
Bangladesh in Global Environmental Politics: Focus on Climate Diplomacy

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Abstract

Bangladesh is geographically situated in a vulnerable location. Its low-lying position in South Asia has made it one of the most natural calamities-affected countries. It is estimated, that by 2050 Bangladesh will have lost fifteen percent of the coastal territory and there will have 25 million internally displaced people. This will be severely impacted Bangladesh's socio-economic stability, national security as well as regional security. In the last 35 years, Bangladesh has spent millions of dollars, but it is not enough to combat climate change. To address the climate change issue, Bangladesh in its 15th constitutional amendment prioritized environment and climate protection. Bangladesh has already taken national policies and strategies to improve its environment. As Bangladesh lacks sufficient resources and technologies, it needs broad support from international actors.

This study recommends a clear projection of Bangladesh's climate risk vulnerability. Bangladesh needs to take the step to form a strong vulnerable country bloc. It also recommends the engagement of NGOs and adaptation programs to pull climate change funds. It suggests, track two diplomacy and proper training for diplomats. It also suggests, proper plan to demand a climate fund, arrangement of an international summit on the climate issue, and build a global personality like the Swedish teenager Greta Thunberg. Bangladesh needs to dedicate a special envoy for climate change issues, procure technological assistance from developed countries through bilateral diplomacy, and building regional arrangements to address climate change issues.

Keywords: *Climate change, Climate diplomacy, Adaptation, Climate finance, Environmental politics.*

1. Introduction

Bangladesh has been facing severe climate problems, which affected millions of people's lives and properties. This will be severely impacted Bangladesh's socio-economic stability, national security as well as regional security. Bangladesh has already taken national policies and strategies to improve its environment but lacks enough resources and technologies. Bangladesh's engagement with United Nations Framework Convention on Climate Change (UNFCCC) and Sustainable Development Goals (SDG) lead Bangladesh in a broad commitment to combat climate change. Natural disasters are common because of geographical location. Bangladesh's adaptation capacity is limited because of poverty, inefficient institutional structure, illiteracy, and corruption. Bangladesh 80 percent of areas are vulnerable to flood. The threat of rising sea levels poses a risk of coastal salinity.

South Asia has been facing severe risk for climate change, it is facing technical and political challenges to deal with climate change. South Asian Association for Regional Cooperation (SAARC) has failed as a regional institution to create cooperation among

members. Bangladesh in UNFCCC cannot deal with powerful international actors. UNFCCC held developed states like the United States and European states as major polluter states responsible for global climate change. The victim countries such as developing, small island, and African states are facing difficulties to procure compensation from polluter countries. To negotiate with powerful polluter states, Bangladesh formed a coalition with the least developing vulnerable countries, small island, and African states to secure common interests. Bangladesh is facing a big challenge as it prepares to graduate from the status of least developing state to a middle-income state. There is a big concern about Bangladesh's position after its graduation. As climate change will remain a big concern for Bangladesh even after graduation from a middle-income country, the government needs efficient climate diplomacy to get climate change funds.

Bangladesh needs to properly address climate issues in the global climate regime and need to upgrade its strategy in climate negotiations. Bangladesh needs to address the importance of different actors like NGOs to strengthen climate diplomacy. This study discusses the importance of climate diplomacy for Bangladesh. It views Climate change as a security issue in terms of socio-economy and regional stability. This study emphasizes the challenges of climate diplomacy, Bangladesh's participation and contribution in climate change negotiations, and the next steps to build effective climate diplomacy.

1.1. Objectives and Research Questions

Climate change has become one of the major security concerns in the international arena. Bangladesh has active participation in various international environmental forums. In the global climate regime, Bangladesh does not act as a single state, they work together with other least developed and climate-vulnerable states to negotiate climate change issues with the developed states. Besides

representatives of the Bangladesh government regularly meets with other stakeholders to discuss climate change issues.

The Central research question of this study is, what is Bangladesh's stance in climate change diplomacy? To facilitate the study of the central question, some secondary questions have been studied too. These secondary questions are, what are the Bangladesh government's foreign policy actions to climate change issues in global environmental governance? And what is the contribution of the non-state actors to influence government on climate diplomacy? Some basic inquiries on environmental politics, climate change, climate diplomacy or negotiation, global warming, and climate change finance are studied.

The objective of this study is to discuss Bangladesh's current approach to climate diplomacy. The strategic objective of this study is to analyze shortcomings in Bangladesh's climate diplomacy. It also explores the role of non-state actors to strengthen the climate diplomacy of Bangladesh. Moreover, the role of non-state actors of Bangladesh in arranging international seminars where different actors from different states meet with each other to discuss climate change problems, are discussed in this study.

This study also focuses on Bangladesh's adaptation strategy as a domestic effort to combat climate change. It focuses on effective climate diplomacy to get global climate funds as Bangladesh is facing a deficiency in climate financing. There are some challenges for Bangladesh at both the national and international level to procure global climate funds, which need to be addressed properly.

Importance of the Study

Bangladesh is at the top of the Global Climate Risk Index. In an index of 170 countries prepared by German watch, Bangladesh tops the list with a death toll of 4729 in 2007 due to natural calamities (Eckstein et al., 2017). It triggers that climate issue is a crucial part

to consider. Although at present time Bangladesh seems considerate regarding this climate issue nationally; but in international frontiers, she has much to do because climate problem is a global problem. And also, Bangladesh can reap the benefits from climate diplomacy at the global level.

In recent decades, the government has invested more than US\$10 billion to protect its population and assets in the floodplains (Siteresources.worldbank.org, 2019). Hence, through active indulgence in climate diplomacy, Bangladesh can come up with force by grabbing more foreign aids for different climate development projects. Therefore, this study aims to shed light on the climate diplomacy of Bangladesh where there is a lesser amount of works available.

2. Theoretical Framework

Climate change and its effects and problems are now widely discussed all around the world and probably one of the most discussed issues of the present time. According to climate scientists, the world temperature would rise from 0.3 to 4.8 degrees Celsius in this century, and thereby the sea level would also increase from 26-28cm (Mehedi, 2019). So, to avoid the resultant effect of such a tremendous issue, worldwide steps are being taken through different international meetings and sittings. UNFCCC is among the most vibrant of all measures which are desperately working for the world climate and launching and supervising laudable programs of COP, Kyoto protocol, etc. many more.

Bangladesh is too a serious fellow and active member of the climate conferences and treaties all over the world. Bangladesh formed bilateral and multilateral adjustment with many influential states through its excellence and expertise in the world's climate diplomacy. This area might be described from the lens of liberalism theory of International Relations. This theory mainly talks about

cooperation and institutional management of world disputes (Scholte, 2005). This theory also talks about the absolute gain of all the members on an equal basis. Under this theory, international law and agreements are accompanied by international organizations to create an international system that goes significantly beyond one of just states. Liberal norms favor international cooperation, human rights, democracy, and rule of law. And most liberal scholarship today focuses on how international organizations foster cooperation by helping states overcome the incentive to escape from international agreements (Jeffery, 2008). So, these are the core themes of the liberalism theory that can explain the indulgence of Bangladesh in climate diplomacy more accurately.

The classical liberal theory of IR has two functions. First, it is meant to be an analytical device, which helps to understand world politics by providing a specific way to look at and judge current world affairs. Second, it is a normative preference or the ideal that classical liberals aim for. In their view, the world should comply with the overall framework presented here. Perhaps this process is made easier by the fact that a key aspect of classical liberalism is its application of the same core principles to domestic and international politics while acknowledging the differences between these two spheres of political action. The ultimate goal of liberalism in international affairs is the same as in domestic politics: to maximize individual freedom for all people in the world. This is a straightforward way to show that the theory follows the bottom-up approach to politics. Where Realists view states as opaque single units, liberalism begins with individuals and groups operating in both domestic and transnational civil society. These are the primary actors in the international system. State behavior is in turn determined not by the international balance of power, whether or not mediated by institutions, but by the relationship between these social actors and the governments representing their interests, in varying degrees of completeness.

State preferences are derivative of individual and group preferences but depend crucially on which individuals and groups are represented. Now for example, as A.N.M. Muniruzzaman, President of the Bangladesh Institute of Peace and Security Studies (BIPSS) says that 35 million people live close to the sea and are severely impacted by sea-level rise. Implications of climate change for the coastal belt regions are necessary. Shoreline erosion and land inundation, coastal flooding, and natural calamities such as increased cyclones and storms, loss in coral reefs and marine fisheries, loss in marine biodiversity, salinity intrusion, crop failure, displacement, and migration, and health hazards are crises. Furthermore, large uncontrolled population movements could lead to political and social destabilization of the region. And the state cannot alone watch over all these and as minimal as the fund is at least needed. Bangladesh is exactly acting likewise to cope up with the threat that German Watch surveyed showing Bangladesh to top the list of climate change risks. As Saleemul Huq stated that over the last two decades, the issue of global climate change has shifted from being primarily an environmental issue to a global security and diplomatic issue as well; Bangladesh is now using its tool of diplomacy for environmental gain but with the collaboration of varying states and institution. This is what the theory of liberalism asserts, that mutual interdependence or in other words multilateral collaboration to overcome the security threats and to posit peace around the world on a global scale.

Bangladesh is one of the most suffered countries from this climate change loss. From 1991 to 2000, 93 natural disasters took place in this country and the economic loss might be counted to the amount of 590 USD (Mehedi, 2019). So, Bangladesh is getting involved in the issue from its urge and need; and also, its international involvement benefitting the climate forums all over the world. For instance, the prime minister of the country Sheikh Hasina is rewarded as “Champions of the Earth” for taking the stand to take initiatives to fight climate change effect (Anam, 2019). This is not

only prestigious; it also implies that the relations and cooperation among Bangladesh and other countries are getting on well. Bangladesh also promotes its indulgence with almost all the institutions working for the climate. And here by focusing on the more optimistic viewpoint of absolute gains and providing evidence of its existence via international organizations, liberalism also shares the same insights. This theory looks forward to solving a problem where states will likely cooperate in any agreement where any increase in prosperity is probable. Thus, liberalism explains the described context more accurately.

Challenges/Limitation of the study

Observations on this topic are not always right. Besides, the time frame was limited for this study. There is a lack of existing literature on the foreign policy of Bangladesh on climate change topics. It's difficult to differentiate those policies which are taken because of international influence. Measurement of correct data on climate change impact was difficult to examine as confusion arose from several pieces of literature. Collecting data from primary sources was also a limitation of this study. Getting access to interviewers was a challenge for data collection.

Data Collection and Analysis

This study is based on a qualitative research approach. Data are collected from both primary and secondary sources for this study then they have been analyzing with the help of different theories and concepts. The primary research methods for this study are literature review and expert interview. This paper has consisted of a qualitative case study design. It is an exploratory study to discuss the climate diplomacy of Bangladesh systematically. Apart from that, Bangladesh's participation in various global environmental conferences and meetings is observed for this study. Bangladesh's role in climate change decision-making processes is also noted to

know Bangladesh's stance in climate change negotiations. Besides, it's important to analyze Bangladesh's Foreign Service officers' performance at those environmental conferences to find out if they can secure Bangladesh's interests regarding climate change issues. Bangladesh's relation and cooperation with other states on the matter of environmental security are observed to examine Bangladesh's policies on climate change issues in the international arena. Statements along with actions of the representatives of Bangladesh for global environmental negotiations and meetings are contextualized from existing literature. Current national environmental policies on climate change have been analyzed to understand how Bangladesh is utilizing climate finance at the national level. The interviews and documents available about this topic are the sources of data.

Scope of the Study

This study helps the students of International Relations in many ways. It is beneficial for their academic purpose. This study also helps them to understand the Bangladesh government's foreign policies regarding climate change issues. By this study, they could critically analyze the climate diplomacy of Bangladesh in the international arena. Environmental issues are important for Bangladesh as Bangladesh is an environmentally vulnerable state in South Asia. So, this study will give them fresh insight into Bangladesh's approach to global environmental politics.

Bangladesh is thinking about defending the climate problem and various initiatives have been taken in this regard. There was disintegration among the activities. A full-fledged and flourished work in this field is being observed and therefore, this study collaborates and upholds all the works that are already done and that are yet to be done. It helps the students, researchers, and professionals to gather relevant and adequate knowledge in this field.

3. Literature Review

Rio + 20: National Report on Sustainable Development (2012) showed the progress and future regarding sustainable development in Bangladesh after the Rio Earth summit 1992. The economic growth of Bangladesh is in a good state. According to this report, Bangladesh is comparatively doing well among the South Asian Association for Regional Cooperation (SAARC) member states to secure Millennium Development Goals (MDGs) social targets. Bangladesh's government is working to solve the climate change issues with their limited resources. Bangladesh adopted the framework of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in July 2009. According to this plan, the Bangladesh government also collects funds from their national budget to execute BCCSAP for environmental development.

Bangladesh plays an active role in global environmental regimes. They mainly work with the least developed states and environmentally vulnerable states. Bangladesh performs in global environmental governance under the framework of G77 with China. Bangladesh government passed several policies to deal with climate change issues. They try to fulfill international obligations on environmental problems. Still, there are some challenges to achieve the objectives of those policies.

Shahjahan Bhuiyan (2015) argues in his article that good governance plays an important role to achieve climate change policy objectives. He showed that Bangladesh is facing several problems like floods, changes in the ecosystem, overpopulation, and frequent attack of cyclones. Bangladesh took policies like the National Adaptation Program of Action (NAPA) (2005) and BCCSAP (2009) to deal with climate change issues under the framework of UNFCCC. Bhuiyan described the situation of good governance in Bangladesh by six factors: political stability, regulatory quality,

voice and accountability, government effectiveness, rule of law, and control of corruption.

He tried to explain that the lack of good governance is harming the overall progress to achieve environmental policy goals. Bangladesh receives support from international actors to deal with climate change issues, but ineffective government and corruption make it difficult to build capacity in Bangladesh for solving environmental problems. They take policies but fail to implement those policies properly because of the lack of good governance.

Md Raihan Akhter (2009) stated in his article that all environmental policies in Bangladesh need to be reviewed. He showed several environmental problems which Bangladesh is facing in recent years. There are two types of actors who have a role in the formation of environmental policies in Bangladesh: internal and external. International actors mainly support the Bangladesh government to deal with all kinds of environmental problems. They act as a donor to help Bangladesh as Bangladesh is a developing state.

Bangladesh's policies on environmental issues mainly focus on fifteen broad issues which include energy, water management, agriculture, industry, health, forest, etc. He addressed some findings after reviewing the environmental policies of Bangladesh. Those are the use of the English language to write the official policy paper, engage all actors from various sectors. the necessity of mentioning specific principles, setting of environment standard, need of enhancing administration capacity, dynamic approach to regional and global environmental issues, etc.

Bangladesh is a coastal state in South Asia. It faces problems of floods and cyclones. Because of these natural calamities, Bangladesh often goes through a humanitarian disaster. People lose their lives and property from those natural disasters. A natural disaster can cause internal displace which will create instability in

the social order. Bangladesh's government invested almost 10 billion dollars in the last 35 years to deal with environmental problems still needs additional policy planning because of the increase in the magnitude of several climate change issues.

Department of Environment plays an active role to represent Bangladesh in the international arena. Ministry of Environment and Forest was established when Bangladesh ratified the UNFCCC. Key negotiators from the Bangladesh side in the international arena are from the Ministry of Environment and Forest. It also mobilizes funds from various actors for Bangladesh. After 2009, most environmental funds come from United Nations-sponsored grant programs (A Situation Analysis of Climate Change Adaptation Initiatives in Bangladesh, 2012).

M. Monirul Azam and Mahesti Okitasari (2015) explained the environmental governance of Bangladesh by exploring Bangladesh's policies toward achieving Sustainable Development Goals (SDGs). They compared Bangladesh's environmental governance with Indonesia's case. Though the Bangladesh government took several policies to achieve MDGs, recent development initiatives increase Carbon dioxide emission in Bangladesh. So, climate change acts as a barrier to make progress for SDGs as an environmental condition is not so good in Bangladesh.

Bangladesh government has passed many environment-related policies, but those policies lack a proper explanation of sustainable development and climate changes issues in Bangladesh. Government should enhance the capacity of governmental institutions such as the forest department, department of environment, Bangladesh water development board, etc. The private sector should obey the rules and regulations. Civil society's role in Bangladesh is limited from an environmental perspective. Civil

society needs to mobilize public opinion to influence the government to achieve environmental sustainability.

Md. Nazmul Islam (2017) showed a link between global environmental governance and national environmental governance. Global environmental governance influences environmental development in Bangladesh. He explained that environmental development would sustain with the implementation of environmental policies. According to the author, Bangladesh's environmental programs can be divided into four big areas. Those are 1) Sustainable development connected with environmental governance, 2) Management of natural resources along with the conservation of Biodiversity, 3) well-grounded management of Land and Water, and 4) Enhanced and cleaner Urban Environment Management.

A seminal study (Huq et al., 2019) described climate change issues and their impact on Bangladesh. It also vastly narrated the policies and programs which are taken in Bangladesh to adapt to the environmental problems. Almost 85 adaptations are in practice. These are taken by the government for long-term environmental impacts. These adaptations are mainly agricultural in nature. BCCSAP and NAPA are two climate change-related programs in Bangladesh. Bangladesh has also a climate change trust fund from 2009-2010 to deal with climate change issues. This study showed Bangladesh's separate plan on gender action projects to protect gender equality in climate change-related policies. Bangladesh is receiving international support and climate change-related funds from various actors such as United Nations, World Bank, United Nations Environment Programme, and United Nations Development Programme, etc. Bangladesh is also receiving help from the United States, Norway, and Netherland.

Mohammad Mohabbat Khan stated (2009) in his study that Bangladesh is a signatory state of a lot of multilateral environmental

agreements. Several policies are also taken to meet with the agreed decisions of those agreements. But Bangladesh lacks resources and there are mismanagement, corruption, and ineffective civil society on the different stages of environmental governance. Transparency and accountability are absent among the public servants. Accountability is rule-driven which only benefits the fixed purposes. Sometimes environmental policies contradict national development policies. So, all environmental policies are needed to be reviewed.

Ahsan Uddin Ahmed (2006) addressed the climate change issues and their impact on Bangladesh. Bangladesh's geographic location as a flat land makes it vulnerable to flood. Winter is dry and cooler where monsoon is relatively hot in Bangladesh. Water is sufficient for the current need for Bangladesh. In the future, there will a crisis for water in the dry season. Other climate change issues are Riverbank Erosion, Sedimentation, Droughts, Salinity Ingress, and cyclones. These issues have an impact on agriculture, fish production, human health, sea level, average temperature, Coastal Shrimp Culture, the population of livestock, forest and vegetation, settlements, and infrastructure. People's daily lives will also be affected by climate change concerns.

Saleemul Huq and Golam Rabbani (2011) explained several national environmental policies of Bangladesh. Ministry of Environment and Forests mainly takes such policies. These policies include Bangladesh Climate Change Strategy and Action Plan (BCCSAP), National Adaptation Programme of Action (NAPA), Climate Change Unit which works under the same ministry, and Climate Trust Fund. This ministry also handles international negotiations and conferences on environmental concerns. Bangladesh Climate Resilience Fund (BCRF) is established to support actions to achieve the objectives of climate change policies. Two environmental protection-related committees are Inter-ministerial Committee on climate change and All-Party

Parliamentary Committee on Environment and Climate Change. NAPA was taken after COP7 with fifteen immediate acts. There are 34 projects under BCCSAP which will be carried out by several institutions. Bangladesh's government works with national and international NGOs to implement environmental policies. Bangladesh is also active in regional and global environmental governance.

In a working paper “Challenges in Climate Finance Governance and the Way Out”, Mahfuzul Haque and Mohua Rouf showed that due to extreme vulnerability in climate sect, the Bangladesh government has taken multiple projects in hand. Although the main purpose is to undertake the climate problem, Bangladesh gets to cooperate with numerous foreign states, organizations, and agencies. For example, as the authors mentioned, Bangladesh Climate Change Strategy and Action Plan, National Adaptation Program and Action, Bangladesh Climate Change Trust Fund Act, Bangladesh Climate Change Resilience Fund, etc. are established regarding a climate solution. And these are established with the assistance of development partner’s namely the United Kingdom, Denmark, European Union, Sweden, Switzerland, etc.

Thus, this study, on one hand, shows governance challenges and risks in policy formulation, fund management, project selection, and implementation and on the other hand shows the foreign interaction with the country. The climate finance of Bangladesh is another focal point (on which authors conducted grass-root level surveys and projects) that relates the economy, a major sector to connect with a state’s foreign policy.

A work “Building Environmental Governance Capacity in Bangladesh” conducted through the lead of Dr. Emdad Haque identified Bangladesh to be in an ecologically sensitive deltaic environment. Here, national needs are the new initiatives towards

strengthening good governance, especially in the natural resource and environmental areas. Thus, the development and action research project in Bangladesh, at present time is focused on building environmental and natural resource governance and management capacity. But the challenge to strengthen institutional and human resource capacity in Environmental Governance to support an integrated approach that reconciles pro-poor economic growth, sustainable resource, and environmental management, a human resource development support system is necessary; an Environmental Governance and Sustainable Development Policy Network is also necessary.

The author here thus prescribed long-term policy that incorporates some exclusive ideas such as a new applied, interdisciplinary master's Program in Resource and Environmental Management, a professional certificate program on Environmental Governance; community development, and local environmental governance program; and assist in policy development. Overall, the prescriptions of national strategy regarding climate change are for facing serious challenges to sustain its natural resource base and environmental health.

Swedish International Development Cooperation Agency (SIDA) (2001) published a paper on country analysis in Bangladesh, where different social-economic, and political conditions are discussed along with environmental problems and limitations. If we consider the size of the population, geographic area, then it is true to believe that Bangladesh is going to play a significant political and strategic function in South Asia. Due to rapid industrialization, many natural resource exploitation and pollution happened which harms both the domestic area and the global atmosphere. Simultaneously the use of energy resources is leading Bangladesh towards an extreme environmental threat. So, it is necessary to address the policy measures for domestic and regional security.

Md. Nazmul Islam (2013), tried to illustrate how global environmental regimes can contribute to bringing about change in environmental sustainability. Till now many environmental regimes had been formed to address the problem regarding climate change and global warming. To what extent they made a successful implementation that still raised a question. Many institutional frameworks are working to deal with the environment and its protection. United Nations environment program played an important role regarding this. In the national arena, Bangladesh is also building some policy frameworks and institutions for the conservation of the environment. Environmental policy 1992, Bangladesh Environmental Lawyers Association (BELA), and Bangladesh Agro-Processors Association (BAPA) are significant examples.

Besides, multiple conferences and agreements had taken place. Some of them are successfully implemented while some failed to achieve their objectives. For example, Brunt land Commission, 1992 earth summit, Kyoto protocol, Montreal protocol, Paris agreements, and others. The writer also argued that pollution is a sign of inefficient resource use. Effective governance policies can provide rational decisions to consider and protect the environment and natural resources on which its current and future development depends.

Dr. Fazle Rabbi (2012) argues in his article that Bangladesh is facing the most vulnerable conditions in terms of its energy, natural resources, climates, and ecosystem. As Bangladesh consists of low-level plain land it is obvious that it will face natural hazards and floods frequently. All these conditions affected society and the human condition mostly. It also affected the biodiversity of Sundarbans and other areas of Bangladesh. The writer tried to explain multiple sectors which are badly affected by climate change. Data shows that due to excessive rise in sea levels within 2030 different parts of Bangladesh will be sunk under deep water. These

issues are elaborated in the report in thematic analysis to bring about a sustainable environment for Bangladesh.

He also explains how the Bangladesh government is taking measures to address climate change as a fundamental problem. For example, in the 15th amendment of the constitution, the protection of the environment and biodiversity was introduced. While environmental policy framework is also documented in the vision 2021 manifesto. BCCSAP is considered as one of the landmarks to this following issue. It includes multilateral contributions like government officials, NGOs, civil society, community-based organizations, etc.

The climate change trust fund also works properly. The budget allocation is increasing day by day. From 2009 to now UNFCCC contributed a large amount of money for the mitigation process. Along with this Bangladesh government also allot a big budget in every fiscal year. The government is aimed to make Bangladesh climate-resilient within 2050. That's why around 125 million funds have been allotted to develop three sectors-cyclone shelters, resilient crops, and deforestation.

One of the prominent sufferers of climate change is the least developed countries, as they are not advanced in technologies or development. So, it is difficult for poor countries like Bangladesh. Shakeel Mahmood (2012) is mainly focused on the adverse effect of climate change on human health, natural resources, ecology, and species in the context of Bangladesh. Several data shows that the average temperature is increasing while on the other hand, the sea level is rising. If this continues then soon the production of food grains will be decreased.

In 2007, Intergovernmental Panel on Climate Change (IPCC) report identified human activities are solely responsible for global warming. The writer also points out some actions which need to take

to build a clean and safe environment. To him, regional cooperation and collective efforts can make positive results to combat climate change. He also added that the government also should more focus on public funding, migration problems, and flowing information to the local level.

Water is a vital element for the environment. In recent days many people are not getting enough pure drinking water and sanitation facilities. That's why a sustainable development program is prioritizing access to pure drinking water and sanitation for all. To discuss water governance in Bangladesh Chan Ngai, Ranjan Roy, and Brian Chaffin (2016) refer to global water partnership through integrated water resource management. Integrated Water Resources Management (IWRM) is a systematic opportunity for Bangladesh where government agencies, NGOs, stakeholders, and civil society will work inclusively for the sustainable use of freshwater sources.

Bangladesh is a mainly agro-based country. Most people have relied on water resources. While surface water sources are contaminated with arsenic ending 35 million affected people. They also talked about several difficulties Bangladesh is facing regarding water governance like excessive growth of population, unavailability for agricultural production, natural calamity, and dropping of ground water level. Tran's boundary water dispute is also a serious issue in the implementation of water governance, for example, the Test agreement is still an unresolved issue between India and Bangladesh.

Bangladesh needs a sound policy framework to adapt to climate change impacts. Bangladesh's government has taken a lot of initiatives for climate change impacts. Those initiatives can be divided into two levels: national and international. The climate change problem has now emerged as a global security problem. As it is now a global security issue, it is also a diplomatic issue.

Decisions are taken regarding climate change issues at the international level under the support of the United Nations Framework Convention on Climate Change (UNFCCC). Bangladesh's permanent representative of the United Nations is invited to speak about climate change's impact on Bangladesh in Climate change summits. Sometimes Prime minister also delivers a speech on climate change issues. Bangladesh's participation in these summits and international forums is important because of its vulnerability to the adverse impacts of climate change.

Bangladesh is engaging in global environmental governance with other international actors on climate change issues. Bangladesh's government is engaged in bilateral relations with several states for environmental collaboration. For example, the Bangladesh government signed a 330 million euro deal with Germany to tackle climate change on 14th January 2018 (Dhaka Tribune, 2018). Sometimes non-state actors also work at the international level to discuss climate change issues. For example, International Centre for Climate Change and Development arranged an event on climate change in July 2019 when climate action week was going on in London. United Kingdom's Royal Geographical Society as well as the Bangladesh High Commission in London supported this event. These are few examples of many activities where the Bangladesh government is engaging in international collaboration on climate change issues. Non-state actors of Bangladesh have also an influence on the government's diplomatic measures regarding climate change issues.

There are several studies on how the Bangladesh government is taking initiatives at the domestic level to deal with climate change. However, Bangladesh's foreign policy and diplomatic measures on climate change issues are yet to explore. This study has explored the climate diplomacy of Bangladesh systematically. As environmental security issues are now discussed and given significance at the international level, it is important to know how the Bangladesh

government is participating and contributing in global environmental politics to deal with global warming.

Climate Diplomacy of Bangladesh

Climate Change in Bangladesh

As Bangladesh is a climate change vulnerable state so 164.7 million people live with environmental insecurity. Natural disasters are common here because of their geographical location. Adaptation power is limited as social, economic, and physical setup of Bangladesh. Bangladesh has issues of poverty, inefficient institutional structure, population density, illiteracy, and corruption (UNICEF, 2019). These issues create problems for the government of Bangladesh to deal with climate change impact.

The characteristics of the climate of Bangladesh are heavy rainfall, high temperatures, and humidity. Normally there are six seasons in Bangladesh, but three seasons can be identified easily: a hot summer season which starts in March and ends in June, a rainy season from June to October, and winter from October to March. 80 percent of the rain falls during the rainy season in Bangladesh. The highest temperature in summer ranges from 30 degrees to 40 degrees Celsius and April and January are respectively the warmest and coolest months in Bangladesh (Discovery Bangladesh, 2019).

Bangladeshis facing different types of problems because of global warming and climate change. These problems are:

Flood/flash flood; In Bangladesh, 80 percent of areas are vulnerable to flood. Northwest of Bangladesh is most vulnerable to flash floods where corps and infrastructures are destroyed floods and some scholars suggest that it has a link to climate change impact.

Temperature rise: Temperature is rising globally which is the result of greenhouse gas. Heat waves in Bangladesh can easily be noticed by anyone. Hot weather sustains beyond the summer season.

Cyclones and Storm Surges: Southern part of Bangladesh is vulnerable to a tropical cyclone. The tropical cyclone is becoming frequent in Bangladesh if we notice the last few years' records.

Salinity Intrusion: People from the coastal areas of Bangladesh are facing the problems of salinity intrusion into drinking and irrigation waters.

Drought: Bangladesh's northern and North-western parts are suffering from drought because of high temperature and unavailability of water during the summer season (Denissen, 2012).

Bangladesh would be one of the most affected states of global warming. Flood and cyclones are the results of global warming. These natural events are already seen frequently in recent years. The rise of sea level mainly causes these extreme incidents of floods and cyclones (Mirza, 2002). Moreover, the sea level is increasing because of global warming. Some experts have predicted that some parts of Bangladesh would go under the water by 2050 (Szczepanski, 2018). The Himalayas is in the North and the Bay of Bengal is in the south of Bangladesh which makes Bangladesh extremely vulnerable to global warming. Global warming would cause floods by melting glaciers of the Himalayas and cyclones from the Bay of Bengal. The ecosystem of Bangladesh is in danger as the sea level is rising day by day. It will destroy the common features of soil and water which will have an impact on fish habitat. Besides, global warming will force the people of coastal areas to migrate to other places. Bangladesh is a populated state, so climate change and global warming will have a tremendous impact on Bangladesh (Hasan and Rahman, 2013).

According to an academic of Environmental science, the Dengue epidemic is another dimension of climate change impact in Bangladesh. Heavy rainfall and temperate both are suitable for the outbreak of dengue. Dhaka city is highly populated and water management is not sufficient for all. So stagnant water and high temperature are causing dengue outbreaks in Dhaka. Dengue fever is not common in Bangladesh. Few people are a sufferer from this disease during a specific time of a year. But Bangladesh has seen a huge number of dengue virus-affected patients. Though the government was trying to minimize its impact, it became very difficult for Bangladesh to address this issue within a short period as the number of deaths from dengue fever was increasing day by day. So, this new type of issue can be also identified as an impact of climate change in Bangladesh. The consequences of global warming and climate change are happening already in Bangladesh. The fact is Bangladesh's contribution to global carbon emission is not that significant, but a vulnerable state like Bangladesh must suffer more because of climate change. So, it's the responsibility of the developed states to help Bangladesh to combat the devastating impact of climate change.

Bilateral Engagement

Bangladesh is gradually progressing in climate. We can observe it from numerous bilateral engagements of Bangladesh with influential countries. Bangladesh pursues significant bilateral relations with many states and amongst them, Japan, Germany, Korea, United States, Netherlands, Italy, Norway, etc. states are significant for Bangladesh. Bangladesh needs bilateral engagement because as a developing state it needs to ensure different assistance such as technical assistance, capacity building, funding, etc. (Rahman, 2019).

Engagement with Japan: Japan is working with Bangladesh and providing different supports. Joint Crediting Mechanism (JCM) is

one of the influential works. Under this mechanism, the private entrepreneurs of Bangladesh get low carbon emission technologies, goods, services, and infrastructure building assistance in the field of electricity, fuel, industry, and other sectors from Japan (Ali, 2019). The project aims to ensure low carbon emission development and to play a role in sustainable development. Japan's government can provide 30% to 50% financial assistance to Bangladesh under this project.

Japanese Environmental ministry is also working with the Environment, Forestry, and Climate ministry of Bangladesh. On 19th March 2013, a treaty was signed between them in Dhaka named “Low Carbon Growth Partnership.” Already four projects are implemented in Bangladesh with the assistance of Japan. City Sugar Industries Ltd. In Narayanganj, Hamid Fabrics Ltd., YKK Bangladesh Pte Ltd., Savar EPZ, and Next Accessories Ltd. And construction of a 50 MW powered Solar Plant is undergoing on Sutiakhali, Mymensingh which was supposed to complete within the month of September this year.

Japan is also working on the grass-root level with Bangladesh by conducting different workshops for both the public and private entrepreneurs. Through the JCM project, yearly two workshops are arranged by the environmental department of the Environment, Forestry, and Climate Ministry. Bangladesh Garments Manufacturers and Exports Associations (BGMEA), Chittagong Chamber of Commerce and Industry (CCCI), Dhaka Chamber of Commerce and Industry (DCCI), Federation of Bangladesh Chamber of Commerce and Industry (FBCCI), etc. are some of the important places the workshop has been met.

Engagement with Germany: Germany is working with Bangladesh for about half a century. During this period Germany has done a lot of significant works that support the climate welfare of the states. Under the German Corporation for International

Cooperation GmbH (GIZ), Bangladesh gets prioritized on adaptation to climate change in urban areas, renewable energy, and energy efficiency, good governance, rule of law, and human rights.

Climate change is as regarded one of the adverse forms of human life degradation, due to river erosion and other forms of calamities many people are forced to leave their homes. GIZ helps to improve the living conditions of climate migrants. This organization helps by offering support to adjust the basic urban infrastructure. For instance, roads, drainage systems, bathing corners, cloth washing slabs, solar streetlights, and tube wells, etc. supports are provided. Host cities of the climate migrants get support in identifying the economic potentials that come with the new inhabitants (Giz.de, 2019).

Different assistance is also provided to increase the capacity of the Bangladesh Forest Department and improve the cooperation and coordination among various stakeholders engaged in conservation efforts. GIZ operates on behalf of clients of the public and private sectors to improve social and environmental standards as well as health and safety in factories of the textile and leather industries. Another area of contribution of this institution is- it collaborates with Energising Development (EnDev) and the French Development Agency (AFD) and this benefits Bangladesh. All these activities support the Government of Bangladesh to gain its middle income which was supposed to acquire by the year 2021. These projects will also help Bangladesh to materialize the 7th Five Year Plan as well as the Sustainable Development Goals (SDGs).

Engagement with Korea: Korea is a crucial partner for Bangladesh especially South Korea. The Green Technology Centre (GTC) of South Korea and the Korea Institute for Civil Engineering and Building Technology (KICT) are assisting Bangladesh with brilliant incentives. For example, they have proposed a combined project of sustainable housing design for the coastal area of

Bangladesh. If this gets proper validation, then the Green Climate Fund (GCF) is promised to fund this future project. And this project surely will help the people of the coastal region of Bangladesh.

Another institution of Korea named Glory and Tech is cooperating with Bangladesh by supplying salt-free pure water. This institution has passed a resolution of 5 lacks USD from its government for this project and this program is currently ongoing in the country. The institution uses various technology including reverse osmosis and filtration to reduce salt, iron, and arsenic from water. This initiative will be conducted under the Clean Development Mechanism (CDM), and it has the aim of supplying pure water for 40 thousand people of the Shathkhira district of Bangladesh (Ali, 2019)

Engagement with the United States: USAID of United States also works with the Bangladesh Government to respond and adapt to climate change and mitigate its effects on the most vulnerable populations. It helps to improve the management of natural resources, increase resilience to climate change impacts, strengthen capacity to reduce emission, etc. In 2017, United States provided training to over 75,000 people to be less dependent on natural resources through sustainable agriculture, aquaculture, and poultry rearing reducing pressure on sensitive habitats. USAID also worked to improve the management of 945,190 hectares of forests and wetlands with the improved capacity and active participation of 30 community management organizations and 74 community-based organizations. It has also helped to reduced carbon dioxide equivalent greenhouse gas emissions by more than 1,200,000 metric tons (USAID Report, 2019)

Engagement with some other States: Bangladesh to averse to the risk of climate change works with many countries and many organizations around the world. Not that only Korea, Germany, or Japan helps Bangladesh; there are many other countries with which

Bangladesh pursues good bilateral engagement in terms of climate change issues. However, Norway is an important state for Bangladesh. The Norwegian Institute of Air Research (NILU) helped the environmental department of Bangladesh to mark the source of air pollution. Particulate Matter, Carbon Mono oxide, Sulphur Oxides, Nitrogen Oxides are responsible for the pollution of air and in Bangladesh, the vehicles, brick production industries, and others are responsible for pollutions. However, Italy is also an important state which is aware of the adverse part of climate change. Italy, Netherland, Maldives, etc. are also influential states that collaborate on the Climate Change issue and work deliberately with Bangladesh. And many South Asian countries, countries of Asia Pacific work on behalf of the world climate, and Bangladesh is also engaged with them which will be discussed under the multilateral engagement.

Multilateral Engagement

The effects of the climate problem are manifold. That is why it needs multiple solutions. Only bilateral engagement with different states would not eradicate the climate problem. So besides active engagement with some influential countries mentioned above, Bangladesh also has active participation in climate-related activities with UNFCCC, Asia Pacific Climate, GCF, Montreal Protocol, Paris Agreement, Least Developed Countries Fund (LDCF), UN Environment, and many more.

Montreal Protocol- Montreal protocol has been adopted on 16th September 1987 to protect the ozone layer. Initially, the protocol has taken the step to control the production and usage of 8 products that erode the ozone layer. Later on, different corrections and adjustments have been added to it that worked as one of the crucial climate-related activities. Bangladesh has signed the protocol in 1990. And from 1995 onwards Bangladesh has been working accordingly with the obligation of the protocol. According to the

obligation of the protocol, Bangladesh has obstructed the usage of CFC gas. Also, the fund of the protocol is benefitting Bangladesh. For instance, the Walton high-tech industries limited has to use HFC for their refrigerator production. Montreal Protocol Multilateral Fund will help in this regard to stop the usage of HFC.

Paris Agreement- Paris Agreement is another crucial concern for the climate. Bangladesh has active participation and contribution in it. A transparency framework has been adopted recently under article 13 of the Paris Agreement named Capacity Building Initiative on Transparency (CBIT). This will be working for capacity building, institutional expertise, and more transparency on the work. To implement this program Bangladesh will get a fund of 1million dollars from Global Environment Facility (GEF) with the help of the Food and Agriculture Organization (FAO). Under this program, some sectors are to be benefitted and these are energy, Industrial Process and Product Use (IPCC), Agriculture, Forestry and Other Land Use (AFOLU), ETC. and the pollution that is the gas emission of the waste sector would also be monitored more transparently (Ali, 2019).

Green Climate Fund-The Green Climate Fund is established by the 194 countries, which are members of the United Nations Framework Convention on Climate Change (UNFCCC) before. It was started in 2010, as part of the UNFCCC's financial mechanism (Dhaka Tribune, 2019). This fund aims to finance equal amounts of funding for both the mitigation and adaptation following the Convention's principles and provisions. Bangladesh is also engaged with this fund and gets help from it. And with the economic benefit Bangladesh gets from GEF, different programs are launched and conducted thoroughly. For instance, Bangladesh's Country Program for Green Climate Fund 2018 has undergone 11different programs including Promotion of Climate Friendly Cooking: Bangladesh, Kenya, and Senegal. The budget of the projects is 113million dollars for example (Ali, Rahman, and Akter, 2019). So, Bangladesh's

efficiency in the engagement with the different organizations has brought multiple incentives for it.

Conference of Parties (COP) - The conference of the parties is set as a supreme decision-making body of the UNFCCC. A major task of this COP is to review the national communications and emission inventories submitted by the Parties. Bangladesh, being a member country of the convention, has also shared concerns about climate-induced loss and damage. In Bangladesh in the last cop, cop 24 could not bring much more influence so the preparatory works are now going on to influence the next cop 25 that is supposed to act in December 2019 (The Daily Star, 2019). This will be imperative for Bangladesh to explore the possibilities and avenues to address loss and damages and Bangladesh should also create an enabling environment to attract climate funds and enhance budgetary allocations to adaptation efforts.

Regional Cooperation

Bangladesh is a South Asian state. Climate change problems have a serious impact on the South Asian region. Climate refugees in this region are also increasing. This region has technical and political challenges to deal with climate change. In 1985 South Asian Association for Regional Cooperation (SAARC) was founded. Its main purpose is economic cooperation. However, in the late 1990s, there was an initiative for environmental action plan where the state would have to send their report on the environment. SAARC Convention on Cooperation on Environment was taken to deal with climate change issues. But regional climate change combat has failed in South Asia because of various constraints. One of the respondents of this study argued that India is not active in combating climate change. They are going through high economic growth so talks on climate change seem irrelevant to India. However, summits and meetings are happening in this region between related officials,

experts, and civil society actors to discuss climate change impacts on South Asia (Zafarullah & Huque, 2018).

Bangladesh's Collaboration with the Least Developing States

Normally states negotiate with each other by forming a coalition. Some coalitions are active in climate change politics such as developed states, developing states, least developed states. Bangladesh collaborates with the least developed states in the matters of climate change negotiation. There are forty-seven states in this bloc (Environmental Justice, 2019). They work together under the framework of the UN Framework Convention on Climate Change for collective goods. One of the officials of the Ministry of Environment, Forest and Climate Change said during her interview that Bangladeshi negotiators have prestigious status in this coalition. They actively take part in climate change-related conferences and negotiations with other negotiators from least developed states. Mr. Sonam Phuntsho Wangdi is the current chair of this group. Bangladesh was elected as a chairman in 2015 in the least developed states group. Mohammad Reazuddin was the chair of the LDC group from 2005 to 2006. Currently Md. Ziaul Haque is working on the sector of mitigation in LDC group coordination.

The Least Developed Countries Fund (LDCF) was formed to help Least Developed states to implement and take the preparation of national adaptation programs of action (NAPAs). Global Environment Facility (GEF) mainly operates this fund. Bangladesh also gets help from this fund from other climate change vulnerable states. Bangladesh always takes part in climate change negotiations with the LDC group with academics, NGOs, experts, and Media. Besides Bangladesh shares knowledge and experiences with the least developed states to tackle climate change issues.

International funding for climate change

The only preferable policy for Bangladesh for tackling climate change is adaptation policy because of its poor economic and technical conditions. The adaptation policy is more likely dependent on international funding for effective policy action. Though adaptation policy took long term for implementation. That's why it is more suitable for Bangladesh for applied climate change policy. Bangladesh's climate change policy includes high-risk reduction, strong institutional building, technology transfer, etc. all these policy implications are required wide-ranging financing. And that's why Bangladesh is dependent on international funding and support.

On the other hand, Bangladesh is facing several challenges to build self-resilience in climate change. Also, the vulnerable situation posed by climate change is needed to mitigate. For all these reasons Bangladesh needs adequate spending to tackle climate change. In the 21st century, all the developed countries are focusing on rapid industrialization and economic growth. For that reason, many natural resource exploitation and pollution happened which harms the global atmosphere. All the developed countries are responsible for carbon emissions and temperature rise, that's why they are spending billions of dollars as compensation for the victim countries to reduce the vulnerability of climate change.

The United Nations Intergovernmental Panel on Climate Change (IPCC) claims that climate change is mainly human-made activity. And it is leading to the sufferings not only for human beings but also the other living beings on the planet. Bangladesh is facing different types of problems like floods, Cyclones, and Storm Surges, Drought because of global warming and climate change. Immediate response for all these issues is necessary and that's why it needs adequate adaptation funding. But the fragile economy and poor technical capacity of Bangladesh make it difficult to fight all these problems. Both bilateral and multilateral funding for the climate

change adaptation and mitigation measures is helping Bangladesh to become well off in solving the issues.

All the developed nations promised that by 2020 they will provide 100 billion a year in climate finance to the poor countries. The United Nations Convention on Climate Change (UNFCCC) published a bi-yearly report in 2016 that stated that the total estimates reached so far are around 75 billion (Thimperly, J, 2018). Rich countries are committing their fair share of at least US\$50bn a year in adaptation fund the most urgent and immediate needs in the most vulnerable countries (Oxfam International, 2008)

There is some bilateral funding which includes Germany, Japan, the USA, France, UK, etc. The Kyoto Protocol Adaptation Fund, Least Developed Countries Fund, and other multilateral Banks are the major funding for Bangladesh. For reducing vulnerability in terms of climate change Bangladesh formed the Climate Change Trust Fund which comprises both domestic and international funding. Apart from this, Green Climate Fund is also played an important role as long-term funding which works under the United Nations Framework Convention on Climate Change.

World Bank (WB): The World Bank has administered two different funds one is Climate Investment Funds (CIFs) and the Global Environmental Facility (GEF). World Bank is planning to adopt direct adaptation funds for the poor and most vulnerable countries estimated to spend 10 billion per year in the fiscal year 2021-2025(The World Bank, 2019). The World Bank allotted around 55 million US dollars for Bangladesh under Rural Electrification and Renewable Energy Development (RERED-II) Project to develop the idea of rural people for using renewable energy (Export.gov, 2018)

The Kyoto Protocol Adaptation Fund: The adaptation fund under the Kyoto protocol was initiated in 2010. Bangladesh is

received 10 million us dollars for the first time from The Adaptation Fund on a joint project by the United Nations Development Programme (UNDP) and Ministry of Environment, Forest, and Climate Change (MoEFCC). The project mainly focusing on the adaptation policies for the small and riverine islands of Bangladesh (Dhaka Tribune, 2019).

Global Environmental Facility (GEF): Global Environmental Facility is one of the most significant frameworks for financial mechanisms. It was initiated in 1991 and till now it has been working to support the adaptation policy. It has been working through two funds, the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). The GEF activities include adaptation plans, biodiversity strategy, and many more. In Bangladesh, Global Environmental Facility is working in community-based management in conserving agriculture and marine life, awareness building for the poor people, etc. GEF is increasing its allocation for the Least Developed Countries (LDCs) including Bangladesh. Till now it allocated a total of 143.59 million US dollars for 41 projects (Ahmed U. K, 2016). The GEF launched Challenge Program for innovative Adaptation to develop the private sector participation and that's why it is proposing 10 million US dollars. (Funds for Bangladesh, 2019).

Multilateral Development Banks: Multilateral Development Banks consist of six large banks such as the World Bank Group, the Asian Development Bank (ADB), African Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, and the Inter-American Development Bank. The fourth joint report 2014 claims that multilateral development banks contributed to the 28 billion US dollar for the adaptation and mitigation policy. A lion's share has been allotted for the climate change mitigation process. MDBs provide the largest share of funds to the South Asian region as it includes all the poor countries (The Independent, 2015). In another report published in 2017, there is a

critical improvement happened. The MDBs increased their commitments to 35.2 billion US dollars. The only shortcomings of climate financing are that its large portions are focusing on mitigation projects. While Bangladesh and other Least Developed Countries (LDCs) more relied on the adaptation policy (Smith et al., 2018).

Least Developed Countries (LDCs) Fund: Bangladesh along with other LDCs is working to build self-resilience capacity in climate change adaptation. All the least developed countries are the parties of this special fund which is run by GEF. Each year they held on to summits or meetings to discuss their target areas and policies, how they will be implemented (Huq.S, 2019). The main objective of the fund is to help Least Developed states to implement and take the preparation of national adaptation programs of action (NAPAs). In 2017 it provides 1.2 billion US dollars to 51 LDCs for the implications of NAPAs. NAPAs is quite successful today by getting strategic support from the funds. Another important motive of the funds is to help all the least developed countries to uplift their status (Huq.S, 2018)

Bangladesh with the least developing states is focusing on loss and damage mechanisms, funding for the pollutions by the developed countries, which is proposed on COP19 (UN, 2019). It also introduced coastal afforestation as a community-based program that has become a milestone for others. 2018, Least Developed Countries Fund (LDCF) proposed 34 million US dollars for Bangladesh for capacity building in climate negotiations and national planning. Bangladesh is supporting other least developed countries by sharing knowledge and experiences about the adaptation program.

Climate Diplomacy of Bangladesh

Climate change impacts are not national-level security issues rather climate change has a global impact. It's difficult to set up the territoriality of the environment. Lands can be identified with territorial dimensions and divided into several parts to the states of the world. But environmental dimensions cannot be specified for the states as states are connected with an environmental perspective. One state's activity in the environment can affect other states. Rapid industrialization and exploitation of natural resources have caused several environmental problems. Climate change is one of those problems. The rise of sea level and temperature, frequent natural disasters, water pollution, etc. are the impacts of climate change.

UNFCCC is a treaty that was signed in 1992 to address the issues of climate change and it came to effect in 1994. There are 197 members under this treaty. Members of this treaty participate in the conference of parties annually from 1995. Kyoto protocol was signed in 1997 to reduce the emission of greenhouse gas. Moreover, the United Nations climate change conference of 2010 had an agreement on a future global temperature level that was below 2 degrees Celsius. However, the Paris agreement was signed in 2015 to keep the global temperature level below 1.5 degrees Celsius and this agreement's objectives are applicable for all the parties. Both mitigation and adaptation strategies were taken in this agreement. It came into force in 2016.

Bangladesh is a member of the UNFCCC and Bangladesh always sends its representatives to international conferences on climate change. There are broadly two parties in climate change negotiations: polluters and victims, as stated by an associate professor at the University of Dhaka. He also explained that developed states like the United States and European states are the polluter states as they are the first states who had industrialization. Their carbon emission rate is still higher than other developing

states. They are considered the main actors in causing climate change around the world. Another party is the victim group. Developing, Small Island and African states are the victim states for the climate change impact.

According to an officer of the Ministry of Environment, Forest and Climate Change, some issues are included in climate change negotiations. Firstly, asking for climate funds from the developed states as they are the responsible states for climate change. Secondly, states commit to taking possible national actions for dealing with climate change. Thirdly states take necessary strategies for tackling climate change (mainly mitigation and adaptation). Fourthly new issue has been introduced in climate change negotiation which is loss and damage. The fifth state came to a combined decision to keep the global temperature level at a specific point.

States do not negotiate in the UNFCCC on Climate Change as a single state rather they negotiate as a coalition. Bangladesh negotiates with the least developing, Small Island, and African states. Bangladeshi negotiators have gained knowledge from their experiences by taking part in global climate change conferences. So, Bangladesh's negotiators are now the senior negotiators in the least developing state coalition. As Bangladesh takes part in the climate change negotiation as a coalition, Bangladesh's gains from those negotiations are not solely national interest-based rather these are the common interests of the coalition. It will not be appropriate for Bangladesh to act as a single country and seek only its national interest as environmental problems are not specified in a specific state, these problems are applicable for all.

Bangladesh's narrative for climate change diplomacy was the representation of the vulnerable situation of climate change impact in Bangladesh. Bangladesh took the National Adaptation Programs of Action in 2005 which was presented in COP7. Later Bangladesh

government developed Bangladesh Climate Change Strategy and Action Plan in 2009 which was updated in 2015. Prime minister Sheikh Hasina got the champion of the earth award in 2015 for her contribution to policy leadership for climate change.

Bangladesh prefers the adaptation approach over mitigation for dealing with climate change. Adaptation is suitable for developing states as they are still facing the impact of climate change. Negotiators from least developing states coalition focus on funding for adaptation. They had been argued for giving importance to adaptation as mitigation. Adaptation solution was taken in Paris agreement in 2015. Bangladesh is one of the founding members of the Climate Vulnerable Forum where the Least Developed states, Small Island, and African states are the member. This forum addresses the consequences of global warming. Bangladesh representatives sit with the members of this forum to discuss the common issues of the member states. They agreed to act as a bloc in the Paris agreement negotiation process. Their focus was to keep the global temperature level below 1.5 degrees Celsius. However developed states were supporting to keep it below 2 degrees Celsius. Climate Vulnerable Forum (CVF) declared that they have the intention to make their states 100 percent renewable by 2050 to achieve long term 1.5-degree temperature goal.

Paris agreement took long term goal of keeping global temperature level below 1.5-degree Celsius, it was a success for the vulnerable states including Bangladesh who advocated for it from the beginning. Bangladesh sent its representative group of civil society, experts, and high officials to the negotiation, some important negotiators of the least developing states were from Bangladesh. According to an academician of International Relations, Bangladesh's negotiators are also successful to gain funds for adaptation solutions under the Paris agreement.

She also added that Bangladesh with the least developing states is focusing on funding for loss and damage and equal funding for adaptation solutions. Loss and damage were included in Warsaw International Mechanism (WIM) at COP19 in 2013. Loss and damage are the funding for the losses of least developing states which has happened for climate change impact. It follows the “polluter pays” policy. It’s more like compensation for the developed world as the responsible states for climate change. The least developed states are arguing for this cause though developed states are not ready to share the burden. However, the Paris agreement included loss and damage in its article 8 to recognize that loss and damage was a new and significant issue that required international attention. It’s also a success for the negotiators of the least developing state's coalition.

Bangladesh is changing its narrative from the most vulnerable to the most adaptive state, as claimed by Saleemul Huq who a prominent climate scientist in Bangladesh is. Bangladesh is resilient to climate change impacts. Bangladesh’s diplomacy on climate change is going through this transformation for two reasons: the first one is to capitalize Bangladesh’s knowledge on adaptation planning, the second one is to show the world that Bangladesh is taking efficient policies with the proper use of international climate fund to get further climate funding from the international forums and increase Bangladesh’s legitimacy in international level. Bangladesh is a member of V20 where vulnerable states are a member of it. Mainly finance ministers of these states take part in it. The Ministry of finance sends Bangladesh representatives to the conferences of this group. This group’s main objective is to make cooperation among the twenty-climate change vulnerable states to increase the economic and financial feedbacks to climate change.

Bangladesh's Representatives in Climate Change Negotiation

Climate change is now becoming a serious problem for Bangladesh. That's why Bangladesh is focusing on international collaboration for climate negotiations and finance. For building a more comprehensive climate negotiation the Ministry of Foreign Affairs (MOFA) is integrating with other ministries such as the Ministry of Environment and Forests (MOEF) as well as the Ministry of Finance (MOF) etc. Apart from the ministries, some other groups are participating in the climate negotiation process. The members of parliaments, Non-Governmental Organizations (NGOs), Expert groups, university professors, the private sector as well as media are playing important role in this regard.

Ministry of foreign affairs along with other ministries formed a panel group where all the people who are expert in climate negotiations works together to represent Bangladesh in the international arena. For climate change issues, Bangladesh also collaborates with other states so that an integrative approach can be taken to solve the problem. Bangladesh's adaptation program to build a climate-resilient country is relying on integration at the local, sectoral, and national levels. And it is now sharing its experience and knowledge with the other developing and least developed countries that are the victims of climate change (Hossain and Marinova, 2011).

The negotiating groups represent the country's stand in terms of climate change. The main objectives of the group are arriving at decisions through agreement. They also work to ally with the other vulnerable states to increase economic and financial response to climate change. As Bangladesh is working as a member of different bodies in the United Nations Framework Convention on Climate Change (UNFCCC), it is negotiating with the least developing

countries and other small countries which are mainly facing vulnerability due to climate change (Huq, 2016).

Bangladesh's negotiating behavior in the international platform is based on shared knowledge and experiences. Bangladeshi negotiating body is nowadays taking part in different conferences and conventions as a merger with other countries. Because climate change is a worldwide problem, only integrative approaches can solve this problem. Bangladeshi negotiators offer coalition with other countries both south and north as well as south to south, which is treating as a new dimension of Bangladesh's diplomatic strategy (Huq, 2019).

The Ad-hoc Working Group on Long Term Cooperative Actions (AWG-LCA) is a global plan, an outcome of Bangkok climate talks under the UN Convention on Climate Change (UNFCCC). The second session of the Ad-hoc Working Group on Long Term Cooperative Actions (AWG-LCA) was held in Germany. Bangladesh presented in all three workshops on behalf of the LDCs. Bangladesh identified both adaptation and mitigation in climate change for the LDCs. Bangladesh suggested that all the countries will make National Adaptation Action Plans (NAAP) for climate proofing of development. It also proposed a conceptual framework for climate financing for the most affected countries (CSRL, 2008).

Challenges

The Intergovernmental Panel on Climate Change predicts that Bangladesh must face a 1.5 mm sea level rise per year (Intergovernmental Panel on Climate Change, 2014). Bangladesh has been identified as the most vulnerable country due to climate change. Though Bangladesh is a low carbon emitter but suffers worst in terms of global warming and disaster-prone geology. Bangladesh has not enough preparations to face the challenges of climate change. It has been working to develop an early-warning

system and build at least 2,500 concrete storm shelters for the reduction of deaths. For reducing the vulnerabilities to natural disasters, the country has so far invested more than US\$ 1, 50,000 (Friedman, 2019). But that is not enough, Bangladesh needs more finance to build similar infrastructure in the future.

Adaptation policies are also visible at the community level for Reducing Vulnerability to Climate Change (RVCC) which is known as Community Based Adaptation (CBA). The Prime Minister of Bangladesh has received the “Champion of the Earth award” in 2015 for the recognition of Bangladesh's far-reaching initiatives to address climate change (The Daily Star, 2015). In addition, for its outstanding contributions to climate change adaptations, Bangladesh received the climate change initiative award ‘Lighthouse Activities 2013’. It has shown its urgency to move towards green sources of energy. Bangladesh Bank has adopted the green banking policy, which is another great initiative in this regard.

Despite all the positive initiatives Bangladesh is still facing several challenges to build self-resilience in climate change. Apart from inadequate expending, there is a lack of coordination between different authorities, the inadequate allocation for adaptation, unavailability of fund-related information, political influence in project approval, lack of research and development, corruption as well as poor governance can be identified as major challenges for Bangladesh in mitigating climate change.

The structure of Bangladeshi foreign policy and other domestic policies are mainly based on the hierarchical division of the Prime Minister (Masud, 2016). The political ideology of the existing government plays a role in shaping policy choices. That’s why political influence for the approval of different projects and transparent governance in climate finance is one of the important challenges for Bangladesh. Though Bangladesh is now trying to ensure self-reliance in climate change, still there remains some gap

in implementing successful climate diplomacy at the local, national, and regional levels. Bangladesh should go for the right scope for mainstreaming climate change adaptation policy in its mechanism.

Bangladesh has no advanced research organizations and scientific publications on climate change compared to other countries. Though lots of studies regarding climate change and environmental problems are carried out in Bangladesh each year by different think tanks, NGOs, and universities most of them remain unpublished because of poor quality. That's why their impact on foreign policy decision making quite far away. Though recently, Gobeshona as a climate change research community started working in Bangladesh. This includes national and international participants who shared their knowledge to build a green planet. In addition, although they publish frequently, the journals' impact factor is nothing significant.

The least developed countries and developing countries faced several problems to raise funds as they cannot properly represent their financial demands to the international community. Bangladesh is not an exception either as said by a respected faculty member of International Relations from Bangladesh University of Professionals. She added that Bangladesh has been faced obstacles for funds allocation to measure the adaptation policies. By analyzing Bangladesh's involvement in climate finance, we can assert that every year Bangladesh has been pledged for a large amount of money by the donors but in practice, it receives only a few of them. Bangladesh has explored options like "no regrets" for example, Bangladesh now invested in the community-based disaster response system to manage and reduce the vulnerabilities of disasters or cyclones (Kissingera and Namgyel, 2013).

Another significant challenge Bangladesh is facing today is the transparency and accountability for implementing the projects and financing. Most of the spending of the Bangladesh Climate Change

Trust Fund (BCCTF) and other funds have been using inappropriately. While it was allocated for the adaptation program (Transparency International Bangladesh, 2014). The improper utilization of the money is affecting Bangladesh to mitigate climate change successfully. Climate change researcher professor Ainun Nishat claims that there is a lack of clear information about climate spending. For example, since 2010 Bangladesh got over 3000 crores Tk for BCCTF, but there is no distinct development in combating climate change (The Daily Star, 2019).

As there is no efficient policy on the proper use of international climate funds, so at a certain time, Bangladesh cannot represent how it used the funds for reducing vulnerability. And it hampers the possibility to get further climate funding from the international forums and increase Bangladesh's legitimacy at the international level.

Though Bangladesh gets a good amount of money for the adaptation policy its application at the practical level is problematic because of bad governance and corruption. Due to Poor governance systems, it is difficult to combat corruption, which has resulted in an unsuccessful attempt for building resilience against it. While people of the coastal areas are fighting against the threats of climate change, corruption and mal governance posed an additional threat to their livelihood. Bribery, extortion, illegal logging all in case of the vulnerability of the coastal population (Rahman, 2018). Recently, Transparency International Bangladesh (TIB) has undertaken the Climate Finance Governance Program to reduce the corruption risks in climate finance.4.10 Climate Change Research Community

Gobeshona is a climate change research community in Bangladesh. Other research platforms in Bangladesh are also working on the issues of the environment and climate change. But Gobeshona is different from them as normal people, climate change scientists, several public and private organizations, and universities

are included in this community. This platform for climate change knowledge sharing consists of international and national level participants. It has mainly three objectives are: to improve the quality of the research on climate change in Bangladesh, to share the research outcome and information with other researchers, and finally to conduct good quality research to help the policymakers of both Bangladesh and abroad.

Gobeshona has an online portal that provides updated news of climate change-related issues. It organizes a monthly seminar in which experts and researchers take part to talk about climate change issues. Participants from United States, United Kingdom, Canada, Uganda, Australia, Germany, Tanzania, and Nepal join the conferences which are held by Gobeshona. Fifty universities and organizations of Bangladesh are working together in Gobeshona on climate change matters. Gobeshona's fifth conference was happened in Bangladesh from January 8 to January 11 in 2019.

Civil Society Participation

In Bangladesh, climate diplomacy civil society is playing a crucial role. These groups not only suggesting the government of Bangladesh on possible cures and step regarding climate negotiation but also these groups are continuously doing work to build an adaptable environment. Among civil society groups in Bangladesh academicians or researchers, environmentalists, national and international NGOs are playing a prominent role. Civil society's strength lies in influencing state decisions on climate change negotiation. Civil society always advocates for a positive method. It reflects the concern of vulnerable citizens of society. The most important activity of civil society is to create public awareness.

Civil society plays key roles in pushing for new laws, programmers, policies, or strategies on climate change, in holding governments to account for their commitments; and in ensuring that

national policymaking does not forget the poor and vulnerable (IIED,2012). CARE Bangladesh is working on climate adaptation, developing new technologies, and researching climate change policies. Transparency international Bangladesh verifies mismanagement in climate policy implementation and suggests in this regard (The daily star, 2018).

Bangladesh civil society forum always advising and criticizing Bangladesh policy regarding climate change (The daily star, 2019). Personalities like shaikhsiraj continuously exploring climate change adapting methods in the agriculture sector (Quadir, 2015). Civil society activism regarding anti-climate entities like banning plastic bags, protection of mangrove forest Sunder Ban, coastal salinity, and coal-fired power plant, etc. making positive change in government attitude regarding climate policy. Media reporting on climate hazards and indifference to authority is also playing a very important role (The daily star, 2016).

United Nations is the core regime on creating a global platform to provide possible cures and to help the most vulnerable country like Bangladesh. UN Framework Convention on Climate Change provided a scientific explanation regarding climate change. This led the Kyoto Protocol to minimize the emission of greenhouse gas and to provide aid to vulnerable states. Intergovernmental Panel on Climate Change has been made to monitor all activities on climate change issues. The intergovernmental panel on climate change (IPCC) was founded by the world meteorological organization (WMO) in association with the United Nations environment program (UNEP) to provide knowledge on scientific and socioeconomic reasons for climate change (Islam, 2014).

Bangladesh and the UN are working collectively, and Bangladesh has learned a lot. UN is playing important role in climate negotiations. Bangladesh in the conference of parties (COP) negotiation is effectively presenting climate change victims

situation in Bangladesh. In the Doha conference, Bangladesh demanded compensation for vulnerable countries and asked for the green climate fund a total of 100 billion US dollars by 2020 (Islam, 2014).

Graduating to Middle Income State

Bangladesh will soon graduate from the status of least developing state to middle-income state. Bangladesh fulfilled all given criteria by United Nations for graduation from the least developed state in 2018. United Nations will review Bangladesh's position in 2021 and Bangladesh will finally become a middle-income state from 2025 after the formal recognition of the United Nations in 2024. So, there are some issues which are needed to be considered (Sarkar, 2018).

Firstly, Bangladesh negotiates with the least developing state's coalition in climate change negotiation, so what will be Bangladesh's position after its graduation is now a big concern for the government of Bangladesh. Bangladesh is trying to keep south-south collaboration if after their graduation to a middle-income state. So, Bangladesh's negotiators are trying to change the coalition name to G47. Secondly, Bangladesh will no longer have access to grant-based Overseas Development Assistance, so, the government will need efficient climate diplomacy to get climate change funds. Climate change funds can replace overseas development assistance. Thirdly even if Bangladesh graduates from the least developing state status it will remain as a climate change vulnerable state. So, Bangladesh will not lose its access to climate change finance. Fourthly Bangladesh's position in the least developing state's coalition will need modification if Bangladesh would choose to stay with the coalition. Because Bangladesh will no longer be the least developing state so its status and responsibility will also be different in the coalition.

4. Conclusion and Recommendation

Review of the Key Findings

Bangladesh is one of the most risk-prone countries on climate change. The possible rise of sea level because of rising temperature will displace millions of people. Climate change in Bangladesh does not see as environmental degradation, it also poses a serious security threat. Bangladesh among the most vulnerable country is now trying to mitigate effects but lacks enough technological and financial support. As several global climate governments are promised to assist vulnerable countries, Bangladesh's role in global climate governance is also active to get global climate finance.

This study's central focus is Bangladesh's stance in climate change diplomacy. It tries to figure out the Bangladesh government's foreign policy actions to global environmental governance, and the contribution of the non-state actors to influence government climate diplomacy. To achieve its objective, it analyses Bangladesh's current approach in climate diplomacy and its shortcomings. Besides, this study emphasized investigating challenges for Bangladesh at both national and international levels to get global climate funds.

This study finds Bangladesh's climate diplomacy has developed through time. Bangladesh's government's national policies on climate change are noteworthy but lack enough resources and technologies. Moreover, Bangladesh's implementation of climate change policies is limited because of poverty, inefficient institutions, and corruption. The regional institution has failed to address climate problems. Though there are some challenges, the current climate diplomatic practice of Bangladesh is comparatively better than before.

This study finds Bangladesh's stance in climate diplomacy as a member of vulnerable-20 (V20) and Climate Vulnerable Forum. Bangladesh does not negotiate as an individual state in the climate change negotiations rather it negotiates as a bloc with other vulnerable states. Bangladesh's climate diplomacy has been facing several domestic and international challenges. Bangladesh now needs to focus on those challenges to get enough climate finance from international actors. There is a broad lack of academic study on climate diplomacy, which this study tries to highlight. This study fulfilled research interest by making an overall discussion on all queries. The objectives of the study are queries on Bangladesh's current diplomatic practices, several aspects of Bangladesh's climate diplomacy, and challenges in getting climate funds. These objectives are met by making an overall discussion on mentioned objectives and by making suggestions to strengthen Bangladesh's climate diplomacy.

Recommendation

In international relations weak states like Bangladesh face several difficulties in securing interest against a powerful entity like the USA and EU, who are more capable of defending their interest. A weak state can also achieve objectives by applying proper tools and strategies in the international forum. Bangladesh should present its climate change vulnerability with valuable facts. This will provide Bangladesh a comparative advantage in climate diplomacy, as Bangladesh is not a big polluter but bearing a bigger risk.

Bangladesh needs to justify its claim as the most vulnerable state. It should gain recognition in this regard. It will provide Bangladesh a moral ground in climate diplomacy. This ground will also help Bangladesh in leading the bloc of vulnerable countries. Stronger communication regarding climate diplomacy should promote among developing countries. Lack of expertise and resource is an obstacle in this regard. NGOs can play a very

important role in mitigating these difficulties. Bangladesh should promote the idea of adaptation, which could play important role in climate change combat. This will help Bangladesh in demanding international financing in climate change adaptation.

Bangladesh needs to develop a strategy based on collective effort with other parties. Bangladesh needs to focus on backtrack diplomacy, as most negotiations now a day occurs behind the scenes. Bangladesh needs to highlight and should strongly present the real scenario of climate change and its victim in Bangladesh. Bangladesh as the most vulnerable country should lead the demands of vulnerable countries in COP. The negotiations skill of Bangladeshi negotiators should adopt the international standard and should maintain standards in international forums.

The most important objective of Bangladesh's climate diplomacy is to pull climate finance into Bangladesh. This finance is not like pursuing charity from developed states or not a loan to financed climate projects; rather it is a demand for compensation because developed countries are responsible for global climate change. The Ministry of Finance and the ministry of foreign affairs should dedicate a separate body for the management of climate finance. It should develop a strategy in climate finance.

Bangladesh needs to specify, which fund it needs. It must project a clear picture of the early funds it has taken. How are those funds spending? What are the signs of progress? How will be new fund spend and for what purposes? Bangladesh needs a proper risk management program. It needs a proper plan to demand funds from international organizations.

Bangladesh needs to project its desire to work on climate change. In the Maldives to reflect climate change issues arranged cabinet meetings under seawater, Bangladesh needs to develop such projection. Bangladesh needs to develop a strong bloc of vulnerable countries. In an international forum, the united voice of all

vulnerable countries will strengthen Bangladesh's position in climate diplomacy.

Bangladesh needs to arrange an international summit on the climate issue, it will not only strengthen Bangladesh's position as a negotiator, but also it will garner support on Bangladesh causes. It needs to enhance community engagement. The most important task for Bangladesh is to build a global personality. The Swedish teenager Greta is not from a climate-vulnerable country, Greta is now a global face on the climate issue. The creation of such a global face in Bangladesh will benefit from getting global attention.

The foreign ministry should embrace climate diplomacy tightly as soon as possible. After any international or national development on climate negotiation, the foreign ministry needs to brief all development and future strategy to its foreign missions. The foreign ministry should provide its officials with sufficient academic knowledge and training regarding climate diplomacy. The Prime minister could play a vital role in enhancing capability and access to climate diplomacy. The Prime minister should take climate diplomacy as regular agenda of foreign trips and should build common ground.

The foreign ministry and prime minister should dedicate a special envoy or adviser to deal with climate change issues in all international forums. A diplomat, skilled in the UN system and negotiation could play important role in this regard. Bangladesh needs to build solidarity with all developing and vulnerable countries to promote its climate diplomacy. In international negotiation on climate change, the use of global norms like mother earth protection can play a pivotal role in creating worldwide consensus.

As Bangladesh needs a developed state's technological assistance, it should handle bilateral relations carefully and should

provide a sense of a win-win situation. Bangladesh should make a group-based effort to achieve objectives. Bangladesh should build a strong relationship with regional countries to make an argument stronger and should build a bloc with developing countries to grab international attention on Bangladesh demand. Diplomatic Missions abroad will raise international awareness of the environmental problems of Bangladesh. Bangladesh could raise its voice in other intergovernmental regimes like the NAM and OIC. A new dimension like cultural diplomacy will help to create consensus in climate diplomacy.

Bangladesh should strengthen the Ministry of Foreign Affairs (MOFA) capability to develop a unique strategy to build a solid climate diplomacy policy. The Ministry of foreign affairs should direct its all mission in developing countries or developed countries to build a common goal in respect of Bangladesh's diplomatic objective. In this process, all other important national agencies will work under the ministry of foreign affairs directive. There is a policy difference among Bangladesh bank, Ministry of Finance (MOF), Ministry of Environment and Forests (MOEF), and parliament, it should be mitigating following the objectives of climate diplomacy. University, private entities, and media have a very crucial role to play in climate diplomacy. Lobbying could be an important factor in using a private entity to achieve objectives. Positive and timely media coverage on climate issues will provide Bangladesh opportunity to make a conducive environment for climate diplomacy.

Bangladesh must cling to the UNFCCC and its framework to advance diplomatic objectives. It should recognize and approve global consensus like the development of the Paris climate agreement. Bangladesh should use the international climate regime to strengthen its voice and should build a consensus with other countries. Based on a common goal Bangladesh could build a large group to make voice heard to other negotiating partners. These

international regimes have many principles, which Bangladesh could exploit to gain diplomatic objectives.

Conflict of Interest: The authors have no conflicts of interest associated with this publication.

Funding: This paper received no specific grant from any funding agency in the public, commercial or for nonprofit sectors.

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