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Strengthening Environmental Governance for Sustainable Development: Appraising the Impact of Local Government in Rural Bangladesh

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ABSTRACT

In an era defined by escalating climate change, Bangladesh stands as one of the world's most vulnerable nations, where the well-being of millions and the prospects for sustainable development is intrinsically linked to the health of its environment. This research was undertaken to address a critical question at the heart of this challenge: How effective is local government in strengthening environmental governance and building resilience at the grassroots level? With such a basic unit of rural governance as the Union Parishad, this study evaluates the role, influence of the institution and the systemic pressures that limits its performance. The results indicate a deep and disturbing paradox. A majority of the rural communities agreed that environmental degradation, which is coming in the form of massive floods, uncontrollable erosion of rivers and globally advancing salinity is a grave and imminent danger to their lives and livelihood. Such strong local action should in theory have a strong mandate because of this high level of public concern. However, the study also revealed a very profound and widespread sense of disillusionment between the people and the very establishments that are supposed to defend the people. The paper has concluded that, this disjoint is not due to indifference of the citizens, but is the effect of a malfunctioning system of governance. The Union Parishad, which in theory is the foundation stone of local action, is substantively disempowered and in practice emasculated by three kinds of paralysing problems: a debilitating shortage of financial resources, the corrosive effects of corruption which eats away at its credibility, and the unwarranted political interference which eats away at the proper planning and fair action. These fundamental problems are further enhanced by the inferior institutional capacity, insufficient technical skills and inability of the local, regional and national organizations to coordinate their efforts.

KEYWORDS: *Local Government, Environmental Governance, Climate Change, Sustainable Development, Disaster Management*

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1.INTRODUCTION

1.1 Background

Bangladesh is known to be one of the most vulnerable nations on the Earth, extremely prone to climatic expressions due to its exclusive geographic position, hydro-geological features such as the prevalence of floodplains, low altitude above the sea level and finally, the socio-economical features including the high population density, high level of poverty and the excessive reliance on nature. Bangladesh has a varied physical environment, and both the traditional and the modern techniques of land use are intermingled, all being highly adjusted to the non-homogenous conditions. Climate change and environmental degradation that in turn is triggered by the overwhelming development of economy, urbanisation and population threatens the existence of the planet Earth (Germanwatch, 2021).

Bangladesh too is experiencing a number of environmental crisis such as climate change, water pollution, air pollution, noise pollution and hazardous waste. Bangladesh is considered to be among the most risk-prone and vulnerable nations on the earth with regard to the effects of global warming and climate change (Rahman, 2021). The rise in climate has been causing threats such as cyclones, tidal surges, salinity intrusion and water logging in coastal lands, and drought, landslides and the improper effect on agricultural production has become a key threat to the attainment of the Sustainable Development Goals in the country. The current Government is humbly attempting to overcome these environmental issues to make a healthy, beautiful, sustainable and environment-friendly Bangladesh to serve the interest of the current and the future generation (Ahsan, et al., 2014).

It seems that in order to place governance in the field of development, there is essence in the clear leadership and shared vision of the environmental governance as a developmental and not environmental management. It is seen that environmental governance is everybody business and all stakeholders state and non-state actors should incorporate governance in their respective development plan to mainstream to cut disaster risk and help vulnerable people to manage live and livelihood with security and less risk (Islam & Faisal, 2025). Such environmental and use pattern complexity has valued implications to the susceptibility and exhaustion of the natural resource base. Environmental governance analyses any dangers of environmental occurrences and patterns to people, groups or states. Environmental governance is environmental viability as a life support, and it has three sub-elements:

- preventing or responding to environmentally caused conflicts, and
- Protecting the environment due to its inherent moral value,
- Preventing or repairing military damage to the environment.

The remaining natural forests in Bangladesh are declining with a range between 2.1 per cent/year to 3.3 per cent/year. This is attributed to the fact that the forest resources are being exploited through commercial logging, fuel wood picking up and agricultural land clearance. Commercial logging offers an alternative source of income to the poor since the

timber logs would fetch some cash. This financial gain may lead to the cutting down of more trees leading to deforestation (Islam, et al., 2024).

Providing water and sanitation is the work of local government most of the time, and it depends on good local government, management of natural resources, and city planning (Siddique, 1992). There is a role of local governments in water quality improvement related to the protection of the environment and sustainable solid waste management. The rural poor have been more discriminated than the urban poor in accessing the health facilities. The positive contribution of health security to human capital as well as social-economic development is well recognized. Good health minimizes loss of working time work and improves the school attendance of children. Health constitutes an important element in both Human Development Index (HDI) and Human Poverty Index (HPI). Health in itself is a great asset, and may be directly significant to the effective freedom of the person (Islam, 2020).

Local and regional governments particularly in urban areas are frequently at the forefront in managing the impacts of climate change. We must ensure that our abilities to manage climate related hazards and natural disasters are enhanced in such a way that we are able to secure our communities and especially the most vulnerable. Local leaders have already experience of taking the bottom up leadership in the fight against climate change and creating awareness at local level (Ali, et al., 2019). Over the past decades, there are several important steps that the Government of Bangladesh has taken in order to establish institutional arrangements at the national to union levels to manage disasters in an effective and systematic way. Besides the institution building, legislative development is another way that enables mitigation to the sufferings of disaster victims in Bangladesh (Islam, 2017).

In order to ensure appropriate coordination of the concerned ministries, departments, line agencies, Local Government Body and the people in the community and also to make sure that they are functioning properly to reduce the sufferings of the people, the Government of Bangladesh has established a set of apparatuses at national, regional and grass-root levels. For these mechanisms to be best operative, the Standing orders on Disaster (SOD) act as a guidebook. According to SOD, Disaster Management Committees are observed to exist beginning with the National Disaster Management Council chaired by the Honorable Prime Minister operating down to the Union Disaster Management Committee which is chaired by the Chairman of the Union Parishad (DDM, 2012).

The 2030 Agenda states that it should be an inclusive and localized process in which the commitment of leaving no one behind should be anchored at the core of the local government (Islam, 2022). The international development community is increasingly becoming aware, recognizing and acknowledging that the local level of government is best placed to facilitate the mobilization of the local development stakeholders (Islam, 2020). A

participatory grassroots local government is inevitable in providing SDGs, especially in rural Bangladesh. Sadly, it is a long way to be established in majority of the developing nations such as Bangladesh. To take some examples, the committee system, the project implementation committee, the grassroots political participation or open budget discussion is not successfully utilized under the prospect of local government in Bangladesh (Islam, 2020). Therefore, local government is not only not enhancing access to basic services but is also unable to offer effective arena through which the Local government can be involved in decision-making process and development initiatives.

With the coronavirus blowing lives and livelihoods throughout the nation, the government of Bangladesh should emphasize a set of multilateral solutions to alleviate the pandemic, as well as put back on the rails the progress to meet SDGs (Islam, 2020). Provided that the global agenda 2030 is applied locally and on the principle of cooperation with the people of all categories of the population, a huge socio-economic, environmental and ecological development will be created and then the goals of SDGs will become easily attainable (Faisal, 2025). Localisation of SDGs would be a fast-producing solution to the medium and long-term effects of the Covid-19 debacle. Past progress in promoting decent work (SDG 8), increasing access to quality health care (SDG 3) and ensuring internet access for school and work (SDG 9) help mitigate the severity of adverse impacts (Islam, 2020).

A developing country such as Bangladesh where more than 70 percent of the people live in the rural area faces numerous environmental threats which are a hazard to the human governance over them. There are several initiatives funded by own resource and external resource Bangladesh Government has to save environment. Local government is the important medium of Bangladesh government to use the resource in environmental safeguard (Haque, et al., 2023). The sole representative body of central government Union Parishad is the vital role player to make safer environment in rural Bangladesh. Any union Parishad programs are quite a substantial source of environmental conservation to the local people residing in the rural set up. The agricultural and rural development actions facilitate the food security of the increasing population and avoid degradation of the environment (Local Government Division, 2009).

The agriculture diversification and better technologies can boost the crop productivity. Storage of surface water is intensified and rainwater tapped to cut on irrigation dependency and chance of salinization. Fishing is controlled so as to avoid over exploitation of the marine fisheries resource to ensure that it is not subjected to decline. To improve the biodiversity of forest, forest protected area may be expanded and rural people may be trained with the knowledge of sustainable use of resources. With cleanliness, housing and education empowerment, social security is attained. It entails the provision of housing amenities, clean drinking water, electricity and medical care and making food secure to everybody. The result of this study is beneficial to demonstrate the effectiveness of Union Parishads in achieving

sustainable development goals in rural Bangladesh as well as in maintaining environmental governance.

1.2 Objectives of the Study

1. To analyze nature and scope of environmental governance adopted by the government of Bangladesh to mainstream coordinated efforts to protect environmental sustainability and sustainable development in rural Bangladesh
2. To learn about how does local government work design the appropriate programmes for ensuring environmental sustainability in rural Bangladesh
3. To perceive the role of local government in localising SDGs by the way of improving governance at grassroots level?
4. To undertake case study on role of Union Parishad in its jurisdiction and demonstrate whether support from donor community positively contribute towards protecting environmental governance.

1.3 Research Questions

1. Would environmental governance and policy be more effective with increased intervention from local government?
2. To what extent, can the local government move forward with inadequate resources, lack of delegation of authorities for localisation of SDGs by improving governance for safeguarding environmental security at grassroots level?

1.4 Rationale of the Study

Bangladesh is already known as one of the most ecologically fragile nations globally and quite susceptible to climatic changes due to its geographic position and hydro-geologic particularities, i.e., the predominance of floodplains, low altitude above the sea level and, finally, the socio-economic factors such as the great population density, the high level of poverty, and the total reliance on the nature. Physical Bangladesh is heterogeneous, and combinations of both the traditional and modern ways of using the land are very closely adjusted to the heterogeneous conditions. Such environmental and utilization pattern complexity has crucial consequences in regards to vulnerability and depletion of the natural resource base. The great density of the population, the low level of economic growth, the scantiness of institutional infrastructure, a dense reliance on the agriculture and the agricultural goods, the geographical conditions and a lot of other aspects, make the country weak in its economic development and life quality (WFP, 2011).

The government of Bangladesh took an active part in the generic process of safeguarding the global environment in accordance with Stockholm mandate 1972. To implement the Stockholm mandate, the Bangladesh government had already issued ordinance no. 1 of 1973, the Water Pollution Control Ordinance and ordinance no. 4 of 1977, the Environment Pollution Control Ordinance. To carry out the environmental programme on ground, in 1985 Department of Pollution Control Ordinance was established and it has been renamed and structured as Department of Environment (DOE) afterward.

The concept of the protection of the environment based on the national endeavors was observed and proclaimed with the implementation of the Environmental Policy 1992. In the drafting of the environmental policy, various players/factors took up some indirect and direct roles. The external or internal actors were all relevant in the process of the environmental policy formulation. Within the environmental setting, the Government of Bangladesh has developed Bangladesh Environment Policy in 1992. The important facts about the environment policy are the following: maintenance of the ecological balance; the general progress and development of the country through the protection and amelioration of the environment; protection of the country against the natural calamities; identification and regulation of all kinds of activities that pollute and degrade the environment.

The Government of Bangladesh has picked up climate change as an issue of concern, and it is trying to integrate possible response options towards reducing effects of climate change in the overall development planning process. There is increased realization that the negative effects of a changing climate in a country like Bangladesh which is already vulnerable will exert further pressure on the overall national development (Faisal, 2025). The National Adaptation Programme of Action (NAPA) is prepared by the Ministry of Environment and Forest (MOEF), Government of the People's Republic of Bangladesh in 2005 as a response to the decision of the Seventh Session of the Conference of the Parties (COP7) of the United Nations Framework Convention on Climate Change (UNFCCC) (Ali, et al., 2019). The rudimentary form of NAPA preparation was by a side of the sustainable development goals and objectives of the country where it has identified need of managing the environment issue and natural resource management whereby stakeholders are involved in the bargaining process over the usage, allocation and distributions of the natural resources (Sarker, et al., 2021).

The threat to the environment is one of the vital issues to the bio-diversity rich developing nations like Bangladesh. Since economic growth and development of the country is highly determined by the natural resource factor, sustainable environmental development should be maintained. As the Government of Bangladesh conducting a range of programmes with the measures of environmental pollution control and the effects of the global warming included. Meanwhile, Bangladesh has achieved the target of ensuring safe drinking water

and sanitation for all people as envisaged in the Millennium Development Goal (MDG) set by United Nations.

The Government also integrated the Sustainable Development Goals (SDGs) in the Seventh Five Year Plan (2016-2020) and has set 11 targets in it. Bangladesh has presented the ministries mapping, analysis of data and national monitoring and evaluation system of SDGs implementation. Bangladesh Climate Change Strategy and Action Plan, 2009 (BCCSAP 2009) is being implemented to address the impact of climate change where both adaptation and mitigation activities have been considered (Islam, 2020).

Finance Division has undertaken a Technical Assistance Project titled Inclusive Budgeting and Financing for Climate Resilience (IBFCR) funded by UNDP at an estimated cost of Tk.185.20 million. Ministry of Environment and Forests too has conducted numerous awareness programmes and reform work in the conservation of the environment such as Ozone Layer Protection and Control of Pollution. Bangladesh has a lot of biodiversity that is very significant to environment and ecosystem and keeping this in mind the Government has designed National Action Plan 2020 and under this action plan a lot of projects are being undertaken. There is an implementation of National Bio safety Framework and National Biodiversity Strategy and Action Plan which has been revised to conserve biodiversity in the country. The Ministry of Disaster Management and Relief is also swift at executing different programmes so as to address the eventualities which arise as a result of natural disasters (GIU, 2023).

The academics as well as the policy planners have realized that in environmental governance in rural area Union Parishad is the only alternative. Union Parishad a significant role to meet the contingencies with the local environment like tree plantation, social awareness, arsenic mitigation, air and water pollution reduction, landslide mitigation, physical protection, natural disaster etc. by offering various types of aids likes installation of tube well for fresh water, identification of arsenic affected tube well, communication with concerned authorities to provide proper distribution of plants, providing early warning message, enforcement of government enacted rules to reduce air and water pollution, assist the concerned authority to protect embankments, and help them to ensure natural flow of water through canals and rivers, Research works carried out to be aware of the situation of environmental problems (UCLG, 2015).

The greatest problem of Union Parishad is inadequate finance. With the yearly government grants, Union Parishad undertakes some large development projects. Union Parishad is also allowed by the government to impose taxes and duties on the small number of resources. Due to a number of reasons, Union Parishad exercises not or fully its taxation powers. Conversely, since the government is late in releasing the grant money, Union Parishad is not able to perform an effective role to provide the rural people with environmental governance

through the initiation of different programs. The ineffective functioning of Union Parishad to facilitate the environmental governance in the rural Bangladesh is also hindered by patron-client relation, undo political pressure, mismanagement, improper planning, motivation and lack of technical knowledge.

Union Parishad comes in as one of the most significant units of the central government to provide environmental governance to the rural folks in Bangladesh. Any union Parishad programs are quite a relevant contributor in the environmental protection to the local people living in the rural area. The academics and the policy planners have come to realize that in environmental governance in rural area Union Parishad does not have any alternative (FAO, 2021). Union Parishad plays a huge role to handle the contingencies related to the local environment such as tree plantation, social awareness, arsenic mitigation, air and water pollution mitigation, landslide mitigation, physical protection, natural disaster, etc.

They can help by supplying different aids such as installation of tube well for fresh water, identification of tube well which is affected by arsenic, communication with related authorities to provide plants equally, dissemination of early warning message, implementation of rules and regulation made by government to control air and water pollution, help the concerned authority to protect embankments and make them able to provide natural flow of water through canals and rivers, clean movement to make healthy environment, maintenance of community shelter and coordination with various stakeholders to respond to disaster effectively and efficiently. The challenges that have threatened the existence of UP as an institution need to be handled adequately. The responsibilities in deliberation of the environmental governance program to the rural people living in Bangladesh can be shared between the NGOs and Union Parishad.

The academics, as well as the policy planners, have realized that in the rural area, Union Parishad is the only alternative to environmental governance. Union Parishad a significant role to meet the contingencies based on the local environment like tree plantation, social awareness, arsenic mitigation, air and water pollution reduction, landslide mitigation, physical protection, natural disaster, etc by availing various aids likes installed tube well to get fresh water, identification of arsenic affected tube well, communication with the concerned authority to get the plants distributed properly, dissemination of early warning message, enforcement of the rules and regulations enacted by the government to reduce air and water pollution, assist the concerned authority to protect embankments and help them to ensure natural flow

Research works carried out to be informed of the situation with environmental issues. Environmental governance/ environmental degradation/protection or role of government and NGO in environmental protection but no research has been carried yet especially to learn about the role of local government in environmental governance in Bangladesh. The

research has been attempted to find out the present role of local government institutions in the field of environmental governance and to determine whether their role allow ensuring environmental governance in Bangladesh or not.

1.5 Scopes of the Study

The scope of the study is as follows:

1. To ascertain underlying causes of the failure of environmental governance mainstreaming into development process in Bangladesh;
2. To contribute to the formulation of robust environmental management framework, policy and business plans of the Government of Bangladesh to speed up mainstreaming environmental governance into development process;
3. To help the Government of Bangladesh to reform existing governing modality to facilitate identify obstructions and opportunities for effective accomplishment of environmental management programming;
4. To add value to the body of knowledge in Bangladesh as there are limited number of studies that contribute to safe and sound environment for sustainable development; and
5. To add value to policy, promote investments and to protect vulnerable communities exposed to natural disaster, climate change and environmental degradation.

2. REVIEW OF LITERATURE

2.1 Conceptualizing Environmental Governance

2.1.1 The Foundations in Human Security

Environmental Governance is the notion which is spun off the larger paradigm of Human Governance that became an important academic discourse in 1994. This paradigm questions the conventional or the state-centric concept of national security by stating that individual should be the correct referent of governance and security rather than the state. The advocates of human security believe that people-centered perspective is required to attain national, regional and global stability (Islam, 2020). The essence behind this line of action is to protect the vital essence of all human lives against critical and pervasive dangers in a way that is in harmony with the long-term human fulfillment (Mashura, et al., 2020).

The United Nations Development Programme (UNDP) was instrumental in introducing and defining the concept of human security in its 1994 Human Development Report. In the report human security was cited as the totality of seven different, yet interlinked and complementary, dimensions: economic, food, health, environmental, personal, community

and political. This frame has created environmental security as a basic, and essential part of human well-being and has made the connection between the condition of the environment and the security of the person direct (UN, 2017).

2.1.2 Principles and Scope of Environmental Governance

Building on this foundation, environmental governance addresses the specific processes of decision-making and regulation surrounding the management of the environment and natural resources. At a global level, it can be defined as “the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection”.

There is a set of key principles underpins effective environmental governance (Islam, et al., 2024):

- It embeds environmental considerations into all levels of decision-making and action.
- It conceptualizes cities, communities, and all aspects of economic and political life as subsets of the environment.
- It emphasizes the intrinsic connection between people and the ecosystems in which they live.
- It actively promotes a transition from linear systems (e.g., disposal without recycling) to sustainable, circular systems.

The urgency for such governance is driven by the crisis caused by the accelerated and often irrevocable impact of human activities on nature, which calls for collective and coordinated responses from international institutions, national governments, and citizens alike.

2.1.3 Global Challenges to Effective Environmental Governance

Although there is an apparent necessity of a strong environmental governance, the development of such as been difficulty-filled and sluggish at the global arena. The growing magnitude and seriousness of environmental issues including climate change, the disappearance of biological diversity and the deterioration of ecosystem services threaten to swamp efforts to resolve them and are already limiting economic growth in most areas. The adequacy of measures to protect the environment is generally regarded as inadequate compared with grim warnings by the scientific community (Adger, 2006).

There exist a number of particular barriers to the creation of the well-structured arrangement of global environmental regulation (IPCC, 2012):

- **Absence of Political Will:** A central problem is the absence of political will to take the environment solutions as a priority rather than other interests.
- **Ineffective Regulations and Lack of Funding:** Environmental regulations often prove ineffective due to insufficient funding, a disconnect from economic policy, and the limited application of Multilateral Environment Agreements (MEAs). Financing constraints and absence of direct investment in environment remain as grave impediments. The Global Environment Facility (GEF), for instance, has been criticized

for not being administered precisely enough to help developing countries cope with climate change impacts.

- **Lack of Coordination:** A gradient lack of articulation amid the various stakeholders; such as governments, UN agencies, NGOs, the private sector, and civil society hinders effective implementation of the governance measures smoothly. This is in spite of the increasing appreciation of the fact that the environment concerns are inter-dependent with trade, agriculture, health and peace.
- **Imbalance with Economic and Trade Agendas:** The international environmental governance systems lack a basic balance with the potent international trade and finance programs. The failure to incorporate environmental considerations into the core macroeconomic domain, particularly within the World Trade Organization (WTO), allows market forces to continue generating distortions that accelerate environmental degradation.
- **The Value of Participation:** In order to curb these forces and enable the implementation of the environmental governance, there should be the participation of the concerned parties in all the levels. At the local level, the inclusion of all actors (such as NGOs, community groups, and local government) is a critical factor for success, whereas the exclusion of these groups makes any progress significantly more difficult.

2.2 The Context of Environmental Vulnerability in Bangladesh

2.2.1 Geographical and Socio-Economic Vulnerabilities

Bangladesh is recognized globally as one of the most susceptible and ecologically vulnerable countries in the world. This acute vulnerability is a result of a confluence of factors, beginning with its unique geographic and hydro-geological characteristics. The country's landscape is dominated by floodplains, has a very low elevation from the sea, and a complex mix of both traditional and modern land use methods adapted to these heterogeneous conditions. This complexity in the physical environment and land utilization patterns has significant implications for the depletion and vulnerability of the nation's natural resource base (Ali, et al., 2019).

Compounding these geographical challenges are socio-economic characteristics that heighten the nation's susceptibility to environmental shocks. These are an extremely large population density, great amounts of poverty, and an economy that is still immensely reliant on nature and its resources. Over 70 percent of the population is based in the rural settings, and in most occasions, they are always faced with a number of environmental threats, which pose a number of challenges to their well-being and governance. Such a combination of the high population level, a significant reliance on the agricultural sector, and other factors precondition the weaknesses in the economic development and the overall quality of life (Ahsan, et al., 2014).

2.2.2 Climate Change as a Threat Multiplier

The effects of global warming and climate change are gravely worsening the existing vulnerabilities of Bangladesh, and turning it into one of the most vulnerable countries in the world, in terms of disasters. A variety of amplified and increased risks is being driven by climate change and poses a threat of going off track in gaining Agenda 2030 of the Sustainable Development Goals of the country.

The primary climatic manifestations include:

- Frequent and intense cyclones and tidal surges.
- Salinity intrusion in coastal areas due to sea-level rise.
- Water logging in coastal regions.
- Irregular and unpredictable rainfall patterns, leading to both floods and droughts.
- Increased river erosion, landslides, and adverse impacts on agricultural production.

The effects of these issues lead to a chain of adverse reactions. The country's economic growth, which is largely dependent on its natural resource base, is put under additional stress. Moreover, such environmental emergencies as water and air pollution endanger the planet existence and are directly provoked by the intensive development of the worldwide economy, urbanization, and population (Rana, 2011). The current Bangladesh Government is well aware of these overwhelming challenges, and it is currently making attempts to solve these environmental issues in order to make a healthy, sustainable, and environmentally friendly Bangladesh, a better place to live in, by the current and the future generations (GEF Evaluation Office and MoFA, 2009).

2.3 The Evolution of Environmental Policy and Institutions in Bangladesh

The Government of Bangladesh has been able to incrementally build a policy, legal, and institutional framework over the past few decades in response to increasing pressure on the environment. This transformation is an indication of increasing awareness of the importance of a connection between environmental protection and national development.

2.3.1 Early Policy Initiatives and Institutional Formation

Bangladesh's formal engagement in the global environmental process began in line with the 1972 Stockholm mandate. To give this mandate effect, the government issued the Water Pollution Control Ordinance in 1973 and the Environment Pollution Control Ordinance in 1977 (GED, 2012). To carry out the environmental programs on the ground, the Department of Pollution Control was established in 1985, which was later restructured and renamed as the Department of Environment (DOE) (Panday, 2011).

A significant milestone was the adoption of the national Environmental Policy in 2018. This was a comprehensive policy document that recognized environmental protection as a national priority (Saadat, 2022). The key elements of this policy included:

- Preservation of the ecological balance towards the general advancement and development of the nation by protecting and enhancing the environment.
- Security of the nation against natural calamities.
- All environment polluting and degrading activities to be identified and controlled.

2.3.2 Mainstreaming Climate Change: NAPA and BCCSAP

As the international community started to discuss the issue more directly in terms of climate change, Bangladesh adjusts its policy agenda as well. There is increasing realization that the negative effects of climate change will cause extra pressure on the general development of a vulnerable country such as Bangladesh (Abed, 2021).

In 2005, the government prepared the National Adaptation Programme of Action (NAPA) as a response to the United Nations Framework Convention on Climate Change (UNFCCC). The NAPA was aligned with the country's sustainable development goals and recognized the necessity of addressing environmental issues with the participation of stakeholders in decisions over resource use, allocation, and distribution (CDMP, 2014).

This was followed by the landmark Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2009, which is being implemented to address the impacts of climate change through both adaptation and mitigation activities. To support the BCCSAP, the government took the innovative step of creating the Bangladesh Climate Change Trust Fund (BCCTF) using its own internal resources, allocating Tk. 3,100 crore between FY2009-10 and FY2016-17. The Climate Change Trust Fund Act of 2010 was passed towards the proper management of this fund. In addition, the Bangladesh Climate Change Resilience Fund (BCCRF) was formed with the assistance of development partners to further support the implementation of the BCCSAP (Islam, 2020).

2.3.3 Integrating with National Development Plans

The Bangladesh Government has also made efforts to inculcate environmental and climate concerns into its wider national development planning. The government has been introducing a number of programmes integrating some measures related to the environmental pollution prevention and handling the effects of the global warming. Following the adoption of the global 2030 Agenda, the government integrated the Sustainable Development Goals (SDGs) into its Seventh Five Year Plan (2016-2020), setting 11 specific targets within it. In addition, Bangladesh has presented a ministry mapping and national monitoring and evaluation system to follow up the SDGs execution. Other related initiatives include the development of a National Biodiversity Strategy and Action Plan to conserve the country's rich biodiversity (Haque, et al., 2025).

2.4 The Union Parishad: Local Government as the Key Actor

While national policies and frameworks provide the strategic direction for environmental management, their successful implementation at the grassroots level depends entirely on the capacity and effectiveness of local government institutions. In rural Bangladesh, the Union Parishad is identified as the most critical of these institutions.

2.4.1 The Mandated Role of Local Government in Environmental Management

There is a growing and widespread consensus among academics, policy planners, and the international development community that for environmental governance in rural areas of Bangladesh, there is no alternative to local government bodies like the Union Parishad. The local sphere of government is considered to be in the best position to facilitate the mobilization of local development stakeholders for the purpose of safeguarding the environment. This view is rooted in the understanding that participatory grassroots local government is indispensable for delivering on the Sustainable Development Goals (SDGs), particularly in a rural context (Ahmed & Islam, 2012). The Union Parishad is the key channel through which the Government of Bangladesh utilizes resources for environmental protection and serves as the primary representative body of the central government at the local level. As such, any programs implemented by the Union Parishad can be a very significant contributor to the environmental protection of people living in rural areas.

2.4.2 The Union Parishad's Specific Responsibilities

Union Parishad happens to be endowed with a significant task, to be able to counter a vast range of local climate and disaster-related eventualities. These responsibilities are extensive and directly impact the community's resilience and well-being (Asaduzzaman, 2008). They are:

- **Natural Resource Management:** This involves tree plantation program and contacting concerned authorities to distribute plants properly. It also entails helping authorities to safeguard embankments and the natural transportation of water along canals and rivers.
- **Pollution Control and Public Health:** The UP is in charge of the arsenic mitigation process which includes marking and mapping of arsenic-contaminated tube wells and providing new tube wells to supply fresh water. It also has a role in reducing air and water pollution by enforcing government-enacted rules and promoting "clean movements" for a healthy environment. Moreover, access to clean water and sanitation that depends on the efficient local governance is typically the duty of local governments.
- **Disaster Management:** The Union Parishad forms a pillar of national disaster management framework. The Standing Orders on Disaster (SOD) place the Union Disaster Management Committee, headed by the UP Chairman, at the forefront of local response. Its responsibilities involve distribution of early warning messages, sustenance of community shelters as well as coordination with various stakeholders to ensure effective and efficient response to a disaster (GoB, 2008).

- **Awareness and Social Mobilization:** One of the most significant, non-structural functions of the UP is to conduct social awareness on various environmental concerns. The history of local leaders is characterized by bottom-up leadership in the fight against climate change and creation of awareness about it on local levels.

Union Parishad can play a pivot role in converting national policy on environment into local reality through these varied and important roles.

2.5. Challenges and Gaps in Local Environmental Governance

With an extensive setup of national policies and the strict directive already handed to the local government, the execution of sound environmental governance at the local level in Bangladesh is however fraught with numerous and serious obstacles. Such barriers include financial and institutional failures as well as structural governance gaps.

2.5.1 Financial and Resource Constraints

Perhaps the most frequently cited and critical barrier is the severe financial strain under which Union Parishads operate. Inadequate finance is considered the most serious problem faced by the Union Parishad. While UPs implement some development projects with annual government grants, these funds are often insufficient. Furthermore, delays in the release of these grant funds by the government mean that UPs cannot play an effective role in initiating timely environmental programs (ILO, 2023). Although the government permits Union Parishads to levy taxes and fees on a limited number of resources, various factors mean that UPs often do not, or are unable to, fully exercise these taxation powers. This leaves them almost entirely dependent on central government allocations (World Bank, 2022).

2.5.2 Lack of Participation and Coordination

Good governance presupposes the involvement of all interested parties, which however is completely insufficient in rural Bangladesh. Mechanisms of participation like committee system, project implementation committees and open budget discussions are not effectively used in the name of local government. Consequently, the Union Parishad is usually unsuccessful in offering a meaningful platform where citizens can engage in decision-making process and development efforts. This is the failure of the community to participate in the management of the resources, which is a major root cause of inactively managing the environment (UCLG, 2015).

More so, there exists a serious discoordination between various stakeholders such as government ministries, departments, non-governmental organizations, the private sector, and civil society. The lack of feedback between the lower-level and the upper level leads to a situation where the overall decision-making process lacks information on what is really

happening on the ground thereby leading to policies that fail to capture the true picture on the ground (UNICEF, 2020). Such communicational and coordination gap undermines prompt and efficient response to environmental crises and sustainable governance in the long run.

2.5.3 Governance Deficits and Weak Institutional Capacity

Financial and participatory problems notwithstanding, the local environmental governance is weakened by more fundamental governance gaps. Patron client relation, unwarranted political influence, mismanagement and inappropriate planning often cripple the operations of the Union Parishad. The system is further undermined by absence of transparency and public consultation in decision-making (World Bank, 2022).

This is coupled with poor institutional capability both nationally and locally. The relevant ministries including the Ministry of Environment and Forest (MoEF) and the Department of Environment (DoE) have failed to build up the institutional mechanism to combat the issues of environmental management and protection extensively. This has been attributed to several reasons, among them being lack of institutional capacities and human resources which are not trained. Lack of motivation and technical knowledge towards environmental governance at the local level also hampers effective working of the Union Parishad in advocating environmental governance (Sarker, et al., 2021).

2.6 Identification of the Research Gap

The literature demonstrates a clear and growing consensus on several key points. First, the concept of environmental governance, rooted in human security, is critical for achieving sustainable development. Second, Bangladesh faces extreme and escalating environmental threats that make effective governance a national imperative. Third, national policies have evolved to recognize these threats, and the Union Parishad has been mandated as the key actor for implementation at the grassroots level.

However, the literature also comprehensively documents the severe financial, participatory, and systemic governance challenges that prevent the Union Parishad from fulfilling its mandated role. While a number of research works have been conducted to understand the state of environmental issues in Bangladesh—focusing on topics like environmental degradation, disaster management, or the role of NGOs—a specific gap remains. According to the available literature, no research has been done yet particularly for learning about the role of local government in environmental governance in Bangladesh.

Therefore, this study has designed to address this critical gap. It seeks to move beyond a general acknowledgment of challenges and to specifically explore and appraise the current role, effectiveness, and impact of local government bodies in the area of environmental governance, thereby contributing new and vital knowledge to this under-researched field.

3. THEORETICAL FRAMEWORK

3.1 The Foundations of Environmental Governance in Human Security

The concept of Environmental Governance does not exist in isolation; it is conceptually derived from the broader paradigm of Human Governance, a discourse that gained prominence in academia in 1994. This paradigm represented a fundamental shift, challenging the traditional, state-centric notion of national security by arguing that the proper referent for governance should be the individual rather than the state (Islam & Faisal, 2024). Human governance posits that a people-centered view is essential for achieving national, regional, and global stability. Its primary objective is to safeguard the vital core of all human lives from critical and pervasive threats in a way that is consistent with long-term human fulfillment (Asaduzzaman, 2008).

The United Nations Development Programme (UNDP) was instrumental in operationalizing this concept through its 1994 Human Development Report, which introduced "human security". The report identified human security as the sum of seven distinct but interrelated dimensions: economic, food, health, environmental, personal, community, and political (Islam, 2021). By including "environmental security" as a core component, the UNDP framework explicitly links the stability of ecosystems and the quality of the environment to the fundamental security of individual human beings (Islam, 2020). This people-centric foundation is critical because it frames environmental protection not merely as an ecological issue, but as a fundamental pillar of human well-being and development. This study adopts this perspective, viewing environmental degradation in rural Bangladesh as a direct threat to the human security of its population (Ahmed & Islam, 2012).

3.2 Defining the Core Components of Environmental Governance

Environmental Governance can be understood as the sum of organizations, policy instruments, financing mechanisms, rules, and norms that regulate the processes of environmental protection. It is a framework that seeks to embed environmental considerations within all levels of decision-making and action. However, for the purpose of analyzing the effectiveness of institutions like the Union Parishad, it is crucial to break down this broad concept into its core operational components. Drawing from the literature, effective governance—and by extension, effective environmental governance—is built upon four key pillars (IPCC, 2013):

- **Participation:** This refers to the active involvement of all stakeholders, including local communities, NGOs, and the private sector, in the decision-making, implementation, and monitoring of environmental programs. The success of an environmental governance process is seen as being directly correlated with the inclusion of these stakeholders.

- **Accountability:** This principle requires that the actions and decisions of the public officials and institutions are accountable. With respect to environmental governance, it is associated with making polluters liable and with making government institutions which are charged with the responsibility of protecting the environment to be carrying out their functions effectively and in a transparent manner.
- **Transparency:** Transparency has a strong relationship with accountability, whereby decisions and Processes should be exposed to the public eye. This involves open budgetary dialogue, availability of information regarding development projects and proper channels of communication between the government players and the community.
- **Predictability:** This is the even-handed enforcement of the laws and policies. In the environmental governance context, it implies the consistency in implementation of environmental regulations, and stability of legal and institutional frameworks of resource management, which all stakeholders understand well.

This study used these four pillars, namely Participation, Accountability, Transparency, and Predictability as the lens of analysis. These principal practices are against which the quality of environmental governance provided by the Union Parishad has been measured.

3.3 Justification for Adopting the Environmental Governance Framework

The choice of the Environmental Governance framework with the main pillars of Participation, Accountability, Transparency and Predictability is not random. One deliberately opts it as the most suitable theoretical lens in this study due to a number of convincing reasons that lead directly to the objectives of the research and the context of the study that is rural Bangladesh. Firstly, the **Participation** as the core focus of the framework offers the perfect theoretical instrument to examine one of the most serious problems observed in the course of this study. The fact that such a huge percentage of the community is not engaged in local environmental programs is not just a statistical fact; through this prism, it is a catastrophic failure of one of the principles of good governance (Islam, 2020). The framework allows the research to investigate why participatory mechanisms, which are considered "indispensable for delivering SDGs", are not functioning and to understand the implications of this failure for the legitimacy and effectiveness of local government actions.

Second, the pillars of **Accountability and Transparency** offer a robust structure for analyzing the deep-seated governance challenges that were consistently raised by respondents. This framework allows the study to move beyond simply listing "corruption" and "political interference" as problems and instead diagnose them as symptoms of a systemic deficit in accountability. The qualitative findings, where citizens call for open budgets and strict monitoring, can be interpreted as a demand for the very transparency that the framework identifies as essential. It provides the language and structure to analyze how issues like

"patron-client relation, undo political pressure, and mismanagement" directly corrode the institutional integrity of the Union Parishad.

Third, the framework's focus on **Institutions** legitimizes a deep and critical appraisal of the Union Parishad itself. The literature and policy landscape position the UP as the institution with "no alternative" for environmental governance in rural areas. The Environmental Governance framework provides the criteria against which the performance of this key institution can be measured. It allows the research to assess whether the UP is fulfilling its mandated role and to analyze the "inadequacy in transparency and public consultation at decision-making process" that weakens its capacity (Islam, 2018).

Finally, the framework's intrinsic link to **Sustainable Development** makes it highly relevant for a study seeking to understand the "role of local government in localising SDGs". It connects the micro-level actions and governance quality of a single Union Parishad to the macro-level goals of the 2030 Agenda (Islam, 2020). It allows the research to argue that achieving goals related to clean water, climate action, and sustainable communities is not just a matter of funding or technical solutions, but is fundamentally dependent on the quality of local governance.

3.4 Operationalizing the Framework in this Research

Having established its theoretical relevance, it is important to clarify how the Environmental Governance framework was operationalized to guide the data collection and analysis phases of this study. The framework was not used as an abstract concept but as a practical tool to structure the inquiry.

The quantitative survey questionnaire was designed specifically to gather data on perceptions related to the framework's pillars. For instance:

- Questions regarding satisfaction with the Union Parishad's performance served as indicators of perceived **Accountability** and effectiveness.
- Questions about community involvement in decision-making and participation in UP-led initiatives directly measured the **Participation** dimension.
- Questions about the challenges facing the UP, which yielded responses like "corruption" and "political interference," provided data on the perceived lack of **Transparency and Accountability**.

These quantitative indicators were in turn given a narrative depth via the qualitative analysis of open-ended questions. The stories and suggestions from respondents provided rich, contextual data on specific failures of accountability (e.g., stories of bribery or favoritism) and articulated a clear desire for greater participation and transparency (e.g., suggestions for public meetings and shared information).

The framework gives the interpretive lens in the analysis and discussion of the findings. When the satisfaction is found to be low, therefore, it is not just taken as a public opinion, but a sign of lack of governmental accountability. The result of 81.5 percent non-participation is discussed as a fatal flaw of the participatory model of governance. The use of the framework

in this manner allows the study to transcend a mere provision of the data to a theoretically informed examination of the situation of the local environmental governance in the rural areas of Bangladesh.

4. RESEARCH METHODOLOGY

4.1 Research Design: A Mixed-Methods Approach

In order to obtain a multi-faceted and rich picture of complex interactions between local government activity and how communities perceive environmental governance, the mixed-methods research design have been used in this research. It is a methodic that implies the gathering and synthesis of quantitative and qualitative data. The reasons to adopt a mixed-methods design lie in the fact that the given design allowed to obtain a more comprehensive image than either of the separate methods would.

- The quantitative element, mainly a structured community survey, was meant to establish general patterns, trends and statistical associations in a large sample. This method is effective for measuring the extent of community awareness, levels of satisfaction, and the prevalence of specific challenges, thus addressing the "what" and "how many" questions of the research.
- The qualitative component, consisting of Key Informant Interviews (KIIs) and a review of secondary sources, was designed to explore the nuances, motivations, and underlying reasons behind the quantitative findings. This method delves into the "why" and "how" questions, providing rich, contextual narratives and expert insights that are essential for interpreting the data accurately.

The study has been attempted to triangulate the data collected by these two methods to give the study two aspects of credibility: the statistical results, and the human-interest narratives that give the numbers a face.

4.2 Selection of Study Areas: A Purposive Sampling Strategy

The main unit of analysis in this study is a community residing in an environmentally vulnerable territory and local government bodies providing services to it. In order to reflect the versatility of the environmental issues in Bangladesh, purposive sampling strategy was used in the selection of the study sites. The rationale behind this strategy was the purposely selected locations that encompass a variety of different ecological and disaster-related vulnerabilities. Doing that has allowed not to narrow the findings to one particular kind of

environmental threat but to capture the wider range of the problems that rural Bangladesh is facing.

Five Union Parishads in five districts were chosen, each one representing a kind of vulnerability:

1. **Coastal Vulnerability (Cyclone):** One Union Parishad in **Mongla Upazila, Khulna district**, was selected to represent communities in the coastal zone that are highly prone to cyclones, tidal surges, and salinity intrusion.
2. **Riverine Vulnerability (Flood):** One Union Parishad in **Belkuchi Upazila, Sirajganj district**, was chosen as a case study for a region susceptible to seasonal riverine floods.
3. **Compound Vulnerability (Flood and River Erosion):** One Union Parishad in **Islampur Upazila, Jamalpur district**, was selected to study an area exposed to the dual threats of severe flooding and persistent riverbank erosion.
4. **Haor Vulnerability (Flash Flood):** One Union Parishad in **Mithamain Upazila, Kishoreganj district**, was included to represent the unique wetland (Haor) ecosystem, which is vulnerable to sudden and destructive flash floods.
5. **Peri-Urban Vulnerability (Urbanization):** One Union Parishad in **Savar Upazila, Dhaka district**, was chosen to analyze the environmental governance challenges arising from the pressures of rapid and often unplanned urbanization on the fringes of a megacity.

4.3 Data Collection Methods and Sources

In this research both primary and secondary sources of data were used so as to provide a well-balanced and holistic investigation. The secondary data helped in giving the contextual and policy background and the primary data gave first-hand information, at the ground level, of the communities and important stakeholders.

4.3.1 Secondary Data Collection

Since this was a complex of environmental governance in Bangladesh, the research started by thoroughly reviewing secondary data to establish a solid foundation and be in a position to know the existing legislative and institutional aspects of environmental governance in Bangladesh. This included intensive desk research of vast range of documents that included:

- **Academic Literature:** Books, peer reviewed journals and published research reports relating to environmental Governance in Bangladesh, disaster management in Bangladesh, climate change in Bangladesh and local government in Bangladesh.
- **Policy and Legal Documents:** A critical analysis of relevant policies of the Government of Bangladesh, including the Environment Policy, the Disaster

Management Act, the Climate Change Strategy and Action Plan (BCCSAP), and related national development plans.

- **Grey Literature:** Reports from seminars, workshops, and projects conducted by Non-Governmental Organizations (NGOs), International NGOs (INGOs), donor agencies, and United Nations (UN) bodies working on environment and disaster issues in Bangladesh.
- **Media and Other Sources:** Editorials and articles from major national newspapers and credible internet sources were also consulted to gauge the public discourse on the research topic.

Key institutional sources for these documents included the Department of Environment (DoE), the Ministry of Environment, Forest and Climate Change (MoEFCC), the Department of Disaster Management (DDM), the Ministry of Disaster Management and Relief (MoDMR), as well as various local administration and local government offices.

4.3.2 Primary Data Collection

Primary data was collected directly from the field using both quantitative and qualitative methods to capture the diverse perspectives of community members and expert informants.

4.3.2.1 Quantitative Method: Community Survey

A community-level survey was conducted to gather quantitative data on the awareness, perceptions, and experiences of people living in the vulnerable study areas.

- **Instrument:** A structured questionnaire was developed for this purpose. The questionnaire included closed-ended questions designed to collect data on respondent demographics, household characteristics, awareness of environmental concepts, satisfaction with the Union Parishad, participation levels, and perceptions of key challenges.
- **Sampling and Sample Size:** A multi-stage sampling technique was employed. After the five Union Parishads were purposively selected (Stage 1), a total sample size of **N=400** households was determined. A proportional quota of approximately 80 respondents was allocated for each of the five study sites. Within each site, households were approached using a convenience sampling method until the quota was met, ensuring a practical approach to data collection in diverse rural settings.
- **Data Administration:** The survey was administered through face-to-face interviews by trained researchers to ensure clarity, high response rates, and the ability to assist respondents who might have literacy challenges.

4.3.2.2 Qualitative Methods: Key Informant Interviews (KIIs) and Focused Group Discussions (FGDs)

Qualitative data was gathered to add depth, context, and expert opinion to the quantitative findings.

- **Key Informant Interviews (KIIs):** A total of **N=40** Key Informant Interviews were conducted to solicit in-depth information from individuals with expert knowledge or significant experience in the field of environmental governance.
 - **Sampling:** A purposive sampling method was used to identify and select the key informants. To ensure a diversity of perspectives, the sample was stratified into four professional clusters, with 10 individuals interviewed from each:
 1. **Policy Makers:** Senior officials involved in formulating national policies.
 2. **Government Officials:** Mid- to senior-level officials from relevant government departments (e.g., DoE, DDM) responsible for implementation.
 3. **Practitioners:** Professionals from local and international NGOs, donor agencies, and UN agencies working directly on environment, disaster, and climate change projects.
 4. **Academics and Civil Society:** University professors, researchers, journalists, and local elites with recognized expertise on the subject.
 - **Instrument:** A semi-structured interview guide was used to facilitate the KIIs. This approach ensured that a core set of topics was consistently covered across all interviews while providing the flexibility to probe deeper into specific areas of the informant's expertise.
- **Focused Group Discussions (FGDs):** In addition to individual interviews, FGDs were conducted in each study area. These served as a community consultation process, bringing together small groups of residents to discuss shared problems, validate the findings from the survey, and collaboratively explore potential solutions to local environmental challenges.

4.4 Data Analysis

Once the primary and secondary data were collected, a systematic process of analysis was undertaken to derive meaningful findings. Consistent with the mixed-methods design, separate but complementary analysis strategies were employed for the quantitative and qualitative datasets.

4.4.1 Quantitative Data Analysis

Analysis of data collected in the 400 community survey questionnaires was performed by first coding, cleaning up and inputting the data into statistical software package. The analysis was done in two phases:

- **Descriptive Statistics:** Descriptive statistics was employed in the summarization of data and description of the fundamental characteristics of the sample. This included calculating frequencies and percentages for categorical variables (such as gender, occupation, and satisfaction levels). The given analysis was utilized to come up with the demographic picture of respondents, as well as to have an idea about the general distribution of opinions on primary issues.
- **Inferential Statistics:** Inferential statistics were used to examine the connections amid significant variables. Specifically, the Chi-square (χ^2) test of independence was used to determine whether there were statistically significant associations between categorical variables. For example, this test was used to assess the relationship between the respondents' location (Upazila) and their level of satisfaction with the Union Parishad's performance.

The results of the quantitative analysis were then presented using clear and concise tables, charts (pie charts, bar charts), and graphs to facilitate easy interpretation and visualization of the findings.

4.4.2 Qualitative Data Analysis

The rich textual data collected from the Key Informant Interviews (KIIs) and Focused Group Discussions (FGDs) were analyzed using a thematic analysis approach. This was done in a number of steps:

1. **Familiarization:** The researchers immediately transcribed the audio-recorded interviews and discussions and several times read the transcripts to get well-acquainted with the information.
2. **Coding:** Original codes were systematically determined in the whole set of data. These codes represented interesting features or recurring ideas within the data (e.g., "lack of funds," "chairman's decision," "community meeting").
3. **Theme Development:** The different codes were subsequently listed, organized and bundled into possible overarching themes and sub-themes. For example, codes like "bribery," "political influence," and "nepotism" were grouped under the broader theme of "Governance Deficits and Corruption."
4. **Review and Refinement:** These themes were then reviewed and refined to ensure they accurately represented the dataset and coherently captured the essence of the participants' perspectives.

Direct quotes were chosen and included in the final report to present the main themes, which offered empirical material to the analysis and made it possible to hear the participants directly.

4.4.3 Integration of Data

The last step of the analysis consisted in the synthesis of the quantitative and qualitative results. The quantitative data was explained, contextualized and elaborated upon using the qualitative data. As an example, the qualitative themes of corruption and absence of transparency were able to explain the quantitative result of overall dissatisfaction of the community with the Union Parishad. This combination gives a more solid and detailed perception of the research issue.

4.5 Ethical Considerations

The study followed the strict ethical guidelines to make sure that the rights, dignity, and well-being of every participant were upheld in the course of the study. The protocols that were observed included the following:

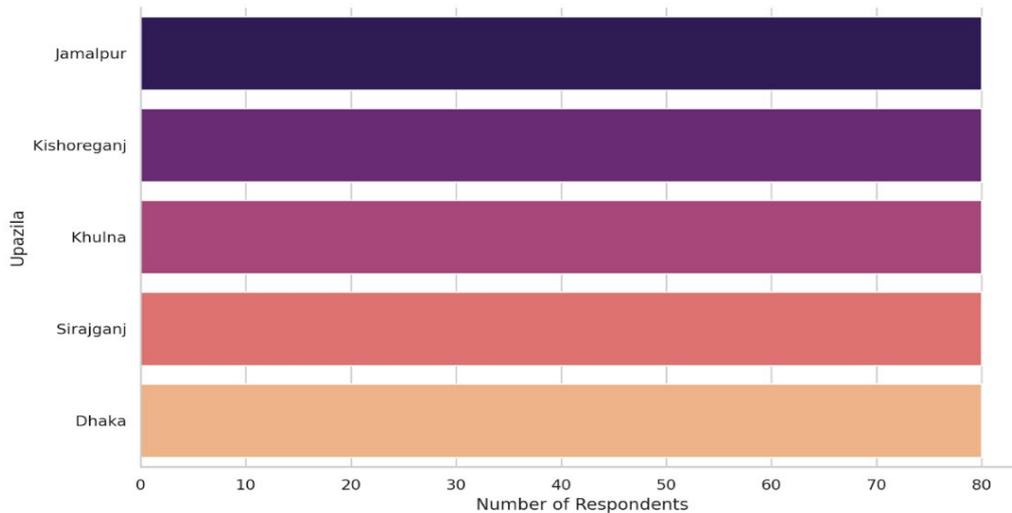
- **Informed Consent:** Before every survey, interview or focus group discussion, all the participants were given clear information on the aim of the research, the voluntary basis of their participation and the intended use of the collected data. All participants gave verbal informed consent to participate.
- **Anonymity and Confidentiality:** All the participants were treated with confidentiality. The real names of respondents or key informants are not used in the final report and any publications. The data is presented aggregated and anonymized to make sure that no particular person can be identified based on the results.
- **Voluntary Basis:** All people were informed that their participation was based purely on a voluntary basis and they could refuse to answer any question or leave the study at any time without repercussion.
- **Data Security:** All the raw data (questionnaires and interview transcripts) have been stored in a safe place and can only be accessed by the main researcher to safeguard the anonymity of the information that the participants shared.

5. FINDINGS AND ANALYSIS

5.1 Part 1: Demographic Profile of the Research Participants

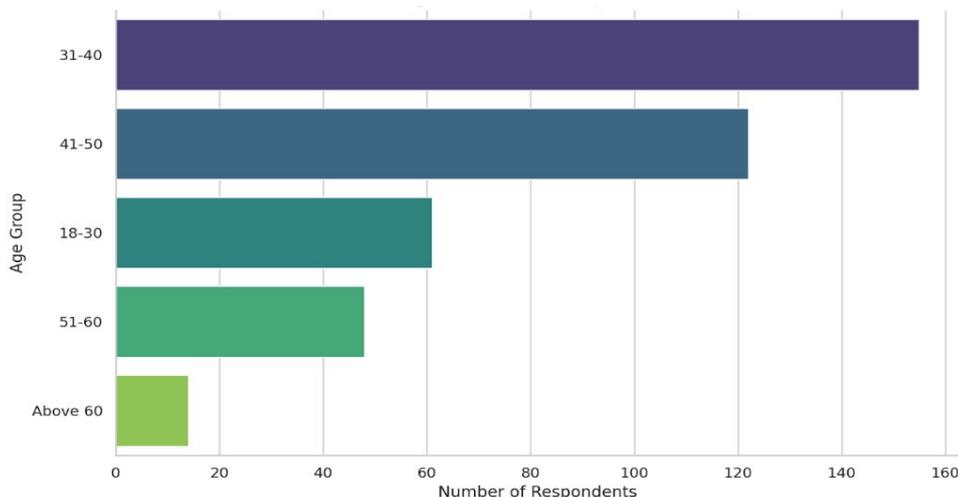
Getting to know the peculiarities of the research participants is one of the elementary initial steps to place their perceptions and experience in context. The study managed to cover a wide range of 400 participants across the chosen study sites in Mongla, Belkuchi, Islampur, Mithamain and Savar with 80 respondents representing each location proportionately.

Figure 5.1: Distribution of Respondents by Location



The sample was also diverse in terms of age, where most of the respondents were found in the middle-age and prime working-age groups. The largest cohort of respondents (38.8%) fell within the 31-40 age bracket, followed closely by those aged 41-50 (30.5%). The younger age group of 18-30 showed a lesser percentage in the sample of 15.3. This implies that the research results obtained largely depend on the views of adults, well-established individuals in the society who have a long-term exposure to the issues of the local environment and the effectiveness of the local government.

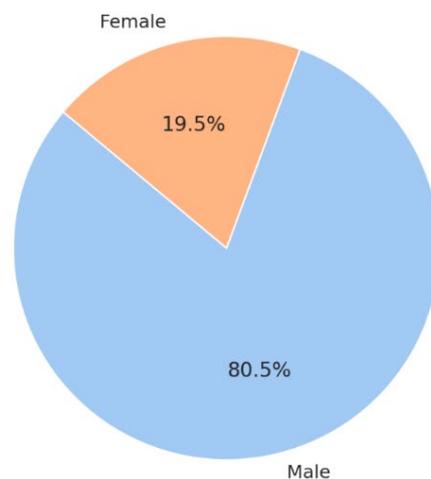
Figure 5.2: Distribution of Respondents by Age



Such allocation is advantageous in that it picks the opinion of the various generations, including young adults and the senior citizens of the society. The respondents that are younger might not share the same level of environmental issue awareness and engagement as the older generations.

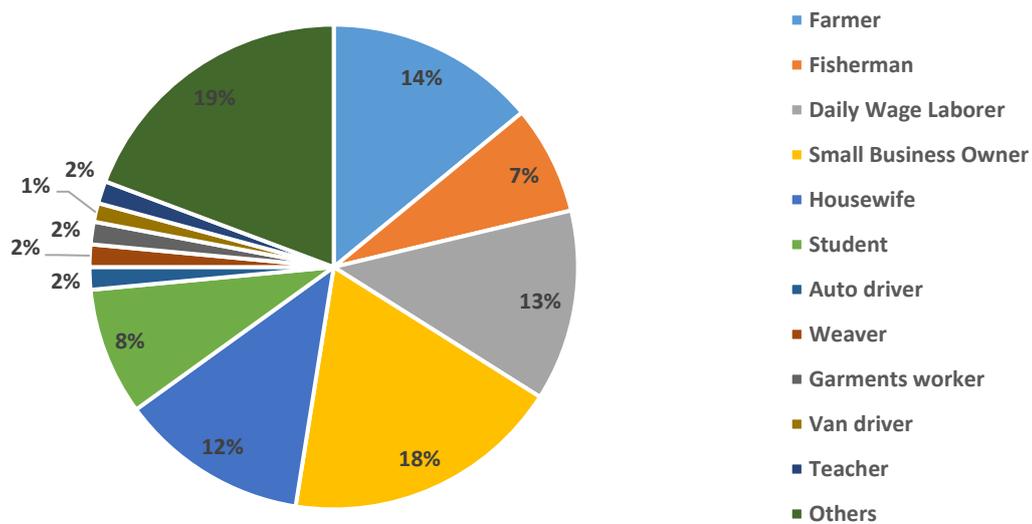
The male population of the sample was quite high, constituting 80.5 percent of the total population, whereas the female respondents formed 19.5 percent of the population. Although it is an expression of gender imbalance, the data can still be meaningful in terms of expressing the thoughts of women, who are common subjects of disproportionately negative effects of environmental crises.

Figure 5.3: Distribution of Respondents by Gender



The professional background of the respondents was very diverse, which was representative of the rural and peri-urban complex economies of the study sites. The most notable professional categories were as follows: students, farmers and small business owners. It is especially important to this research that the farmers are represented so significantly, as their means of living directly depends on the well being of the local environment, and thus their opinion on the governance is of especial relevance. The other prominent jobs had been housewives, day laborers, and service holders both in government and privately, making sure that the results obtained cover a wide range of social-economic lives.

Figure 5.4: Distribution of Respondents by Occupation

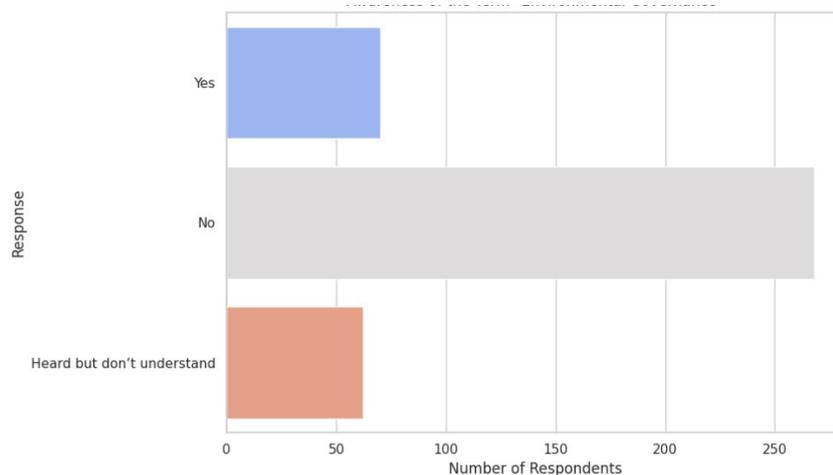


5.2 Part 2: Environmental Awareness and Perception

5.2.1 Awareness of the Term "Environmental Governance"

There is a sharp contrast between this degree of practical concern and the degree of awareness gap that was discovered by the study concerning the formal terminology of governance. When asked if they were aware of the term "environmental governance," a large proportion of respondents either had never heard the term or did not understand its meaning. This dichotomy is essential. It implies that communities are quite able to define environmental issues and want those issues solved; however, they might not have the particular words and knowledge of the formal procedures, organization, and duties of public administration and environmental management. This disjuncture may constitute quite an obstacle to the efficient community engagement and citizen capacity to local institutions accountability.

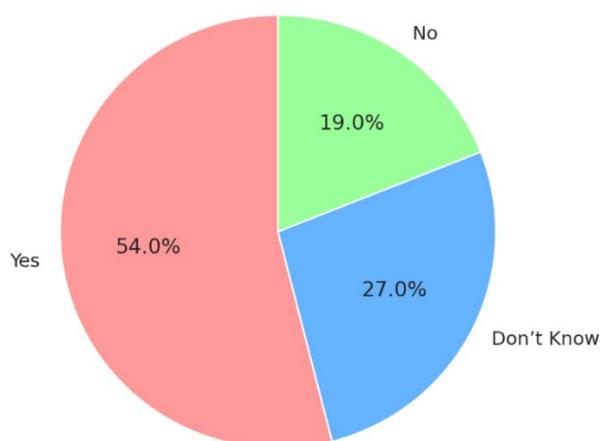
Figure 5.5: Awareness of the Term "Environmental Governance"



5.2.2 Is Environmental Degradation Considered a Serious Problem?

A majority consensus on the gravity of the environmental situation was observed across all five study sites. 54% of the 400 respondents affirmed that they consider environmental degradation to be a serious and pressing problem in their locality. This powerful finding indicates that the threats posed by climate change and pollution are not abstract or distant concerns for the rural populace; they are deeply felt realities that impact daily life. This high level of perceived risk suggests a strong, inherent public mandate for decisive action from government institutions.

Figure 5.6: Is Environmental Degradation Considered a Serious Problem?



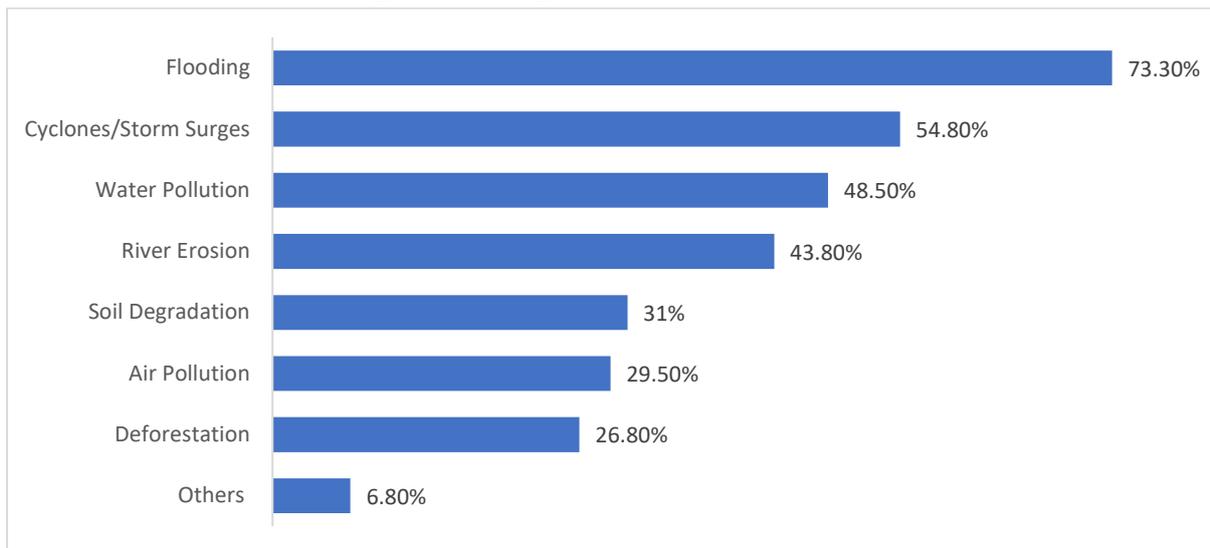
5.2.3 Major Environmental Issues Identified by Respondents

When asked to identify the major environmental issues in their specific areas, respondents highlighted a range of tangible threats that directly impact their safety, health, and livelihoods. The most frequently cited challenges across the study sites included:

- **Flooding:** This was the most common issue, mentioned consistently across the riverine and Haor regions.
- **Water Pollution:** A major concern impacting health, agriculture, and fisheries.
- **River Erosion:** A significant threat leading to the loss of land, homes, and livelihoods, particularly in Islampur.
- **Air Pollution:** A prominent issue, especially in the peri-urban context of Savar but also noted elsewhere.
- **Cyclones and Storm Surges:** The primary threat identified by respondents in the coastal region of Mongla.
- **Deforestation:** Recognized as a significant problem contributing to environmental imbalance.

These findings empirically confirm the rationale for the study's site selection. The challenges identified by the communities align directly with the specific vulnerabilities (cyclone, flood, erosion, urbanization) that each site was chosen to represent. This demonstrates that the environmental crises are not uniform but are highly specific to the local geography and context, reinforcing the need for tailored, locally-appropriate governance solutions rather than a one-size-fits-all approach.

Figure 5.7: Major Environmental Issues



5.3 Part 3: Assessment of Union Parishad's Role and Effectiveness.

The central aim of this research is to appraise the impact of local government in strengthening environmental governance. This section delves into the findings related to the direct performance of the Union Parishad (UP), as perceived by the citizens it serves. The analysis covers citizen satisfaction, levels of public participation, and the key challenges that are seen as hindering the UP's effectiveness.

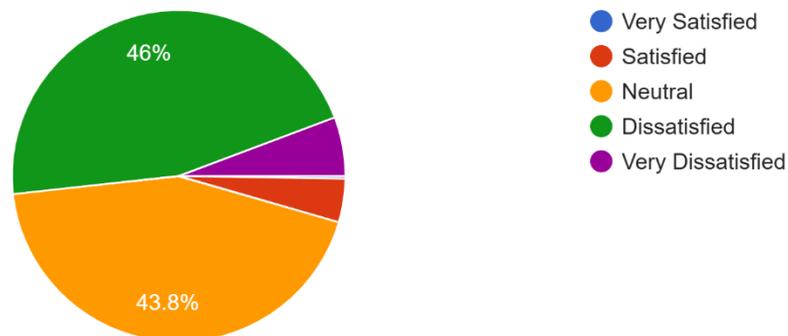
5.3.1 Satisfaction with Union Parishad's (UP) Role in Environmental Issues

The research attempted to gauge the satisfaction level of the residents with the overall role that their Union Parishad performs in dealing with local environmental affairs. The results indicate a high level of community dissatisfaction and indifference pointing to the existence of a rather wide gap between the community expectations and the performance of institutional level.

When responded upon being satisfied, the answers were hugely skewed towards the neutral and dissatisfied bands. The largest group of respondents selected "**Neutral**," closely followed by those who chose "**Dissatisfied**." In contrast, only a small minority of respondents expressed that they were "Satisfied" or "Very Dissatisfied." This widespread neutrality and dissatisfaction indicate that, from the community's perspective, the Union Parishad's efforts in environmental protection are either not visible, not impactful, or altogether insufficient. A

"neutral" stance often implies a lack of meaningful engagement or discernible action from the local government, pointing to a passive rather than proactive institutional role.

Figure 5.8: Satisfaction with Union Parishad's (UP) Role in Environmental Issues

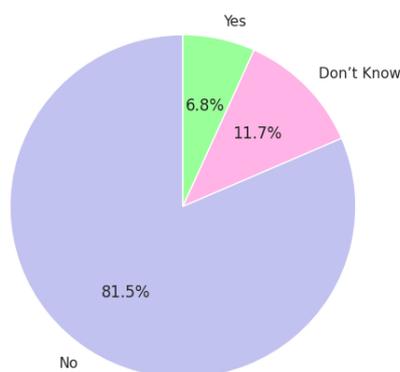


5.3.2. Community Participation in UP-led Environmental Initiatives

The results of this research contain one of the most decisive and alarming conclusions connected to the degree of popular involvement in local environmental programs. Good governance especially at the grass root is one which relies on the effective participation of the community. But the data indicates that there is almost complete disassociation between the Union Parishad and the residents in this respect.

What is more impressive is that **81.5 percent** of the respondents claimed that they have never been involved in any environmental protection or disaster management program facilitated by their Union Parishad. This observation is fundamental, because it indicates a major malfunction of the participatory governance paradigm. It implies that decisions are made mostly in a top-down way, and the residents are not equal partners in planning and realizing solutions to their own communities but rather passive receivers of them. This is why a lack of engagement may result in a vicious cycle: the failure to engage communities in a process may result in their lack of ownership over the projects and the absence of local knowledge by the local government, which will subsequently result in lower and unsustainable results.

Figure 5.9: Community Participation in UP-led Environmental Initiatives



5.3.3. Perceived Challenges for the Union Parishad

To know why the rate of satisfaction and participation is low, the study prompted the respondents to point out what they think are the key issues hindering their Union Parishad to carry out effective environmental programs. The answers are a diagnosis, in the words of the citizens, of the most important institutional and systemic obstacles. The most regularly announced difficulties were:

1. **Lack of Funding:** This was overwhelmingly ranked as the single greatest obstacle, indicating a belief that UPs are systematically under-resourced for the tasks assigned to them.
2. **Corruption:** This was the second most significant challenge identified, pointing to a deep-seated mistrust and a perception that resources, even when available, are not used honestly or effectively.
3. **Lack of Community Participation:** Interestingly, residents themselves identify the lack of public involvement as a key problem, acknowledging the breakdown in the relationship between the community and the local government.
4. **Political Interference:** This was also ranked as a major impediment, suggesting that partisan politics often disrupts sound planning and equitable implementation of environmental programs.
5. **Lack of Technical Expertise:** A significant number of respondents also felt that the UP lacks the necessary technical knowledge and skills to address complex environmental problems effectively.

5.3.4. Is Satisfaction with the UP's Role Consistent Across All Locations?

The study also explored whether the performance of the Union Parishad was consistent across the five diverse study locations. A cross-tabulation analysis comparing the Upazila of residence with the level of satisfaction revealed notable differences. A Chi-square test confirmed that this relationship is statistically significant.

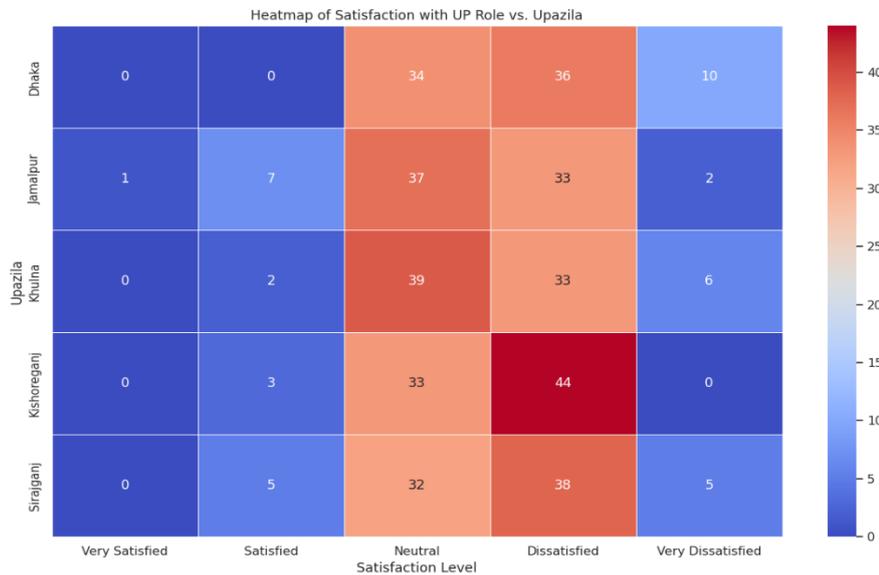
Chi-square Test Result: P-value: 0.0262

Since the p-value (0.0262) is less than the standard significance level of 0.05, meaning that there is a statistically significant relationship between the respondent's location (Upazila) and their level of satisfaction with the Union Parishad's role. In simpler terms, the level of satisfaction is *not* the same across all study sites; it varies significantly from one Upazila to another.

For instance, the proportion of "Dissatisfied" and "Neutral" responses was visibly higher in the flood and erosion-prone areas of Belkuchi and Islampur compared to the coastal area of Mongla. This finding is crucial as it suggests that the effectiveness of local governance is not uniform. The specific local context—including the nature of the environmental threat, the capacity of local leadership, and other socio-political factors—likely plays a strong role in

shaping the performance of the Union Parishad. This statistical result is visually represented in the heatmap below:

Figure 5.10: Heatmap of Satisfaction with UP Role vs. Upazila



We have a clear picture of a public that is concerned about the environment but is largely dissatisfied with and disconnected from the local government's efforts. The challenges of funding, corruption, and political interference are deeply felt at the grassroots.

5.4 Part 4: Qualitative Analysis - Community Voices on Improving Environmental Governance

For this section, the researchers conducted a thematic analysis of the responses recorded from open-ended questions and from Focus Group Discussions (FGDs). By identifying the recurring themes and presenting quotes, the readers can gain a richer understanding of the community's expectations and their proposed solutions.

5.4.1 Theme 1: Ensure Transparency, Accountability, and Fight Corruption

This was the most dominant theme across all responses. The quantitative data showed that corruption is perceived as a major challenge, and the qualitative data strongly reinforces this, with respondents explicitly demanding fairness and transparency in the use of funds and delivery of services.

Illustrative Quotes:

- **On how the UP can improve:**
 - *"They must be honest and select the proper people to fund and not to provide [for a] corrupted political party."*
 - *"By stopping corruption and being more responsible towards the people."*
 - *"Proper allocation of the budget is needed. UP should be free from corruption."*

- *"By being honest. They are corrupted and they don't do any work without bribes."*
- **Suggestions for the government:**
 - *"The government should strictly monitor the activities of the Union Parishad."*
 - *"Create a strong monitoring cell so that the allocated money can be used properly."*
 - *"Stop political power [influence] on the chairman. Also, corruption should be stopped."*

The community's trust in the local government is severely eroded by perceived corruption. Any effort to strengthen environmental governance must begin with measures to enhance transparency, ensure accountability in financial management, and build public trust.

5.4.2 Theme 2: Increase Funding and Proper Resource Allocation

Matching the quantitative finding that "Lack of Funding" is the top challenge, respondents repeatedly called for more financial resources to be allocated to the Union Parishad for environmental and disaster management work.

Illustrative Quotes:

- **On how the UP can improve:**
 - *"Government should increase the budget for Union Parishad so that they can take more initiatives."*
 - *"By providing direct funding to the people."*
 - *"Increase financial support for disaster and environmental management."*
 - *"Adequate budget and manpower should be ensured."*
- **Suggestions for the government:**
 - *"The government should increase the budget for environmental protection."*
 - *"Provide more funding and proper guidelines for environmental work."*
 - *"Proper budget allocation is the first priority to solve this problem."*

While corruption is a major concern, there is also a clear recognition that Union Parishads are under-resourced. Respondents believe that for the UP to be effective, it needs a significant increase in its budget specifically earmarked for environmental protection and disaster preparedness.

5.4.3 Theme 3: Enhance Community Awareness, Participation, and Training

Respondents feel disconnected from the local government and desire more active engagement. They believe that raising awareness and involving the community in planning and action is crucial for success.

Illustrative Quotes:

- **On how the UP can improve:**
 - *"They should arrange meetings with the local people and discuss the problems to find a better solution."*
 - *"Increase awareness programs. They should involve the young generation."*
 - *"By creating awareness, arranging training, and taking practical steps."*
 - *"Engage people from all walks of life. Form a committee with local people for better management."*
- **Suggestions for the government:**
 - *"Create awareness through mass media."*
 - *"The government should take initiatives to train the local people about disaster management."*
 - *"Include environmental studies in the curriculum from the primary level."*

This directly supports the quantitative finding of extremely low public participation. The community does not want to be a passive recipient of services; they want to be active partners. The suggestions point towards a need for regular consultations, awareness campaigns, and practical training programs to build local capacity.

5.4.4 Theme 4: Focus on Concrete Actions and Infrastructure

Beyond governance issues, respondents pointed to specific, practical actions they expect the Union Parishad and the government to undertake to mitigate environmental risks.

Illustrative Quotes:

- **On how the UP can improve:**
 - *"They should take initiatives for tree plantation and waste management."*
 - *"Proper drainage system should be developed."*
 - *"Build permanent and strong embankments to protect us from river erosion."*
 - *"They should ensure the supply of pure drinking water for all."*
- **Suggestions for the government:**
 - *"The government should take initiatives for river dredging."*
 - *"Stop unplanned urbanization and industrialization."*
 - *"Take necessary steps for waste management and recycling."*

This provides a clear, citizen-defined agenda for environmental action. The effectiveness of local government is judged on its ability to deliver tangible results like better infrastructure (embankments, drainage), services (waste management, clean water), and proactive programs (tree plantation).

5.5 Part 5: Expert Perspectives: Findings from Key Informant Interviews

To triangulate the community-level findings and gain a deeper understanding of the systemic issues, in-depth interviews were conducted from key informants. These experts, drawn from policymaking, government administration, civil society, and academia, provided critical insights into the structural and operational realities of environmental governance in Bangladesh. The thematic analysis of these interviews is presented below.

5.5.1 Expert Consensus on Key Environmental Challenges

There was a strong consensus among all informant groups regarding the primary environmental challenges confronting rural Bangladesh. They confirmed that the country's unique geographic and hydro-geological characteristics, such as the dominance of floodplains and low elevation, make it exceptionally vulnerable. The experts consistently identified climate change as a primary threat multiplier, inducing risks like intensified cyclones, irregular rainfall, river erosion, and salinity intrusion, which severely undermine agricultural production and threaten to reverse development gains. This expert view aligns perfectly with the hazards identified by the community members, confirming that these threats are recognized at both the grassroots and policy levels.

5.5.2 Perspectives on Current Policy and Institutional Frameworks

When asked about the effectiveness of existing policies, the key informants offered a nuanced critique. While they acknowledged that the government has taken significant steps over the decades, such as formulating the Environmental Policy of 2018 and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) of 2009, they pointed to a significant gap between policy intent and on-the-ground reality.

- **Gaps in Policy Formulation:** A key point raised by several experts was that existing environmental policy guidelines often fall short of providing effective operational tools to deal with emerging challenges. For instance, it was noted that the environment policy did not explicitly mention how policy can lag behind the evolving nature of the problem.
- **Weak Institutional Capacity:** A recurring theme was the weak institutional capacity of the primary government bodies responsible for implementation. Experts from this sector noted that there is a lacking of the institutional capacity to comprehensively tackle the vast problems of environmental management and protection. This weakness is attributed to a range of underlying causes, including a lack of trained human resources and insufficient funding.
- **Lack of Coordination:** The informants consistently highlighted a critical lack of coordination among different stakeholders, including government ministries, UN agencies, NGOs, and the private sector, which hinders the smooth application of

environmental governance measures. It was pointed out that despite the interdependent nature of environmental issues with trade, agriculture, and health, there is no permanent mechanism for cooperation among the stakeholders addressing these interconnected challenges.

6. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

6.1 Discussion of Key Findings

The study's findings, when woven together, reveal a complex and challenging landscape for local environmental governance. The following discussion explores the deeper implications of the most significant results.

6.1.1 The Disconnect: A Paradox of High Environmental Concern and Low Civic Engagement

A central paradox emerging from this research is the simultaneous existence of high public concern over environmental degradation. This is not mere apathy. It points to a fundamental breakdown in the relationship between the state and its citizens on issues of critical mutual concern. The "top-down decision-making system" and the "dearth of feedback process from the lower to upper-levels" identified in the research proposal manifest here as a wide chasm. When citizens perceive their local government as ineffective, corrupt, and non-responsive, their withdrawal from participation can be seen as a logical, albeit detrimental, outcome. This suggests that without first rebuilding trust and establishing credible platforms for engagement, simply calling for more participation will be futile. The promise of the 2030 Agenda to "leave no one behind" is fundamentally unachievable in a system where the vast majority of citizens are disengaged from the local governance processes that shape their environmental future.

6.1.2 A Systemic Failure of Good Governance Principles

The research has been correctly identified that "Accountability, participation, predictability and transparency are known as the key features of a governance structure that nurtures development". The findings of this study demonstrate a systemic failure across all these dimensions.

- **Accountability and Transparency:** The perception of widespread corruption and political interference, ranked as the second and fourth biggest challenges respectively, demonstrates a severe accountability deficit. When citizens believe that funds are misappropriated and decisions are influenced by patronage networks, the social

contract is broken. The qualitative calls for strict monitoring and open budgets are a direct plea for accountability and transparency where it is perceived to be absent.

- **Participation:** The near-total lack of participation is perhaps the most alarming finding. It indicates that formal mechanisms for community involvement, such as the Union Disaster Management Committee or other project committees, are either dormant, non-existent, or function merely as a token gesture, failing to provide an "effective platform for the Local government to participate in the decision-making process". This comprehensive failure of governance principles explains why, despite numerous government policies and programs, the situation on the ground remains dire. The policy frameworks are not being translated into effective action due to a dysfunctional governance mechanism at the local level.

6.1.3 The Union Parishad: A Disempowered Actor in a Flawed System

While it is easy to assign blame to the Union Parishad for the observed failures, the findings suggest it is more of a disempowered actor caught within a larger, flawed system. The overwhelming consensus on "Lack of Funding" as the primary challenge, supported by the proposal's note on delays in government grants, indicates that UPs are systematically under-resourced for the monumental task they face. They are expected to manage everything from disaster response to climate adaptation with inadequate and unpredictable financial support. This financial precarity, combined with the "undo political pressure" and a lack of real delegated authority, creates an environment where effective, long-term environmental planning is nearly impossible. Therefore, strengthening environmental governance requires more than just capacity building at the UP level; it demands a fundamental reform of the inter-governmental fiscal and political system (Jahan & Faisal, 2025).

6.1.4 The Criticality of a Localized Approach: Evidence from Regional Variation

The statistically significant variation in satisfaction levels across the five Upazilas (p -value = 0.0262) provides strong empirical support for the argument that one-size-fits-all policies are inadequate. The different challenges and performance levels in cyclone-prone Mongla versus flood-prone Belkuchi highlight that local context is paramount. This finding reinforces the view of academics and the international community that the local sphere is best positioned to mobilize stakeholders and adapt to heterogeneous conditions. Any national strategy for environmental governance must therefore be an enabling framework, providing resources and guidelines while allowing for the flexibility and autonomy necessary for UPs to tailor their interventions to the specific ecological and social realities of their jurisdictions.

6.2 Recommendations

Based on the empirical evidence and conclusions of this study, the following specific, actionable recommendations are proposed:

6.2.1 Recommendations for the Central Government and National Agencies

- **Reform and Augment Fiscal Transfers:**
 1. **Increase Baseline Grants:** Immediately increase the baseline Annual Development Programme (ADP) grants to UPs to a level that can cover the core operational costs of environmental services, such as waste management and maintenance of drainage infrastructure.
 2. **Establish a Targeted 'Climate Resilience Fund':** Create a competitive fund, accessible to UPs, specifically for projects related to climate adaptation and mitigation. Applications should require evidence of participatory planning and co-financing (cash or in-kind) from the community to ensure ownership.
 3. **Ensure Timely Disbursement:** Overhaul the fund-release mechanism to eliminate delays, which severely hamper project timelines and effectiveness.
- **Enforce a Zero-Tolerance Policy on Corruption and Strengthen Accountability:**
 1. **Mandate Public Audits and Expenditure Tracking:** Legislate that all UPs must conduct and publicly display the results of annual independent audits. A public-facing expenditure tracking website for local government projects should be established.
 2. **Empower Monitoring Bodies:** Expand the mandate and resources of existing district and upazila level committees to include rigorous monitoring of the financial and procedural integrity of all UP-led environmental projects.

6.2.2 Recommendations for the Union Parishads and Local Government Officials

- **Institutionalize Genuine Community Participation:**
 1. **Activate and Empower Committees:** Move beyond tokenism by activating Ward and Union-level Disaster Management Committees as standing bodies for all environmental planning. Ensure their meetings are regular, open to the public, and their recommendations are formally recorded and considered.
 2. **Conduct Mandatory Open Consultations:** Implement a mandatory policy of holding at least two "Ward Shava" (ward-level public meetings) per year dedicated exclusively to discussing local environmental problems, planning initiatives, and reporting on progress.
- **Forge Strategic Partnerships:**
 1. **Systematically Engage Civil Society:** Actively seek out and formalize partnerships with local NGOs, who can provide valuable technical expertise, assist with community mobilization, and enhance project credibility.

2. **Create a Youth Volunteer Corps:** Establish a "Green Volunteer" program to engage the large student and youth population in practical activities like tree plantation drives, awareness campaigns, and community clean-ups.

6.2.3 Recommendations for Future Research

- **Conduct In-depth Studies of Positive Deviance:** This study found statistically significant variation in performance. Future research should conduct deep, qualitative case studies on the higher-performing Upazilas to identify the specific leadership practices, social dynamics, or institutional innovations that enable their success. The lessons learned would be invaluable for developing scalable best practices.
- **Analyze the Efficacy of Different Participatory Models:** Research is needed to compare the outcomes of different community participation models within the Bangladeshi context to determine which approaches (e.g., NGO-facilitated, state-mandated committees, traditional community leadership) are most effective at fostering sustained engagement and improving environmental outcomes.

6.3 Conclusion

The top-down decision-making structure in Bangladesh however has its diffuseness in that decisions are made by the central government and policies implemented by the local government and administration. There is a lack of feedback process between lower to upper-levels in the entire decision-making process, and thus there is poor reflection of the real situation at the ground level in the policies and systems. On the other hand, the decision-making process provides no adequate channels for communication among decision-makers, the public, relevant actors (civil society members and non-state actors) and the media. Consequently, there is less enthusiasm by the non-state actors to take initiatives in responding to policies and also, the community to whom the environmental protection programmes are targeted, lack positive role in participation that constrain effectiveness of implementation, to a large extent. As another instance, the current platform whereby community participation towards improved environmental management could be guaranteed is Union Disaster Management Committee.

The current directions of the environmental policy lack functional mechanisms of addressing climatic change; climate change and its negative effects were not expressly mentioned in environment policy. The implementation of the environmental policies in Bangladesh does not bear formal or informal discussions between the governmental bodies especially MoEFCC and DoE and the polluters. The capacity of the worried ministries to carry out the action measures in their institutions is not passable. On the other hand, the MoEFCC and DoE are yet to establish the institutional competency to combat extensively issues relating to environmental management and protection. Insufficiency of transparency and publicity in the process of decision making leading to feebleness of

MoEFCC and DoE to take care of the environmental management. In addition, there are a number of underlying causes which are apparently liable for poor environmental management in Bangladesh, including a lack of institutional capabilities, untrained human resources, a lack of awareness, low community participation in resource management, and a paucity of research and lack of coordination among different stakeholders (governments, UN agencies, NGOs, private sector and civil society).

This study has been set out to fill a critical gap in the existing literature by providing a ground-level appraisal of the role of local government in environmental governance in rural Bangladesh. Confronted with extreme vulnerability to climate change, the effectiveness of local institutions like the Union Parishad is not merely an academic question but a matter of national survival and sustainable development.

In response to the primary research questions, this study concludes the following:

1. The **nature and scope of environmental governance** in rural Bangladesh is defined by a deep and persistent implementation gap. It is a system characterized by well-meaning national policies but crippled at the local level by a dysfunctional governance environment where institutions lack the funds, autonomy, and community trust to be effective.
2. The **Union Parishad "works"** less as a proactive and participatory agent of environmental protection and more as a reactive, resource-starved administrative body. It is hobbled by a triad of challenges: severe financial constraints, a debilitating governance deficit marked by corruption and political interference, and a profound disconnect from the citizens it serves.
3. The **role of the Union Parishad in localizing the SDGs** is currently compromised and largely unfulfilled. While it remains the most vital institution for delivering on goals related to water, climate, and community resilience, its operational weaknesses prevent it from translating these global objectives into meaningful, sustainable local outcomes.

Ultimately, this study concludes that strengthening local environmental governance is the lynchpin for building a climate-resilient Bangladesh. However, achieving this requires a paradigm shift from a top-down, administratively focused approach to one that is genuinely decentralized, adequately resourced, highly accountable, and fundamentally participatory.

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