

DISSERTATION ON

The Preservation of Current Marine and Coastal Environmental Law in
Bangladesh: A Critical Analysis

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DECLARATION

I truly declare that My name is Md. Mehedi Hasen Jewel and now I am enrolled in the Department of Law at East West University. In fulfillment of my academic obligations, I have conducted this Legal Research. This written dissertation is a representation of my thoughts expressed in my own words and I have appropriately attributed and acknowledged the sources from which they were taken. I further swear that I have followed all of the rules of academic honesty and integrity and that I have not misrepresented, invented, or faked any significant concept, data, fact, or source in my work. I have also not used any sources that have been tampered with in any way. I am aware that any violation of the aforementioned will be grounds for disciplinary action to be taken by the institute. I acknowledge that this is the case and that it is my responsibility to ensure that this does not occur.

ABSTRACT

The main point of the research was to demonstrate the international legal norm and local legal strategy for marine and coastal environment protection in Bangladesh. Various forms of pollution from land, ships, and the air were also defined, along with their effects on coastal and marine ecosystems. The research presented here analyzes the international laws regarding the preservation of the marine and coastal environment and with Bangladesh's international responsibilities. The research also shows Bangladesh's current laws for protecting the marine and coastal environment and the comparison between the domestic law of Bangladesh and international law. Finally, it gives a few recommendations for how Bangladesh's laws could be improved to better protect the marine and coastal environment.

LIST OF ABBREVIATIONS

Abbreviation	Full-form
BAPA	Bangladesh Poribesh Andolon.
BOBLME	The Bay of Bengal Large Marine Ecosystem Project
EEZ	Exclusive Economic Zone
IMO	The International Maritime Organization
ITLOS	The International Tribunal for the Law of the Sea
MARPOL	The International Convention for the Prevention of Pollution from Ships
TMWZ	Territorial Waters and Maritime Zones Act
UN	United Nations
UNCBD	The United Nations Convention on Biological Diversity
UNCLOS	The United Nations Convention on the Law of the Sea
WHO	World Health Organization

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Chapter: 1

Introductory

1.1 Statement of the problem:

Bangladesh is a South Asian developing nation that borders both India and Myanmar. Most of the country's money comes from agricultural, and it is supported and made simpler by excellent geographic conditions, rich soil, and a wide network of major and minor rivers. The Bay of Bengal is known for its biodiversity, which has made fishing a source of income for coastal inhabitants. About 30 million people live in coastal regions for fisheries, salt farming, agriculture, coastal transportation, and forests. The increasing human population, business and industrial activities, over use of marine resources, reckless shipwrecks, and pollution from land are all having a negative impact on marine ecosystems. Additionally, due to a lack of adequate wastewater treatment facilities, a significant amount of plastics, wastewater, urban sewage, industrial waste end up in marine water or straight in the coastal sea. These events raise questions about how to prevent Bangladesh's marine and coastal environment.

To prevent, reduce, and control the pollution in the marine and coastal environment has been a concern in the whole world in addition to being a concern in Bangladesh. In the middle of the 20th century, scientists and experts identified the cause of marine pollution. The first international legislative document to acknowledge the preservation of the maritime environment was The International Convention for the Prevention of Pollution of the Sea was established in 1954. Following the Torrey Canyon incident in 1967, the worldwide legal community started to create more thorough legal protections for the maritime environment against unforeseen pollution. The United Nations Convention on the Law of the Sea 1982 (UNCLOS) noticed concerns relating preservation of the maritime environment in addition producing a number of international legal instruments. In order to accomplish its objectives for the maritime environment, UNCLOS lays a number of rules, guidelines, and standards for state parties.

Bangladesh has accepted international conventions to safeguard marine and coastal regions from pollution but has not yet passed national law to carry out international agreements. Even now, when marine and coastal areas are polluted, legal process are hardly practice in this country.

1.2 Research question:

- How current marine and coastal environmental law in Bangladesh is compatible with international norms?

1.3: Objective of the thesis:

1. To compare Bangladeshi law with international legal norms for conserving and protecting marine and coastal environments.
2. To assess the strengths of Bangladesh's domestic marine and coastal environment protection laws.
3. To make a few findings and recommendations after concluding the dissertation.

1.4 Methodology:

This dissertation will focus on primary and secondary data in order to establish a multidimensional view of the topic. Primary data refers to material that was collected directly by the subject of study. This qualitative analysis draws from a variety of sources, including case law, domestic legislation, books, articles from academic journals, reports, opinions, international legal instruments, and online sources. The problem was found and analyzed with the help of secondary data, and then all of the relevant data, information, and ideas were put together.

1.5 Literature Review:

In countries like Bangladesh, legal problems about preserving and protecting marine and coastal areas are rare and not given enough attention. But the present condition of the marine and coastal environment was going out of control, and this problem needs to be fixed by the government. Several research studies and books have been written about these kinds of environmental issues.

To move forward with this dissertation idea, intellectual questions about the marine and coastal environment and its law parts need to be defined. Abdullah Al Farooq covers the eleventh chapter on preventing marine pollution from a global legal viewpoint in his book Abdullah Al-Faruque, "Environmental Law: Global and Bangladesh Context"¹. The author places a strong point on the development for the preservation of the marine and coastal environment under international law. He also describes many sources of marine and coastal pollution and how international law might deal with events like these. Writer of the book covers the removal of marine pollution from Bangladesh's standpoint in the twenty-sixth chapter. In this part, he talks about why Bangladesh needs to pay more

¹ Abdullah Al Faruque, "Environmental Law: Global and Bangladesh Context (1st Published, 2020, New Warsi Book Corporation)"

attention to protecting the marine and coastal environment. He ends by talking about a few laws that are already in place but may not meet international standards and that deal with the marine and coastal environment. The literature mentioned above has helped in guiding the present research work.

1.6: Chapter outline:

This dissertation is arranged in total six chapters. The first chapter of this dissertation discusses about the introductory part which is contain the problem statement, research question, methodology, and objective of the dissertation. The basic concepts of marine and coastal environments discussed in the second chapter. The third chapter contain preservations of marine and coastal environment under the law of Bangladesh. International legal preservation on marine and coastal environments is discussed in the fourth chapter. The fifth chapter contain a view of comparison between the domestic laws of Bangladesh and International law on the preservation of the marine and coastal environments. Finally in the sixth chapter finding, recommendations, and conclusion is shown.

1.7 Limitation of the research:

First limitation of the research was time. The research could have many aspects that could not be explored in depth due to the limitations of the information. It was not possible to interview any of the victims of this type of situation. Since the work was done at home, many publications, research papers, books, and articles couldn't be found because not having access to many online resources.

Chapter: 2 Basic Concepts of Marine and coastal environments

2.1 Introduction:

The marine and coastal area includes the point where land and water meet, and it is a complex system. It is the place where many human do activities like fishing, shipping. The coastal zone is especially significant, beaches, estuaries, wetlands, and coastal woods include in the coastal zone. Millions of people dependent on the coastal area as a source of food and income. The marine zone also significant the open ocean includes marine zone, which covers about 70% of the Earth's surface. Fish, whales, sharks, and the microscopic plankton that provide the basic food chain are all present in marine life. For its ability to absorb and disperse heat and carbon dioxide, the open ocean is a key for controlling the climate. Climate change and pollution are two issues that facing marine and coastal ecosystems. Sea levels are rising, ocean temperatures are rising as a result of climate change, which may have influence on marine and coastal ecosystems.

2.2 Pollution and Environment:

It is important to look into the area of law and how the law defines the pollution and environment. The term "environment" is defined as "the interdependence between air, water, soil, and physical qualities and the interactions with people, other plants, animals " under Section 2 of the Environment Conservation Act of Bangladesh.² This idea acknowledges how water interacts with the marine and coastal environments in relation to people, other plants, and animals.

Pollution reduce is the main goal for the environmental legislation. It's hard to find out the main causes of pollution. In legal terms, pollution can refer to any substance, material, or energy that is released into the environment that may be harmful to human health or the environment.³ This can include pollutants such as chemicals, hazardous wastes, noise, radiation, and emissions from vehicles and factories.

2.3 Marine and Coastal Environment:

The law can have different ideas about what is the marine and coastal environment. However, here are some general definitions:

² Environment Conservation Act 1995, s 2.

³ Frank Veronica, "The European Community and marine environmental protection in the international law of the Sea" "https://www.academia.edu/77549625/The_European_Community_and_Marine_Environmental_Protection_in_the_International_Law_of_the_Sea" accessed 17 March 2023.

The ocean and all the living and nonliving things in it are referred to as the marine environment. This can include the water, seabed, and all the living organisms that make up the marine ecosystem.⁴ The coastal environment generally refers to the land and water areas where the land touch with the sea. This can include beaches, dunes, cliffs, estuaries, and wetlands.⁵ The marine and coastal environment is importance of protecting these unique and valuable ecosystems and the resources.

2.4 Marine and Coastal Environment Pollution:

The legal definition of marine and coastal environment pollution refers to the presence or introduction of any substance, material, or energy into the coastal or marine environment that has harmful or toxic effects on living organisms or on the natural environment.⁶ Types of marine and coastal environment pollution can include oil spills, chemical spills, sewage discharge, and plastic pollution.⁷ These types of pollution can have significant negative impacts on the health of the marine ecosystem as well as on human health and economic activities that depend on the marine and coastal environment.

The definition of marine environment pollution, as stated by the United Nations Convention on the Law of the Sea (UNCLOS) “includes any substance prohibited by the current convention, that introduced into the sea, might endanger living things, human health and maritime life .”⁸

2.5 Current Marine and Coastal Pollution Statistics in Bangladesh:

According to the latest data, marine and coastal pollution in Bangladesh remains a significant environmental issue. Here are some key statistics:

2.5.1 Plastic Pollution:

Bangladesh produces around 3.3 million tons of plastic waste every year, with a large portion ending up in the oceans and waterways. According to a study managed by the Ocean Conservancy, Bangladesh is the ninth-largest contributor to ocean plastic pollution in the world.⁹ According to the International Conference on the Bangladesh Marine Environment, 1800 metric tons of pesticides were

⁴ Yousef Almutairi H., “Protection of The Marine Environment Under International Law and Kuwaiti Criminal Law” (May 2016), “<http://digitalcommons.pace.edu/lawdissertations/18/>” accessed 17 March 2023.

⁵ Ibid

⁶ Edgar Gold, Moira L., and McConnell, “*The Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment* (1991)” “<https://scholarlycommons.law.case.edu/jil/vol23/iss1/3>” accessed 17 March 2023.

⁷ Ibid

⁸ The United Nations Convention of Sea of the Law 1982, art 1(4).

⁹ Shafiul H., Md A. Rahman, M. Ahmed Chowdhury, Sajib M. “Plastic pollution in Bangladesh: A review on current status emphasizing the impacts on environment and public health” “<https://doi.org/10.4491/eer.2020.535>” assessed 17 March 2023

directly dumped into the sea at the same time.¹⁰ In Chottogram, shipbreaking yards release roughly 250 kg of polychlorinated biphenyls daily.¹¹

2.5.2 Oil Spills:

Oil spills are a significant concern for Bangladesh's coastal waters. Under a report published by the Bangladesh Centre for Advanced Studies, there were 150 oil spills in the country's waterways between 2010 and 2018, with a total of around 3,700 tons of oil spilled.¹² Statistics indicate that 6 thousand metric tons of crude oil and 50 thousand metric tons of waste are discharged annually by land-based refineries at Chittagong Seaport.¹³

2.5.3 Industrial Pollution:

Industries dump a lot of trash into the water, which causes a lot of pollution. A study show that published by the Bangladesh Poribesh Andolon (BAPA) found that 22 out of 24 industrial areas in the country were discharging untreated effluent into nearby rivers and canals.¹⁴ On Bangladesh's coastline, there are now around forty docks that recycle and break ships. Shipbreaking is a profitable business in developing nations but it comes with a number of environmental and health dangers.¹⁵

2.5.4 Land-Based Pollution:

Bangladesh's marine and coastal pollution is also caused by pollution from the land, like farming waste and garbage. According to the Department of Environment, around 80% of the country's sewage is discharged untreated into waterways.¹⁶ According to the Bay of Bengal Large Marine Ecosystem Project (BOBLME), land-based marine pollutants (LMP) were released directly into the Bay of Bengal by streams, rivers, tides, and canals.¹⁷

¹⁰ Md. Kabir Humayun, "Coastal and marine pollution *The Daily Star* (Dhaka, 23 April 2010)" "www.thedailystar.net/news-detail-135561" accessed 17 March 2023.

¹¹ Ibid

¹² IQBAL K. "ASSESSING THE IMPACTS OF OIL SPILLAGE FROM SHIPS ON COASTAL ENVIRONMENT OF BANGLADESH: MEANS FOR RESPONSE AND MITIGATION: A Dissertation for the Degree of Master in Disaster Management" "<https://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/1552/08268006.pdf?sequence=2>" assessed 17 March 2023.

¹³ Md. Kabir Humayun, "Coastal and marine pollution *The Daily Star* (Dhaka, 23 April 2010)" "www.thedailystar.net/news-detail-135561" accessed 17 March 2023.

¹⁴ SBB. "Pollutants discharged from ship breaking and its impact 2022" "<https://shipbreakingbd.info/environmental-pollution/>" accessed 17 March 2022.

¹⁵ Ibid

¹⁶ Md. Wahidul A. "Land-Based Marine Pollution: An Emerging Threat to Bangladesh 2023" "<https://www.intechopen.com/online-first/85545>" accessed 17 March 2023

¹⁷ Ibid

2.5.5 Human Waste Pollution:

Human waste is any substance that enters the water, either directly or indirectly, such as synthetics, plastics, and other things. 9,000 MT of human waste reportedly dumped regularly from Khulna and Chittagong Seaport, as per Global Program Action 2005. This might ruin the sea environment and block sustainable growth.

2.5.6 Tourism-Related Pollution:

Clean marine environments are necessary for sustainable marine tourism. However, Bangladesh's seaside tourism business is in danger because of the rising amount of garbage in the ocean. Along with garbage, coral, and seashell in coastal locations, tourists, marketplaces, and tourist stores also dump large quantities of plastic bottles and empty packaging on beaches.¹⁸

2.6 Conclusion:

In conclusion, the marine and coastal environment is a complex system that provides essential ecological, economic, and cultural. It includes a large area where the land connects the sea, with beaches, estuaries, bays. However, this environment faces a lot of threats, including climate change, pollution.. To understand the concepts of this environment is not easy for proper management and conservation efforts, also for ensuring the long sustainability of this ecosystem. It is important that we take an appropriate action to managing the marine and coastal environment.

¹⁸ Md. Kabir Humayun, "Coastal and marine pollution *The Daily Star* (Dhaka, 23 April 2010)" "www.thedailystar.net/news-detail-135561" accessed 17 March 2023.

Chapter: 3 Preservations of Marine and Coastal Environment Under the Law of Bangladesh

3.1 Introduction:

Bangladesh is a country that have a rich marine and coastal environment, along with the Bay of Bengal. Bangladesh's marine and coastal environment a large area of ecosystems, with estuaries, mangroves, coral reefs, and beaches. The ecosystems are home to a lot of marine species. The marine and coastal environment of Bangladesh also plays important role in the country's economy and provides livelihoods for millions of people who depend on sea for fishing, aquaculture, tourism, and other economic activities. The fishing industry of this country alone with employs over 10 million people and fill up a large portion of animal protein. However, the marine and coastal environment of Bangladesh faces significant threats from human activities such as overfishing, coastal development, pollution, and climate change. To identified this issue, Bangladesh has developed a range of policies, regulations, and aimed at promoting the sustainable use and preservation of marine and coastal resources.

3.2 Bangladesh's current law for protecting and preserving the country's coastal and marine environment:

Protecting the environment legally is a challenging task, especially when it comes to the marine and coastal ecosystem. This is because of its peculiar nature, worries about global legal standards, economic viability, and difficulties with enforcement systems. The key environmental and marine legislation that is related to safeguarding the maritime and coastal environments are listed below:

3.2.1 The Constitutional Obligation to Protect the Marine and Coastal Environment:

By virtue of Section 12 of Act XIV of 2011, referred to as the Fifteenth Amendment, and Article 18A were added to that amendment in the Bangladesh Constitution.¹⁹ The conservation and improvement of the environment and biodiversity are covered under Article 18A. According to this Article, "the State should try to safeguard and preserve biodiversity, natural resources, wetlands, forests, and animals for the present and future people who live there".²⁰ The article is include in Fundamental Principles of State Policy that is the Part 2 of the Constitution that has no judicial application but is still significant to Bangladesh's government because it will use in legislation, as a guideline for how the constitution should be interpreted, and as a foundation for the work of the government and its people.²¹

¹⁹ The Constitution of Bangladesh, Article 18A

²⁰ Ibid

²¹ Ibid article 8 (2)

3.2.2 Territorial Waters and Maritime Zones Act, 1974:

Bangladesh's first legislation to establish sea limits and, control marine pollution was the Territorial Waters and Maritime Zones Act, 1974.²² The Act grants the government the power to take appropriate measures for the preservation of maritime health and natural balance in the environment of the high seas surrounding territorial waters.²³

3.2.3 Maritime Zones and Territorial Waters Regulations 1977:

In line with the Territorial Waters and Maritime Zones Act of 1974, these rules were adopted in 1977. That regulation establishes to regulate the foreign vessel in Bangladesh's territorial water.²⁴ Without first receiving consent from the government or a permit from a qualified organization, no one shall have the right use territorial zone.²⁵ By publishing in the official gazette, the government might announce any place within the territorial zone as a nature reserve for exploitation, exploration, and economic development in the interest of Bangladesh.²⁶

3.2.4 The Port Authority Act and Regulations:

Under Article 211 of the UNCLOS, state ports must implement measures to control the ports. There is no particular provision for the management of marine pollution.²⁷ The Chittagong Port Authority Ordinance 1976 has been added to allow for a larger fine for pollution, which is anticipated to be Taka 100,000.²⁸ Port authorities have the authority to refuse to release a foreign ship if it causes any harm to the coastal or maritime environment, under Article 226 (1) of the UNCLOS.

3.2.5 Coast Guard Act 1994:

The Act of Coast Guard created the Bangladesh Coast Guard Unit in 1994 to ensure coastal security and defend the coast from dangers. The Coast Guard is tasked with identifying and preventing environmental contamination in Bangladesh's marine regions.²⁹

²² Al Faruque A. "Environmental Law: Global and Bangladesh Context (1st Published, 2020, New Warsi Book Corporation)"

²³ The Territorial Waters and Maritime Zone Act 1974, section 8

²⁴ Ibid section 3

²⁵ Ibid section 7

²⁶ Ibid section 6

²⁷ Asaduzzaman, Khondaker Md., "Protection of Bangladesh waters against accidental oil pollution from ships" (1998). World Maritime University Dissertations. "<https://commons.wmu.se/alldissertations/1256>" accessed 17 March 2023.

²⁸ The Chittagong Port Authority Ordinance, 1976 section 41(A)

²⁹ The Coast Guard Act of 1994, s. 7(2)(e).

3.2.6 Marine Fisheries Regulations 1983:

The marine fishing area in Bangladesh is known as being significant part to the national economy. There are 475 kinds of fish in Bangladesh's water. This Ordinance addresses the preservation, management, and improvement of marine fishery resources in Bangladesh. Using any chemical or harmful substance in water is banned.³⁰ To protect native aquatic flora and fauna as well as the marine and coastal environment, the government might call any area of Bangladesh's fishery waters to be a marine reserve.³¹

3.2.7 Bangladesh Ship Recycling Act 2018:

This Act was created such instruments that serve as the basic legislation for the implementation, regulation of the marine environment. The creation of a ship-recycling zone is mentioned in Section 4 of the Act. Anybody who develops a shipbreaking facility without government approval authorization faces up to two years in jail, or up to Taka ten to thirty lac of fine, or both.³²

3.2.8 Bangladesh Environment Conservation Act, 1995.

The act creates an ecologically important area to address environmental effect on that area³³ Between Cox's Bazar and Teknaf Beach, there are 10465 hectares of land, around 4900 hectares of St. Martine Island, Sonadia Island, and a 9-kilometer stretch of ocean surrounding the Sunderbans protected forest have all been designated as ecologically sensitive areas by the government of Bangladesh. If any individual engages in any action (pollution) that is not permitted by the government in any area that is sensitive to the environment, He or she might be sentenced to 10 years in jail, ten lac taka in fines, or both.³⁴

3.2.9 The Environment Court Act, 2010:

To address environmental concerns and provide justice, the Environment Courts Act was formed in 2010. The Joint District Judge has the power to perform duties outside of his regular role as an Environment Court. However, a court for environmental appeals may consist of district judges or may be given more power. An environmental court's main objective is to give a quick trial. To safeguard the marine and coastal environment, an environmental court might be very helpful.³⁵

³⁰ Marine Fisheries Regulations, 1983 section 26.

³¹ Ibid section 28.

³² Bangladesh Ship Recycling Act, 2018 section 25.

³³ Bangladesh Environment Conservation Act, 1995 section 5.

³⁴ Ibid section 15.

³⁵ Md. Khaled M., "Effective functioning of Environment Court" *The Daily Star* (Dhaka, 25 August 2015) <<https://www.thedailystar.net/law-our-rights/effective-functioning-environment-court-131956>> accessed 17 March 2023.

3.2.10 Draft Bangladesh Marine Environment Conservation Act 2004:

To comply with global marine pollution regulations, which address, issues from all perspectives, the proposed Marine Environment Protection Act 2004 seeks to protect Bangladesh's maritime environment and end marine pollution. This proposed legislation is designed to be applicable to all marine pollution incidents where waters become polluted, as well as to all ships and people or boats that are connected to ships while they are in Bangladeshi seas.³⁶ This proposal, if accepted would allow the international convention on preventing ship pollution (MARPOL) 73/74.³⁷

3.3 Conclusion:

Finally, analyzing this chapter there are many legal preservations with policies and processes in place to protect Bangladesh's marine ecology. Marine pollution is a regular incident in Bangladesh. Current coastal and marine protection laws were not developed properly and cannot meet the present need in the maritime environment. However, the increasing pressures from human activities and climate change need to take an action to ensure the long-term sustainability of these ecosystems.

³⁶ Asaduzzaman, Khondaker Md., "Protection of Bangladesh waters against accidental oil pollution from ships" (1998). World Maritime University Dissertations. "https://commons.wmu.se/all_dissertations/1256" accessed 17 March 2023.

³⁷ Ibid

Chapter: 4 International Legal Preservation on Marine and Coastal Environments

4.1 Introduction:

The International legal preservation of the marine and coastal environment is a legal rule, agreement, and regulation that govern the use, conservation, and protection of the marine and coasts environment. Legal preservation is based on the principles of sustainable development, environmental protection, and the responsible use of marine resources. It works for the preservation of the ocean's biodiversity, and marine ecosystems, and also ensures that marine resources will use in a positive way for the well-being of human and economic development. Legal preservation is mixed with a number of international agreements, treaties, and conventions. These agreements establish legal preservation and standards for the management of the marine and coastal environment, including areas such as pollution control, and protection of marine and coastal biodiversity.

4.2 International Principle for Preservation of Marine and Coastal Environment:

The preservation of the marine and coastal environment is a significant issue in international law, and customary international law plays an important role in this context. Here are some of the most significant principles of international law for protecting the marine and coastal environment:

4.2.1 The Precautionary Principle:

This principle maintains that in a condition where there is a risk of harm to the environment, precautionary measures should be taken even if there is no conclusive scientific evidence of the potential harm. This principle recognizes that the lack of scientific certainty should not be used as an excuse for failing to take protective measures.³⁸

4.2.2 The Polluter Pays Principle:

This principle holds that those who cause pollution or environmental damage should bear the cost of the measures necessary to prevent or mitigate such harm. This principle reflects the idea that polluters should take responsibility for the harm they cause.³⁹

4.2.3 The Sustainable Development Principle:

This principle recognizes that the use of natural resources should be sustainable and that economic

³⁸ Yoshifumi T. "Principles of international marine environmental law" <https://doi.org/10.4337/9781781004777.00009> accessed 31 March 2023.

³⁹ LSE, "The polluter pays principle" <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-polluter-paysprinciple/#:~:text=The%20'polluter%20pays'%20principle%20is,human%20health%20or%20the%20environment.> accessed 31 March 2023.

development should not occur at the expense of the environment. This principle reflects the need to balance economic development with the protection and preservation of the environment.⁴⁰

4.2.4 The Integration Principle:

This principle recognizes the need to integrate environmental considerations into all relevant decision-making processes. This principle reflects the idea that environmental concerns should be taken into account in all areas of policy and decision-making.⁴¹

4.2.5 The Precedence Principle:

This principle holds that in situations where there is a conflict between economic development and the protection of the environment, the environment should take precedence. This principle reflects the idea that the protection and preservation of the environment should be given priority over economic interests.

4.2.6 The Common Heritage Principle:

This principle recognizes that the marine and coastal environment is a common heritage of all humanity and that its protection and preservation are a shared responsibility. This principle reflects the need for cooperation and collaboration among states to address environmental challenges.⁴²

4.3 International Legal Preservation for Protecting the Marine and coastal environment:

Various international organizations, such as the United Nations Environment Programme, the International Maritime Organization, and regional seas organizations implement and enforce the legal structure. These organizations work to provide technical assistance, promote cooperation, and ensure compliance with international agreements related to the marine and coastal environment. Further information gives in the following paragraph:

4.3.1 United Nations Convention on the Law of the Sea:

The United Nations Convention on the Law of the Sea (UNCLOS) is a treaty that governs the use and management of the world's oceans and resources. In 1982, it became available for signing. The

⁴⁰Environmental Advisory Council, “Principles of Sustainable Development” [“https://www.princeedwardisland.ca/sites/default/files/publications/principles_of_sustainable_development.pdf”](https://www.princeedwardisland.ca/sites/default/files/publications/principles_of_sustainable_development.pdf) accessed 31 March 2023.

⁴¹UN Environment, “Integration principle” [“https://globalpact.informe.org/glossary/integration-principle#:~:text=Definition\(s\),%2C%20Treaty%20of%20Maastricht%2C%20Art.”](https://globalpact.informe.org/glossary/integration-principle#:~:text=Definition(s),%2C%20Treaty%20of%20Maastricht%2C%20Art.) accessed 31 March 2023.

⁴² CENGAGE, “Common Heritage of Mankind Principle” [“https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/common-heritage-mankind-principle”](https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/common-heritage-mankind-principle) accessed 31 March 2023.

Convention's methodology has been largely accepted since 1994.⁴³ UNCLOS sets out several key provisions to protect the marine and coastal environment from pollution. UNCLOS is called the "constitution of the seas" because of its broad coverage of water.⁴⁴ Part XII's parts show the State's responsibilities toward the preservation of the maritime environment.⁴⁵

It is an obligation for a signed state to protect and preserve the marine environment.⁴⁶ It is also an obligation for a states to take measures to prevent, reduce, and control pollution of the marine environment, including pollution from land-based sources.⁴⁷ The states have to cooperate in preventing, reducing, and controlling pollution of the marine environment.⁴⁸ States must adopt laws and regulations to prevent, reduce, and control pollution of the marine environment.⁴⁹ Member states are liable under international law if they uphold their obligations to prevent the marine and coastal environment.⁵⁰ Governments must "avoid, mitigate, and regulate maritime environment pollution from any source. States must take all required actions and implement best practices within their capacities.

Overall, UNCLOS provides a comprehensive protection of the marine and coastal environment from pollution, and its provisions have been instrumental in guiding the development of national and international laws and regulations to protect the marine and coastal environment.

4.3.2 International Convention for the Prevention of Pollution from Ships, 1973:

The International Convention for the Prevention of Marine Pollution from Ships, also known as MARPOL is a treaty adopted by the International Maritime Organization (IMO) in 1973 and revised several times thereafter, with the latest version being MARPOL Annex VI, which entered into force in 2005.⁵¹ The purpose of MARPOL is to prevent pollution of the marine environment by ships and to minimize the harmful effects of accidental pollution. MARPOL covers six main areas of ship-source pollution: oil, chemicals, harmful substances in packaged form, sewage, garbage, and air emissions. MARPOL requires ships to have certain environmental management plans and procedures in place,

⁴³ T. Aqorau, "Obligations to protect marine ecosystems under international conventions and other legal instruments (4 October 2001)" "<https://www.fao.org/fishery/docs/DOCUMENT/reykjavik/pdf/02Aqorau.pdf>" accessed 31 March 2023.

⁴⁴ Howard S. Schiffman, "INTERNATIONAL LAW AND INSTITUTIONS" "<https://www.eolss.net/sample-chapters/C14/E1-36-02-03.pdf>" > accessed 24 November 2021

⁴⁵ T. Aqorau, "Obligations to protect marine ecosystems under international conventions and other legal instruments (4 October 2001)" "<https://www.fao.org/fishery/docs/DOCUMENT/reykjavik/pdf/02Aqorau.pdf>"> accessed 31 March 2023.

⁴⁶ United Nations Convention on the Law of the Sea, 1982 article 192

⁴⁷ Ibid article 194

⁴⁸ Ibid article 197

⁴⁹ Ibid article 211

⁵⁰ Ibid article 235(1)

⁵¹Theint Nandar Htet, "Protection of Marine Environment under the Law of the Sea (2017)" "https://www.un.org/oceancapacity/sites/www.un.org.oceancapacity/files/theint_united_nation_researchg_final.pdf" accessed 31 March 2023.

such as oil spill response plans and garbage management plans. This helps to prevent and respond to pollution incidents.⁵²

MARPOL establishes a system of the flag state and port state control to ensure compliance with its requirements. Flag states are responsible for ensuring that their ships are complying with the Convention, while port states can inspect and take enforcement measures against non-compliant ships that enter their ports.⁵³ This convention shall not apply to a state-owned naval warship, auxiliary, or any other vessel used purely for official non-commercial activities.⁵⁴ The government must carry out the proper measures to punish those who break the law, these processes must be applied to own flagships if the other State Party provides adequate information and proof, and the punishment should be equal and adequately sufficient with the violations.⁵⁵

4.3.3 United Nations Convention on Biological Diversity:

The United Nations Convention on Biological Diversity is an international treaty. That was adopted at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil in 1992 and enacted on 23 December 1993.⁵⁶ The UNCBD does not specifically address coastal and environmental pollution. However, the Convention does recognize the importance of protecting marine and coastal biodiversity and ecosystems, which are vulnerable to pollution and other environmental impacts.⁵⁷ States are need to build a network of protected areas where more steps need to be done in order to protect the variety of biological species.⁵⁸ States member must be manage and regulate risky processes that harm biodiversity or may do so.⁵⁹

National programs, plans, and policies are one way to safeguard biodiversity and promote environmentally sustainable development.⁶⁰ The convention encourages the state member to develop biodiversity conservation policies and efforts.⁶¹ This treaty covers marine, terrestrial, and extraterritorial processes, and activities.⁶² The convention also emphasizes member states working

⁵² Ibid.

⁵³ The MARPOL Convention, article 3.

⁵⁴ Ibid article 3(3).

⁵⁵ Ibid article 4(1) and 4(4).

⁵⁶ T. Aqorau, "Obligations to protect marine ecosystems under international conventions and other legal instruments (4 October 2001)" < <https://www.fao.org/fishery/docs/DOCUMENT/reykjavik/pdf/02Aqorau.pdf>> accessed 31 March 2023.

⁵⁷ Ibid

⁵⁸ United Nations Convention on Biological Diversity, 1992 article 8(a)

⁵⁹ Ibid article 8(l)

⁶⁰ Ibid article 6(a)

⁶¹ Ibid article 6(b)

⁶² T. Aqorau, "Obligations to protect marine ecosystems under international conventions and other legal instruments (4 October 2001)" <https://www.fao.org/fishery/docs/DOCUMENT/reykjavik/pdf/02Aqorau.pdf> accessed 31 March 2023.

together to protect biodiversity and guarantee sustainable use in regions beyond national control.⁶³ While the UNCBD does not provide specific legal obligations or enforcement mechanisms for addressing marine and coastal pollution, its objectives can help to guide and inform national and international efforts to the protection and conservation of these important ecosystems.

4.4 Significant Judicial Decisions on Marine and Coastal Environment Protection:

In the case of Southern Bluefin Tuna (Japan vs. New Zealand and Japan vs. Australia), both countries appealed to the International Tribunal for the Law of the Sea (ITLOS) to get temporary solutions in order to prevent Japan from conducting experimental solo fishing for southern bluefin tuna. Their argument was based on the fact that the number of southern bluefin tuna captured by Japan's experimental fishing program could put an end to the existence of the stock.⁶⁴ The ITLOS takes into consideration and ordered the party to exercise suitable actions to save the environment and avoid serious harm.⁶⁵

To protect its rights to the maritime environment, coastal access, and other coastal resources, Malaysia launched a lawsuit against Singapore known as Malaysia v. Singapore as it relates to landfilling in the Johor Straits.⁶⁶ After concluding that land restoration operations were harmful to the marine environment, ITLOS determined the negative impact of land restoration activities on the marine environment and required both countries to set up systems for information sharing, risk analysis, and the development of preventative measures in the affected areas.⁶⁷

4.5 Bangladesh's International Obligation to Protect the Marine and Coastal Environment:

In 1969, the Vienna Convention on the Law of Treaties article 26 states that " Any existing treaty is binding upon the signatory parties and must be executed in a sincere and honest manner." Bangladesh accepted many international treaties to protect the marine and coastal environment.

On July 27, 2001, the United Nations Convention on the Law of the Sea was ratified, which establishes the legal framework for the conservation and sustainable use of the oceans and their resources. Under UNCLOS, Bangladesh has jurisdiction over its territorial sea, contiguous zone, exclusive economic zone (EEZ), and continental shelf. Bangladesh is responsible for protecting the marine environment within its jurisdiction and for ensuring the sustainable use of its marine resources.

On May 3, 1994, the United Nations Convention on Biological Diversity was signed, which aims to

⁶³ Ibid

⁶⁴ [1999] 3 and 4 ITLOS 74

⁶⁵ Ibid

⁶⁶ [2003] 61 ITLOS

⁶⁷ Ibid

conserve biological diversity, promote its sustainable use, and ensure the fair and equitable sharing of benefits arising from the utilization of genetic resources. The marine and coastal ecosystems are an essential part of the world's biodiversity, and Bangladesh has an obligation to protect and conserve these ecosystems.

Bangladesh became a party to the International Convention for the Prevention of Pollution from Ships (MARPOL) on April 22, 1986. which seeks to prevent and control pollution from ships. As a coastal state, Bangladesh has the right to adopt and enforce measures to prevent, reduce, and control pollution from vessels in its EEZ and territorial sea.

Bangladesh, along with other UN member states, has committed to achieving the United Nations Sustainable Development Goals, which include Goal 14, to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Bangladesh has an obligation to take action to achieve this goal, which includes protecting the marine and coastal environment. In addition, The International Marine Organization (IMO) Convention was signed on May 27, 1976.

4.6 Conclusion:

The international legal preservation governing the marine and coastal environment is a complex legal agreements, conventions, and regulations that protect and manage the world's oceans and coasts. It is a critical component of efforts to protect the ocean and coastal areas, promote sustainable development, and ensure the responsible use of marine resources for the benefit of current and future generations.

Chapter: 5 Comparison Between the Domestic Laws of Bangladesh and International Law on The Preservation of The Marine and Coastal Environments

5.1 Introduction:

The concept of comparison between domestic laws and international law on the preservation of the marine and coastal environments refers to situations where a country's laws and regulations related to the preservation of the marine and coastal environments are not consistent with duties and agreements under international law. As a result, there may be inconsistencies with the nation and international law, resulting in insufficient protection of these environments. The comparison between the domestic laws of Bangladesh and international law on the preservation of the marine and coastal environments is a complex issue that arises from the inconsistency between national laws and international agreements, conventions, and norms. Bangladesh has many national laws and environmental protection regulations, including preserving marine and coastal environments. However, implementing and enforcing these laws are often inadequate, leading to the ongoing degradation of these sensitive ecosystems.

5.2 Comparison between the domestic law of Bangladesh and international law on the preservation of the coastal and marine environments:

Bangladesh has several regulations dealing with the coastal and marine environment, but they have not been implemented by international norms. Bangladesh has agreed to sign all of the MARPOL annexes and MARPOL 73/78.⁶⁸ The government has not enacted any laws to give any effect to the MARPOL Convention on a local level.⁶⁹ After signing and ratifying International Maritime Conventions and other MARPOLs for many years, these international legal tools will not be able to take effect in Bangladesh unless the country passes the appropriate domestic legislation that is essential.⁷⁰ Because Bangladesh is a dualist country for that the country has to pass appropriate national law to enforce it. The Environmental Protection Act 1995 of Bangladesh gives authorities the authority to take action against pollution.⁷¹ However, MARPOL and other IMO agreements cannot be implemented using this regulation.⁷² The Environment Conservation Act 1995 is a sunshine law for total environmental

⁶⁸ Al Faruque A., "Environmental Law: Global and Bangladesh Context (1st Published, 2020, New Warsi Book Corporation)"

⁶⁹ Khondaker Md Asaduzzaman' "Protection of Bangladesh waters against accidental oil pollution from ships 1998" "https://commons.wmu.se/cgi/viewcontent.cgi?article=2255&context=all_dissertations" accessed 31 March 2023.

⁷⁰ Ibid

⁷¹ Khondaker Md Asaduzzaman' "Protection of Bangladesh waters against accidental oil pollution from ships 1998" "https://commons.wmu.se/cgi/viewcontent.cgi?article=2255&context=all_dissertations" accessed 31 March 2023.

⁷² Md. S. Karim, "Implementation of The MARPOL Convention in Bangladesh (January 2009)" "https://www.researchgate.net/publication/254664196_Implementation_of_the_MARPOL_convention_in_Bangladesh" access on 31 March 2023

conservation, it is not appropriate to contain precise requirements for certification, and surveys to confirm environmental protection.⁷³ MARPOL should have been incorporated in Bangladesh's marine and port-related law, as it is in the legislation of many other states.⁷⁴

As per the TWMZ Rules of 1977, if a foreign vessel intentionally or significantly pollutes the marine environment, its innocent passage through the territorial waters of Bangladesh is deemed detrimental to the nation's security or interests.⁷⁵ The TWMZ Regulations serve as the fundamental guidelines for establishing the maritime boundaries of a nation. However, they are not suitable instruments for the effective implementation of a complex agreement like MARPOL, which requires a high level of technical expertise. In accordance with the TWMZ Rules, competent authorities possess the power to establish necessary regulations for the execution of MARPOL.⁷⁶

The Merchant Shipping Ordinance of 1983 is Bangladesh's overall shipping regulation (MS Ordinance). This piece of law specifies the requirements for the seaworthiness of vessels, in addition to the procedures for registering and surveying ships belonging to Bangladesh.⁷⁷ Nevertheless, due to the fact that its certification and survey procedures do not reflect the application rules standards of MARPOL, the MS Ordinance is not suited to fulfill the requirements of the present day.⁷⁸

The Coast Guard was granted the right to operate inside Bangladesh's contiguous zone, economic zone, conservation zone, territorial seas, and continental shelf to tackle marine and coastal pollution by The Coast Guard Act of 1994. But due to the absence of a domestic MARPOL fulfilling legislation in Bangladesh, the Bangladesh Coast Guard is not able to carry out MARPOL enforcement operations inside the country.⁷⁹

Port-related regulation is also critical for preserving maritime environment pollution. However, the harsh fines imposed by the Port Ordinance or the Port Act of 1908 are not sufficient. Pollution of the port region's environment or water is punishable by a punishment of up to 100,000 Taka under the

⁷³ Ibid

⁷⁴ Sheikh Shahriar Zaman, "Blue economy to require partnerships" Dhaka Tribune (Dhaka, 02 September 2014) "www.dhakatribune.com/uncategorized/2014/09/02/blueeconomy-to-require-partnerships" access on 31 March 2023.

⁷⁵ Md. Jahangir Alam and Kamal Uddin Bhuiyan "Maritime Environmental Laws Needed to Combat Marine Pollution" *The Daily Star* (Dhaka, 28 October 2014)" "<https://www.thedailystar.net/maritime-environmental-laws-needed-to-combat-marine-pollution-47653>" access on 31 March 2023.

⁷⁶ Ibid

⁷⁷ SBB, "Pollutants discharged from ship breaking and its impact" "<https://shipbreakingbd.info/environmental-pollution/>" accessed 31 March 2023.

⁷⁸ Ibid

⁷⁹ Md. S. Karim, "Implementation of The MARPOL Convention in Bangladesh (January 2009)" "https://www.researchgate.net/publication/254664196_Implementation_of_the_MARPOL_convention_in_Bangladesh" access on 31 March 2023

Chittagong Port Authority Act 1976.⁸⁰ The Mongla Port Authority carries a similar clause. This punishment might prevent minor breaches, but it is not sufficient to dissuade longer-scale pollution. The port-related regulations of the nation are inadequate in meeting the standards set up by the MARPOL Convention. Many of these laws have been in effect for more than a century and have yet to be updated.⁸¹

Bangladesh's enforcement and compliance processes were relatively inadequate, uncoordinated, and fragmented as a port and coastline state.⁸² There are no welcome facilities at Bangladesh's seaports. The legal, judicial, and administrative powers for longer-scale pollution enforcement are uncertain. Even though the occurrence of multiple instances of significant oil pollution incidents within the marine jurisdiction of Bangladesh, the competent authorities have been unable to bring any charges against foreign vessels.⁸³ The marine administration the coast guard, and the port authority does not cooperate. The marine sector has suffered from outdated, unenforced, and unclear legislation.⁸⁴

The enforcement mechanisms for currently established environmental regulations have proven to be largely ineffective. Enforcing current environmental regulations has mainly failed. Bangladesh has accepted all of its annexes and the MARPOL Convention, but has not passed any national law to carry out this.

5.3 Conclusion:

Finally analyzing this chapter, it is important for Bangladesh to ensure the effective implement and enforcement of its nation laws, also work towards ling up with international obligations on the preservation of marine and coastal environments. This will include capacity building for environmental regulators and law enforcement agencies, and increased investment in conservation efforts.

⁸⁰ Khondaker Md Asaduzzaman' "Protection of Bangladesh waters against accidental oil pollution from ships 1998" "https://commons.wmu.se/cgi/viewcontent.cgi?article=2255&context=all_dissertations" accessed 31 March 2023.

⁸¹ Ibid

⁸² Al Faruque A., "Environmental Law: Global and Bangladesh Context (1st Published, 2020, New Warsi Book Corporation)"

⁸³ Md. Jahangir Alam and Kamal Uddin Bhuiyan "Maritime Environmental Laws Needed to Combat Marine Pollution" "The Daily Star (Dhaka, 28 October 2014)" "<https://www.thedailystar.net/maritime-environmental-laws-needed-to-combat-marine-pollution-47653>" access on 31 March 2023.

⁸⁴ Ibid.

Chapter: 6 Conclusion

6.1 Introduction

The primary focus of this paper referred to the idea of pollution in coastal and marine environments, in addition to the processes that used to prevent this kind of pollution via the national and international laws. The safeguarding of the marine and coastal environments within the domestic laws is based on the requirements that are imposed by international conventions. It is of the utmost importance in order to check whether our national laws safeguarding the marine and coastal environment are complies with international legal obligations. This paper brings in a comparative analysis to identify gaps in domestic laws in relation to the safeguarding of coastal and marine environments from pollution, as compared to established international standards.

6.2 Findings:

We can draw the following conclusions from comparing Bangladesh's present legal system to recognized international legal norms:

- a) The domestic laws of Bangladesh to prevent marine and coastal pollution is inadequate in comparison to international standards.
- b) Bangladesh has not fulfilled its international responsibilities under international law to protect the marine and coastal environment.
- c) Bangladesh does not have a national scientific and technical institution that investigate the marine biodiversity.
- d) In addition, Bangladesh does not have a marine and coastal database or information bank, which makes it difficult to monitor the pollution.
- e) Bangladesh's efforts to safeguard the marine and coastal environments by establishing international regulations with other countries are insufficient.
- f) There is no practice of submitting data to world organizations to show that a country fulfills its international responsibilities to protect the marine and coastal environment.
- g) Existing national laws dealing with the preservation of marine and coastal environment is not fully applied.
- h) The current institutional framework is inadequate for implementing preventative observation and enforcement.

6.3 Recommendations:

Bangladesh must encourage people to pay attention to marine and coastal concerns at risk and raise public understanding of marine issues. These interests include a variety of topics, such as maritime security, marine resource development and exploitation, the protection of foreign investments, marine scientific research, and among others. The following are some ideas to improve the existing system and domestic duties for marine and coastal environment protection.

- a) The proper way to prevent pollution is to reduce the waste produced. We can reduce waste by avoiding single-use plastics, recycling, composting, and reusing items.
- b) Pollution may be avoided with effective waste management. Correct waste management methods such as the safe dumping of waste and the correct treatment of wastewater, should be implemented and followed by governments, industry, and communities.
- c) By enacting legislation and programs that reduce pollution, governments may play a crucial role in reducing pollution. The regulations could include limits on what industries can release into the environment, more rules about how to get rid of trash, and rewards for eco-friendly behaviors.
- d) The development and use of sustainable technologies can help reduce pollution. These technologies include renewable energy sources, and eco-friendly products.
- e) Supporting conservation efforts such as marine protected areas, habitat restoration, and endangered species conservation can help protect marine and coastal environments from pollution.
- f) As previously noted, The Draft Bangladesh Marine Environment Conservation Act of 2004 carries most of the international legal requirements. Bangladesh's government must act quickly to make this law official and effective.
- g) To safeguard, secure, and sustain the marine and coastal ecosystem, all people and the government, NGOs, and other domestic institutions must work together to reduce marine and coastal pollution.
- h) Furthermore, by including marine and coastal environment preservation courses in the academic curriculum and hosting seminars, law schools may play a crucial part to resolve this issue.

6.4 Conclusion:

The issue of pollution in marine and coastal environments is the most importance issue. Pollution has many effects and can have big effects on both marine life and human health. Oceans and beaches can be avoided from being polluted by establishing sustainable waste management practices, rules, and policies, public education and awareness programs, environmentally friendly technologies, and reducing trash. Marine and coastal pollution must be stopped if we want to protect the earth and keep future generations healthy and happy. We all have to do our part to stop pollution, and if we all work together, we can make a cleaner, better, and more secure future for everyone.

BIBLIOGRAPHY

National law and convention:

- a. Chittagong Port Authority Ordinance, 1976.
- b. Coast Guard Act 1994.
- c. Draft Bangladesh Marine Environment Conservation Act 2004.
- d. Mongla Port Authority (Amendment) Ordinance 1982/1987.
- e. Territorial Water and Maritime Zones Act 1974.
- f. Territorial Waters and Maritime Zones Rules 1977.
- g. The Bangladesh Environment Conservation Act 1995.
- h. The Bangladesh Ship Recycling Act 2018.
- i. The Draft Maritime Zones Act of 2019.
- j. The Environment Court Act 2010.
- k. The Marine Fisheries Ordinance 1983.
- l. The Marine Fisheries Ordinance of 1983.
- m. The Shipbreaking and Recycling Rules 2011.

International law and convention:

- a. 1996 Protocol to the Convention on The Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972.
- b. Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973.
- c. Convention on the Conservation of Migratory Species of Wild Animals 1979.
- d. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972.
- e. International Convention for the Prevention of Marine Pollution from Ships (MARPOL).
- f. International Convention for the Prevention of Pollution from Ships 1973.
- g. United Nations Convention on Biological Diversity 1992.
- h. United Nations Convention on the Law of the Sea 1982.
- i. Vienna Convention on the Law of Treaties 1969.
- j. The Stockholm Declaration 1972.
- k. The agenda 21.
- l. The Global Program of Action 1995

International treaties/conventions signed by Bangladesh:

- a. Vienna Convention on the Law of Treaties 1969.
- b. United Nations Convention on the Law of the Sea 1982.
- c. United Nations Convention on Biological Diversity 1992.
- d. Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973.
- e. Convention on the Conservation of Migratory Species of Wild Animals 1979.
- f. International Convention for the Prevention of Pollution from Ships 1973.
- g. The Stockholm Declaration 1972.
- h. The agenda 21.
- i. The Global Program of Action 1995.

Cases:

- a. New Zealand v. Japan; Australia v. Japan “Southern Bluefin Tuna Cases” 1999 Cases No. 3 and 4 ITLOS 74
- b. BELA vs the Secretary, “the Ministry of Forest and Environment, and others 2011 16 BLC [HCD] 123”
- c. Malaysia v. Singapore: “Land Reclamation by Singapore in and Around the Straits of Johor” 2003 ITLOS Case No. 61

Books:

- a. Abdullah Al Faruque, “Environmental Law: Global and Bangladesh Context (1st Published, 2020, New Warsi Book Corporation)”.
- b. Cullinan C, Wild Law: A Manifesto for Earth Justice (2nd edition, Chelsea Green Publishing 2011).
- c. Frank Veronica, “The European Community and marine environmental protection in the international law of the sea (01 Nov 2007, Martinus Nijhoff Publication)”.
- d. Hedley Bull, “The anarchical society: a study of order in international politics (Second edition 1995, MACMILLAN PRESS LTD).
- e. Philippe S., University College London, Jacqueline P., University of Melbourne. “Principles of international environmental law”. “(3rd edition June 2012 Cambridge University Press)”.
- f. Tanaka Y, The International Law of the Sea (3rd edition, Cambridge University Press 2019).

Thesis:

- a. Htet T, 'Protection of Marine Environment under the Law of the Sea' (The Nippon Foundation of Japan Fellowship Programme, United Nations 2017) <https://www.un.org/oceancapacity/sites/www.un.org.oceancapacity/files/theint_united_nation_researchg_final.pdf> accessed 17 March 2023.
- b. Sharmin A, 'Water and Wastewater in Bangladesh, Current Status and Design of a Decentralized Solution' (Master Thesis, Lund University 2016) <<https://lup.lub.lu.se/luur/download?func=downloadFile&recordOid=8895656&fileOid=8895752>> accessed 17 March 2023.
- c. Khondaker Md. Asaduzzaman' "Protection of Bangladesh waters against accidental oil pollution from ships 1998" <https://commons.wmu.se/cgi/viewcontent.cgi?article=2255&context=all_dissertations> accessed 31 March 2023.
- d. Shafiul H., Md A. Rahman, M. Ahmed Chowdhury, Sajib M. "Plastic pollution in Bangladesh: A review on current status emphasizing the impacts on environment and public health" "<https://doi.org/10.4491/eer.2020.535>" assessed 17 March 2023.
- e. Md. Wahidul A. "Land-Based Marine Pollution: An Emerging Threat to Bangladesh 2023" "<https://www.intechopen.com/online-first/85545>" accessed 17 March 2023.
- f. IQBAL K. "ASSESSING THE IMPACTS OF OIL SPILLAGE FROM SHIPS ON COASTAL ENVIRONMENT OF BANGLADESH: MEANS FOR RESPONSE AND MITIGATION: A Dissertation for the Degree of Master in Disaster Management" "<https://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/1552/08268006.pdf?sequence=2>" assessed 17 March 2023.
- g. Yoshifumi T. "Principles of international marine environmental law" "<https://doi.org/10.4337/9781781004777.00009>" accessed 31 march 2023.
- h. Arif A, Karim M, 'Marine Pollution and The South Asian Coastal States: A Legal Appraisal' <https://www.researchgate.net/publication/264552382_Marine_Pollution_and_the_South_Asian_Coastal_States_A_Legal_Appraisal> accessed 17 March 2023.
- i. Matthews G, 'International Law and Policy on Marine Environmental Protection and Management: Trends and Prospects' (1992) 25 Marine Pollution Bulletin 70 <[https://doi.org/10.1016/0025-326X\(92\)90189-D](https://doi.org/10.1016/0025-326X(92)90189-D)> accessed 24 March 2023

Journal Articles:

- a. Devall B, 'The Deep Ecology Movement' [1980] 20(2) Regents of the University of New Mexico 299–322 < http://www.fraw.org.uk/data/ap/devall_1980.pdf> accessed 28 March 2023.
- b. Grip K, 'International marine environmental governance: A review' (2017) 46:413 SpringerLink 427 < <https://link.springer.com/article/10.1007/s13280-016-0847-9>> accessed 24 March 2023
- c. Islam M, 'Bangladesh Ship Reprocessing Act 2018: A Critical Overview' [2019] 2(2) SCLS 26-30 <<https://sclsbd.org/wp-content/uploads/2019/06/10.-Ship-Reprocessing-Act-2018-Jahedul-Islam-1.pdf>> accessed 28 March 2023
- d. Karim M, 'Implementation of The MARPOL Convention in Bangladesh' (2009) vol 6 MqJICEL 51 < <http://www.austlii.edu.au/au/journals/MqJIICEnvLaw/2009/4.pdf>> accessed 28 March 2023.
- e. McConnell M and Gold E, 'The Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment' (1991) 23 Case W. Res. J. Int'l L. 83 < <https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1637&context=jil>> accessed 17 March 2022.
- f. Rahman M, Mansura Akter and Wahidul Sheikh, 'A National and International Regulatory Framework for Establishing Sustainable Shipbreaking Industry in Bangladesh' (2019) 3(1) BMJ 87 < https://www.researchgate.net/publication/332874830_A_National_and_International_Regulatory_Framework_for_Establishing_Sustainable_Shipbreaking_Industry_in_Bangladesh> accessed 31 March 2023.
- g. United Nations Environment Programme, 'International legal instruments applied to the conservation of marine biodiversity in the Mediterranean region and actors responsible for their implementation and enforcement' (2010) United Nations Environment Programme Mediterranean Action Plan Regional Activity Centre for Specially Protected Areas < <https://www.cbd.int/doc/meetings/mar/ebsaws-2014-03/other/ebsaws-2014-03-submission-rac-spa-9-en.pdf> > accessed 31 March 2022.
- h. LSE, "The polluter pays principle" <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-polluter->

