

1. INTRODUCTION

1.1 Background

Climate change is arguably the most pressing crisis facing the globe today. Since the emergence of industrial revolution about a century and a half ago, human activities such as rapid industrialization, widespread deforestation and large-scale agriculture have resulted in exorbitant amounts of greenhouse gases being expelled to the Earth's atmosphere. This has led to an unnatural and dramatic rise in the Earth's temperature within a short period of time.¹ This rapid warming has triggered significant changes in the global climate system, with rising sea levels, shifting weather patterns and increasing frequency and magnitude of extreme weather events (e.g., droughts, cyclones and floods) already being observed all over the world.² These alarming changes bear far-reaching impacts on the global economy, infrastructure, human health, ecosystems, biodiversity and the broader society in general.

Least Developed Countries (LDCs) are particularly vulnerable to these impacts, owing to their limited technical, financial and institutional capacity to tackle the issue. In 1992, the United Nations Framework Convention on Climate Change (UNFCCC) was founded as a flagship international treaty for addressing global climate change. Article 4 of the Convention states that “the Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology”. In order to implement this, the LDC work programme was established in 2001, and updated at the 24th session of the Conference of the Parties (COP) in December 2018. The work program calls upon the following set of actions³:

1. Strengthening existing national climate change secretariats and/or focal points to enable the effective implementation of the Convention and the Kyoto Protocol in the LDC Parties;
2. Providing ongoing negotiations training to build the capacity of negotiators from the LDCs to participate effectively in the climate change process;
3. Supporting the preparation of national adaptation programs of action (NAPAs). NAPAs were structured around an eight-step process resulting in a list of discrete projects. Having completed a NAPA would make the country eligible for the Least Developed Countries Fund (LDCF);
4. Promoting public awareness programs to ensure the dissemination of information on climate change issues;
5. Developing and transferring technology, particularly adaptation technology; and

¹ Houghton, J. T. (2001). Climate Change 2001: The Scientific Basis.

² Intergovernmental Panel on Climate Change (IPCC). (2014). AR5 synthesis report: Climate change 2014.

³ United Nations Framework Convention of Climate Change (2020). LDC Work Programme of 2001 as updated in 2018. URL: <https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans-naps/ldc-portal/ldc-work-programme-of-2001-as-updated-in-2018>. Retrieved 14 July 2021

6. Strengthening the capacity of meteorological and hydrological services to collect, analyze, interpret and disseminate weather and climate information to support the implementation of

In accordance with the above, several dedicated financing mechanisms have been set up over the years for addressing the issue of global climate change. One of the earliest of such entities is the Global Environment Facility (GEF). GEF was established in 1992 as an independent international cooperation entity, mandated to help developing countries and countries with economies in transition meet the objectives of international climate change conventions, while enabling economic growth. GEF administers several funds targeted at supporting climate action in LDCs. This includes, but is not limited to, the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). Established in 2001, LDCF remain the only dedicated funding mechanism out there aimed at exclusively supporting climate adaptation action in LDCs. As of 2020, the Fund has helped 51 countries with the preparation and implementation of their National Adaptation Programs of Action (NAPAs) and is presently supporting the formulation of National Adaptation Plans (NAPs) in these countries. The LDCF also supports the LDC work program under the UNFCCC.

The Adaptation Fund is a financial mechanism under the UNFCCC and Kyoto Protocol, financed partly by proceeds from Clean Development Mechanism (CDM) project activities and voluntary pledges of donor governments. Operational since 2010, the fund aims to support concrete adaptation activities in developing countries. Since its inception, the fund has committed USD 783 million towards climate adaptation and resilience activities, including supporting 115 concrete adaptation projects, with over 27 million total direct and indirect beneficiaries. In 2010, the Green Climate Fund (GCF), was established and it represents one of the most prominent climate financing channels in operation today. It has been designed to support both mitigation and adaptation activities for low-carbon climate resilient development in developing countries. It is mandated to invest 50% of its resources towards mitigation and 50% towards adaptation activities. At least half of the resources for adaptation, are expected to be invested in the most climate vulnerable countries which include LDCs, Small Island Developing States (SIDS) and African States. Till date, the Fund has committed around USD 8.9 billion towards 177 projects across the globe.⁴

In addition to the above, multilateral development banks such as the Asian Development Bank, World Bank and the African Development Bank continue to make substantial financial contributions towards global climate action through their various schemes and programmes. Bilateral development partners have also been playing a crucial role, and billions in Overseas Development Assistance (ODA) have been channelled over the years towards reducing vulnerability and building resilience to climate change in LDCs. Bilateral donors also contribute to the many multilateral public climate funds and have set up a number of dedicated programs and funds for climate change activities. Furthermore, to help curb overreliance on external support, several LDCs have integrated climate related investments in their national

⁴ Green Climate Fund (2021). URL: <https://www.greenclimate.fund/>. Retrieved on 14 July 2021

budgets, and there are cases of national climate funds being established to mobilize domestic resources towards the issue. In recent years, the role of private sector in tackling climate change has been growing, and several facilities and mechanisms have been established to catalyse and channel private sector investment towards climate action.

While there are numerous sources and vehicles in place for supporting climate action in LDCs, it is essential to ensure consistent and effective mobilization of these resources for adequately supporting the growing financing needs in these countries. The Adaptation Gap Report 2020 estimate the annual global adaptation cost to be between USD140 – USD300 billion in 2030. According to the LDC 2050 Vision Report 2019, LDCs will require around USD40 billion between 2020 and 2030 to be able to implement adaptation priorities outlined in their Nationally Determined Contributions (NDCs).

The recent COVID19 pandemic has further exacerbated many of the challenges faced by LDCs in this regard. LDCs susceptible to natural disasters and climate induced shocks and stresses, often tend to rely heavily on overseas development assistance (ODA), remittances and tourism. These sources of income have been adversely affected through global demand reduction, travel restriction and job destruction in hosting countries. The debt stress induced by the pandemic is likely to result in reduction of efforts and resources geared towards climate action, further limiting their potential for accomplishing the 2030 Sustainable Development Agenda.

It is against this background, the UN Department of Economic and social Affairs (DESA) is implementing the project titled **“Strengthening the capacity of developing countries to develop evidence-based, coherent and well financed strategies to implement the 2030 Agenda”**. The aim of the project is to contribute to building the capacity of developing countries to mobilize funding for sustainable development. Under this project, Economic Analysis and Policy Division (EAPD) aims to conduct capacity building activities of international support measures (ISMs) for climate finance for Bangladesh, helping the Government officials and practitioners to develop climate change projects and secure climate financing.

1.2 Objective and Scope

This objective of the report is to provide strategic guidelines and step-by-step procedures for accessing various means of climate financing support, including ISMs, to support climate resilience in Bangladesh, particularly in the agriculture sector. The report is primarily targeted at Government officials, policymakers as well as practitioners engaged in the country’s climate change and agricultural development arena. It should be noted that the report is not designed to be an exhaustive list of climate financing sources and mechanisms available in Bangladesh, but rather it outlines some of the prospective vehicles which can support climate resilience and post-COVID19 economic recovery for the country as it moves forward with its aim to fulfil the 2030 Agenda for Sustainable Development, and to become a developed country by 2041.

1.3 Methodology and Structure

The preparation of this report employed a largely qualitative methodological approach. A combination of primary and secondary data collection was applied which entailed reviewing available literature, and, soliciting inputs from topic experts working within the climate change, environment and agricultural sector in Bangladesh.

The literature review consisted of analysing published reports, academic papers, case studies and policy briefs paper on the topic of climate finance and agricultural resilience. Strategy and guidance documents, as well as website data from various national, bilateral and multilateral climate financing entities were appraised. In addition, semi-structured interviews were conducted (n~6) with national experts including policymakers, practitioners and researchers, to gather their perspectives on the present state and future of climate finance in Bangladesh, particularly in the context of agricultural resilience. Data collected from the literature review and interviews were subsequently analysed to produce this report.

The report is structured as follows: Section 2 provides a summary of climate change risks and impacts in Bangladesh, specifically highlighting the vulnerability of the critical agriculture sector. In Section 3, policy and institutional frameworks for climate action in Bangladesh is illustrated. Section 4 covers the broad scenario of climate financing in the country. Section 5 identifies five (5) important sources of climate finance in Bangladesh, and delineates on their project processes and application procedures. Finally, section 6 recommends a set of strategic considerations for ensuring availability and access, as well as effective utilization of adequate financial resources for facilitating climate resilience in the country.

Box 1. Definitions of key concepts

Vulnerability to climate change is “the propensity or predisposition to be adversely affected”. It is a complex and dynamic phenomenon and that several characteristics of a given social-ecological system contribute to make people and territories more or less vulnerable.

Adaptation refers to adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.

Mitigation involves actions that reduce the rate of climate change through limiting or preventing greenhouse gas emissions and by enhancing activities that remove these gases from the atmosphere.

Resilience is the capacity of systems to survive, adapt and grow no matter what kinds of acute shocks and chronic stresses they experience. Attributes of a resilient system include the following: robust, flexible, reflexive, resourceful, inclusive, integrated and redundant

Climate finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change.

2. PRESENT SCENARIO OF CLIMATE CHANGE IN BANGLADESH

2.1 Climate change risks and impacts

Bangladesh is consistently placed among the most climate vulnerable countries in the world. This can be attributed to a combination of biophysical, hydrogeological and socioeconomic factors. The country is geographically located within the active Ganges-Brahmaputra-Meghna delta in South Asia and possesses a flat, low-lying topography⁵. Owing to regional monsoon patterns, the country also demonstrates extreme climate variability. As such, Bangladesh has always been subjected to a wide array of natural disasters, with tropical cyclones, tidal storm surges, coastal and river flooding, droughts and salinity intrusion being frequent phenomena. As the manifestation of climate change becomes increasingly apparent, it is expected that the frequency and magnitude of these climatic shocks and stresses will substantially worsen in the coming years. The state of climate vulnerability is further exacerbated by the country's high population density and incidence of poverty, along with weak infrastructure and governance setups. The impacts of climate change in Bangladesh are expected to be so overwhelming that it will cascade through all sectors of the economy starting from food security to water management, and from safeguarding ecosystems to securing energy, hindering overall socioeconomic development and prosperity of the country.

In Bangladesh the impacts of climate change can be seen to impact the country's agriculture and food production. Climate change impacts such as rising temperature, reaching critical levels in Bangladesh during the susceptible stages of the rice plants, could potentially affect overall rice production⁶. The increasing temperature also leads to rise in sea levels, which affects coastal and deltaic rice production in Bangladesh. A study from the World Bank denotes that with soil salinity increasing as a result of climate change, by 2050 at least 9 coastal areas in Bangladesh could see rice yield declining by 15.6%.⁷ Bangladesh is largely dependent on the fisheries sector, making up at least 23% of the country's agriculture sector.⁸ The impacts of climate change such as salinity intrusion, riverbank erosions, and storm surges can lead to scarcity of various breeds of fishes that are unable to breed in saline water, threatening the fisheries industry as well. In addition, other crops, such as wheat, potato, maize, sugarcane and soybeans are also projected to suffer yield decreases due to the impacts of a changing climate.

⁵ Brammer, H. (1990). Floods in Bangladesh: Geographical Background to the 1987 and 1988 Floods. *The Geographical Journal* 156 (1):12-22.

⁶ Wassmann, R., Jagadish, S.V.K., Sumfleth, K., Pathak, H., Howell, G., Ismail, A., Serraj, R., Redona, E., Singh, R. K., & Heuer, S. (2009). Regional vulnerability of climate change impacts on Asian rice production and scope for adaptation. In: Sparks, D.L. ed. *Advances in Agronomy*. Burlington, MA: Academic Press. 102, 91-133

⁷ Allison, E.H., Perry, A.L., Badjeck, M.C., Neil Adger, W., Brown, K., Conway, D., Halls, A.S., Pilling, G.M., Reynolds, J.D., Andrew, N.L. & Dulvy, N.K. (2009). Vulnerability of national economies to the impacts of climate change on fisheries. *Fish and Fisheries*. 10(2), 173-196

⁸ Ahmed, A.U., S. Haq, M. Nasreen, and A.W. Raghieb Hassan. 2015. Sectoral Inputs towards the Formulation of Seventh Five Year Plan (2016-2020): Climate Change and Disaster Management.

Climate change will increase the frequency of river and tidal flooding in Bangladesh, leading to loss of both lives and livelihoods. Changes in the rainfall pattern, already visible in many regions, will become more and more prevalent, contributing to inconsistencies in water availability for household, commercial and industrial use. More devastating floods and cyclones can be expected, which will impact the water supply as well as the sanitation infrastructure in the country.⁹ In order to meet the growing agriculture demand and in light of worsening drought conditions, groundwater extraction has also accelerated, which is depleting the country's natural water table. In addition, issues such as sea level rise and salinization of coastal areas are threatening the availability of potable water in many parts of Bangladesh.

Livelihood in Bangladesh is highly dependent upon natural resources. The country's land area is covered by freshwater ecosystems and hosts the world's largest mangrove forest- the Sundarbans. The Sundarbans in Bangladesh, covers 580,000 hectares of land and is home to at least 334 known plant species and 269 animal species. Impacts of climate change such as a potential 45 cm sea level rise by the year 2050 could inundate the Sundarbans, and cause an extreme imbalance to the saltwater and freshwater composition, destroying the habitat for a variety of species and damaging biodiversity. Other risks such as increased temperatures causing drier conditions and prolonged droughts have increased the prevalence of forest fires. However, it should be mentioned that due to the country's successful conservation efforts has been successful in reducing forest loss in the Sundarbans in recent years.

Other areas that are facing adverse impacts of climate change include the energy sector. The relation between climate change and energy is two-fold; production of electricity is often dependent on burning fossil fuels which contribute towards climate change, and then the impacts of climate change itself prevents power production in the country. As extreme weather events become more frequent, energy infrastructure in the country such as power plants, transmission lines, will be subjected to damage, causing reductions in overall energy supply. It is suggested that the combination of increasing energy demand and increasing risks to supply due to climate change are likely to result in higher energy prices, affecting access for the poor.

The growing impacts of climate change can also be seen to affect human health. For example, many diseases, such as diarrhoea, cholera and other water borne diseases, occur when water sources are contaminated during disasters such as floods and cyclones. It is also understood that the rising salinity levels in coastal regions impact pregnant women, causing health issues such as hypertension and increase in blood pressure. Many people are also displaced due to the impacts of climate change destroying their livelihoods, and they are particularly susceptible to ailments such as malnutrition and vector borne diseases from living in poor environmental conditions.

⁹ General Economics Division (GED) (2009). Policy Study on The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh.

2.2 Institutional and Policy Framework of Climate Action in Bangladesh

Over the past couple of decades, the Government of Bangladesh has made remarkable strides in combatting climate change issues in the country. The country has been a forerunner when it comes to adaptation efforts and significant steps have been taken to integrate climate action within various national legal, policy and financial frameworks.

Bangladesh was one of the first LDCs to develop the **National Adaptation Programme of Action (NAPA)**¹⁰ – a document that identifies activities for addressing the immediate needs for climate change adaptation in the country. It was prepared in 2005 by the Ministry of Environment and Forests (MoEF), in wide consultation with the government and other stakeholders, and revised in 2009. The NAPA was built on four pillars – i) Food security, ii) Energy security, iii) Water security and iv) Livelihood security.

In 2009, the **Bangladesh Climate Change Strategy and Action Plan (BCCSAP)**¹¹ was prepared which serves as the primary strategic framework document for guiding climate change action in the country. It underlines 44 programmes of action to be undertaken over the short, medium and long term, within six thematic areas: i) Food security, social protection and health, ii) Comprehensive disaster management, iii) infrastructure, iv) research and knowledge management, v) mitigation and low-carbon development, and vi) capacity building and institutional strengthening. The document is currently in the process of being revised, and the updated version is expected to underscore new priorities and action areas necessary for addressing climate change risks and vulnerability in the country. Subsequently, the **Climate Change Trust Act 2010**¹² was enacted to provide a legal basis for enabling transparency of climate action in the country. The act dictates various rules, regulations, guidelines and operational procedures for submission, approval and amendment of project proposals as well as release and utilisation of funds for climate change.

In 2017, the **Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (CIP-EFCC)**¹³ was launched with support from FAO. The document provides a strategic framework for planning and coordination of national and international investments on environment, forestry and climate change sector in Bangladesh. The overall goal of this document to enhance the contribution of these sectors towards sustainable development in Bangladesh. The document identifies 14 coherent and coordinated investment programmes over a five-year period of 2016-2021, across four pillars – i) sustainable development and management of natural resources; ii) environmental pollution reduction and control; iii) adaptation and resilience to, and mitigation of climate change; and iv) environment governance, gender and human and institutional capacity development. The framework also

¹⁰ MoEF, G. (2005). National adaptation programme of action (NAPA). Government of Bangladesh.

¹¹ MoEF. (2009). Bangladesh Climate Change Strategy and Action Plan (BCCSAP). Government of Bangladesh

¹² Government of Bangladesh. (2010). THE CLIMATE CHANGE TRUST ACT, 2010 ACT NO. LVII OF 2010.

¹³ MoEF. (2017). Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (2016 – 2021).

specifies actions and targets that the Government has submitted to the UNFCCC in pursuance of the Paris Agreement. The total cost of the CIP-EFCC has been estimated at USD 11.7 billion of which 40 percent has already been financed through the government's own sources and contributions from development partners.

Bangladesh also recognizes the importance of long-term vision and planning for addressing the issue of climate change. Accordingly, the **Bangladesh Delta Plan 2100 (BDP 2100)** has been formulated with support from the Government of Netherlands. It is a long-term strategy document which seeks to integrate the short to medium term aspirations of Bangladesh to achieve the status of Upper Middle-Income Country (UMIC) by 2030 and that of a prosperous country by eradicating extreme poverty by 2041. The plan delineates robust and integrated strategies, and subsequent interventions for ensuring long term water and food security, economic growth and environmental sustainability in Bangladesh while effectively reducing vulnerability to natural disasters and building resilience to climate change impacts. Investment priorities across a range of sectors have also been proposed.

Bangladesh is adopting two-fold approach to combatting climate change. While the country's primary focus is on reducing vulnerability and increasing resilience to the impacts of climate change, it is also pursuing the agenda of low-carbon development through reduction of greenhouse gas (GHG) emissions. Bangladesh submitted its **Intended Nationally Determined Contributions (INDC)**¹⁴ to the UNFCCC in September 2015 which puts forth mitigation actions planned by the country to contribute to global efforts of GHG emissions reduction. In the NDC, Bangladesh committed to reduce GHG emissions in the power, industry and transport sectors by 5 percent below 'business-as-usual' GHG emissions by 2030, or by 15 percent below 'business-as-usual' GHG emissions by 2030 if enough and appropriate support is received from developed countries. Considering adaptation is a priority for the country, the NDC also lays out adaptation goals and objectives. Subsequently, a ten-year **Implementation Roadmap for the Nationally Determined Contribution (NDCs)**¹⁵ for 2016-2025 had been prepared to manage growing emissions without compromising economic development. NDC Sectoral Action Plans have been produced for the power, industry and transport sectors as per the roadmap. It is expected that the roadmap will be a 'living' document to be updated over time to adapt to changing contexts. Presently, the government is conducting a stocktake of mitigation measures undertaken between 2015 and 2020, and is in the process of updating and developing enhanced NDC.¹⁶

Remarkable efforts have also been made to integrate climate action within the country's medium and long-term development plans. The upcoming **Perspective Plan (2021-2041)** and **8th Five-year Plan (2021-2025)** which are in formulation are expected to cover various aspects of climate change mainstreaming. Climate action has also been incorporated as a part of the country's various sectoral plans and strategies. This includes the National Agriculture

¹⁴ MOEF. (2015). Intended Nationally Determined Contributions (INDC). Government of Bangladesh.

¹⁵ MoEFCC (2018). Roadmap and Action Plan for Implementing Bangladesh NDC. Government of Bangladesh.

¹⁶ MOEFCC. (2020). Nationally Determined Contributions 2020 (Interim). Government of Bangladesh.

Policy (2018), National Plan for Disaster Management (2016-2020), National Water Management Plan: Development Strategy (2011), Coastal Zone Policy (2005) etc.

There have been advancements towards setting up necessary financial frameworks for addressing climate change in the country. In 2012, Bangladesh completed a **Climate Public Expenditure and Institutional Review (CPEIR)** to assess the policy, institutional and financial management of climate change activities in the country¹⁷. This led to the adoption of the **Climate Fiscal Framework (CFF)**¹⁸ in 2014, with the intent to guide climate fiscal policy making in Bangladesh by outlining tools and approaches and embedding climate action components within the country's public financial management systems. The CFF has been updated in 2020 with a broadened scope which includes the role of private sector, NGOs and CSOs in climate finance, and also highlights additional policies on lending and insurance.

Bangladesh has also taken active measures for realizing the UN Sustainable Development Goals (SDG). While SDG13 is specifically focused on Climate Action, several of the SDGs are interconnected and have synergies with climate change due to the cross-cutting, dynamic nature of the issues. The government prepared the **National Sustainable Development Strategy (NSDS)**¹⁹ for 2010-2021, which emphasises addressing environmental challenges that Bangladesh faces in the way to development. Climate change is actively considered in the strategy and action areas highlighted include the rehabilitation and climate proofing of coastal polders with especial focus on removing water logging, disaster risk reduction, mainstreaming disaster risk reduction and climate change, coastal char land afforestation, development of climate stress tolerant crop varieties and utilisation of climate change funds. Through a “whole of society” approach, ensuring wider participation of NGOs, development partners, private sector, media and CSOs a **National Action Plan for the Implementation of the SDGs**²⁰ has been formulated, which identifies action areas across all relevant ministries and sectors.

2.3 Key actors and stakeholders

The Ministry of Environment, Forests and Climate Change (MoEFCC) serves as the lead national institution for coordinating and overseeing all climate change related activities in the country. The ministry has been in charge of formulating and directing the various policies relevant to climate change including the NAPA, BCCSAP, NDCs etc. The ministry led the establishment of the flagship Bangladesh Climate Change Trust Fund (BCCTF), which operates under its supervision and guidance. MoEFCC also represents Bangladesh at international negotiations under the UNFCCC, number of UNFCCC committees, and other conferences on multinational environmental agreements. MoEFCC has led the Initial National

¹⁷ Steel, P., Islam, T. (2012). The Bangladesh Climate Public Expenditure and Institutional Review (CPEIR). UNDP.

¹⁸ Ministry of Finance. (2020). Bangladesh Climate Fiscal Framework. Government of Bangladesh.

¹⁹ Ministry of Finance. (2013). National Sustainable Development Strategy (NSDS) 2010-2021. Government of Bangladesh.

²⁰ General Economics Division (GED). (2018). National Action Plan of Ministries/Divisions by Targets for the Implementation of SDGs. Government of Bangladesh.

Communication (INCom), the Second National Communication (SNC) as well as the Third National Communications (TNC) to the UNFCCC. Furthermore, MoEFCC responds to queries on Bangladesh's preparation and response to climate change in the national parliament. The MoEFCC also chairs the Local Consultative Group (LCG) on Climate Change and Environment, which is an apex coordination mechanism between the government and development partners on environment and climate change programs in Bangladesh. MoEFCC has led the process of identifying institutional focal point for climate change within each national ministry/agency and accordingly provides them with basic training on climate change issues. They also facilitate inter-ministerial coordination through these focal points. Department of Environment (DoE) under the MoEFCC plays subsidiary functions to support all of the above.

Several other ministries and associated government divisions / departments / programmes are engaged in supporting climate change adaptation and mitigation in varying capacities. Some of the major ones are provided in the table below:

Ministry of Environment, Forests and Climate Change	Department of Environment
	Department of Forests
Ministry of Disaster Management and Relief	Department of Disaster Management
	Cyclone Preparedness Programme (CPP)
Ministry of Agriculture	Department of Agricultural Extension
	National Agricultural Research System (NARS)
Ministry of Fisheries and Livestock	Department of Fisheries
	Department of Livestock
Ministry of Water Resources	Bangladesh Water Development Board (BWDB)
	Institute of Water Modeling
	Flood Forecasting and Warning Center
	Centre for Environmental and Geographic Information Services
Ministry of Power, Energy and Mineral Resources	Energy and Mineral Resources Division
	Sustainable Renewable Energy Development Authority (SREDA)
Ministry of Local Government, Rural Government & Cooperatives	Local Government Engineering Department (LGED)
	Department of Public Health Engineering (DPHE)
	Local Government Division
Ministry of Planning	General Economics Division (GED)
	Programming Division
	Planning Division
Ministry of Finance	Economic Relations Division (ERD)

The agencies presented above are responsible for the execution and management of key physical and social infrastructure targeted at reducing disaster risk and protecting climate sensitive sectors in Bangladesh. They have served as executing entities for delivering a range of climate-change related projects and programmes in the country, with support from international development organizations as well as national non-state actors.

Local governments, including Municipalities, Upazila Parishad and Union Parishad, are also essential for ensuring delivery of important social and infrastructure services to local communities. They often act as direct agents at the community-level, driving efforts related to disaster preparedness, management and rehabilitation.

Non-state actors have been vital players for taking the agenda of climate action ahead in Bangladesh, serving as critical agents for reducing vulnerability and promoting climate resilience in the country through their manifold services and expertise.

- **NGOs and INGOs** substantially contribute towards disseminating information and research on Bangladesh's particular vulnerabilities to climate change, and have advocated strongly for immediate climate change adaptation measures over the past two decades
- **CBOs** have the potential for designing and implementing locally appropriate approaches, creating greater local ownership, and ensuring sustainability of interventions beyond donor-funded project cycles
- **Research institutes, universities and think-tanks** conduct applied research and generate necessary evidence through which future policies and action plans on climate change can be informed. They also participate in international negotiation platforms, such as the UNFCCC helping shape global discourse on the issue, and contributing towards lobbying efforts
- **Private sector** involvement in the social development and climate change sphere has been growing in recent years. A number of banks and corporations are investing in green, low-carbon initiatives, while there are several private entities developing stress tolerant seed varieties and selling solar home systems.
- **Media**, in all forms, have a role to play in creating awareness on the urgency of climate action among the public, both in Bangladesh and also globally

A list of key relevant stakeholders and their roles and responsibilities in the climate change sphere has been provided in **Annex 1**.