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School of Liberal Arts and Social Sciences
Master's in Developmental Studies (MDS) Program

Climate Finance for Adaptation Goals in Bangladesh: Past Trends, Present Gaps and Future Pathways Beyond 2030

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Abstract

Climate finance becomes critical for Bangladesh to address increasing climate risks and advance Sustainable Development Goal 13 (SDG 13: Climate Action). However, prolonged financing gaps, complex access procedures, institutional limitations, and unequal distribution continue to limit effective climate adaptation. This research examines the trends, challenges, and future pathways of climate finance for climate action in Bangladesh by comparing the 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025), while exploring financing prospects for the 9th Five-Year Plan (2026–2030) and beyond 2030. The study uses a mixed-methods approach by combining secondary analysis of policy documents, reports, and climate finance literature with primary data from a structured survey of 44 practitioners and five Key Informant Interviews (KIIs). The literature review was conducted using the PRISMA framework. This study presents an integrated theoretical framework that combines public goods theory, international environmental justice theory, and global governance theory to understand why finance is needed, how it is delivered, and who benefits from it. Findings indicate that climate finance has supported adaptation, particularly in climate-smart agriculture, disaster preparedness, and community resilience, but remains inadequate in scale, accessibility, alignment, and equity. Weak governance and coordination, limited monitoring and accountability, inadequate institutional and technical capacity gaps, insufficient international finance, and declining concessional finance were identified as major barriers. Most respondents also considered Bangladesh inadequately prepared for the post-LDC graduation financing environment and uncertain about achieving its 2030 adaptation goals under current trajectories. Blended finance emerged as the most promising innovative financing mechanism. The study finds that Bangladesh requires more predictable grant-based finance, stronger institutional capacity, decentralized and locally led delivery, improved accountability, and diversified financing sources to strengthen climate adaptation and advance SDG 13 beyond 2030.

Keywords: *Climate finance; Adaptation outcomes; SDG 13; Bangladesh; Adaptation Finance; Climate Resilience; LDC Graduation*

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ABBREVIATIONS

ADB	Asian Development Bank
AF	Adaptation Fund
BCCTF	Bangladesh Climate Change Trust Fund
BCCRF	Bangladesh Climate Change Resilience Fund
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
CBDR-RC	Common but Differentiated Responsibilities and Respective Capabilities
CFF	Climate Fiscal Framework
COP	Conference of the Parties
CSR	Corporate Social Responsibility
DRR	Disaster Risk Reduction
ECCCP	Enhancing Community Climate Change Project
ECNEC	Executive Committee of the National Economic Council
FYP / 5YP	Five-Year Plan
GCA	Gender-Responsive Coastal Adaptation
GCF	Green Climate Fund
GEF	Global Environment Facility
GoB	Government of Bangladesh
IBAS	Integrated Budget and Accounting System
INGO	International Non-Governmental Organization
IPCC	Intergovernmental Panel on Climate Change
KII	Key Informant Interview

LDC	Least Developed Country
LoGIC	Local Government Initiative on Climate Change
MDB	Multilateral Development Bank
MEAL	Monitoring, Evaluation, Accountability and Learning
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NbS	Nature-based Solutions
NDC	Nationally Determined Contribution
NCQG	New Collective Quantified Goal on Climate Finance
NGO	Non-Governmental Organization
ODA	Official Development Assistance
PES	Payment for Ecosystem Services
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
SDG	Sustainable Development Goal
SDG 13	Sustainable Development Goal 13 – Climate Action
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UN DESA	United Nations Department of Economic and Social Affairs
UNFCCC	United Nations Framework Convention on Climate Change

CHAPTER 1: INTRODUCTION

1.1 Background of Study

The adoption of the Paris Agreement and the 2030 Agenda for Sustainable Development in 2015 represented a significant milestone in global climate and development governance. This incorporated climate action with broader sustainable development priorities across 17 Sustainable Development Goals (SDGs). Of the SDGs, SDG 13 on climate action is particularly imperative as climate change is a cross-cutting issue that significantly impacts multiple development sectors. However, SDG 13 is linked to other important goals such as poverty reduction (SDG 1), food security (SDG 2), and global partnerships (SDG 17). Thus, it is a standalone priority and an enabling condition for broader development outcomes (Khorram-Manesh, 2023). This is, therefore, the basis: financing climate action is a must for sustainable development. Climate finance is a key mechanism in helping developing countries to take on mitigation and adaptation. Article 9 of the Paris Agreement underscores the responsibility of developed countries to provide financial resources to climate-vulnerable countries, recognizing that many developing countries do not have the financial capacity to adequately respond to rising climate risks (Tandon & Keating, 2025). According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), mitigation finance for developing countries needs to increase 4 to 8 times from the current level, to USD 1.6-3.2 trillion annually by 2030, and adaptation measures are estimated at USD 140-300 billion annually (Tan et al., 2026).

Significant breakthroughs in climate finance, such as setting new targets and roadmaps for global climate funding, were observed in the recent conferences of COP29 and COP30. One of the significant accomplishments at COP29 was the establishment of the New Collective Quantified Goal (NCQG) of mobilizing at least USD 300 billion annually by 2035 for developing countries, led by developed countries (Tan et al., 2026). And COP30 has been committed to transforming this intention into action and mobilization. At the same time, international climate finance is becoming more uncertain. Reducing official development assistance (ODA) and evolving donor priorities are adding additional pressure on climate-vulnerable developing countries. The withdrawal of the United States from the Paris Agreement and sudden cuts in foreign aid for developing countries have caused geopolitical tensions and uncertainty in international finance. ODA is forecasted to reduce by 9–17% in 2025, while bilateral ODA to least developed countries (LDCs) may decrease

by 13–25%. The main donor countries, including France, Germany, the United Kingdom, and the United States, have already reduced aid budgets (OECD, 2025). Additionally, current assessments show that only 18% of SDG targets are on track, with almost half of them falling behind due to overlapping climate, economic, and geopolitical crises (Willige, 2025).

Despite contributing less than 0.5% of total greenhouse gas emissions, Bangladesh remains as one of the most climate-vulnerable countries globally (Climate Tribune, 2025). The country faces floods, cyclones, sea-level rise, and salinity intrusion, which endanger livelihoods, infrastructure, agriculture, and human security. Bangladesh's GDP has declined by 9.4% in 2022, and future projections estimates that one-third of GDP might decline by 2050, causing internal displacement of millions of people (The Business Standard, 2023; World Bank, 2022). These challenges require substantial financial resources. Bangladesh needs roughly USD 29.3 billion annually to meet its combined adaptation and mitigation needs but is currently able to mobilize only about USD 2.76 billion (Sarwar, 2025). Despite international acknowledgment of Bangladesh's adaptation efforts and policy leadership, the country's climate action is nevertheless constrained by poor access to adequate and predictable climate finance. Furthermore, Bangladesh is scheduled to graduate from the category of the Least Developed Country (LDC) in late 2026, but the question of an extension has been under consideration. This may also further alter its access to highly concessional external international finance, increasing pressure on an already constrained climate-finance system (Khan, 2026).

Climate action progress in Bangladesh since 2015 can be viewed in two distinct implementation phases. The 7th 5-Year Plan (2016–2020) was mostly oriented on enhancing national climate governance, policies, and institutional structures matched to global commitments. Key developments during this period included the consolidation of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) and the establishment of the Bangladesh Climate Change Trust Fund (BCCTF), and Bangladesh is recognized as a global model of community-based adaptation. And the 8th 5-Year Plan (2021–2025) has been characterized by intensified climate impacts, growing implementation challenges, and increasing financial constraints. Bangladesh updated its Nationally Determined Contributions (NDC) in 2021 and adopted a National Adaptation Plan (2023–2050) (ADB, 2024).

Existing studies have showcased climate finance from several perspectives, including mobilization and distribution of international climate finance, determinants of allocation, adaptation finance across vulnerable countries, and the effectiveness of different financing mechanisms (Bhandary, 2022; Scandurra et al., 2020; Weiler et al., 2018; Wen et al., 2025). Other studies have pointed to ongoing quantitative gaps between climate finance requirements and resources, including imbalances of finance among countries and specific industries (Tan et al., 2026). This research, therefore, provides crucial evidence on the scale, distribution, and effectiveness of climate finance.

Literature regarding Bangladesh has demonstrated notable advances in climate policy, adaptation planning, and institutional development, while also identifying ongoing challenges in mobilization, accessibility, and implementation of climate finance (Sarker et al., 2022; Majumder and Matsui, 2025; Hassan et al., 2025). The country's experience with national climate-finance systems, locally led adaptation, the Bangladesh Climate Change Trust Fund, the National Adaptation Plan, and climate-responsive planning (Smith et al., 2021; Hassan et al., 2025; GED, 2025). There are also reports of ongoing difficulties in respect of lack of financing, institutional capacity, coordination, governance, and access to international climate funds (Islam et al., 2025; Hussain and Ahmad, 2019; Nurunnabi, 2025).

However, these strands of research remain relatively fragmented. Previous research has mostly focused on the scale and distribution of climate finance, individual financing mechanisms, or specific dimensions of adaptation effectiveness. There is comparatively less integrated analysis of the impact of financial, institutional, and governance barriers collectively influencing the accessibility, allocation, implementation, and effectiveness of climate finance for adaptation in Bangladesh. Furthermore, limited consideration has been given to how Bangladesh's shifting international financing environment, especially LDC graduation, may influence the layout of its climate-finance architecture and what reforms and financing pathways may be required beyond 2030.

Against this background, this study examines climate finance trends and adaptation outcomes across 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025). It further examines the financial, institutional, and governance barriers affecting climate finance delivery, and explores future financing pathways and institutional reforms post 2030. This study attempts to connect

historical trends and present constraints to the future architecture needed to bolster climate-finance delivery for adaptation in Bangladesh by combining secondary trend analysis with direct information from climate-development practitioners and experts.

1.2 Problem Statement

Climate finance has become of great importance for the achievement of SDG 13. However, adaptation finance remains inadequate, poorly distributed, and increasingly constrained by global economic instability, geopolitical tensions, and declining ODA. Although existing studies have extensively examined on global climate finance flows, financing mechanisms, and international commitments, there is comparatively limited country-specific research about how the changing trends of climate finance since the Paris Agreement have affected adaptation implementation over time, especially in Bangladesh. There is also limited comparative analysis on climate finance and climate action across the 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025). Consequently, little is known about the consequences of changing financing patterns for implementation outcomes and if present trends will suffice to achieve adaptation targets by 2030. Moreover, there is a lack of the practitioners' and experts' perspectives that remain underrepresented. Most studies rely heavily on policy documents and institutional reports rather than ground experiences. Therefore, this study seeks to address these gaps by examining the trends and effectiveness of climate finance, identifying key financing, institutional, and governance barriers affecting its effectiveness, and exploring future pathways for strengthening climate finance and climate action beyond 2030.

1.3 Research Aim and Objectives

To assess the role of climate finance in supporting climate adaptation efforts, identify barriers affecting the effectiveness, and explore future climate-finance pathways for Bangladesh beyond 2030.

RESEARCH OBJECTIVES

The study aims to:

1. Examine trends and patterns of climate finance supporting climate adaptation initiatives in Bangladesh between the 7th Five-Year Plan (2016–2020) and the 8th Five-Year Plan (2021–2025).

2. Identify key financial, institutional, and governance barriers affecting effective climate finance delivery for adaptation.
3. Explore future climate finance pathways and policy priorities for strengthening climate adaptation in Bangladesh beyond 2030.

RESEARCH QUESTIONS

Main Research Question: How has climate finance supported climate adaptation efforts in Bangladesh since the Paris Agreement (2015), and what financing gaps and future challenges influence achieving adaptation goals beyond 2030?

Sub-Questions

- How have climate finance trends and adaptation initiatives evolved in Bangladesh between the 7th Five-Year Plan (2016–2020) and the 8th Five-Year Plan (2021–2025)?
- What are the major financial, institutional, and governance barriers affecting climate finance effectiveness for adaptation?
- What future climate finance strategies and pathways are needed to strengthen Bangladesh's climate adaptation efforts beyond 2030?

1.5 Significance of the study

This study is significant at academic, policy, practical, and personal levels. Academically, it contributes to climate finance and sustainable development literature by comparing climate finance and adaptation progress between the 7th and the 8th Five-Year Plan. The study also identifies financial, institutional, and governance barriers to climate finance access, allocation, and implementation, providing evidence for future climate finance strategies and adaptation planning, in Bangladesh. From a policy perspective, it highlights key gaps in climate finance delivery and their implications for adaptation progress, offering evidence that may support more effective strategies and post-2030 planning. Practically, it incorporates the perspectives of practitioners and experts, bridging the gap between policy level and ground realities. Personally, it reflects the researcher's interest in understanding how global climate finance shapes local development outcomes and in amplifying underrepresented practitioner voices.

1.6 Scope and limitations

This study mainly focuses on climate finance and adaptation goals under SDG 13 in Bangladesh by examining climate finance trends, financing gaps, and institutional challenges across the 7th and 8th Five-Year Plan periods. It also explores potential climate-finance pathways beyond 2030 and incorporates practitioner perspectives on implementation realities.

The study is subject to several limitations. It adopts a qualitative research design, and its relatively small, purposive sample limits the ability to generalize findings statistically. The analysis also relies substantially on secondary reports, policy documents, and institutional data, which may vary in availability and consistency. Future pathways beyond 2030 are assessed qualitatively rather than through econometric forecasting or quantitative modeling. Time and resource constraints also limited the breadth of stakeholder engagement and comparative analysis.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

Climate change has become one of the defining development challenges of the 21st century. This threatens decades of socioeconomic progress, intensified inequality between and within nations, threatened economic growth, declined environmental sustainability, and affected the world's most vulnerable populations (Sheiffdeen et al., 2022). According to Malik and Ford (2024), climate-related hazards have become more frequent and severe, and adapting to them has become a policy and development priority to reduce vulnerability and strengthen resilience in human and natural systems. Therefore, such adaptation requires strong institutional capacity, effective governance, appropriate policy frameworks, and sustained financial investment. Henceforth, climate finance has become a key instrument of climate adaptation by mobilizing financial resources to support adaptation planning, implementation, and resilience-building (Sarker et al., 2022).

Climate change affects all countries, and its impacts increase vulnerability, often by reducing their financial resources, weakening their institutions, and making them more vulnerable to climate disasters (Digitemie and Ekemezie, 2024; Timilsina, 2021). Bangladesh is known as one of the world's most climate-vulnerable countries. The country faces recurrent floods, cyclones, salinity intrusion, riverbank erosion, sea-level rise, and extreme weather events. Therefore, according to the Global Climate Risk Index, Bangladesh ranked as the seventh most climate-vulnerable country globally based on climate-related impacts between 2000 and 2019 (World Bank, 2021). Over the past 40 years, disasters caused by climate change have cost the economy between 0.5% and 1% of GDP each year (World Bank, 2016; Rahman et al., 2020). In response, the Government of Bangladesh (GoB) allocates approximately Tk. 25,000 crore (around USD 3 billion) annually to address the impacts of climate change through various development programmes and public investments (GED, 2025). Despite these domestic efforts, foreign funding does not seem to meet the country's growing adaptation needs.

Therefore, Bangladesh has developed an extensive policy and institutional framework to mainstream climate change into national development planning. Bangladesh was among the first Least Developed Countries (LDCs) to prepare a National Adaptation Programme of Action

(NAPA) in 2005, although it lacked a dedicated financing strategy (Ministry of Environment, 2005). Since then, the country has adopted several key policy instruments to showcase Bangladesh's commitment to incorporating climate adaptation and resilience into national planning, but, however, implementation, remains an issue (Sarker et. al., 2022)

To set the conceptual and empirical groundwork for the study, this chapter critically reviews the existing literature on climate finance and climate adaptation. Rather than presenting individual studies descriptively, the review adopts a thematic and analytical approach to synthesize existing knowledge across five interconnected areas: (i) the introduction of climate change, climate adaptation, SDG 13, and difference between climate adaptation and mitigation; (ii) the concept of climate finance and the global architecture of climate finance; (iii) climate finance trends and adaptation outcomes in Bangladesh; (iv) governance of climate finance; (v) governance, institutional, and financial barriers affecting climate finance; (vi) climate finance landscape in Bangladesh and (vii) future climate finance pathways beyond 2030.

2.2 Climate Change, Adaptation, and Sustainable Development Goal 13

2.2.1 Climate Change and Climate Vulnerability

Climate change is considered as a development challenge that threatens progress toward sustainable development (GED, 2025). The Intergovernmental Panel on Climate Change (IPCC) (2023) sixth assessment report highlights that human-induced (anthropogenic) climate change is affecting every region of the world through severe and multiple climate-related disasters.

Climate vulnerability refers to the degree to which individuals, communities, and ecosystems are susceptible to adverse climate impacts, determined by their exposure to hazards, sensitivity to those hazards, and adaptive capacity (Anjum et al., 2024). Countries with limited financial resources, weak institutional capacity, and inadequate infrastructure experience climate vulnerability the most. Which is why, Bangladesh relates to this reality. Due to its low-lying deltaic geography, high population density, and dependence on climate-sensitive sectors, the country remains highly exposed to climate vulnerabilities (Haque et al., 2025).

2.2.2 Climate Adaptation

Climate adaptation has therefore become a central response to climate change, aiming to reduce vulnerability and strengthen resilience against current and anticipated climate impacts. The IPCC

(2014) defines climate adaptation as *"the process of adjustment to actual or expected climate and its effects."* This definition recognizes adaptation as a continuous and dynamic process that enables societies and ecosystems to respond effectively to changing climatic conditions. Major adaptation sectors are climate-resilient agriculture, integrated water resource management, resilient infrastructure, ecosystem restoration, disaster risk reduction, early warning systems, institutional strengthening, and nature-based solutions (NBS). Evidence suggests that such generate resilience, and social and environmental benefits, although adaptation progress remains uneven with accelerating climate risks (Smith et al., 2021; Pisu et al., 2024).

2.2.3 Climate Adaptation v/s Mitigation

Climate finance supports both mitigation and adaptation. Mitigation reduces greenhouse gas emissions, while adaptation reduces vulnerability and enhances resilience to climate change impacts (Duguma et al., 2014). While mitigation delivers long-term global environmental benefits by limiting future climate change, adaptation produces immediate and localized benefits by strengthening resilience to climate-related risks, making it essential for vulnerable countries like Bangladesh (Zhao et al., 2018). This study mainly focuses on adaptation outcomes because of Bangladesh's vulnerability to climate change.

Adaptation contributes to achieving several other SDGs, highlighting the interconnected relationship between climate resilience and sustainable development. However, despite growing international commitments, global progress remains inadequate. Current assessments indicate that only 18% of SDG targets are on track (Willige, 2025). The Paris Agreement recognizes adaptation as a global challenge and calls for strengthening adaptive capacity, enhancing resilience, and reducing vulnerability through international cooperation, financial support, technology transfer, and capacity building by integrating adaptation into national planning through National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs) (Trivedi and Jolly, 2022; Türkeş, 2024). Despite these policy commitments, achieving effective adaptation depends on adequate and predictable financial resources. Adaptation measures require substantial long-term investments, but global adaptation finance remains significantly below estimated needs. Consequently, adaptation finance has emerged not merely as a funding mechanism but as a prerequisite for strengthening resilience, reducing vulnerability, and supporting sustainable development under a changing climate.

2.3 Climate Finance: Concepts and Global Architecture

2.3.1 Definitions of Climate Finance

Climate finance has become an integral part of international climate governance, providing the financial resources necessary to support countries in responding to climate change through mitigation and adaptation (UNFCCC, 2019). Despite its increasing prominence within global climate policy, there is no universally accepted definition of climate finance. According to UNFCCC (2023), climate finance refers to financial resources mobilized from local, national, or transnational financing derived from public, private, and alternative sources that support activities aimed at addressing climate change through mitigation and adaptation.

Different institutions such as OECD, IPCC, IDFC, and CPI define and classify climate finance differently, particularly regarding eligible activities, sources, and reporting methodologies; they share a common objective of financing activities that support climate change mitigation and adaptation (Shishlov and Censkowsky, 2022). Therefore, differences remain regarding what qualifies as climate finance. Surprisingly, climate finance is beyond a purely technical financial mechanism and is increasingly understood as a politically negotiated concept shaped by institutional priorities, methodological choices, historical responsibilities, and global power relations.

2.3.2 Global Climate Finance Architecture

Following the broad definition of climate finance, the global climate finance architecture comprises the institutions, financial mechanisms, funding sources, and governance arrangements that mobilize and allocate financial resources to support climate action (Shah et al., 2025). The architecture consists of a diverse network of public and private actors, bilateral and multilateral institutions, and specialized climate funds operating under different mandates, eligibility criteria, and reporting frameworks. As climate finance has expanded in scale and complexity, architecture has become increasingly fragmented. Challenges related to coordination, transparency, accountability, and equitable access to finance, particularly for developing countries were reported. Despite these challenges, the global climate finance architecture remains central to supporting countries in achieving climate mitigation and adaptation goals under the UNFCCC and the Paris Agreement. However, improving its effectiveness requires reforms that strengthen institutional

coordination, simplify access to finance, enhance transparency, and better align financial investments with national priorities. As argued by Buchner et al. (2021), the effectiveness of the global climate finance architecture depends not only on increasing the volume of finance but also on improving the quality, accessibility, and strategic allocation of financial resources to achieve transformative climate outcomes.

The global finance architecture includes funding such as the Green Climate Fund (GCF), Green Environment Facility (GEF), Adaptation Fund (AF), alongside multilateral development banks (MDBs), including the World Bank and the Asian Development Bank (ADB). These mechanisms integrate climate finance into broader development lending, providing concessional loans, grants, guarantees, technical assistance, and blended finance (Watson et al., 2019). However, fragmentation across institutions, differing access requirements and complex approval processes continue to affect accessibility and effectiveness.

Public and Private Climate Finance

Both public and private sources mobilize climate finance. Public finance remains important because many adaptation investments do not generate immediate commercial returns. Public funds are provided by national governments and their agencies, climate funds, and development financial institutions (DFIs) that provide resources for activities that may not attract private investment (Buchner et al., 2019; Fan et al., 2025; Tandukar et al., 2025). Private finance, meanwhile, is increasingly important for scaling climate investment, particularly in infrastructure and low-carbon technologies (Buchner et al., 2019).

Domestic and International Climate Finance

Domestic climate finance refers to financial resources mobilized within a country through national budgets, domestic financial institutions, and private sector investments. Bangladesh has demonstrated domestic commitment through initiatives such as the Ministry of Environment, Forest, and Climate Change (MoEFCC); the Bangladesh Climate Change Trust Fund (BCCTF); the Bangladesh Climate Change Resilience Fund (BCCRF); climate budget tagging; and green banking policies (Hasan et al., 2025). Between 2009 and 2017, domestic government sources accounted for approximately 61% of climate adaptation funds in Bangladesh, while foreign donors contributed around 39% (Rahman et al., 2020). Nevertheless, domestic resources alone remain insufficient to meet the country's rapidly growing adaptation needs. International climate finance,

therefore, remains important, particularly for countries whose domestic fiscal resources cannot meet climate-related investment requirements. However, dependence on international finance creates exposure to donor priorities and changes in global development assistance in accordance with the principle of Common but Differentiated Responsibilities (CBDR) under the UNFCCC (Kuman & Chaturvedi, 2025).

Adaptation Finance Gap

Literature also highlighted the imbalance between adaptation needs and available finance. International climate finance has historically favored mitigation over adaptation, particularly energy and infrastructure, despite the high adaptation needs of climate-vulnerable developing countries (Iacobuţă et al., 2022; Timilsina, 2021). Khan et al. (2021) states that adaptation finance remains uneven despite developed countries' commitments. Recent estimates indicate that developing countries face an annual adaptation finance gap of approximately USD 187–359 billion, while current public adaptation finance amounts to only about USD 27.5 billion (Meraj and Hashimoto, 2025). Developing countries like Bangladesh requires USD 29.3 billion annually to meet its combined adaptation and mitigation goals but can currently mobilize USD 2.76 billion, a shortfall of USD 26.5 billion (Sarwar, 2025). These concerns were reflected in the recent UNFCCC Adaptation Committee (AC) 2026 Thematic Dialogue, where participants emphasized the urgent need to significantly scale up adaptation finance, expand grant-based financing, and simplify access mechanisms to ensure that financial resources reach the most climate-vulnerable communities (The Climate Watch, 2026).

2.4 Climate Finance and Adaptation in Bangladesh

Climate finance can produce positive adaptation outcomes when resources reach vulnerable communities, households, and institutions. This section directly supports the research study by showing evidence from Bangladesh that demonstrates benefits in agriculture, disaster risk reduction, livelihoods, ecosystem restoration, and household resilience. However, the literature also shows that these outcomes depend strongly on the scale, accessibility and governance arrangements.

2.4.1 Agricultural Resilience, Water, and Livelihoods

Agriculture is the sector that has been most exposed to climate finance in Bangladesh. And climate finance has supported the dissemination of flood-, drought-, and salinity-tolerant crop varieties; climate-smart agriculture; aquaculture development; and livelihood diversification, thereby strengthening agricultural resilience (Hasan et al., 2018). However, evidence also indicates that climate stress can encourage farmers to adopt adaptation measures through their traditional knowledge, but adaptation is constrained by structural barriers. Limited household assets, inadequate infrastructure, and unequal access to financial resources restrict the ability of vulnerable farmers to adopt more transformational forms of adaptation (Anjum and Rahman, 2025).

Bangladesh has shown remarkable progress in agriculture, including saline-tolerant and flood-resistant rice varieties, floating garden cultivation techniques, and climate-smart agriculture practices (Anjum et al., 2025; Saddaf et al., 2024; Bößner et al., 2026). These interventions demonstrate that targeted climate finance can strengthen resilience. However, marginalized groups such as landless farmers, smallholder farmers, women farmers, and char dwellers remain under documented even though they face compounded access barriers to the finance instruments that support agricultural adaptation (Anjum et al., 2025; Sarker et al., 2022).

2.4.2 Disaster and Community Resilience

Climate finance has contributed Bangladesh's disaster resilience through cyclone shelters, early warning systems, coastal embankments, and community-based disaster risk management; contributing to reductions in disaster-related mortality and affected populations (Alam et al., 2023) However, growing economic losses from climate hazards indicate that existing investments remain insufficient. Sarker et al. (2021) demonstrate that the benefits of climate finance can be weakened when projects are not based on community needs or when local populations are excluded from decision-making. Microfinance can support household coping with climate shocks, but its contribution is generally incremental rather than transformational (Fenton et. al., 2017). Jordan (2020) supports this by identifying a potential debt trap in which repeated climate shocks increase borrowing, which can reduce future adaptive capacity. Microfinance should therefore complement rather than replace grant-based public adaptation finance.

2.4.3 Household Climate Finance

Evidence from Bangladesh indicates that climate finance can improve adaptation engagement, livelihood diversification and climate-risk awareness (Hussain and Ahmad, 2019; Hussain and Ahmad, 2020). However, household finance often supplements rather than replaces household resources, while grant-based finance appears more effective than loans for vulnerable households (Hussain and Ahmand, 2020; Ahmed et al., 2025). Their findings suggest that finance can improve adaptation outcomes when it reaches vulnerable households, but scale, financing modality and access remain important constraints.

2.4.4 Nature-based Solutions (NbS)

Nature-based Solutions (NbS) have gained increasing recognition as cost-effective approaches for climate adaptation by simultaneously enhancing ecosystem resilience, biodiversity conservation, and community livelihoods (Smith et al., 2021). Mangrove restoration, wetland conservation, agroforestry, and ecosystem-based adaptation can contribute to multiple environmental and socio-economic co-benefits (Anjum et al., 2024). However, NbS remains underfinanced. Anjum et al. (2024) highlights that limited support for ecosystem-based adaptation despite its potential effectiveness. Tashmin (2016) further argues that institutional preferences for conventional infrastructure can limit the integration of ecosystem approaches into climate finance.

This literature paints a dual lens. Climate finance can generate positive adaptation benefits across agriculture, disaster risk reduction, household resilience, community adaptation, and nature-based solutions. However, these benefits remain limited by inadequate financing, difficult access, weak governance and unequal implementation. Effectiveness of climate finance, therefore, depends on both finance availability and the systems through which finance reaches vulnerable communities.

2.5 The Governance of Climate Finance

Climate finance governance refers to the systems, institutions, rules, decision-making processes, and accountability mechanisms through which climate finance is mobilized, allocated, implemented, evaluated, and monitored to support climate action. It encompasses a diverse range of actors, including national and local governments, international organizations, public institutions, the private sector, civil society organizations, and non-governmental organizations, all of whom play complementary roles in financing and implementing climate mitigation and adaptation initiatives (Commonwealth of Learning, 2024). The literature suggests that Bangladesh

has developed a relatively comprehensive institutional framework, but implementation remains weaker than policy design.

2.5.1 Institutional Arrangements and Accountability

The institutional architecture of climate finance in Bangladesh is relatively well-developed in design but chronically under-performing in implementation. Sarker et al. (2021) provide the most direct empirical evidence on this gap, examining climate finance governance in hazard-prone riverine island (char) communities in Bangladesh. His study reflects on formal architecture, drawing on the BCCSAP and NAPA, establishes a well-structured policy and strategy framework on paper. Yet the study's central finding is devastating in its simplicity: *the mechanism of climate finance in Bangladesh is good enough, but implementation is not satisfactory*. This design-implementation gap, where institutional frameworks are adequate on paper but inoperative at the local level, is the defining accountability failure in Bangladesh's climate finance system and recurs throughout the literature reviewed in this section.

Similarly, Bhandary (2021) demonstrates that national climate funds can support mainstreaming when sectoral ministries participate in implementation and climate units are established. However, weak planning, inconsistent climate units and donor-driven programming can reduce alignment with national priorities. The Bangladesh SDG Progress Report 2025 confirms the presence of such institutional and capacity constraints in the 8th Five-Year Plan period. This impacts achieving SDG 13 and recommends stronger coordination across ministries (GED, 2025).

2.5.2 Transparency and Coordination

Transparency and coordination within Bangladesh's climate finance governance system face challenges at both the domestic and international levels. Studies highlighted challenges such as transparency challenges in fund allocation, complex procedures for accessing climate finance, restricted access for local governments, exclusion of community-based organizations, poor integration of climate and labor policies, and weak independent monitoring of expenditure outcomes, and coordination failures among multilateral climate funds (Hasan et. al., 2025; Skovgaard et. al., 2023) At both international and national levels, fragmented institutions, complex accreditation requirements, weak coordination and limited monitoring reduce the efficiency and accessibility of climate finance (Skovgaard et al., 2023; Bößner et al., 2026). In Bangladesh,

centralized decision-making further limits local participation, while weak data and monitoring systems constrain accountability and evidence-based planning.

2.5.3 Local Participation and Accessibility

Local participation is increasingly recognized as a fundamental principle of effective climate finance governance. Achieving transformative climate action requires meaningful public participation throughout the planning, decision-making, and implementation processes due to their local knowledge. Studies like Parsons et al. (2025) and Price (2021) emphasizes the importance of involving local actors including local governments, communities, and civil society in decision-making and implementation processes.

In Bangladesh, Sarker et al. (2021) found that climate finance decisions in char communities were largely made at national and ministerial levels, with limited involvement of affected communities. Similarly, Bößner et al. (2026) document the same pattern of centralized decision-making and argue for greater authority for local institutions. Smith et al. (2021) also adds to this by identifying participatory delivery, supportive government policy, strong governance and long-term financing as important conditions for successful Nature-based Solutions. These findings suggest that decentralization is not simply an administrative reform; it can directly affect whether climate finance responds to local risks.

Furthermore, multilevel governance in the UN DESA (2024) theoretical framework, provides an important framework for understanding the effectiveness of climate finance. Although Bangladesh has increasingly integrated climate change into national planning, policy advances have not always translated into effective sub-national implementation (Fatemi et al., 2020).

2.6 Financial, Institutional, and Governance Barriers to Effective Climate Finance

The literature reviewed in this section identifies a comprehensive set of barriers that collectively prevent Bangladesh's climate finance system from delivering adaptation outcomes commensurate with available resources and documented needs.

2.6.1 Financial Barriers

Financial constraints remain one of the most significant barriers to effective climate adaptation. Bangladesh received only USD 1,189.5 million against an estimated requirement of USD 12 billion by 2025, representing less than 10% of the required investment (GED, 2025). This illustrates the scale of financing gap. The country requires an additional $421 billion between FY2026 and FY2030 to achieve the Sustainable Development Goals (SDGs) through domestic public and private finance, climate finance, and international partnerships (The Daily Star, 2026).

Hassan et al. (2025) disaggregates this need sectorally, with agriculture requiring USD 2.5–3 billion annually, energy infrastructure USD 1.8 billion, and coastal protection USD 1 billion, while annual international climate finance remains at approximately USD 1.2 billion. Even the GCF has contributed only USD 448.8 million, representing just 3.7% of Bangladesh's projected medium-term climate finance needs (GED, 2025). Similarly, Bößner et al. (2026) reveal a broad consensus that current adaptation finance remains inadequate, with concerns that Bangladesh's graduation from LDC status may further reduce access to ODA and increase future financing pressures.

Ahmed et al. (2025) found that grant-based financing is more effective than loan-based financing for household adaptation, while UNCTAD (2024) similarly raises this concern at the international architecture level: increasing reliance on non-concessional loans can increase debt pressure and undermine development objectives. Another major challenge is Bangladesh’s continued dependence on external donors. Climate finance is largely supported by bilateral and multilateral development partners alongside domestic funding through BCCTF. While these resources have played an important role in financing adaptation, reliance on external funding exposes Bangladesh to shifts in donor priorities and reductions in international assistance (Hassan et al., 2025). This concern is particularly important as Bangladesh approaches LDC graduation (Bößner et al., 2026).

2.6.2 Institutional and Governance Barriers

Institutional and governance constraints continue to limit the effectiveness of climate finance in Bangladesh. Literature consistently identifies weak institutional capacity, fragmented governance, limited technical expertise, and complex access procedures as major barriers to mobilizing and implementing climate finance. Bößner et al. (2026) categorize these challenges into four broad areas: weak policy and regulatory frameworks, limited institutional capacity, inadequate coordination across sectors and governance levels, and insufficient data systems.

Monitoring and evaluation represent a critical institutional gap. Although Bangladesh has established comprehensive institutional mechanisms for climate finance, implementation at the local level remains inconsistent (Sarker et al., 2021). Similarly, Anjum et al. (2024) reported that despite the existence of policies promoting urban greening and ecosystem-based adaptation, implementation remains limited because of inadequate institutional capacity and weak enforcement. Tashmin (2016) attributes inadequate monitoring and evaluation systems to the continued exclusion of ecosystem-based adaptation from climate finance.

Access to climate finance presents an additional institutional challenge. Complex accreditation procedures, stringent funding requirements, and limited technical capacity make it difficult for government agencies, local institutions, and community-based organizations to access international climate finance (GED, 2025; Bößner et al., 2026). Consequently, the literature suggests that strengthening institutional capacity, simplifying access procedures, improving monitoring systems, and decentralizing climate finance governance are critical.

2.6.3 The Political Economy of Climate Finance

The political economy perspective adds a further dimension in the literature. Unlike technical perspectives that view climate finance primarily as a mechanism for allocating financial resources, the political economy perspective argues that climate finance is shaped by power relations, institutional interests, and global inequalities. Decisions regarding who provides climate finance, how resources are allocated, which projects receive funding, and what conditions accompany financial support are influenced not only by technical assessments but also by political priorities and governance structures (Shah et al., 2025). Bhandary (2021) shows that donor conditions, reporting requirements and funding priorities can influence how climate finance is programmed in Bangladesh. Similarly, Skovgaard et al. (2023) demonstrate that institutional fragmentation can reflect political differences over control and allocation of climate finance. Understanding these political dynamics is therefore essential for identifying future pathways that promote more equitable, transparent, and nationally owned climate finance systems.

2.7 Climate Finance Landscape in Bangladesh

Bangladesh has developed a diverse climate finance architecture combining domestic public resources, international funds, bilateral development assistance and emerging private finance.

Existing literature highlights persistent issues related to fragmented governance, institutional coordination, limited private sector participation, difficulties in accessing climate finance, dependence on external donors, and concerns regarding the long-term sustainability of adaptation financing (Digitemie and Ekemezie, 2024). Furthermore, the evolving international climate finance landscape, including Bangladesh's graduation from LDC status, declining concessional finance, and emerging global financing mechanisms beyond 2030, introduces additional uncertainties for the country's future adaptation efforts (GED, 2025; Hassan et al. 2025; Bößner et al. 2026).

2.7.1 Domestic Climate Finance Mechanisms

Bangladesh Bank has contributed a distinct dimension to the climate finance landscape through its green banking and sustainable finance framework. The Climate Risk Fund has instructed banks and financial institutions to assign at least 5% of their annual CSR budget to the fund, accessible for environmental conservation, climate mitigation and adaptation, or disaster management activities. Monira (2024), reviewing the role of green finance in sustainable development, confirms that Bangladesh's green finance framework promotes green credit, green investment, and carbon-linked instruments.

The Bangladesh Climate Change Trust Fund (BCCTF) is one of the country's major domestic climate finance mechanisms. The fund has supported over 727 projects through government institutions and NGOs (Sarker et al., 2021). Thematically, BCCTF allocation has concentrated heavily on infrastructure, accounting for 61% of projects, with mitigation and low carbon development receiving 18% and food security, social protection, and health receiving 11%. This sectoral distribution reflects the institutional bias toward large, visible infrastructure investments that is documented throughout the governance literature (Tashmin, 2016; Sarker et al., 2021). The Bangladesh Climate Change Resilience Fund (BCCRF) complements the BCCTF and provided another major channel of climate finance through bilateral donors. Bhandary (2021) notes that both domestic and donor-funded mechanisms have faced challenges related to planning, donor priorities and the inconsistent role of climate units.

2.7.2 International Climate Finance Mechanisms

Bangladesh receives international climate finance through four primary channels: the GCF, the GEF, the Adaptation Fund, and bilateral development partnerships. GED (2025) documents that Bangladesh received a total international climate finance at approximately USD 1.19 billion against a projected requirement of USD 12 billion by 2025, with the GCF contributing USD 448.8 million, only 3.7% of documented needs. Hassan et al. (2025) confirms that Bangladesh receives approximately USD 1.2 billion annually in climate-related funding, out of which adaptation finance accounts for approximately 60%, while mitigation constitutes about 40%. Despite this relatively high adaptation share, which exceeds the global average, the absolute volume falls dramatically short of sectoral requirements.

The GEF has funded 43 projects in Bangladesh as grants, amounting to USD 160 million with USD 1,037 million in additional co-financing. The GCF, despite positioning Bangladesh as the third largest GCF investment destination in Asia, has concentrated resources in large-scale infrastructure and energy projects that reflect global fund preferences rather than Bangladesh's most pressing adaptation needs (Majumdar & Matsui, 2025). Bößner et al. (2026) identify successful climate finance initiatives that demonstrate what effective delivery can achieve when barriers are overcome. These include the Solar Home System programme, community-based adaptation projects, floating gardens and saline-tolerant rice varieties; the Resilience and Inclusive Growth in Urban Bangladesh (LoGIC) Project, and the Gender-Responsive Coastal Adaptation (GCA) project. These examples are important because they demonstrate that the problem is not simply the absence of effective adaptation models. Rather, the challenge is scaling and sustaining them.

2.7.3 Adaptation Sectors and Financing Trends since 2015

Bangladesh's climate finance landscape has evolved in both scale and sectoral distribution, across the 7th and 8th 5-Year Plan periods and provides an important period for assessing post-Paris climate finance trends.

Available evidence indicates that climate finance has increased in nominal terms, but not at a rate sufficient to match rising adaptation needs. Hassan et al. (2025) document sector-wise annual adaptation needs that vastly exceed available finance for agriculture, energy and infrastructure, coastal protection, and health, a combined need of USD 7.08–7.58 billion annually against

approximately USD 1.2 billion received. GED (2025) confirms that this gap has widened rather than closed over the 7th and 8th 5YP period, with climate impacts intensifying faster than adaptation finance has scaled.

Climate-relevant budget allocations across 25 ministries have grown in nominal terms, yet their distribution within BCCSAP's six thematic areas shows a concerning pattern. Allocation for mitigation and low-carbon development increased from 9.32% to 13.36% of the climate budget between FY2016 and FY2023, while allocation for comprehensive disaster management, the primary adaptation thematic area, fell from 11.68% to 7.21% (Hassan et al., 2025). The MOEFCC allocation grew from 0.031% to 0.034% of GDP, far below the 8th FYP target of 0.10% of GDP by 2025 and 0.5% by 2041 (GED, 2025).

A major constraint is the persistent shortfall in adaptation finance, which continues to limit the ability of developing countries to implement long-term resilience measures. It is estimated that achieving net-zero greenhouse gas emissions by 2050 requires approximately USD 4.6 trillion annually, yet only 43.5% of this investment was mobilized in 2024. Similarly, developing countries require around USD 387 billion per year for climate adaptation, but only 7.2% of this need was met in 2022 (Irfanullah, 2025). Despite increasing recognition of adaptation as a global priority, international climate finance remains disproportionately allocated toward mitigation. Although mechanisms such as the GCF have committed to balancing investments between mitigation and adaptation, mitigation projects continue to receive a greater share of funding, leaving highly climate-vulnerable countries such as Bangladesh with insufficient resources to strengthen resilience (Majumdar and Mitsui, 2025).

2.8 Future Climate Finance Pathways Beyond 2030

This section is the most forward-looking in the literature review and is unique to this study's contribution. As Bangladesh approaches the end of the SDG timeline and the formal transition to a post-2030 framework, understanding future climate finance pathways is no longer a prospective academic exercise; it is an urgent policy imperative.

2.8.1 LDC Graduation

Bangladesh is scheduled graduation from the LDC status, which creates uncertainty over future access to highly concessional finance and development assistance. Graduation may reduce access

to LDC-specific concessional finance windows for Bangladesh. Bößner et al. (2026) documents this concern directly from practitioner perspectives, that graduation could reduce ODA and increase financing pressures. GED (2025) similarly identifies a significant medium-term financing requirement that cannot be covered through domestic resources alone.

The challenge is therefore not simply to replace lost funding. Bangladesh must also strengthen its institutional capacity to access, negotiate and manage a more diverse set of financing sources to navigate post-graduation financing conditions.

2.8.2 The New Collective Quantified Goal (NCQG)

The NCQG, agreed at COP29 in Baku in November 2024, established USD 300 billion annually from developed countries by 2035 (Tan et al., 2026). However, UNCTAD (2024) estimates that developing countries require considerably more, reaching approximately USD 1.8 trillion annually by 2030. The USD 300 billion target, therefore, covers less than a third of assessed needs and implies a target of approximately 1.4% of developed countries' GDP per year, an ambitious but achievable figure that remains politically contested.

UNCTAD (2024) emphasizes that the NCQG will have done little to address the shortcomings of the USD 100 billion commitment, if developing countries become more indebted through loan-based climate finance, burdened by lengthy application processes, or lacking access to suitable finance to deliver climate priorities. A better NCQG would be based on the demonstrated needs and priorities of developing nations, ensuring an effort-sharing approach among developed countries based on CBDR-RC, concentrating on increasing fiscal space rather than debt, and enhancing the efficiency of finance in delivering high-quality climate action.

2.8.3 Innovative Finance Mechanisms

Several innovative finance mechanisms have been proposed and piloted as complements to public climate finance, with varying degrees of relevance and readiness for Bangladesh's adaptation context.

- **Article 6: Carbon Markets:** Article 6 of the Paris Agreement provides opportunities for Bangladesh to generate climate finance through high-integrity carbon markets, including potential carbon credits from ecosystems such as the Sundarbans. However, governance

concerns and weak alignment between carbon-finance projects and the needs of local communities may limit its effectiveness for adaptation (Majumdar & Matsui, 2025).

- **Green Bonds:** Green bonds can mobilize private finance for climate and environmentally sustainable investments in Bangladesh. However, limited capital-market depth, challenges in financing adaptation rather than mitigation, and creditworthiness requirements constrain their accessibility for smaller and community-level adaptation initiatives (Hassan et al., 2025).
- **Blended Finance:** Blended finance combines public and private capital to reduce investment risks and mobilize additional resources for climate action. Although it supports climate-resilient infrastructure and adaptation, regulatory uncertainty, complex procedures, and limited private-sector engagement remain important barriers to scaling this mechanism in Bangladesh (Bößner et al., 2026).
- **Debt-for-Climate Swaps:** Debt-for-climate swaps could provide an alternative source of climate finance by linking debt relief with climate investments. This mechanism may become increasingly relevant as Bangladesh faces greater fiscal pressure and reduced access to concessional finance following LDC graduation, although its potential scale and implementation feasibility remain uncertain (Hassan et al., 2025).

2.8.4 Domestic Resource Mobilization

As international concessional finance becomes less accessible post-graduation, domestic resource mobilization emerges as a critical complement rather than an alternative. GED (2025) identifies Bangladesh's Climate Fiscal Framework as the foundation for tracking climate-relevant public expenditure across ministries. Potential domestic instruments such as carbon taxes, climate bonds, insurance, private green investment and greater use of CSR resources (Hassan et al., 2025). Moreover, Bangladesh Bank's Climate Risk Fund provides an existing mechanism that could potentially be strengthened and better aligned with adaptation priorities. Domestic finance cannot replace international climate finance entirely, particularly given Bangladesh's scale of vulnerability. However, stronger domestic mobilization can reduce dependence on external donors and improve national ownership.

2.8.5 Climate Justice and Future Finance

Future climate finance is also a question of climate justice. Bangladesh contributes only a small share of global emissions but faces significant climate impacts. Shah et al. (2025) argue that climate finance is shaped by historical inequalities and power relations.

UNCTAD (2024) similarly emphasizes that future finance should reflect developing countries demonstrated needs, reduce debt burdens and follow the principle of common but differentiated responsibilities. For Bangladesh, a fair future finance architecture should therefore provide resources that are adequate, predictable and accessible without undermining long-term development.

2. 9 Theoretical Framework

2.9.1 Introduction to the Theoretical Framework

Climate finance is a multi-dimensional concept that involves economic, governance, and justice dimensions that cannot be captured by a single theoretical perspective (Shah et al., 2025). To be more precise, climate finance is influenced by power relations, historical inequalities, governance structures, and competing development priorities. Therefore, understanding climate finance requires an integrated theoretical perspective that captures these interconnected dimensions.

Accordingly, this study adapts an integrated theoretical framework adopted from Tan et al. (2026), combining Public Goods Theory, International Environmental Justice Theory, and Global Governance Theory (Figure 2.1). The three selected theories operate at different but interconnected levels. Together, these complementary theories provide a comprehensive lens for examining how climate finance supports climate adaptation in Bangladesh, the financial, governance and institutional barriers affecting its effectiveness, and the future pathways for strengthening adaptation finance beyond 2030.

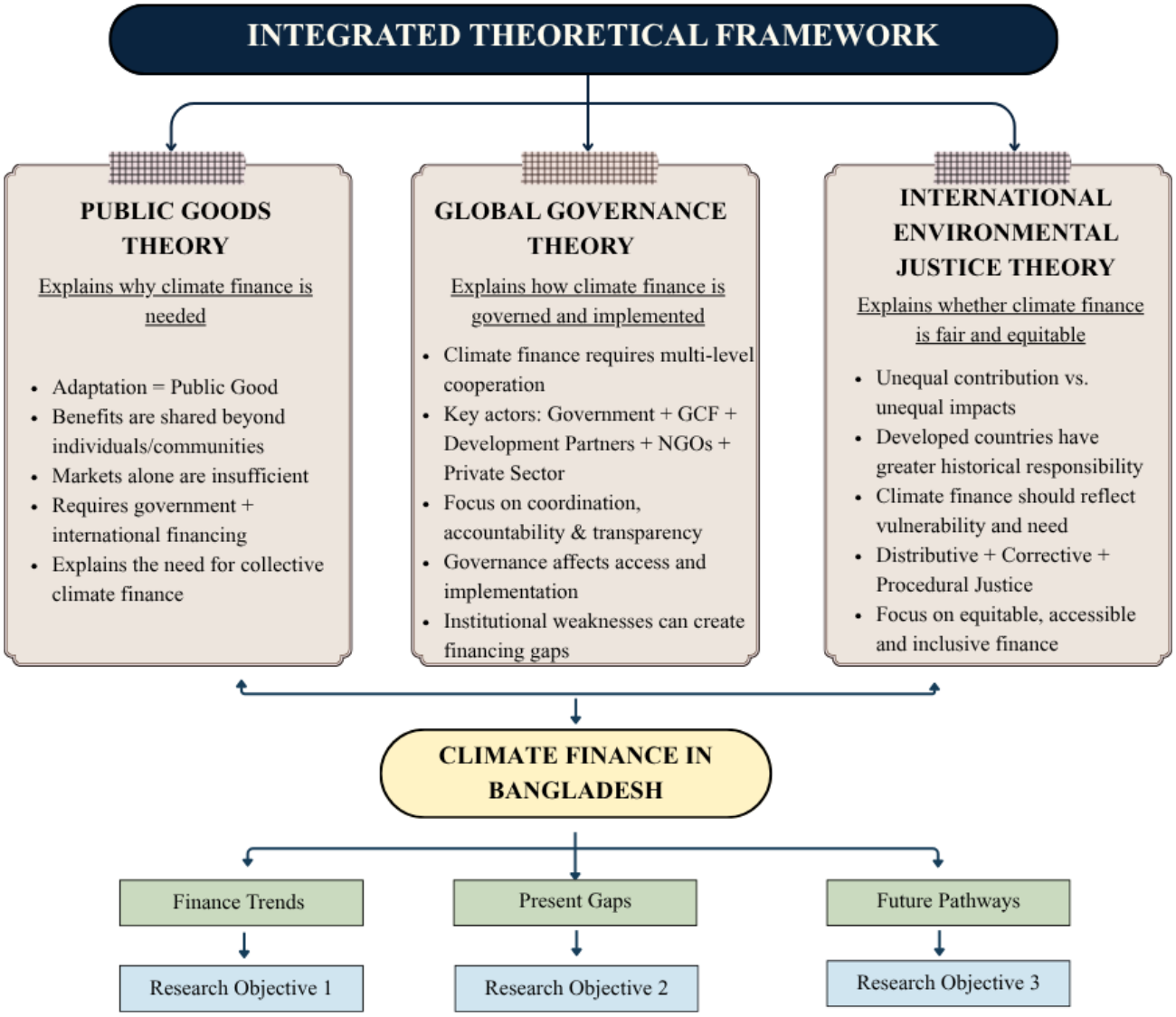


Figure 2.1: Integrated theoretical framework, adopted by Tan et al. (2026)

Theory 1: Public Goods Theory

Public Goods Theory, introduced by Samuelson (1954), explains why some goods and services require collective provision because they are non-rival and non-excludable. Since private markets often fail to provide these goods efficiently, governments and international institutions play an important role in financing them (Dougherty, 2003).

Climate adaptation shares many characteristics of public goods because investments such as cyclone shelters, flood protection, climate-resilient infrastructure, ecosystem restoration, and early

warning systems generate benefits that extend beyond individual communities to society. Similarly, improving resilience in climate-vulnerable countries contributes to regional stability, food security, and sustainable development. Since these benefits cannot be fully achieved through market mechanisms alone, adaptation requires public investment and international cooperation. Public goods theory, therefore, provides an economic explanation for international climate finance by viewing adaptation as a shared global responsibility that requires collective financial support.

Theory 2: Global Governance Theory

Global Governance Theory, developed by Rosenau (1992), explains how global challenges are addressed through cooperation among governments, international organizations, development partners, civil society, and the private sector. Rather than relying solely on national governments, the theory emphasizes coordination, accountability, transparency, participation, and cooperation among multiple actors operating at different governance levels.

In the context of climate finance, this theory explains how financial resources are mobilized, allocated, and implemented through institutions established under the UNFCCC, including the GCF, GEF, and Adaptation Fund. Although these institutions have expanded climate finance since the Paris Agreement, many studies continue to identify governance challenges such as fragmented institutional coordination, lengthy approval procedures, limited implementation capacity, and difficulties in accessing international funds. Global governance theory, therefore, highlights that the effectiveness of climate finance depends not only on the availability of funding but also on the quality of governance systems responsible for delivering it (Tan et al., 2025).

Theory 3: International Environmental Justice Theory

International environmental justice theory focuses on fairness and equity in responding to climate change. The theory argues that although climate change affects all countries, its causes and impacts are distributed unequally. Developed countries have historically contributed the largest share of greenhouse gas emissions, while developing countries often experience the greatest climate impacts despite contributing very little to global emissions. This principle is reflected in the concept of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) under the UNFCCC.

The theory emphasizes three dimensions of justice: distributive justice, which concerns the fair allocation of climate finance; corrective justice, which recognizes the responsibility of major emitters to support countries suffering climate impacts; and procedural justice, which promotes meaningful participation of vulnerable countries in climate finance decision-making. Consequently, International Environmental Justice Theory argues that climate finance should be distributed according to countries' vulnerability and adaptation needs rather than economic or political influence. This perspective shifts attention beyond the amount of finance provided to whether climate finance is fair, accessible, and responsive to the needs of the most climate-vulnerable countries.

2.9.2 Integration of Three Theories

Climate finance for adaptation cannot be fully understood through a single theoretical perspective because it involves economic, institutional, and equity-related dimensions. Therefore, this study adopts an integrated theoretical framework adapted from Tan et al. (2026), combining public goods theory, global governance theory, and international environmental justice theory.

The three theories complement one another by explaining different aspects of climate finance. Public Goods Theory explains why climate finance is necessary, highlighting adaptation as a public good that requires collective investment. Global governance theory explains how climate finance is governed and implemented, emphasizing the role of institutions, coordination, and accountability. International environmental justice theory explains whether climate finance is distributed fairly, focusing on equity, vulnerability, and the responsibilities of developed countries toward climate-vulnerable nations.

Together, these theories provide a comprehensive framework for analyzing climate finance trends, governance and institutional barriers, financing gaps, and future pathways for strengthening climate adaptation in Bangladesh beyond 2030. The integrated framework also supports the study's three research objectives by examining climate finance from economic, governance, and justice perspectives.

2.9.3 Operationalization of the framework

Theory	Corresponding Research Objectives (RO)	Corresponding Research Questions (RQ)	Evidence from the literature
Public Goods Theory	RO1	RQ1	Global adaptation finance requirements; Bangladesh's estimated financing gap; climate finance trends
Global Governance Theory	RO2	RQ2	Literature findings on governance, and fiduciary systems; evidence on GCF and other international financing mechanisms
International Environmental Justice Theory	RO2 / RO3	RQ2 / RQ3	Bangladesh's low contribution to global emissions relative to climate vulnerability; evidence on adaptation finance distribution and international climate finance commitments

2.9.4 Limitations of the framework

Although the integrated framework provides a useful multidimensional lens, it has several limitations. First, the three theories were developed to explain broader economic, governance, and justice-related phenomena and therefore do not specifically explain the operational complexities of climate finance in Bangladesh. Second, Public Goods Theory may place greater emphasis on the collective economic rationale for adaptation while giving less attention to political and institutional constraints affecting actual fund delivery. Similarly, Global Governance Theory helps explain institutional coordination and accountability but may not fully capture power asymmetries between international donors, national institutions, and local communities. International Environmental Justice Theory emphasizes equity and vulnerability but provides less guidance for assessing the technical and financial feasibility of different financing mechanisms. Finally, the framework is primarily explanatory rather than predictive; therefore, it supports interpretation of Bangladesh's climate finance trends, barriers, and future pathways but does not independently forecast future financing levels or adaptation outcomes.

2.10 Knowledge Gaps

The review of the literature across the sections reveals gaps that are not merely academic limitations; they represent practical deficits in the knowledge base available to policymakers,

practitioners, and community organizations working to improve climate finance effectiveness in Bangladesh.

- **Limited longitudinal comparison of climate finance across the 7th and 8th FYP periods.** Most literature reviewed, including both the Bangladesh-specific empirical studies (Hussain & Ahmad, 2019, 2020; Islam et al., 2025; Ahmed et al., 2025; Sarker et al., 2021) and the global architecture analyses (Wei, 2025; Iacobuţă et al., 2022; Nurunnabi, 2025), examines climate finance at a single point in time or across a general period without systematically comparing distinct implementation phases. Few studies systematically have compared Bangladesh's climate finance trends, governance effectiveness, and adaptation outcomes across the 7th and 8th 5FY Plans. Without this temporal comparison, it is impossible to assess whether Bangladesh's climate finance system is improving or deteriorating, what has changed between the two plan periods, and what the trajectory implies for post-2030 planning. This study addresses this gap through phase-based comparative analysis.
- **Fragmented analysis of individual climate finance mechanisms rather than the system as a whole.** Existing research evaluates individual mechanisms such as the BCCTF (GED, 2025; Sarker et al., 2021), the BCCRF (Bhandary, 2021), the GCF (Majumdar & Matsui, 2025), household-level climate finance (Hussain & Ahmad, 2019, 2020), microfinance (Fenton et al., 2017; Jordan, 2020), and NbS (Smith et al., 2021; Tashmin, 2016) separately. Limited attention has been given to how these different sources interact as part of Bangladesh's wider climate finance system and whether their combined financing is adequate for adaptation needs.
- **Limited integration of finance, governance, and adaptation outcomes.** Previous literature documents governance failures (Sarker et al., 2021; Bhandary, 2021; Bößner et al., 2026) and adaptation outcomes (Hussain & Ahmad, 2019, 2020; Islam et al., 2025; Ahmed et al., 2025) in separate bodies of work, few studies examine how governance quality, institutional capacity, and stakeholder coordination jointly determine whether financial flows produce adaptation outcomes at the community level. There is limited evidence on how institutional capacity, coordination, and governance influence whether climate finance translates into effective adaptation outcomes at the local level.

- **Limited Bangladesh-specific practitioner and expert perspectives.** Existing Bangladesh-focused literature relies largely on policy documents, institutional reports, and quantitative or household-level evidence**.** The perspectives of NGO practitioners, implementers, and climate finance experts remain comparatively underrepresented. This study addresses this gap by integrating practitioner survey and KII findings with secondary evidence.
- **Limited forward-looking analysis linking LDC graduation, NCQG, domestic mobilization and innovative finance to post-2030 adaptation**. Existing literature discusses global post-2030 climate finance and financing mechanisms, but there is limited Bangladesh-specific analysis connecting LDC graduation, declining concessional finance, domestic resource mobilization, innovative financing, and future adaptation needs. This study therefore develops a forward-looking assessment of climate finance pathways beyond 2030.

This study addresses these gaps by combining phase-based secondary analysis with practitioner survey and KII evidence to examine climate finance trends, barriers and future pathways in Bangladesh.

2.11 Chapter Summary

This chapter reviewed the existing literature on climate finance, climate adaptation, and SDG 13, with particular attention to Bangladesh and the broader international climate finance architecture. It examined the evolution of climate finance since the Paris Agreement, the global adaptation financing gap, and the major international and domestic mechanisms through which climate finance is mobilized and delivered. The review also explored Bangladesh's climate finance landscape, including domestic funds, international mechanisms, adaptation and mitigation financing, and the role of innovative financing approaches.

The chapter further examined key challenges affecting the effectiveness of climate finance, including limited financing, complex access procedures, institutional and technical capacity constraints, weak coordination, governance and accountability gaps, and the mismatch between financing priorities and local adaptation needs. Literature on locally led adaptation, nature-based solutions, private-sector engagement, and future financing mechanisms was also reviewed to understand potential pathways for strengthening adaptation finance.

The chapter identified five major knowledge gaps: limited longitudinal comparison of climate finance across Bangladesh's development planning periods, fragmented analysis of financing mechanisms, insufficient integration of finance, governance and adaptation outcomes, limited practitioner perspectives, and inadequate Bangladesh-specific analysis of post-2030 financing pathways. To address these gaps, this study adopts an integrated theoretical framework combining Public Goods Theory, Global Governance Theory, and International Environmental Justice Theory. The next chapter presents the methodology used to investigate these issues through secondary analysis, practitioner survey data, and key informant interviews.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter outlines the methodological approach adopted for the study. It describes the research design, study area, data sources, sampling strategy, data collection methods, and data analysis techniques employed. The chapter explains how both primary and secondary data were collected and analyzed to address the research objectives and ensure the validity and reliability of the findings.

3.1 Study Area

The study was conducted in Bangladesh, with the country serving as the geographical scope for examining climate finance for climate adaptation. Bangladesh was selected because it is globally recognized as one of the most climate-vulnerable countries due to its low-lying geography, dense population, and limited adaptive capacity, facing recurrent floods, cyclones, sea-level rise, salinity intrusion, riverbank erosion, and other climate-related hazards (Hossain, 2025). These vulnerabilities pose significant challenges to the country's sustainable development and necessitate substantial investments in climate adaptation (Das et al., 2024). Bangladesh has demonstrated a strong commitment to climate action by integrating adaptation into national development planning through policies and strategies such as the BCCSAP, NAP, NDCs, and the Mujib Climate Prosperity Plan (2022-2041) (Sultana et al., 2023). Despite these efforts, the country continues to face significant challenges in mobilizing, accessing, and effectively utilizing climate finance to meet its growing adaptation needs (Sarker et al., 2021)

Given these circumstances, Bangladesh provides an appropriate context for examining the trends, gaps, and future pathways of climate finance for adaptation. The country shows a clear policy-

implementation gap in adaptation finance and current needs have already exceeded available finance and institutional capacity (Arfanuzzaman, 2024). Therefore, Bangladesh can be used as an example for studying beyond-2030 pathways to achieve adaptation goals. The study adopts a national perspective by collecting insights from professionals working in climate change, climate adaptation, climate finance, sustainable development, disaster risk reduction, policy, academia, government agencies, non-governmental organizations, development partners, and the private sector.

3.2 Research Design

This research adopts a mixed-methods research design combining qualitative and quantitative approaches to provide a more comprehensive understanding of complex research problems (Dawadi et al., 2021). The design was selected because the study requires both descriptive analysis of climate finance trends and the institutional, governance, and financial factors influencing climate adaptation in Bangladesh (Hovestad, 2024). Secondary data provides evidence of changes across the 7th 5YP (2016-2020) and 8th 5YP (2021-2025), while primary data captures the experiences and perceptions of professionals involved in climate finance and adaptation.

The study therefore combines three sources of evidence: secondary documentary analysis, an online professional survey, and semi-structured KIIs. The integration of these sources allows findings from one source to be compared and explained using evidence from the others, strengthening the credibility of the analysis through methodological triangulation (Vivek et al., 2023; Morgan, 2024).

The research is organized around three objectives: examining climate finance trends and adaptation outcomes, identifying financial, institutional and governance barriers, and exploring future pathways for climate adaptation finance beyond 2030. The study was designed around these objectives, with individual questions mapped to the relevant objective; the complete mapping is provided in Appendix D. The research uses two types of questionnaires, such as questionnaire for Key Informant Interviews (KIIs) to examine expert experiences, institutional perspectives, governance issues, and future policy priorities (Kibuacha, 2024). Complementing this, an online survey questionnaire via Google Forms was administered to professionals working in climate change, development, climate finance, and related sectors, helping gather data through a diverse population (Regmi et. al., 2016).

In addition to primary data collection, the study undertakes a comprehensive review of secondary sources, including peer-reviewed literature, national policies and strategies, government reports, climate finance assessments, development plans, and publications from international organizations. The integration of documentary evidence, survey responses, and expert interviews strengthens the credibility, validity, and robustness of the research through methodological triangulation, enabling a more comprehensive assessment of climate finance for climate adaptation in Bangladesh.

3.3 Study Population and Sampling

3.3.1 Target Population

The target population for this study includes professionals from government ministries and agencies, development partners, international and national non-governmental organizations (INGOs and NGOs), research institutions, academia, donor agencies, multilateral organizations, private sector organizations, media and policy think tanks engaged in climate-related initiatives in Bangladesh. Participants were selected based on their expertise, professional experience, and involvement in climate-related initiatives.

3.3.2 Sampling Strategy and Sample Size

The study considered three types of sampling: convenience, purposive, and snowball sampling to collect data from participants. Convenience sampling helped reach accessible respondents, while purposive sampling targeted individuals with relevant knowledge and experience in climate change and climate finance (Ahmad and Wilkins, 2025; Bhardwaj, 2019). Snowball sampling was also employed, with initial participants recommending additional experts possessing relevant knowledge and experience (Ting et al., 2025).

For qualitative surveys, respondents were chosen through convenience sampling. The participants, as mentioned in Section 3.3.1, are professionals working in the climate change sector. They were reached through social media networks by sharing the Google Form questionnaire link. Convenience sampling was the most appropriate choice for this study. Moreover, given the limited time and resources, this seemed to be the practical way to reach the target population. A total of 51 responses were obtained through the quantitative survey. For KIIs, key informants were selected

through purposive sampling and snowball sampling, where participants were targeted based on their knowledge and expertise (Ahmad and Wilkins, 2025). Snowball sampling was used to identify additional participants through referrals from existing respondents (Ting et al., 2025). Different categories of key informants were interviewed. A total of 5 key informant interviews were conducted across these categories.

3.3.3 Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were applied to the respondents and key informants to ensure that they meet the research objectives of the study. Table 3.1 and Table 3.2 give an overview of the inclusion and exclusion criteria.

- **Survey Respondents**

Inclusion criteria	Exclusion criteria
At least 2 years of relevant professional experience	Less than 2 years of relevant experience
Experience in climate finance, climate adaptation, or SDG 13	No direct experience with climate-related work
Currently or previously worked in Bangladesh on climate-related issues	No professional experience related to Bangladesh
Works/has worked in government, NGO, development organization, research, academia, donor agency, or private sector	Individuals with no relevant institutional/professional involvement
Involved in climate policy, research, project implementation, or financing	Experience unrelated to climate policy, finance, adaptation, or implementation

Table 3.1: Inclusion and Exclusion Criteria for Survey Respondents

- **Key Informants**

Inclusion criteria	**Exclusion criteria**
At least 5 years of relevant experience	Less than 5 years of relevant experience

Senior-level, managerial, advisory, or expert experience	Entry-level or junior professionals
Expertise in climate finance or climate governance	No direct expertise in climate finance/governance
Experience at national or international level (publications)	Limited experience outside unrelated sectors
Experience in policy, financing, programme implementation, or climate governance	No relevant policy, financing, or implementation experience

Table 3.2: Inclusion and Exclusion Criteria for Key Informants

3.3.4 Case Study Selection

Two climate finance-supported adaptation initiatives were selected as illustrative case studies based on their relevance to the research objectives and their repeated identification by survey respondents and KII participants. The Local Government Initiative on Climate Change (LoGIC) was selected because of its emphasis on locally led adaptation, community participation, local government capacity, and decentralized climate finance. The PKSF-supported Extended Community Climate Change Project–Drought (ECCCP- Drought) was selected to represent the role of an important climate adaptation initiative, particularly because it addresses localized water and agricultural vulnerabilities. The two cases were selected to provide complementary perspectives on how different climate finance mechanisms contribute to adaptation outcomes in Bangladesh.

3.4 Data Sources and Data Collection Methods

The study utilizes both primary and secondary data sources to address the research objectives.

3.4.1 Primary Data Collection

Primary data were collected using two complementary data collection methods: an online questionnaire and semi-structured KIIs. Table 3.3 shows an overview of the data collection methods, instruments, sources of data, and sample size for this study. The questionnaire included both closed-ended and open-ended questions. Closed-ended questions generated descriptive

numerical evidence, while open-ended questions allowed respondents to explain their experiences and perceptions in greater depth. The questionnaire covered issues including climate finance availability, adaptation outcomes, implementation barriers, financing gaps, inclusiveness, future financing mechanisms, LDC graduation, and priorities for strengthening climate finance. Questions were grouped according to the three research objectives.

Data Collection Methods	Instruments	Sources of Data	Sample Size
Online Questionnaire	Structured questionnaire with open-ended questions, using Google Forms	NGO practitioners, climate project implementers, development professionals, civil society actors	51 respondents,
Key Informants Interview (KII)	Semi-structured interview via online platforms	Senior experts, policymakers	5 interviews

Table 3.3. Data Collection Methods

- **Online Survey Questionnaire**

A structured online questionnaire was developed using Google Forms to collect primary data from professionals working in climate change, climate adaptation, climate finance, sustainable development, disaster risk reduction, and related sectors in Bangladesh. The questionnaire comprised a combination of multiple-choice questions, likert-scale items, checkbox questions, and a limited number of open-ended questions to capture respondents' perspectives and experiences. In total, 25 questions were developed based on research objectives, an extensive review of relevant academic literature, policy documents, and institutional reports on climate finance and climate adaptation (Appendix B).

To ensure a logical flow and facilitate ease of response, the questionnaire was organized into six sections: (i) respondent profile; (ii) experience with climate finance and climate adaptation; (iii) contributions of climate finance to adaptation outcomes; (iv) challenges and gaps in climate finance delivery; (v) future of climate finance; and (vi) pathways for strengthening climate finance beyond 2030. The questionnaire required approximately 30-45 minutes to complete and was distributed electronically through professional email lists, LinkedIn, Facebook groups, institutional networks, and referrals from participants.

- **Key Informant Interviews**

To obtain deeper insights into climate finance governance and climate adaptation implementation, semi-structured KIIs were conducted with experts representing government agencies, donor organizations, non-governmental organizations (NGOs), research institutions, academia, and development organizations. These participants were selected based on their professional expertise and direct involvement in climate finance, climate adaptation, policy formulation, and project implementation in Bangladesh.

Each interview lasted approximately 30–45 minutes and was conducted online according to participants' availability. All interviews were conducted in English. Prior to each interview, participants were informed about the purpose of the study and their voluntary participation, and informed consent was obtained. With participants' permission, the interviews were audio-recorded solely for transcription and analysis. A semi-structured interview guide with 16 questions was developed based on the study objectives and findings from the literature review (Appendix C). Follow-ups and probe questions were asked during the interview to dig deeper into the context (Mashuri et al., 2022).

The discussion focused on key themes including climate finance and climate adaptation priorities in Bangladesh, the effectiveness of climate finance in supporting adaptation, governance and institutional challenges, financing gaps, innovative financing mechanisms, donor priorities, major achievements, and future pathways for strengthening climate finance beyond 2030.

As there were no targeted sample sizes for the survey and KII, the data collection concluded when the theoretical saturation reached which means no new information was found from the participants (Anjum et al., 2024). Rahimi and Khatooni (2024) demonstrate that thematic saturation is typically reached at a point where additional interviews produce no substantively new themes or insights, rather than statistical representativeness.

3.4.2 Secondary Literature Selection using the PRISMA Framework

To ensure a comprehensive and transparent review process, a structured literature search was conducted to identify relevant academic studies, policy documents, government publications, and reports related to climate finance, climate adaptation and SDG 13. The literature search and

selection process was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework, ensuring a systematic and transparent literature selection process (Page et al., 2021b; Sohrabi et al., 2021).

A systematic search was conducted across electronic databases, including Scopus, Google Scholar, ScienceDirect, ResearchGate, and SpringerLink, as well as publications from institutions such as the Government of Bangladesh, UNFCCC, IPCC, OECD, UNDP, and World Bank. Keywords included *climate finance*, *climate adaptation*, *adaptation finance*, *Bangladesh*, *SDG 13*, *National Adaptation Plan*, climate budgets, *Nationally Determined Contributions*, LDC, *and future pathways,* using Boolean operators such as AND and OR, to refine the search and improve the retrieval of relevant publications.

The selection process followed the four stages of the PRISMA framework: identification, screening, eligibility, and inclusion (Sultana et al., 2023). At the identification stage, literature was selected using the keyword search. During the screening stage, titles and abstracts were reviewed to determine whether the publication addressed at least one of the study objectives. Publications that did not contribute to the research objectives were excluded. During the eligibility stage, the relevance of each publication's findings to the study objectives was assessed. Publications supporting only one objective were classified as low relevance, while those contributing to two or more objectives were classified as high relevance. This assessment helped prioritize literature that provided stronger support for the overall research objectives.

The review focused literatures published between 2015 and 2025, written in English, and included studies relevant to Bangladesh, while international literature was also considered where it provided applicable conceptual or policy insights (Sultana et al., 2023). Following screening and eligibility assessment, 34 publications were selected for detailed analysis.

The selected literature was organized in Microsoft Excel according to key themes, including climate finance, adaptation policies, governance challenges, sustainable development, and future pathways beyond 2030. The overall literature selection process is presented in the PRISMA flow diagram in Figure 3.1.

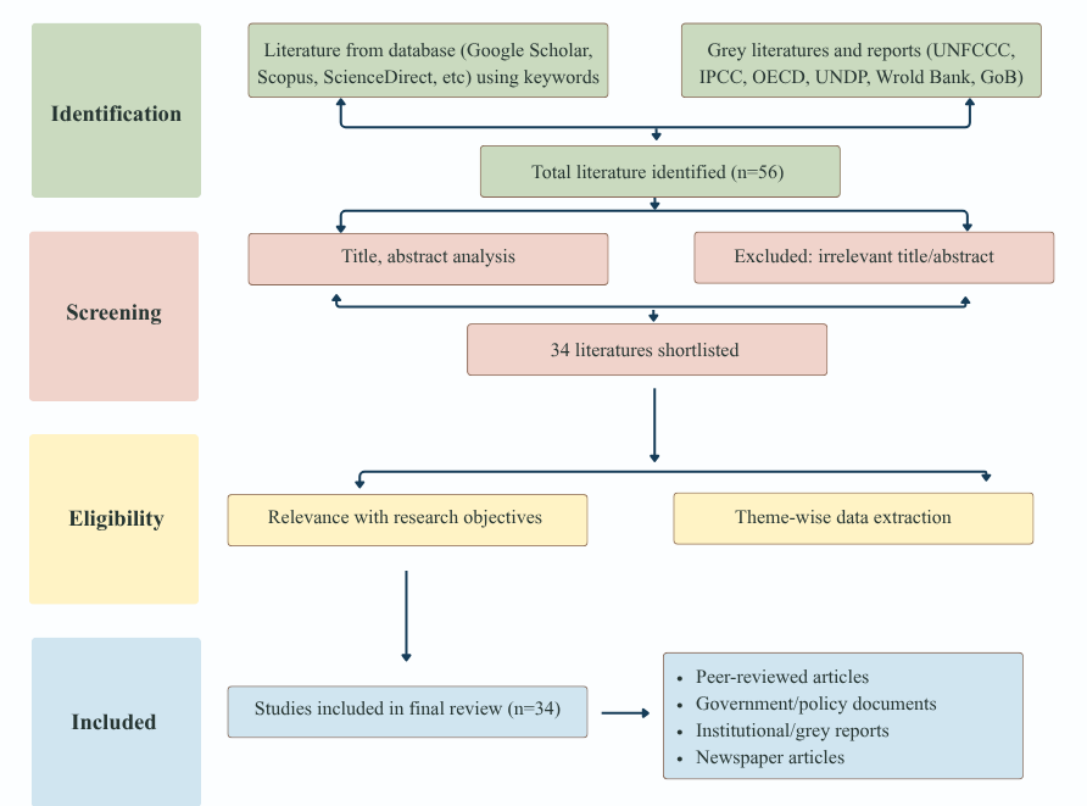


Figure 3.1 Literature selection process using PRISMA Framework

3.5 Data Analysis Techniques

The study comprised a combination of descriptive analysis, inductive content analysis, and thematic analysis to examine data collected from the primary and secondary sources (Braun & Clarke, 2006; Elo & Kyngäs, 2008). The integration of these analytical techniques enabled the study to identify patterns, compare findings across multiple data sources, and develop a comprehensive understanding of climate finance for climate adaptation in Bangladesh (Creswell & Creswell, 2018).

Data obtained from the online questionnaire was exported from Google Forms into Microsoft Excel for organization and analysis. Responses to closed-ended questions were analyzed using descriptive statistics, including frequencies, percentages, and graphical summaries, to describe

respondents' demographic characteristics and overall perceptions regarding climate finance and climate adaptation (Saunders et al., 2019). Responses to open-ended questions were analyzed qualitatively using inductive content analysis to identify recurring concepts and emerging issues (Elo & Kyngäs, 2008; Kyngäs et al., 2020).

Data from the KIIs were transcribed following the completion of each interview (Miles et al., 2014). Initially, the data were read repeatedly to achieve familiarity with the content in accordance with thematic analysis (Braun & Clarke, 2006) and inductive content analysis (Elo & Kyngäs, 2008). Meaningful words, phrases, and statements relevant to the research objectives were identified and noted (Elo & Kyngäs, 2008; Miles et al., 2014). Similar codes were subsequently grouped into broader categories based on conceptual similarities (Vears & Gillam, 2022). These categories were then refined into emerging themes representing key issues related to climate finance governance, adaptation effectiveness, institutional challenges, financing mechanisms, and future pathways beyond 2030.

Thematic analysis was further employed to interpret and organize the coded data into coherent themes that reflected participants' experiences, perceptions, and recommendations (Sultana et. al., 2023). The themes were developed inductively, allowing patterns to emerge directly from the data rather than being predetermined by existing theoretical frameworks (Braun & Clarke, 2006; Clarke et al., 2015). The findings from the questionnaire, KIIs, and document review were subsequently compared through methodological triangulation to identify areas of convergence and divergence across the different sources of evidence (Flick, 2018; Creswell & Creswell, 2018). This analytical process enhanced the credibility, validity, and robustness of the study by corroborating findings from multiple methods (Morgan, 2024). Microsoft Excel was used throughout the analysis process to organize datasets, manage coding, categorize emerging themes, compare findings across data sources, and generate descriptive tables and figures (Miles et al., 2014; Saldaña, 2021).

3.6 Ethical Considerations

Ethical considerations were integrated throughout the research process to ensure the protection of participants and the integrity of the study. Ethical approval for this research was obtained from the Department of Social Sciences and Humanities, Independent University, Bangladesh (IUB) prior to data collection (Appendix A).

Participation in both the online questionnaire and Key Informant Interviews was entirely voluntary. Before participating, respondents were provided with information regarding the objectives of the study, the nature of their participation, the expected duration, and their rights as research participants. Informed consent was obtained from all participants. To maintain confidentiality, no personal identifiable information is disclosed in the thesis or any resulting publications unless explicit permission has been granted by the participant. Interview recordings were made only with prior consent and solely for transcription purposes. All digital recordings, transcripts, survey responses, and research documents are securely stored and accessible only to the researcher and academic supervisor. The study posed minimal risk to participants. Nevertheless, participants were informed that they could refrain from discussing any issue they considered sensitive or confidential.

3.7 Limitations of the research

The study faced several limitations related to primary data collection. The use of purposive and convenience sampling may have limited the representativeness and generalizability of the findings. The number and diversity of respondents were also constrained by time and participant availability. As the survey was conducted through Google Forms using open-ended questions, the depth and quality of responses varied among participants. In addition, the findings reflect respondents' professional experiences and perceptions and may therefore contain some degree of subjective or response bias.

The study also faced limitations related to secondary data and literature. The availability of Bangladesh-specific literature on climate finance and SDG 13 was relatively limited, while differences in definitions, indicators, reporting methods, and data sources made direct comparison across years and institutions challenging. The literature selection and relevance assessment also involved researcher judgment, which may introduce some degree of selection bias despite following the PRISMA framework.

Finally, the study's future pathways beyond 2030 are subject to uncertainty. Future climate finance availability depends on international commitments, domestic fiscal conditions, economic changes, policy priorities, and global climate negotiations. Therefore, the projected pathways should be understood as indicative scenarios rather than precise predictions. To strengthen the findings,

primary data were triangulated with relevant secondary literature, policy documents, and climate finance reports.

3.8 Methodological Framework

Figure 3.2 summarizes the methods and analysis techniques used to conduct this study, linking the research objectives with the data sources, collection methods, and analytical techniques used. It summarizes how primary and secondary data were collected, analyzed, and integrated to assess past trends, present gaps, and future pathways for climate finance in Bangladesh.

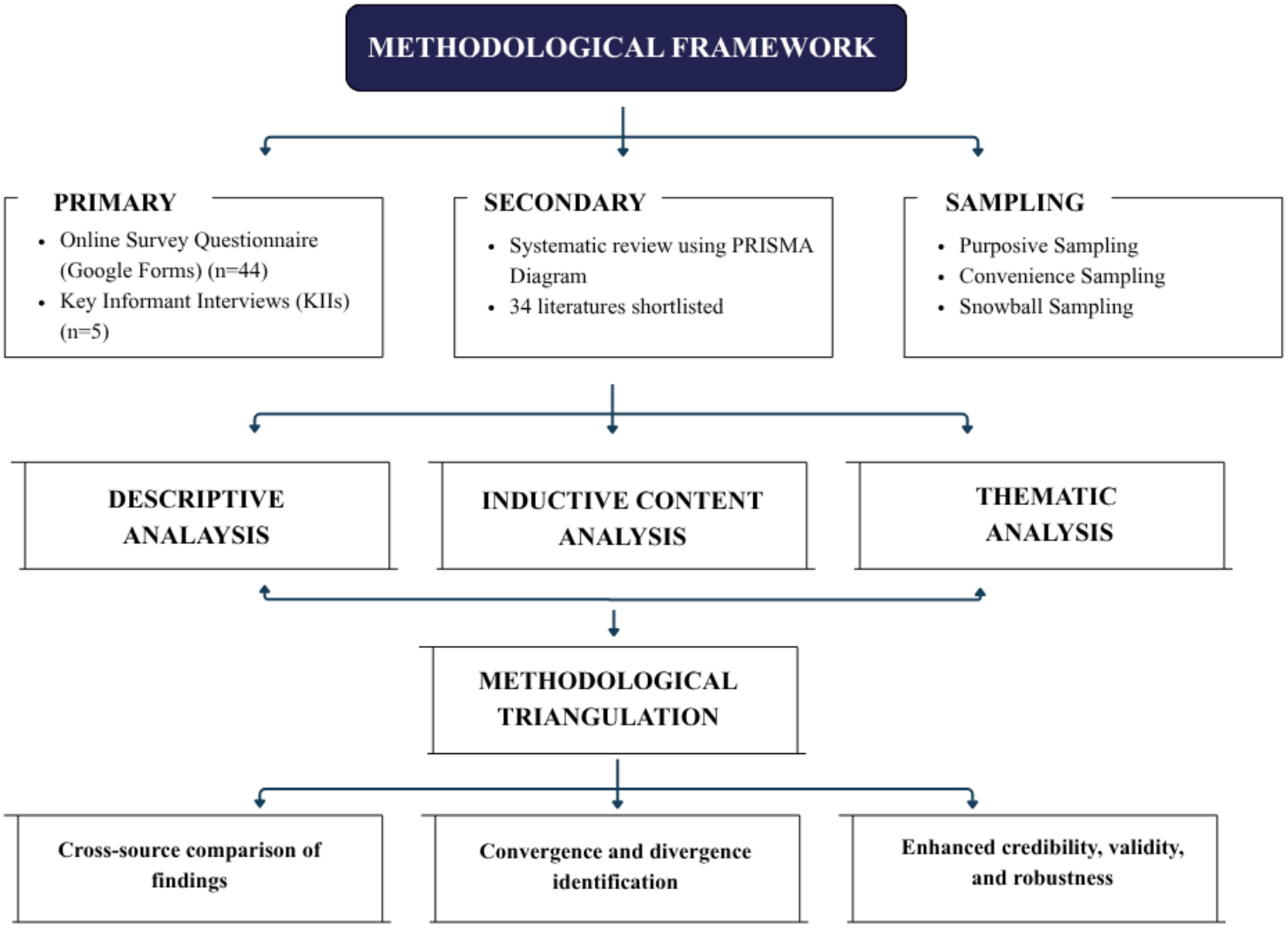


Figure 3.2: Methodological Framework for this Study

Chapter 4: Findings and Discussion

4.1 Introduction

This chapter presents and discusses the key findings of the study on climate finance and climate adaptation in Bangladesh. It addresses the main research question and three sub-questions concerning climate finance trends between 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025), financial, institutional and governance barriers affecting adaptation finance, and future climate finance pathways beyond 2030. The findings are based on 44 valid survey responses from professionals working in climate finance, climate adaptation, development and related fields, complemented by 5 Key Informant Interviews (KIIs) with experienced sector professionals. Descriptive statistics and inductive content analysis are used to summarize the survey findings, while KII responses are thematically analyzed to provide deeper contextual insights. The findings are presented thematically according to the three research objectives and triangulated with relevant literature reviewed in Chapter 2.

4.2 Profile of the Respondents

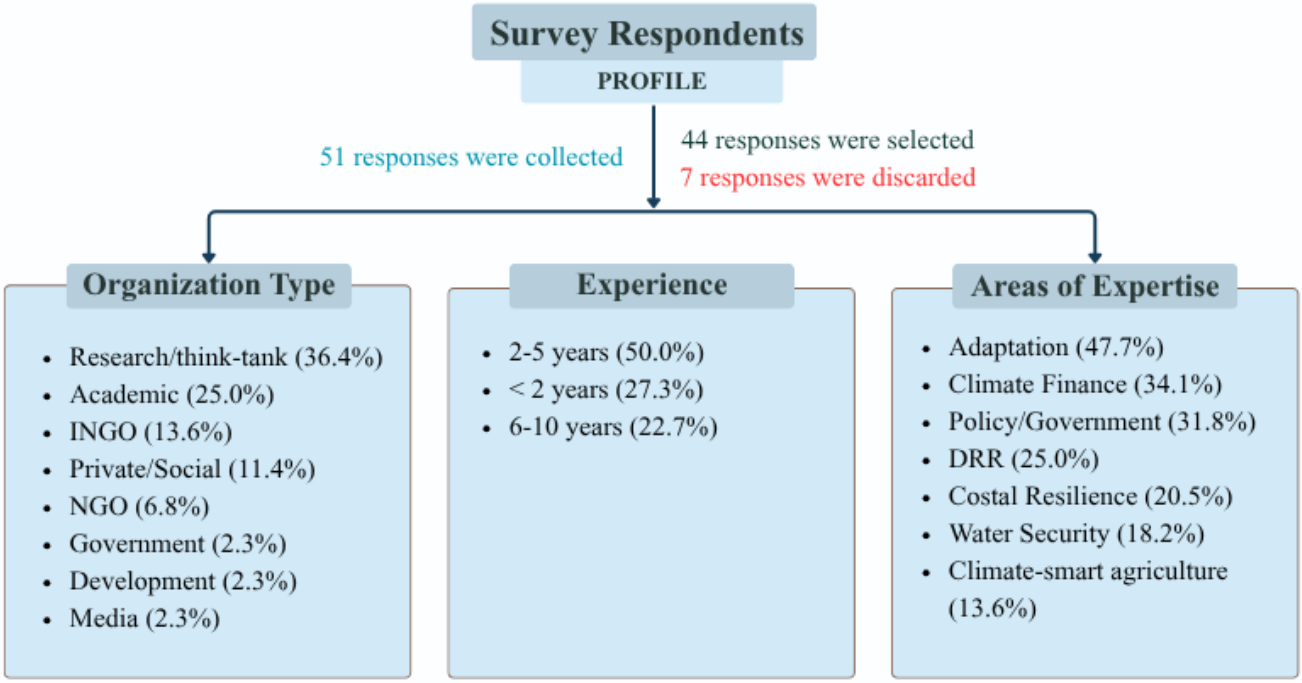
The primary data for this study were collected through two complementary sources: a structured questionnaire survey and Key Informant Interviews (KIIs). Together, these two sources provide both a broader practitioner perspective and in-depth expert perspectives on the study's research objectives.

4.2.1 Survey Respondents

A total of 44 responses out of 51 responses were retained for analysis and 7 entries were excluded after applying the inclusion criteria described in Section 3.3.3. The respondents represented a range of organizations and professional backgrounds within Bangladesh's climate and development sector. Their profiles were examined across four main dimensions: organization type, professional designation, years of experience, and areas of thematic expertise.

As shown in Figure 4.1, research organizations and think-tanks constituted the largest group (36.4%), followed by academic organizations (25.0%), international NGOs (13.6%), private sector and social enterprises (11.4%), NGOs (6.8%), and government, development partners, and media

institutions (6.8%). Half of the respondents (50.0%) had 2-5 years of experience in climate and development sector, while 27.3% have fewer than two years, and 22.7% have six to ten years (Figure 5.1). The respondents also represent diverse areas of professional expertise. Since multiple responses were permitted, many participants reported working across several thematic areas



simultaneously. Climate adaptation was the most frequently reported area of work (47.7%), followed by climate finance and project management (34.1%), climate policy and governance (31.8%), disaster risk reduction (25%), coastal resilience (20.5%), water security (18.2%), and climate-resilient agriculture (13.6%). This diversity of expertise strengthens the study by incorporating perspectives from professionals engaged in different sectors of climate adaptation planning, implementation, financing, and policy development.

Figure 4.1: Profile for survey respondents

4.2.2 Key Informant Interviews (KII) Respondents

The survey findings were further supported by five Key Informant Interviews, conducted with experienced professionals working directly in climate finance, climate adaptation, policy, research, and development practice. All five KII participants had more than five years of professional

experience in relevant fields and were selected for their direct knowledge and practical engagement with Bangladesh's climate finance and adaptation landscape, as outlined in Section 3.3.3. The KII participants represented different institutional and professional perspectives as shown in Table 4.1.

KII Code	Role and experience in climate finance or climate governance in Bangladesh	How did he/she contribute
KII-1	Works closely with the Green Climate Fund (GCF) and the Government of Bangladesh, supporting country readiness, pipeline development, policy formation, and mainstreaming climate finance across ministries and sectors.	Provides insights into GCF–government relations, access to international climate finance, project pipeline development, and policy mainstreaming.
KII-2	Works in research and advocacy, with a focus on climate finance and climate adaptation in Bangladesh.	Provides a research and advocacy perspective on climate finance trends, adaptation, and related policy issues.
KII-3	An independent climate change consultant with 15–20 years of experience, specializing in climate adaptation, biodiversity conservation, and nature-based solutions. He has also tracked Bangladesh's national climate budget for the past 5–6 years.	Provides extensive insights into national climate budget trends, climate finance allocation, adaptation, nature-based solutions, and financing gaps.
KII-4	A development practitioner with extensive experience in climate adaptation, resilience, livelihoods, and private-sector engagement, particularly through MSMEs and donor-fundsed programmes.	Provides an implementation-level perspective on how climate finance reaches communities, including MSME engagement, livelihood adaptation, institutional challenges, and local-level implementation.
KII-5	Economist and development studies expert with experience in development policy, SDGs, climate finance, and public budgeting. His work connects climate finance with	Provided insights into climate budgeting, financing allocation and tracking, policy implementation, and the translation of climate finance into adaptation outcomes.

	Bangladesh's development planning and budgetary processes.	

Table 4.1: Profile of key informants

4.3 Climate Finance Trends and Adaptation Outcomes

This section seeks to answer research question 1 by examining the trends and patterns of climate finance supporting climate adaptation in Bangladesh across the 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025) periods, drawing on survey and KII questions (Appendix B and C). Rather than presenting each question independently, findings are synthesized into four thematic areas: respondents' engagement with climate finance mechanisms; perceived availability and evolution of finance since 2015; adaptation outcomes supported by climate finance; and contributions to SDG 13.

4.3.1 Engagement and Familiarity with Climate Finance Mechanisms

A strong majority of respondents (Q. B1), 39 out of 44 (88.6%), confirmed that they or their organizations have implemented projects supported by climate finance, while five respondents (11.4%) were uncertain. For Q. B2, the Green Climate Fund (GCF) and multilateral development banks (MDBs including the World Bank, ADB, and JICA) emerge as the two most widely recognized financing mechanisms, cited by 29 (65.9%) and 30 (68.2%) respondents respectively. Several respondents selected familiarity more than three. The Bangladesh Climate Change Trust Fund (BCCTF) is familiar to 20 respondents (45.5%), followed by microfinance for climate resilience is equally recognized by 20 respondents (45.5%). The Adaptation Fund and BCCRF are each recognized by 14 respondents (31.8%), while bilateral channels, private commercial bank green finance, and GEF are recognized by fewer respondents, suggesting relatively limited

practitioner exposure to these channels (Figure 4.2).

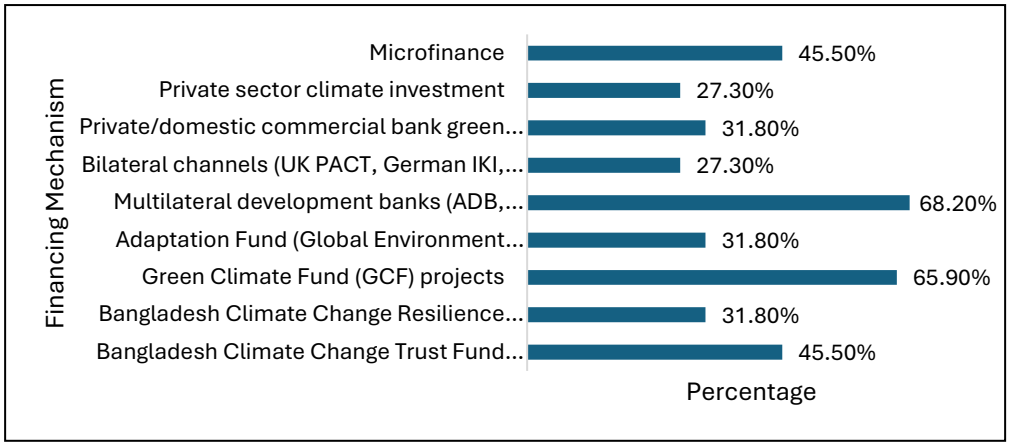


Figure 4.2: Climate finance mechanisms recognized by survey respondents

However, KII respondents deepen this picture with critical institutional analysis. KII-1 notes that Bangladesh has shifted from dependence on bilateral and MDB grants toward a diversified instrument palette such as loans, equity, and guarantees from multilateral funds, as the country has repositioned itself from 'vulnerable country' to 'adaptation champion', consistent with observations by Hassan et al. (2025). However, the diversification of financing instruments also introduces greater complexity in accessing and managing climate finance. KII-3 notes that the government has tracked the climate budget through Integrated Budget and Accounting System (IBAS) since 2017–18, providing systematic continuity. Even though the proportion of the national budget allocated to climate finance has remained stable at approximately 5.5%, which is consistent but insufficient in ambition (Irfanullah, 2026).

4.3.2 Availability and Evolution of Adaptation Finance

When asked to characterize availability for adaptation projects in Bangladesh (Q. B3), 22 respondents (50.0%) describe it as 'limited' and 14 (31.8%) as 'highly insufficient'. Only 4 respondents (9.1%) consider finance 'somewhat sufficient,' while three (6.8%) are unsure. These findings reflect the structural financing gap documented in other studies (Hassan et al., 2025; Irfanullah, 2026). KII-1 similarly noted that although the proposed climate budget increased to Tk 51,746 crore, the allocation remains substantially below Bangladesh's estimated annual climate finance requirement of approximately USD 30 billion, as documented in (Irfanullah, 2026). KII-1

also articulates the gap in concrete terms, *'Limited fund with huge gaps in action, we need 26 billion USD per year for climate actions whereas we can manage only 1-2 billion yearly.'*

When asked whether access to adaptation finance has improved since 2015 (Q. C4), 18 (40.9%) describe it as 'poorly aligned with Bangladesh's needs', 14 (31.8%) as 'available but difficult to access', and 8 (18.2%) as 'insufficient in volume'. Taken together, 91% of respondents identify a fundamental problem with either the volume, alignment, or accessibility of climate finance. KII-4 also stated that findings that converge with Iacobuţă et al. (2022), who demonstrates that donor-recipient alignment has not improved since the Paris Agreement, and with Bößner et al. (2026), who documents that Bangladesh's climate finance landscape lacks a strong enabling environment. KII-2 observes a more nuanced dynamic, *'Access has increased but so have barriers and limitations.'*

The comparison between the 7th FYP (2016–2020) and 8th FYP (2021–2025) periods (Q. D10) reveals an improvement in the view of the majority, but with significant dissent. 21 respondents (47.7%) indicate that climate finance availability, effectiveness, and adaptation outcomes 'slightly improved' between the two periods, while 11 (25.0%) report the situation stayed about the same. However, 5 respondents (11.4%) indicate it 'slightly worsened' and one reports a 'significant worsening', while 5 (11.4%) were uncertain and only one observed 'significant improvement'. Additionally, KII respondents validate but critically contextualize this trajectory. KII-1 states the 8th FYP period was '*more organized and directly focused on climate action'* compared to the earlier phase.

KII-2 described the overall evolution as relatively stable but highlighted the need for greater innovation within the existing institutional framework. KII-3 introduces a countervailing structural critique: the same 25 ministries have been tracked in the national climate budget framework for nine consecutive years without revision, including ministries that receive less than 0.15% of the climate budget with no critical review, as stated in (Irfanullah, 2026). KII-4 emphasized that the 8th Five-Year Plan reflects greater implementation experience, more comprehensive adaptation programming, and stronger attention to resilience, sustainability, and community participation. However, the respondent cautioned that increased financial availability has not necessarily translated into improved effectiveness, as governance, coordination, institutional capacity, and long-term sustainability remain important constraints. Figure 4.3 shows the difference between 7th

FYP (2016–2020) and 8th FYP (2021–2025) periods and section 4.3 will discuss the future trend of adaptation finance in achieving adaptation goals by 2030 and beyond.

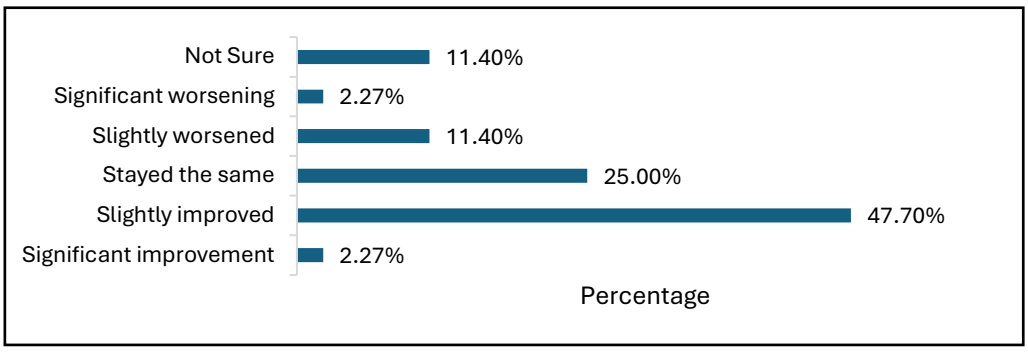


Figure 4.3: Survey respondents' perceptions on the difference between 7th FYP (2016–2020) and 8th FYP (2021–2025) periods

4.3.3 Adaptation Outcomes and Climate Finance-Supported Initiatives

As shown in Table 4.2, respondents identified a range of adaptation outcomes supported by climate finance-funded projects in Bangladesh (Q. C6). Climate-smart agriculture emerges as the most widely recognized outcome, cited by 35 respondents (79.5%). Participants were asked to select multiple options. Climate-resilient livelihoods and disaster preparedness are each cited by 28 (63.6%), followed closely by improved community resilience (61.4%). Improved infrastructure and institutional capacity building are cited by 16 respondents (36.4%) respectively, while ecosystem restoration is the least frequently cited at 13 respondents (29.5%).

Adaptation Outcome	n	% of Sample
Climate-smart agriculture	35	79.5
Climate-resilient livelihoods	28	63.6
Disaster preparedness	28	63.6

Improved community resilience	27	61.4
Improved infrastructure	16	36.4
Institutional capacity building	16	36.4
Ecosystem restoration	13	29.5

Table 4.2: Adaptation outcomes attributed to climate finance-supported projects

The survey findings indicate that climate-smart agriculture is perceived as a major recipient of adaptation finance. However, Khan and Mirza (2022) identified comprehensive disaster management, followed by flood management and riverbank erosion, as the areas likely to require and attract the largest share of adaptation financing. This divergence highlights a potential difference between current financing patterns and projected adaptation financing needs in Bangladesh. KII-4 further highlighted Bangladesh's progress in climate-resilient agriculture through the adoption of improved agricultural technologies and approaches. The respondent emphasized that adaptation is increasingly moving beyond a narrow focus on physical infrastructure towards strengthening livelihoods, building local capacities, and enabling communities to develop longer-term adaptive capacity. In response to the low recognition of ecosystem restoration, concerns were raised by Tashmin (2016), who demonstrates that existing climate finance instruments in Bangladesh have given limited attention to ecosystem-based adaptation. Similarly, Majumdar and Matsui (2025) note that the Green Climate Fund has supported only a limited number of dedicated mangrove projects globally, despite the importance of mangrove ecosystems such as the Sundarbans for coastal resilience. The survey evidence confirms that this exclusion is not merely a policy-level observation but rather, it translates into a practitioner-perceived absence of ecosystem outcomes from climate finance portfolios.

To contextualize these perceived outcomes, respondents identified a range of climate finance-supported initiatives as examples of successful adaptation interventions in Bangladesh (Q. C7) (Figure 4.4). The projects covered several dimensions of adaptation, including locally led adaptation, climate-resilient infrastructure, livelihood development, disaster preparedness, nature-based solutions, and community resilience.

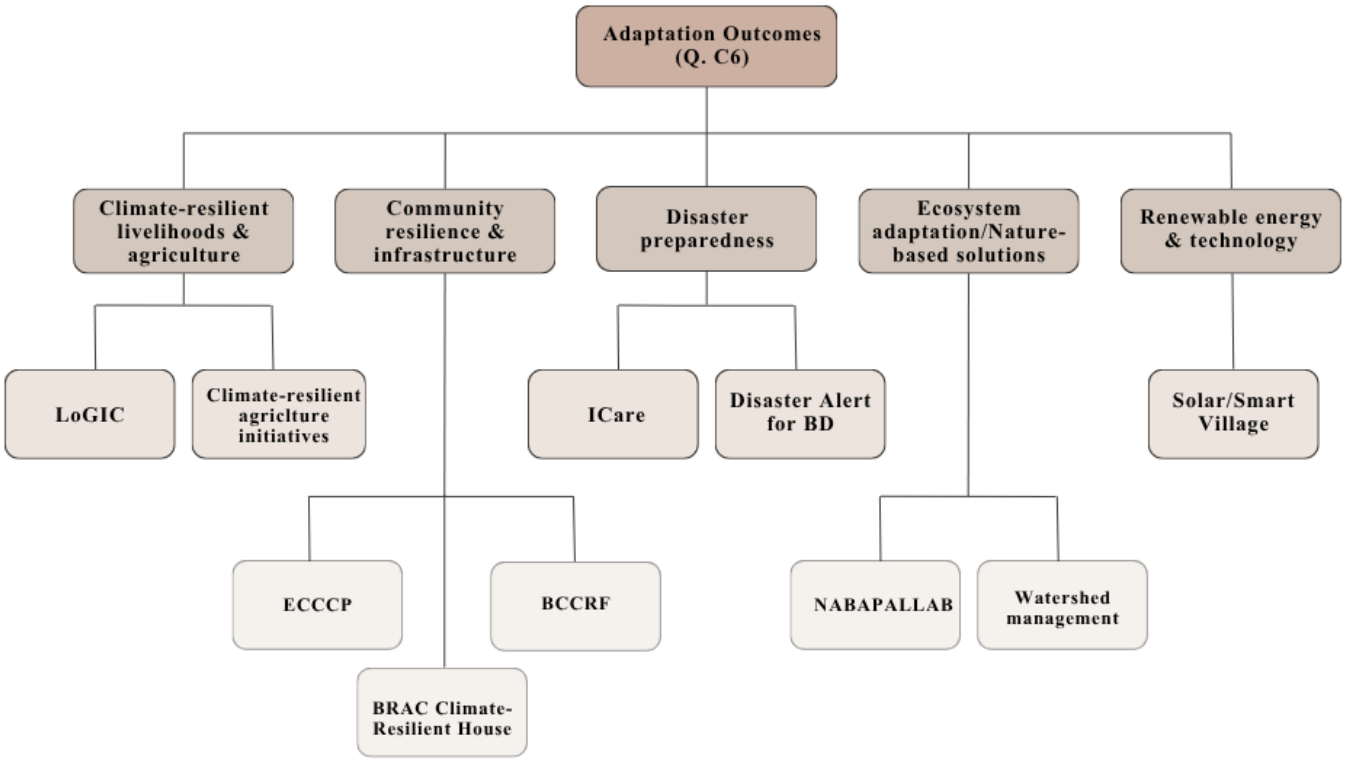


Figure 4.4: Climate Finance-Supported Projects perceived by Survey Respondents

Among the initiatives mentioned (Figure 4.4), the Local Government Initiative on Climate Change (LoGIC) was cited the most, with respondents highlighting its emphasis on locally managed adaptation finance, community participation, climate-resilient livelihoods, small-scale infrastructure, and strengthening local government capacity. Other frequently identified initiatives included the Extended Community Climate Change Project (ECCCP), particularly its flood-related interventions; the Bangladesh Climate Change Resilience Fund (BCCRF), which was associated with coastal embankments, cyclone preparedness, and community-based adaptation; and the GCF-supported coastal adaptation project implemented by UNDP, which respondents associated with resilient livelihoods and improved access to safe drinking water. Respondents also identified initiatives such as BRAC's Climate-Resilient Houses, Friendship's Solar/Smart Village, ICare's

digital early-warning initiative, and the NABAPALLAB Nature-Based Adaptation project, demonstrating that climate finance-supported adaptation extends beyond physical infrastructure to include technology, ecosystem restoration, livelihood resilience, and disaster preparedness. Case study 1 and 2 (Section 3.3.4) shows two projects as successful initiatives, proving that climate finance has supported climate adaptation in Bangladesh.

Case Study 1: Local Government Initiative on Climate Change (LoGIC)

The Local Government Initiative on Climate Change (LoGIC) is a multi-donor initiative led by the Government of Bangladesh in partnership with UNDP, UNCDF, the European Union, Sweden and Denmark. The initiative aims to strengthen the capacity of vulnerable communities and local government institutions to plan and finance locally led climate adaptation. It was selected as a case study because it was the most frequently identified successful initiative by survey respondents, particularly for its community-based approach and direct delivery of adaptation finance (UNDP, 2023).

Significant achievements include:

- Directly benefited approximately 1.1 million vulnerable people, of whom 63% were women, through grants and capacity-building.
- Disbursed USD 9.72 million to 35,000 vulnerable beneficiaries for climate-adaptive livelihood options.
- Supported 72 local government institutions with USD 7.91 million to implement 909 climate-resilient community schemes, benefiting around 300,000 people.
- Developed a Climate Vulnerability Index to support climate-sensitive resource allocation by local governments.
- Strengthened women's financial inclusion, with 35,000 beneficiaries opening individual or group bank accounts, and supported women-led businesses.
- Established a locally led adaptation financing model that reduces transaction costs and directs a substantial share of funds directly towards vulnerable households and communities.

The project is considered successful by respondents because it demonstrates how climate finance can be directly translated into community-level adaptation outcomes rather than remaining primarily at the institutional or policy level. Its emphasis on local government, community participation, climate-resilient livelihoods, women's empowerment, and locally led decision-making makes LoGIC a strong example of how climate finance can strengthen adaptive capacity and contribute to SDG 13 in Bangladesh.

Case Study 2: Extended Community Climate Change Project-Drought (ECCCP)

The Extended Community Climate Change Project–Drought (ECCCP-Drought), implemented by PKSF with 18 implementing partners across 14 drought-prone upazilas in Rajshahi, Naogaon and Chapainawabganj, focuses on strengthening community resilience to drought through water security, groundwater recharge and climate-resilient agriculture. It was identified by respondents as an important climate adaptation initiative, particularly because it addresses localized water and agricultural vulnerabilities (PKSF, 2022)

Significant achievements include:

- 130 ponds re-excavated and 43 km of canals re-excavated to improve surface-water availability.
- 1,200 rooftop Managed Aquifer Recharge (MAR) systems installed to support groundwater recharge.
- 8,242 farmers trained in drought-tolerant fruit and crop cultivation.
- 100 NGOs trained on climate change and development.
- Promotes low-water-demand crops, with the potential to reduce irrigation requirements by up to 70%.
- Strengthens local institutions and community groups to plan and manage climate-resilient interventions.
- Improves access to safe water, thereby helping reduce the disproportionate water-collection burden on women.

The project is considered a relevant example of climate finance-supported adaptation because it translates financing into tangible community-level outcomes in water management, agricultural resilience and institutional capacity. Unlike LoGIC, which demonstrates locally led financing and governance, ECCCP-Drought illustrates how climate finance can directly address drought-induced water scarcity and livelihood vulnerability, particularly among rural farming communities.

The examples include locally led adaptation, livelihood diversification, early-warning systems, nature-based solutions and renewable-energy technologies. However, the responses also indicate that perceptions of "success" vary: some respondents identified specific projects and measurable community benefits, while others questioned whether reported project outputs necessarily translate into long-term adaptation outcomes. The findings therefore indicate that the effectiveness of climate finance should be assessed not only through the delivery of project outputs, but also through the durability, scalability, and long-term adaptation benefits generated for vulnerable communities, a finding consistent with the monitoring failures documented by Sarker et al. (2021) and the political economy of climate finance reporting critiqued by Shah et al. (2025). The KII findings provide further context to these practitioner perceptions. KII-4 particularly emphasized the growing importance of livelihood-centred and locally led adaptation, noting that adaptation is increasingly moving beyond infrastructure-based interventions toward strengthening livelihoods, local capacities, and community ability to respond to climate risks independently. KII-5 further emphasized several areas of progress, including climate-resilient infrastructure, water security, climate-smart agriculture, disaster risk reduction, ecosystem-based adaptation, and livelihood diversification. He particularly highlighted improvements in early warning systems, cyclone preparedness, salinity control, and climate-resilient agricultural practices, suggesting that climate

finance has contributed to both physical resilience and community-level adaptation. This area of progress is supported by secondary studies such as (Sarker et al., 2022; Sultana et al., 2022; Anjum et al., 2024; Saddaf et al., 2024). However, the concerns raised by respondents regarding the gap between project outputs and long-term impacts also reinforce the broader institutional and governance challenges, which will be discussed further.

4.3.4 Climate Finance Contributions to SDG 13

Survey question (Q. C8) asked respondents to rank the SDG 13 and its sub-targets most directly supported by current climate finance mechanisms. SDG 13.2 (Integrate climate change measures into national policies, strategies and planning) is the most frequently cited sub-target, appearing in the responses of 36 respondents (81.82%). SDG 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters) follows with 32 respondents (72.73%) and SDG 13.3 (Improve education, awareness-raising and human and institutional capacity) with 25 (56.82%). Large majority of respondents places SDG 13.1 and SDG 13.2 in first or second position and makes SDG 13.3 consistently as a third-ranked target. SDG 13.a (Implementing the USD 100 billion commitment from developed countries) and 13.b (Promoting mechanisms for raising capacity in LDCs) appear in a minority of responses and are generally ranked third or lower. This suggests that respondents primarily associate climate finance with domestic policy integration, adaptation implementation and capacity development. In contrast, the relatively limited recognition of SDG 13.a, which directly addresses the international climate-finance commitment to developing countries, indicates a potential disconnect between the international financing architecture and its perceived contribution at the national implementation level.

This finding is particularly significant given the broader literature on the role of international climate finance. Soergel et al. (2021) identify international climate finance as a key driver of sustainable development and argue that climate policies require complementary financial and social-policy interventions to translate ambition into wider SDG progress. From this perspective, the limited recognition of SDG 13.a in the survey is notable because international financial commitments ultimately underpin the resources available for achieving targets such as 13.1 and 13.2. GED (2025) notes that Bangladesh has established a relatively strong climate-policy architecture, including the NAP, BCCSAP, NDC and BCCTF, but continues to face inadequate climate finance and a substantial gap between required and available resources. Thus, the high

recognition of 13.2 alongside the relatively low recognition of 13.a may suggest that Bangladesh's climate finance discourse is more strongly connected to the policy and implementation dimensions of SDG 13 than to the international financing commitments required to enable them.

In practical terms, however, these targets are interconnected rather than independent. Progress towards 13.1 and 13.2 depends partly on the availability, predictability, and accessibility of adequate climate finance. The limited recognition of 13.a may therefore reflect a gap in how the financing architecture is understood at the practitioner level: respondents may directly observe the projects, policies, and adaptation outcomes supported by finance, while the international commitments and financial flows that make those interventions possible remain less visible. Iacobuţă et al. (2022) similarly identify weaknesses in the alignment between climate-related ODA and recipient countries' SDG priorities, while UNCTAD (2024) highlights the continuing gap between international climate-finance commitments and the scale of resources required by developing countries.

4.4 Financial, Institutional, Governance Barriers and Inclusiveness

This section addresses the second research question by identifying the major financial, institutional, and governance barriers affecting the effective delivery of climate finance for adaptation in Bangladesh. The analysis draws primarily on survey questions, which examine key implementation challenges (Q. D9), factors constraining the achievement of adaptation goals (Q. D11), and gaps between climate finance allocation and implementation on the ground (Q. D12). This section also further examines the impact of declining Official Development Assistance (ODA) (Q. D13), and the inclusiveness of climate finance across different vulnerable and marginalized groups (Q. E17). Rather than presenting these challenges separately by question, the findings are thematically categorized into financial, institutional, and governance barriers as shown in Figure 4.5.

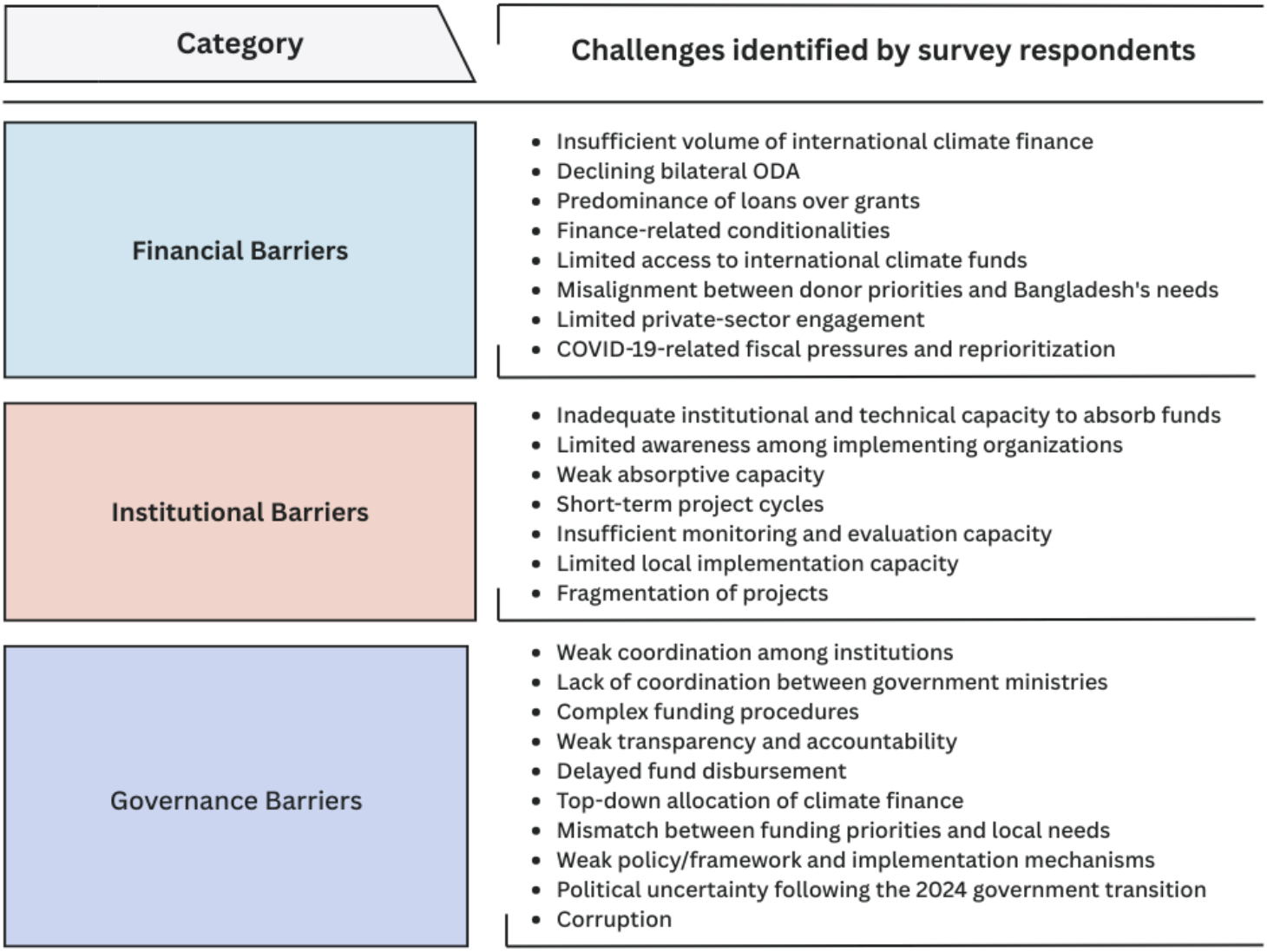


Figure 4.5: Challenges identified by survey respondents under financial, institutional, and governance barriers

4.4.1 Financial Barriers

The most prominent concern was the insufficient volume of international climate finance, identified by 28 respondents (63.6%) in Q. D11, reinforced by the predominance of loans over grants cited by 25 respondents (56.8%). Followed by the limited access to international climate funds identified by 21 respondents (47.7%), while 18 respondents (40.9%) highlighted declining

bilateral ODA as a further constraint, like other studies (Tan et al., 2026; Hassan et al., 2025). The role of the private sector also remains limited, with 28 respondents (63.63%) identifying insufficient private-sector engagement as a financial constraint in D11 and 19 respondents (43.8%) reporting the same in D9. In addition, 28 respondents (63.6%) identified the misalignment between donor priorities and Bangladesh's needs as a major constraint, indicating that the financial challenge concerns not only the quantity of finance available but also its source, structure, accessibility and alignment with national adaptation priorities (Iftekharuzzaman et al., 2025; UNCTAD, 2024; Iacobuţă et al., 2022). Respondents further identified finance-related conditionalities (8; 18.2%) and COVID-19-related fiscal pressures and reprioritization (15; 34.1%) as additional constraints. The open-ended responses in D12 similarly emphasized an overall financing gap, with some respondents noting that financial commitments often exceed the resources ultimately available for implementation. KII 4 provides further explanation that while the number of funding channels has grown post-Paris, competition for access has intensified, with smaller implementing organizations significantly disadvantaged by increasingly rigorous compliance, reporting, and proposal requirements, a challenge also identified by Bößner et al. (2026). Taken together, these findings suggest that Bangladesh's adaptation-finance challenge is multidimensional: insufficient funding, declining concessional resources, reliance on loans, limited private finance and donor-driven priorities collectively constrain the country's ability to finance adaptation at the scale required.

A separate question on understanding the impact of declining Official Development Assistance (ODA) is assessed (Q. D13). Respondents were asked to rate the severity of impact across five dimensions (Figure 4.3). Across all five areas, 'significant impact' is the modal response. On overall climate programme funding, 20 respondents (45.5%) report significant impact and six (13.6%) report severe impact. Adaptation project implementation shows a similar pattern, with 18 (40.9%) reporting significant and six (13.6%) severe impact. Community-level climate action receives the most severe combined assessment: 17 respondents (38.6%) report significant impact and seven (15.9%) severe impact. These findings suggest that declining ODA may affect not only the availability of climate finance at the national level but also its translation into adaptation activities at the project and community levels. In terms of Bangladesh, where ODA continues to play an important role in development financing despite its declining share of GDP (Khatun et al., n.d.) The Daily Star (2026) similarly notes that declining ODA may contribute to slower project

negotiations, implementation delays, and greater caution among lenders amid global economic and domestic uncertainties.

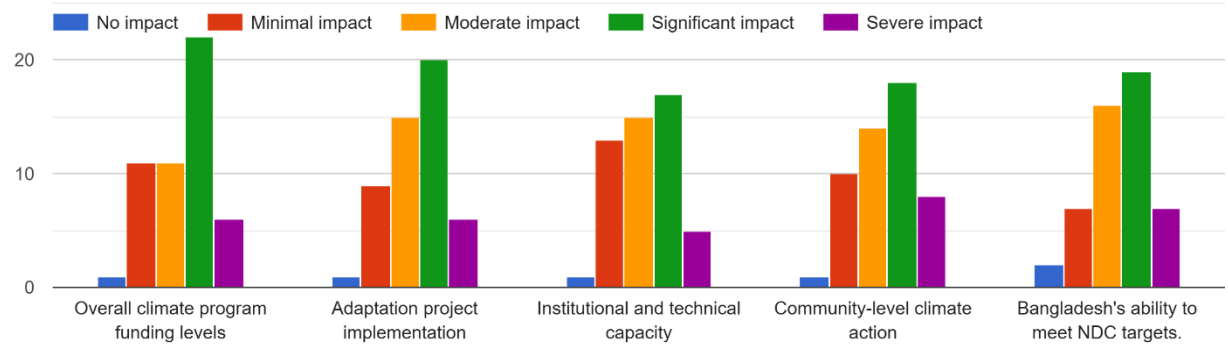


Figure 4.6: Perceived impacts on declining ODA and adaptation finance.

4.4.2. Institutional Barriers

Institutional and capacity limitations represent another major constraint identified across the survey responses. Inadequate institutional and technical capacity to absorb climate finance was the most frequently identified constraint in Q. D11, reported by 30 respondents (68.2%), indicating that the challenge extends beyond obtaining finance to the ability of institutions to effectively design, manage and implement climate-financed projects. This is consistent with Q. D9, where 23 respondents (52.3%) identified lack of technical capacity as a major challenge. The open-ended responses in Q. D12 further elaborate on this problem, particularly at the local government level. Respondents highlighted shortages of skilled personnel, weak project-management capacity and limited institutional preparedness to manage climate finance. Weak absorptive capacity was also identified as an important gap. In addition, short project durations, identified by 17 respondents (38.6%) in D9, were viewed as limiting the continuity and long-term sustainability of adaptation interventions. Limited awareness among implementing organizations was reported by 5 respondents (11.4%), but the qualitative responses suggest that awareness and institutional understanding remain relevant at the local level. Respondents also highlighted fragmented projects and multiple implementing institutions as factors that can dilute impact and make implementation more difficult.

KII-4 emphasized that the ability of climate finance to produce meaningful adaptation outcomes depends heavily on the capacity of local implementing organizations and institutions. From his

experience implementing donor-funded adaptation programmes, limited institutional capacity can affect project implementation even when funding has already been secured. He also highlighted the challenges faced by smaller organizations in meeting increasingly demanding donor compliance, reporting, and proposal requirements. KII-3 similarly highlighted institutional concerns within Bangladesh's climate-budget system, particularly the continued inclusion of the same 25 ministries in the climate budget framework over several years despite differences in their relevance and allocation levels. His observation, like a study of Irfanullah (2026), raises questions about whether institutional arrangements and climate-budget classifications are being periodically reviewed to reflect changing adaptation priorities. Overall, the findings indicate that institutional barriers operate alongside financial constraints: even when climate finance is secured, weaknesses in technical capacity, absorptive capacity, project continuity and institutional preparedness can limit the extent to which resources produce sustained adaptation outcomes.

4.4.3 Governance Barriers

Governance and access-related barriers emerged as particularly prominent across D9, D11 and D12. Lack of coordination between government ministries was the most frequently reported constraint in D11, identified by 31 respondents (70.5%), while 23 respondents (52.3%) in D9 identified limited coordination among institutions as a key challenge. A further 12 respondents (27.3%) identified lack of coordination between organizations or government agencies. These findings suggest that fragmentation across ministries, government agencies, donors, NGOs and implementing organizations can hinder the effective flow and utilization of climate finance. Complex and restrictive access procedures, including processes such as GCF accreditation, were identified by 28 respondents (63.6%) in D11, while 24 respondents (54.5%) in D9 reported complex funding procedures as a major challenge. Although only two respondents (4.6%) selected complex application/accreditation procedures as a separate option in D9, the much higher D11 response suggests that respondents may perceive access difficulties as part of a broader governance and institutional process rather than as accreditation alone. Monitoring, transparency and accountability were also major concerns, with 25 respondents (56.8%) identifying monitoring and accountability as a key challenge in D9. Similar findings were observed in (Islam et al., 2025; Chowdhury et al., 2021) The D12 responses reinforce this finding through references to weak monitoring and evaluation, delayed fund disbursement, bureaucratic procedures, corruption,

resource leakage and inadequate fund tracking. This result is supported by other studies (Anjum et al., 2024; Göçoğlu et al., 2025; Iftekharuzzaman et al., 2025). Furthermore, 27 respondents (61.4%) identified political uncertainty following the 2024 government transition as a factor constraining adaptation goals. The qualitative responses also point to a persistent top-down approach to allocation, whereby centrally determined or donor-driven priorities may not adequately reflect local climate vulnerabilities.

The political uncertainty associated with Bangladesh's 2024 government transition emerges as a contextually significant barrier cited by 59.1% of respondents (Q. D11). This finding adds to a dimension absent from secondary literature, which was largely written before the political developments of 2024. Several respondents in their open-ended responses reference institutional paralysis, delays in fund release, and uncertainty about programme continuation as direct consequences of the transition. This suggests that governance barriers in Bangladesh's climate finance system are not merely structural but are acutely context-dependent, with political discontinuity capable of reversing or stalling implementation progress built over multiple years.

KII-3 highlighted concerns regarding the governance and categorization of Bangladesh's climate budget as mentioned in (Irfanullah, 2026). KII-4 emphasized that smaller implementing organizations are particularly disadvantaged by increasingly complex compliance, reporting, and proposal requirements, demonstrating how governance and access procedures can create unequal access to climate finance. In addition, KII-1 explained that the increasingly diversified financing landscape requires organizations and government institutions to navigate different investment criteria, approval processes, and institutional requirements. However, these findings demonstrate that governance barriers affect multiple stages of climate finance delivery, from accessing and approving funds to coordinating institutions, disbursing resources, monitoring implementation and ensuring that finance reaches communities in accordance with local adaptation priorities.

Representative observations include the following:

'Funds still operating on a top-down approach. Lack of proper baseline surveying prior to implementation.'

"Funds flow through a top-down bureaucratic framework that fails to reflect diverse, hyper-local vulnerabilities."

The respondents' vocabulary such as top-down, red tape, coordination failure, corruption precisely mirrors the governance analysis of Bößner et al. (2026), who identify governance fragmentation, unclear mandates, and centralized decision-making as the defining barriers to effective climate finance in Bangladesh. The problem is therefore not only how much climate finance Bangladesh receives, but also how effectively that finance moves through the system, from international commitment and national allocation to institutional disbursement, local implementation and ultimately adaptation outcomes.

4.4.4 Equity and Inclusiveness of Adaptation Finance

There are many studies that adaptation finance comes through but does not reach the people in need. Therefore, respondents were asked to provide their perception in this matter (Q. E17). The findings reveal a systematic gradient: coastal communities are perceived as most included, while char communities and disabled persons are perceived as least included. Coastal communities were perceived as the most included group, with 25 respondents (56.8%) considering climate finance to be fully or fairly inclusive toward them, while 9 (20.5%) considered it somewhat inclusive and 10 (22.7%) perceived minimal or no inclusion. Youth and young people followed, with 15 respondents (34.1%) reporting full or fair inclusion, although 20 (45.5%) viewed their inclusion as only moderate. Women and girls were perceived as fully or fairly included by 13 respondents (29.5%), while 19 (43.2%) considered their inclusion somewhat adequate. In contrast, people with disabilities were perceived as the least included group, with only 3 respondents (6.8%) reporting full or fair inclusion, compared with 31 (70.5%) who perceived minimal or no inclusion. Similarly, Indigenous and ethnic minority communities recorded only 5 respondents (11.4%) reporting full or fair inclusion, while 29 (65.9%) perceived minimal or no inclusion. Ultra-poor and landless households also faced substantial exclusion, with only 6 respondents (13.6%) reporting full or fair inclusion and 24 (54.5%) perceiving minimal or no inclusion. Char communities showed a comparatively low level of inclusion, with 13 respondents (29.5%) reporting full or fair inclusion and 20 (45.5%) perceiving minimal or no inclusion (Figure 4.7).

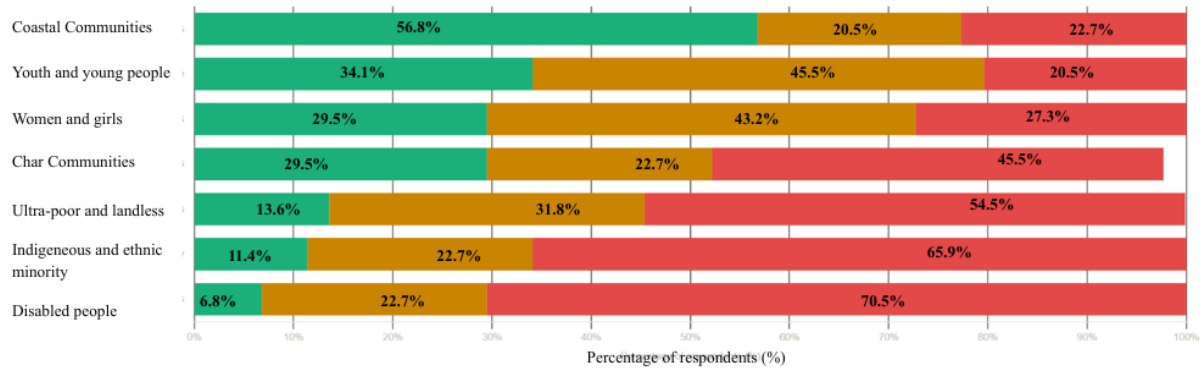


Figure 4.7: Perceived inclusiveness of climate finance for vulnerable groups

These qualitative observations confirm what Sarker et al. (2021) documented through structured community research: the institutional procedure for climate finance is formally complete at the national level but fails entirely at the community level. Overall, the findings suggest that climate finance is perceived to be more responsive to geographically recognized climate-vulnerable populations, particularly coastal communities, than to socially and economically marginalized groups, highlighting an important equity and inclusion gap in Bangladesh's climate finance system.

4.4.5 The Financing Gap: Structural Explanations

Sarwar (2025)'s article raises a stark financial reality, 'Bangladesh needs USD 29.3 billion annually to meet its combined adaptation and mitigation goals but can currently mobilize USD 2.76 billion, a shortfall of USD 26.5 billion.' In light to this, respondents were asked to select the best explanation for this financial gap (Q. E18).

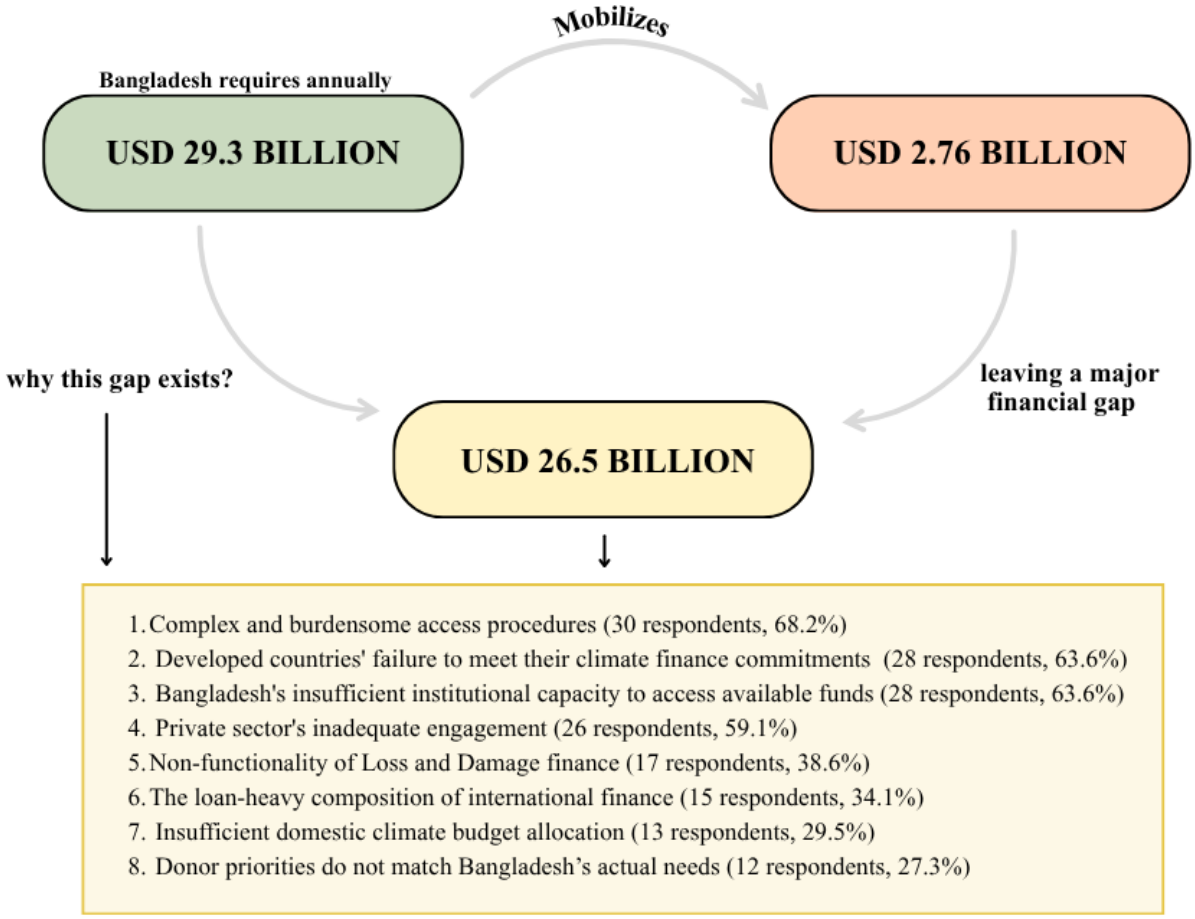


Figure 4.8: Why a financial gap exists in Bangladesh, according to survey respondents

Thirty respondents (68.2%) identified complex and burdensome access procedures as the most widely cited structural explanation, as illustrated in Figure 4.8. Developed countries' failure to meet their climate finance commitments is cited by 28 respondents (63.6%), and Bangladesh's insufficient institutional capacity to access available funds by an equal 28 respondents (63.6%). The private sector's inadequate engagement is cited by 26 respondents (59.1%), the non-functionality of loss and damage finance by 17 (38.6%), and the loan-heavy composition of international finance by 15 (34.1%). Donor priorities do not match Bangladesh's actual needs, cited by 13 respondents (29.5%), and insufficient climate budget allocation was selected by 12 respondents (27.3%).

Respondents do not attribute the financing gap primarily to a single cause but to a combination of structural failures in which international commitment inadequacy, domestic institutional

incapacity, access procedure complexity, and private sector absence complement one another (Sarwar, 2025; (Iftekharuzzaman et al., 2025). This multi-causal understanding from practitioners aligns with the integrated theoretical framework of Tan et al. (2026), which diagnoses the same gap through the simultaneous operation of public goods free riding, distributive justice deficits, and governance barriers.

4.5 Future Climate Finance Pathways Beyond 2030

This section examines future climate finance pathways and policy priorities for Bangladesh beyond 2030, drawing on relevant survey and KII questions, and seeks to answer research question 3. Findings are organized around preparedness and confidence, innovative finance mechanisms, priority sectors, and the roles of government and civil society, leading to suggested reforms by practitioners and experts.

4.5.1 Preparedness and Confidence for Post-2030 Financing Challenges

The assessment of Bangladesh's preparedness for upcoming challenges in financing climate adaptation (Q. F19) including the reduced concessional finance access that will follow LDC graduation, is unambiguously concerning. 27 respondents (61.36%) assess Bangladesh as having 'limited preparedness', and 14 respondents (31.82%) describe the country as 'not prepared'. Only 3 respondents (6.82%) consider Bangladesh 'somewhat prepared' (Figure 4.9). No respondent considers Bangladesh well-prepared or fully prepared for the post-graduation financing environment, as shown in Figure 9.

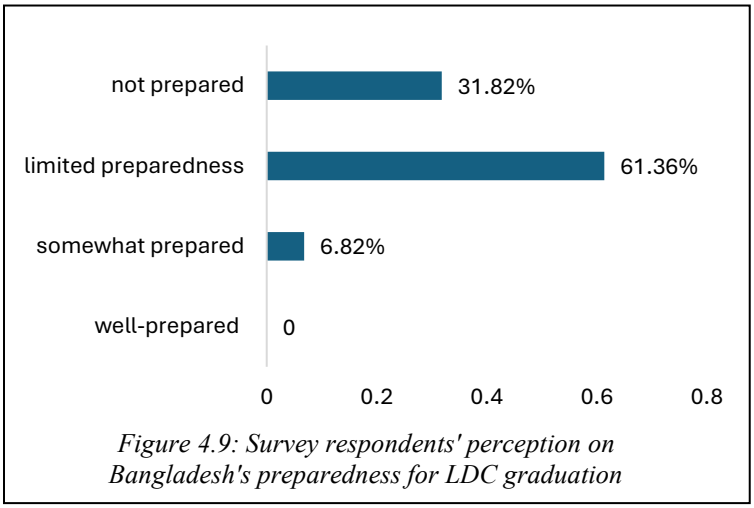


Figure 4.9: Survey respondents' perception on Bangladesh's preparedness for LDC graduation

The KII experts strongly support the survey respondents' assessment that Bangladesh is not adequately prepared for future climate adaptation financing challenges, particularly in anticipation of reduced concessional finance following LDC graduation. KII-1 noted that there are currently no visible measures from the government or development

sector to adequately address the anticipated financing challenges. Similarly, KII-2 questioned Bangladesh's preparedness, noting that the country has sought postponement of LDC graduation, which reflects the concerns surrounding the transition. KII-3 further highlighted the potential emergence of a "finance cliff" as concessional finance declines and emphasized the need to diversify financing sources through stronger domestic financing and private-sector engagement. KII-4 similarly expressed concern that Bangladesh is not yet sufficiently prepared for the financial implications of LDC graduation and stressed the importance of strengthening fiduciary systems, transparency, accountability, and financial management to improve access to international climate finance.

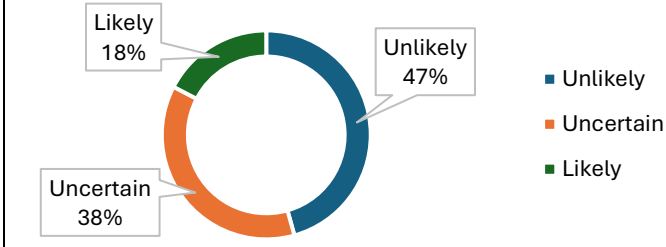


Figure 4.10: Perception on achieving adaptation goals by 2030

In terms of achieving adaptation goals by 2030, respondents were asked how confident they were that Bangladesh could achieve its goals (Q. F21) (Figure 4.10). 21 respondents (47.73%) rate their confidence at 1 out of 3 (unlikely); 17 (38.64%) at 2 (neutral or uncertain); and 8 (18.18%) at 3 (likely), as shown in figure 10. The highest assessment, a 47.73% rating confidence at 1, indicates that a strong majority of practitioners consider the achievement of Bangladesh's 2030 adaptation goals unlikely under current trajectories. This finding aligns with Willige (2025), who reports that only 18% of SDG targets globally are on track, and with respondents' own assessments of structural barriers in the previous section.

These findings carry significant policy implications. The near-universal assessment of inadequate preparedness reflects practitioner recognition of the structural double bind identified in the secondary literature: Bangladesh's LDC graduation in 2026 will progressively reduce eligibility for concessional finance windows at precisely the moment when climate vulnerability is intensifying and adaptation financing needs are expanding (Bößner et al., 2026; UNCTAD, 2024). However, the 2024 political transition adds a domestic governance dimension to this external challenge: institutional disruption at the national level reduces the capacity to navigate complex transition planning precisely when such capacity is most required (Hassan et al., 2026).

4.5.2 Innovative Finance Mechanisms for Bangladesh

Despite the pessimistic preparedness assessments, respondents chose the most promising innovative finance mechanism (Q. E16); blended finance combining public and private funds is selected by 19 respondents (43.2%), making it by far the leading mechanism. Results-based climate finance (pay-for-performance models) is selected by 11 respondents (25.0%), payment for ecosystem services by 6 (13.6%), debt-for-climate swaps by 3 (6.8%), Article 6 carbon markets under the Paris Agreement by 2 (4.5%), and green sukuk by 2 (4.5%). The list of the promising innovative finance mechanisms for Bangladesh, as suggested by the survey respondents are shown in the list below (Figure 4.11).

- Blended finance (public-private combination)
- Results-based climate finance (pay-for-performance)
- Payment for ecosystem services
- Debt-for-climate swaps
- Article 6 Carbon Markets
- Green sukuk (Islamic climate bonds)

Figure 4.11: Most promising innovative finance mechanism for Bangladesh

The KII findings suggest that innovative financing mechanisms could realistically contribute to Bangladesh's future climate finance needs, but their effectiveness depends on creating an enabling policy and institutional environment. KII-1 emphasized that mechanisms such as green bonds and carbon markets can work if appropriate policies and practices are established as suggested in (Sarwar, 2025). KII-2 noted that although green bonds have already been introduced in Bangladesh, they have not yet made a significant difference, while carbon markets are being considered as a longer-term option that would require structural reforms and a clear long-term plan. KII-3 similarly identified green bonds and payment for ecosystem services (PES) as promising mechanisms but highlighted limited institutional capacity and the lack of a mature domestic market as key constraints. The respondent suggested prioritizing blended finance, combining public and private capital to make innovative instruments more viable. KII-5 further identified green bonds, climate-resilient investment funds, and catastrophe-risk financing as potential instruments for mobilizing climate finance.

The strong preference for blended finance reflects practitioners' pragmatic recognition that public resources alone cannot close Bangladesh's financing gap, while purely private capital lacks the risk

appetite for community-level adaptation in vulnerable geographies. Blended finance, by using public funds to de-risk private investment, addresses this gap structurally rather than incrementally (Khatun et al., 2021). The secondary preference for results-based finance indicates interest in performance-linked disbursement as a means of improving accountability and overcoming the monitoring failures identified in Section 5.3. The relatively low selection of Article 6 carbon markets (4.5%) despite their potential relevance to Sundarbans conservation may reflect respondents' awareness of the governance integrity concerns and community-benefit capture issues documented by Majumdar and Matsui (2025).

4.5.3 Priority Sectors and Adaptation Areas Beyond 2030

Survey question (Q. F22) asks respondents to identify priority areas for climate finance beyond 2030. Nature-based solutions are cited by 29 respondents (82.9%), making them the leading priority. Community-based adaptation is second at 26 respondents (74.3%), followed by climate-resilient agriculture (24; 64.6%) and climate-resilient infrastructure (26; 64.6%). Coastal adaptation is cited by 21 respondents (60.0%) and capacity building by 20 (57.1%). Climate technology is cited by 17 respondents (48.6%) (Figure 4.12).

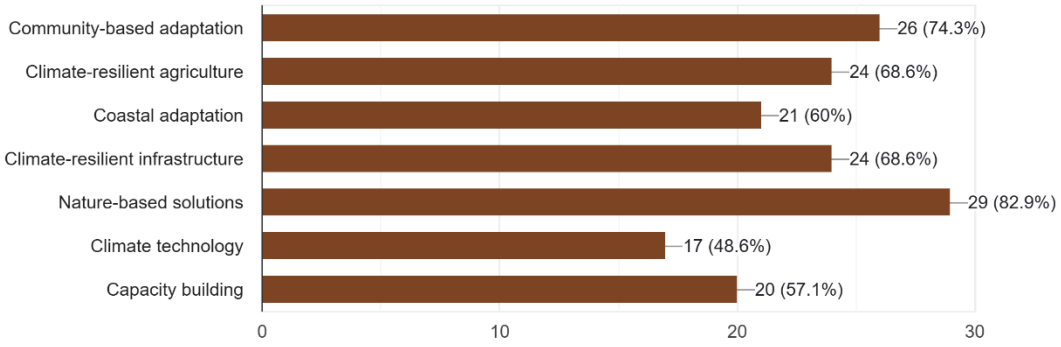


Figure 4.12: Perceived priority climate sectors beyond 2030

Smith et al. (2021) also agrees that priority should be given to NbS, showing that NbS can strengthen adaptation and generate wider social and environmental benefits when supported by effective governance, participation, policy, and long-term finance. Tashmin (2016) and Majumdar and Matsui (2025) further explain the limited uptake of NbS in Bangladesh through institutional and financing constraints. Similarly, Soergel et al. (2021) support and give priority to community-based adaptation, emphasizing integrated approaches that combine climate finance, equity,

livelihoods, and local decision-making. Hussain and Ahmad (2019, 2020) provide Bangladesh-specific evidence that community-based adaptation can strengthen livelihood diversification and adaptive capacity, although poverty-oriented activities should not automatically be classified as adaptation. Practitioners thus identify precisely the sectors that the evidence base shows to be most underfinanced and most effective, a gap between what respondents know should be prioritized and what current finance systems actually support.

4.5.4 Roles of Government and NGOs in Future Finance Architecture

The open-ended responses to F23 (NGO and development Organization roles) and F24 (government roles) yield rich qualitative data that was thematically coded, as shown in Table 5.5. Representative responses were coded into themes which include:

NGOs & Development Organizations (F23)	Government (F24)
1. Last-mile delivery & local adaptation – Ensure finance reaches vulnerable communities and support locally led adaptation.	**1. Strategic leadership & coordination** – Lead the national climate finance architecture and improve coordination across ministries.
2. Capacity building – Strengthen technical and institutional capacity of local actors.	**2. Improve access** – Simplify procedures and strengthen direct access to international climate funds.
3. Accountability & monitoring – Improve transparency, community monitoring and tracking of finance.	**3. Project pipeline development** – Develop investment-ready projects to improve Bangladesh's ability to absorb available finance.
4. Resource mobilization & partnerships – Mobilize finance, generate evidence and work with government/private sector to scale successful initiatives.	**4. Accountability & financial management** – Strengthen transparency, monitoring and fiduciary systems.
	5. Private-sector engagement – Create policies and incentives to attract private investment in adaptation.

Table 4.6: Respondents perceived future roles for NGOs and government in playing

Following this, a future climate adaptation finance architecture can be drawn from the above perception, as shown in Figure 13.

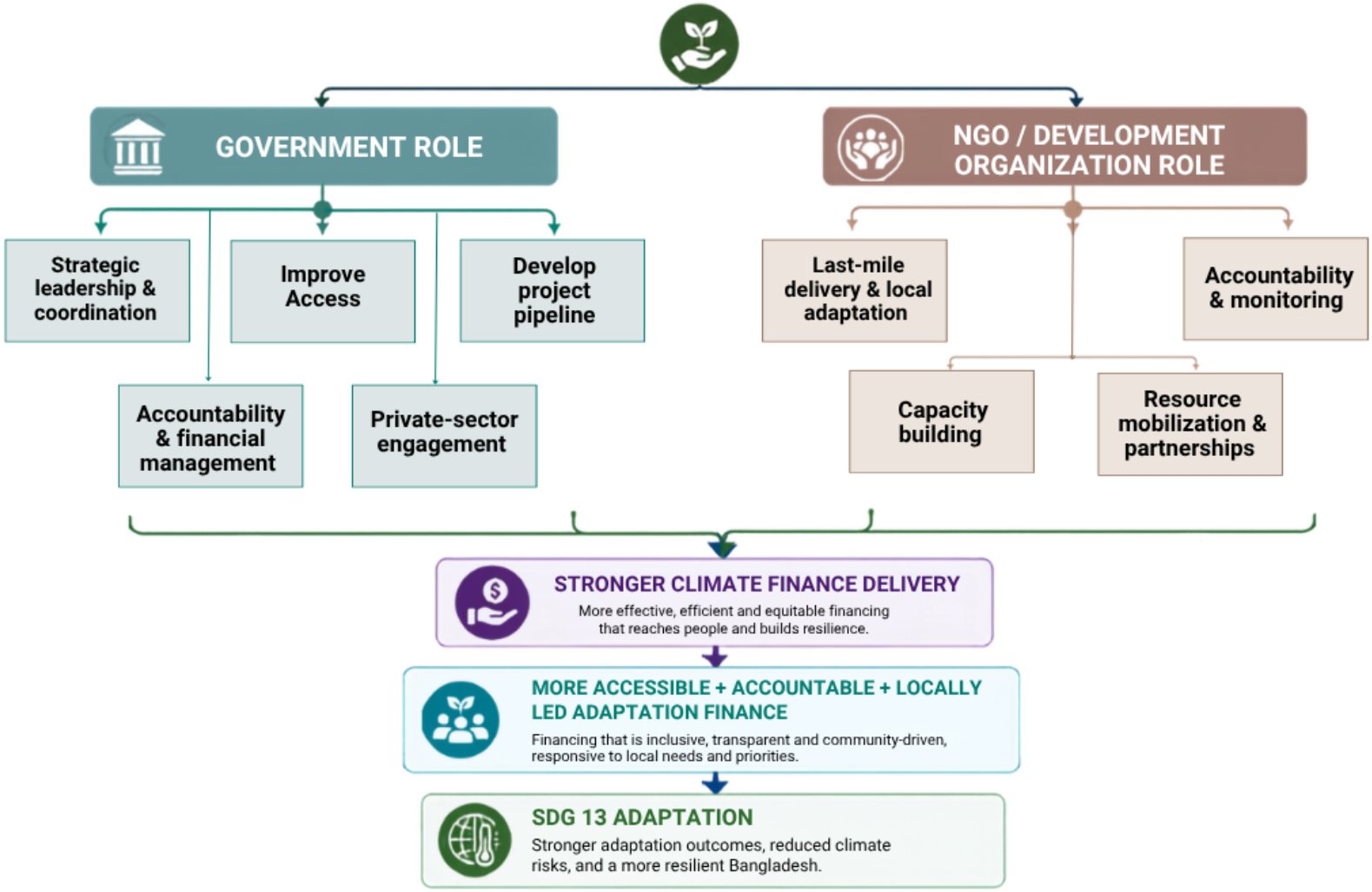


Figure 4.13: Future Climate Finance Architecture

KII respondents provide the institutional reform specificity that survey responses alone cannot generate. KII-2 (ICCCAD) identifies MEAL integration (Monitoring, Evaluation, Accountability and Learning) as the single most important reform: 'More blended finance and local access and ownership, and stronger MEAL integration.' This prioritization of accountability infrastructure over volume expansion reflects a sophisticated practitioner assessment: without robust MEAL systems, increased finance, whether blended, grant-based or domestically mobilized, cannot be tracked, attributed or improved over time. However, Bößner et al. (2026) directly validate the governance-reform agenda. UN DESA (2024) establishes the multilevel governance framework: effective climate action requires 'institutionalized multilevel governance arrangements, policy coherence across levels, peer-to-peer learning among local authorities, and equitable resource

allocation'. Sarker et al. (2021) provide the Bangladesh-specific evidence base for the monitoring and transparency reform demonstrating that 'poor monitoring reduces programme effectiveness' and recommending 'effective monitoring systems so that climate finance governance can contribute a lot and improve food security and livelihood resilience.

4.5.5 Policy Reforms and Suggested Changes

Survey question F20 (multiple selections) asks what changes are needed to improve climate finance effectiveness in Bangladesh. The responses reveal a governance-reform agenda rather than a resource mobilization request. Stronger local government capacity is the most cited reform, identified by 25 respondents (56.8%). Better coordination among institutions and improved monitoring and transparency are each cited by 24 respondents (54.5%). Greater community participation is identified by 21 respondents (47.7%), easier access to international funds by 20 (45.5%), more private sector engagement equally by 20 (45.5%), and long-term adaptation financing strategies by 19 (43.2%).

Building on this, an open-ended response to (Q. F25), asking for the single most important reform needed, produce the most concentrated and analytically revealing qualitative evidence in the survey. Thematic analysis identifies three dominant themes: establishing decentralized, transparent, and accountable climate finance systems that enable direct community access; shifting from loan-based to grant-based finance; and building institutional and technical capacity at national and local levels.

The most frequently identified reform theme was governance, transparency and decentralization, with 7 responses emphasizing simplified procedures, stronger coordination and accountability, decentralized fund management, direct access for local governments and communities, and improved tracking of climate finance. A second major theme was the need for predictable, grant-based and accessible finance, identified in 5 responses, particularly through reducing dependence on debt and simplifying access to international climate funds. Respondents also emphasized longer-term and programmatic approaches to adaptation, alongside stronger institutional and technical capacity at the local level. A smaller number highlighted greater private-sector and domestic financing. Overall, the findings suggest that respondents perceive Bangladesh's future climate finance challenge as involving both financial adequacy and the quality of the financing architecture through which resources reach vulnerable communities.

Furthermore, KII-1 identified transparency and institutional readiness as critical priorities, while KII-2 emphasized the need to integrate climate finance into broader development planning rather than treating it as a separate or siloed financing stream. KII-3 similarly highlighted governance, fiduciary management, transparency, accountability, and management efficiency as particularly urgent given the expected decline in concessional finance following LDC graduation. KII-5 further emphasized strengthening government–private sector financing mechanisms, developing innovative financing instruments, and improving institutional and negotiation capacity to access bilateral and multilateral finance. Taken together, the KIIs suggest that strengthening Bangladesh's climate finance future requires more than increasing the volume of finance; it requires building a transparent, integrated and institutionally capable financing system that can mobilize, access, manage and effectively utilize diverse sources of climate finance.

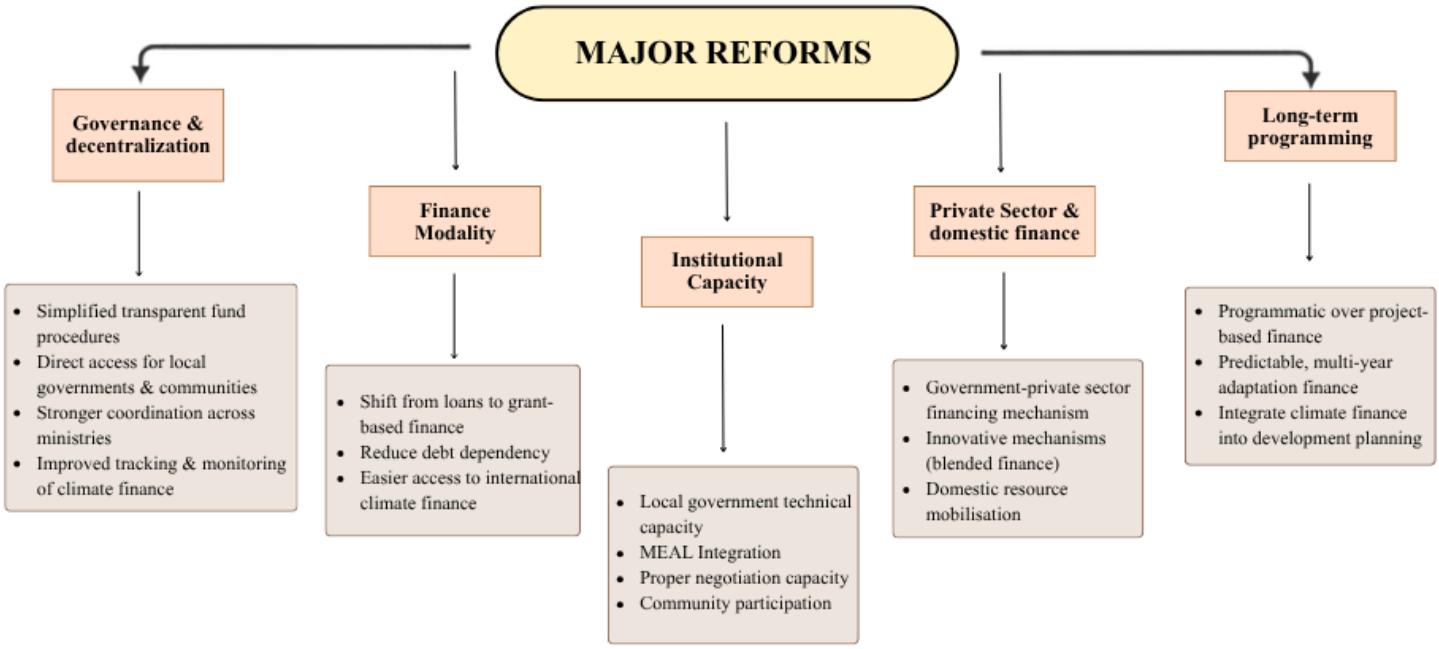


Figure 4.14: Future Reforms needed for effective climate finance in Bangladesh

4.6. Chapter Summary

The survey, KII and secondary literature evidence collectively demonstrate that climate finance in Bangladesh has grown in both volume and diversity since the Paris Agreement, with the 8th Five-Year Plan reflecting greater integration and programmatic focus than the 7th. However, the dominant finding is structural inadequacy: more than 80% of practitioners describe finance as limited or highly insufficient, misalignment between donor supply and national adaptation priorities persists, and ecosystem-based

adaptation remains systematically underfinanced. While projects like LoGIC indicate that locally led approaches can succeed, the frequent disconnect between project outputs and long-term adaptation outcomes underlines that volume alone does not ensure effectiveness.

The RO2 findings establish that Bangladesh's adaptation finance challenge is not primarily one of volume but of compound financial, institutional, governance and equity failures that mutually reinforce one another. Financial constraints such as loan dominance, declining ODA, donor misalignment, establishing the structural ceiling. Institutional weaknesses and governance barriers then determine how much of available finance reaches implementation. Equity exclusions ensure that the communities bearing the greatest climate vulnerability including disabled persons, indigenous communities, char dwellers, ultra-poor households consistently receive the least support. The 2024 political transition introduces a contextually specific governance barrier without counterpart in secondary literature, confirming the value of primary data in capturing real-time systemic constraints.

The RO3 findings reveal a coherent practitioner vision for Bangladesh's post-2030 climate finance future, grounded in shared pessimism about current preparedness and specific convergence on required reforms. Near-universal inadequate-preparedness assessment (93.2%), combined with KII confirmation of Bangladesh's LDC graduation postponement application, establishes that the post-2030 financing environment will be structurally more challenging than the present. Blended finance is the preferred innovative mechanism, but KII evidence establishes that enabling preconditions such as fiduciary credibility, regulatory frameworks, and market maturity must be built first. Table 4.7 summarizes all the key findings addressing the research objectives.

Research Objective	Theme	Survey Findings	KII Findings	Reference
RO1 Trends and patterns of climate finance (7th FYP vs 8th FYP)	Engagement with climate finance mechanisms	88.6% have implemented CF-supported projects. MDBs (68.2%) and GCF (64.4%) are most recognized. BCCTF (45.5%) and microfinance (45.5%) are also widely cited. Private sector instruments were least recognized.	KII-1: Bangladesh shifted from grant-based projects to investment cycles (loans, equity, guarantees). KII-3: Climate budget tracked via IBAS since 2017–18; stable at ~5.5% of national budget. KII-4: Multi-actor partnerships increasing but competition for access has intensified.	Hassan et al. (2025); Bhandary (2021); Irfanullah (2026)

	Availability and alignment of adaptation finance (7th vs 8th FYP)	84.1% describe CF availability as limited or highly insufficient. 40.9% describe finance as poorly aligned with national needs. 47.7% perceive slight improvement from 7th to 8th FYP; only 1 respondent identifies significant improvement.	KII-1: Estimated annual need of USD 26bn vs USD 1–2bn mobilized. KII-2: 'Access has increased but so have barriers and limitations.' KII-3: Same 25-ministry budget framework maintained for 9 years; stagnant institutional design. KII-4: 8th FYP shows stronger resilience focus but effectiveness remains constrained.	Iacobuţă et al. (2022); Irfanullah (2026); Bößner et al. (2026); GED (2025)
	Adaptation outcomes and project effectiveness	Climate-smart agriculture most cited outcome (79.5%). Livelihoods and disaster preparedness each at 63.6%. Ecosystem restoration was least cited (29.5%). LoGIC most frequently cited successful initiative. Respondents question whether outputs translate into long-term outcomes.	KII-4: Emphasizes shift from infrastructure to livelihoods and locally led adaptation. KII-5: Notes progress in early warning, agriculture and DRR. KII-3: Concerns about ecosystem and NbS being excluded from CF instruments.	Hussain & Ahmad (2019, 2020); Tashmin (2016); Majumdar & Matsui (2025); Sarker et al. (2021); Shah et al. (2025)
	Contribution to SDG 13	SDG 13.2 (81.8%) and 13.1 (72.7%) were most cited as supported. SDG 13.a and 13.b least cited (minority of responses). Suggests disconnecting between international financing commitments and national implementation perceptions.	KII-1: Confirms international finance supports 13.1 and 13.2 through resilience projects but financial architecture targets (13.a) remain unmet. No KII respondent directly addressed SDG 13. b.	Soergel et al. (2021); Iacobuţă et al. (2022); UNCTAD (2024); GED (2025)
RO2 Financial, institutional and	Financial barriers: volume, modality and alignment	Insufficient international CF volume: 63.6% (D11). Loan dominance over grants: 56.8% (D11); 18.2% (D9).	KII-1: USD 26bn annual need vs USD 1–2bn managed.	Tan et al. (2026); Hassan et al. (2025); UNCTAD (2024); Iacobuţă et al. (2022);

governance barriers		Limited access to international funds: 47.7% (D9). Donor misalignment: 63.6% (D11). Declining ODA: significant/severe impact on overall funding reported by 59.1%.	KII-4: Post-Paris funding grew but compliance burdens disadvantage smaller organisations. KII-2: Confirmed declining developed-country funding as operational barrier.	Ahmed et al. (2025)
	Institutional and capacity barriers	Inadequate institutional/technical capacity to absorb CF: 68.2% (D11). Lack of technical capacity: 52.3% (D9). Short project duration limiting sustainability: 38.6% (D9). D12 open responses: weak local capacity, skills gaps, fragmented projects.	KII-4: Local implementing agencies lack expertise; compliance demands disadvantage smaller actors. KII-3: Same 25-ministry framework maintained; climate budget categories not periodically reviewed. KII-5: Need for stronger technical and negotiation capacity.	Bößner et al. (2026); Bhandary (2021); Irfanullah (2026)
	Governance and coordination barriers	Lack of inter-ministerial coordination: 70.5% (D11). Complex access/accreditation procedures: 63.6% (D11). Monitoring and accountability gaps: 56.8% (D9). Political uncertainty (2024 transition): 61.4% (D11) not present in pre-2024 literature. D12: top-down allocation; corruption; bureaucratic red tape; delayed disbursement.	KII-1: Diversified financing landscape requires navigating multiple criteria and approval processes. KII-3: Governance categorization of climate budget not adequately reviewed. KII-4: Smaller organizations disproportionately affected by complex compliance requirements.	Bößner et al. (2026); Sarker et al. (2021); Islam et al. (2025); Göçoğlu et al. (2025); Iftekharuzzaman et al. (2025)
	Equity and inclusiveness	Coastal communities were most included (56.8% fairly/fully inclusive). Disabled persons most excluded (70.5% minimally/not inclusive).	No KII respondent directly addressed disability inclusion — itself a governance blind spot. KII-4: MSME and private sector actors are also structurally excluded from CF access.	Sarker et al. (2021); Hussain & Ahmad (2020); Shah et al. (2025); Anjum et al. (2024)

		Indigenous/ethnic minorities: 65.9% minimal/not inclusive. Ultra-poor and landless: 54.5% minimal/not inclusive. Char communities: 45.5% minimal/not inclusive.	KII-3: Youth Ministry excluded from climate budget governance architecture.	
RO3 Future climate finance pathways beyond 2030	LDC graduation and post-2030 preparedness	61.4% assessed preparedness as 'limited'; 31.8% as 'not prepared'. No respondent considers Bangladesh well/fully prepared. 47.7% rate confidence in achieving 2030 goals as 'unlikely' (1/3 scale).	KII-1: No visible government measures to address post-graduation financing challenges. KII-2: Bangladesh has sought postponement of LDC graduation. KII-3: Risk of a 'finance cliff'; need to diversify toward domestic and private sources. KII-4: Fiduciary systems, transparency and management efficiency must be strengthened urgently.	UNCTAD (2024); Bößner et al. (2026); Willige (2025); Hassan et al. (2026)
	Innovative and private climate finance	Private CF mobilization largely at 'early stages' (70.5% E15). Blended finance is the most promising mechanism (43.2%). Results-based finance second (25.0%). Article 6 carbon markets: only 4.5% lowest preference.	KII-1: Mechanisms viable only with enabling policy environment. KII-2: Green bonds introduced but have not yet made a significant difference. KII-3: Blended finance preferred; institutional capacity and market maturity are key barriers. KII-5: Identified green bonds, resilient investment funds and catastrophe-risk financing as options.	Khatun et al. (2021); Majumdar & Matsui (2025); Sarwar (2025); Bößner et al. (2026)
	Future adaptation priority sectors	Nature-based solutions top priority (82.9%). Community-based adaptation (74.3%).	KII-4: Adaptation moving beyond infrastructure toward livelihoods and local capacity. KII-5: Progress in agriculture, DRR and water security; NbS needs stronger policy backing.	Smith et al. (2021); Tashmin (2016); Soergel et al. (2021); Hussain & Ahmad (2019, 2020)

		Climate-resilient agriculture (64.6%) and infrastructure (64.6%). Gap: NbS is top future priority but current outcome least recognized (29.5%).	KII-3: NbS cited in NAP, but institutional culture maintains business-as-usual spending.	
	Institutional reform and governance of future finance	Stronger local government capacity: most cited reform (56.8%). Better coordination and improved monitoring each cited by 54.5%. F25 dominant themes: decentralization, grant-based finance, programmatic approaches. F23/F24: NGOs as last-mile intermediaries; government to lead coordination and simplify access.	KII-2: MEAL integration as the single most important reform. KII-3: Governance, fiduciary management and transparency are most urgent pre-graduation priorities. KII-1: Transparency and institutional readiness essential for future international access. KII-5: Stronger government–private sector mechanisms; improved institutional capacity.	UN DESA (2024); Bößner et al. (2026); Sarker et al. (2021); Bhandary (2021)

Table 4.7: Summary of the key findings

CHAPTER 5: CONCLUSION

This research has examined the relationship between climate finance and climate adaptation in Bangladesh, with particular attention to the evolution of how climate finance has supported climate adaptation goals, in terms of financial and institutional barriers, and future pathways beyond 2030. The study also compared the 7th and 8th Five-Year Plan periods and combined secondary analysis with primary evidence from 44 survey respondents and 5 key informant interviews (KIIs). The results were then interpreted and triangulated with existing studies using PRISMA diagram and an integrated theoretical framework, combining Public Goods Theory, Global Governance Theory, and International Environmental Justice Theory, adopted by Tan et al., 2026.

The major findings show that climate finance has contributed to important adaptation outcomes,

particularly in climate-smart agriculture, disaster preparedness, and community resilience. However, these achievements remain limited compared with Bangladesh's growing adaptation needs. More than 80% of respondents considered climate finance availability limited or highly insufficient, while most respondents identified problems related to finance volume, alignment, and accessibility. The study also found that complex funding procedures and weak institutional coordination were major barriers, alongside limited technical capacity, declining development assistance, loan-heavy financing, political uncertainty, and weak private-sector engagement. The financing gap was therefore found to be both a financial and structural problem. The findings also reveal concerns about equity, particularly the limited inclusion of persons with disabilities, Indigenous and ethnic minority communities, ultra-poor and landless households, and char communities. Looking ahead, respondents expressed low confidence in Bangladesh's preparedness for the changing financing environment associated with LDC graduation and the post-2030 period. Overall, the findings suggest that Bangladesh has developed a stronger climate-policy and institutional architecture, but the scale, accessibility, governance, and equity of climate finance have not progressed at the same pace.

The findings can be further understood through the three theories. Public Goods Theory helps explain why adaptation finance requires collective investment and international support. Climate adaptation investments such as disaster preparedness, resilient infrastructure, ecosystem restoration, and community resilience generate benefits that extend beyond individual beneficiaries and therefore cannot depend entirely on private-market financing. The persistent financing gap identified in this study supports this theoretical argument, as the scale of adaptation needs exceeds what domestic and private resources can currently provide. Global Governance Theory helps explain the institutional and governance dimensions of the findings. The study identified weak coordination, complex access procedures, limited institutional capacity, inadequate monitoring, and difficulties in accessing international funds as major constraints. These findings demonstrate that the effectiveness of climate finance depends not only on how much finance is available but also on how international and national institutions coordinate, manage, monitor, and deliver it. International Environmental Justice Theory provides the equity dimension of the analysis. Bangladesh contributes relatively little to global emissions but faces significant climate impacts, creating a strong basis for international climate-finance support. At the domestic level, however, the findings show that climate finance does not reach all vulnerable groups equally.

The lower perceived inclusion of socially and economically marginalized groups highlights the importance of distributive and procedural justice in climate-finance allocation. Together, the three theories provide a complementary explanation: Public Goods Theory explains why finance is needed, Global Governance Theory explains how it is mobilized and delivered, and Environmental Justice Theory examines whether it is distributed fairly.

The study also identifies several future pathways, suggested by survey and KII respondents for strengthening Bangladesh's climate-finance architecture during the 9th Five-Year Plan (2026–2030) and beyond 2030. The findings suggest that Bangladesh needs to move towards a more predictable, accessible, decentralized, and programmatic financing system. Greater emphasis should be placed on grant-based and highly concessional finance to reduce dependence on debt, while access procedures should be simplified to allow capable local institutions and communities to participate more directly. Institutional and fiduciary capacity, transparency, accountability, monitoring, and inter-ministerial coordination also need to be strengthened. At the same time, Bangladesh should gradually diversify its financing sources through private-sector participation and innovative mechanisms such as blended finance, green financial instruments, carbon markets, and other context-appropriate mechanisms. However, these mechanisms will require stronger regulatory and institutional conditions before they can operate effectively on a scale. Future climate finance should also priorities nature-based solutions, community-based adaptation, ecosystem restoration, and locally led approaches. NGOs and development organizations can support last-mile delivery, capacity building, monitoring, and fund mobilization, while government should provide strategic leadership, coordinate institutions, simplify access, and develop investment-ready project pipelines. These reforms would help Bangladesh prepare for declining concessional finance after LDC graduation and reduce the risk of a future financing gap.

The study nevertheless has several limitations that should be considered when interpreting its findings. First, the research adopted a qualitative design and therefore does not provide statistically generalizable conclusions for all climate-finance stakeholders in Bangladesh. Second, the primary evidence was based on 44 valid survey responses and five KIIs, which provided useful practitioner and expert perspectives but could not capture every stakeholder group or regional experience. Third, the study relied substantially on secondary reports, policy documents, and institutional data, which may differ in their definitions, reporting periods, and estimates of climate finance. The

future pathway component is also exploratory rather than a quantitative forecast, as the study did not use econometric or advanced modelling techniques to project climate finance beyond 2030. Future research could address these limitations by using larger and more diverse samples, longer-term datasets, quantitative forecasting, and community-level studies of how climate finance reaches different vulnerable groups. It could also examine the effectiveness of innovative financing mechanisms and assess whether decentralized and locally led financing produces better adaptation outcomes. Despite these limitations, the study provides an integrated understanding of Bangladesh's climate-finance challenges by connecting financial adequacy, institutional capacity, governance, and equity. Its central conclusion is that achieving SDG 13 will require more than mobilizing additional finance; Bangladesh must also build a system capable of accessing, managing, allocating, and delivering that finance effectively and fairly.

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Annex

A. Ethical Consideration Form

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Date: 25 June 2026

Subject: Ethical Considerations for Thesis Research

This study, titled **"Climate Finance for Adaptation Goals in Bangladesh: Past Trends, Present Gaps and Future Pathways Beyond 2030,"** focuses on examining how climate finance has supported climate adaptation efforts in Bangladesh, identifying existing financing and implementation gaps, and exploring future pathways for strengthening adaptation finance under SDG 13 beyond 2030. The research seeks to understand how climate finance has supported climate adaptation efforts in Bangladesh, identifying existing financing and implementation gaps, and exploring future pathways for strengthening adaptation finance under SDG 13 beyond 2030.

The study will explore the perspectives and experiences of professionals working in climate change, climate finance, development, policy, research, and related sectors. The findings are expected to contribute to academic knowledge on climate finance and sustainable development while providing insights for policymakers, practitioners, and stakeholders involved in climate action and climate finance planning in Bangladesh.

Participants will be selected through purposive, convenience, and snowball sampling based on their professional knowledge and involvement in climate-related programmes, policies, or projects. The study will use qualitative research methods, including structured qualitative questionnaires and Key Informant Interviews (KIIs). Prior to participation, informed consent will be obtained from all respondents to ensure that they understand the purpose of the research, the nature of their participation, and their rights as research participants, including the right to withdraw from the study at any stage without any negative consequences.

Participant confidentiality and anonymity will be maintained throughout the research process. No personally identifiable information, including names or organizational details, will be disclosed in the thesis, publications, or presentations without prior permission from the participants. The collected data will be used solely for academic purposes and will be appropriately managed, securely stored and accessed only by the researcher and research supervisor

The study is considered to involve minimal risk. However, some participants may experience slight discomfort when discussing institutional challenges, financing limitations, governance issues, or implementation barriers related to climate finance. Participants will have the option to skip any question they do not wish to answer and may discontinue their participation at any time without any consequences.

The findings of this study may contribute to a better understanding of climate finance challenges, implementation realities, and future opportunities for achieving adaptation outcomes in Bangladesh. The research aims to provide evidence-based insights that may support improved climate finance strategies, stronger implementation mechanisms, and future climate action planning beyond 2030.

Ethical approval will be obtained from the Department of Social Sciences and Humanities at Independent University, Bangladesh (IUB). All data collection and research activities will be conducted following established ethical principles, including voluntary participation, informed consent, confidentiality, anonymity, and responsible data management.

I am committed to maintaining ethical standards throughout this research process. Participants are encouraged to contact the researcher if they have any questions or require further clarification regarding the study.

Thank you.

B. Questionnaire for Survey Respondents

Section A: RESPONDENT PROFILE

- Name (Optional)
- Designation/Role
- Organization
- Organization Type
    - Government
    - NGO
    - INGO
    - Development Partners
    - Academic Organizations
    - Research Organizations/Think-tanks
    - Grassroot/local Organizations
    - Media
    - Private Sector/Social Enterprise
- Years of Experience in Climate/Development Work
- Which climate-related areas does your work mainly focus on?
    - Climate Adaptation
    - Disaster risk reduction
    - Climate-resilient agriculture
    - Coastal resilience
    - Water security
    - Climate finance/project management
    - Climate policy/governance
    - Migration/renewable energy
    - Other

Section B: **UNDERSTANDING OF CLIMATE FINANCE AND ADAPTATION**

B1. Have you or your organization implemented projects supported by climate finance?

- Yes

- No
- Not Sure

B2. Which climate finance mechanisms are you most familiar with in Bangladesh? Or what are the major sources of climate finance supporting your work? *(Select all that apply)*

- Bangladesh Climate Change Trust Fund (BCCTF)
- Bangladesh Climate Change Resilience Fund (BCCRF)
- Green Climate Fund (GCF) projects
- Adaptation Fund (AF)
- Global Environment Facility (GEF)
- Multilateral development banks (ADB, World Bank, JICA, etc.)
- Bilateral channels (UK PACT, German IKI, EU, etc.)
- Private/domestic commercial bank green finance
- Private sector climate investment
- Microfinance for climate resilience

B3. How would you describe the availability of climate finance for adaptation projects in Bangladesh?

- Very Sufficient
- Somewhat sufficient
- Limited
- Highly insufficient
- Unsure

Section C: **CLIMATE FINANCE CONTRIBUTION TO ADAPTATION OUTCOMES**

C4. Based on your experience, has access to climate finance improved since 2015?

- Sufficient and well-targeted
- Available but difficult to access
- Insufficient in volume
- Poorly aligned with Bangladesh's needs
- Not sure / I don't have enough information

C5. In your experience, how effectively has climate finance supported climate adaptation and resilience outcomes in Bangladesh?

- 1 (Not Effective)
- 2 (Effective)
- 3 (Highly Effective)

C6. What types of adaptation outcomes have climate finance-supported projects contributed to? *(Multiple selections)*

- Improved community resilience
- Climate-resilient livelihoods
- Climate-smart agriculture
- Disaster preparedness
- Improved infrastructure
- Ecosystem restoration
- Institutional capacity building
- Other

C7. Can you mention any climate-supported project or initiative that you consider successful in improving adaptation outcomes?

C8. Which SDG 13 sub-targets are most directly supported by current climate finance mechanisms in Bangladesh? *(Rank top 3)*

- 13.1 – Strengthen resilience and adaptive capacity to climate hazards
- 13.2 – Integrate climate measures into national policies, strategies, and planning
- 13.3 – Improve education, awareness, and institutional capacity
- 13.A – Implement Green Climate Fund commitments
- 13.B – Promote mechanisms for raising capacity for planning and management

Section D: CHALLENGES AND GAPS IN CLIMATE FINANCE DELIVERY

D9. What were the key challenges affecting effective climate finance implementation in Bangladesh? *(Select all that apply)*

- Limited access to international climate funds
- Complex funding procedures
- Lack of technical capacity
- Limited coordination among institutions
- Short project duration
- Donor priorities not aligned with local needs
- Monitoring and accountability challenges
- Limited private sector involvement
- Other

D10. How do you compare the 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025) periods in terms of climate finance availability, effectiveness, and adaptation outcomes?

- Significantly improved
- Slightly improved
- Stayed about the same
- Slightly worsened
- Significantly worsened
- Not sure

D11. Which factors have most constrained achieving climate adaptation goals? *(Select all that apply)*

- Insufficient volume of international climate finance
- Declining bilateral ODA from major donor countries
- Predominance of loans over grants in climate finance
- Complex and restrictive access procedures (e.g., GCF accreditation)
- Inadequate institutional and technical capacity to absorb funds.

- Lack of coordination between government ministries
- COVID-19-related fiscal pressures and reprioritization
- Political uncertainty following the 2024 government transition.
- Misalignment between donor priorities and Bangladesh's needs
- Insufficient private sector engagement in climate finance

D12. From your experience, what are the main gaps between climate finance allocation and actual implementation on the ground?

D13. What impacts have declining Official Development Assistance (ODA) and adaptation finance had on climate action programs in Bangladesh? *(1 = No impact, 5 = Severe impact)*

- Overall climate programme funding levels
- Adaptation project implementation
- Institutional and technical capacity
- Community-level climate action
- Bangladesh's ability to meet NDC targets

D14. Despite financial constraints, which of the following do you consider genuine climate action achievements in Bangladesh? *(Select all that apply)*

- Updating the Nationally Determined Contribution (NDC) in 2025
- Adopting the National Adaptation Plan (NAP, 2023–2050)
- Expansion of renewable energy (especially solar home systems)
- Improvements in cyclone preparedness and early warning systems
- Greater engagement with international climate funds (GCF, Adaptation Fund)
- Mujib Climate Prosperity Plan adoption
- None of the above / progress has been very limited

Section E: **BANGLADESH CLIMATE FINANCE AND INNOVATION**

E15. To what extent is private climate finance (e.g., green bonds, insurance, corporate investment) being mobilized in Bangladesh?

- No meaningful mobilization
- Early stages

- Moderate, growing
- Significant and effective

E16. Which innovative finance mechanism holds the most promise for Bangladesh's climate action? *(Select one)*

- Article 6 carbon markets under the Paris Agreement
- Catastrophe bonds and parametric climate insurance
- Debt-for-climate swaps (converting debt into climate investment)
- Green sukuk (Islamic climate bonds)
- Payment for ecosystem services (e.g. mangrove conservation finance)
- Results-based climate finance (pay-for-performance models)
- Blended finance (combining public and private funds)
- Catastrophe bonds / parametric insurance
- Debt-for-climate swaps
- Payment for ecosystem services (e.g., mangrove conservation)
- Results-based climate finance

E17. How inclusive is climate finance to the relevant stakeholders?

- Women and girls
- Disabled persons
- Indigenous and ethnic minority communities
- Ultra-poor and landless households
- Youth and young people
- Coastal communities
- Char communities

E18. Bangladesh requires roughly USD 29.3 billion annually to meet its combined climate adaptation and mitigation goals but currently mobilizes only about USD 2.76 billion per year. What do you think best explains this gap? *(Select up to 3)*

- Developed countries are not meeting their climate finance commitments
- International finance is too loan-heavy and increases Bangladesh's debt
- Bangladesh lacks the institutional capacity to access available funds

- Finance access procedures are too complex and burdensome
- Donor priorities do not match Bangladesh's actual needs
- Insufficient domestic climate budget allocation
- Private sector is not adequately engaged
- Loss and Damage finance is not yet functional

Section F: **FUTURE PATHWAYS BEYOND 2030**

F19. How prepared is Bangladesh for future climate adaptation financing challenges, including reduced concessional finance after LDC graduation?

- Very prepared
- Somewhat prepared
- Limited preparedness
- Not prepared
- Unsure

F20. What changes are needed to improve climate finance effectiveness in Bangladesh? *(Select all that apply)*

- Better coordination among institutions
- Easier access to international funds
- Stronger local government capacity
- Greater community participation
- Improved monitoring and transparency
- More private sector engagement
- Long-term adaptation financing strategies

F21. Based on current trends, how confident are you that Bangladesh can achieve its climate adaptation goals by 2030? *(1 = Very unlikely,2= Neutral, 3 = Very likely)*

F22. What should be the priority areas for climate finance beyond 2030? *(Multiple selections)*

- Community-based adaptation
- Climate-resilient agriculture
- Coastal adaptation

- Climate-resilient infrastructure
- Nature-based solutions
- Climate technology
- Capacity building

F23. What role should NGOs and development organizations play in future climate adaptation finance?

F24. What role should the government play in improving climate finance access and effectiveness?

F25. What is the single most important change needed to strengthen climate adaptation finance in Bangladesh?

C. Questionnaire for KII

1. Could you briefly describe your role and experience in climate finance or climate governance in Bangladesh?
2. How would you describe the evolution of climate finance in Bangladesh since 2015, particularly in supporting climate adaptation and resilience?
3. In your opinion, what have been the most significant achievements in climate adaptation and resilience-building in Bangladesh since the Paris Agreement?
4. To what extent has climate finance supported climate adaptation and resilience outcomes in Bangladesh?
5. What major financial and institutional barriers continue to hinder effective climate adaptation and resilience efforts in Bangladesh?
6. Can you identify some projects or initiatives in Bangladesh where climate finance has played a significant role in supporting climate adaptation and resilience outcomes at the community level?
7. How do you compare the 7th Five-Year Plan (2016–2020) and 8th Five-Year Plan (2021–2025) periods in terms of climate finance availability, effectiveness, and adaptation outcomes?
8. Based on current climate finance trends, how achievable are Bangladesh's climate adaptation and resilience goals by 2030?

9. How effective are domestic mechanisms such as BCCTF in supporting adaptation and resilience-building in Bangladesh?
10. How do donor priorities and international finance structures shape Bangladesh's climate finance access?
11. How prepared is Bangladesh for reduced concessional finance following LDC graduation, particularly for sustaining climate adaptation financing?
12. What climate finance reforms are most urgently needed beyond 2030?
13. Are there innovative financing mechanisms such as Article 6 carbon markets, debt-for-climate swaps, or green bonds that you believe could realistically work for Bangladesh?
14. What role should Bangladesh play in future international climate negotiations and discussions?
15. What is the single most important change needed to improve Bangladesh's climate finance future?
16. Is there anything else you would like to add regarding SDG 13 or climate finance in Bangladesh?

D. Question Mapping with Research Objectives

Research Objective	Survey Questions	KII Questions	Purpose – What the Study Seeks to Understand
RO1: Examine trends and patterns of climate finance supporting climate adaptation initiatives in Bangladesh between the 7th and 8th Five-Year Plans.	**B1–B3, C4–C8, D10, D14**	**Q2–Q4, Q6–Q7, Q9**	To understand how climate finance has evolved in Bangladesh since 2015, identify major funding sources and mechanisms, assess changes in access and effectiveness, examine adaptation outcomes and successful initiatives, compare the 7th and 8th Five-Year Plan periods, and assess the contribution of climate finance to climate adaptation.
RO2: Identify key financial, institutional, and governance barriers affecting effective climate finance delivery for adaptation.	**B3, C5–C8, D9–D13, E17–E18**	**Q5–Q6, Q10**	To identify the major financial, institutional, governance, accessibility, coordination, and equity-related barriers affecting climate finance delivery, including the gap between finance allocation and implementation, donor priorities, and the effects of declining ODA and adaptation finance.

RO3: Explore future climate finance pathways and policy priorities for strengthening climate adaptation beyond 2030.	**E15–E16, F19–F25**	**Q8, Q11–Q16**	To explore Bangladesh's preparedness for future financing challenges, particularly after LDC graduation; assess opportunities for private and innovative climate finance; identify priority reforms, institutional roles, and financing pathways; and examine strategies for strengthening and achieving climate adaptation beyond 2030.

E: KII Profile

KII Code	Designation/Role	Organization	Organization Type	Key Area of Expertise
KII-01	Liaison Officer in Bangladesh	Green Climate Fund (GCF)	Multilateral Climate Finance Institution	Climate finance access, GCF readiness, pipeline development, climate policy and adaptation
KII-02	Programme Coordinator	ICCCAD	Research Organization/Think Tank	Climate finance, climate adaptation, research and advocacy
KII-03	Independent Consultant	ULAB	Academic/Research Institution	Climate finance tracking, climate budget, climate adaptation, biodiversity and development policy
KII-04	Team Leader	SwissContact	International Development Organization (INGO)	Climate adaptation, resilience, livelihoods, MSMEs and private-sector engagement
KII-05	Professor	University of Dhaka	Academic/Research Institution	Development policy, SDGs, climate finance and public budgeting