰ These definitions of maritime terrorism are hinged on the traditional understanding of terrorism in general. Though contested, several scenarios are common in defining the acts of terrorism: first, the use of violence against civilian and non-combatant targets and secondly, acts committed to pursue political or ideological objectives. Thus, in this study, we can adhere to the above-mentioned principles to define maritime terrorism.

5.2.3.3. Maritime Terrorism in the Indian Ocean

The rapid expansion of maritime trade and connectivity has likewise increased the threats of violence in the maritime domain. Like Piracy, maritime terrorism has become emerging and present threat to the global maritime order. After 9/11, the acts of maritime terrorism have become much more visible, however, the terrorist and militant groups have long used terrorist tactics to advance ideological and political goals. The Liberation Tigers for Tamil Eelam (LTTE) established its own ‘Naval capabilities’ to fight against Sri-Lankan Navy. Known as ‘Sea Tigers’, the group routinely targeted military, naval and commercial vessels at sea.⁷¹ Other organizations such as the Al-Qaeda, Jemaah Islamiah and Moro Islamic Liberation Front who have resorted to maritime terrorism. The case of Al-Qaeda is significant in the context specially in the post-9/11 security environment. With land-based terrorism in focus and shrinking space for terrorist launching pads in regions such as Afghanistan and parts of Middle East, Al-Qaeda resorted to ‘economic targets’ in maritime space. The key choke-points of the world, where most of the world’s important trade arteries have passed through, provided fertile targets for the terrorist group.⁷² The attack on USS Cole in year 2000, was an extreme example of terrorist attack on a naval vessel. The incident caused the death of 17 US military personnel and \$250 million of damage.⁷³ The event was first of its kind terrorist incident in the maritime sphere, inspired other terrorist and militant groups to carry out attacks in similar fashion. In Maritime South East Asia, the Abu Sayyaf group is particularly active in maritime domain. The group, while particularly, active in the Southern Philippines have adopted a tactic of carrying out terrorist operation as it continues to face

⁷⁰ Lisa Otto, Suzanne Graham, and Adrienne Horn. “Maritime Terrorism”, In *Global Challenges in Maritime Security*, 2020, p. 145-159.

⁷¹ Bjørn Møller, “Piracy, maritime terrorism and naval strategy”, no. 02, 2009.

⁷² Abhijit Singh, “Maritime Terrorism in Asia: An Assessment.” ORF Occasional paper, vol 215, 2019.

⁷³ Akiva J. Lorenz, “Al Qaeda's maritime threat”, *International Institute for Counter-Terrorism*, vol 17, 2007.

assault on land by the Philippines Army. The Superferry 14 incident led to the death of nearly 100 civilians.⁷⁴ The close maritime space of South East Asia, which happens to be the busiest water ways of the world, provides the terror groups a wide array of targets and thus is the most vulnerable to maritime terrorism. The ‘containerization’ of the global maritime trade means global trade is heavily concentrated in few ‘Mega-ports’. Any terrorist attacks on these mega ports or even mere threat of it could paralyze the global supply chain, causing billions of dollars of economic damage.⁷⁵ There is a level of overlap between terrorism and piracy in terms of modus operandi, approach and tactics.⁷⁶ While piracy is carried out for private ends, terrorism has a political and ideological context. However, both activities can significantly deteriorate the security environment in the Indo-Pacific maritime domain. At the same time, there are evidences of collaboration between professional pirates and terrorists. In Somalia, the pirates have supplied the terrorist groups such as Al-Shabab with weapons and fighters in exchange of money and non-interference in their criminal activities.⁷⁷

In South Asia and the Bay of Bengal, there has not been any major incidents of Maritime terrorism after the demise of LTTE. However, certain attacks have close relevance to the threat of maritime terrorism in South Asia. The terrorist attacks on Pakistani naval base PNS Mehran in 2011 by Al-Qaeda and Tehrik-i-Taliban Pakistan (TTP), followed by similar attack on PNS Zulfiqar, a Pakistani frigate in Karachi.⁷⁸ These attacks show that even heavily guarded high security naval assets are not completely secured from the threats of terrorism. However, the threat of maritime terrorism against non-combatant targets are similarly persistent. There is, especially a potential threat of terrorist groups carrying out ‘Mumbai style’ land-based terrorism while using sea as a mode of transporting personnel and weapons. In such scenario, it is difficult to identify and prevent terrorist attacks without prior solid intelligence. In Mumbai attack, the

⁷⁴ Rommel C. Banlaoi, “Maritime Terrorism in Southeast Asia: The Abu Sayyaf Threat”, *Naval War College Review*, vol 58, no. 4, 2005, p. 62-80.

⁷⁵ Justin SC Mellor, “Missing the boat: The legal and practical problems of the prevention of maritime terrorism”, *Am. U. Int’l L. Rev.* vol 18, 2002, p. 341.

⁷⁶ Graham Gerard Ong, “Ships Can be Dangerous Too: Coupling Piracy and Maritime Terrorism in Southeast Asia’s Maritime Security Framework”, Singapore: Institute of Southeast Asian Studies, 2004.

⁷⁷ Alex Ward, “Pirates and Terrorists Are Working Together Now in Somalia”, Vox. Available at: <https://www.vox.com/world/2017/7/13/15948184/pirates-terrorists-somalia-isis-shabaab>.

⁷⁸ Abhijit Singh, 2019, op.cit.

terrorist used fishing vessel as means of transportation to avoid the eyes of security agencies.⁷⁹ The lessons of the Mumbai attack are also relevant for Bangladesh. The maritime territory of Bangladesh is around 1,18,813 sq.km which is nearly as large as the land area of the country. However, compared to land area, only fraction of Bangladesh's total military and non-military resources are devoted to the security of the maritime domain. The large coastal belt of Bangladesh, including the military and civilian infrastructures should be brought under comprehensive security and surveillance arrangements to deter any future terrorist threats.

5.2.4.1. Maritime Mixed Migration

A non-traditional security threat, which is commonly misunderstood and therefore, creates a global governance issue is of maritime mixed migration. While using the understanding of maritime 'mixed' migration, we need to understand that this includes the flow of both economic fortune seekers and refugees, who are fleeing because of repressive regimes or being persecuted in their country of origin. What is interesting here that the international bodies who deal with global governance in this area often fail to distinguish the reasons for fleeing and may politically conflate the two categories. Examples of this can be shown in the treatment of Syrian refugees who were termed as economic fortune seekers by some political leaders in Europe. Scholars have argued that the area of mixed migration suffers from 'categorical fetishism' as if the category of 'mixed' migration exist as it is ontologically.⁸⁰ On the other hand, this category also does not recognize areas of climate refugees, specially from the South Pacific Island nations who are being subjected to sea level rise and climate disaster, which is neither of their own creation, nor there are choices available to reverse or prevent the situation. It is to be noted that a Bangladeshi citizen is recognized as the first climate refugee in France in 2021, who argued and established his case by pointing out how the level of air pollution would be an existential threat for him should he made to return to Bangladesh.⁸¹

⁷⁹ J. Y. Wee, "Maritime Terrorism Threat in Southeast Asia and Its Challenges", *Journal of the Singapore Armed Forces*, vol 43, no. 2, 2008, p. 32-44.

⁸⁰ Heaven Crawley and Dimitris Skleparis. "Refugees, migrants, neither, both: categorical fetishism and the politics of bounding in Europe's 'migration crisis'", *Journal of Ethnic and Migration Studies*, vol 44, no. 1, 2018, p. 48-64.

⁸¹ Amali Tower and Ryan Plano, "French Court recognizes Country's first Environmentally impacted Migrant", *Climate Refugees*, 2021. Available at: <https://www.climate-refugees.org/spotlight/2021/1/15/french-court>.

Maritime Mixed Migration	Flow of both refugees and migrants
Channels of Operations	Land and sea—maritime routes are primarily used to cross longer paths
Actors	Direct: refugees and migrants; Indirect: abettors in different capacities.
Means of ‘travel’	Refugees and migrants use similar types of vehicles and similar routes
Entitlements	Under the international humanitarian law—YES! Under statist laws: NO!

Table 01. Maritime Mixed Migration

The Bay of Bengal has seen its fair share of maritime mixed migration. In this section, the cases discussed are of ‘boat people’ and Forcibly Displaced Myanmar Nationals (FDMN)/Rohingyas.

5.2.4.2. The ‘Boat’ People in the Bay of Bengal

International attention turned towards Bangladesh and the Bay of Bengal in 2015 as crisis on ‘boat’ people unfolded. It was highlighted that the ‘boat people’ were a mix of Rohingya refugees and Bangladeshis.⁸² It raised concerns on what drove Bangladeshis to leave the country and portrayed a negative image of the country. A number of independent researches rather showed that Bangladeshi migrants tend to go to Middle Eastern countries due to varied economic incentives as well as religious affinity with the people of these countries. While a percentage of the ‘boat’ people were Bangladeshis, international discourses failed to pay attention that the majority of these ‘boat’ people originated from Myanmar. The repression on the Rohingyas by Myanmar military led them to cross the Bay and either come to Bangladesh or to go to Southeast Asian countries of Malaysia and Indonesia and as far as in Australia. The rising concerns did not yet alarm the international community to pay attention what was going on inside the country, as a result of which the Myanmar military committed genocidal atrocities against the Rohingyas in August 2017. Bangladesh had to open its borders out of humanitarian concern, which has created another area of non-traditional security concern for Bangladesh.

⁸² Mubashar Hasan, “The international politics of Bangladeshi ‘boat people’”, East Asia Forum, 2015, Available at: <https://www.eastasiaforum.org/2015/09/12/the-international-politics-of-bangladeshi-boat-people/>.

5.2.4.3. Rohingya Crisis and its Regional Implications

The Rohingya crisis is regarded as one of the greatest humanitarian crises of the world. Rohingya people have been continuously facing persecution in Myanmar since its independence. However, the level of persecution became more intense after the Military Junta took power in the country in 1962. The first Rohingya exodus took place after the operation Nagamin in 1978, when the Burmese military and immigration authorities systematically targeted Rohingyas in northern Rakhine state under the pretext of clearing illegal immigrants from the state.⁸³ The Rohingya issue is rooted in an assumption that Rohingyas are Bengali Muslim immigrants from Bangladesh who have no connection to Rakhine state. Such belief is widespread among Myanmar's military and Burmese Buddhist nationalists who see the Rohingyas as a demographic and security threat. As part of the marginalization campaign against the minority group, Myanmar's military junta passed a discriminatory citizenship law in 1982 which denied the Rohingyas of citizenship, thus effectively took away all political and civil rights from them. The 1982 law is widely regarded as the major obstacle towards the settlement of the Rohingya question. To drive the Rohingyas out of Rakhine state, Myanmar's military has carried out several sectarian offensives against the population since 1970's. In the 1991-92 period, 3,00,000 Rohingyas were driven out to Bangladesh. Small scale expulsions took place throughout the 90's. However, 226,576 Rohingyas were repatriated to Myanmar after 12 years of bilateral negotiations between both countries.⁸⁴

The largest sectarian conflict took place in 2017, when Rohingya militant group Arakan Rohingya Salvation Army (ARSA) carried out an attack on Myanmar security forces. In retaliation Myanmar military conducted Counter Terrorism operation against the militants which caused Refugee exodus to Bangladesh. According to UNHCR, more than 900,000 Rohingya refugees are currently living in Refugee camps across Cox Bazar region. However, many unofficial sources put this figure at 1.1 million.⁸⁵ The Rohingya crisis generated a range of responses

⁸³ Akm Ahsan Ullah, "Rohingya refugees to Bangladesh: Historical exclusions and contemporary marginalization", *Journal of Immigrant & Refugee Studies*, vol 9, no. 2, 2011, p. 139-161.

⁸⁴ Ibid.

⁸⁵ Tazreena. Sajjad, "As Bangladesh Hosts Over a Million Rohingya Refugees, A Scholar Explains What Motivated The Country To Open Up Its Borders", *The Conversation*. 2022, Available at: <https://theconversation.com/as-bangladesh-hosts-over-a-million-rohingya-refugees-a-scholar-explains-what-motivated-the-country-to-open-up-its-borders-133609>.

from the international community. Many countries, especially European and the United States, took strong diplomatic stances against the Myanmar military for their human rights abuses against the Rohingya civilians. However, many other countries openly or tacitly backed Myanmar at the international arena. In this chapter we will discuss the responses from the international community pertaining to the Rohingya crisis.

The Western governments, especially the US strongly condemned the actions of the Myanmar government on the eve of the 2017 violence in the Rakhine state. While the Trump administration of that time urged the security council to adopt ‘Strong and Swift’ actions, it came short on imposing any sanctions on the Myanmar government. China came to the rescue of the Myanmar government. Beijing has been one of the leading proponents of Myanmar’s narrative on the Rohingya issue. It has categorically warned the global community against ‘internationalizing’ the issue. It has been one of the leading defenders of Myanmar in the UN Security Council. Beijing has also emerged as a mediator between Bangladesh and Myanmar. It has arranged a virtual tripartite meeting in January, 2021 to settle the issues related to the repatriation process.⁸⁶ In the early stage of the crisis, China offered a three-stage plan to help de-escalating the conflict on the ground by assisting both nations to return to normalcy and also called upon the UN and the international community to create an appropriate environment to reach a ‘suitable agreement’ on the crisis.⁸⁷

Beijing has emerged as one of the few supporters of Myanmar's military Junta in the International stage in the aftermath of the military coup of February, 2021. China sees the crisis in Myanmar as an opportunity to advance its geopolitical goals in the country. The China Myanmar economic corridor (CMEC) is a significant bilateral engagement between the two countries and holds immense importance for China’s connectivity and strategic interests. The Rohingya crisis cannot be seen separately from the growing geopolitical competition in the Bay of Bengal region. However, Bangladesh holds an important position within Chinese

⁸⁶ Mostafa Safi, “Bangladesh and Myanmar Resume Talks on Rohingya Repatriation”, *TheDiplomat.com*, 2022, Available at: <https://thediplomat.com/2022/02/bangladesh-and-myanmar-resume-talks-on-rohingya-repatriation>.

⁸⁷ Sutirtho Patranobis, "China Says 3-Step Approach to Tackle Rohingya Crisis Approved By Myanmar And Bangladesh", *Hindustan Times*, 2022, Available at: <https://www.hindustantimes.com/world-news/china-says-3-step-approach-to-tackle-rohingya-crisis-approved-by-myanmar-and-bangladesh/story-EXINfEalCsho4rcHBAEknN.html>.

geo-political design. Beijing has made commitments to invest heavily in Bangladesh. In 2016, during Xi Jinping's visit to the country, China signed bilateral deals of \$22.5 billion dollars in 27 projects, mostly in connectivity infrastructures and energy sector.⁸⁸ Thus, China had shown symbolic gestures to Bangladesh by supporting the repatriation in principle but without drawing ire from the Military rulers in Myanmar. The Chinese role in the crisis has been described as a 'Bridge of communication' between the two parties.⁸⁹

Indian role in the crisis has been most ambiguous, in one hand it has supported Myanmar 'counter-terror' assault on the Rakhine state and simultaneously sympathized with Bangladesh's position on the refugee crisis. Prime Minister Modi during his visit to Myanmar condemned the 'terrorist' attacks by ARSA but did not offer any solidarity to the displaced Rohingyas. However, under Bangladeshi pressure, the Indian government moderated its stance on the issue. During the visit of late Indian Foreign Minister Sushma Swaraj to Bangladesh, she reiterated New Delhi's support for repatriation of the Rohingyas. She maintained "It is clear that normalcy will only be restored with the return of the displaced persons to Rakhine state".⁹⁰ However, the Rohingya issue has a domestic dimension in the context of India. The Indian government has long regarded the Rohingya refugees in the country as a 'security threat'. It has taken measures to gradually deport the 40,000 Rohingyas living in the country back to Myanmar, despite protests from the human rights groups.⁹¹ These domestic dynamics have complicated India's response to the crisis. Strategically, Myanmar is a significant country for Indian policymakers. New Delhi has several interests in maintaining steady ties with Myanmar's military junta: first, because of the connectivity initiatives such as the Kaladan Project which aims to connect the north-eastern India to Kolkata via the Sittwe port and secondly, Indian policymakers have clear interests in limiting China's influence in the country. This

⁸⁸ Rubiat Saimum, "The prospect of Belt and Road Initiative in the context of Bangladesh", *China Report*, vol 56, no. 4, 2020, p. 464-483.

⁸⁹ Dhaka Tribune, "Rohingya Repatriation: Beijing To Act As Bridge For Early Results", 2022, Available at: <https://archive.dhakatribune.com/bangladesh/rohingya-crisis/2021/06/25/rohingya-repatriation-beijing-to-act-as-bridge-for-early-results>.

⁹⁰ The Wire, "Normalcy Will Only Be Restored with Return of Rohingya to Myanmar: Sushma Swaraj", The Wire, 2022, <https://thewire.in/diplomacy/normalcy-will-only-be-restored-with-return-of-rohingya-to-myanmar-sushma-swaraj>.

⁹¹ Zeba Siddiqui, "India's Top Court Paves Way For Rohingya Deportations To Myanmar". Reuters, 2022, Available at: <https://www.reuters.com/article/us-myanmar-rohingya-india-idUSKBN2BV2FG>.

requires being silent on the Rohingya issue and other human rights violations in Myanmar. However, Bangladesh is also an important regional partner state of India. To appease Bangladesh, New Delhi has been supporting the idea of ‘repatriation’ in principle and occasionally sending aid to Rohingya refugees in Bangladesh. What both India and China are not willing to do, is confronting the Myanmar military for their human rights abuses. The support of the regional powers has been the key strength of Myanmar defying the western sanctions and condemnation. While in 1990’s, the global pressure and negotiation forced Myanmar to repatriate the Rohingyas. Such pressure did not materialize after the 2017 crisis, due to its extensive commercial, political and military ties with the regional countries, mostly with China and to a lesser extent India. These ties provide Myanmar with an economic lifeline which helped it to survive without western economic support.

Sanctions imposed by Western countries have not been effective in changing the course of Myanmar’s actions. The European Union (EU) imposed three rounds of sanctions against key Myanmar officials and froze their assets. Those sanctions also prohibited the EU nations from exporting military equipment as well ‘dual use’ materials to Myanmar.⁹² However, these sanctions are unlikely to force the Junta to moderate its behavior as they could get a steady supply of military equipment from China, its largest defense and economic partner. New Delhi has also proven to be a reliable defense partner of Myanmar. In October 2020, India supplied Myanmar with a Kilo-class submarine to increase the capability of the latter’s Navy. The US government has imposed similar sanctions against Myanmar’s military rulers in the aftermath of the 2021 coup. But these sanctions too targeted only members and entities related to Myanmar’s military, without going further with ‘hard economic’ sanctions targeting Myanmar’s economy and banking systems. Some analysts believe that such sanctions would further push Myanmar into Beijing’s orbit, thus the Western governments have been against the impositions of serious sanctions against the Myanmar government. However, it is not reasonable to think that any ‘sanctions’ would reverse Chinese influence in Myanmar given the extensive ties between Beijing and Naypyidaw.

⁹² Consilium Europa, “Myanmar/Burma: Third Round of EU Sanctions Over the Military Coup and Subsequent Repression”, 2022, Available at: <https://www.consilium.europa.eu/en/press/press-releases/2021/06/21/myanmar-burma-third-round-of-eu-sanctions-over-the-military-coup-and-subsequent-repression/>.

Another key issue has been the recognition of the ‘genocide’ of the Rohingyas by Myanmar’s security forces. Despite having reasonable evidence of genocide being committed against the Rohingyas, the US government had resisted the demands of defining acts of crimes against the community ‘genocide’. However, the Biden administration has reversed the Trump administration’s status quo on the Rohingya question and declared the crimes committed against the Rohingyas as ‘genocide’.⁹³

5.2.5.1. The Overlooked Nexus between Business and Politics

In the study of strategy, the increasingly important but overlooked area that often remains outside of evaluating a threat matrix for a country is to establish a connection between business and politics. In an age of globalization, it is not only important to understand connectivity issues but threats to business, which includes an array of issues starting from but not limited to deep sea port capacity, ensuring of uninterrupted supply chain and export destinations. These issues not only determine who a state shall connect with but also how it shall promote its competitiveness in international market for a sustained economic stability. A deep-sea port for a country ensures so that its export goods do not have to depend on a feeder vessel, which delays the shipment of products to its local market and delays its exports to international buyers. For Bangladesh, the lack of having a deep-sea port undermines development of competitive pricing for its products as it has to primarily follow three processes of shipment:

- a) Bringing products to the Chittagong Port
- b) Carry products to the feeder vessels
- c) Carry products to the mother vessels

This entire process is time-bound and delays not only Bangladesh’s exports but affects its competitiveness in comparison to Vietnam and other countries as international companies are increasing emphasizing on shorter lead time. Bangladeshi products, in lieu of a deep-sea port, are rerouted to either Sri Lanka or to Singapore. Talks are on board for Bangladeshi products to be exported to India using Chennai as the intermediary port, which has a strategic significance for Bangladesh. In such a case, its export to India, hypothetically without Bangladesh’s own deep-sea port, shall be beholden to political and business

⁹³ Timothy McLaughlin, “Why The U.S. Finally Called A Genocide In Myanmar A ‘Genocide’”, *The Atlantic*, 2022, Available at: <https://www.theatlantic.com/international/archive/2022/03/blinken-myanmar-genocide-rohingya-muslims/627124/>.

interests of India. In this section, two particular areas are elaborated upon—Bangladesh’s port diplomacy and the supply chain issue and its implications.

5.2.5.2. Bangladesh’s Port Diplomacy

Bangladesh has been looking forward to gain uninterrupted access to its southern neighbor, the Bay of Bengal, since it emerged as an independent nation. It has pursued to resolve maritime disputes with India and Myanmar since early 1970s, which only materialized in 2014 and 2012, respectively. With maritime boundary demarcation issues being resolved by UNCLOS, came Bangladesh’s opportunity to emerge as a regional hub of trade and commerce. The fly in the ointment, however, is that Bangladesh does not have a deep-sea port, which is an essential element to further its trade and commerce. Diplomacy in Bangladesh to become Bangladesh’s partner in constructing its first deep sea port became pronounced shortly after 2014.⁹⁴ The first spot was chosen in Sonadia and a deal for China to construct it was to be signed in 2016 during Bangladesh’s Prime Minister’s visit to China. The deal, however, was scrapped due to citing of ‘environmental concerns’ from Bangladesh’s part, although observers have commented that it was rather geopolitical tussle over Bangladesh and China’s access to the country through building a critical infrastructure rather played a role for the project to be buried.⁹⁵ The decision to construct a deep-sea port was decided later at a place 25 kilometers from Sonadia to Matarbari. Japan International Cooperation Agency (JICA) is funding the construction of the project, for which land is already acquired and work has begun. The plan is to construct a 300-metre-long multipurpose terminal at the first stage of the work and another 460-metre-long container terminal by 2026, where ships with twenty feet equivalency would be able to berth.⁹⁶ Payra deep-sea port was being built by

⁹⁴ 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/>.

⁹⁵ Rejaul Karim Byron, “Plans for a deep seaport at Sonadia nixed”, *The Daily Star*, 01 September 2020; Sudha Ramachandran, “Bangladesh Buries the Sonadia Deep-Sea Port Project”, *The Diplomat*, 12 October 2020, Available at: <https://thediplomat.com/2020/10/bangladesh-buries-the-sonadia-deep-sea-port-project/>.

⁹⁶ Arifur Rahman, “Deep sea port: From Payra to Matarbari, Prothom Alo”, *English*, 13 November 2021, Available at: <https://en.prothomalo.com/business/deep-sea-port-from-payra-to-matarbari>; Nazimuddin Shyamol, “Deep Sea Port construction work resumes”, *The Financial Expree*, 18 February 2022, Available at: <https://thefinancialexpress.com.bd/trade/deep-sea-port-construction-work-resumes-1645156990>.

China, which, however, has been downgraded to being a sea port only, where medium-sized vessels berth. While the port was seen as the nerve center of the Bangladesh-China-India-Myanmar (BCIM) corridor, it shall now operate like the Chittagong and the Mongla ports.⁹⁷ In addition to these, Chittagong Bay Terminal is being constructed in Patenga, right off the Chittagong Port, which is divided into 19 components and divided into different partners for its construction. Although the port shall not be a deep-sea port owing to the lack of depth of 15 meters required to fall within the category, it is going to nearly accomplish the depth of 13-14 meters, which is to be completed by 2024. While Bangladesh's decision to divide the Chittagong Bay Terminal into different components show a political maturity so that the country is not dependent on any single actor, the business contracts must ensure so that Bangladesh's interests are not compromised and these terminals are open to receive freights form all actors.

The core logistics issue for transportation of goods for Bangladesh is to cut down its route to Europe via having its own deep-sea ports, as majority of Bangladesh's exports head to Europe and the US. Under the current system, it takes for about 35-40 days for Bangladeshi goods to reach to Europe via either Colombo or Singapore ports. The first direct shipment of Bangladeshi goods to Italy started since February, where it took 18-20 days for shipment of products. This encouraged more countries such as Slovenia, Portugal and Denmark to initiate direct shipping as it reduces 30 to 40 per cent of service costs and reduces shipping time to about a week.⁹⁸ New business companies are initiating direct services to a number of European countries like in the UK, Netherlands and Spain, which would reduce dependency on other ports, the booking of bigger container vessels from these ports and more importantly, reduce shipment time to around 23 days.⁹⁹ Similarly, new container ships are being introduced in a new route, which are to avoid the process of transshipment. Much-needed raw materials for ready-made garments (RMGs) industries imported from China now shall reach to

⁹⁷ Shahrier Khan & Morshed Noman, "Payra downgraded to seaport from deep seaport", *The Business Standard*, 19 April 2021; Sharier Khan, Payra port to host medium-sized ships from Aug 2022, *The Business Standard*, 22 May 2021.

⁹⁸ The Loadstar, "More time-saving Bangladesh-Europe direct shipping services on the cards", 15 February, 2022, Available at: <https://theloadstar.com/more-time-saving-bangladesh-europe-direct-shipping-services-on-the-cards>; Dwaipayana Barua, More EU countries keen for direct shipping with Ctg port, *The Daily Star*, 20 February, 2022.

⁹⁹ *The Business Standard*, "Direct freight shipping to UK soon", 28 April 2022.

the Chittagong port within 12-13 days after this would be introduced in late-April, 2022.¹⁰⁰ Having its own deep-sea port will enable Bangladesh to make room for bigger container vessel and thus, increase business competitiveness of Bangladesh's products.

Bangladesh's long-term goal to emerge as a regional hub of connectivity through enhancing its port capacity is going to mitigate its existing incapacity to host mother vessels and dependence on countries like Sri Lanka and Singapore. The strategic importance of Bangladesh developing its port facilities through building critical infrastructure cannot be overstated. This shall ensure Bangladesh being able to provide maritime trade support and facilities to India's land-locked Northeast region, Nepal and Bhutan.

5.2.5.3. Disruptions in Global Supply Chain and Bangladesh's Concerns

The level of interconnectedness and complex interdependence in a globalized world did not seem so visible until the Covid-19 pandemic hit since early 2020. The world looked comfortable and operating easily when it came to businesses being able to maintain their supply chains uninterrupted. That China gradually elevated itself as a 'Factory of the World' received its recognition but what implications it might have in the case of a disruption in China hardly came to strategic discussions. In fact, strategic attention was given to China's rise in the sense of how it was spreading its connectivity, investment and operations in other countries through BRI. If China closes, the repercussions of that hardly came to the imagination of strategic thinking. Strategies and the concept of security being military-centric have created such blindness, which was revealed in a shocking manner as the pandemic started. The global dependence on China's factories as well as the closure of major ports due to the pandemic created a global supply chain crisis in 2020 hitherto unseen of. As the world is experiencing yet another major surge in the pandemic in April, 2022 and major cities in Shanghai have closed down, the global supply chain is once again at a breaking point.¹⁰¹ This has led to not only congestions at ports, delay in delivery but also to a rising cost of shipping affecting global economy. As an observer has pointed out, "Whatever the

¹⁰⁰ Dwaipayan Barua, "New direct shipping service with China begins this month", The Daily Star, 13 April 2022.

¹⁰¹ Kandy Wong and He Huifeng, China's manufacturers remain key to global supply chain, producers 'even more dependent' on world's factory, South China Morning Post, 29 April 2022, Available at: <https://www.scmp.com/economy/china-economy/article/3175865/chinas-manufacturers-remain-key-global-supply-chain-producers>.

problems at sea, they are matched by those ashore”, the pandemic has created a unique type of non-traditional threat in the maritime domain, which is inextricably linked with what happens in inland areas. The recognition of this is found in the declaration of Quad summit held in March 2021, which acknowledged the importance of working on creating the resilience of global supply chain.

For Bangladesh, the lack of having any deep-sea port already put its trade and business at the mercy of other countries. With supply chains being interrupted, it has created newer areas of vulnerability for Bangladesh, and in this context, in two particular areas-agro-sector and business sector. The threat scenario for Bangladesh in these two sectors are different in terms of both sources and the delivery process. While the issue of food security is discussed in a separate section, this section deals with supply chain issue of agro products. On top of it, freight charges have increased exponentially.

The remarkable relationship between international politics and business became truly visible in the 21st century. The rise of China and the growing significance of the Indo-Pacific region lies in effective control on economic statecraft and leading and guiding it through an efficient political leadership. Securing physical lands and waging wars are ineffective in today's politics than actually intruding in markets, creating trading partnership and securing sea lanes of communications. Disruptions on supply chains thus create a global instability where markets, although operates internally, are influenced by global chain of events.

5.2.6.1. Climate Change and Regional Security

Asian countries have been producing greenhouse gases significantly during the last two decades, mainly for artificial reasons. Four of the ten highest CO₂ emitters from fossil-fuel use nowadays are located in Asia. Though China as an emitter is second now but may overtake the United States as the largest emitter by 2030.¹⁰² India (fourth), Japan (fifth), and South Korea (seventh) are also within the top eight emitter list globally.¹⁰³ Increased CO₂ and other greenhouse gases from industries, transportation, electricity production sector, commercial and

¹⁰² Emma Newburger, “China’s greenhouse gas emissions exceed those of U.S. and developed countries combined, report says”, CNBC, 6 May 2021, Available at: <https://www.cnbc.com/2021/05/06/chinas-greenhouse-gas-emissions-exceed-us-developed-world-report.html>.

¹⁰³ Toufiq A. Siddiqi, “The Evolving Role of Asia in Global Climate Change”, East-West Center.

residential activities, agriculture, and deforestation result in climate change and global warming.

A report published at the IUCN World Conservation Congress concluded that since the 1970s, oceans had taken almost 93% of the produced warming from human activities.¹⁰⁴ In that perspective, if the heat generated between 1955 and 2010 had gone into the Earth's atmosphere instead of the oceans, temperatures would have jumped by nearly 36.2°C.¹⁰⁵ The Bay of Bengal is a part of the ocean that is now a matter of concern.

The Bay of Bengal is a home for many species and a home of economic benefits for the country. Climate change is now considered a severe global threat to marine ecosystems as it changes ocean chemistry resulting in livelihood and production threats. Global climate change is responsible for illegal migration, sea-level rise, sea surface temperature, ocean heating, ocean acidification, coastal flooding, salinity intrusion etc. Nowadays, climate change and its impact as a non-traditional security threat is a hot topic of international discussion. Bangladesh is an open addressed climate vulnerable countries globally,¹⁰⁶ as its unfavorable geographic location; flat and low-lying topography; high population density; dependence on climate change-related livelihood facilities, particularly agriculture and fisheries; and inefficient institutional aspects.¹⁰⁷

Addressing climate change, Bangladesh has allocated more than \$10 billion and also has been recognized globally as a resilient climate country¹⁰⁸ for developing human capacity to fight against climate change vulnerabilities and also enhancing the capacity of government agencies to respond to any immediate emergencies, strengthening coastal polders, building emergency cyclone shelters

¹⁰⁴ IUCN, "Latest ocean warming review reveals extent of impacts on nature and humans", 5 September 2016, Available at: <https://www.iucn.org/news/secretariat/201609/latest-ocean-warming-review-reveals-extent-impacts-nature-and-humans>.

¹⁰⁵ Brittany Patterson, "How Much Heat Does the Ocean Trap? Robots Find Out", Climate Wire, 18 October 2016, Available at: <https://www.scientificamerican.com/article/how-much-heat-does-the-ocean-trap-robots-find-out/>.

¹⁰⁶ Saleemul Huq, "Climate Change and Bangladesh," *Science*, vol 294, no. 5547, 2001, p. 1617, DOI: 10.1126/science.294.5547.1617.

¹⁰⁷ MOEF (Ministry of Environment and Forest, "National Adaptation Programme of Action Final Report", UNFCCC, 2005.

¹⁰⁸ Ministry of Environment and Forests, "Climate Change and Disaster Management in Bangladesh".

and adopting advanced farming systems, reducing saline water intrusion and developing timely warning facility and emergency management practice.¹⁰⁹

Bangladesh Government has developed the "Bangladesh Climate Change Strategy and Action Plan" published in 2008, including policies, plans & regulations.¹¹⁰ To build the capacity and stability under climate change vulnerabilities, the "Climate Change Action Plan" is a 10-year target programme (2009-2018) that is mainly built on six pillars: 1) food security, social protection and health; 2) comprehensive disaster management; 3) infrastructure; 4) research and knowledge management; 5) mitigation and low carbon development, and 6) capacity building and institutional strengthening. All the pillars are based on poverty reduction with economic and social stabilization.

The Government of Bangladesh has recently capitalized on \$45 million and established a National Climate Change Fund focused mainly on adaptation. The "National Adaptation Programme of Action (NAPA)", developed by the Government in 2005, is dedicated to helping in any urgent and immediate needs for adaptation depending on the priority basis. A long-term integrated techno-economic mega plan, "The Bangladesh Delta Plan (BDP) 2100", integrates all delta-related sector plans and policies for their resilience.¹¹¹ Still, there are some irrelevancy and immaterial information for the application of the BDP.¹¹² Out of ten consultancy firms for services eight are from outside the country which means the maximum control of our country is in the hand of foreign agencies. But recently, the Prime Minister of Bangladesh restated that Bangladesh has achieved self-sufficiency and dependency on foreign projects is now out of our working motto.¹¹³ So, the two working intentions are quite controversial. On the other hand, It has been learnt from BDP2100 webpage that "besides these typical coastal projects, several river enhancement projects are also relevant for our baselines,

¹⁰⁹ The World Bank, "Bangladesh: Building Resilience to Climate Change", BT: The World Bank , 2016, Available at: <https://www.worldbank.org/en/results/2016/10/07/bangladesh-building-resilience-to-climate-change>.

¹¹⁰ Ministry of Environment and Forest, "Bangladesh Climate Change Strategy and Action Plan", BT: MoEF, 2009.

¹¹¹ Embassy of Bangladesh to the Netherlands, "Bangladesh Delta Plan (BDP), 2100", 2020.

¹¹² Md. Khalequzzaman, "Bangladesh Delta Plan 2100: Not the most practical proposal", 21 April 2016.

¹¹³ Risingbd, "PM says 'no' to appoint foreign consultants liberally", 18 May 2021, Available at: <https://www.risingbd.com/english/national/news/79695>.

including Gorai River Restoration Plan, the Ganges Barrage Plan, Bhairab River Plan and Kobadak River Basin Plan". Suppose we are not aware of the water-sharing plans of the riparian countries. In that case, the Gorai River Restoration Plan and the Ganges Barrage Plan's success during the lean season is uncertain. The BDP2100 has pointed out the disadvantage of the Farakka Barrage and other upstream diversion structures, including the Indian River Linking Project. Still, it doesn't address the importance of an integrated water resources management plan for the Ganga-Brahmaputra-Meghna (GBM) basins, involving all co-floodplain countries. Almost all coastal structures are designed to face coastal hazards of a certain magnitude, but various opinions exist. Some predict that just 0.88 meters of sea level rise will topple the existing polders, whereas the proponents suggest a rise of polder height by one metre is suitable. Studies found that in the next few decades, a four-metre rise in sea level will affect 40% of the area by disrupting the polders, and 50 million people of the country will be displaced.¹¹⁴ Under these unstable statements from the expert groups, BDP2100 will be outdated in the next century.

On the other hand, Bangladesh will be locked in a maintenance commitment with the consulting firms for the project's lifetime. It will be a wrong decision to put our next generation under such a constraint. Considering SDG's, there is no mention or mutual combination of any SDG in the Delta plan.

Now, the 17 Sustainable Development Goals of 2015, adopted by all United Nations Member States are, mean an urgent call for action by all countries (developed and developing) in a global partnership to reduce poverty and other scarcities through strategic actions like improving health and education, reducing inequality, and economic growth to tackle climate change and preserve oceans and forests.¹¹⁵

Sustainable Development Goal 13 (SDG 13 or Goal 13) is one of 17 Sustainable Development Goals to address climate change. Making SDG 13 practical for Bangladesh needs to allocate more resources transparently to improve national capability building. Though no specific activities/initiatives by

¹¹⁴ Md. Golam Mahabub Sarwar, "Impacts of Sea Level Rise on the Coastal Zone of Bangladesh".

¹¹⁵ GoB, "Bangladesh Climate Change Strategy and Action Plan", BT: GoB, 2008, Available at: <https://www.ccacoalition.org/en/resources/bangladesh-climate-change-strategy-and-action-plan>.

Bangladesh in the UN Decade (2021-2030) on the Bay of Bengal have been taken for sustainable development.¹¹⁶

According to 'Climate Change Profile Bangladesh,' all areas are not equally vulnerable to all aspects of climate change.¹¹⁷ During any action or measures for the immediate response or any development projects, the zonal hazard should be kept under consideration to make it valid and realistic. Many areas are highly vulnerable to salinity intrusion, drought-prone, severe surge-prone, etc. So, hazards should be considered before any action in any area.

Some maps are representing area-based climate change risks:

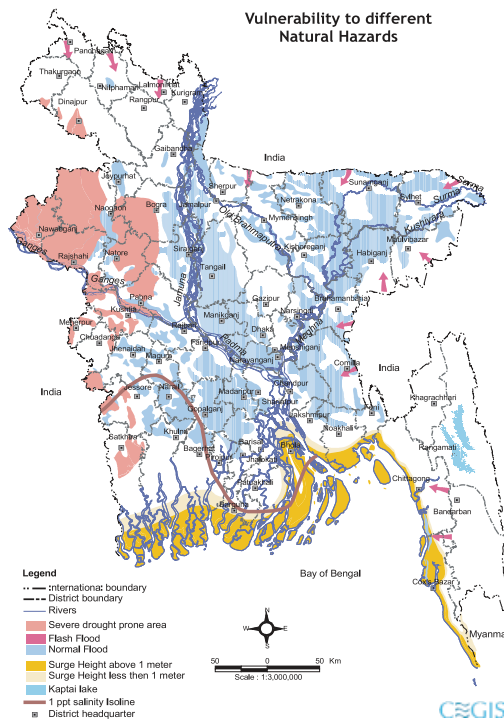


Figure 5. Vulnerability to Different Natural Hazards¹¹⁸

¹¹⁶ Md. Khalequzzaman, “Bangladesh Delta Plan 2100: Not the most practical proposal”, The Daily Star, 21 April 2016, Available at: <https://www.thedailystar.net/op-ed/politics/not-the-most-practical-proposal-1211857>.

¹¹⁷ Ministry of Foreign Affairs of the Netherlands, “Climate Change Profile Bangladesh”, April 2018.

¹¹⁸ MoEF, “Vulnerability to different natural hazards”, 2020.

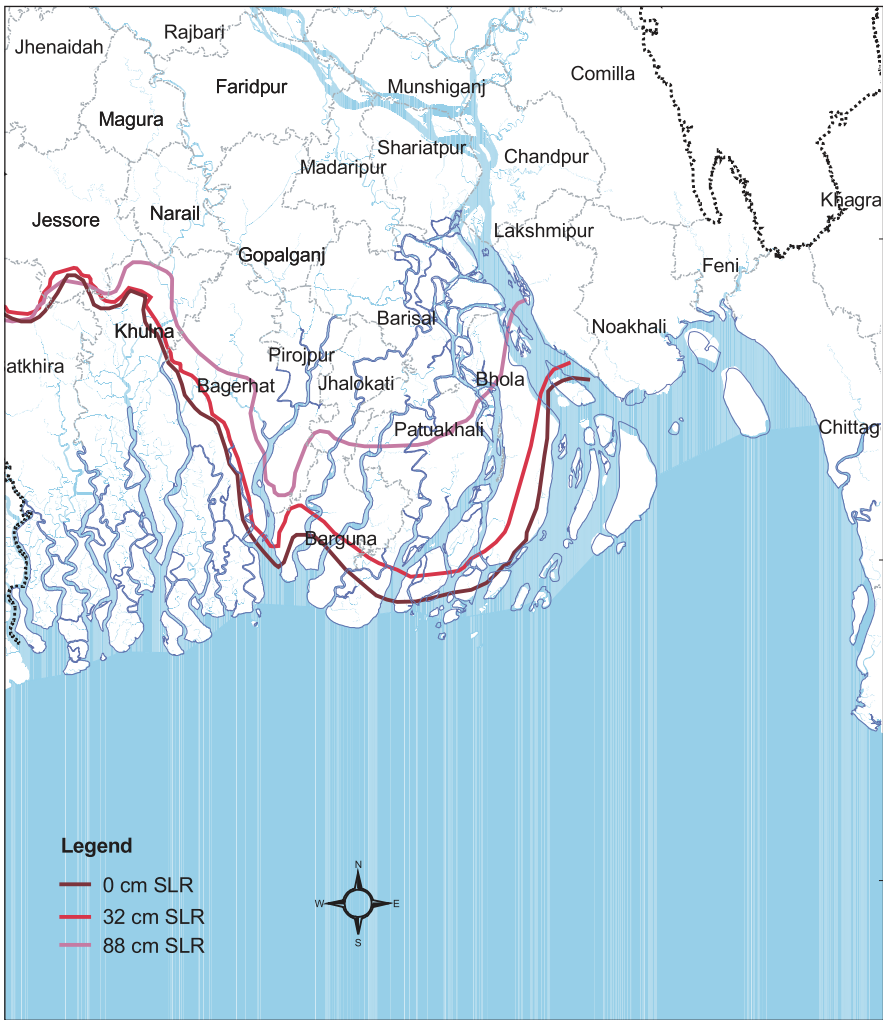


Figure 6. Likely Salinity Ingress in Southern Bangladesh for Different Amounts of Sea-level Rise (SLR)¹¹⁹

¹¹⁹ MoEF, “Likely salinity ingress in southern Bangladesh for different amounts of sea-level rise (SLR)”, 2009.

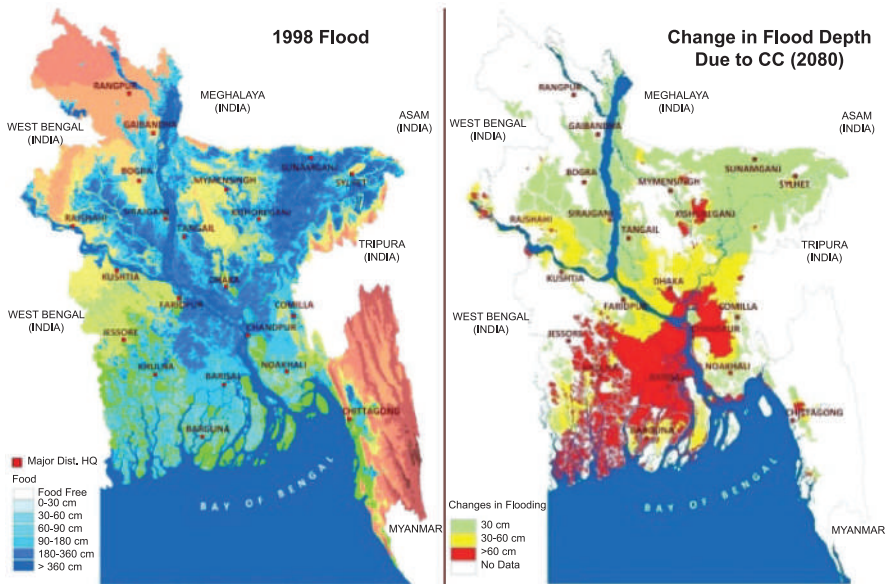


Figure 7. Change in Flood Depth Due to Climate Change, Source: CCAFS (2013): Flood Management in Bangladesh¹²⁰

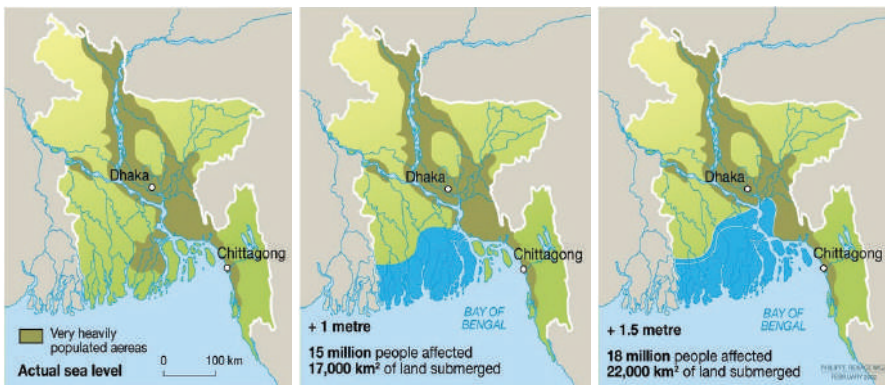


Figure 8. Land Submerged in Case of a 1.0 or 1.5-Metre Sea-level Rise, Source: Dacca University and IPCC, 2011¹²¹

¹²⁰ CCAFS, “Flood Management in Bangladesh”, 2013, Available at: <http://www.SLIDESHARE.NET/CGIARCLIMATE/FLOOD-MANAGEMENT-IN-BANGLADESH-PD-CDMPII-UPD-28-NOV13>.

¹²¹ Dacca University and IPCC, via Wilson Center, “Perfect Storm? Population Pressures, Natural Resource Constraints, and Climate Change in Bangladesh”, 2011, Available at: <http://www.NEWS.ECURITYBEAT.ORG/2011/09/PERFECT-STORM-POPULATION-PRESSURES-NATURAL-RESOURCE-CONSTRAINTS-AND-CLIMATE-CHANGE-IN-BANGLADESH/>.

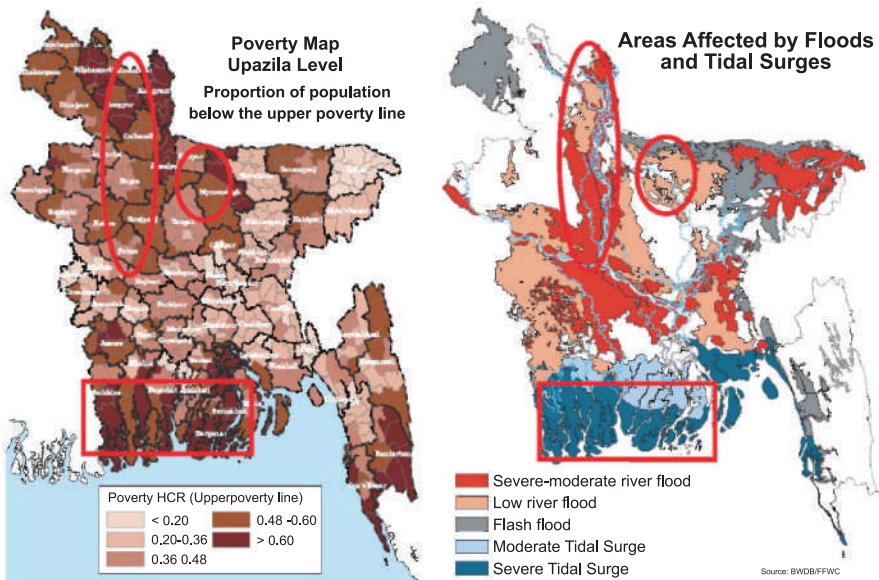


Figure 9. Poverty and Climate Risks in the Same Regions, BBS, World Bank, and WFP (2009): Updating Poverty Maps of Bangladesh

According to an interview of famous climate specialist Prof. Dr. Ainun Nishat that BIMRAD correspondents have taken, it is clear that there is no way out without addressing climate change specially in the developing countries like Bangladesh. Now, fund is a big fact. Even, COP26 has also given an alarm to Bangladesh for handling climate funds. Before transferring funds to any country, a few criteria have been finalized: accountability, transparency, inclusiveness, partnership, and MRV (Measurement, Reporting and Verification) in COP26. Bangladesh needs to be prepared to fulfil these criteria to get the climate funds in future. Bangladesh has a definite target for climate change issues. His suggestion is to reach the target globally. Bangladesh can talk in subgroups, then LDCs and then G77. Subsequently, it will be placed at the global level.

There are many unutilized or underutilized resources in the Bay of Bengal, including hydrocarbon, minerals, deep-sea fishing, sand, oil and gas that should explore sustainably as an adaptation and mitigating option considering the massive cost of management strategy as a highly climate-vulnerable country.

Evidence shows that women’s empowerment and activating gender equality is a way to get sufficient services in all aspects, including food and economic security. Proper participation of both men and women also helps to

protect the environment for the natural growth of resources.¹²² Currently, less than 25 percent of the influential positions in the COP26 leadership team are led by women. The target is to make participation equal to open women's involvement as a stakeholder, policymakers and direct workers to fight against the vulnerability of climate change around the world.¹²³ Considering the country's total population, about 49.44% were women in 2020, according to the World Bank report.¹²⁴ So, without considering and confirming the participation of this vast population, it is difficult to fight against any crisis for the country. Regular participation and proper presentation of climate change as a non-traditional security threat in the Indian Ocean Region may attract international attention.

5.2.7.1. Food Security

The term food security refers to the sustainable supply of food to population of a particular country and region. The term food security in global south has long been used as a reference to 'self-sufficiency' in food production in context of the growing population of these countries. Throughout the 1950's the primary focus of food security was 'supply side availability'. However, in the 80's the focus shifted to the 'demand side' of the food security which also included the individual's capacity to access food resources in order to feed themselves.¹²⁵ In recent times, focus has been shifted towards the utilization of food resources and the stability of food supply over the times. The contemporary literature generally considers availability, access, utilization, and stability as the four major pillars of 'food security'.¹²⁶ A number of definitions has been proposed over the years to comprehend food security. However, the definition agreed upon in the 1996 World Food Summit has been accepted by the majority stakeholders. It defines 'food security' 'when all people, at all times, have physical and economic access to

¹²² IUCN, 'Gender and Climate Change', Available at: <https://www.iucn.org/resources/issues-briefs/gender-and-climate-change>.

¹²³ Katy Dartford, "More than 400 female climate leaders call for COP26 gender equality", Green News, 8 March 2021, Available at: <https://www.euronews.com/green/2020/12/10/over-400-female-climate-leaders-sign-a-letter-calling-for-gender-equality-in-cop26-leaders>.

¹²⁴ Trading Economics, Available at: <https://tradingeconomics.com/bangladesh/population-female-percent-of-total-wb-data.html>.

¹²⁵ Joanna B. Upton, Jennifer Denno Cissé, and Christopher B. Barrett. "Food security as resilience: reconciling definition and measurement." *Agricultural economics*, vol 47, 2016, p. 135-147.

¹²⁶ Ibid.

sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life'.¹²⁷

Bangladesh has been a miracle when it comes to food production and making food available to the mass population. Bangladesh was able to achieve self-sufficiency in food grain production. The political leadership of the country focused heavily achieving sustainability and self-sufficiency in food production and distribution. The growth of food production from 2009-19 has been on average 3.8%. By 2019, the food grain production stood at 41.57 million metric ton.¹²⁸

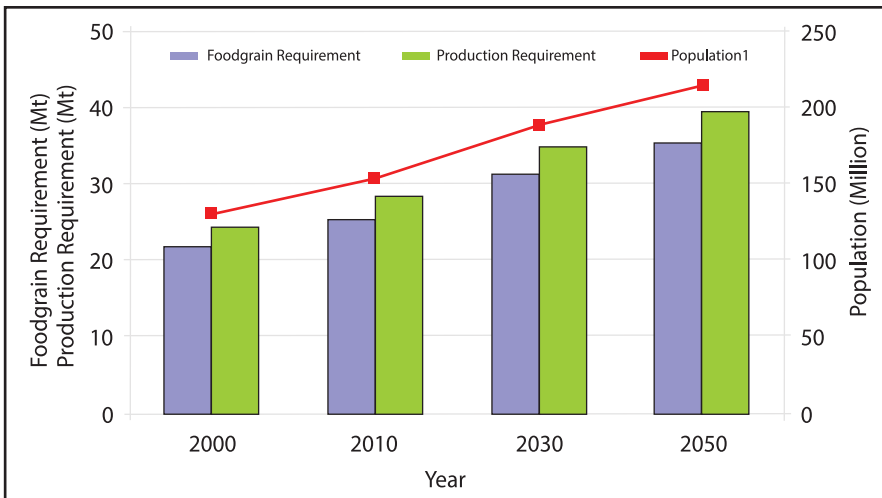


Figure 10. Food Demand Over Time. Source: Country Paper: Bangladesh, Available at: https://www.researchgate.net/publication/228521756_Country_Paper_Bangladesh

However, some economists have shown concerns about the accuracy of data regarding food production. For example, there has been a substantial increase in rice production in the country. Despite that Bangladesh had to import rice to meet the domestic demand. The food grain imports in the 2017-18 period increased up to 9.8 million tonnes.¹²⁹ Moreover the growth in rice production in the

¹²⁷ Pinstrup-Andersen, Per. "Food security: definition and measurement." *Food security*, vol 1, no. 1, 2009, p. 5-7.

¹²⁸ Centre for Research and Information, "Bangladesh: Towards Achieving Food Security 2009-19." 2019, Available at: <https://cri.org.bd/publication/2019/Aug/food-security-19/Bangladesh%20-%20Towards%20Achieving%20Food%20Security%202009-2019.pdf>.

¹²⁹ M.A. Taslim, "The myth of food self-sufficiency", *The Financial Express*, 2018, Available at: <https://thefinancialexpress.com.bd/views/the-myth-of-food-self-sufficiency-1528124689>.

country has also been stagnating for last few decades. From 1972-2000, annual average increase of rice production was 3.3%, It was 1.8% in the 2001-21 period, but the growth was minuscule from 2011-21 period, only 0.75%.¹³⁰ Maintaining food grain production at the level of population growth is necessary for achieving food security of the country. At the same time, a contingency plan is also required from the government's side is also required for maintaining the stability of food supply in the emergency situation. The covid-19 crisis has shown that even the availability and stability of food supply may not be sufficient in achieving food security. During the lockdowns, people working in the informal sectors lost their employment. One study found that people working in the informal sector may have lost 75% to 100% of their income during the pandemic.¹³¹ For many middle-class people the situation was precarious as many of them could not openly ask for support like their lower income counterparts. This 'invisible food insecurity', thus, was a key characteristic of the pandemic period.¹³²

The geopolitical crises could also impact the food security issue in Bangladesh and South Asia. The Russia-Ukraine war have also created a food shortage in the country. Especially given the fact that half of Bangladesh's wheat imports came from Russia and Ukraine.¹³³ There has also been a significant crisis of edible oil due to the conflict. The price of Soyabean oil, which Russia is a significant producer of, have gone up rapidly after the beginning of the Russia Ukraine conflict.¹³⁴ Both countries are also significant producer and global supplier of sunflower and rapeseed oil, which are key ingredients in the many food

¹³⁰ M.A. Taslim, "The confusion about self-sufficiency in food grains", The Financial Express, 2022, Available at: <https://thefinancialexpress.com.bd/views/views/the-confusion-about-self-sufficiency-in-food-grains-1643211328>.

¹³¹ Hanna A. Rusczyk, M. Feisal Rahman, Louise J. Bracken, and Sumaiya Sudha. "Contextualizing the COVID-19 pandemic's impact on food security in two small cities in Bangladesh." *Environment and Urbanization*, vol 33, no. 1, 2021, p. 239-254.

¹³² Ibid.

¹³³ Osama Rizvi, "Ukraine Crisis and Food Security in South Asia", The Diplomat, 2022, Available at: <https://thediplomat.com/2022/03/ukraine-crisis-and-food-security-in-south-asia/>

¹³⁴ UNB, "Quader: Russia-Ukraine war triggers hike in edible oil price", The Dhaka Tribune, 2022, Available at: <https://www.dhakatribune.com/bangladesh/2022/05/06/quader-russia-ukraine-war-triggers-hike-in-edible-oil-price>.

products, affected the supply chain and affordability in international markets.¹³⁵ Other major producers such as Indonesia, which supplies a third of global edible oil, have banned exports to control local shortages.¹³⁶ Bangladesh imports substantial wheat from global markets, thus any disruption could potentially lead to food shortages and insecurity in the country.

Year	Imports (1000 MT)	Growth (%)
2015	4720	20.13
2016	5556	17.71
2017	6472	16.49
2018	5100	-21.20
2019	6800	33.33
2020	7200	5.88
2021	7400	2.78

Table 2. Bangladesh Wheat Imports (2015-21)¹³⁷

Thus, it is important to develop a national food strategy to deal with food insecurity in emergency cases such as pandemic or global supply chain disruptions. Multiple scenarios have to be taken into account to resolve food crisis in case of such supply chain disruptions. However, focus should be given on achieving real food sufficiency in key food ingredient productions such as edible oil, vegetables, meat products, instead of overt agricultural dependence on rice production. The market mechanisms need to be rearranged to provide more autonomy to farmers to sell products at market rates. Measures should be taken to diversify the food supply chain and adoption of newer farming techniques.

¹³⁵ Henry Sandercock, "Why is there a cooking oil shortage? Supermarket limits on olive oil, sunflower oil and rapeseed oil explained", National World, 2022, Available at: <https://www.nationalworld.com/lifestyle/food-and-drink/why-cooking-oil-shortage-supermarket-limits-olive-oil-sunflower-oil-rapeseed-oil-explained-3666031>.

¹³⁶ Aisyah Llewellyn, "Indonesia faces international pressure over palm oil export ban", Al-Jazeera, 2022, Available at: <https://www.aljazeera.com/economy/2022/5/9/indonesia-faces-international-pressure-over-palm-oil-export-ban>.

¹³⁷ Available at: <http://www.usda.gov/>.

5.2.8.1. IUU Fishing and Regional Security Mechanism

IUU fishing refers to a comprehensive set of fishing activities that are harmful to both the resources and the country's law.¹³⁸ Illegal fishing refers to fishing activities through vessels from one's jurisdiction of another country besides permission or other things to do of fishing vessels that disobey the existing fishing law. Under the UN Convention of the Law of the Sea, coastal states have sovereign rights to extract and manage natural resources, which includes fish stocks, in the waters and seabed within 200 nautical miles from their baseline known as the Exclusive Economic Zone (EEZ). However, foreign trawlers and other fishing vessels commonly fish illegally within the EEZ of other countries. Unreported fishing refers to things done that are not reported or intentionally misreported to proper responsible authorities. Unregulated fishing is mainly done in areas not under the administration measures, or any conservation tolls are yet applied within those boundaries, such as outdoor any country's EEZ and no longer under the jurisdiction of Regional Fisheries Management Organizations (RFMOs). EEZs and RFMOs attempt to foster regulations and fishing quotas amongst interested states to manage necessary fish stocks in international waters. The period also refers to fishing by vessels without nationality or flying the flags of a country no longer a party to the applicable RFMO and who therefore consider themselves unbound by the RFMO's rules. While the period fishing is regularly used, marine catches also encompass crustaceans, molluscs, echinoderms, and other invertebrates.

5.2.8.2. Causes of IUU Fishing

The security threats of IUU fishing are not new to the waters of the Indian Ocean and the Bay of Bengal regions. Experts' opinions have been analyzed in the third report in the Caught Red-Handed paper series about maritime security threats in the Indian Ocean region that indicates IUU fishing. IUU is an obstacle to developing countries like Bangladesh, where many people depend solely on fisheries. The IUU Fishing Index is a scale to rate a country's position on addressing or being exposed to IUU fishing. The IUU Fishing Index provides the score of all maritime countries ranging from 1 to 5 (1 is the best and 5 indicates the worst). Bangladesh's World ranking is 47 of 152 countries. The overall score for

¹³⁸ National Intelligence Council and was coordinated with the US Intelligence Community, "Global Implications of Illegal, Unreported, and Unregulated (IUU) Fishing", NIC WP, 2016.

Bangladesh is 2.41. This score indicates "Call for Action," which means it is yet active to protect.

Most Indian Ocean littoral States have underdeveloped economies marred by poorly developed and implemented government policies, administrative systems beset by corruption, and complicated issues of neglect and marginalization that often push poverty-stricken fishers to adopt illegal fishing practices and assist criminal organizations conducting transnational crimes.¹³⁹ Main causes are included bellow-

5.2.8.3. Regulatory Gap

Regulatory gaps in the high seas of the Indian Ocean have not been overlooked by international fishing fleets.¹⁴⁰ As global demand for marine products grows, these gaps can be filled or faced destabilization of both marine ecosystems and resources that many depend on for income and food security.¹⁴¹ Current regulatory deficiencies need to be addressed. Antonia Leroy, director of maritime policy at the EU WWF European Policy Bureau, said it needs to play a role in encouraging action.¹⁴² India's current regulatory gap along the Bay of Bengal is very effective in continuing IUU in the region.

Gap in Geographic Locations

The World Wildlife Fund (WWF) and Trygg Mat Tracking (TMT) have released reports showing geographic location and species gaps. The narrowly divided and often misleading depictions of the sea boundary zones between several dense Asian coastal nations complicate the situation of fishermen unknowingly fishing in the waters of other states. Frequent cases of IUU fishing

¹³⁹ United Nations Office on Drugs and Crime Vienna "Transnational Organized Crime In The Fishing Industry Focus on: Trafficking in Persons Smuggling of Migrants Illicit Drugs Trafficking UNITED NATIONS", Vienna, 2011.

¹⁴⁰ WWF, "Unregulated fishing in the Indian Ocean is putting food security and ocean health at risk", 2020, Available at: https://wwf.panda.org/wwf_news/?1013641/Unregulated-fishing-in-the-Indian-Ocean-is-putting-food-security-and-ocean-health-at-risk.

¹⁴¹ Ibid.

¹⁴² Ibid.

arrests by India and Sri Lanka in the Pork Strait, India and Pakistan in the Rann of Kutch, and India and Bangladesh in the Bay of Bengal prove this.¹⁴³

Gap in Species Catch Regulation

The high seas of the Indian Ocean are often not fully covered by the regulatory framework of non-regional species such as tuna. Without proper regulations on species, an 830% increase in the catching effort of an unsupervised species such as squid can endanger the continued survival of that species, and squid-like foods such as tuna. It can pose a threat to species that depend on it. The unmanaged squid fishery is dramatically economical given the value of tuna, which is estimated to exceed US \$ 6.5 billion (€ 5.55 billion),¹⁴⁴ as the Indian Ocean supplies 20% of the world's tuna demand.¹⁴⁵ It may affect all littorals. International attention should focus on illegal and unreported fishing in the Indian Ocean, which is often overlooked indirectly by BoB. If overfishing and IUU fishing are not addressed, the resulting fish biomass loss results in a deficiency of fatty acid and essential micronutrients for millions of people in the region, resulting in an imbalance in the risk of malnutrition in low- and middle-income countries.¹⁴⁶

Deployment of Fishing Vessels in Areas of Maritime Territorial Disputes and the Use of Military Force against Illegal Fishers within EEZ of the Affected State

Two recent issues related to IUU fishing in the region are the use of fishing vessels in areas of maritime territorial disputes and the use of military force against illegal fishermen in the affected state's EEZ. The Bay of Bengal, as part of the Indian Ocean, is a regular witness to illegal fishermen and trawlers. State sponsored activities sometimes violate the EEZ of several countries around the world,

¹⁴³ Pooja Bhat, "IUU Fishing as a National Security Threat: Revisiting India's Domestic Framework and Compliance with International Regimes," *International Law Studies*, vol 96, 2020, Available at: <https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=2928&context=ils>.

¹⁴⁴ Chris Chase, "WWF report finds unregulated fishing escalating in Indian Ocean," *Seafood Source*, 2020, Available at: <https://www.seafoodsource.com/news/environment-sustainability/new-wwf-report-finds-unregulated-fishing-escalating-in-indian-ocean>.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

jeopardizing the national security. Government responses to such illegal activities need to be scrutinized as they reflect the position of individual governments and their ability to respond to IUU activities.

Not Bound by Regional Monitoring and Surveillance

Unregulated fisheries have not been reported and are not tied to local surveillance systems, making it difficult for coastal state authorities to identify vessels operating in or near water bodies. The consequences of inadequate control of fisheries and fishing practices can have serious consequences for wider marine ecosystems.

Lack of Information Sharing and Coordination between National Maritime Agencies

Lack of information sharing on fishing vessel activity and close coordination between national maritime authorities could allow cross-border fishing vessels to be overlooked and operate far offshore, transshipping illegal catch to distant ports.

High Demand and Reward with Low Risk

Global demand for fish is increasing as overfishing and IUU fishing increase the world's population and reduce supply. According to FAO, about 4.3 billion people depend on fish resources as a source of protein. According to scientists quoted by FAO, the world's fish stock is half that of the 1950s. At the same time, fishing fleets are on average 10 times more efficient than the 1950s livelihood. A 2005 economic analysis prepared for the Organization for Economic Co-operation and Development (OECD) found many of the IUU fisheries, including over- or underutilized capacity of fishing vessels, tax shelters, and the relatively high market value of targeted fish. Economic incentives have been identified. It also points to the emergence of commercial IUU fisheries that use advanced communications technology to avoid detection and provide easy access to bulk processing facilities. This also reduces costs. A 2006 academic study estimates that fines for IUU fishing vessels need to increase costs by a factor of 20 or more to match the interests of the IUU fishery. According to the same investigation, many operators abandon a ship if they are arrested because the profits from a particular ship tend to exceed the price of the ship. In Europe, a region with relatively good governance, the study found that IUU fines from 2003 to 2004 averaged 1 to 2.5 per cent of the average illegal catch. People involved in the IUU fishery are found or fined for inadequate governance, loopholes in the international legal

framework, corruption, the remote and widespread nature of the operating environment, and all reasons that promote the IUU fishery.

Low Barriers or Technical Requirements

The financial, logistical and technical skills required by fishermen for IUU fishing in the Bay of Bengal are minimal. In many cases, legal fishermen are also engaged in accidental or simultaneous illegal activities. According to scientific research, Indonesia's young and inexperienced fishermen seeking immediate profits have been made possible by illegal "exclusive buyers" who provide all the necessary fishing and bombing equipment, including boats. IUU fishing often rely on explosive fishing. These buyers offer a large down payment in exchange for the fisherman's sole purchase right to the catch, and in many cases, the fisherman is forced to fish a large amount of fish to repay this debt.

5.2.8.4. 'Policy, Regulation and Management System' Gap Identification and Possible Intervention Points in the Context of Bangladesh

The coastal republics of the Bay of Bengal are gravely concerned about the incidences of IUU fishing activity. No country is better positioned to tackle the problems posed by IUU fishing than Bangladesh among the Bay of Bengal's coastline states. Unfortunately, due to a lack of monitoring and surveillance procedures on the legal and administrative levels, IUU fishing activities have continued in Bangladesh's marine zones.

There is currently no accurate estimated data available regarding IUU fishing activities in the Bay of Bengal maritime area. Regarding the protection of living marine resources, Bangladesh's current legal system has a glaring deficit.

Both the "Protection and Conservation of Fish Act, 1950" and the "Marine Fisheries Ordinance of 1983" speak to the significance of maintaining both inland and marine fish populations.¹⁴⁷ Both regulations, however, are lacking in comprehensive tools to stop and discourage illegal fishing. Additionally, there is no definition of or recognition of IUU fishing as a criminal in these statutes.

¹⁴⁷ Mohammad Rubaiyat Rahman, "Analysing the draft Bangladesh Maritime Zones Act", The Daily Star, 18 February 2020, Available at: <https://www.thedailystar.net/law-our-rights/news/analysing-the-draft-bangladesh-maritime-zones-act-1869532>.

Though the Coast Guard Act of 2016's Section 10 refers to the constabulary role of law enforcement organizations in combating IUU fishing, a number of issues, such as the inspection of allegedly foreign-flagged IUU vessels and the prevention of IUU-catch products entering ports, have not been addressed. These factors collectively have made it more difficult to pinpoint the problem of illegal and unreported fishing activity. All may not be as it seems when it comes to the Maritime Zones Act, 2019. A littoral state like Bangladesh should take into account updated and strengthened legal provisions. The Maritime Zones Act of 2019 should include some measures linked to a strict and ongoing monitoring mechanism to fulfil the coastal state's duty to exercise due diligence outlined in Article 208 of the 1982 Convention, keeping in mind the fragility of the marine environment and uncertainty associated with marine exploration and exploitation activities.¹⁴⁸

Most notably, the Maritime Zones Act 2019 lacks a concrete definition of IUU fishing. This unexpectedly interfered with the regulation of illegal fishing activities. At first glance, it is very likely that only foreign fishing vessels are involved in IUU's fishing activities. In reality, IUU's fishing activities cannot ignore the involvement of domestically licensed fishing vessels. With this omission, evasion violations of the IUU fishing rules clearly play a major role.

The Department of Fisheries (DoF) is under the Ministry of Fisheries and Livestock (MOFL) and is the leading government organization responsible for fisheries management. As such, DoF continues its mission related to the conservation and development of marine fisheries in Bangladesh and the licensing of marine fisheries. DoF is headquartered in Dhaka, 64 district fisheries offices (13 on the coast), each headed by a district fishery officer, and 460 quasi-district offices (Upazilla offices) run by Upazilla fisheries officers (UFOs).¹⁴⁹ Along with DoF, there are at least 12 other government agencies involved in the management or development of the fishery industry. The legal framework for DoF to control Bangladesh's fisheries is contained in the Marine Fisheries Ordinance (1983) enforced by the Marine Fisheries rules (1983). This rule establishes certain fishery management tools used by DoF, such as vessel licenses, fishing gear restrictions, and rules regarding marine protected area boundaries. Fines and penalties related

¹⁴⁸ Mohammad Rubaiyat Rahman, 2020, *op.cit.*

¹⁴⁹ P. Flewwelling, & G. Hosch, "Country review: Bangladesh. Review of the State of World Marine Capture Fisheries Management: Indian Ocean", vol 488, no. 97, 2006.

to violations of the Fisheries Act are also clearly stated. However, this law is outdated and is considered in need of revision.

Pramod and Pitcher (2006)¹⁵⁰ reviewed on Bangladesh's compliance with Article 7 of the United Nations Code of Conduct for Responsible Fisheries provides insight into the effectiveness of the components of Bangladesh's MCS program. According to this survey, fishing surveillance in this country is very poor and the ability to monitor both domestic and foreign vessels is limited to port countries. The country managed to lack the ability to board and inspect at sea. In addition, Flewwelling (2001)¹⁵¹ points out that port condition inspections do not have formal inspection reporting procedures and no data management systems.

Bangladesh's port authorities do not have extensive maritime inspection capabilities and are limited to port inspections to monitor and control their fisheries. However, Pramod and Pitcher (2006)¹⁵² conclude that port state measures are relatively ineffective given the small number of trained personnel, poor infrastructure and lack of financial support for offshore surveillance. The European Union has established a Catch Certification System (CSS) to combat illegal, unreported and unregulated (IUU) fishing through the Council Regulation (EC) No. 1005/2008. Under this scheme, companies wishing to export saltwater fish to European Union countries must apply for an IUU Catch Certificate (CC) from the competent authority of the flag state. The Marine Fisheries Ordinance 1983 were amended to allow the issuance of IUU Catch Certificates in 2010. Prior to the issuance of the IUU-CC, each shipment will be inspected and verified by the Marine Fisheries Ordinance personnel to confirm the traceability and documentation process of the product.¹⁵³

The emergence of IUU fishing as a national security threat continues in the Indo-Pacific region, but has not yet had the same significant impact on the Indian Ocean periphery as its neighbors. Recognizing the need for national, regional and

¹⁵⁰ Pramöd Ganapathiraju, "Evaluations of Compliance with the FAO (UN) Code of Conduct for Responsible Fisheries", *Fisheries Centre Research Reports*, vol 14, no. 2, 2006, p. 1191.

¹⁵¹ P. Flewwelling, "Fisheries Management and MCS in South Asia: Comparative Analysis" FAO, Rome: 2001.

¹⁵² Ibid.

¹⁵³ Department of Fisheries. Ministry of Fisheries and Livestock, "Annual Report", 2014, Available at: http://fisheries.portal.gov.bd/sites/default/files/files/fisheries.portal.gov.bd/annual_reports/e7d1364f_3e7d_44a3_be04_a44221e823a9/Annual_Report_2014.pdf.

international cooperative action to combat the IUU fishery, 14 countries in South and Southeast Asia, including Bangladesh, Cambodia, Myanmar, Thailand and Vietnam, have joined FAO with the IUU fishery.¹⁵⁴

Strengthen capacity and cooperation to fight IUU fisheries by sharing experiences and lessons, develop national action plans, develop regional action plans, reviewing and validating regional consultations and regional action plans on is critical to this threatening moment to protect the fishing sector and safety concerns.¹⁵⁵

5.2.9.1. Blue Economy and Resources in the Bay of Bengal

The concept of blue economy emerged in the context of sustainable development. First introduced by Gunter Pauli in 1994, the idea of blue economy took some time to gain traction and emerge in the mainstream discussions as “sustainable industrialisation of the oceans to the benefit of all”.¹⁵⁶ With the UN Conference on Sustainable Development in 2012 held in Rio de Janeiro, Brazil, the World Bank report *Complexity in Small Island Developing States (SIDS)* in 2014, Intelligence Unit Report of the World Bank-primarily catalyzed the understanding on the core issues that led to the formation and understanding of the concept of blue economy.¹⁵⁷ Although much debates still persist in arriving at an all-acceptable definition and application of the concept of blue economy,¹⁵⁸ the

¹⁵⁴ FAO, “Support to Countries to Address Illegal, Unreported and Unregulated Fishing (IUU)” Rome, Italy: 2020

¹⁵⁵ FAO, “Report of the second Workshop on the Assessment of Fishery Stock Status in South and Southeast Asia”, Bangkok, Food and Agriculture Organization of the United Nations Rome, 2009, p. 54

¹⁵⁶ S. Smith-Godfrey, “Defining the Blue Economy, Maritime Affairs”, *Journal of the National Maritime Foundation of India*, 2016, p. 3, DOI: 10.1080/09733159.2016.1175131.

¹⁵⁷ Jennifer J. Silver, Noella J. Gray, Lisa M. Campbell, Luke W. Fairbanks and Rebecca L. Gruby, Blue Economy and Competing Discourses in International Oceans Governance, *The Journal of Environment & Development*, vol 24, no. 2, 2015, p. 135-160 ; Michelle Voyer, Genevieve Quirk, Alistair McIlgorm & Kamal Azmi, “Shades of blue: what do competing interpretations of the Blue Economy mean for oceans governance?”, *Journal of Environmental Policy & Planning*, 2018, p. 1-17, DOI: 10.1080/1523908X.2018.1473153.

¹⁵⁸ Mads Barbesgaard, “Blue growth: savior or ocean grabbing?”, *The Journal of Peasant Studies*, 2017, DOI: 10.1080/03066150.2017.1377186; I. Ertör & M. Hadjimichael, “Blue degrowth and the politics of the sea: rethinking the blue economy”, *Sustainability Science*, vol 15, 2020, p. 1–10, Available at: <https://doi.org/10.1007/s11625-019-00772-y>.

fundamental premise remains harnessing of marine resources can be a viable tool for countries located at coastal regions. For the Bay of Bengal region, this is particularly relevant as the concepts of blue economy, blue growth, marine economy and marine growth-however, it is conceptualized, it draws attention to how the issue of underutilized resources of the Bay can be addressed. While some parts of the world are facing scarcity of fish resources, majority of the Bay of Bengal littorals are yet to develop their deep-sea fishing capacities. In terms of harnessing energy (both wind power and natural gas) from the Bay of Bengal and a comprehensive mapping of the maritime region for mineral resources, the countries of the region lacks any substantial efforts.

The study identifies, from Bangladesh's perspectives, a number of issues that need to be explored. First, the Bay of Bengal has hydrocarbon potentials,¹⁵⁹ for which a three-dimensional seismic survey is urgent. Second, it has been argued that there is a fugitive resource capture by Myanmar in Bangladesh's offshore deep-sea block 12 adjacent to the former's deep-sea block AD-7.¹⁶⁰ Third, in terms of rising oil prices, a survey of possible offshore gas and oil reserves in the Bay,¹⁶¹ within Bangladesh's EEZ is also required immediately. Fourth, in the context of rising energy prices we need to consider the preliminary assessments of the Bay of Bengal having the potentials to generate wind power,¹⁶² which may go up to the capacity of 20,000 MW.¹⁶³ Fifth, the potentials of rare earth materials in the Bay

¹⁵⁹ Aftab Alam Khan, "Geological Evolution and the Hydrocarbon Potentiality of the Bay of Bengal", *BMJ*, vol 5 no. 1, 2021, p. 127-140; M Azizur Rahman, Bay of Bengal hydrocarbon reserve mapping hobbles, *The Financial Express*, 9 January 2022, Available at: <https://www.thefinancialexpress.com.bd/trade/bay-of-bengal-hydrocarbon-reserve-mapping-hobbles-1641695994>.

¹⁶⁰ Interview with Mr. Parvez Karim Abbasi, Assistant Professor, Department of Economics, Faculty of Business and Economics, East-West University, Bangladesh, 02 April 2022.

¹⁶¹ Vanessa M. Héctor, Marín-M. Gaye, Bayrakcib A. Bestb, Farhana S. Mohammad, Moinul H. Ahmad, Al Karim, Md K. Alam, "Seismic characterization and modelling of the gas hydrate system in the northern Bay of Bengal, offshore Bangladesh," *Marine and Petroleum Geology*, vol141, 2022, pp. 1-17; Dr A S M Masuduzzaman, "Blue Economy Approaches in the Bay of Bengal," *Daily Asian Age*, 16 January 2022, Available at: <https://dailyasianage.com/news/280027/blue-economy-approaches-in-the-bay-of-bengal>.

¹⁶² Md. A. Shaikh, K M A. Chowdhury, Sukanta S. Milky, Mohammad M. Islam, "Potentiality of Wind Power Generation along the Bangladesh Coast," ICMEAS, 2017, Available at: <https://aip.scitation.org/doi/pdf/10.1063/1.5018553>; Navila R. Nadi, Ferhat B, Merete B, "Offshore Wind Energy Estimation in the Bay of Bengal with Satellite Wind Measurement," ICASERT, May 2019, DOI: 10.1109/ICASERT.2019.8934915.

¹⁶³ "Bay of Bengal has resources to generate 20,000 MW wind power", *The Daily Observer*, 21 December 2021, Available at: <https://www.observerbd.com/details.php?id=345114>.

are being discussed at various levels,¹⁶⁴ although not much studies have been done yet to understand the feasibility of using these resources. It is being suspected for quite some time that the Bay may be home to “a treasure trove of minerals”¹⁶⁵ such as Zircon, Garnet, Manganese, Copper, Lead, Monazite, Ilmenite, sands and mineral sands, many of which have commercial values as well as are materials used in nuclear reactors.

A number of studies have pointed out the issues that are raised here. This study observes that the obstacles are in lacking coordination among the relevant stakeholders both at the policymaking and in the scholarly levels. The urgency for Bangladesh to explore its resources in the Bay of Bengal are often being neglected, delayed or even being hostage to prolonged bureaucratic processes. Information regarding these issues are available, what is lacking is relevant actors not being proactive in these areas. This study incorporates a number of policy recommendations on how these issues can be approached.

5.2.10.1. Energy Security

Energy security has been a much-discussed issue in international politics. Securing energy resources played a significant role in the establishment of the international order. In times, the drive for securing energy supply had led to war and also cooperation among the states. The concept of energy security depends on the particularities of the states. For energy dependent industrial states, energy security is ‘the availability of sufficient supply at affordable price’, whereas for energy exporting states, energy security is the ‘security of demand’ of their products.¹⁶⁶ However, in contemporary literature on the subject, the definition of energy security remains an ‘unclear’ and ‘elusive’ concept.

Contemporary scholarship sees energy security within a framework of four as, namely availability, affordability, accessibility and acceptability. Most

¹⁶⁴ Farah Deeba, Syed H. Rahman, Mohammad Z. Kabir and Mohammad R, “Geochemical Characterization and Presence of Rare Earth Elements in the Recent Depositions at the Islands of the Eastern Bay of Bengal, Bangladesh,” *International Journal of Economic and Environmental Geology*, vol 11, no. 1, 2020, p. 40-47.

¹⁶⁵ Interview with Mr. Parvez Karim Abbasi, Assistant Professor, Department of Economics, Faculty of Business and Economics, East-West University, Bangladesh, 02 April 2022.

¹⁶⁶ Yergin Daniel, "Ensuring energy security." *Foreign affairs*, 2006, p. 69-82.

mainstream definitions cover these areas while conceptualizing the concept.¹⁶⁷ However, the review of existing literature on energy security shows a lack of ‘common interpretation’ of the concept, which makes it ‘difficult’ to define the concept in an absolute term.¹⁶⁸ Winzer (2011) analysed the prevalent understandings of ‘energy security’ among the scholars and identified three group scholars with competing focuses. The first group of scholars defined energy security within the purview of ‘reliability’ of energy supply. The second group views energy security through the availability of energy at a certain price threshold. The third group tied the energy security with the ‘continuity of energy services’.¹⁶⁹ Ang et al. (2014) reviewed 83 available definitions of energy security, and found that there is no widely accepted definition. However, the study found seven major dimensions, present in the reviewed definitions, which are: Energy availability, infrastructure, energy prices, societal effects, environment, governance, and energy efficiency.¹⁷⁰ Of the reviewed definitions, energy availability and infrastructure are two dimensions which are present in most definitions.¹⁷¹ These two concepts, thus, are important to develop a concept of ‘energy security’ in the international system.

Fiscal Year	2025	2030	2035	2040
GDP growth	7.4%	6.3%	5.3%	4.4%
Electricity Demand (MW)	24,147	33,800	45,014	60,836

Table 3. Projected Electricity Demand

¹⁶⁷ Aleh Cherp, and Jessica Jewell. "The concept of energy security: Beyond the four As," *Energy policy*, vol. 75 2014, p. 415-421.

¹⁶⁸ Christian Winzer, "Conceptualizing energy security." *Energy policy*, vol 46, 2012, p. 36-48.

¹⁶⁹ *Ibid.*

¹⁷⁰ Beng Wah Ang, Wei L. Choong, Tsan S. Ng, "Energy security: Definitions, dimensions and indexes," *Renewable and sustainable energy reviews*, vol 42, 2015, p. 1077-1093.

¹⁷¹ *Ibid.*

Energy security is an important issue for Bangladesh. The economy of the country is widely dependent of the availability of energy. The government of Bangladesh has unveiled the ‘Perspective Plan’ for year 2041, under which the country is set to become developed nation by 2041. However, sustained growth momentum is vital secure such ambitious objective. The perspective plan shows that Bangladesh needs to achieve at least 9% growth by 2030 to become a middle-income nation, which is no way an easy feat to achieve. The most important element to maintain such growth is to secure a reliable and long-term supply of energy to meet the growing demand of the country.

It is estimated that the country’s electricity demand would increase up to 33,800 MW by year 2030 and it will be almost double by year 2041.¹⁷² The current energy mix of the country is unsustainable as it depends entirely on natural gas, which Bangladesh domestically produce.¹⁷³ However, the country’s natural gas reserve is depleting in a rapid rate. At current pace, the gas reserves of the country would be depleted completely by the year 2041, if sizeable reserves are not discovered.

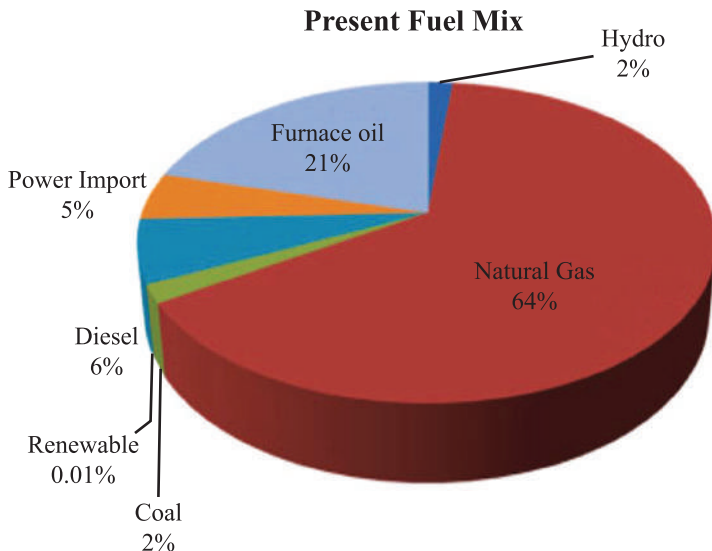


Figure 11. Present Energy Mix in Bangladesh

¹⁷² N K Das, J. Chakrabartty, Mrinmoy D, AK S. Gupta, M. A. Matin, "Present energy scenario and future energy mix of Bangladesh." *Energy Strategy Reviews*, vol 32, 2020, p. 100576.

¹⁷³ Ibid.

Based on these projections, Bangladesh would be heavily dependent on imported energy for most of its consumption. The country currently imports almost of all of its oil from the international market. Bangladesh Petroleum Corporation imports around 5 million tonnes of diesel, 1.30 million tonnes of crude oil, 200,000 tonnes of furnace oil and 120,000 tonnes of octane annually.¹⁷⁴ Bangladesh has also built two LNG terminals to meet the growing energy demands of the country. Bangladesh's growing dependence on energy imports would inevitably lead the country into the global energy geopolitics. To build a reliable supply of energy, Bangladesh has two options: to source energy from the neighbouring states or to import most of it from the energy rich parts of the world.

The regional energy trading system in South Asia has been conceptualized for last few decades. The South Asian nations have a huge prospect in regional energy trading. Both exporters and importers would benefit through interconnected power networks, that can provide financial strength, effective use of available resources, enhanced power transfer network reliability, and enhanced energy security between countries.¹⁷⁵ However, political barriers are present to realize such endeavours. Bangladesh has shown increasing interest in importing 9000 MW of electricity from Nepal by 2040 to meet growing demands. Though bureaucratic complexities and infrastructural gaps remains to materialize such initiative.¹⁷⁶ Moreover, most of these electricity imports have to be passed through Indian territory, which would require long term arrangement vis-à-vis New Delhi at favourable terms.

The second scenario is to depend heavily on imported energy from resource rich regions of Middle East and Africa, which would further plunge the country into global energy geopolitics. Bangladesh would have to compete with other emerging economies such as India and China to secure scarce and competitive hydrocarbon market, and given the price volatility, it might become costlier in future or even unaffordable. The Russia-Ukraine war and the events in

¹⁷⁴ M A Rahman, "Bangladesh starts counting fuel import cost amid Russia-Ukraine war," The Financial Express, 2022, Available at: <https://thefinancialexpress.com.bd/trade/bangladesh-starts-counting-fuel-import-cost-amid-russia-ukraine-war-1645929191>.

¹⁷⁵ Zagam S Abbas, Kousar A, Razzaq S, Saeed S, Alam M, Mahmood A, "Energy management in South Asia," *Energy strategy reviews*, vol 21, 2018, p. 25-34.

¹⁷⁶ M.F. Rahman, "Power import gets easier", The Daily Star, 2018, Available at: <https://www.thedailystar.net/business/electricity-import-from-nepal-bhutan-gets-easier-1679245>.

Middle East have revealed the fragility of global energy markets. The heavy dependence on imported hydrocarbon would tie the country economic growth and stability with the geopolitical dynamics of the world's most volatile regions. In both cases, Bangladesh's energy independence and 'strategic autonomy' would be suffered. Thus, the way forward for maintaining energy security is to source most energy locally through increasing the portion of renewables and nuclear energy into the country's energy mix as well as increasing exploration in the country's maritime domain.

5.2.11.1. Maritime Cyber Security

The maritime sector is a significant domain of operation for Bangladesh. Bangladesh has a long history of maritime shipping and fishing. It is known fact that the maritime route operates about 80% of trade and commerce in Bangladesh. Though the operation of those sectors was only considered under physical threat with time, like land-based industries, marine sectors in the sea operation are getting digitalization for better and fast performance. At present, in the world of developed countries, digitalization is a significant factor for fast and accurate action, and statistics show that within Europe, 52% of the goods traffic in 2010 was carried by maritime transport, while only one decade ago this was only 45%.¹⁷⁷ This continuous maritime transport development is vital to our society and economy. In Bangladesh, like land-based economic sectors, maritime activity increasingly depends on Information and Communication Technology (ICT) to optimize its operations. Under the theme "Digital Bangladesh" marine sector is a significant sector to consider. ICT is increasingly used to enable critical maritime operations, from a voyage to propulsion, cargo management, and traffic control communications. As the shipping and fishing sectors are growing in Bangladesh, the sectors must consider the risk caused in light of hacking and cyber-attacks.

Conventionally, maritime attacks based on marine vehicles include piracy, boarding, theft, destruction or sometimes responsible for illegal migration. These types are always tricky to handle, as calling and receiving help quickly is lengthy and sometimes impossible while travelling across the sea. As these types of

¹⁷⁷ Enisa, "Analysis Of Cyber Security Aspects In The Maritime Sector", European Network and Information Security Agency, 2021, Available at: <https://www.enisa.europa.eu/publications/cyber-security-aspects-in-the-maritime-sector-1/@/@/download/fullReport>.

accidents are common, they are well understood with active mitigation actions.¹⁷⁸ In contrast, today's cyber-attacks are much more stealthy. They are often placed "under the radar" to take advantage of compromised vessels for longer periods and, therefore, greater profits. The impact of maritime cyber-attacks on current threats includes business disruption, financial loss, reputational loss, loss of goods and environment, loss of incident response cost, and fines and legal issues. There is a need to ensure the reliability and robustness of the ICT sector. As seen in the example of a malware-infected oil rig, even if an inexperienced hacker attempts to launch an attack using the kit and fails, the onboard system is disrupted enough to trigger an accident or shutdown. This can result in loss of life, infrastructure, money and reputation against cyber-attacks, which is an important national and pan-European issue. In June 2017, IMO issued guidelines on cyber risk management, as cyber security attacks increase the threat to technology on board modern ships and terrestrial organizations. Version 4 of the Cyber security Principles was released at a time when ship owners and ship managers were faced with the obligation to implement cyber risk management in their Safety Management System (SMS). At that time, the first audit of the compliance document was held on January 1, 2021. While the previous version (version 3, dated November 2018) provides essential guidance for the initial work of implementing risk management cyberspace in SMS, the new version has some improvements.¹⁷⁹

5.2.11.2. Modern Maritime Vulnerabilities

Generally, each maritime vessel is supported with two specific parts like hardware and software. First, all vessels must have systems for navigation and administration. Significant technological advances in these areas represent the whole vessel, like what is happening inside and outside the ship, often in real-time. These capabilities include but are not limited to, Global Positioning Systems (GPS), marine Automatic Identification Systems (AIS), the Electronic Chart

¹⁷⁸ Tawhidur Rahman, "Ict Division Bangladesh Cyber Security New Threat For Maritime Industry In Bangladesh", BGD E-GOV CIRT, 2019, Available at: https://www.researchgate.net/profile/Tawhidur_Rahmna/publication/332555102_CYBER_SECURITY_NEW_THREAT_FOR_MARITIME_INDUSTRY_IN_BANGLADESH/links/5cbd62064585156cd7a8d001/CYBER-Security-New-Threat-For-Maritime-Industry-In-Bangladesh.

¹⁷⁹ IMO 2021, "Cyber Security Compliance for Maritime," Available at: <https://imo-2021.com/imo2021/f/cyber-security-guidelines-v4>.

Display and Information Systems (ECDIS) and the associated digital nautical charts.¹⁸⁰ As a result, fewer manpower is needed to handle modern-day ships. However, this dependency on technology increases the vessel's presence in the cyber domain, increasing its chances of being targeted and offering new vectors for cyber attacks. Automated Indicator Sharing (AIS), and Global Navigation Satellite Systems (GNSS) are widespread in maritime cyber security.¹⁸¹

Hijacking may be compromised either with false data, interference or by encrypting critical files or system components during navigation and administrative systems. Ships can be compromised through insecure network connections. With access to critical systems, an attacker can directly control or encrypt critical system components so that no one can control the ship. Then, the ship and passengers may be held hostage at sea until the ransom is paid. This is more dangerous than traditional ransomware, as the ship is isolated at sea, knows where it is, and can be at risk. Alternatively, a hacker can steer a compromised ship and collide with another target, destroying the ship or another target. This attack can occur on other ships, oil platforms, bridges and, in some cases, onshore structures, depending on the situation. No such event has occurred in Bangladesh, but given the scale of the current voyage attack, it does not seem impossible.

5.2.11.3. Complexity of Non-traditional Security Threats and Issues

Traditional and non-traditional security threats and issues cannot be entirely viewed in isolation to each other. In the contemporary discussions, however, often scholars argue that the worlds of high and low politics are separated. This distinction is increasingly being challenged and security challenges, no matter where they emanate from, are intrinsically linked to each other. In this section, this complexity is highlighted using three examples:

- ❖ The relationship among resource depletion, joblessness of fishers; leading to illegal activities in both the maritime domain and in the adjacent land areas;

- ❖ Maritime mixed migration of 'boat people' may happen due to economic hardships or climate emergencies and it is in this context it is to be noted that a Bangladeshi was considered as the first 'environmentally displaced' person in France;

¹⁸⁰ Tawhidur Rahman, 2020, *op. cit.*

¹⁸¹ *Ibid.*

❖ The Rohingya influx in Bangladesh shows that this has created dissatisfaction among the host community in south-eastern part of Bangladesh as their resources were being shared by people who were not citizens of the country and the resolution of the Rohingya issue and ensuring their repatriation requires cooperation among a multitude of state and non-state actors.

This research highlights that maritime issues cannot be treated in isolation. It needs to carefully identify what are the areas that are interconnected, which will lead to possible points of interventions.

6.1. Cooperative Mechanism in Indian Ocean Region

The global oceans are a vast space with limited governance. Oceans are regarded as the common resource of all of humanity. Hugo Grotius in his *Magnum Opus 'Mare Liberum'* termed the seas as international territory with all nations having equal access. The international regimes such as UNCLOS however, adopted a more dualistic approach in which nations were allowed to establish sovereignty and rights over a portion of sea, while vast area remained opened for trade, military activities and connectivity. The UNCLOS first use the term 'common heritage of mankind' to denote the global responsibility to maintain the health of the oceans and equitable access to oceans within a sustainable and 'rule based' framework.¹⁸²

The gradual integration of global economy and supply chain has brought the world into a new era of globalization where a 'complex interdependence' is slowly erasing the prospects of large-scale conflicts among the nations. With the decline of traditional security threats, the focus has shifted to non-traditional security issues. The relative ungoverned nature of the maritime space has raised important questions on the need to manage and mitigate these threats in regional level, especially in the global south. The development of institutions in the global south has not been smooth, however, the process of regionalization has seen different level of successes in different regions. The ASEAN for example, is a case study of regionalism in the global south. It has been unique in its development of regional cooperative framework in South East Asia, based on the principles of 'non-interference' and 'consensus building'.¹⁸³

¹⁸² Garry R. Russ, and Dirk C. Zeller. "From mare liberum to mare reservarum." *Marine Policy*, vol 27, no. 1, 2003, p. 75-78.

¹⁸³ Rubiat Saimum, "ASEAN's Rohingya Dilemma: Limits of Regional Co-operation." In *Charting a Sustainable Future of ASEAN in Business and Social Sciences*, p. 339-348. Springer, Singapore, 2020.

ASEAN's approach of managing regional security has been termed as 'ASEAN way', rooted in the concept of 'cooperative security'. The concept of cooperative security has no agreed definition in the International Relations literature, however, it loosely means multilateral cooperation against non-state threats.¹⁸⁴ It can also be defined as "collaborative efforts by all members of the international community or a region thereof to prevent situations that could give rise to the use or threat of military force".¹⁸⁵ The idea of cooperative security has been operationalized through the establishment of ASEAN Regional Forum (ARF), which has a greater expansion over the years by including countries from all around Asia as well as major powers. The ARF embodies ASEAN's model for maintaining regional peace in Asia through multilevel dialogue and informal process. The informality of ARF is essentially different from all other modalities of regionalism. ARF is an example of informal engagement with implicit confidence building measures to address common security issues through extensive consultation.¹⁸⁶ South East Asia has been the epicenter of Asian norm building. The normative order established through ASEAN is unique in its characteristics, because the South East Asian states were not passive consumer of western norms rather, they 'localized' the western ideas within their 'cognitive prior' or the existing cultural framework of cooperation.¹⁸⁷ Unlike South East Asia, the regional institutions in South Asia has failed to innovate 'norms' to manage the regional disputes while advancing cooperation 'functional' issues such as climate change, migration, piracy and terrorism. The Indo-Pakistan conflict and lack of concession on the side of India was the major barrier to South Asian regional integration. While the SAARC failed to achieve regional integration, BIMSTEC has shown some hopes towards regional cooperation in the Bay of Bengal region.

In case of SAARC, the Indo-Pakistan conflict has long hindered the advancement of regional cooperative mechanism, because the member states could not agree on 'what' constitutes common security threats.¹⁸⁸ The active

¹⁸⁴ Michael Mihalka, "Cooperative Security in the 21 st Century," vol 4, no. 4, 2005, p. 113-122.

¹⁸⁵ Harry Harding, "Prospects for cooperative security arrangements in the Asia-Pacific region." *Journal of Northeast Asian Studies*, vol 13, no. 3, 1994, p. 31-41.

¹⁸⁶ Michael Leifer, "The ASEAN regional forum. A model for cooperative security in the Middle East?." 1998.

¹⁸⁷ Amitav Acharya, "How ideas spread: Whose norms matter? Norm localization and institutional change in Asian regionalism." *International organization*, vol 58, no. 2, 2004, p. 239-275.

¹⁸⁸ Joyeeta Bhattacharjee, "SAARC vs. BIMSTEC: The search for the ideal platform for regional cooperation." *Observer Issue Brief*, vol 226, 2018, p. 1-12.

territorial disputes and issue of cross border terrorism had greatly reduced the possibility of non-traditional security cooperation. In other words, the existence of traditional security concerns limited the space for non-traditional security cooperation in South Asia. Some points out that because the traditional security issues are not present in the grouping, it has a better possibility of success compared to SAARC. However, the unresolved issues exist among the BIMSTEC as well. The Rohingya issue and the tension between Bangladesh and Myanmar could slow down the regional cooperation. There has been also a low-key arms race between Bangladesh and Myanmar. In response to Bangladesh's acquiring submarines from China, New Delhi has provided Myanmar with a kilo-class submarine. Though the probability of an active military conflict is low in the BIMSTEC region, the existing disputes and tensions if not minimized could harm the prospects of the organization's objective of regional integration. The other major underlying issue is New Delhi's hegemonic position within the Bay of Bengal. How the smaller states in the region negotiate their interests in any future trade agreement vis-à-vis India, would set the tone of BIMSTEC in years to come.

In border level, there has been attempts of institutionalizing the Indian Ocean littoral states. The Indian Ocean Rim Association (IORA) and Indian Ocean Naval Symposium (IONS) are two regional frameworks established to advance maritime cooperation in the region. However, there are challenges in making such a large regional body into functional institutions. The Indian Ocean itself is a vast collection of states, with diverse culture, history, governing systems and contrasting interests. There is no unifying regional identity that can bind such a heterogeneous group of states spread across three continents. There is also a disconnect between the small islands and the continental powers in terms of IORA's vision.¹⁸⁹ The lack of a shared strategic culture and localized 'ideas' makes it difficult to establish norms. Institutions cannot add value to the existing security structure without a normative skeleton. The essential question about Indian Ocean regionalism is what additional functions IORA may provide that are not already offered by the existing sub-regional institutions. In a long run, IORA could facilitate interregional cooperation in the Indian Ocean and serve as a meeting point of sub-regional institutions, however, it requires the organization to develop

¹⁸⁹ Kwa Chong Guan, "Prospects for Indian Ocean Regionalism." Edited by Sam Bateman, Rajni Gamage, and Jane Chan. *Asean And The Indian Ocean: The Key Maritime Links*. S. Rajaratnam School Of International Studies, 2017, Available at: <http://www.jstor.org/stable/resrep05888.6>.

its capacities to engage the states and regional institutions alike.¹⁹⁰ The IONS on the other hand, is mostly a defense centric arrangement. The symposium is an Indian instantiated framework to collaborate on security issues relevant to the Indian Ocean region which includes developing mechanisms for HADR operations, creating informal ‘soft laws’ through consultation and enhance interoperability among IOR navies.¹⁹¹

However, these institutions and frameworks requires the realization of two significant goals: firstly, the development of transnational norms to further cooperation into sensitive areas of traditional and non-traditional security issues. The vast and diverse landscape of the IOR means, developing transnational norms are rather difficult task. Therefore, cooperative norms have to be developed at sub-regional level with inputs from regional states. These can be done through developing cooperative arrangements in localized setting, where standard practices can be established through close consultation on the basis of consensus. An incremental and long-term approach are necessary elements to build a ‘normative architecture’. This can be applied in every sub-regional institution in the IOR region, including in the Bay of Bengal. BIMSTEC members for example, have to agree on ‘standard procedure and practices’ before delving into trade agreements and ‘legal regimes’. Thus, localized and ad-hoc practices and processes need to be preferred over global practices and regimes. But at the same time, national coordination is also essential. Specially in the maritime domain, a number of agencies, institutions and bodies are tasked with maintaining security and management of resources. Coordinating the responsibilities of these organizations are necessary to build standard practices in the national level. Synchronizing these actors and establishing a ‘whole government’ approach is therefore a paramount task to completed.

Secondly, proper channels need to be established to ‘diffuse norms’ from sub-regional setting to regional setting. The IOR based institutions such as IORA could function as a platform for settlement of interregional disputes and building cooperation on major security issues while sub-regional normative practices could be integrated into the mechanics of the organization. In a sense, localized norms could be utilized to resolve global security issues.

¹⁹⁰ Christian Wagner, "The Indian Ocean Rim–Association for Regional Co-operation (IOR–ARC): the futile quest for regionalism?," *Journal of the Indian Ocean Region*, vol 9, no. 1, 2013, 6-16.

¹⁹¹ P. K. Ghosh, "Indian Ocean naval symposium: uniting the maritime Indian Ocean region." *Strategic Analysis*, vol 36, no. 3, 2012, p. 352-357.

7.1. Policy Recommendations and Future Areas of Interventions

- ❖ It is time that Bangladesh opts for a proactive foreign policy weighing on its strengths and weaknesses. To make its policies relating to the Bay of Bengal work, opportunities and challenges of Bangladesh need to be identified. This is also required for a consistency in its foreign policy and to respond to increasing attention that Bangladesh is receiving in recent times. When a momentum is created and a country witnesses a change in its global status, renewed efforts are required to sustain such moments.
- ❖ Formulating a threat matrix to identify different levels of threat in Bangladesh's maritime domain and creating more maritime domain awareness. The threat matrix can be a yearly projection of domestic, regional and global issues. Such threat matrixes would incorporate short-term, medium-term and long-term possible solutions and identification of black swan events analyzing past events.
- ❖ A platform or forum is essential where policymakers, Armed Forces' officials and scholars can conceptualize the different aspects of non-traditional threats and their implications.
- ❖ This research particularly stresses upon formulating Maritime Strategy Papers for Bangladesh of two different types:
 - Naval Doctrine
 - Strategy Paper on Non-traditional Issues
- ❖ A mix of practitioners, diplomats, experts on relevant fields and strategists (depending on the context) shall work on preparing two different strategy papers. Depending on the nature of the Naval Doctrine and the Strategy Paper, these shall be disseminated to relevant stakeholders.
- ❖ As this research has identified, intra-issue connections and dynamics must be paid attention to while understanding an issue and formulate policies accordingly, which requires intra-agency cooperation.
- ❖ Threats in the maritime domain are of transnational nature and therefore, requires transnational cooperation. A Coordinating Cell for ensuring cooperation on non-traditional issues among nation-states can be formulated.

- ❖ Division of responsibilities between the Navy and Coastguards depending on the nature of threats.
- ❖ Bangladesh should focus on becoming an ‘autonomous’ ‘three-dimensional’ force at ocean. Autonomous technologies such a long-range Unmanned Ariel Vehicle (UAV) and Autonomous Underwater Vehicle (AUV) should be part of the country’s growing inventory.
- ❖ Purchasing of specialized research vessels to deal with major threats in maritime domain and collecting information in the territorial sea, EEZ, Contiguous zone and Continental shelf regions for the extraction of resources.
- ❖ Sensitization of maritime issues through using a whole-of-society approach as was effective in the case of countering violent extremism. Recrafting our identity from a deltaic perspective to a maritime perspective is also a matter of urgent attention.
- ❖ The research prioritizes that any measures undertaken concerning maritime affairs should not only emphasize on ‘security’ but also of ‘defense’ and ‘safety’ as key dimensions of focus.
- ❖ In this research, a major gap was found in the area of maritime search and rescue, specially from Bangladesh’s perspective. In Bangladesh’s vicinity, only two countries—India and Singapore—have Information Center on maritime search and rescue. It is to be noted that only 14 countries are signatory to the IORA MoU on Search and Rescue. This study highly recommends Bangladesh stepping up and developing its own strength in this regard.
- ❖ The study recommends further inquiry on the linkage between climate change and security, where security is referred to as both human security as well as its societal impacts in terms of maritime migration.
- ❖ The effect of climate change in the south western part of the country and its effects on economic activities is another recommended area of intervention. While the Bay of Bengal, at its mouth specially is subject to heavy siltation, the southwestern part of the country experiences heavy saline intrusion which needs specific intervention. Similarly, the northwestern part of the country needs attention due to growing

desertification, which would require an entirely different approach to mitigate the situation. This shall require an effective negotiation on the Ganges water Sharing Treaty with India and a regional approach to the sharing of international rivers among the relevant countries of South Asia.

- ❖ We must work to find the possibility of international coordination on the Rohingya issue and find ways to initiate the process of repatriation. Ensuring donor countries attention and commitments should be given priorities, while at the home front, two issues require urgent attention. The soaring relationship between the host community and the Rohingyas, and maintaining law and order situation in the Rohingya camps. While the Bhashan Char stands as a shining example of Bangladesh's management of providing temporary shelters for the time being, creating job opportunities for the Rohingyas living in the island would remain one of the key challenges.

Maritime Piracy

- ❖ The link among Piracy, Climate change and the depletion of fish stock should be properly studied to understand the socio-economic causes of maritime piracy. The impact on climatic factors on criminalization should take into account to counter piracy, armed robbery and maritime terrorism. Socio-economic aspects should be placed in the intersection of both climate and security policy.
- ❖ A long-term vision needs to be developed to address the climate and environmental induced unemployment in the coastal south of the nation. The state should support small farmers and fishers affected by the climatic resource scarcity.
- ❖ Both Navy and Coastguards are security guarantors of Bangladesh's maritime domain. However, both Coastguards and Navy has different sets of capabilities. The Coastguard should be restructured as a force which can immediately expedite to deal with security threats in coastal waters, inland waters and territorial sea, while the Navy should increasingly re-focus on the threats at Bangladesh's EEZ and the high sea. While a protocol of interoperability between these two forces should be set up to share resources, hardware and intelligence in times of necessity.

Maritime Terrorism

- ❖ The concept of maritime terrorism should be included into a national terrorism framework. The distinction between maritime terrorism and land-based terrorism has to be properly delineated to provide the law enforcement agencies the theoretical tools to measure threats.
- ❖ The inter-agency collaboration network among Navy, Coast-guards and the police should be established to disseminate information, training and expertise to fill the gap of counter-terrorism capabilities of Bangladesh's maritime forces.
- ❖ The intelligence and counter-terrorism facilities should be developed in the maritime islands to protect them from terrorist groups, radicalization and from the usage as terrorism launching pad. Bangladesh should develop a threat matrix based on available data to divide the maritime domain into three threat regions: High threat regions, medium threat regions and Low threat regions. The threat matrix should be based on data related to piracy, maritime armed robbery, IUU fishing and maritime terrorism. The matrix should cover the entire maritime domain of Bangladesh, the territorial sea, EEZ, Contiguous zone and Continental shelf. The resources, i.e., security cover should be allocated to a region based on their threat level. Highest priority should be given to high and medium threat regions.

Food Security

- ❖ Farmers should be encouraged to focus on important crops such as edible oil, onion and other crops which, Bangladesh is dependent on imports. Government schemes should facilitate the transition from rice to other valuable crops.
- ❖ Loan, economic aid and other facilities should be provided to meat producers in the country. Local supply chain should be developed to source food for cattle farming in the country. The security aspect of climate change should be better reflected in the country's climate change policy. The effects of climate induced environmental degradation on food security and employment in Bangladesh's rural and remote coastal region require further study.

- ❖ More food import licenses should be provided to multiple farms. Competition in the food import business should be encouraged. Strong anti-trust laws should be brought to break monopoly of syndicates in the country's food industry.

Blue Economy and Energy Security

- ❖ The percentage of renewable and clean energy should be increased in the energy mix of the country. Today renewable energy contributes to less than 1% of the country's energy mix. Measures should be taken to make it 10% of the energy mix by 2030 and 25% by 2041. Steps should be taken to build more nuclear plants in the country's north and southern portions. Smart energy grids should be constructed to limit system loss and modern battery facilities should be built to conserve additional energy.
- ❖ Compromised and Resilience systems must also be designed to recover quickly and effectively control cyber-attacks that may not become vulnerable to the whole vessel.
- ❖ Bangladesh should diversify its electricity imports. Aside from India, focus should be made to import energy from Myanmar, Nepal and Bhutan under favourable terms. Bangladesh should establish Exclusive Energy Hubs (EEH) where both local and foreign energy producers should be encouraged to establish electricity plants with favourable tax incentives under long term government support schemes.
- ❖ The natural gas exploration in the Bay of Bengal should be intensified. State energy companies should focus on collaborating with foreign energy giants on favourable terms.
- ❖ Bangladesh government can provide incentives to local companies such as initial seed money and tax cuts to encourage them to start-off companies. Same can be done in promoting deep-sea fishing capacities.
- ❖ Domestic capability to extract energy should be enhanced which includes procuring more survey vessels as well as establishing specialized schools to train petrochemical and offshore engineering.

Maritime Cyber Security

- ❖ Awareness of cyber security needs and challenges in the maritime sector, like the high ICT complexity and the use of specific technologies, should ensure adequate security provisions. It would be beneficial for all stakeholders to agree on a common strategy and development for the cyber sector; as current maritime regulations and policies consider only the physical aspects of security and safety, it is recommended that policymakers should add cyber security aspects under practice. There should be a holistic risk-based approach also.
- ❖ Updating existing ship systems with intelligent isolation is essential to control cyber-attacks on maritime vessels.
- ❖ In port safety like Cargo X-ray Scanner, Control of ports by the electronic camera (CCTV), Metal detectors should be ensured.
- ❖ Like the US Navy, Bangladesh needs to develop Resilient Hull, Mechanical, and Electrical Security (RHIMES), which aims to introduce diversity and prevent the same exploit from succeeding on multiple controllers.

Research Agenda

- ❖ A research center on exploring research and business opportunities can be established in Cox's Bazar, which would be dedicated to blue economy related researches and their implementations. We should pay attention to locational realities and how being on the center of activities make us view an issue in its fullest sense. Urban centric works often make us overlook the priorities and concerns of a particular location for which a Cox's Bazar-based research center would be more relevant in identifying issues from being on the spot. Not only that, this shall be able to address the issue of urban-periphery divide and provide fresh perspectives in understanding issues, which are often urban-centric and thus, run the risk of overlooking the local contexts. Localization and contextualization are significant in policy-planning, which should be taken into consideration.

8.1. Conclusion: The Future is As We Write It Today

While conducting a research on mapping the security architecture of the Bay of Bengal from Bangladesh's perspective, a glaring observation from the researcher's point of view has been how the outside world views Bangladesh today and how the Bangladeshis view themselves. At this particular juncture of time, what Bangladesh has achieved with the resources at its disposal and has been able to create its distinct geopolitical identity are highlighted in a positive note in international media. It has made scholars and policymakers alike to see Bangladesh in a different light and highlight the rise of a 'Bangladesh that can say no'.¹⁹² On the other hand, an extremely cautious approach is pursued in Bangladesh in asserting its strategic posture. There are moments in history when countries failed to 'seize the moment', it did not bode well for them in the long run. To make this happen for Bangladesh, policymakers and scholars together must work together and create a new positive narrative for Bangladesh contrary to how the international media sees Bangladesh. Bangladeshis working in other countries, specially in the West, have emphasized on this aspect, which must be addressed in an urgent manner. While interviewed for this research, Mr. Anu Anwar, who is a doctoral student at Johns Hopkins University in Washington DC, America, pointed out the need for highlighting Bangladesh's strategic significance and built a value of Bangladesh.¹⁹³ The need to create an alternative narrative for Bangladesh has recently been highlighted by other scholars as well.¹⁹⁴ This research also suggests that with an unfettered access to the Bay of Bengal, Bangladesh's strategic significance has taken a new turn. Analyzing the significance of the Bay as one of the major hotspots of the Indo-Pacific region and challenges before Bangladesh,

¹⁹² Interview with Dr. David Brewster (Senior Research Fellow of National Security College, Crawford School of Public Policy, Canberra, Australia), Dr. Ian Hall (Professor of International Relations and the Deputy Director (Research) of the Griffith Asia Institute, Griffith University, Australia), Dr. Kikuchi Tsutomu (Professor of International Political Economy, Aoyama Gakuin University & Adjunct Senior Fellow, Japan Institute of International Affairs (JIIA), Japan), and Dr. Zou Yingmeng (Assistant Professor of the Institutes for International Studies at Yunnan University and the Director of the Center of Bangladesh Studies, Yunnan University, China) representing Australian, Japanese and Chinese views.

¹⁹³ Fellow at the Faculty of Arts and Sciences and an Associate in Research at the John K. Fairbank Center for Chinese Studies, Harvard University, USA and Doctoral student at the Johns Hopkins University, USA.

¹⁹⁴ Naomi Hossain, 2021, "Nobody is interested in Bangladesh", Himal South Asia, Available at: <https://www.himalmag.com/nobody-is-interested-in-bangladesh-naomi-hossain-2021/>.

this research also outlines the possible loopholes for the country. The greater objective is to create awareness about Bangladesh's status-transformative stage and how can this best be utilized for creating further opportunities. One must not forget the cautionary tales coming from different countries of the region of South Asia, where the pandemic and mismanagement of economic opportunities, coupled with rising inflation due to the war in Ukraine have led to political breakdown for Sri Lanka and may give rise to similar situation in a few other countries. It also must be noted the brunt of the unstable global political situation have given rise to social and political instability in European countries, America and many other parts of the world. The world collectively is going through a difficult period in history, which requires a prudent leadership and macroeconomic managements to steer through for the future.

Strategic significance of a country, and in this case that of Bangladesh, however, does not diminish as for Bangladesh, these are based on hard realities. The Bay provides Bangladesh a unique opportunity to work as a gateway for the land-locked Northeast Indian region a well as for Nepal and Bhutan. As the country is experiencing energy deficit just like any other countries of the world, wind power generating project using the resources of the Bay of Bengal has been inaugurated earlier in 2022, which will be operational by the end of the year, providing much-needed relief to the perennial energy crisis.¹⁹⁵ While this will not fill in the greater part of the solution, nonetheless, this is a start in the right direction. One must, in the end, also look into a unique characteristic of Bangladeshi people—resilience and entrepreneurship.¹⁹⁶ A country that started off with no foreign currency and has no natural resources has traveled this far not only through prudent and persistent economic policies but also because of the resilience of its people always ready to weather any storm that may come on their path. The land, a big delta, is a confluence of major rivers flowing into the Bay of Bengal, where the courses of the river changes their courses quite frequently. People of this delta are aware of this unseen fate and have always shown the courage to rebuild. There are no macro- or micro-economic indicators to measure its impact and thereby, there is no plausible way to add this factor to the existing economic calculations. The practical manifestation of this in a large scale however are seen in disaster-stricken areas and was specially evident during the Covid pandemic.

¹⁹⁵ Jobaer Chowdhury & Eyamin Sajid, 2022, Country's first big leap in wind energy from December, *The Business Standard*, 21 July 2022.

¹⁹⁶ Syed Akhtar Mahmood, *Entrepreneurial waves*, Dhaka Tribune, 18 April 2022, Available at: <https://www.dhakatribune.com/business/2022/04/18/entrepreneurial-waves>.

Despite many apprehensions regarding how the future may look like, realistic political, economic decisions coupled with the resilience of its people, Bangladesh has the capability to stand before the future challenges. What it requires also to highlight its strategic significance to attract more financial investments and political engagements in a favorable manner for the country, where positioning the Bay of Bengal plays one of the key roles.

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Web : www.bimrad.org

Naval Headquarters Complex, Banani, Dhaka-1213, Tel : +8802-9835182