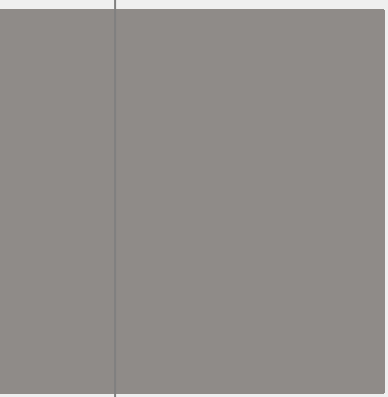
CHANGE initiative

JUSTICE IN THE BALANCE:

Climate Debt Relief & the Rise of Natural Rights Led Governance

Climate Debt Risk Index 2025



BANGLADESH REPORT

Natural Right Led Governance

Change Initiative is a Bangladesh-based research and advocacy and solution policy organization focused on climate and nature justice, climate finance, natural right renewable energy finance community-led resilience, working with national and international partners to design natural rights-based, practical solutions that protect people and nature.

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Natural Rights Led Governance | Climate Debt Risk Index 2025
Bangladesh Report

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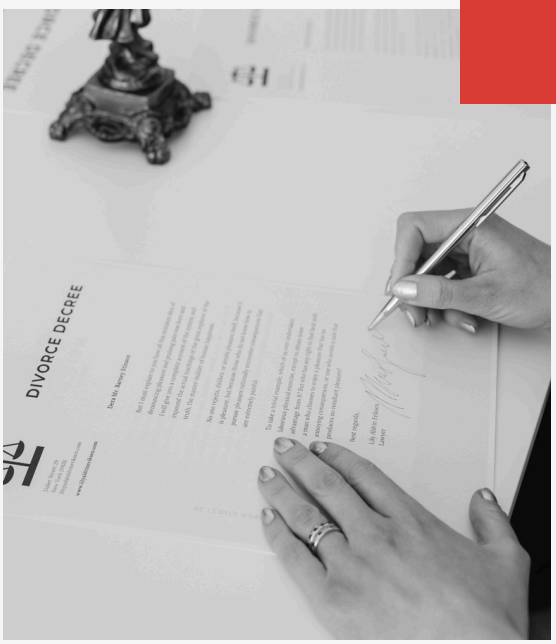

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CDRI-2025
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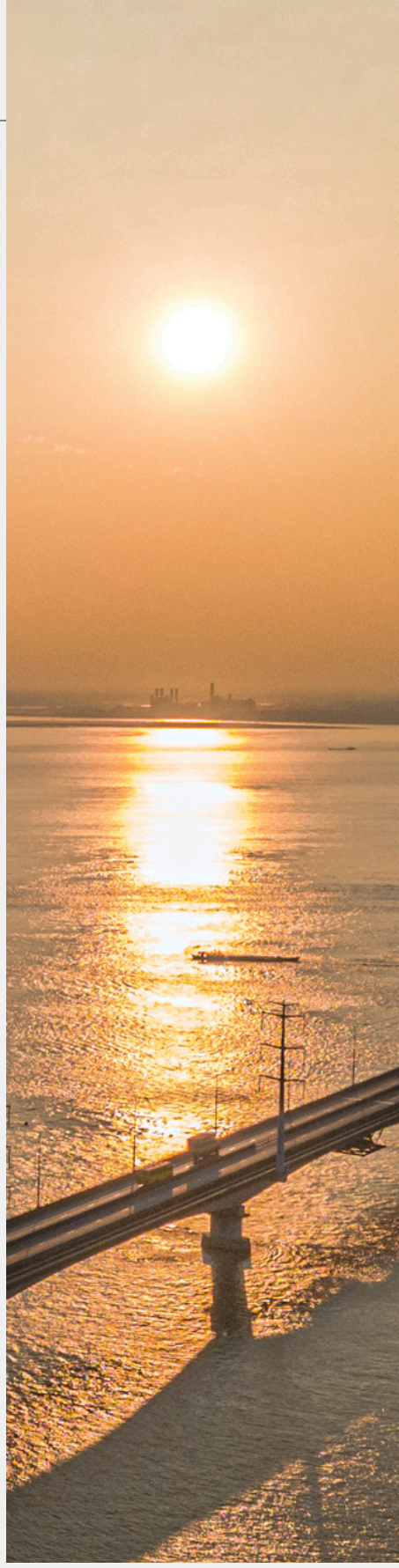
Acronyms

AID ATLAS - Aid Atlas
AF - Adaptation Fund
AFOLU - Agriculture, Forestry and Other Land Use
BCCTF - Bangladesh Climate Change Trust Fund
BNRF - Bangladesh Natural Rights Fund
CBDR - Common but Differentiated Responsibilities
CDRI - Climate Debt Risk Index
CFU - Climate Funds Updaten
CO_2 - Carbon Dioxide
COP28 - 28th UN Climate Change Conference of the Parties
CPI (Index) - Corruption Perceptions Index
CPI (Org.) - Climate Policy Initiative
CRI - Climate Risk Index
CTF - Climate Technology Fund
EbA - Ecosystem-based Adaptation
ESF - Earth Solidarity Fund
GCCA - Global Climate Change Alliance
GCF - Green Climate Fund
GDP - Gross Domestic Product
GEF - Global Environment Facility
ICJ - International Court of Justice
IDMC - Internal Displacement Monitoring Centre
IPCC - Intergovernmental Panel on Climate Change
KII - Key Informant Interview
LDC - Least Developed Country
LDCF - Least Developed Countries Fund
MCF - Multilateral Climate Funds
MDB - Multilateral Development Bank
MtCO2– Million tonnes of Carbon Di Oxide
mm - Milimeter
MRV - Monitoring, Reporting, and Verification
NAP - National Adaptation Plan
NCQG - New Collective Quantified Goal (for climate finance)
NDC - Nationally Determined Contribution
NRLG - Natural Rights-Led Governance
ODA- Official Development Assistance
OECD - Organisation for Economic Co-operation and Development
PPCR - Pilot Program for Climate Resilience
SCCF - Special Climate Change Fund
SEI - Stockholm Environment Institute
tCO2– tonnes of Carbon Di Oxide
Tk - Bangladeshi Taka
UNDP - United Nations' Development Programme
UNEP - United Nations Environment Programme
UN-REDD - United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation



Executive Summary

BANGLADESH CLIMATE FINANCE PROFILE

Bangladesh is one of the most climate-exposed countries globally, facing a combination of geographical, socio-economic, and climatic pressures. As a country situated within a Ganges-Brahmaputra Delta region where much of the nation is only a few meters above sea level, much of the nation is highly vulnerable to annual flooding, cyclones, riverbank erosion, and sea-level rise. As a nation with a population of over 160 million where agriculture dominates its economic profile, people living in Bangladesh are highly exposed to climate shocks that affect livelihoods, infrastructure, and access to food. Furthermore, extreme temperatures, droughts, and changing rain patterns also increase agricultural vulnerabilities, especially to rice and high-water-demanding crops.

Climate finance is central to Bangladesh's resilience and adaptation. It has mobilized domestic funds such as the Bangladesh Climate Change Trust Fund (BCCTF) together with international assistance from GCF, Adaptation Fund, as well as LDCF. Much of external climate finance is contributed though loans instead of grants, with Bangladesh therefore ending up with accumulating debts instead of receiving credible assistance to support adaptation. Such a debt-laden trend positions Bangladesh among nations facing greatest risk according to the Climate Debt Risk Index, reflecting how current flow of finance can worsen financial stress for vulnerable economies.

Climate Debt Risk Index (CDRI-2025) quantifies climate finance equity and economic exposure among highly vulnerable countries. Despite low emission volumes, Bangladesh has extensive climate debt burdens because it is hit regularly by disasters and has loan-based financial flows.

CLIMATE FINANCE

Disbursement-to-Commitment Ratio

Disbursement-to-Commitment ratio indicates the share of committed funds that are actually disbursed to the country. For overall climate finance, Bangladesh has a ratio of 0.63, marginally higher than the overall average of 0.57, registering moderate delivery but ongoing gaps. In contrast, South Sudan is disbursing 1.2 against its commitment, registering excess delivery, while Yemen is only receiving 0.13, reflecting extreme delay. For Multilateral Climate finance, Bangladesh's ratio is a meager 0.32 only compared to a higher LDC average of 0.5, reflecting slow delivery compared to commitment. Countries such as Tuvalu register better performance (0.76), while South Sudan is low at 0.04, reflecting uneven distribution of multilateral climate funds.

Debt-to-Grant Ratio

Bangladesh has a high debt-to-grant ratio, reflecting reliance on loans instead of grants. For total climate finance, the ratio is 2.7, much higher than the weighted world average of 0.7, indicating Bangladesh receives 2.7 dollars in loans for every dollar of grant. Its multilateral climate finance debt is also high with a ratio of 0.94, close to five times higher than the LDC average of 0.19. Bangladesh ranks highest in both scenarios among the 55 countries analyzed. Such a financing strategy with high dependence on loans increases fiscal pressure and restricts Bangladesh's ability to invest in adaptation as well as mitigating measures with an increase in public debt.

Adaptation-to-Mitigation Ratio

Adaptation-to-mitigation ratio conveys funding choices between emissions reduction and building resilience. Bangladesh's ratio is 0.42 for total climate finance, which is lower than the LDC average (0.88), suggesting a lesser amount financed on adaptation relative to mitigation. A slightly better-aligned figure is found with Multilateral Climate Finance (0.9), but lower than the LDC average (1.08). Countries like Somalia spend significantly on adaptation (12.62), while others like Equatorial Guinea spend almost entirely on mitigation (0.01), highlighting funding allocation differences.

Climate Debt Metrics

- **Climate Debt-to-GDP Ratio:** Bangladesh's climate debt is equivalent to 0.0077 of GDP, less than the world's average of 0.0125 but fiscal costs from recurrent borrowing to cover climate shocks.
- **Per-Capita Climate Debt to Per Capita Income Ratio:** For Bangladesh, it is 0.008, lower than the overall mean value (0.018) but high even for low-income households given a high frequency of disasters.
- **Per-Capita Climate Debt to Per capita CO2 Emissions:** Bangladesh's ratio of 29.52 USD/CO2 is close to the global mean (30.49), illustrating the injustices: low-emitting countries owe high climate debt.
- **Per-Capita Cumulative Climate Debt Burden (2002–2023):** Bangladesh has thus accumulated a total of USD 79.61 per person throughout this span, much higher than the weighted LDC average of USD 23.12. It indicates the historic climate burden upon people.
- **CDRI Score:** Bangladesh's CDRI 2025 score is 65.37 (High Risk) out of 100, projected to edge up to 65.42 by 2028 and 65.63 by 2031, showing a slight upward trend- reflecting both its level of hazard exposure and volume of climate finance attracted within a span of 20 years. Cyclones and river floods spur current adaptation spending but although the economy is growing pockets of poverty and a mid-range CPI score rule out risks relenting.

Bangladesh's Sectoral Climate Finance

- Energy sector leads Bangladesh's climate finance (USD 2.54 billion), primarily as loans (loan-to-grant ratio 11.99) with nearly complete allocation for mitigation with only limited support for adaptation.
- Agriculture, forestry & fisheries, & disaster preparedness have low but a fully grant-based allocation with adaptation only partially a priority but where both sectors are severely underfunded compared to their needs.
- Environmental conservation and water supply largely depend on grants with high adaptation consideration but suboptimal effectiveness in their disbursals, especially regarding water.
- Transport and Storage highly depend on loans (loan-to-grant ratio >1000), with a focus on adaptation with high exposure to debt despite satisfactory disbursement performance.

Very High Risk: Final Index ≥ 70; High Risk: 50 ≤ Final Index < 70; Moderate Risk: 40 ≤ Final Index < 50; and Low Risk: Final Index < 40.

- ·Minimum allocations go to health, industry, and population sectors, which indicate green finance gaps for human resilience, industrial adaptation, and vulnerable groups.
- Multi-sector projects accommodate cross-cutting projects with moderate adaptation prioritization and blended loan-grant financing but with moderate delivery efficiency.
- Overall trends indicate a dominant skew towards mitigation and energy, high dependence on loans among priority sectors, uneven prioritization of adaptation, and unevenly efficient disbursements, which highlight the importance of grant-first, adaptation-centrically oriented, and efficiently implemented climate finance consistent with sectorally determined requirements.

Misattribution in Bangladesh's climate finance

18.84% of Bangladesh's reported climate finance (USD 0.88 B) is misclassified with funds directed to coal & gas projects, e.g., Matarbari Ultra Super Critical, Bheramara combined cycle. This misattribution of climate finance raised Bangladesh's loan-to-grant ratio from 2.07 to 2.70, diverting funds from real climate solutions and weakening its ability to negotiate and influence global climate finance decisions.

Implications

Bangladesh's climate finance landscape reflects persistent gaps and inequities defined by low-level disbursements, high reliance on loans, low investment in adaptation funding, and an unbalanced fiscal impact relative to emissions and income. While Multilateral Development Banks (MDBs) represent a form of assistance, the overall levels of delay and loan-based structures nonetheless remain a deterrent to the country's ability to pursue climate-resilient development. These signals highlight the pressing imperative for debt-free, grant-based climate finance consistent with a polluter-pays principle to ensure Bangladesh is able to build resilience without increasing fiscal vulnerability.

PATHWAY TO BANGLADESH

Supply Side: Developed Countries

- **Grant-Based Funding:** Prioritize grants for adaptation and loss & damage to ease Bangladesh's debt burden (debt-to-grant ratio: 2.7).
- **Debt Relief & Reparative Justice:** Support debt-for-nature swaps and reparative justice to address historical responsibilities.
- **Earth Solidarity Fund:** Establish a global fund for equitable, unconditional grants to vulnerable nations.
- **Global North Responsibility:** Provide dedicated finance via debt relief and unconditional support, rooted in natural rights justice.

Supply Chain: Development Partners, MDBs, UNDP

- **Grant-First Approach: Shift to grant-based finance (MDB ratio:** 0.94) for adaptation and loss & damage.
- **MDB Reform:** Adopt NRLG principles for decentralized finance access; zero fossil fuel and unproven clean energy finance; expand concessional and grant-based financing, e.g. CIF-Nature, Climate and People fund; strictly maintain balance funding between mitigation and adaptation; support country platforms, co-financing, and long-term systemic change; create Regional Fund like SARF sourced from CIF, AF, GCF etc.
- **Build Local Capacity:** Strengthen MRV and fiduciary systems at national/sub-national levels.

Demand Side: LDCs - Innovative Finance

- **Reform BCCTF:** Transform into Bangladesh Natural Rights Fund (BNRF), using carbon/pollution taxes and philanthropy.
- **Community-Led Adaptation:** Empower communities to design, lead and monitor climate actions.
- **Innovative Financing:** Leverage carbon pricing and partnerships to bridge funding gaps (e.g., USD 137.5B energy sector need vs. USD 2.54B allocated).

Chapter 1: Background

Climate Finance Paradigm: A Broken System

The global commitment of climate finance attempts to maintain equity, based upon the "common but differentiated responsibilities" (CBDR) principle agreed upon by the 1997 Kyoto Protocol. It takes into consideration that developed countries, being responsible for the vast volume of greenhouse gas emissions throughout history, would have a higher responsibility to tackle climate change compared to developing nations, especially Least Developed Countries (LDCs hereafter). LDC countries contribute less than 3.3% of world output yet are heavily affected by climate change (UNFCCC, 1998; IPCC, 2022) (UNFCCC, 1998).

The Copenhagen Accord (2009) and Paris Agreement (2015) reaffirmed such commitment, with developed countries committing to deliver "new and additional to" financial aid, mostly grants, to allow climate change-adaptive measures for vulnerable nations, reduce emissions, and cope with loss and damage (UNFCCC, 2009; UNFCCC, 2015). The Paris Agreement's Article 9.1 states that such support is a legal requirement and not generosity under the "polluter-pays principle"; therefore, polluters most guilty should bear the related costs associated with it (UNFCCC, 2015).

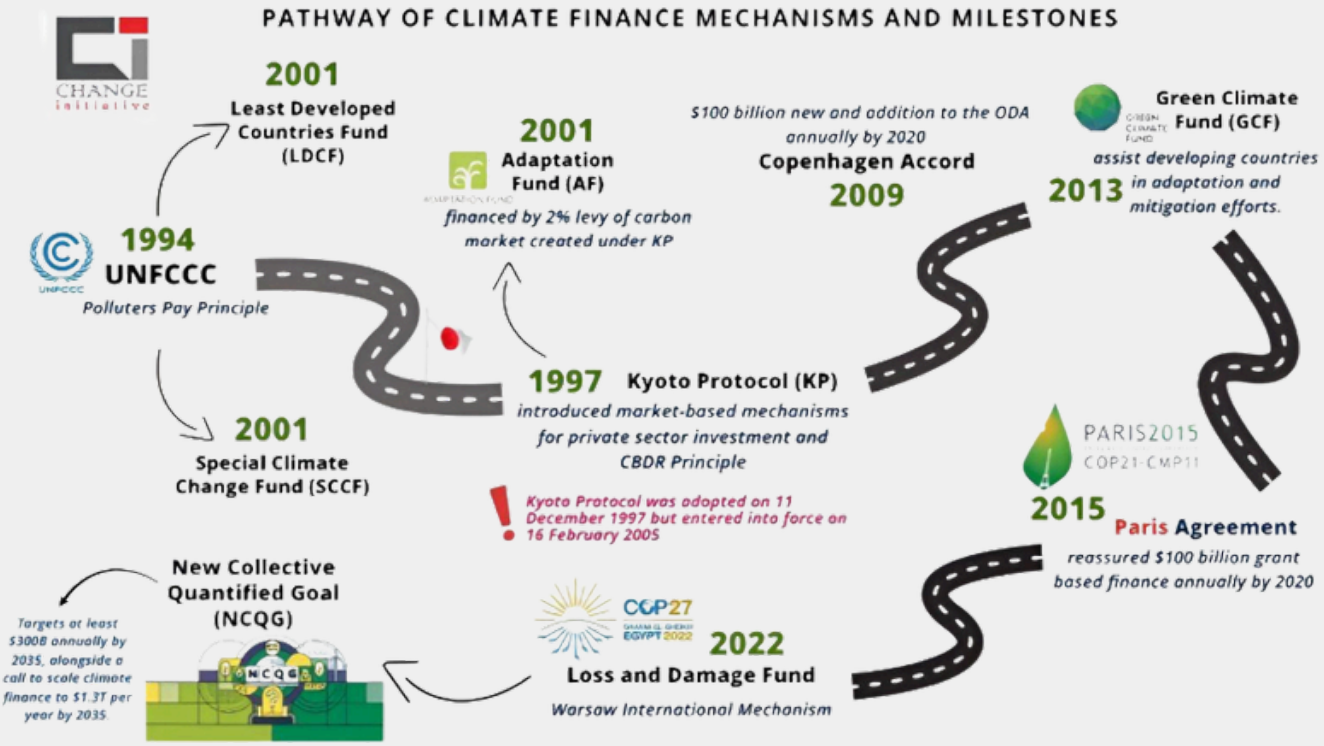


Figure 1: Pathway of Climate Finance and Mechanisms

For Least Developed Countries (LDCs), such commitment guarantees access to grants-based funding, boosting resilience and recovery from damages induced because of climate change with no additional costs. Over the past five decades, these nations, even with their low emission share, have undergone 69% of disaster-related deaths (IPCC, 2022).

A Broken System: From Grants to Loans

Although the promises were made, the reality has proven to be underwhelming. Till the end of 2023, multilateral climate funds committed about $61 billion; yet only 55% were distributed to agreed projects (OECD, 2023). Even though developed countries pledged $1.27 trillion worth of climate finance delivery for 2021-2022, fewer than 5% were grants and approximately 73% were loans (OECD, 2023). However, the Copenhagen and Paris agreement's vision of grant-first, justice-driven finance remains largely unfulfilled while vulnerable countries like Bangladesh now stand to lose again. Instead of being rewarded with assistance to protect themselves against floods, cyclones, and rising sea levels, vulnerable countries now face additional debts that further deplete their meager finances.

The Climate Debt Trap: LDCs Pay Twice

The Least Developed Countries (LDCs) face a challenging position: they contribute the least to global emissions but are the most to being harmed by climate change. They now face a compounding crisis: first pay through the devastating human and economic costs of climate disasters and then pay again through the financial burden of servicing the loans acquired to address those same impacts.

In Bangladesh, for instance, recurrent flooding and extreme weather exacerbate poverty and forced internal migration. According to Internal Displacement Monitoring Centre (IDMC), in Bangladesh alone, the number of total displacements were 2.4 million only in 2024 (IDMC, 2025). However, most of the climate finance contributes to additional national debt instead of paying it down. In 2021, among $69.6 billion worth of climate finance to developing nations, more than 76% offered as loans, with only less than 5% as grants to the LDCs (OECD, 2023; CPI, 2023).

This domination of loan-based finance is contrary to the commitment for "new and additional" financing and hampers least developed countries' (LDCs') fiscal flexibility. Climate Debt Risk Index (CDRI)-2024 flagged at least ten LDCs receiving more loans than grants which is compelling them to divert scarce resources from core services, including health care, education, and infrastructure, to debt repayment. Such a situation forms a "climate debt trap," where climate finance designated to enhance resilience instead elevates fiscal vulnerability. In 2021, LDCs' total external debt service cost increased to $50 billion from $31 billion in 2020, with their climate-related borrowings shooting up prior to their repayment capacity (UNCTAD, 2022). For over ten years, Least Developed Countries (LDCs) like Bangladesh have been receiving more climate loans than grants, according to the CDRI-2024. This trend is making the debt situation worse for those countries (Khan, 2024).

Barriers to Access and Trust

Access to climate finance is a substantial challenge for Least Developed Countries (LDCs), who have secured only fewer than 3% of the overall climate funds. Even if funds have been committed, disbursal is hindered by bureaucratic hurdles and complex approval processes; roughly about 44% of committed funds actually reach LDCs (OECD, 2023; Green Climate Fund, 2023). In Bangladesh, such delays lead to communities being kept waiting for a number of years until projects finally begin, leaving them to be exposed to recurring disasters such as floods and cyclones. Such slow and patchy distribution of funds greatly contributes to maladaptation and undermines confidence in the international climate finance regime.

Legal Obligations: From Aid to Reparations

There is a fundamental shift happening in the realm of international law. In 2025, the International Court of Justice (ICJ) released an advisory opinion concurring with the view that countries have a legal duty to protect the climate and nature system. If they don't meet their obligation, they should offer full compensation with a component of funding assistance (ICJ, 2025). The ICJ highlighted that funding cooperation as agreed upon in the Paris Agreement is a legal obligation, not a voluntary one. It clarifies the position of vulnerable countries like Bangladesh to claim a right to seek grant-based assistance to support climate adaptation as well as to cover loss and damage instead of relying on gratuitous aid.

Progress and Gaps: Loss & Damage, GCF, and New Collective Quantified Goals (NCQG)

At COP28 in 2023, loss and damage fund activation remained a major breakthrough towards recognizing that countries facing climate losses require grants instead of loans. Initial pledges were over $700 million; however, governance structures established in 2024 should ensure frequent and increased funding to meet future pledges running into trillions (UNFCCC, 2023). Successful replenishment for the period 2024-2027 for $12.8 billion to the GCF has been effective but only saw 30% utilized by the Least Developed Countries (LDCs) due to complex procedures coupled with low capacities (Green Climate Fund, 2025). An annual $300 billion goal by 2035 has been set by New Collective Quantified Goal (NCQG); however, such a figure remains a long way off the $1.3 trillion called for by the LDCs and has a tendency to reinforce reliance on loans unless it tilts towards public grants instead of debt-based funding (UNFCCC, 2024).

CDRI-2025: A Path to Natural Accountability and Nature Justice

The CDRI-2025 is an effective tool here, spotlighting injustices within present climate finance dealings and calling for a higher level of accountability. For nations like Bangladesh, whose climate impacts threaten to destroy millions, and loan-based funding exerts a heavy toll on public budgets, the CDRI-2025 lays out a concise framework to advocate for debt-free, needs-based, and rights-based climate finance. In the absence of a shift towards grants, vulnerable countries will be faced with twin burden: paying to withstand climate shocks even as they service debts taken to buffer such impacts.

Chapter 2: Bangladesh's Climate Vulnerability

Bangladesh is one of the most vulnerable countries to climate impacts situated within South Asia due to its unique geographical and socio-economic conditions. It is situated over the Ganges-Brahmaputra Delta with a flat, low-lying terrain covering extensive river systems with vast floodplains. Coupled with a highly dense population covering over 160 million people within a land area of 147,570 square kilometers, these make Bangladesh highly vulnerable to climate change effects such as extreme weather occurrences, sea level rise, and natural disasters. [1]

Bangladesh is exposed to climate change due to its geographical location that imposes upon its frequent extreme weather events such as floods, cyclones, droughts, salinity, hailstorms, and river as well as coastal erosion. These affect the entire nation to varying degrees, but ranking regions by the severity of climate loss is imperative to establishing effective adaptation measures as well as mitigative strategies. According to a 2023 study by Rahman, 4 out of 64 districts of Bangladesh are at severe-risk (Climate Risk Index, CRI: >50), 10 are at high-risk (CRI: 36–50), and 12 are at medium-risk (CRI: 26–35) with respect to their susceptibility to climate change impacts. These severe-risk prone districts, such as Sunamganj, Bhola, Kurigram, and Patuakhali, came up with losses ranging between $520 million and $720 million. About 41.71% of people were affected by extreme weather, and 5.55% suffered from illness or injury caused by these hazards (Rahman, 2023).

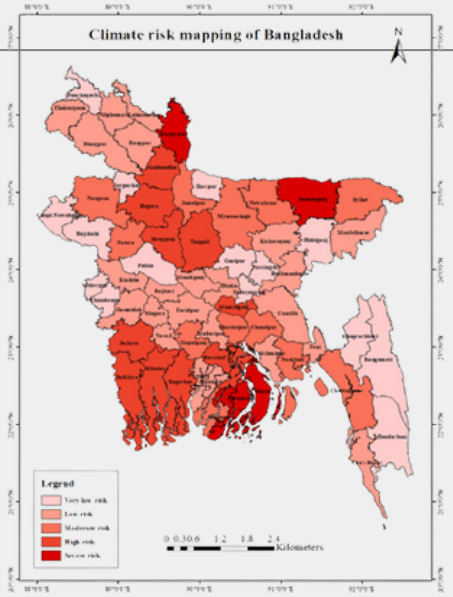
Bangladesh is highly agriculture-based, with a large percentage of its people relying on agriculture to generate their livelihoods. Such a dependency makes the nation highly vulnerable to climate-induced disruptions such as reduced food production, limited water supply, and land loss resulting from sea-level rise and increased salinity. Additionally, the nation's economic and sociological infrastructure is often lacking in resilience to withstand recurrent climate shocks, hence again deepening its vulnerability.

[1] https://en.wikipedia.org/wiki/Climate_change_in_Bangladesh

Key Climate-Induced Hazards

Bangladesh is highly exposed to a broad spectrum of climate-induced hazards and is thus a hub for climate-driven disasters. Below is a concise but efficient overview of these core issues:

1. Flooding: Being a riverine delta nation, Bangladesh is vulnerable to frequent flooding most seriously during the monsoon. Ganges, Brahmaputra, and Meghna rivers often overflow submerging massive areas of land, rendering millions homeless, causing damage to dwellings, structures, and agricultural commodities. In 2022 alone, floods resulted in approximately $1.0 billion damage and impacted 7.3 million people (Center for Climate Change Economics and Policies, 2022).



2. Cyclones: Tropical cyclones are often produced by the Bay of Bengal off Bangladesh's southern coast. Cyclones produce heavy rain, storm surges, and high winds that destroy coastal communities, kill people, and hamper economic activity. Cyclone Remal in 2024 had damaged an estimated Tk7,482 crore throughout Bangladesh. (The Business Standard, 2024)

3. River Erosion: Riverbank erosion is a recurrent problem with shifting river channels washing away agricultural land, houses, and roads. It abruptly displaces thousands every year, mostly living in deltas, with resulting repeat cycles of loss and displacement. Every year riverbank erosion wrecks close to 8,700 hectares of homestead land, leaving about 200,000 people displaced (Billah, Majumber, & Rahman 2023).

4. Sea-Level Rise: Bangladesh's coastal lowlands are also being threatened with rising sea levels from global warming. Sea-level rise results in land degradation, saltwater encroachment into freshwater resources, and lower agricultural productions. It is estimated that sea-level rise within the Ganges Delta is roughly 5–10 mm/year (Rahman, et al., 2022).

5. Extreme Temperatures and Droughts: Increasing temperatures and shifting rain patterns have made heatwaves and droughts more frequent and severe, hitting agriculture, especially rice and water-demanding crops. Heat exposure caused an estimated $21 billion worth of economic losses because of decreased labor supply (The Lancet, 2023).

These issues evoke Bangladesh's critical need for effective climate adaptation alongside climate mitigative steps to protect its people and economy.

Relevance to CDRI-2025

Bangladesh's exposure to climate risk is a key reason for its presence in the Climate Debt Risk Index (CDRI)-2025, an instrument for estimating and comparing nations' climate-related debt liability and fiscal exposure. Being one of the most climate-exposed nations, Bangladesh has a lot to lose from CDRI-2025's highlighted risks. It gauges nations such as Bangladesh that are already experiencing the physical effects of climate change even as they increasingly rely on debt to support their resilience and recovery.

Bangladesh's ranking of the CDRI-2024 reflects its excessively high climate risks that have been fueled by the dependence on adaptation and mitigation finance with a reliance placed via loans. It provides an important framework to highlight how climate finance designated to enable adaptation and support resilience has often taken a preference for loans instead of grants as originally pledged. It hopes to raise recognition for such a problem and to call for a fundamental shift in climate finance to a preference for grants over lending to prevent vulnerable countries like Bangladesh from falling into a trap of debt induced by climate.

Bangladesh's addition to CDRI-2025 allows for improved knowledge and addressing of the nation's climate finance and associated risk problems, thereby facilitating balanced solutions that remain committed to the polluter-pays principle with the Natural Rights Led Governance (NRLG) framework (Khan, 2024). Such inclusion is a fundamental stride towards realizing that countries such as Bangladesh gain access to much-needed debt-free support to increase their resilience and be better prepared for a changing climate.

Chapter 3: Analytical Framework

Interplay of Nature Justice in Climate Finance

Nature Justice emphasizes that people and ecosystems have fundamental rights to exist and to thrive, and to recover from harm (Khan, 2024). The prevailing climate finance framework, however, often relies on loans with long disbursal schedules, impedes such rights by shifting the cost burden to vulnerable countries for climate effects they did not cause. Climate Debt Risk Index-2025 combines Natural Rights-Led Governance (NRLG) principles with custom-designed metrics to shed light on such injustices, including high debt to per-tonne of CO_2 ratio and recurrent under-funding of adaptation measures. CDRI-2025 positions climate finance as a mandatory responsibility by casting debt-free solutions whenever possible. Such a strategy promotes equity and justice for people and ecosystems.

Rationale for Indicator and Variable Selection

Climate Debt Risk Index (CDRI)-2025 identifies the quality, structure, and accessibility of climate finance to be as relevant as the volume of funding disbursed. In light of CDRI-2024's observations, as also by several analyses conducted by organizations such as the UNFCCC, Climate Policy Initiative (CPI), and Oxfam, CDRI-2025 considers nine principal indicators to quantify inequity in climate finance and highlight the fiscal vulnerability amongst Least Developed Countries (LDCs). These indicators present a holistic picture of how LDCs struggle to access climate finance as much as make effective use of it.

Indicator	Interpretation
Disbursement-to-Commitment Ratio	Tracks how much of promised climate finance actually reaches countries.
Debt-to-Grant Ratio	Measures reliance on loans versus grants. A high ratio means more debt than aid.
Adaptation-to-Mitigation Ratio	Compares funding for adaptation vs. mitigation, showing prioritization.
Climate-Debt-to-GDP	Compares climate-related debt to a country's economy size.
Climate-Debt-to-Tax Revenue	Measures how much climate debt impacts a country's tax income.
Per-Capita Climate Debt/Income	Indicates how much debt burdens individuals relative to their income.
Per-Capita Climate Debt/Emissions	Compares climate debt to a country's emissions, highlighting fairness issues.
Per-Capita Climate Debt/Natural Resources	Assesses climate debt against a country's natural assets (e.g., forests, water).
Per-Capita Climate Debt Burden	Measures the overall financial stress from climate debt per individual.

Table 1: Key Indicators of Inequity and Fiscal Vulnerability in CDRI-2025

These nine indicators construct the CDRI-2025, shedding light on how different countries experience climate finance risks and vulnerabilities. They support a call for a more equitable climate finance framework that better addresses the specific needs of vulnerable countries.

Methodology for Estimating and Forecasting the CDRI-2025

Climate Debt Risk Index (CDRI) 2025 employs a comprehensive methodology to estimate and forecast climate debt risks by integrating indicators related to climate exposure and fiscal capability. It captures eight major indicators, such as the Climate Risk Index (CRI), Per Capita Climate Burden, and Government Debt-to-GDP Ratio, to analyze injustices prevailing with regard to climate finance amongst Least Developed Countries (LDCs) and recently graduated LDCs. These indicators are standardized and weighted proportionally to their importance to overall climate debt risk.

For forecasting the possibility of climate debt risks into 2028 and 2031, CDRI-2025 utilizes a composite country-level governance quality score using transparency, control of corruption, and rule of law to quantify its effect on CDRI-2025 score.

When combined with historical data, such a score enhances accuracy of forecasting as well as providing a more complete picture of future risks.

Data Sources and Analysis

Climate Debt Risk Index (CDRI-2025) draws upon a variety of data sources such as primary data produced out of Key Informant Interviews (KIIs) with experts and secondary data from international databases such as Germanwatch, SEI-AID ATLAS, and World Bank. These contribute to producing indicators reflecting inconsistency in climate finance distribution, thereby emphasizing grant-based funding, quicker disbursals, and debt relief to most vulnerable countries.

Variable Name	Measures/ Unit	Description	Calculation Technique	Source of Data
CRI Score (Climate Risk Index)	Index Score	Measures climate vulnerability, with an inverse relationship to the Climate Debt Risk Index (CDRI).	Derived from climate impact assessments and vulnerability measures	Germanwatch
Per Capita Overall Cumulative Climate Burden	USD per capita	Measures the financial cost of climate impacts per capita.	Calculated by dividing total climate-related financial burdens by population size for each year and adding them cumulatively	Authors' Estimation from SEI-AID ATLAS database
Government Debt to GDP Ratio	Percentage (%)	Represents the percentage of a country's government debt relative to its GDP.	Ratio of total government debt to national GDP	World Bank, IMF
Per Capita Development-Related External Debt Burden	USD per capita	Captures the external development debt burden in relation to the population size.	Divides total external development debt by population size	Authors' Estimation from SEI-AID ATLAS database
Per Capita GDP	USD per capita	Indicates a country's economic wealth, with an inverse relationship to the CDRI.	Calculated from total GDP divided by population size	World Bank
Population in Multidimensional Poverty	Percentage of population (%)	Shows the proportion of the population in poverty, indicating increased climate vulnerability.	Ratio of population in poverty to total population	Macrotrends, World Bank
Credit Rating (Moody's)	Rating score (e.g., Aaa, Baa)	Reflects a country's financial stability and capacity to manage debt.	Based on Moody's financial stability and creditworthiness assessment	Moody's and Trading Economics
Natural Efficiency Index	Index Score	How effectively a country manages natural, human, and financial capital-domestic or imported-since efficient use, regardless of scarcity or abundance, determines competitiveness and national wealth.	Derived by combining per-capita resource consumption (intensity) with resource use per unit of economic output (efficiency)	Solability

Table 2: Variables with Measures, Units, Calculation Techniques, and Data Sources

Normalization & weights: Each variable is normalized to 0–10 (higher value = higher risk). Inverse variables (e.g., per-capita GDP, CRI, natural efficiency) are inverted before scaling. Weighted average yields CDRI-25 with weights: CRI 15%; per-capita climate burden 25%; debt-to-GDP 5%; per-capita external debt 5%; per-capita GDP (inverted) 15%; multidimensional poverty 15%; credit rating 15%; natural-efficiency 10%.

Governance & forecasting: For 2028 and 2031, a Governance Score (CPI, Control of Corruption, Rule of Law) is built and normalized (0–10) and combined with updated financial variables. Per-capita climate debt is projected via compound growth from historical trends; updated values feed the index. To test robustness and refine weights, we apply multiple linear regression, PCA, and weight optimization, adjusting weights where empirical influence is strongest and diagnosing heteroscedasticity with standard tests.

We did the normalization in 0-10 scale, but our final CDRI Index is in 0-100 scale. The scaling methodology in our report aligns closely with established approaches used in the Worldwide Governance Indicators (WGI) and Human Development Index (HDI), reinforcing the robustness of our analytical framework. Like WGI, which standardizes diverse indicators to a common scale and applies weighted aggregation, our use of PCA for weighting captures the relative importance of each parameter, followed by normalization on a 0-10 scale. The HDI's methodology further parallels ours, as it normalizes indicators and then resizes them for interpretability (0-1 scale, often presented as 0-100), a step mirrored in our final 0-100 scaling. These consistent practices validate our approach as a statistically sound and widely recognized scaling methodology.

The formula to calculate CDRI (2025) is:

$$\text{CDRI (2025)} = 10 \times [(0.15 \times \text{Normalized CRI Score}) + (0.25 \times \text{Per Capita Overall Cumulative Climate Burden Percentile Score}) + (0.05 \times \text{Normalized Debt to GDP Score}) + (0.05 \times \text{Normalized Per Capita Development Related External Debt Burden Score}) + (0.15 \times \text{Normalized Inverted Per Capita GDP Score}) + (0.15 \times \text{Normalized Population in Multidimensional Poverty Score}) + (0.15 \times \text{Indexed Credit Rating}) + (0.10 \times \text{Indexed Natural Resources Efficiency Index})]$$

Scope and Limitation of The Study

CDRI-25 broadens the coverage and depth of its predecessor by assessing 55 countries, including 48 LDCs and 4 recent graduates, to present a comprehensive view of climate debt risks for vulnerable economies. It uses updated indicators such as per-capita climate debt, loan-to-grant ratios, climate finance flows, disbursement efficiency, credit ratings, macroeconomic data, and climate vulnerability metrics, with projections to 2028 and 2031. The study compares countries and sectors (adaptation mitigation, loss and damage) to expose inequities in climate finance distribution. Its findings rely on publicly available data and composite index methods, which may limit precision and omit informal financial flows. Forecasting introduces uncertainty, given changing climate finance policies. Ethical principles guided the work—ensuring transparency, proper citation, and fairness—while emphasizing that recommendations aim to reduce financial burdens on affected communities and promote just, sustainable climate finance.

Chapter 4: Climate Finance And Debt Landscape in Bangladesh

4.1 Climate Debt Exposure

Bangladesh's Debt Risk Profile

Bangladesh presents a salient climate debt risk, supported by its CDRI-2025 score of 65.37 that unveils its two-decade exposure to hazards as well as received climate finance. The index ranks Bangladesh alongside countries of South Asia that face marked climate-induced financial vulnerabilities. Bangladesh's average Climate Risk Index (CRI) value of 12.36 for the 1993 to 2025 underscores the long-term exposure to cyclones, river floods, and seasonal inundations that necessitates continued adaptation costs. Bangladesh's economy has grown, supported by a per capita GDP of USD 2,551 and a manageable debt-to-GDP ratio of 39.34%. However, 24.64% of the population still lives in multidimensional poverty, and a low Corruption Perceptions Index score of 24% weakens the country's ability to handle economic shocks. Further, the per capita cumulative climate burden for the years 2002 to 2021 amounts to USD 79.61, highlighting the long-term impact of repeated climate events on public finances and households. Collectively, these elements firmly rank Bangladesh in the "High" debt-trap risk category with other regionally vulnerable nations.

Impact of Loan-Heavy Climate Finance

Loan-based climate finance prevalence in Bangladesh aggravates fiscal vulnerability. It creates undue reliance on loans, thus restricting the government's fiscal space to finance much-needed adaptation projects despite relieving it of continued debt servicing. Climate-related loans directly compete with critical public services resources in health, education, and infrastructure with per capita development-related external debt of USD 387.61. Over time, this debt-heavy financing model can compromise resilience-building efforts, forcing trade-offs between investing in disaster risk reduction and meeting broader development priorities. While Bangladesh receives grants for sectors of agriculture, water, and disaster preparation, the loan-to-grant ratio is quite pronounced for principal sectors of energy and transport, thus maintaining long-term fiscal pressure and perpetuating the climate debt trap.

4.2 Vulnerability and Socio-Economic Impacts

Climate Risks and Socio-Economic Context

Bangladesh's high population density, exceeding 1,100 persons per square kilometer, intensifies the country's vulnerability to climate-induced hazards. Floods and cyclones displace millions, disrupt agricultural cycles, and strain urban settlements, particularly in low-lying riverine and coastal areas. Agriculture, which employs a large portion of the population, is repeatedly affected by salinity intrusion, riverbank erosion, and seasonal flooding, threatening food security and rural livelihoods. Urban settlements also face mounting risks from river floods, drainage congestion, and heat stress, creating pockets of high socio-economic vulnerability across the country.

4.3 Climate Finance Needs and Gaps

Bangladesh formulated the National Adaptation Plan (NAP) in 2022. It covers eight sectors namely water resources; disaster, social safety, and security; agriculture; fisheries, aquaculture, and livestock; urban sectors; ecosystem, wetlands, and biodiversity; policy and institutions; as well as capacity development, research, and innovation. The NAP has outlined a total number of 113 interventions where 90 fall in high-priority lists and 23 fall into moderate-priority lists that span across 11 climatic stress sub-sections to accomplish the goal to build a climate-resilient nation. To execute the NAP, Bangladesh will need about USD 230 billion for 2023-2050 (approximately USD 8 billion per year) as new and additional funding requirements.

A considerable amount of such funding is anticipated to be generated from external sources, with an approximation indicating some USD 6 billion annually from such international sources. It thus also follows that we will require approximately USD 172.5 billion over the entire duration stretching from 2023 to 2050. (MoEFCC, 2023)

However, our analysis of historical climate finance data between 2002 and 2023 reveals that Bangladesh has secured only USD 1.41 billion for adaptation purposes to cover fewer than 1% of projected requirements. Such a huge gap is reflective of persistent underinvestment in adaptation efforts, leaving millions of people exposed to climate threats and necessitating its reliance on loans and shrunk domestic funding with a consequent dilution of its ability to boost climate resilience effectively.

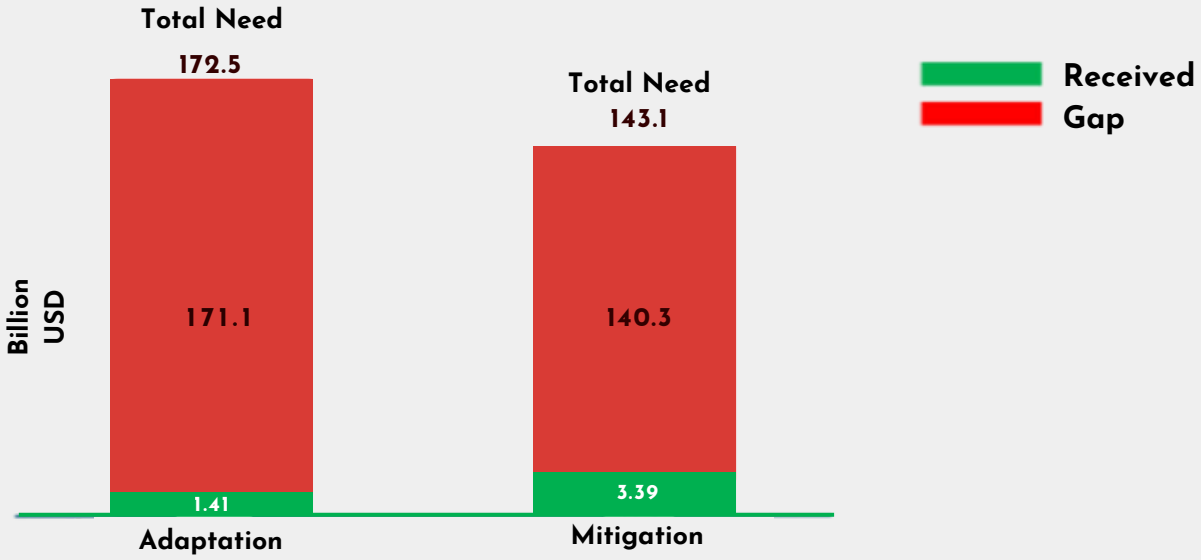


Figure 2: The Gap in Climate Finance for Bangladesh (2002 to 2023)

Bangladesh is facing a huge gap between its climate mitigation requirements and available actual resources. As per the Nationally Determined Contributions (NDC) 2.0, Bangladesh has a requirement of about USD 3.225 billion every year for unconditional mitigation. However, an average annual allocation of just USD 0.36 billion between 2020 and 2024 was made by the government, covering only 11.07% of needed funding. In the case of conditional mitigation actions, Bangladesh has a requirement of near USD 27.12 billion every year. In reality, however, only USD 3.39 billion has been mobilized compared to a total requirement of USD 143.71 billion, thus covering only a portion of about 2.35% of the needed investment. Such huge under provisioning indicates a substantial lack of mitigation finance, limiting Bangladesh's ability to meet its emission reduction goal and transform itself into a low-carbon, climate-resilient economy. (MoEFCC, 2021)

The following findings provides an overview of climate finance in Bangladesh with respect to LDCs context.

4.4 Disbursement to Commitment Ratio

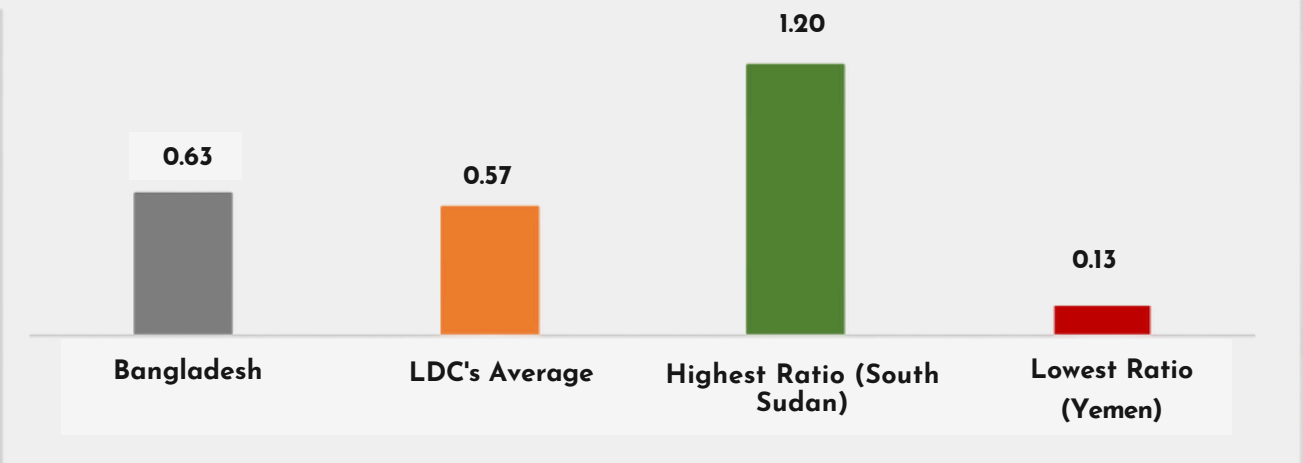


Figure 3: Overall Disbursement to Commitment Ratio

Bangladesh suffers considerable hurdles regarding the disbursement-to-commitment ratio of climate finance, which measures the share of committed funds that actually arrive in the nation. In other words, this ratio is a measure of how much each committed dollar has been disbursed.Bangladesh has a disbursement-to-commitment ratio of 0.63 (Figure 3) in overall climate finance which is slightly higher than the LDCs average of 0.57. As such, it suggests that even though a reasonable share of committed funds is successfully mobilized, significant deficits still persist. For comparison, some countries receive disbursements that exceed their own commitments, i.e., South Sudan has a ratio of 1.2 (Figure 3), which is probably a reflection of accelerated releases or early access to committed funds. On the contrary, only 13% (or ratio of 0.13) of committed funds is received by Yemen, which highlights crippling delays or systemic barriers to disbursing funds.

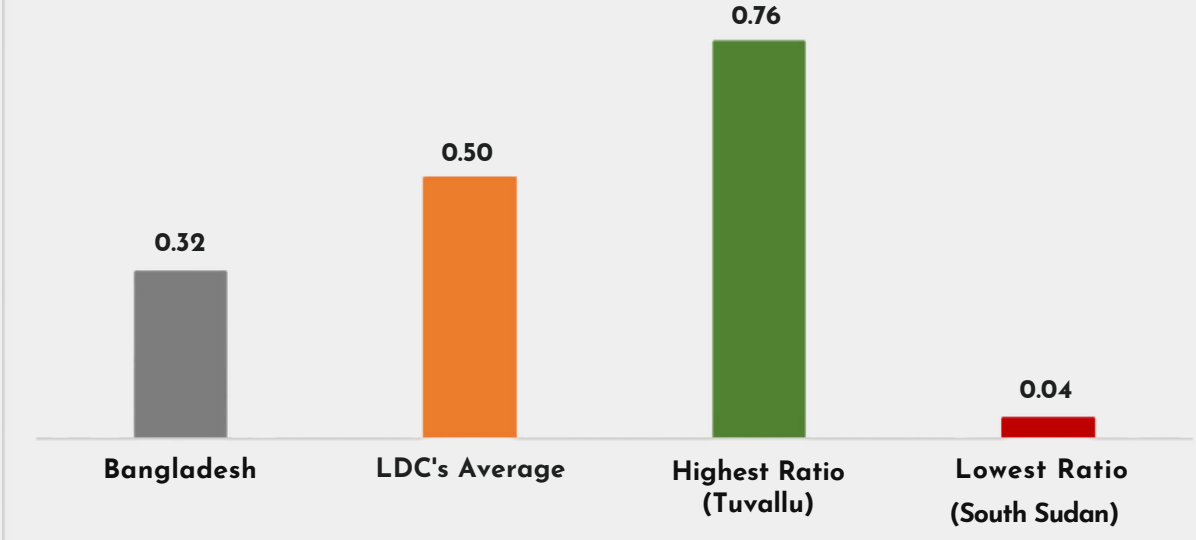
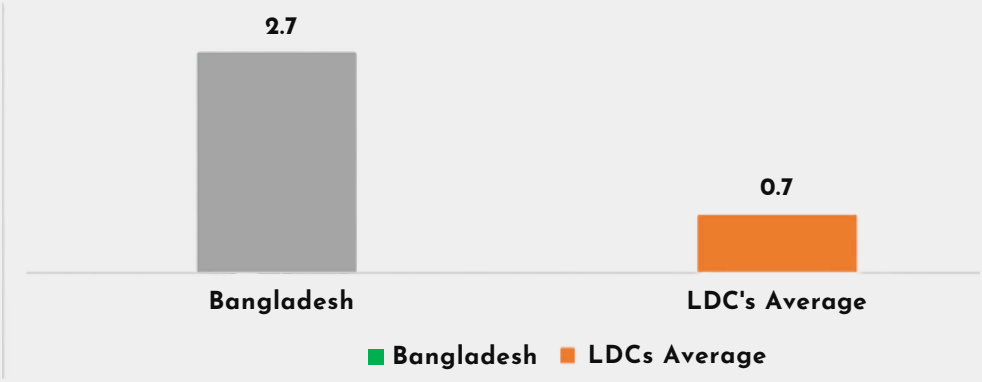


Figure 4: Disbursement to Commitment Ratio Through Multilateral Climate Funds

When specifically examining the climate finance provided by multilateral climate funds (MCF), it becomes apparent that Bangladesh faces significant constraints. The ratio of disbursement to commitment for Multilateral funding is merely 0.32 (Figure 4), which is considerably lower than the Multilateral Climate Funds for LDC's average of 0.5. This indicates that less than one-third of the pledged funds are actually being allocated to the country.

In contrast, Tuvalu successfully receives 76% of its MCFMDB commitments (0.76), demonstrating a more rapid and reliable delivery, whereas South Sudan is only able to access 4% (0.04), revealing substantial delays in funding. This disparity emphasizes the inequitable access and lagging disbursement of MCFDB climate finance, thereby hindering Bangladesh's ability to implement adaptation and mitigation strategies effectively. The low disbursement ratio from MCFDBs, combined with a significant dependence on loans, exacerbates the issue of underfunding, rendering Bangladesh exceedingly vulnerable despite the substantial resources that have been pledged.

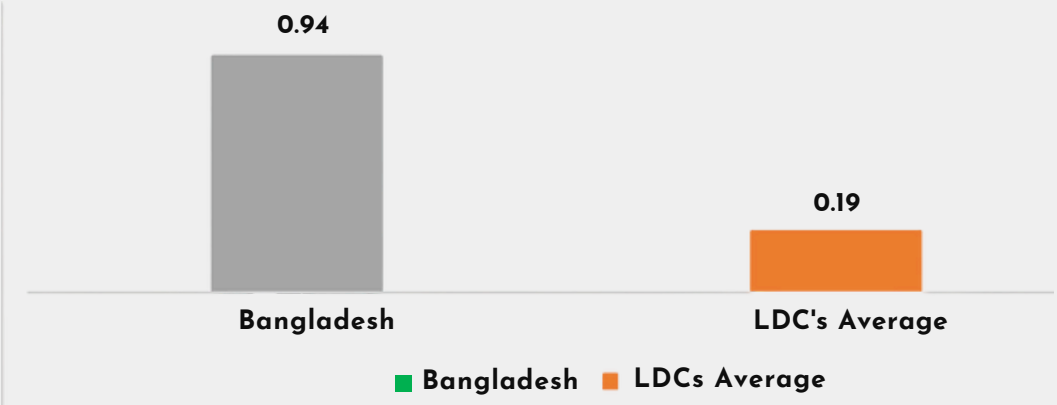
4.5 Debt to Grant Ratio



***Bangladesh has Highest Ratio**
***Multiple Countries have Zero Debt to Grant Ratio**

Figure 5: Overall Debt to Grant Ratio

Bangladesh has a high debt-to-grant ratio for climate finance with a reliance on loans over grants that deepens its fiscal risk. A debt-to-grant ratio measures how much debt a country receives compared to grants: if a country receives $1 in debt, how much has it received in grants compared to that. For Bangladesh, the ratio is 2.7 (Figure 5), which means for every $1 it has received in grants, it has taken $2.70 from loans, having the largest such ratio among comparable countries and significantly higher than the weighted LDCs average of 0.7. Such a loan dominated framework constrains fiscal space because paying off debt diverts funds away from necessary investments in adaptation, infrastructure, and social services.



***Bangladesh has Highest Ratio**
***Multiple Countries has Zero Debt to Grant Ratio Through MCF**

Figure 6: Debt to Grant Ratio Through Multilateral Climate Funds

With respect to multilateral climate funds (MCFs) (see Figure 6), the situation is indeed concerning. Bangladesh's ratio of debt to grants from MCFDBs is 0.94, higher than the 0.19 LDCs average ratio. It means that nearly every dollar from MCFs is a loan instead of a a grant, with Bangladesh having the highest ratio among this data set. Dominance of loans over grants from MCFDBs amplifies Bangladesh's climate debt risks, making it increasingly difficult to support critical adaptation and mitigation efforts with unsustainable amounts of debt.

4.6 Adaptation to Mitigation Ratio

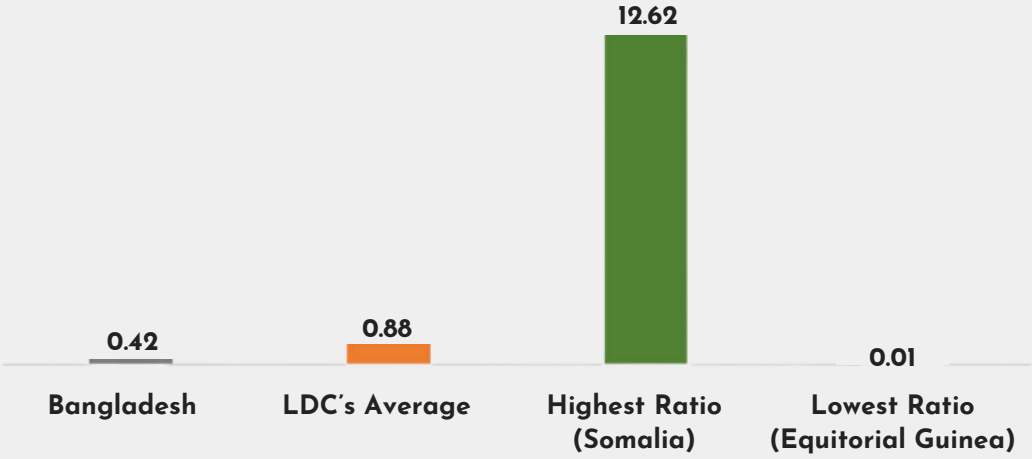


Figure 7: Overall Adaptation to Mitigation Ratio

Bangladesh is facing a huge gap in the allocation of climate finance between adaptation and mitigation measures. Bangladesh's adaptation-to-mitigation ratio is 0.42 (Figure 7), which is significantly lower than the weighted LDCs average of 0.88. Such a gap indicates that compared to mitigation projects, Bangladesh's adaptation projects find funding much lower than they require for their effective implementation. On the contrary, countries like Somalia give emphasis to adaptation, as can be seen from a ratio of 12.62, while countries like Equatorial Guinea invest almost their entire resources into mitigation to yield a ratio as low as 0.01. Moreover, 58.15% of Adaptation Financing in Bangladesh was delivered as debt. Bangladesh's low ratio indicates a lack of sufficient funding for critical adaptation needs such as food security, water supply, flood defense lines, cyclone shelters, and riverbank protection, making people vulnerable to ongoing climate-induced hazards.

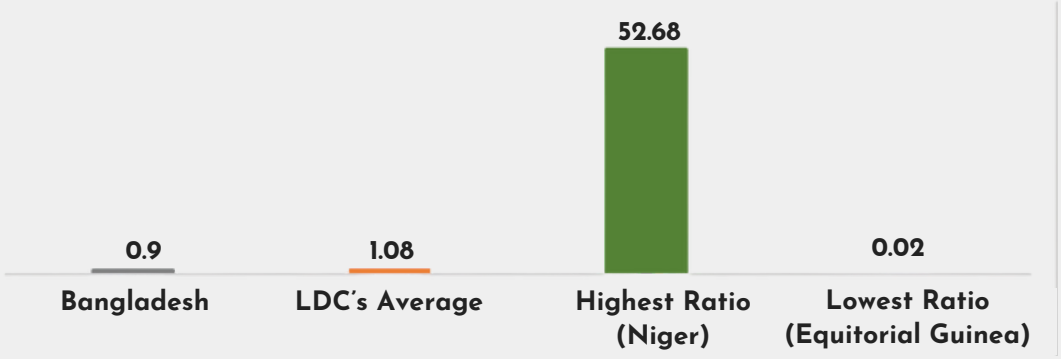


Figure 8: Adaptation to Mitigation Ratio Through Multilateral Climate Funds

For multilateral climate finance, Bangladesh's adaptation-to-mitigation ratio improves moderately to 0.9 (Figure 8), getting close to the MCF average of 1.08 but still tilting towards a preference for mitigation. This is restrained compared with Niger, with a ratio of 52.68, reflecting extreme prioritization of adaptation,

as well as with Equatorial Guinea, preferring mitigation again with a ratio of 0.02. Even with MCF support improving balance to Bangladesh's portfolio, adaptation projects remain more underfunded than mitigation projects, still reflecting a sizeable gap between allocation of finance and pressing resilience requirements.

4.7 Climate Debt to GDP Ratio

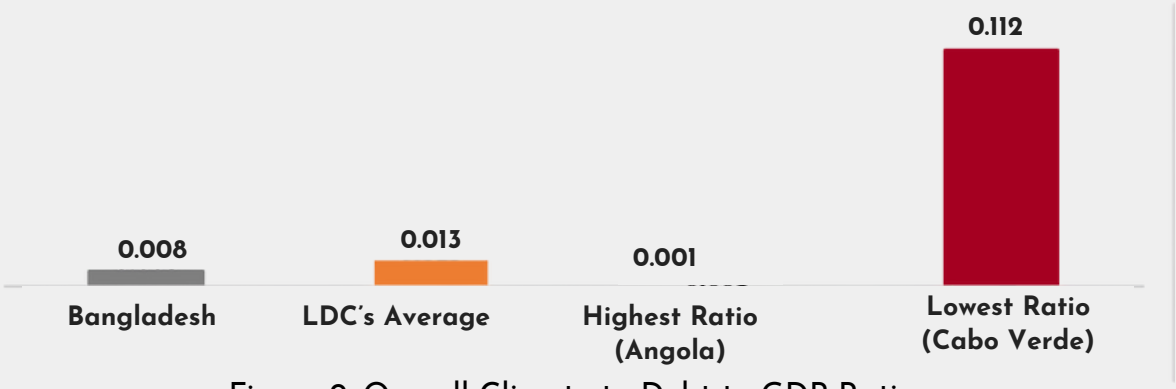


Figure 9: Overall Climate to Debt to GDP Ratio

Bangladesh's climate debt-to-GDP ratio (Figure 9) displays the relative size of climate-associated borrowing relative to the national economy. Bangladesh has a ratio of 0.0077, below the weighted LDCs average of 0.0125, signifying that even though climate loans account for only a minor fraction of Bangladesh's GDP, the absolute value of the financial burden is sizable in consideration of the wide climate impacts it faces. Conversely, countries like Angola only have a negligible ratio of 0.0005, while Cabo Verde shows an alarming scenario wherein climate debt accounts for up to 11.21% of GDP (0.1121), thus revealing how smaller nations that are largely exposed to climate change can bear relatively large debt liabilities. For Bangladesh, even a relatively modest ratio translates into large fiscal stress due to recurrent disasters, repeated borrowing, and limited local resources, thus highlighting the need for debt-free climate finance and grant-based assistance to build up strength without aggravating fiscal stress.

4.8 Per-Capita Climate Debt to Per-Capita Income Ratio

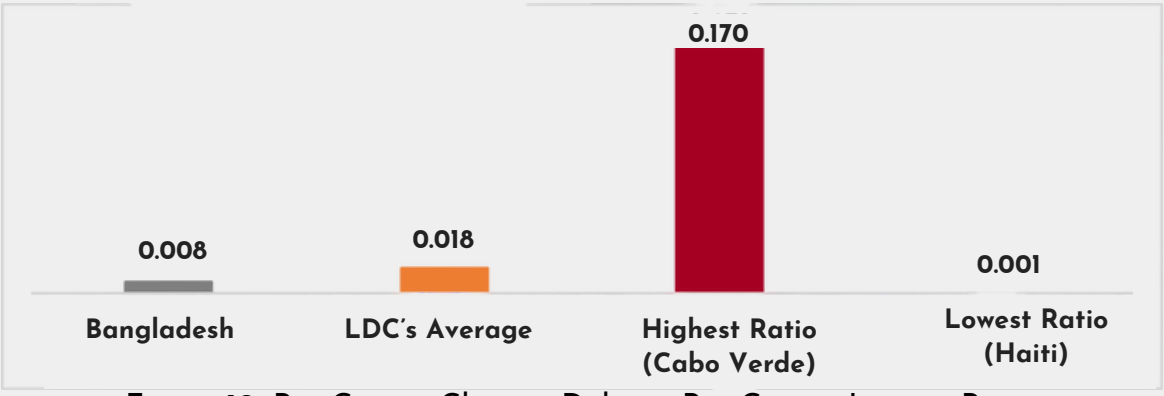


Figure 10: Per Capita Climate Debt to Per Capita Income Ratio

Bangladesh's per capita climate debt compared to per capita income helps us understand how much of an individual's earnings may go toward paying back climate-related loans. With 0.008 as its ratio, Bangladesh is below the weighted LDCs average of 0.018, revealing that, while per-person debt burden is relatively moderate, it is nonetheless of concern to low-income communities that are highly exposed to the

effects of climate change. By contrast, nations like Cabo Verde faced with a climate debt of 17% of per capita income (0.17), while Haiti is faced with little burden at 0.0008. For Bangladesh, even relatively slight per capita debt is problematic due to the regularity of climate-induced hazards like floods, cyclones, and river erosion that impose financial stress upon households. The ratio stresses the urgency of the need to prioritize grant-based climate finance to ensure that adaptation and risk management activities impose no additional burden upon citizens already subject to economic and environmental vulnerabilities.

4.9 Per Capita Climate Debt to Per Capita CO2 Emission

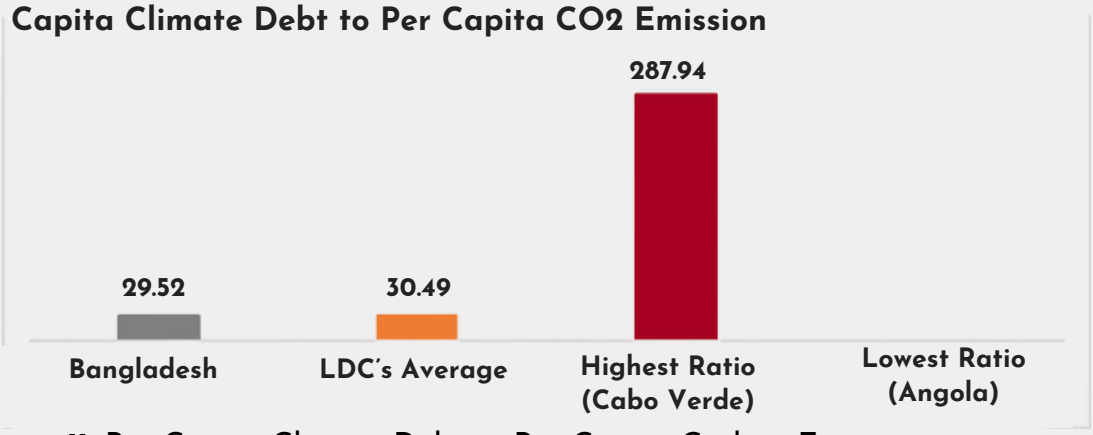


Figure 11: Per Capita Climate Debt to Per Capita Carbon Emission

Bangladesh's per capita climate debt relative to per capita carbon emissions (Figure 11) is representative of the imbalance between a country's contribution to global emissions and the climate finance burden it faces. Bangladesh has a ratio of 29.52, placing it just below the LDCs average of 30.49, implying that its per capita climate debt is largely comparable to the LDC standard for emissions. In marked contrast, countries like Cabo Verde face severe imbalance, supported by a ratio of 287.94, while that of Angola is negligibly small at 1.73, implying much less debt burden relative to emissions. For Bangladesh, it highlights the inequity of the polluter-pays principle, wherein the country contributes relatively minimally to global emissions but owes much climate debt to account for disaster-induced effects of floods, cyclones, and riverbank erosion. It highlights the urgent need for debt-free, grant-based climate finance to enable adaptation and resilience without penalizing countries that are low-emission and yet of high vulnerability.

4.10 Total Climate Debt to Total Debt Services

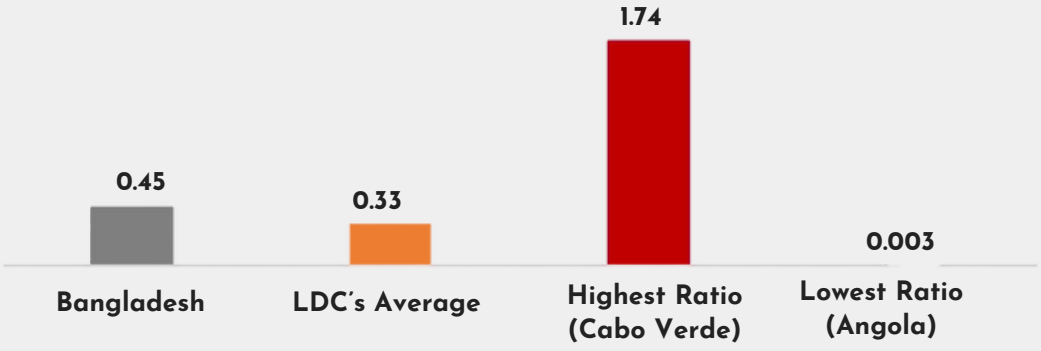


Figure 12: Total Climate Debt to Total Debt Services

Bangladesh's total climate debt, as compared to total debt servicing (Figure 12), is the share of national debt servicing that can be apportioned to climate-related loans. Having a ratio of 0.45, Bangladesh is above the weighted LDCs average of 0.33 and hence demonstrates that almost half of its climate-related loans account for much of

the total servicing of debts. Conversely, countries like Cabo Verde undertake an alarming ratio of 1.74, wherein climate debt exceeds annual servicing of debts, while for Angola it is only 0.003, evidencing the negligible role of climate loans in undertaking total repayments of debt. For Bangladesh, the specific indicator highlights the financial burden that climate finance, largely in the form of loans, places upon public budgets. The relatively higher ratio highlights the need for grant-based financing and debt relief mechanisms to ensure that climate adaptation and mitigation efforts do not exacerbate fiscal risk nor crowd out essential public investments.

4.11 Total Per Capita Cumulative Climate Debt (2002-23)

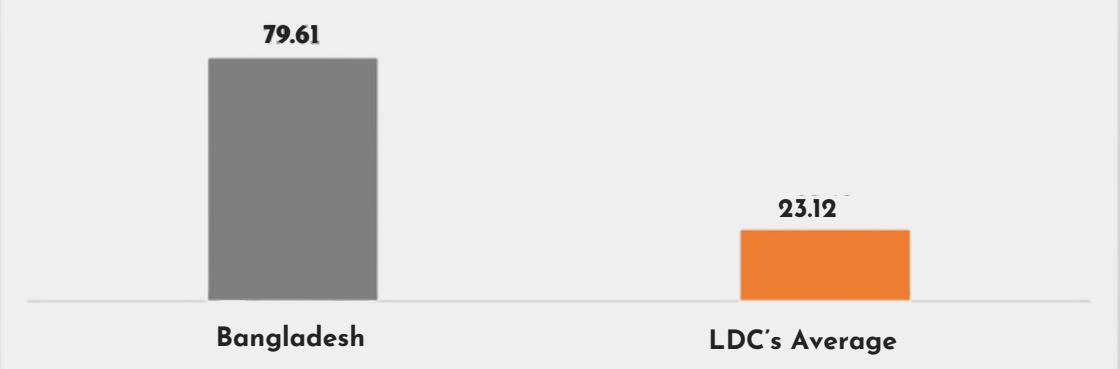


Figure 13:Total Per Capita Cumulative Climate Debt

Bangladesh's per capita cumulative climate debt from 2002 to 2023 is representative of the sustainable financial burden placed upon citizens by climate-related borrowing. From the period, Bangladesh has incurred about USD 79.61 per capita, significantly higher than the LDCs weighted average of USD 23.12.. The figure demonstrates the compounded effect of repeated climate shocks such as floods, cyclones, and riverbank erosion and reliance on loan-based climate finance to remedy them. The relatively high cumulative per capita debt demonstrates how climate finance, intended to enhance resilience, has also contributed to individual-level financial stress, particularly among low-income and vulnerable communities. The indicator highlights the need for grant-based and debt-free financing modalities to prevent Bangladesh's climate debt from continued escalation and ensure that resilience-building measures do not Add additional costs to households and national fiscal burdens.

4.12 Multilateral Climate Finance Scenario of Bangladesh

Bangladesh's climate finance from the Multilateral Development Banks (MDBs) is a deeply troubling case, drawing immense debt liabilities from the nation for only limited grant support. The Pilot Program for Climate Resilience (PPCR) is one of the front-running platforms for adaptation, relying heavily upon concessional loans having a loan-to-grant ratio of 1.20. Moreover, the Scaling Up Renewable Energy Program demonstrates an even higher ratio of 1.58, indicating even less reliance upon non-repayable financial flows and even more upon debt. While the Green Climate Fund (GCF) has committed immense amounts of financial resources, it has performed considerably poorly: it has actually disbursed merely 17% of the total amount committed funds allocated, with the financial allocations of the GCF demonstrating an apparent skewing even towards mitigation activities (256.48 million USD) over those of adaptation (141.82 million USD). Thus, even for this case, the picture does not adequately meet the required needs for adaptation funding.

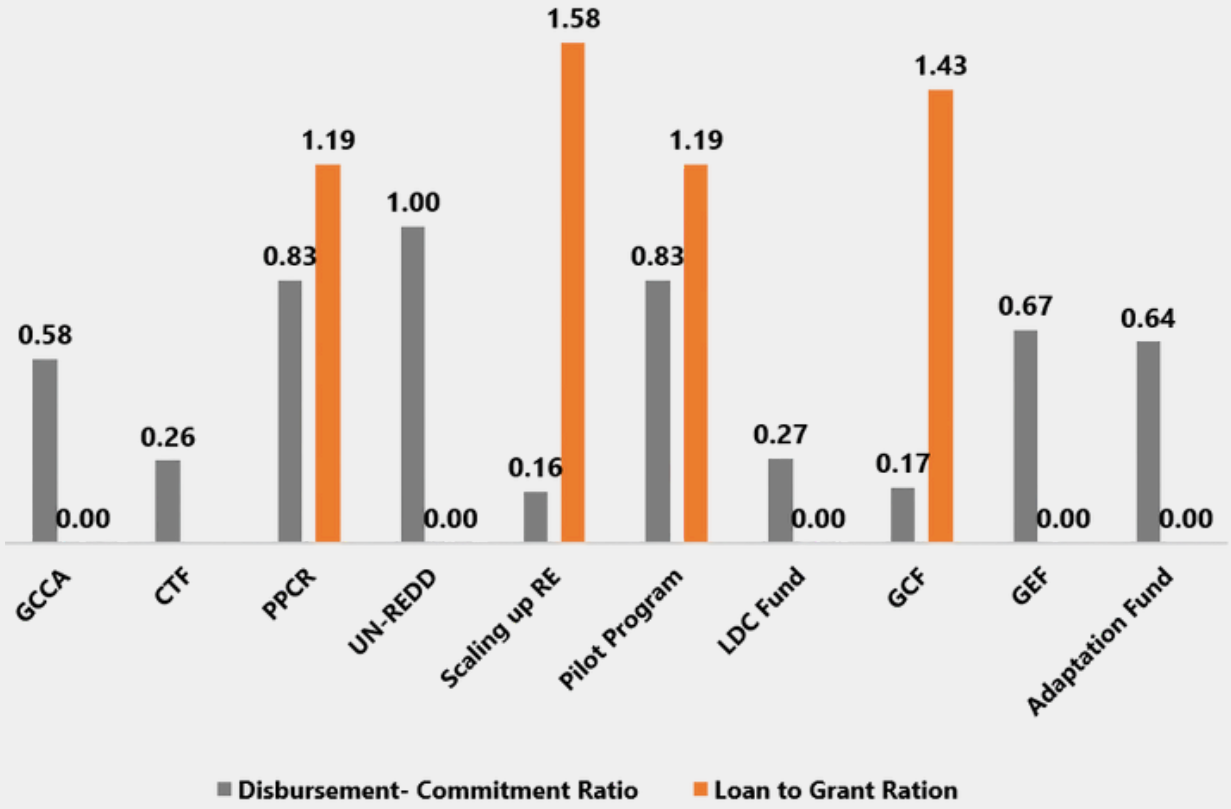


Figure 14: Multilateral Climate Finance Scenario of Bangladesh

Other MDB agreements exhibit similarly troubling trends. The Least Developed Countries Fund (LDC Fund) and Adaptation Fund, though adaptation-oriented, release just 26% and 64% of their committed volumes (Figure 14), respectively, signifying continued bottlenecks in accessing committed resources. The Climate Technology Fund (CTF), Global Environment Facility (GEF), and UN-REDD, meanwhile, use little loan exposure but deliver sparse absolute funding in light of Bangladesh's climate exposure.

Prevalence of loan-dominated instruments, combined with reduced disbursement percentages in large funds and mitigation-oriented allocation, puts Bangladesh in a vulnerable position individually, thus increasing the risk of falling into a climate debt trap.

Despite being considered one of the world's most climate-exposed nations, Bangladesh continually experiences an overbearing share of financing its climate adaptation by means of loans, thus weakening its fiscal capacity to effectively respond to risk that is climate change-induced.

4.13 Sectoral Analysis of Climate Finance in Bangladesh

An analysis of Bangladesh's climate finance distribution across sectors reveals significant disparities, reflecting both priority areas and persistent gaps in addressing climate vulnerabilities.

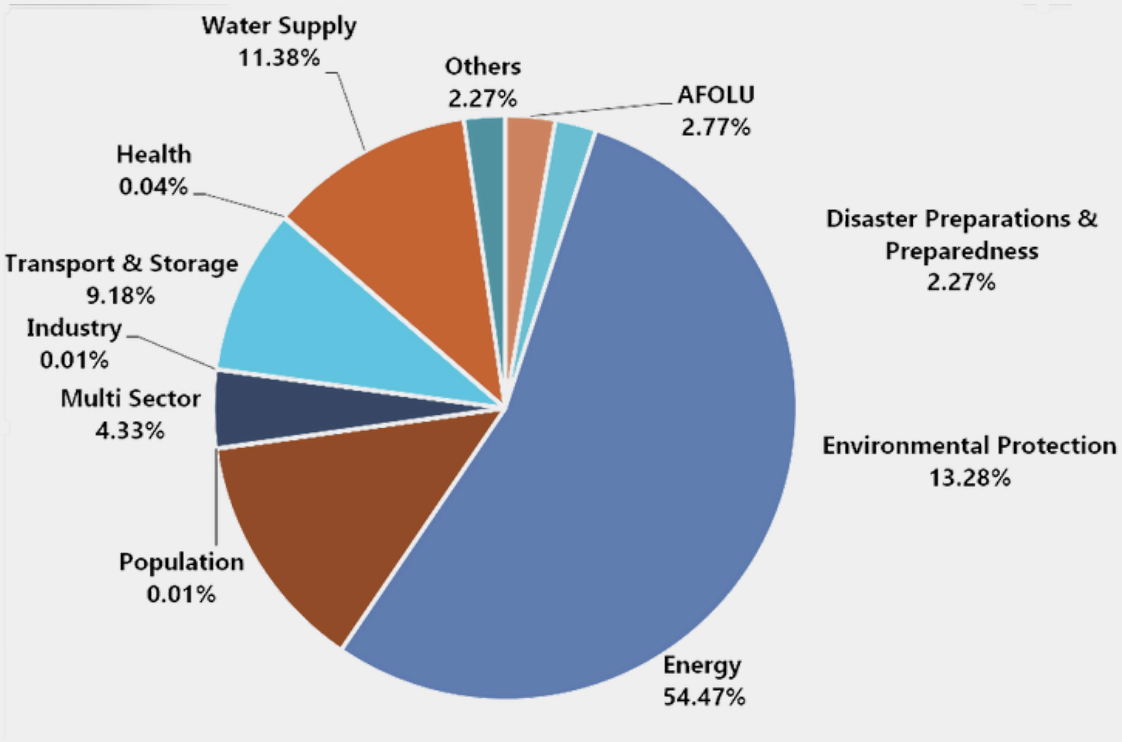


Figure 15: Total Climate Finance (in Billion USD)

Disbursement of Bangladesh's climate finance (Figure 15) from 2002 to 2023 shows a clear sectoral skewness, with energy occupying the largest share of USD 2.54 billion, illustrating a keen interest in mitigation endeavors such as renewable energy and grid efficiency. Environmental protection and water supply followed with USD 0.62 billion and USD 0.53 billion allocations, supporting ecosystem restoration, pollution control, and climate-resilient water supply. Transport and storage activities claimed USD 0.43 billion, presumably towards climate-proof roads, bridges, and logistics, and multi-sectoral activities claimed USD 0.20 billion, supporting cross-cutting activities. However, human vulnerability directly related to sectors such as agriculture, forestry, and fisheries only claimed USD 0.13 billion, and disaster preparation claimed USD 0.11 billion, revealing that climate adaptation funding for rural and high-risk groups is limited. Key sectors such as health, industry, and population programs claimed zero climate finance, testifying to the continuation of gaps to cover the entire spectrum of climate risks. Overall, the disbursement reveals overreach for energy-based mitigation at the cost of adaptation and human-oriented sectors, therefore constraining Bangladesh's potential to build resilience, protect livelihoods, and achieve climate equity for its most vulnerable populations.

4.13.1 Agriculture, Forestry and Fisheries

For Bangladesh, the agriculture, forestry, and fisheries sector have received roughly USD 0.13 billion of climate finance, all of which was provided in grants, hence giving it a loan-to-grant ratio of zero. USD 0.061 billion has been received by adaptation projects and USD 0.093 billion by mitigation projects, hence giving it an adaptation-to-mitigation ratio of 0.66, indicating that it has kept up a humble interest in mitigation. Total commitments and disbursements are USD 0.13 billion and USD 0.104 billion, respectively, hence giving it a disbursement-to-commitment ratio of 0.80, indicating a strong delivery rate. However, the sector's total needs estimates are USD 2.76 billion, hence indicating a substantial gap between current funding and the resources required to fully address these needs.

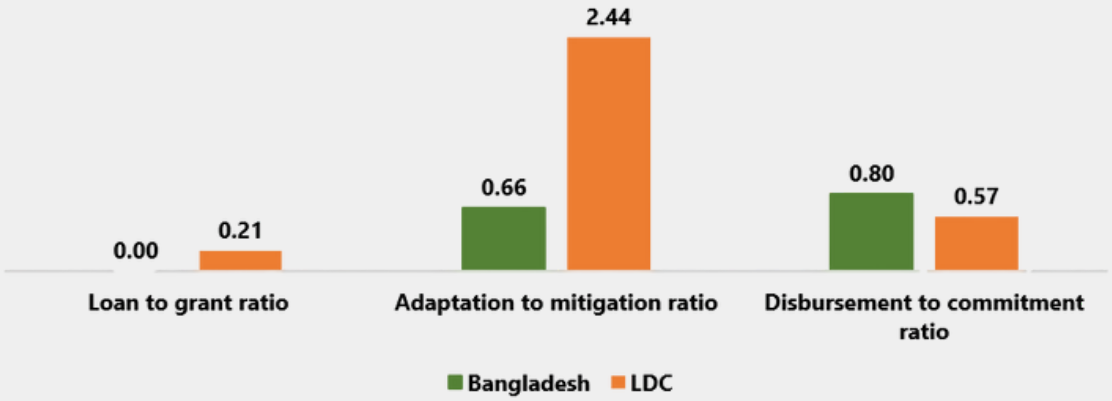


Figure 16: Climate Finance in Agriculture, Forestry and Fisheries in Bangladesh

Relative to LDC countries' trends, Bangladesh's climate finance of the agriculture, forestry, and fisheries sector (Figure 16) is clearly remarkable. For the LDCs at large, the average loan-to-grant ratio is 0.21, representing a mix of loans and grants; Bangladesh, by contrast, depends solely on grants, giving it a ratio of 0. For the world at large, the adaptation-to-mitigation ratio averages 2.44, representing a clear focus on adaptation, while Bangladesh's ratio of 0.66 is more biased toward mitigation. The world's average disbursement-to-commitment ratio is 0.57, much lower than Bangladesh's 0.80, signifying that Bangladesh is relatively structured at disbursement of committed funds despite being restricted to limited sectoral financing. These comparisons shed light upon the underfunding of the sector in Bangladesh and highlight the potential to be more convergent with global best practices by placing a stronger focus upon adaptation activities.

4.13.2 Disaster Preparedness & Prevention

For Bangladesh, the Disaster Preparedness and Prevention sector has been allocated approximately USD 0.11 billion in climate finance, of which all has been provided as grants so that the loan-to-grant ratio is 0. USD 0.06 billion has been used for supporting adaptation activities and USD 0.05 billion for mitigation activities, providing an adaptation-to-mitigation ratio of 1.11, indicating that adaptation has been given a slight emphasis. The total amount committed is USD 0.11 billion, of which USD 0.08 billion has been disbursed, providing a disbursement-to-commitment ratio of 0.79, indicating successful delivery of funds. However, the sector's needs estimate is USD 0.2 billion, indicating a vast difference between the amount of climate finance committee and the volume of resources required to meet the needs.

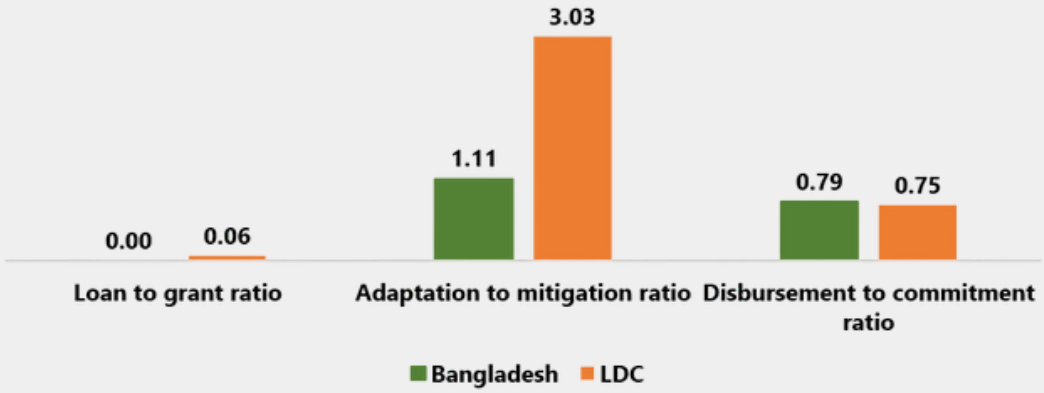


Figure 17: Climate Finance in Disaster Preparedness in Bangladesh

As compared to the overall LDC's pattern, Bangladesh's allocation for climate finance for the Disaster Preparedness and Prevention sector (Figure 17) reveals significant differences. On the LDCs level, the mean loan-to-grant ratio is 0.06, signifying widespread use of grants with limited use of loans, while Bangladesh is entirely grant-dependent, giving it a ratio of 0. Therefore, it is contrary to the LDC countries' adaptation-to-mitigation ratio of 3.03, much higher than Bangladesh's ratio of 1.11, thus showcasing a higher interest in adaptation among LDCs in this sector compared to Bangladesh's relatively balanced approach. More importantly, the mean LDCs disbursement-to-commitment ratio is 0.75, slightly less than Bangladesh's 0.79, signifying that Bangladesh is relatively efficient in disbursing committed funds despite its meager allocations. These comparisons reflect the need for Bangladesh to increase the volume of climate finance and the focus on adaptation in disaster preparedness to better meet its requirements for resilience.

4.13.3 Energy

For Bangladesh, the energy sector is the largest benefactor of climate finance, with total allocation reaching USD 2.54 billion. The allocation is comprised of USD 2.35 billion in loans and USD 0.196 billion in grants, thus taking a loan-to-grant ratio of 11.99 that denotes much reliance upon debt finance. Allocation of climate finance to the sector is heavily skewed in favor of mitigation activities, as seen through the allocation of USD 2.54 billion for mitigation activities, while USD 0.0006 billion is allocated to adaptation, resulting in an adaptation-to-mitigation ratio of 0.00023 that highlights almost sole focus upon mitigation activities. Committed funds total USD 2.5435 billion of which USD 1.638 billion has been disbursed, thus taking a disbursement-to-commitment ratio of 0.64 that denotes moderate efficiency in releasing funds. However, the sector's estimated needs amount to USD 137.5 billion, showing wide gap between current levels of funding and resources that would be required to meet mitigation and energy transition plans.

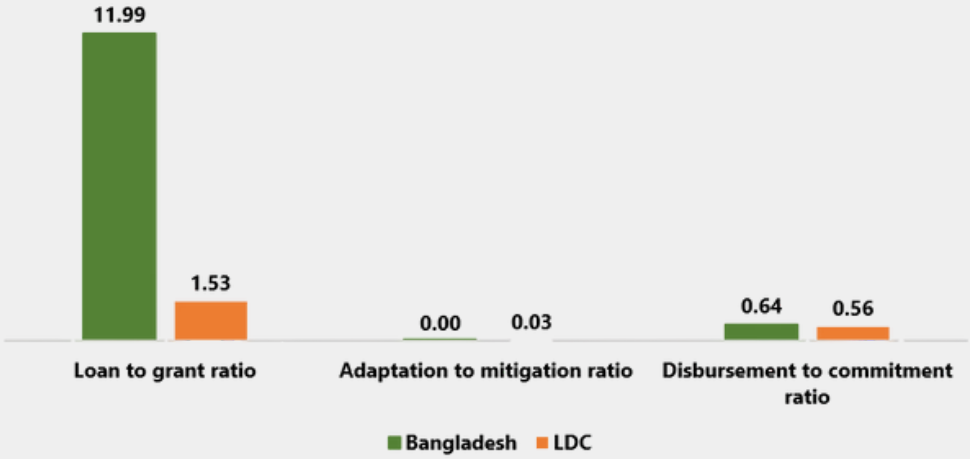


Figure 18: Climate Finance in Energy Sector in Bangladesh

In comparison with the LDC's situation, Bangladesh's energy finance picture (Figure 18) diverges significantly. The LDCs average of the loan-to-grant ratio for energy is 1.53, significantly less than Bangladesh's 11.99, signaling that other nations use grants to support mitigation and adaptation projects even more.

The LDCs adaptation-to-mitigation ratio is 0.03, somewhat above Bangladesh's 0.00023, implying that even though mitigation is the focus worldwide, Bangladesh's allocation is even more biased toward mitigation. Moreover, the LDCs disbursement-to-commitment ratio is 0.56, less than Bangladesh's 0.64, revealing that Bangladesh

is moderately successful in disbursing committed funds despite the intense use of loans. In analysis, urgency exists for balance and grant-based financing for energy mitigation and adaptation to ensure the sector facilitates sustainable and resilient energy transition for Bangladesh without embedding deeper debt liabilities.

4.13.4 Environment Protection

For Bangladesh, the Environment Protection sector was allocated USD 0.62 billion in total climate finance, of which USD 0.06 billion was allocated as loans and USD 0.56 billion was allocated as grants. This allocation of funds created for the sector a loan-to-grant ratio of 0.10, thus registering marked dependency on grant-based financing. From this allocation, USD 0.31 billion was assigned to financing adaptation actions, while USD 0.37 billion was assigned to mitigation activities, resulting in an adaptation-to-mitigation ratio of 0.84. The ratio shows a relatively even balance between adaptation and mitigation for the sector. The total commitment was USD 0.62 billion, of which USD 0.35 billion was disbursed, giving rise to the disbursement-to-commitment ratio of 0.56, thus registering moderate effectiveness in the release of committed funds.

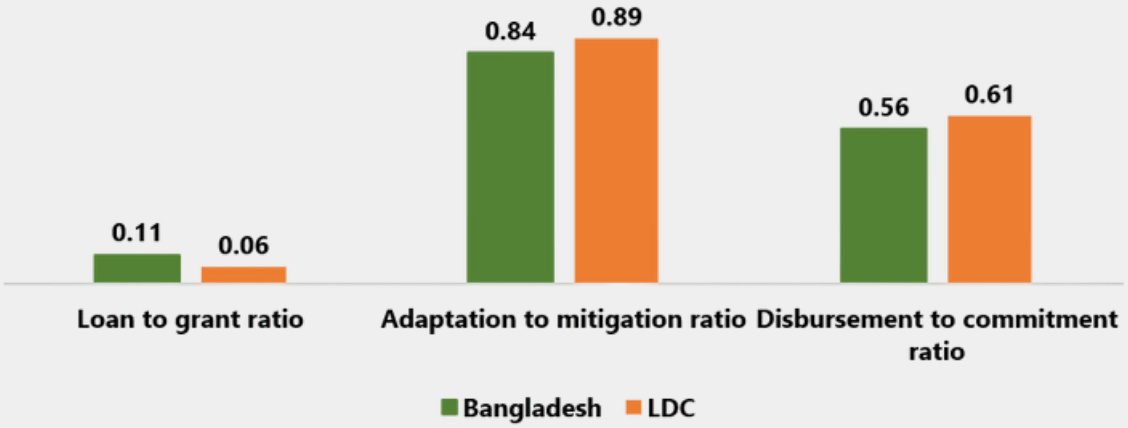


Figure 19: Climate Finance in Environment Protection in Bangladesh

As compared to the overall LDC status, Bangladesh's record for the environment protection sector shows notable strengths and potential for improvement. On the LDCs level, the loan-to-grant ratio is 0.06 (Figure 19), slightly less than Bangladesh's ratio of 0.10, hence showing that Bangladesh's sector is largely grant-based, fully aligning with best practices for the financing of environmental projects. The LDC's adaptation-to-mitigation ratio is 0.89, slightly higher than Bangladesh's ratio of 0.84, thus showing that adaptation is given a slightly higher focus among LDC countries compared to mitigation. Additionally, the LDC's disbursement-to-commitment ratio is 0.61, exceeding Bangladesh's ratio of 0.56; it shows that although Bangladesh is heavily dependent upon grant-heavy allocations, much potential exists to improve the velocity and effectiveness of the distribution of funds. In conclusion, Bangladesh's financing for environment protection demonstrates a grant-based approach with an even balance towards adaptation and mitigation focus; however, the sector can benefit from increased disbursement to meet urgent environment and resilience needs.

4.13.5 Health

For Bangladesh, the health sector (Figure 20) has seen negligible climate finance, with total allocation standing at around USD 0.002 billion, all of it in the form of grants, giving it a loan-to-grant ratio of 0. The allocation for adaptation was USD 0.001 billion and for mitigation was USD 0.001 billion, giving it an adaptation-to-mitigation ratio of 0.46, revealing that it has chosen to focus slightly more on mitigation. The overall commitment was USD 1.65 million disbursed to USD 1.34 million, giving it the disbursement-to-commitment ratio of 0.81 that implies seamless delivery notwithstanding the level of funding.

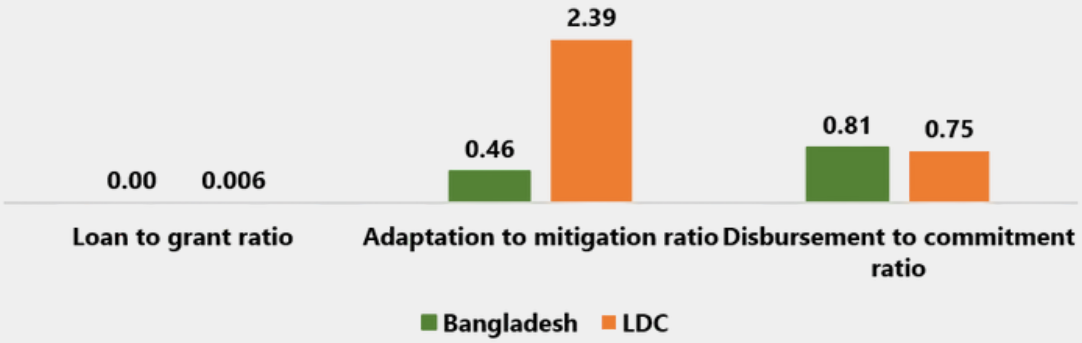


Figure 20: Climate Finance in Health Sector in Bangladesh

On the LDCs plane, the sector has a loan-to-grant ratio of 0.006 and an adaptation-to-mitigation ratio of 2.39, revealing much higher adaptation focus elsewhere. The LDC's disbursement-to-commitment ratio is 0.75, similar to Bangladesh. What is revealed by this scenario is a severe gap, to the extent that the health sector adaptation needs largely remain unfunded against the backdrop of the sector's vulnerability.

4.13.6 Industry

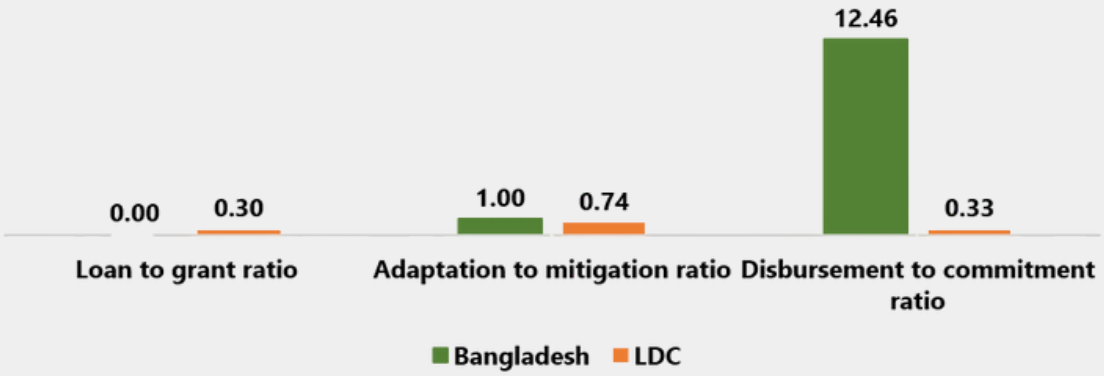


Figure 21: Climate Finance in Industry Sector in Bangladesh

The industry sector of Bangladesh was allocated negligible USD 0.58 million, all as grants, thus achieving a loan-to-grant ratio of 0 (Figure 21). Both adaptation and mitigation allocations were equivalent (USD 0.58 million), achieving an adaptation-to-mitigation ratio of 1, thus indicating uniformly balanced funding for this sector. The disbursement efficiency was poor with the disbursement-to-commitment ratio below 0.33, significantly less than the LDC's average of 0.74, indicating severe Fund delivery delays. The sector is severely underfunded compared to its potential needs for climate-resilient industry development.

4.13.7 Population

Climate finance for population-centric projects was significantly restricted, with USD 0.61 million being fully allocated of grants and a loan-to-grant ratio of 0 (Figure 22).

Adaptation projects received USD 0.045 million, while mitigation activities received USD 0.61 million, thus resulting in an adaptation-to-mitigation ratio of 0.07 that indicates a clear focus on mitigation.

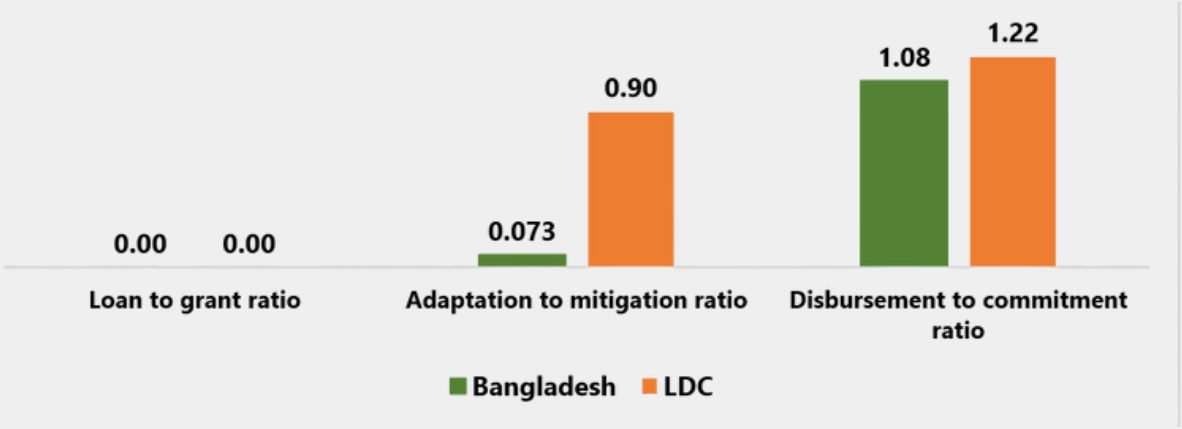


Figure 22: Climate Finance in Case of Population in Bangladesh

The total disbursement was USD 0.66 million, as compared to USD 0.61 million that was committed, thus resulting in a disbursement-to-commitment ratio of 1.08 (Figure 22) that is slightly higher than LDCs averages (1.22), despite limited financial resources. The sector is largely unaddressed with respect to climate-resilient population planning.

4.13.8 Transport & Storage

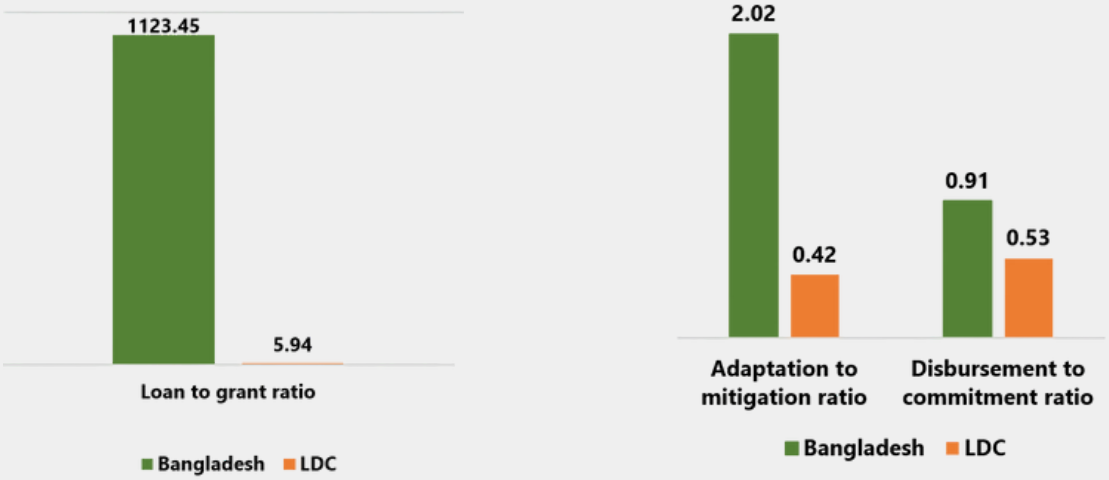


Figure 23: Climate Finance in Transport and Storage Sector of Bangladesh

Transport and Storage was allocated USD 0.43 billion, of which loans amounted to USD 0.43 billion and grants only USD 0.38 million. It works out to a loan-to-grant ratio of 1123.45 (Figure 23), indicating almost total dependence on loans. Adaptation was allotted USD 0.29 billion, while mitigation activities received USD 0.14 billion, resulting in an adaptation-to-mitigation ratio of 2.02. It highlights the intense emphasis laid upon adaptation in a sector that is heavily reliant, mostly upon debt financing.

Disbursement-to-commitment ratio was 0.91 (Figure 23) despite the excessive reliance on loans. Transport infrastructure, especially climate-resilient roads, bridges, and storage, is another sector of urgent need with a sectoral funding gap.

4.13.9 Multi-Sector

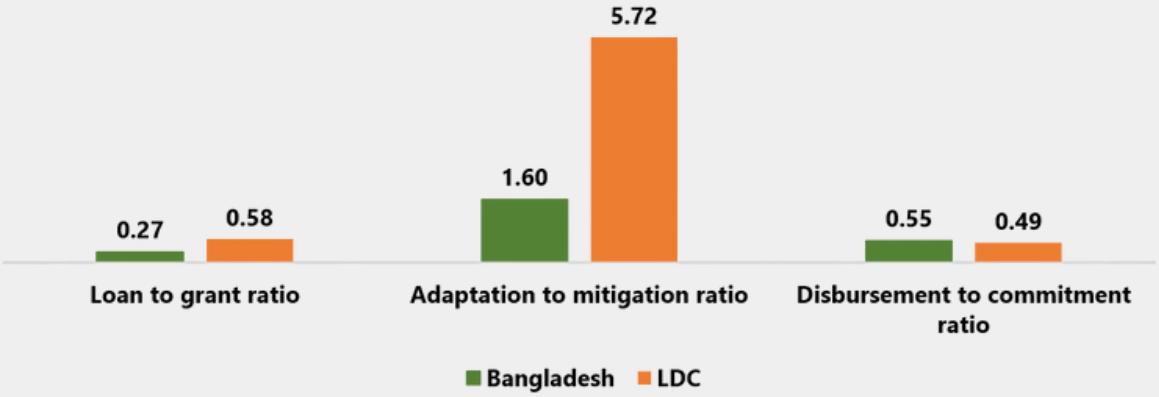


Figure 24: Climate Finance in Multi-Sector of Bangladesh

Multi-sectors received USD 0.20 billion, comprising USD 0.04 billion as loans and USD 0.157 billion as grants, thus yielding a loan-to-grant ratio of 0.27 (Figure 24). Adaptation financing (USD 0.144 billion) was marginally higher than mitigation (USD 0.090 billion), yielding an adaptation-to-mitigation ratio of 1.60, evidencing cross-cutting resilience measures. Disbursement-to-commitment was 0.55, below the LDCs average of 0.49.

4.13.10 Water Supply

For Bangladesh, the Water Supply sector was designated with a total climate finance of USD 0.53 billion, of which USD 0.47 billion was allocated as loans and USD 0.06 billion was dedicated through grants, thus generating a loan-to-grant ratio of 7.78 (Figure 25), hence showing the sector to be heavily reliant upon debt funding. The vast majority of the financing was dedicated to adaptation activities (USD 0.50 billion), while significantly less was dedicated to mitigation projects (USD 0.03 billion), thus generating an adaptation-to-mitigation ratio of 18.94, thus showing an overwhelming focus upon adaptation. Total commitments for the sector matched the allocation at USD 0.53 billion, but only USD 0.22 billion was disbursed, producing a disbursement-to-commitment ratio of 0.41, showing significant delays in delivery. Sectoral needs for Bangladesh for water supply stand at USD 0.86 billion, thus showing the wide gap between the mobilizable financing and the financing that needs to be secured to ensure climate-resilient and safe water access.

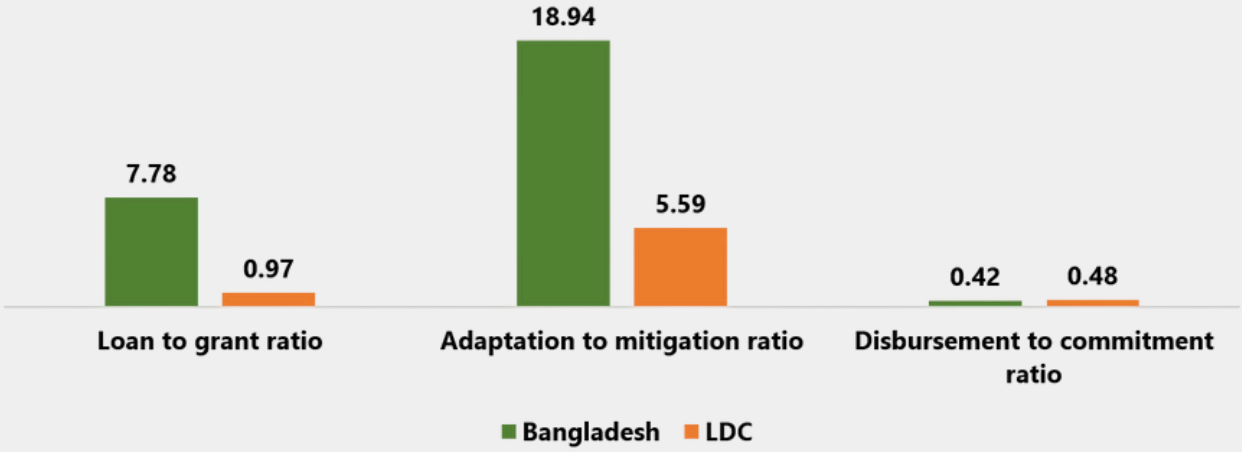


Figure 25: Climate Finance in Water Supply in Bangladesh

Comparing the LDCs picture, Bangladesh's water sector has distinct characteristics. The LDC's loan-to-grant ratio is 0.97 (Figure 25), much lower than Bangladesh's 7.78, indicating that countries at large are grant-dependent rather than loan-dependent in the sector. The LDC's adaptation-to-mitigation ratio is 5.59, much lower than Bangladesh's 18.94, indicating that Bangladesh is much more adaptive than mitigation-oriented compared to the LDC's average.

The LDC's disbursement-to-commitment ratio is 0.48, somewhat higher than Bangladesh's 0.41, indicating that despite Bangladesh's focus on adaptation, disbursement of funds is below international standards. As a whole, despite Bangladesh's water finance allocation to adaptation, loan dependency and poor disbursement rates indicate financial and implementation challenges in meeting sectoral needs.

Equity and Justice Concerns

Climate change effects are disproportionately distributed, unduly impacting poor and marginalized populations. The most vulnerable populations, such as smallholder farmers, fishers, and urban informal workers, are the least capable of handling the economic and social shocks from climate disasters.

Loan-heavy climate finance compounds these inequities, as public debt repayment may crowd out funding for social services that would otherwise benefit these communities. From the perspective of nature justice, it reveals that there is a fundamental mismatch of responsibility and burden: Bangladesh has little contribution to global emissions, yet it has much climate debt to bear, pointing to the urgency for grant-based, debtless climate finance for equity and adaptation priorities.

Indicator	Value
CRI Score Avg (1993–2025)	12.36
Per Capita Cumulative Climate Burden (2002–2021, USD)	79.61
Government Debt-to-GDP (%)	39.34
Per Capita Development-Related External Debt (USD)	387.61
Per Capita GDP (USD)	2,551.02
Population in Multidimensional Poverty (%)	24.64
Credit Rating	BB-
Natural Resource Efficiency Score	50.85
CPI Score	24
Climate Debt Risk Index (CDRI-2025)	65.37
Climate Debt Risk Index (CDRI-2028)	65.42
Climate Debt Risk Index (CDRI-2031)	65.63
Debt-Trap Risk	High

Table 3: Key Metrics from CDRI-25 for Bangladesh (2025)

Bangladesh's profile demonstrates that high hazard exposure, repeated adaptation costs, mid-level governance quality, and loan-heavy financing combine to create sustained climate debt risk. Addressing this requires a shift toward grant-based finance, accelerated disbursement, and equity-driven allocation that protects both communities and ecosystems while strengthening resilience.

Chapter 5: Climate Finance or Carbon Finance?

Calling Out the Misappropriation Trick

As is shown in this report, Bangladesh is allocated USD 4.67 billion of climate finance in 1,373 projects; yet a more detailed analysis is shown to reveal the more alarming side of the picture. This study systematically reviewed these projects: first, examining whether they focus on adaptation, mitigation, or resilience, then evaluating the projects through the seven paradigms of Natural Rights-Led Governance (NRLG): Legal Recognition of Rights of Nature, Protection of Life and Property, Nature Justice, Rule by Natural Law and Natural Accountability, Equity, Integrity and Shared Rights, Peaceful Grievance or Conflict Resolution Mechanism, and Entrusting Community Stewardship.

An assessment framework was developed to address the critical question: do development projects in Bangladesh genuinely safeguard ecosystems, reduce climate change vulnerability, and promote an equitable energy transition? There were 57 projects which failed this test. They are out of all paradigms and do not bring any significant benefit to the climate. The most notable ones are Matarbari Ultra Super Critical Coal-Fired Power Project, Bheramara Combined Cycle Power Plant Development Project, and New Haripur Power Plant Development Project huge investments in fossil fuels that will put Bangladesh decades into a state of carbon addiction. All these misclassified project's total USD 0.88 billion, or 18.84% of the aggregate climate finance inflow in the country. Much of this funding originates from Japan and flows into non-renewable energy, locking Bangladesh into fossil dependence instead of supporting decarbonization. The loan-grant ratio of Bangladesh is 2.07, whereas the misclassified climate finance increased the ratio to 2.70. These projects have an alarming 28.8 loan-grant ratio, which is continuing to bury the country in debt and increase its financial liability.in the coming times.

That means in the sector where Bangladesh was to receive USD 3.79 billion in real climate finance, it has received near USD 0.9 billion under another guise of climate finance. That is not just poor accounting, it is distortion that is steering the money in the most unnecessary direction. Money that is invested in reinforcing embankment, restoration of mangrove, renewable expansion, and protection of community is being spent on coal, gas, and other non-renewable projects that worsen the emissions and climate risk

This misclassification is not a technical issue; it is the betrayal of the spirit of the Paris Agreement and the international obligations to assist climate-vulnerable countries. It enables the high emitting nations and establishments to take a credit of climate action and send its carbon infrastructure to countries such as Bangladesh. Practically, it pushes the decarbonization burden on the same communities that are the ones who are already paying the highest price in terms of climate disasters.

That is why Bangladesh needs to insist on stringent screening and enforceable eligibility criteria to climate finance. Donors and the multilateral development banks need to harmonize project criteria to be compatible with NRLG, reveal the carbon footprint of supported projects, and deny badging of fossil-fuel projects as climate intervention. All climate funds need to take Bangladesh toward a resilient and equitable energy future - not further into a fossil trap of debt. Less is not climate finance. It is green paint carbon finance.

Climate or Carbon Finance? The Misattribution Trap

Misattribution in Bangladesh's climate finance

•18.84% of Bangladesh's reported climate finance (USD 0.88 B) is misclassified
•Funds directed to coal & gas projects, e.g., Matarbari Ultra Super Critical

High loan-to-grant ratios for misattributed projects

•Coal & gas projects have a loan-to-grant ratio of 28.8 vs. national average 2.07
•This worsens Bangladesh's debt burden

Impact of misattribution on national loan-to-grant ratio

•Misclassification raises loan-to-grant ratio from 2.07 to 2.70
•Diverts funds from real climate solutions
•It weakened ability to negotiate globally for access to required climate funds, reducing influence on the international actors for climate funds.

Chapter 6: Call to Action

Flow of Funds: Bilateral, MDBs, and Multilateral Finance

- **Embrace a Grant-First Approach:** Multilateral Development Banks (MDBs) and partners like UNDP are encouraged to transition climate finance from loan-heavy models (current MDB ratio of 0.94 in Bangladesh) to predominantly grant-based support, especially for adaptation and loss & damage initiatives.

- **Reform MDB Frameworks for Accessibility:** We recommend that MDBs adopt Natural Rights Led Governance (NRLG) principles, prioritizing decentralized access to finance. Simplifying processes will enable local institutions and municipalities to access funds more effectively.

- **Enhance Local Capacities:** Support the development of robust Monitoring, Reporting, and Verification (MRV) systems and fiduciary capabilities at national and sub-national levels in LDCs to ensure efficient and equitable use of climate finance.

Demand Side: Least Developed Countries (LDCs) - Innovative Finance Sources

- **Transform National Climate Funds:** We suggest reforming the Bangladesh Climate Change Trust Fund (BCCTF) into the Bangladesh Natural Rights Fund (BNRF), grounded in NRLG principles. New funding streams, such as carbon taxes, pollution taxes, and philanthropic contributions, e.g Zakat can reduce reliance on external loans.

- **Community Stuwardship in Climate Action:** Encourage models where communities lead nature based adaptation and mitigation initiatives, oversee implementation, and monitor outcomes, fostering inclusive and context-appropriate solutions.

- **Leverage Innovative Financing:** LDCs like Bangladesh are encouraged to adopt domestic revenue tools, such as carbon tax, pollution tax environmental levies, and public-private partnerships, to address funding gaps (e.g., USD 137.5 billion needed in Bangladesh's energy sector versus USD 2.54 billion allocated). . A community-based Natural Rights Bond, driven by Non-Resident Bangladeshis (NRBs), could be introduced as an innovative tool for impact investment in climate finance.

Bangladesh's vulnerability to frequent climate-induced shocks underscores the need for a proactive strategy focused on adaptation and sustainable financing. While efforts to enhance resilience across sectors are underway, significant challenges persist in terms of scale, equity, and institutional capacity. There is increasing acknowledgment that nature-based solutions and community-driven initiatives provide effective, context-specific approaches to adaptation. However, the current structure and sources of climate finance, particularly the heavy reliance on loans, constrain Bangladesh's ability to address the crisis without exacerbating fiscal pressures. The following sections highlight practical opportunities to strengthen resilience and offer policy recommendations to ensure climate finance aligns with principles of equity, sustainability, and natural rights.

Opportunities for Climate Resilience

- **Expand Ecosystem-Based Adaptation (EbA):** Bangladesh should scale up mangrove restoration, wetland protection (e.g. haor, beel ecosystems), and urban green buffers to mitigate flood and heat risks. These nature-based solutions offer dual benefits of climate protection and livelihood support.

- **Community-Led Resilience:** Support and finance grassroots adaptation initiatives led by farmers, women's groups, and indigenous communities. Recognize their role in embankment maintenance, cyclone response, and sustainable resource use.

- **Natural Capital as Buffer:** Protecting River corridors, forest cover, and coastal zones can serve as long-term climate shields. Bangladesh's relatively high Natural Resource Efficiency Score (50.85) should be leveraged to justify and attract climate finance for restoration.

Pathways for Equitable and Justice-based Climate Finance

To address Bangladesh's climate challenges effectively, policy recommendations are organized into three categories: Supply Side (developed nations), Flow of Funds (bilateral, MDBs, and multilateral), and Demand Side (LDCs, including innovative financing mechanisms).

Supply Side: Developed Countries

- **Prioritize Grant-Based Funding:** Developed nations are encouraged to provide climate finance primarily as grants for vulnerable countries like Bangladesh, particularly for adaptation and loss & damage efforts. With Bangladesh's debt-to-grant ratio at 2.7, this approach will help ease financial burdens and align with principles of natural rights justice.

- **Facilitate Debt Relief and Reparative Justice:** We urge developed countries to support debt-for-nature or climate swaps tied to verified climate actions, fostering debt relief. Recognizing historical responsibilities through reparative justice measures will further strengthen global equity.

- **Establish an Earth Solidarity Fund (ESF):** We propose the creation of a global fund to deliver country-specific grants to climate-vulnerable nations, ensuring equitable, unconditional support rooted in fairness and solidarity.

- **Global North Responsibility:** Developed nations are encouraged to provide dedicated climate finance to vulnerable countries, grounded in natural rights justice, through measures such as debt relief, reparative justice, and unconditional financial support.

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Annex

1. $$Debt\ to\ Grant\ Ratio = \frac{Total\ Debt}{Total\ Grant}$$
2. $$Disbursement\ to\ Commitment\ Ratio = \frac{Total\ Climate\ Finance\ Disbursed}{Total\ Climate\ Finance\ Committed}$$
3. $$Adaptation\ to\ Mitigation\ Ratio = \frac{Total\ Climate\ Finance\ Commited\ in\ Adaptation\ Projects}{Total\ Climate\ Finance\ Commited\ in\ Mitigation\ Projects}$$
4. $$Loan\ to\ Grant\ Ratio = \frac{Total\ Climate\ Finance\ Commited\ in\ form\ of\ Loan}{Total\ Climate\ Finance\ Commited\ in\ form\ of\ Grant}$$
5. $$Debt\ to\ GDP\ Ratio = \frac{Total\ Climate\ Finance\ Commited\ in\ form\ of\ Loan\ upto\ 2021}{GDP\ of\ FY\ 2021-22\ of\ the\ country}$$
6. $$Per\ capita\ Debt\ to\ Per\ Capita\ Income = \frac{Total\ Climate\ Finance\ Commited\ in\ form\ of\ Loan\ upto\ 2021\ /\ Population\ of\ 2021\ of\ the\ country}{Per\ Capita\ Income\ of\ FY\ 2021-22\ of\ the\ country}$$
7. $$Per\ Capita\ Climate\ Debt\ Burden = \sum_{Year=2002}^{2021} \frac{Total\ Climate\ Finance\ taken\ as\ loan\ in\ the\ year}{Population\ of\ the\ year}$$
8. $$Per\ Capita\ Climate\ Loan\ to\ Per\ Capita\ Carbon\ Emission\ Ratio = \frac{Per\ Capita\ Climate\ Loan}{Per\ Capita\ Carbon\ Emission}$$

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M. Zakir Hossain Khan is an unstoppable actor in the global fight for nature and climate justice, sustainable finance, integrity, and governance. As the Chief Executive as well as co-founder of Change Initiative, a think tank, his unparalleled expertise positions him as a transformative leader in the global landscape of climate finance, community-led resilience, environmental sustainability, renewable energy-based just transition, and innovative anti-corruption efforts. His book titled Sovereignty for Nature, Survival for All: Natural Rights Led Governance Towards Sustainable Future (EXTINCTION OR PROSPERITY?) has provided a new global governance framework to protect nature and lives. Collaborating with global institutions like SOAS University of London, UNDP, Transparency International, World Bank, M. Zakir Hossain Khan reshapes climate finance, energy reform, and anti-corruption strategies across Asia, Africa, and the Middle East. His Dhaka Renewable Energy and Finance Talk (DREFT) and extensive publications amplify his impact, establishing him as a visionary architect of transparency, resilience, and sustainable prosperity. He has been recently appointed as a global Observer of the World Bank-funded Climate Investment Fund.

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