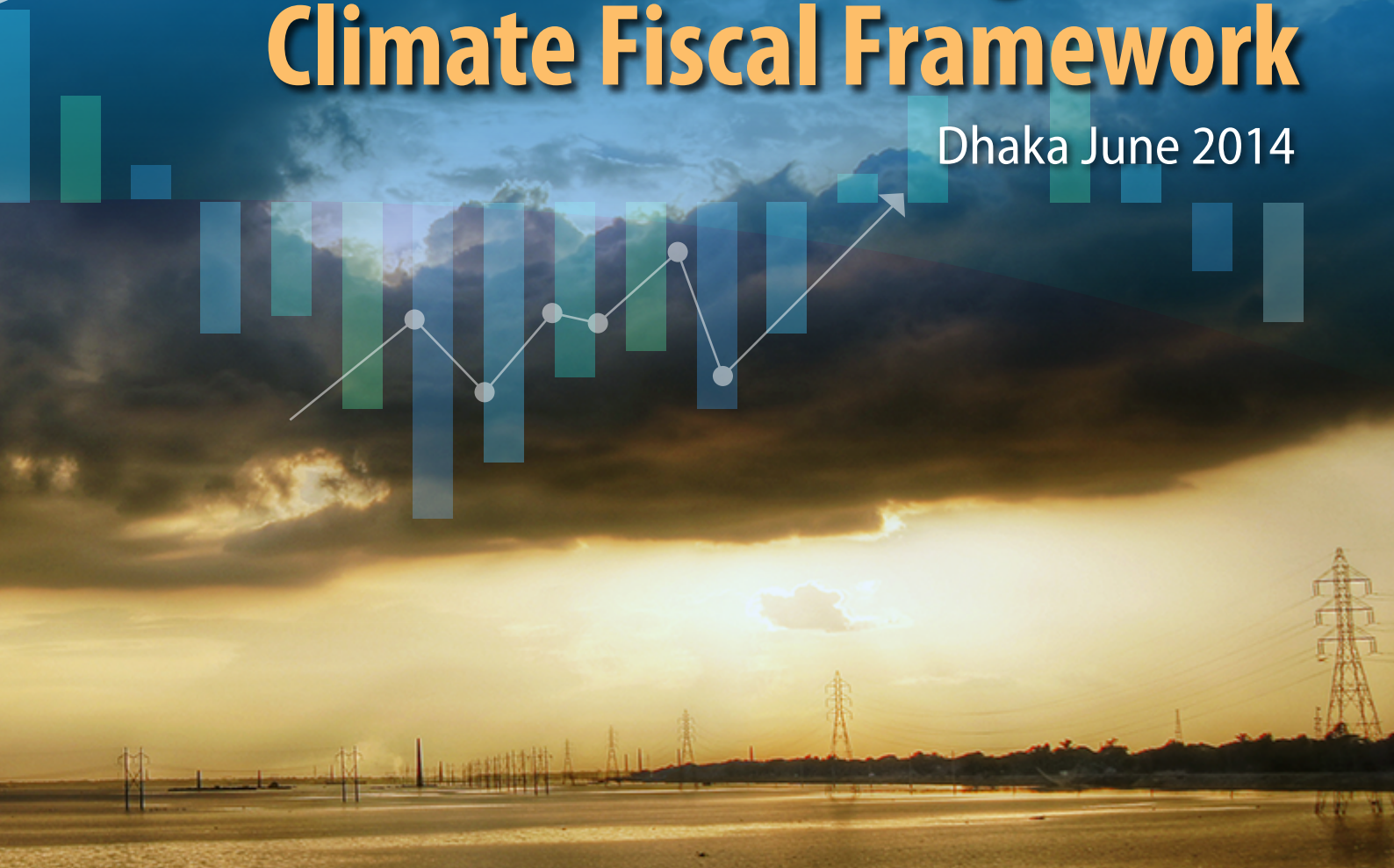




# Bangladesh Climate Fiscal Framework

Dhaka June 2014



## **Bangladesh Climate Fiscal Framework**

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**Finance Division**  
Ministry of Finance  
Government of the People's Republic of Bangladesh



# BANGLADESH Climate Fiscal Framework

Dhaka June 2014



# CONTRIBUTORS

The Climate Fiscal Framework is developed by the Finance Division under the support of the Poverty Environment and Climate Mainstreaming (PECM) Project of the General Economics Division of the Planning Commission. The PECM project is being financed by UNDP Bangladesh and the UNDP-UNEP Poverty-Environment Initiative.

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## Financial assistance



Bangladesh's fate is deeply interwoven with climate change. Historically, we have endured more than our fair share of natural calamities in the forms of riverine flood, tropical cyclones and associated storm surges, earthquakes, tornados and river erosions. The phenomenon of climate change has recently crept in and has added to the increasing vulnerability of Bangladesh. The international community too has recognized that Bangladesh has become an innocent victim of climate change and already ranks high in the list of most vulnerable countries on earth. The Planning Commission's Climate Public Expenditure Review, 2012 and Finance Division's current analysis under Climate Fiscal Framework (CFF) reveal that Bangladesh spends 6-7% of its annual budget for mitigation of and adaptation to the impacts of climate change, which amounts to 1% of the GDP. It is, therefore, important to understand the severity of risks climate change imposes on a large population and relevant sectors. The Primary variables like physical, biological and human systems are the first victims of climate change phenomena such as temperature rise, sea-level rise, erosion, precipitation etc. These, in turn, go on to impact the secondary variables like aquatic, terrestrial and marine environments. Finally various economic sectors like agriculture, livestock, poultry, wildlife, livelihood and health fall prey to this.



I have learnt that CFF has identified several areas for improvement and adjustments in the budget making process of different Ministries/Divisions. For example, climate change is not recognized in the budget framework of different ministries, even though a significant portion of their budget goes into climate financing.

I strongly believe that the CFF will provide necessary guidelines for tracking climate related expenditures, estimating potential costs of long terms financing needs to combat effects of climate change and elaborate the role of GoB towards managing climate finances in order to attain sustainability. Further, it will identify institutional weaknesses and skill gap with recommendations for enhancing the capacity of the Planning Commission and the Finance Division (FD) which eventually will equip them to develop long-term financing plans for adversities emanating from climate change.

I hope that the CFF will generate interest in all ministries and will contribute in the ongoing discourse about the links between development and climate change, and will provide them with new insights and tools to integrate climate change with MTBF and ADP processes.

Finally, I would like to thank the Climate Fiscal Framework Steering Committee, the General Economics Division of Planning Commission, UNDP and UNEP who have put in all out endeavors, ploughed through documents in order to accomplish this arduous task.

A handwritten signature in black ink, appearing to read 'A. M. A. Muhith'.

**A. M. A. Muhith**  
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## MESSAGE

Risks from global climate change (CC) are becoming immediate and sometimes catastrophically tangible. At the same time, Bangladesh is being recognised as one of those countries, most vulnerable to such risks. Adaptation to CC risk is already putting additional strain on development efforts in countries like Bangladesh, and the economic cost, not to mention the social and environmental ones, is expected to become increasingly significant. Developed countries have made commitments to share CC adaptation costs with developing countries, but such commitments are yet to be realized.

Since October 2013, the Finance Division of the Government of Bangladesh in partnership with the General Economic Division's Poverty Environment and Climate Mainstreaming (PECM) project has been engaged in formulating the Climate Fiscal Framework (CFF), which was validated in April 2014. I feel very happy to see that the CFF has been developed in line with the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009, the Sixth Five-Year Plan, Bangladesh's Public Finance Management System, and the Paris and Busan Declaration on Aid Effectiveness. I am also glad to see that the CFF strongly recommends establishing CC dimensions in the Annual Development Programme (ADP) and the Medium Term Budget Framework (MTBF). I hope this will lead to better climate finance, using Bangladesh's country systems in managing public finances. The Finance Division should now implement the CFF in close partnership with the Ministry of Planning, the Ministry of Environment and Forest, and other relevant ministries.

I am also very pleased that the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) have provided technical and financial support to the Finance Division in accomplishing this important task. The steering committee on CFF has done a commendable job by providing guidance to the team engaged in developing the framework.

I would like to thank the CFF Steering Committee Members, the General Economics Division, the PECM Project staff, UNDP, and UNEP for their contributions to the successful formulation of the CFF in Bangladesh.



A handwritten signature in black ink, appearing to read 'M.A. Mannan'.

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## FOREWORD

Bangladesh is a land of rich socio-ecological diversity. The culture, society and economy of the country have evolved around its historic response to climatic condition. The climate of a country changes over time, but now anthropogenic climate change (CC) has become a grave concern for the global community since related changes are coming too fast and if this trend continues, the humankind will face its most critical challenge. This is now widely known that the anthropogenic CC has been largely due to inordinate dependence on carbon-based economic system in developed and fast growing economies. Bangladesh is an innocent victim of this change. The disasters arising from climate change cause an annual average loss of 1 percent of GDP in Bangladesh.

The scale of the climate change challenge that now faces Bangladesh is vast. We cannot ignore this challenge as we move towards achieving the goal of ensuring greater welfare of the people by delivering the benefits of development. Therefore, the two climate change strategies, mitigation and adaptation, have to be embedded in our development agenda.

The new sources of climate finance that are available have the potential to deliver multiple benefits, like poverty reduction and sustainable livelihoods, disaster risk reduction, biodiversity and wetland conservation, sustainable water and ecosystem management, enhanced socio-ecosystem resilience and ecosystem-based adaptation. It is, therefore, important at this stage for the developing countries to make their public finance system ready to absorb these funds which cannot happen overnight. The current Climate Fiscal Framework (CFF) is an attempt to make Bangladesh public finance system ready for utilizing the national and international climate finance, in the most efficient and effective manner possible.

CFF is a key enabling framework aiming to (i) establish greater national ownership of climate finance, better aligning this with the country system, (ii) promote government -NGO-Private sector harmonization, (iii) enhance result management, (iv) increase mutual accountability; and (v) broaden the opportunity for resilient development and green growth in Bangladesh.

I would like to place on record my deep appreciation for the cooperation extended by the General Economics Division and the technical guidance and financial support from UNDP and UNEP in developing this framework. I also gratefully acknowledge the excellent contribution of the members of the steering committee at each stage of development of this document. Finally, I would like to convey my heartfelt thanks and gratitude to the Secretary, Finance Division who provided all-out support to the steering committee and encouraged it to implement this critical agenda.



**Ranjit Kumar Chakraborty**  
Additional Secretary, Finance Division  
And Chairman,  
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# ACRONYMS & ABBREVIATIONS

<b>ADB</b>	Asian Development Bank
<b>ADP</b>	Annual Development Program
<b>BB</b>	Bangladesh Bank
<b>BC1</b>	Budget Call Notice 1
<b>BCCRF</b>	Bangladesh Climate Change Resilience Fund
<b>BCCSAP</b>	Bangladesh Climate Change Strategy and Action Plan
<b>BCCT</b>	Bangladesh Climate Change Trust
<b>BCCTF</b>	Bangladesh Climate Change Trust Fund (Government Fund)
<b>BDT</b>	Bangladeshi unit of currency (taka)
<b>BSPCR</b>	Bangladesh Special Programme for Climate Resilience
<b>CAG</b>	Comptroller and Auditor General
<b>CC</b>	Climate change
<b>CCA</b>	Climate change adaptation
<b>CCTF</b>	Climate Change Trust Fund
<b>CCU</b>	Climate change unit
<b>CDMP</b>	Comprehensive disaster management plan
<b>CDDE</b>	Capacity Development for Development Effectiveness
<b>CDE</b>	Climate Change, Disaster and Environmental
<b>CDIAC</b>	Carbon Dioxide Information Analysis Center
<b>CEAT</b>	Climate Expenditure Analysis Template
<b>CEGIS</b>	Centre for Environmental and Geographic Information Services
<b>CFC</b>	Climate fiscal codes
<b>CFF</b>	Climate fiscal framework
<b>CGA</b>	Controller General of Accounts
<b>CIF</b>	Climate investment fund
<b>CNG</b>	Compressed natural gas
<b>CO2</b>	Carbon dioxide
<b>COFOG</b>	Classification of the functions of government
<b>COP</b>	Conference of the Parties
<b>CPEIR</b>	Climate Public Expenditure and Institutional Review
<b>CRMP</b>	Community Risk Management Planning
<b>CRI</b>	Climate risk index
<b>Crore</b>	Ten million (100 lakh)
<b>CSP</b>	Country Strategy Programme
<b>CSR</b>	Corporate social responsibility
<b>DPP</b>	Development Project Proforma
<b>DAE</b>	Department of Agriculture Extension
<b>DANIDA</b>	Danish International Development Agency
<b>DP</b>	Development partners

<b>DMB</b>	Disaster Management Bureau
<b>DPP</b>	Development Project Proforma/Proposal
<b>DRR</b>	Disaster risk reduction
<b>DRM</b>	Disaster risk management
<b>EDD</b>	Environment due diligence
<b>EEF</b>	Equity and Entrepreneurship Fund
<b>ERD</b>	Economic Relations Division
<b>ERM</b>	Environmental risk management
<b>ETF</b>	Environmental transformation funds
<b>FCK</b>	Fixed-chimney kiln
<b>FD</b>	Finance Division
<b>FSF</b>	Fast-start funding
<b>FYP</b>	Five-year plan
<b>GBM</b>	Ganges, Brahmaputra, and Meghna river systems
<b>GCCA</b>	Global Climate Change Alliance
<b>GDP</b>	Gross domestic product
<b>GED</b>	General Economics Division
<b>GEF</b>	Global Environment Facility
<b>GHG</b>	Greenhouse gas
<b>GFSM</b>	Government Finance Statistics Manual (2001)
<b>GoB</b>	Government of Bangladesh
<b>GoI</b>	Government of India
<b>HRD</b>	Human resource development
<b>HHK</b>	Hybrid Hoffman Kiln
<b>iBAS</b>	Integrated Budget and Accounting System
<b>IDA</b>	International development agency
<b>IFC</b>	International financial corporation
<b>IIED</b>	International Institute for Environment and Development
<b>IMED</b>	Implementation, Monitoring and Evaluation Division
<b>INTOSAI</b>	International Organization of Supreme Audit Institutions
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>IRD</b>	Internal Resources Division
<b>ICT</b>	Information and communications technology
<b>KPI</b>	Key performance indicators
<b>LC</b>	Local consultant
<b>LDC</b>	Least developed countries
<b>LDCF</b>	Least Developed Countries' Fund
<b>LEDS</b>	Low-emission development strategies
<b>LED</b>	Light-emitting diode

<b>LGED</b>	Local Government Engineering Department
<b>MBF</b>	Ministry budget framework
<b>MCF</b>	Million cubic feet
<b>MDB</b>	Multilateral development bank
<b>MP</b>	Members of Parliament
<b>MoEF</b>	Ministry of Environment and Forest
<b>MoF</b>	Ministry of Finance
<b>MTBF</b>	Medium-Term Budget Framework
<b>MTBS</b>	Medium-Term Budget Strategy
<b>NBFI</b>	Non-bank financial institution
<b>NAPA</b>	National Adaptation Program of Action
<b>NGOs</b>	Non-government organizations
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>OPU</b>	Operational unit
<b>PECM</b>	Poverty-environment-climate mainstreaming
<b>PEI</b>	Poverty-Environment Initiative
<b>PHE</b>	Public health and sanitation
<b>PPCR</b>	Pilot Program for Climate Resilience
<b>PPNB</b>	Program Proposal from Non-Development Budget
<b>PSF</b>	Pond Sand Filter
<b>REDD</b>	Reducing emissions from deforestation and forest degradation
<b>SAI</b>	Supreme audit institution
<b>SAS</b>	Senior assistant secretary
<b>SDG</b>	Sustainable development goal
<b>SFYP</b>	Sixth Five-Year Plan
<b>SMEs</b>	Small and medium enterprises
<b>Tk.</b>	Taka (Bangladesh currency unit)
<b>TPP</b>	Technical Project Proforma
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	UN Framework Convention on Climate Change
<b>VGD</b>	Vulnerable group development
<b>VGf</b>	Vulnerable group feeding
<b>VSBK</b>	Vertical Shaft Brick Kiln
<b>VIIES</b>	Vienna Institute for International Economic Studies







## Introduction to the climate fiscal framework

Bangladesh ranks fifth among those 10 countries in the world most vulnerable to climate change-induced natural calamities. (Germanwatch, the Climate Risk Index, 2014)

The Intergovernmental Panel on Climate Change (IPCC) defined the kind of change in question as one ‘attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’. So defined, climate change, beyond being an environmental problem, presents a broad developmental issue.

Climate change (CC) issues typically fall into one or another of two major categories: mitigation, or adaptation. In 2005, Bangladesh adopted the National Adaptation Program of Action (NAPA), which was intended to identify areas of immediate priority response to the adverse impacts of climate change. In 2009, NAPA was followed by the Bangladesh Climate Change Strategy and Action Plan (BCCSAP).

The World Resources Institute (WRI) defines ‘climate finance’ as the flow of funds toward activities aimed either at (i) ‘mitigation’, for example reducing greenhouse gas (GHG) emissions, or (ii) ‘adaptation’, i.e. helping societies to develop resilience in adapting to the negative effects of climate change. While Bangladesh has decided to make low-carbon growth a national policy, Bangladesh’s share of GHG emission is negligible, and this country remains exempt from internationally agreed obligations to pursue mitigation efforts. Thus, Bangladesh’s climate-related activities are generally geared towards developing resilience in the face of climate-related impacts. Therefore climate finance, in the Bangladeshi context, mostly refers to flow of funds, from both internal and external sources, toward adaptation measures. A few measures are also observed in the area of mitigation, mostly in the area of low carbon development. Therefore, by ‘climate finance’ in the context of Bangladesh we refer to the flow of funds, both from internal and external sources, toward adaptation (for the most part) and mitigation (while benefits growth and adaptive capacity) measures.

Under the auspices of the Planning Commission’s Poverty-Environment-Climate Mainstreaming (PECM) project, funded by the UNDP and UNEP, a Bangladesh Climate Public Expenditure and Institutional Review (CPEIR) was conducted in 2012. Its key recommendations included (i) the development of a climate fiscal framework (CFF) that would identify the demand (expenditure) and supply (revenue or finance) sides of climate fiscal funds, and (ii) the establishment of a transparent and sustainable climate fiscal policy (CFP). These two measures are prerequisites for realizing an effective CC policy. The CFF concept is still in an early stage of development, but it may be understood as a framework to help ensure that external and internal finances are used most effectively in addressing climate change. In establishing such a framework, countries need to (i) identify their existing expenditures and modalities for delivering climate-related finance; (ii) identify additional expenditure requirements drawing from such action plans as the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) and other sources; (iii) identify financing gaps and preferred modalities for delivering further sources of public investment (external and domestic); and (iv) create an enabling environment for private financial flows.

The CFF provides principles and tools for climate fiscal policy-making, helping to identify the demand and supply sides of climate fiscal funds (expenditures vis-à-vis revenue or finance, respectively), and to ensure that CFP is transparent and sustainable in the longer term. The CFF is a prerequisite for achieving the objectives of climate-change policy. The budgetary policy framework serves as a key element of the CFP framework in creating better conditions for achieving the overall objectives of climate fiscal policy without jeopardizing public finances.

A CFF is expected to determine the following:

- equitable division of climate funds and their allocation to the concerned sectors;
- division of services, identification of the demand for climate fund, and expenditure responsibilities of financial authority for raising revenue, for national and international financing options, and for fiscal tools; and
- a governance framework for climate change funds under the national fiscal policy.

The CFF also recommends a set of climate codes for Bangladesh designed to (i) track climate change expenditures for policy analysis and reporting, and (ii) estimate long-term climate finance needs by identifying potential climate-related public expenditures across government ministries. Aiming to use the latter codes to track CC expenditures, the Organization for Economic Co-operation and Development (OECD) has developed a CC marker to track CC activities. Following the OECD definition and the procedure adopted in CPEIR, and also considering the BCCSAP action plan, all government expenditures for FY 2012 to FY 2014, both development and non-development, were reviewed in the course of identifying CC-related projects and programmes. This study indicated that climate expenditure ranged from 5.3–7.5 percent of the total budget, or about 1–1.4 percent of GDP.

This CCF is based on (i) a desk review; (ii) cross-country experience regarding the issue; and (iii) information obtained through meetings, seminars, group discussions and, at times, one-to-one exchange of views with a wide spectrum of stakeholders in both public and private sectors. This study did not involve a field survey or primary data collection. Neither did the study have a landmark to use as a starting point — it appears that no other country has so far prepared a full-blown CFF.

Most agencies concerned with CC-related activities had not prepared costed plans for actions to combat potentially negative CC effects, and hence had little means of estimating future expenditures that might be incurred. Under the circumstances, projections of probable future climate costs have instead been solely based upon past expenditure trends.

## Governance of climate funds

To implement BCCSAP 2009, the Government established the Bangladesh Climate Change Trust Fund (BCCTF, 2009) and enacted the Climate Change Trust Act 2010. From 2009–10 through the 2013–14 fiscal year, a total of BDT 2,700<sup>1</sup> crore<sup>2</sup> (USD 360 million) was allocated to BCCTF. As of November 2013, 270 BCCTF-supported projects had been undertaken. Aiming to reduce climate change vulnerability, under BCCTF, various government ministries, departments, and agencies are currently implementing 207 related projects, while NGOs are implementing a further 63 projects.

Meanwhile, this study identifies the following associated issues:

- Projects/programmes implemented under BCCTF need to be reflected in the budget framework of the concerned ministry/division so that these are included in government accountability and outcome frameworks.
- Projects implemented under BCCTF may be included in the Annual Development Program document in the same way self-financing projects are, bringing them under the standard monitoring purview of the Implementation, Monitoring and Evaluation Division (IMED) while they will remain subject to BCCT processing and approval, thereby maintaining BCCTF's distinctive character.
- The government budgetary allocation to BCCTF is tending to decline.

1. The Bangladeshi unit of currency is the taka (BDT). At the time of this writing, US\$1 = BDT 77.605

2. One crore = 10 million (or 100 lakhs).

The Bangladesh Climate Change Resilience Fund (BCCRF), a trust sponsored by the international community, funds CC-related activities. A partnership between the Government of Bangladesh (GoB), the World Bank and other development partners, it addresses the negative impacts of climate change. Established in May 2010 with contributions from bilateral development partners, BCCRF is designed such that all investment projects are executed by the GoB and its designated agencies or other eligible institutions. In the course of reviewing overall BCCTF activities, this study identifies such specifically BCCRF-related issues as the following:

- Initiatives are needed to fully operationalize the Fund. Resources already committed should be disbursed more quickly, while greater assistance from development partners should be mobilized. As was envisaged at the outset, furthermore, initiatives are needed to merge BCCTF and BCCRF. Until that is accomplished, interim arrangements must be devised to ensure effective coordination between these two funds, avoiding duplication of projects.
- The Climate Change Unit at the Ministry of Environment and Forest is meant to supervise and coordinate the activities of the two funds; to this end, the Unit should be brought into full operation as soon as possible.

The Strategic Program for Climate Resilience (SPCR) is another financing facility for combating CC-related threats in Bangladesh. Three investment and two technical assistance projects are being implemented under this fund.

### **Climate-change expenditure tracking**

The CETF (Climate Expenditure Tracking Framework) Module, a database tool attached to the computerized budget database at the Ministry of Finance (MoF), is designed to improve monitoring and reporting of financial resources allocated to CC-related activities. A computerized accounts consolidation system for the Controller General of Accounts (CGA) has also been recommended. The main features of the CETF Module include these:

- development of a separate module, independent yet closely linked with the Budget database and CGA accounts module;
- tagged, user-friendly proportion estimates (climate weight) in percentage terms for six thematic areas of CC-related expenditure (according to BCCSAP); these can be adapted to other situations where appropriate;
- a system capable of generating different types of budget and account reports at different levels, having defined the respective climate weight proportions;
- a system capable of providing comparative budget and account reports;
- proportion (climate weight) percentage data are to be calculated from a standard defined logic set in the new database, one that minimizes data entry as well as data-entry errors;
- a system permitting yearly trend analysis summaries by ministry, thematic area, and source(s) of funding; and
- a system capable of generating such outputs as trend analysis of public expenditure on climate.

This study pursued a trend-based projection regarding future climate expenditure for FY 2015 through FY 2017. The projection was based on climate expenditures trending over the last four years, i.e. FY 2011 through FY 2014. During this period the projected climate dimension budget amounts, on average, to 22.6 percent of total budget and 4.1 percent of gross domestic product (GDP).

## Budget formulation and execution integrating climate change

Following CPEIR recommendations, this study explores ways of including CC issues in ministry accountability, performance management, and governance structure. It suggests necessary changes to the structure of the Ministry Budget Framework (MBF) as well as changes in the Budget Call Circular 1 guidelines that determine MBF preparation. To mainstream BCCSAP in the Medium-Term Budget Framework (MTBF) process, as poverty and gender issues already have been, this study recommends inclusion of a brief description of the six thematic areas and 44 projects/programmes identified in BCCSAP in the Budget Call Circular 1 guidelines. To facilitate such changes in the MBF, a draft budget call circular has been annexed with the study report (Appendix 5).

To ensure that BCCSAP priorities affect sector policy and resource allocation, this study, following the CPEIR recommendation, suggests ways to embed climate-change issues in the Development Project Proforma/Technical Project Proforma (DPP/TPP) format, just as gender and poverty dimensions already have been. A review of the MBF revealed that, while existing guidelines did not include the CC dimension, an environmental dimension had in fact been incorporated, one that incidentally included CC aspects together with some relevant recommendations.

## Fiscal policy and climate change

In dealing with the associated supply-side questions, the CFF explores how CC issues link with official fiscal policy. It outlines the existing structure of subsidies for fossil fuel, electricity, and gas, and it underscores the need to adjust these subsidies to promote green, sustainable energy as a viable option. Highlights from related discussions are reported in what follows.

A carbon tax — calculated according to the relative quantity of carbon dioxide a given fuel emits — can be levied on the production, import, distribution, or use of fossil fuels. Such a tax increases the costs of carbon-emitting fossil fuels, compared to such non-carbon emitting energy sources as renewable energy and nuclear power. Although carbon taxes represent a relatively new concept in Bangladesh, the National Board of Revenue (NBR) is already contemplating, on a test basis from fiscal year 2014–15, a carbon tax on private vehicles that emit comparatively more CO<sub>2</sub>. Specific proposals in this regard may appear in the FY 2014–15 finance bill. NBR is currently at work planning the best way of implementing the proposed tax.

Existing tax law provides for exemptions in the following CC-related cases: (i) renewable energy e.g. energy-saving bulbs, solar energy plants, wind turbines, and related technologies; and (ii) waste treatment plants. The upcoming FY 2014–15 Finance Act will stipulate that tax exemptions for the above items may continue, and will likely specify other, similar areas for exemption.

The GoB, like many other national governments, has for decades used subsidies to promote a wide range of social and economic objectives. Subsidies have wide-ranging impacts on the distribution of wealth within a country, on economic growth, and on the environment. Energy subsidies account for the largest proportion of such assistance provided by the GoB. But subsidized energy discourages initiatives that might develop better alternatives, for example green energy such as solar power. Renewable energies are relatively more expensive, however, and subsidies for fossil fuels put these alternative energy sources at a further disadvantage, discouraging their adoption.

## Green banking

Green banking is a method of finance designed to encourage environmentally responsible investments, extending priority to enterprises and industries that are trying to 'grow green'. In Bangladesh, the Bangladesh Bank (BB) remains the core leader in this regard, having instructed all financial institutions to frame more effective green-banking lending policies.

The climate fiscal framework (CFF) under development expands upon actions taken by BB in promoting green banking in Bangladesh, remaining open to ways of improving on this in future.

## Oversight and transparency of climate expenditures

Audit institutions conduct independent scrutiny of government activities. Such assessments provide Parliament with the kind of information that supports effective examination of government spending and associated outcomes. Although Bangladesh's audit system has so far not explicitly included climate change, the Audit Directorate recently prepared a plan to audit projects/programmes implemented under the auspices of the Bangladesh Climate Change Trust Fund. Meanwhile the CFF identifies obstacles to including CC in the audit policy, and considers ways to more effectively achieve this goal.

Oversight of the executive branch of Government is one of Parliament's most important responsibilities. Upon completion of this study, and once an improved CFF is in operation, revenues and expenditure of all CC-related activities will automatically come under the purview of a routine audit system and become subject to oversight by the Parliamentary Standing Committee on Public Accounts.

## Recommendations

- The current CFF needs to become more robust, and future cost projections must become more reliable. Both public and private entities should be encouraged and materially supported to develop further capacity. This should be one aim of the upcoming Inclusive Budgeting and Financing for Climate Resilience project for the Ministry of Finance.
- Changes in climate-change scenarios, and the associated new realities that are emerging, call for updating BCCSAP. The cost of BCCSAP implementation also needs assessment. The upcoming new project with the Ministry of Finance, together with the current CFF, is expected to provide additional information for the updates.
- Establishment of a Climate Fiscal Cell in the Finance Division of MoF, as proposed in this CFF, should be implemented with immediate effect such that the CCF recommendations are properly operationalized.
- In updating BCCSAP, the GoB should take initiatives to develop a National Adaptation Plan (NAP) and in possible case, Nationally Appropriate Mitigation Action (NAMA) for Bangladesh, while maintaining linkages with CPEIR and CFF.
- Government budgetary allocations for BCCTF are declining, and an expected flow of funds from development partners to BCCRF has not yet materialized. In the light of this, the GoB needs to increase fund allocations to BCCTF so the battle against the harmful effects of CC may continue unabated.
- The CFF developed in this study should be regularly updated through the upcoming IBFCR project, aiming to establish Bangladesh's framework as a landmark model for other countries to follow.

# CHAPTER

## INTRODUCTION AND BACKGROUND

- 1.1 Introduction to climate change and its impacts
- 1.2 Policy background
- 1.3 Rationale
- 1.4 Objectives
- 1.5 Scope of climate fiscal framework
- 1.6 Methodology of developing climate fiscal framework
- 1.7 Climate finance
- 1.8 CFF definition



1

## 1.1 Introduction to climate change and its impacts

**Global consensus.** Given abundant evidence that the global climate is indeed changing, a growing world-wide consensus suggests that ways must be found to contain and, to the extent this is possible, reverse these changes.

**Bangladesh's vulnerability.** According to the Climate Risk Index (CRI) 2014, a recent report by a Germany-based non-profit research institution, Bangladesh ranks fifth among those 10 countries in the world most vulnerable to climate change-induced natural calamities (Germanwatch, 2014). The CRI incorporated number of events, total deaths, loss of property of each affected person, and loss of gross domestic product (GDP). In its report, Germanwatch estimated that, during the period 1993–2012, Bangladesh sustained US\$1.832 billion in damages wrought by a variety of natural disasters. Meanwhile National Geographic ranked Bangladesh as the most vulnerable nation to the impacts of climate change in the coming decades (Braun, 2010). Various other reports have also remarked on the nation's vulnerability.

**'Climate change.'** This expression, as used in the current study, refers to a change in climate that can be identified by using, for example, statistical examination of the mean and/or the variability of its properties. Such change, properly speaking, also persists for an extended period, typically decades or longer. Climate change so described may be due to natural internal processes or to external pressures such as solar-cycle fluctuations, volcanic eruptions, or persistent anthropogenic changes in the composition of the atmosphere or in land use. The Framework Convention on Climate Change (UNFCCC), Article 1, defines climate change as 'a change of climate ... attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods'. UNFCCC thus makes a distinction between CC attributable to human activities that alter the atmospheric composition, and climate variability attributable to natural causes.

**Mitigation and adaptation.** CC issues generally fall into one or the other of two major categories: those related to mitigation, and those related to adaptation. Mitigation refers to efforts to reduce or stabilize GHG emissions, a primary anthropogenic cause of global warming, while adaptation is about coping with the consequences of CC. From a global standpoint, mitigation implies either reduction of GHG emissions into the atmosphere or absorption of GHGs from the atmosphere (IFC Climate Business Department, October 2013). Given that Bangladesh's share of GHG emissions into the atmosphere is insignificant, it remains exempt from any internationally agreed responsibility to reduce GHG emissions. Even though Bangladesh ranks very low as an energy-consuming country, it pursues a low-carbon development path, while building its resilience to climate change (BCCSAP, 2009, GoB). But given the scant support in terms of funding and other help it receives from the international community — even though it has been the large, more developed industrial nations that have emitted much of the offending atmospheric GHGs — Bangladesh cannot go far in its struggle to reduce emissions and fight climate change. Therefore, Bangladesh can go to a green development or low emission path in a limited scale (while it provides adaptive capacity of Bangladesh government and citizen for climate change adaptation and do not impact on economic growth) following a strong knowledge management path towards comprehensive cost-benefit and opportunity cost analysis of low carbon green growth (narrowly, mitigation).

Situated at the bottom of the mighty GBM — the Ganges, Brahmaputra and Meghna river systems — a total of 57 trans-boundary rivers flowing down to Bangladesh. Of these 57 rivers, 54 originate in neighbouring India and 3 in Myanmar. Thus the country has no control of the water flow and volume draining to the Bay of Bengal — over 90 percent of the total run-off generated annually.

Compared to other countries, as mentioned above, Bangladesh suffers CC effects that rank among the most adverse in the world. This situation has been exacerbated by a relatively high level of poverty (though this has declined at a satisfactory rate in recent years); increasing population



density; limited adaptive capacity; and poorly funded, comparatively weak local governance. The average national population density is now an estimated 1,000 people per square kilometre, and the national population is increasing by about 2 million annually. Nearly one-third of these people live below the country's poverty line, even with a significant reduction in the poverty rate achieved in recent years. All these factors diminish national capacity to respond to natural disasters.

By 2020, CC will lead to water stress affecting an estimated 500–750 million people worldwide. Low-lying coastal regions such as Bangladesh are especially vulnerable to sea-level rise and more frequent extreme weather conditions such as the 2007–2009 cyclones (Römisch, 2009). UNEP (1989) showed that a 1.5-metre rise in sea level by 2030 would submerge 22,000 square kilometres, or 16 percent of the country's total landmass, affecting about 15 percent of the total population of Bangladesh

In most countries like Bangladesh, yields from rain-fed agriculture could be reduced to 50 percent by 2020. Agriculture is the single most productive sector of the economy, comprising about 18.6 percent of the country's gross domestic product (GDP) and employing around 45 percent of the total labour force. The performance of this sector has an overwhelming impact on major macroeconomic objectives such as employment generation, poverty alleviation, human resource development, and food security. CC will have a particularly devastating effect on food security in such a country, given the growing population and widespread poverty. Having first identified current vulnerabilities and future opportunities, Bangladesh needs to prepare for long-term adaptation.

Adaptation is a process by which individuals, communities, and countries seek to cope with adverse consequences of any change, including climate change. Unlike adaptation processes and strategies themselves, the idea of incorporating future climate risk into policy-making is something new. While our understanding of climate change and its potential impacts has become increasingly unambiguous, practical guidance regarding adaptation has not. Adaptation policy should be structured by the following four major principles, which provide a basis upon which to develop integrated actions in adapting to climate change:

- adaptation to short-term climate variability and extreme events serves as a starting point for reducing vulnerability to longer-term climate change;
- adaptation occurs at different levels in society, including household and local community levels;
- adaptation policy and measures should be assessed within a broad development context; and
- the strategies and processes that stakeholders adopt are equally important; a growing understanding of the linkages between climate-change adaptations has led to a greater focus on mainstreaming adaptation activities into existing development plans and processes (Alam and Huq, 2009).

Recognition of adverse CC-related impacts raises related issues and questions. For example, is CC a simple environmental issue, or is it a developmental issue? Or is it both? An environmental issue can be addressed from a technical standpoint, while a developmental issue must be examined in a broader context, one necessarily involving social and economic considerations. Equally important are such other matters as policy planning and implementation and management of activities relevant to adaptation and mitigation (CDDE, 2011; IMF, 2008). Perhaps the single most important issue, however, is the question of financing adaptation and mitigation activities.

Financing CC-related activities, 'climate finance', entails many ramifications regarding fiscal policies and modalities. For example, relevant modality questions include the following:

- Should the CC activities be implemented under existing budgetary processes — e.g. MTBF, Annual Development Program (ADP) approval, the monitoring and evaluation framework, auditing — or under some kind of special arrangement?
- Should such expenditure be centrally controlled or decentralized?
- Should these be integrated with the regular budget? Fiscal policy has a critical role to play

in adaptation and mitigation of GHG emissions and raising revenues for climate finance, fiscal consolidation, and other purposes. Adapting to CC requires good macroeconomic management, fiscal policy plans and revenue-raising alternatives, insurance markets, and long-term investment options

## 1.2 Policy background

The UN Framework Convention on Climate Change (UNFCCC) recognizes Bangladesh as being among those countries most vulnerable to the injurious effects of climate change. The country was one of the first least-developed countries (LDCs) to complete its National Adaptation Program of Action (NAPA), citing 'urgent and immediate' adaptation needs in 2005. NAPA was funded by UNFCCC's LDC Fund (as were NAPAs conducted by other LDCs), and followed guidelines provided by the international community and UNFCCC's LDC Expert Group. It consisted mainly of a list of stand-alone adaptation actions.

In 2008, the GoB prepared and adopted the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). BCCSAP aimed to reflect the changing development priorities of the Government, and was eventually revised in 2009, when more areas of action were added, including (i) the development and harnessing of water resources through better management of river course and training, and (ii) mitigating policy directions such as the 'low-carbon development path'. The sixteenth session of the Conference of the Parties (COP) in 2010 in Cancun, Mexico, the Least Developed Countries Expert Group (LEG) of UNFCCC, now also provides technical advice on (i) NAPA revision and updates; (ii) reinforcement of gender considerations and considerations regarding vulnerable communities; (iv) integration of NAPAs into development planning; (v) identification and implementation of medium- and long-term adaptation; and (vi) implementation of the LDC work programme. LEG also provides technical guidance and support to the national adaptation plan (NAP) and Nationally Appropriate Mitigation Action (NAMA).

BCCSAP is built on six pillars: (i) food security, social protection, and health; (ii) comprehensive disaster management; (iii) infrastructure; (iv) research and knowledge management; (v) mitigation and low-carbon development; and (vi) capacity building and institutional strengthening. Under these thematic pillars, 44 programmes to address CC challenges have so far been planned.

It is vital that the threat of adverse CC impacts be addressed now. But financing the implementation of BCCSAP 2009 in itself presents the GoB with a great challenge. And, rather than wait for finance from the international community, Bangladesh decided to initiate action with national funds. This led to the creation of two separate funds: the Bangladesh Climate Change Trust Fund (BCCTF), and the Bangladesh Climate Change Resilience Fund (BCCRF). The former is resourced entirely from the Government's own budget (US\$100 million annually); and BCCRF comprises funds pledged and provided by developed countries or groups such as Sweden, the United Kingdom, and the European Union. The two funds have differing governance and management arrangements, but both support BCCSAP (Rahman, 2011).

In 2010, the GoB adopted the Planning Commission's Poverty-Environment-Climate Mainstreaming (PECM) project, which aims to institutionalize the mainstreaming of environment and CC issues into the planning process. The project, part of an Asia-Pacific regional and global poverty environment initiative (PEI) financed by UNDP and UNEP, is intended to provide targeted support for development planning and budgeting processes through the establishment of poverty-environment-climate linkages. Under PECM, a Bangladesh Climate Public Expenditure and Institutional Review (CPEIR) was conducted in 2012. CPEIR generated a number of recommendations, including the key proposal to develop a climate fiscal framework (CFF) that would incorporate, inter alia, (i) a set of climate fiscal codes for Bangladesh to track CC expenditures for policy analysis and reporting; and (ii) an estimate of long-term climate finance needs by identifying potential climate-related public expenditures across government ministries (Mazouz and Jotzo, 2010).

### 1.3 Rationale

The GoB needs to manage climate-related challenges by adopting budget priorities, pricing policies, and financial market rules. To this end, Bangladesh formulated a comprehensive climate fiscal policy (CFP) to study and map out fiscal issues with regard to climate change. The CFP was first laid down in BCCSAP 2008, and subsequently revised in BCCSAP 2009. The CFF, for its part, offers a tool to ensure that CFP is implemented in a transparent and sustainable way over the long term (BCCSAP, 2009).

The CFF provides an account of fiscal developments and resource estimates for short-, medium-, and long-term climate expenditures; and supports analysis of how CC-related expenditures are being integrated into national budgetary processes. The GoB is ready to direct CFP towards realizing national climate-change policy and development objectives. A key CFP outcome in the years ahead will be the extent to which fiscal action has shielded the domestic economy and its development objectives from severe adverse effects due to global climate change. Timely and targeted fiscal expansions also enable the Government to provide basic amenities and services to an increasing number of actions promoting climate resilience.

### 1.4 Objectives

Combating adverse CC effects in Bangladesh requires a framework for tracking climate-related expenditure while estimating potential costs of long-term finance (Cubasch et al., 2001). To this end, the CFF aims to promote an updateable country system to (i) cost and prioritize climate actions; (ii) access international and national sources for climate finance; (iii) deliver climate finances; (iv) track climate expenditures; and (v) make climate finance and expenditure accountable. More specifically, the CFF means to develop a framework that incorporates the following features:

- It should provide incentives and guidance for costed and prioritized climate actions reflected within the existing national budgetary framework (i.e. MTBF). This includes estimation of potential costs of long-term financing needs to combat adverse CC effects.
- The framework should promote an enabling environment, so that the GoB can more effectively access international climate finances and establish national funds for climate change.
- It should routinely track climate-related expenditures.
- The framework should identify areas of institutional weakness and skills gaps, and on that basis recommend further institutional development and skill capacity in the Planning Commission and the Finance Division (FD), aiming to develop long-term revenue expenditure plans in accordance with BCCSAP, NAPA, NAP, NAMA, and other CC planning instruments.

### 1.5 Scope of climate fiscal framework

Climate change and its adverse impacts present a constellation of fiscal, environmental, poverty, gender, and development issues and ramifications regarding mitigation of, and adaptation to, the harmful impacts of CC. This CFF focuses mainly on issues related to fiscal policy vis-à-vis climate change.

Because CC challenges sustainable development, especially among LDCs, increasingly extreme weather conditions such as droughts, floods, and storms represent an immensely important global issue. These threats affect all income groups and occupations, but women are worst affected. Harmful CC effects are not gender neutral, since women constitute a disproportionately large share of the poor in countries around the world. Furthermore, given their responsibilities for securing water, food, and energy for cooking, heating, lighting and so on for their families, most women in rural areas in developing countries are highly dependent on local natural resources for their livelihood. And the effects of CC make it harder to secure these resources. A recent study of the 10 countries ranked most

vulnerable to CC in Africa reveals a strong relation between CC and environment-based livelihoods, which are closely related to gender ('The link between climate change, gender and development in Africa', *The African Statistical Journal*, Vol. 12, May 2011). Therefore any effective, comprehensive policy relating to climate change must encompass issues of gender and broader development perspectives. The study findings and implementation of its recommendations will certainly take these linkages into account in refining and implementation of the CFF.

## 1.6 Methodology of developing climate fiscal framework

This study included the following approaches:

- a desk review;
- discussions with, among others, the Finance Division (FD); Internal Resources Division (IRD); External Relations Division (ERD); and with other stakeholders, including the Ministries of Environment and Forest; Women and Children's Affairs; Agriculture; Disaster Management and Relief; Food, Fisheries and Animal Resources; Local Government, Rural Development and Co-operatives; Food; Communications; Fisheries and Livestock; Water Resources; the Bangladesh Bank; and non-government organizations (NGOs);
- a general review of fiscal policies (pricing, taxation, and subsidies) and their role in economic development of Bangladesh; a review of annual development programmes, MTBFs; Medium-Term Budget Strategies (MTBS); etc.;
- analysis and review of cross-country experiences in designing strategies to access international financing for CC-related consequences;
- a review of cross-country experience regarding institutional development in the Planning Commission and Finance Division, and skills capacity needs in developing long-term revenue and expenditure plans in line with CPEIR and BCCSAP;
- a review of tax policies, aid policies, CC funds, macroeconomic CC studies, etc.;
- a cross-country review comparing areas of institutional weakness and skills gaps in CFF implementation; and
- application of appropriate econometric methods, including statistical tools for quantitative analysis.

## 1.7 Climate finance

According to the World Resources Institute (WRI), 'climate finance' is used to refer to the flow of funds toward mitigation — i.e. activities aimed at reducing GHG emissions — or at adaptation — i.e. helping societies to develop resilience in adapting to negative effects of climate change. As noted above, Bangladesh's share of GHG emissions is negligible, and although it has decided to take a low-carbon growth path as national policy, its climate-related activities are generally directed towards developing resilience in face of adverse CC effects. To that end, the bulk of its expenditures will support adaptation measures.

Most preferred options involve only mitigation actions that (i) do not inhibit growth; (ii) add value to adaptation; and (iii) are supported by international climate finance. Climate finance in the Bangladesh context refers mainly to adaptation, and only to a limited extent to mitigation. Furthermore, the expressions 'climate finance', 'climate expenditures', and 'climate-related expenditures' are used interchangeably in this CFF, which includes both adaptation- and mitigation-related finances and expenditures.

The GoB has been proactive in both its mitigation and its adaptation efforts. Various solar energy projects, afforestation programmes, and programmes promoting the use of Habla Zig-Zag Kilns

rather than coal-fired kilns are classic examples of mitigation efforts. The many 'adaptation' projects, on the other hand, include such activities as building cyclone shelters, developing saline-resistant crop seeds, and erecting embankments in coastal area.

## 1.8 CFF definition

The CFF concept remains somewhat inchoate. A full-fledged CFF has yet to be developed, although some countries, e.g. Indonesia and Nepal, have taken commendable initiatives towards developing such structures. Cambodia, meanwhile, is developing a framework to ensure effective use of available internal and external resources.

The CFF, given scant available information, may for now best be viewed quite generally as a framework that can ensure most effective use of external and internal finances in addressing climate change. In establishing such a framework, countries need to (i) identify their existing expenditures and modalities for delivering climate-related finance; (ii) identify additional expenditure requirements, drawing upon action plans such as BCCSAP; (iii) identify financing gaps and preferred modalities for delivering further sources of public investment (external and domestic); and (iv) create an enabling environment for private financial flows.

The CFF incorporates principles that should inform CFP design. The framework is basically a tool to identify the supply and demand sides of climate fiscal funds (expenditures vis-à-vis revenue or finance, respectively), ensuring that CFP is transparent and sustainable in the long term (Ampri, 2009). Indeed, the CFF is a prerequisite for achieving the objectives of CC policy. One key CFP element is the budgetary policy framework, since this is used to promote the overall objectives of climate fiscal policy without jeopardizing public finances. And the CFF is expected to facilitate the following enabling measures:

- equitable division and allocation of climate funds to the concerned sectors;
- division of service, identification of the demand for climate fund and expenditure responsibilities;
- determining areas of financial authority for revenue-raising, national and international financing options, and fiscal tools; and
- provide a governance framework of climate fiscal funds under the national fiscal policy.

The CFF provides an account of fiscal developments and resource estimates for the short-, medium-, and long-term climate expenditure framework, and supports analysis of how CC-related expenditure is integrated into national budgetary processes. The framework further sets out aggregate expenditure constraints consistent with expenditure priorities for CC-impact adaptation and mitigation over the short, medium, and long terms.

The GoB is ready to direct its CFP to realizing the national CC policy and development objectives. A key CFP outcome, in the years ahead, will appear in the extent to which fiscal action shields the domestic economy and its development objectives from the adverse effects of global climate change. Timely and targeted fiscal expansions will also enable government provision of basic amenities and services to an increasing number of actions for climate resilience.

# CHAPTER

## THE CLIMATE FISCAL FRAMEWORK

- 2.1 Definition of climate expenditure
- 2.2 Demand side issues of climate fiscal framework
- 2.3 Supply side issues of climate fiscal framework
- 2.4 Institutional and capacity development related issues



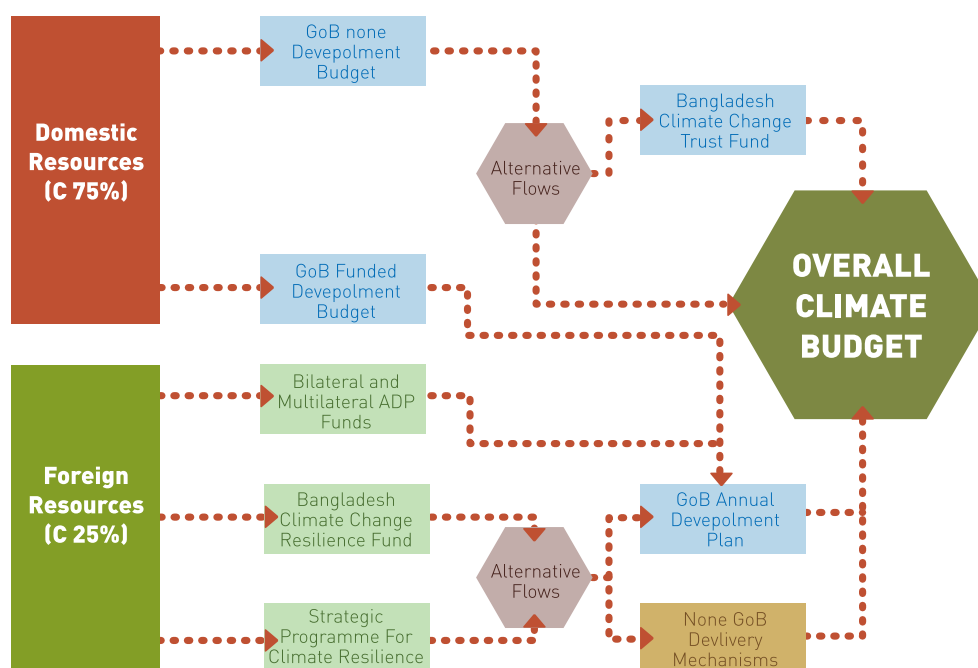


## 2.1 Definition of climate expenditure

The GoB accounting system includes no widely acceptable accounting classification of CC-related expenditure. On the other hand, most activities related to climate mitigation and adaptation have other purposes, and may be classified in terms, e.g., of sub-functions under 'environmental management'. That is why standard classifications of public expenditure are not used to identify expenditure on CC activities.

OECD has developed a 'climate change marker' to track CC activities (OECD, 2011). Following the OECD definition, CPEIR identified 37 ministries/divisions having some link with CC-related activities, either non-developmental or developmental in nature or both. CPEIR identified a total of 180 non-development and 669 development codes. The climate-sensitive weight of these activities varies from 'implicitly relevant' (0 percent to 24 percent) to 'strongly relevant' (75 percent+). Following the OECD definition and the procedure adopted in CPEIR, and considering the BCCSAP action plan, all government expenditures, both development and non-development of FY 2012 to FY 2014 were reviewed to identify CC-related projects/programmes (CPEIR, 2012; BCCSAP, 2009).

**Figure 1: Existing Climate Funds Flow of Bangladesh**



Source: CPEIR 2012

## 2.2 Demand side issues of climate fiscal framework

### 2.2.1 Costing and prioritization of climate actions

The GoB produced the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2009, the National Adaptation Programme of Action (NAPA) in 2005, and updated the latter scheme in 2009. Bangladesh also developed the National Plan for Disaster Management (NPDM) in 2010, and the National Environment Management and Action Plan (NEMAP) in 1995. While all these plans are relevant to CC in terms either of mitigation or adaptation, none of them is costed or prioritized, and thus offers no clear-cut solution to projecting long-term CC financial needs.



Certain climate expenditure trends may be identified over the past four to five years, and they can provide a minimum idea of financial needs, at least, but these fall far short of what will actually be needed as the National Adaptation Plan (NAP) and Nationally Appropriate Mitigation Actions (NAMA) are implemented in coming years. In brief, no adequate costing basis for long-term needs for CC actions are currently available, which suggests the GoB must quickly frame a better and comprehensive CCF.

A starting point for this goal is the CC expenditure review that follows. It assesses how much the country has so far spent, whether explicitly or implicitly, on climate change.

### 2.2.1.1 Climate Change Expenditure Review

#### *Overall national budget and funding: Recent trends*

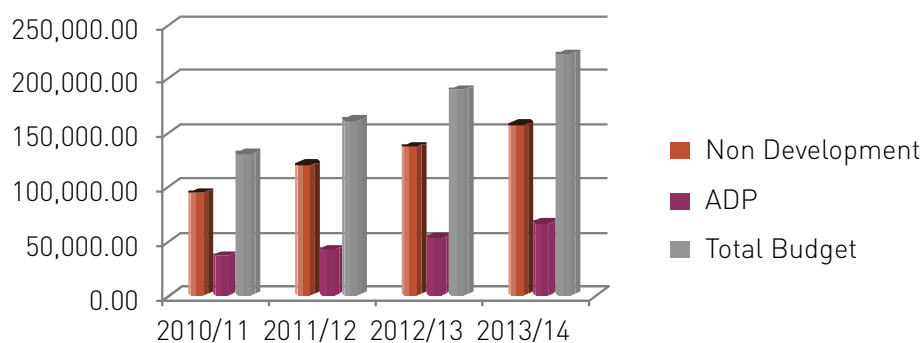
Despite its low public expenditure-to-GDP ratio, in real terms the size of Bangladesh's national budget is continually rising. For FY 2013/14, the total national budget exceeds BDT 200,000 crore (USD 26.67 billion), which is 17.52 percent higher than the revised budget for FY 2013, and 18.72 percent of GDP. Of this, about 30 percent of resources is allocated to the annual development programme, while the remaining 70 percent is allocated to non-development expenditures. (A significant number of development programmes are implemented under the revenue budget, and the allocation for BCCTF also comes from the revenue budget, so the total allocation to development activities amounts to about 32 percent of the national budget.)

The share of foreign assistance in the national budget of Bangladesh shows a clear declining trend, amounting to less than 10 percent of the total budget over the last 4 years. (Of this foreign assistance, about one-third is grant and the remainder is loan assistance.) In recent years, moreover, the non-development budget of Bangladesh has been fully financed by domestic resources.

#### *Existing climate expenditure analysis*

In the course of identifying climate-related projects, programmes, and codes referred to as activities with a climate dimension, this study reviewed such government financial records as 'Budget in brief, demand for grants and appropriations (dev. and non-dev)' (Finance Division, Ministry of Finance, Bangladesh, 2013); MTBF; ADP; the Bangladesh Economic Review; and the Integrated Budget and Accounting System (iBAS) database. A total of 206 non-development codes and 612 development codes were identified (see Appendix 1). In effect, the following financial data were used in the analysis presented in Table 2.1 (below):

**Chart 1: Trend of Revised Budget Allocation from FY11 to FY14**



- 2013/14 original budget
- 2012/13 revised budget and actual expenditure
- 2011/12 revised budget and actual expenditure
- 2011/12 revised budget and actual expenditure

In this study, the term 'climate dimension expenditure' refers to expenditures on projects/programmes which were in part addressed to ameliorating adverse CC impacts. The term 'climate expenditure/climate-related expenditure' refers, on the other hand, to expenditures dedicated to mitigation and/or adaptation measures. For example, a project worth Tk.1 crore (USD 133333), 50 percent of which is devoted to activities combating harmful CC-related effects. In this example, climate dimension expenditure amounts to Tk. 1 crore (USD 133333), of which Tk. 0.5 crore (USD 66666) is climate-related expenditure.

An analysis of the climate dimension budget, actual expenditure with respect to total budget and GDP, is presented below.

**Table 2.1: Climate dimension project/program expenditure as percentage of total expenditure and GDP**

(Crore taka/BDT 10 million)

Value of Climate Dimension* Programs	Revised 2010/11	Actual 2010/11	Revised 2011/12	Actual 2011/12	Revised 2012/13	Actual 2012/13	Budget 2013/14
Non Development Budget with a Climate Dimension	13,348.73	11,330.40	13,627.79	13,004.17	19,293.68	18,594.92	17,980.99
Development Budget with a Climate Dimension	18,050.96	16,494.92	15,399.87	15,453.46	29,314.47	25,565.09	30,207.56
Climate Program Total	31,399.69	27,825.32	29,027.66	28,457.63	48,608.15	44,160.01	48,188.55
Year to Year Change (in %)			-7.55	2.27	67.45	55.18	-0.86
<b>GoB Budget/Expenditure</b>							
Non Development Budget	94,131.00	95,000.00	120,133	114,920.00	136,960.00	125,160.00	156,621.00
Annual Development Program	35,880.00	33,283.00	41,080.00	37,510.00	52,366.00	49,060.00	65,870.00
Total Budget	130,011.00	128,283.00	161,213.00	152,430.00	189,326.00	174,220.00	222,491.00
Non-Dev. Climate Dimension Expenditure as % of Non- Development Budget	14.18	11.93	11.34	10.39	14.09	11.87	11.48
Dev. Climate Expenditure as % of Annual Development Programs (ADP)	50.31	49.56	37.49	31.50	55.98	38.81	45.86
Total Climate Dimension Expenditure as % of Overall GoB Budget	24.15	21.69	18.01	16.33	25.67	19.85	21.66
Gross Domestic Product (GDP)	787,495.0	796,700.0	914,784.0	918,141.0	1,037,987.0	1,037,987.0	1,188,800.0
Climate Dimension Programs as % of GDP	3.99	3.49	3.17	3.10	4.68	4.25	4.05

\* 'Climate dimension expenditure' refers to the expenditure for projects/programmes, part of which is addressed to the remedy of climate adversities.

Sources: iBAS, ADP, and MTBF.

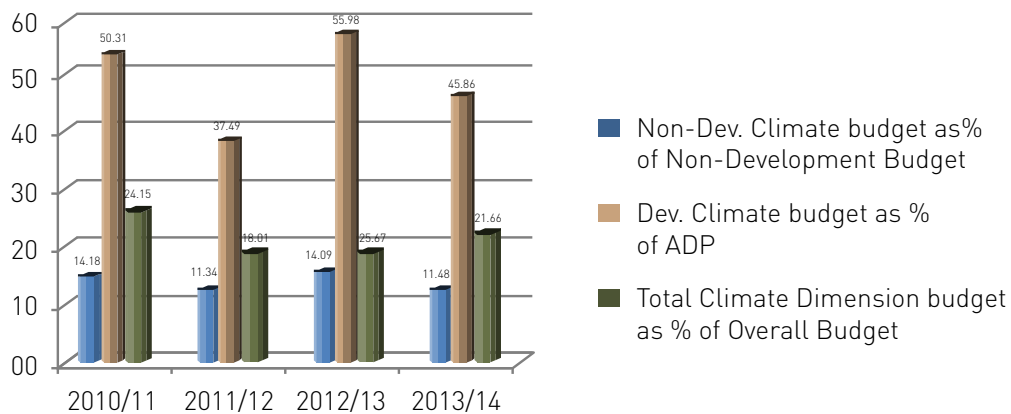
**Chart 2: Trend of Revised Budget Allocation from FY11 to FY14**

Table 2.1 and Chart 2 indicate the following:

- During the period FY2011/14, the allocation of climate dimension budget has on average been 21.79 percent of the total budget, which is 3.9 percent of GDP.
- But actual spending of climate dimension budget amounts to 21.15 percent of total spending and 3.66 percent of GDP.
- During the same period, average allocation for non-development climate programmes was about 12.65 percent of total non-development budget, and climate development projects comprised about 47.63 percent of the annual development programme. The data clearly indicate that the GoB spent a significant portion of its development budget on climate-related projects.
- In the last 4 years, 40 percent of climate dimension projects on average were financed from the revenue budget, and 60 percent from ADP.
- The implementation rate of climate-related projects/programmes exceeds 92 percent.

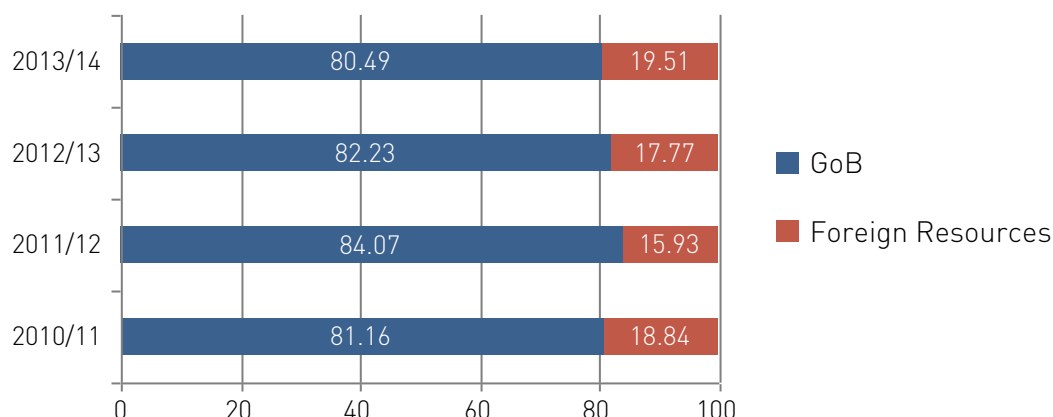
**Table 2.2: Funding Scenario of Climate Related Projects/Programs**

(Crore taka/BDT 10 million)

Source	Revised 2010/11	% of Total	Revised 2011/12	% of Total	Revised 2012/13	% of Total	Budget 2013/14	% of Total
Non Development	13,348.73	42.51	13,627.79	46.95	19293.68	39.69	17980.99	37.31
ADP (Total)	18050.96	57.49	15399.88	53.05	29314.47	60.31	30207.56	62.69
Domestic	12135.87	38.65	10776.10	37.12	20679.16	42.54	20804.77	43.17
Foreign	5915.09	18.84	4623.78	15.93	8635.31	17.77	9402.79	19.52
Climate (Total)	31399.69	100.0	29027.67	100.0	48608.15	100.0	48188.55	100.0
Domestic	25484.6	81.16	24403.89	84.07	39972.84	82.23	38785.76	80.49
Foreign	5915.09	18.84	4623.78	15.93	8635.31	17.77	9402.79	19.51
<b>Proportions of Foreign assistance</b>								
Loans	3072.94	51.95	3491.84	75.52	6164.62	71.39	7128.29	75.81
Grants	2842.15	48.05	1131.94	24.48	2470.69	28.61	2274.5	24.19
Total	5915.09	100.0	4623.78	100.0	8635.31	100.0	9402.79	100.0

Sources: iBAS and ADP

**Chart 3: Funding proportion (%) of Climate Budget**



As Table 2.2 and Chart 3 clearly indicate:

- More than 80 percent of climate-related projects/programmes are financed by domestic resources, while only about 19 percent of financing come from foreign sources.
- One-third of the foreign financing comprises grants, and the remaining two-third are loans.

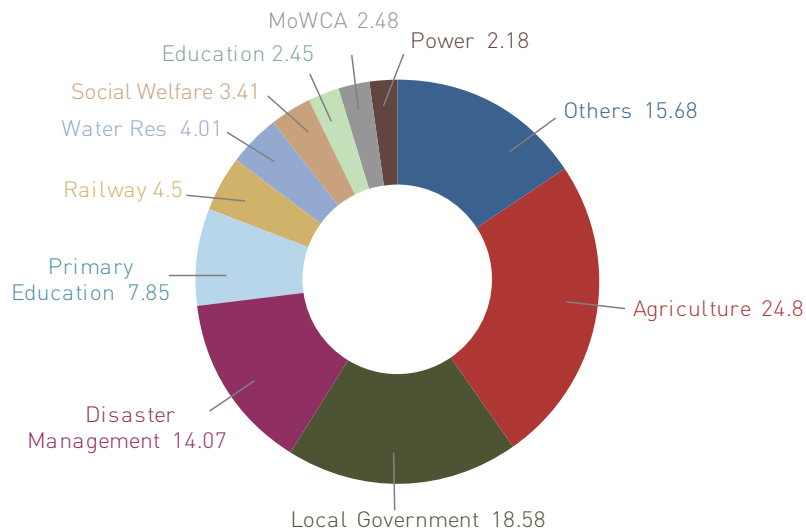
**Table 2.3: Key Ministries' (Financial Basis) Performance on Climate Dimension**

(Core taka/BDT 10 million)

Ministry/Division	Total Resource Allocation (2011/12 to 2013/14)	% of Total
Agriculture	31204.08	24.80
Local Government	23379.74	18.58
Disaster Management and Relief Division	17703.17	14.07
Primary and Mass Education	9876.92	7.85
Railway Division	5665.01	4.50
Water Resources	5045.08	4.01
Social Welfare	4289.18	3.41
Women and Children's Affairs	3114.34	2.48
Education	3078.91	2.45
Power Division	2737.16	2.18
Other Ministries/Divisions (30)	19730.77	15.68
Total Allocation (40 Ministries/Divisions)	125824.36	100.0

Source: iBAS

**Chart 4: Top ministries proportion of delivery of climate activities (FY12 to FY14)**



The main findings from Table 2.3 and Chart 4 follow:

BDT 125,824 crore (BDT 1,258,240,000,000) was allocated for climate-related activities.

- Three ministries/divisions spent more than 57 percent of the total sum (Ministry of Agriculture, 24.80 percent; Local Government Division, 18.58 percent; Ministry of Disaster Management, 14.07 percent).

Not all climate dimension projects/programmes are equally relevant. CPEIR has classified them as either strongly, significantly, somewhat, or implicitly relevant. Table 2.4 presents budget allocation to climate dimension projects/programmes according to degree of relevance.

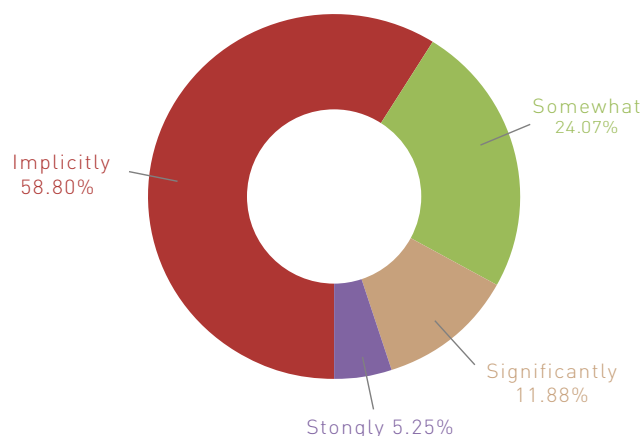
**Table 2.4: Climate Dimension Projects/Programs–By Relevance**

(Crore taka/BDT 10 million)

Climate Relevance Criteria	Revised 2010/11	% of Total	Revised 2011/12	% of Total	Revised 2012/13	% of Total	% of Total
1. Strongly	1152.51	3.67	1021.19	3.52	2914.44	6.00	6.58
2. Significantly	2542.48	8.10	2673.48	9.21	6456.42	13.28	14.53
3. Somewhat	9683.81	30.84	9594.13	33.05	9280.53	19.09	19.26
4. Implicitly	18020.90	57.39	15738.86	54.22	29956.76	61.63	59.63
<b>Total:</b>	<b>31399.69</b>	<b>100.00</b>	<b>29027.66</b>	<b>100.00</b>	<b>48608.15</b>	<b>100.00</b>	<b>100.00</b>

Source: iBAS

**Chart 5: Climate Budget by Relevance (% , on average FY11 to FY14)**



The following observations are drawn from Table 2.4 and Chart 5 (above):

- On average, in FY 2011–2014, only 5.25 percent of climate dimension projects/programmes were ‘strongly relevant’. But that rate increased from 3.67 percent in FY 2011 to 6.58 percent in FY 2014.
- The share of ‘significantly relevant’ projects/programmes also increased in the same period (from 8.10 percent to 14.53 percent), whereas ‘somewhat relevant’ project/programmes decreased sharply from 30.84 percent in FY 2011 to 19.26 percent in FY 2014.
- Between 54 and 62 percent of the activities were rated ‘implicitly relevant’.

Recent budget allocations to projects/programmes addressing harmful CC effects have been presented above. Not all expenditure or resources allocated to such activities were fully dedicated to addressing negative CC impacts. Degree of relevance assigned to categories of projects/programs is subjective, and has been replicated from the CPEIR, preceding this study. The following table presents climate expenditure by degree of relevance.

**Table 2.5: Climate Expenditure by Relevance**

(Crore taka/BDT 10 million)

	Revised 2010/11	% of Total 2010/11	Revised 2011/12	% of Total 2011/12	Revised 2012/13	% of Total 2012/13	Budget 2013/14	% of Total 2013/14
1. Strongly	1064.58	12.02	956.04	11.18	2398.27	16.90	2596.15	18.34
2. Significantly	1329.05	15.01	1431.04	16.73	3420.36	24.10	3735.85	26.39
3. Somewhat	3197.64	36.10	3169.79	37.05	2787.66	19.64	2867.21	20.25
4. Implicitly	3265.29	36.87	2998.30	35.05	5585.96	39.36	4957.31	35.02
Total Climate Expenditure	8856.55	100.00	8555.17	100.00	14192.26	100.00	14156.52	100.00
Climate expenditure as % of budget of climate related projects/programs	28.21		29.47		29.20		29.38	
Climate expenditure as % of Total Budget	6.81		5.31		7.50		6.36	
Climate expenditure as % of GDP	1.12		0.94		1.37		1.19	

Source: iBAS

The main findings presented in the above table are the following:

- In FY 2011 and FY 2012, only 27 percent of climate spending was executed under projects/programmes that were 'strongly' or 'significantly' relevant. Over the two years since, however, this scenario has markedly changed, with the combined share of these two categories increasing to about 45 percent. This suggests that (i) most climate activity was initially delivered as part of other development activities, and (ii) public expenditure management and planning is now according CC issues more importance and attention.
- Over the FY 2011/14 period, climate expenditure as a percent of the budget for climate dimension project/programmes has remained stable, and stands at about 29 percent.
- Climate expenditure as a percent of the total budget has varied from 5.3–7.5 percent, or about 1–1.4 percent of GDP.

BCCSAP identified climate hazards and their impacts in Bangladesh. This action plan grouped all climate activities according to six themes: (1) food security, social protection and health; (2) comprehensive disaster management; (3) infrastructure; (4) research and knowledge management; (5) mitigation and low-carbon development; and (6) capacity building and institutional strengthening. Table 2.6 (below) presents a summary of indicative climate budgets by thematic area.

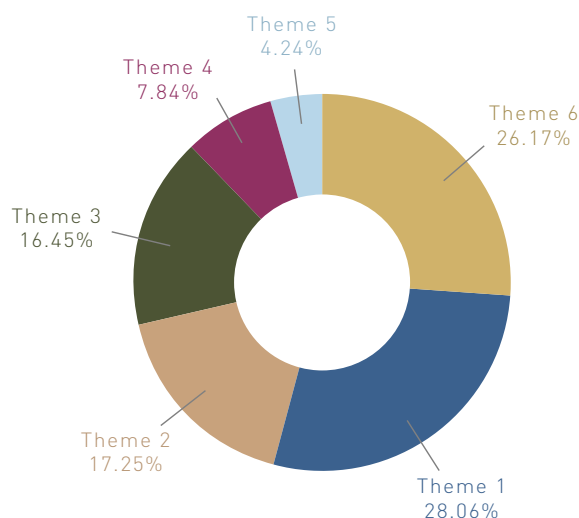
**Table 2.6: Climate Expenditure by Thematic Areas**

(Crore taka/BDT 10 million)

Thematic Area	Climate ADP Expenditure				Non-Development Climate Expenditure				Total Climate Expenditure			
	Revised 2010/11	Revised 2011/12	Revised 2012/13	Budget 2013/14	Revised 2010/11	Revised 2011/12	Revised 2012/13	Budget 2013/14	Revised 2010/11	Revised 2011/12	Revised 2012/13	Budget 2013/14
Theme 1	926.42	869.12	2276.12	2439.63	1292.86	1312.06	1921.69	1801.38	2219.28	2181.18	4197.81	4241.02
Theme 2	891.08	964.60	1459.97	1403.56	650.07	670.34	978.19	873.81	1541.15	1634.94	2438.17	2277.37
Theme 3	1492.62	1396.09	2111.95	2167.66	94.24	87.53	76.95	98.69	1586.85	1483.62	2188.89	2266.35
Theme 4	351.73	271.65	555.88	636.68	381.05	407.32	567.35	416.23	732.78	678.97	1123.24	1052.91
Theme 5	178.84	68.14	609.76	682.38	144.57	142.09	77.67	38.50	323.40	210.23	687.43	720.89
Theme 6	1350.98	1277.47	2077.528	2154.81	1102.11	1088.754	1479.19	1443.2	2453.09	2366.22	3556.72	3597.99
<b>Total</b>	5191.66	4847.08	9091.20	9484.73	3664.90	3708.09	5101.05	4671.79	8856.56	8555.17	14192.26	14156.51

Sources: iBAS, ADP, BCCSAP-2009 and CPEIR, 2012

**Table 2.6: Climate Expenditure by Thematic Areas**



As Table 2.6 and Chart 6 show, both ADP and non-development budget has addressed all six themes. Over the past four years, about 55 percent of climate budget was spent in thematic areas 1 and 6, both areas being heavily funded by ADP and non-development budget. Average spending in thematic areas 2 and 3 has been 17.25 percent and 16.45 percent, respectively. As expected, thematic area 3 (infrastructure) is mostly funded from the development budget. Given that Bangladesh is not a heavy carbon emitter, spending has been lowest on activities in thematic area 5, mitigation and low-carbon development.

## 2.3 Supply side issues of climate fiscal framework

### 2.3.1 Current supply of climate finances

#### 2.3.1.1 Bangladesh climate change trust fund (BCCTF)

The GoB has given top priority to improving national capacity to cope with CC-induced risks. The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009 is one means to this end. To promote implementation of BCCSAP 2009, the Government has established the Bangladesh Climate Change Trust Fund (BCCTF, 2009) and enacted the Climate Change Trust Act 2010. A trustee board, the highest decision-making body for the Trust Fund, has responsibility for overall BCCTF direction and administration. A technical committee, headed by the Secretary, Ministry of Environment and Forest, comprises 13 members including experts and representatives from the Planning Commission, Department of Environment, Department of Forest, Centre for Environmental and Geographic Information Services (CEGIS), and social organizations/NGOs working on climate change. The Committee screens project proposals received through BCCT, and recommends to the trustee board their approval, disapproval or, if required, revision. Two sub-committees have been formed to assist the technical committee.

BCCTF, a block budgetary allocation, takes the form of a government endowment established with the revenue budget to support BCCSAP 2009 implementation. From FY 2009–10 to the current FY 2013–14, a total of 2,700 crore taka (USD 360 million) has been allocated to BCCTF.



**Table 2.7: Budget allocation for BCCTF**

Sl no.	Fiscal Year	Allocated amount (Crore taka/BDT 10 million)
1.	2009-2010	700.00
2.	2010-2011	700.00
3.	2011-2012	700.00
4.	2012-2013	400.00
5.	2013-2014	200.00
<b>Total</b>		<b>2700.00</b>

According to the Climate Change Trust Act 2010, the BCCT can spend a maximum of 66 percent of the allocated amount as well as the interest accrued on the remaining 34 percent kept as fixed deposit. As per provision of the Act and instruction of the Ministry of Finance, a total of BDT 1,021.33 crore (BDT 10213.3 million equivalent to USD 136 million) has been kept in fixed deposit. As of November 2013, 270 projects have been undertaken with a total estimated cost of BDT 1,936.67 crore (BDT 19366.7 million, equivalent to USD 258.22 million). Of this, BDT 1,679 crore (BDT 16790 million, equivalent to USD 223.8 million) came from the allocated amount, while the remainder, BDT 257.67 crore (BDT 2576.7 million, equivalent to USD 34.35 million), came from interest accrued on the fixed deposit. Different government ministries, departments, and agencies are implementing 207 projects, while NGOs and implementing another 63 projects. As of this writing, 31 of the government projects have already been completed.

Concerned line ministries are responsible for overall project management, and financial management of BCCTF projects must adhere to existing government financial rules. Meanwhile, conformity with the Public Procurement Act 2006 and the Public Procurement Rules 2008 is mandatory for all BCCTF project procurements. BCCT has its own mechanism for monitoring and evaluating BCCTF projects. Local administration and elected bodies have also been drawn into the monitoring process, and district-level coordination meetings have ensured local oversight of project implementation. Annual audit by the Office of the Comptroller and Auditor General (CAG) of Bangladesh is compulsory as per the Climate Change Trust Act 2010. Both BCCT and individual projects are audited by CAG, and BCCT is answerable to questions raised by members of Parliament (MPs) in the Jatiya Sangshad (Parliament). Its activities are also discussed in meetings of the Parliamentary Standing Committee on Ministry of Environment and Forest.

#### **Glimpses of actions under BCCTF projects**

- 15.4 kilometres of coastal sea dyke have been constructed.
- 6,760 cyclone-resilient houses have been erected.
- 142 kilometres of embankments have been built.
- 122 kilometres of riverbank protective work have been completed.
- 535 kilometres of canals have been excavated or re-excavated.
- 44 elements of water-control infrastructure including regulators/sluice gates have been constructed.
- 166 kilometres of drainage have been constructed in urban areas to reduce waterlogging.

- 500 water sources and 550 rainwater reservoirs have been established.
- Agro-met stations for early forecasting have been set up in 4 upazilas.<sup>3</sup>
- 143.35 million trees have been planted and 4,971 hectares of land have been afforested.
- 7,800 biogas plants have been installed.
- 528,000 improved cook-stoves have been distributed.
- 12,872 solar home systems have been installed in remote off-grid areas.
- Stress-tolerant crop varieties such as BINA Rice 7, BINA Ground Nut 1 and 2, and BRRI Rice 40, 41, and 47 have been developed.
- 4,500 metric tonnes of stress-tolerant seeds have been produced and distributed.

### Future financial requirements

With a view to implementing more socially desirable projects that promise to be effective in the fight against CC-related adversity, [check: Is that okay?...] BCCT proposes acquiring additional funds, as described in Table 2.8 (below), for the current and ensuing three fiscal years.

**Table 2.8: Future Finance Requirements for BCCTF**

Fiscal Year	Expected Budget (Core taka/BDT 10 million)
2013-2014*	400
2014-2015	700
2015-2016	900
2016-2017	1100

\* Allocation for the current fiscal year has been 200 crore taka (BDT 2 billion). An additional BDT 2 billion is needed for the remaining period.

### Issues relating to BCCTF

- BCCTF projects/programmes should be reflected in the budget frameworks of concerned ministries and divisions, incorporating them within a government accountability and outcome framework.
- Customary project approval guidelines do not apply to projects implemented under the BCCTF, where routine procedures may be relaxed. Given the idiosyncratic nature of these projects, it is necessary, on the one hand, to keep such projects outside the existing project-screening process. On the other hand, they ought to be included in ADP, thereby ensuring they fall within the regular monitoring framework of the Implementation Monitoring and Evaluation Division (IMED). Once, climate change issues are mainstreamed into the regular project design and approval guideline, it will be easy to follow the regular guideline for project design and approval.

<sup>3</sup> An *upazila* is a sub-district similar to a 'county' in some Western countries.

- One immediate solution is to have projects implemented under the BCCTF included, in the way self-financing projects are, in the ADP document. On the one hand, then, these projects will be included in the ADP document though they will not be an ADP constituent, as far as the size of ADP is concerned. On the other hand, they will come under IMED's standard monitoring purview, while continuing to be processed and approved by BCCT, thereby sustaining BCCTF's distinctive character. However, in long run regular project approval process should address the climate change dimension so there will be one country system for financing climate actions.
- Government budgetary allocations for BCCTF show a declining trend. At the beginning it was expected that the GoB would provide initial allocations, and, once funded activities came into full swing, development partners would take over. In the meantime, however, a separate, foreign-funded entity, the Bangladesh Climate Change Resilience Fund (BCCRF), was established, and the issue of merging the two funds remains unresolved. Currently, further governmental allocation to BCCTF appears to be in question.

### 2.3.1.2 Bangladesh climate change resilience fund (BCCRF)

BCCRF — a partnership between the GoB, development partners, and the World Bank — is a trust sponsored by the international community to fund CC-related activities.

Aiming to build a medium- to long-term programme for enhancing resilience in face of climate shocks and facilitating low-carbon and sustainable growth, Bangladesh launched its first Climate Change Strategy and Action Plan (BCCSAP) at the UK-Bangladesh Climate Change Conference in London in September 2008, and updated this in 2009. In the wake of the London conference, an internationally sponsored trust fund for CC was proposed as a modality for the development partners to support Bangladesh in implementing BCCSAP. Thus — with contributions from bilateral development partners, and following the signing of a memorandum of understanding — the Bangladesh Climate Change Resilience Fund (BCCRF) was established in May 2010. BCCRF is owned and managed by the GoB. The Governing Council, comprising a core group of cabinet ministers plus representatives of civil society organizations and development partners, provides overall strategic guidance. Meanwhile a management committee led by the Secretary of the Ministry of Environment and Forest reviews grant requests. BCCRF is designed such that all investment projects are recipient-executed grants, i.e. executed by the GoB and its designated agencies or other eligible institutions. The World Bank is to execute analytical and advisory activities.

This fund, one of the first of its kind in the area of climate change, was established with financial support from Denmark, the European Union, Sweden, and the United Kingdom. In December 2010, Australia, Switzerland, and the USA also joined the Fund. The following table presents a list of participants, together with their contributions to the fund.

**Table 2.9: Contribution of development partners to BCCRF**

Partners	Contribution (million US\$) (as of 31-12-2012)
Unite Kingdom	96.9
EU	37.6
Sweden	19.3
USAID	13
Switzerland	12.5
AusAID	7.1
Denmark	1.8
Total	188.2

Source: BCCRF Annual Report 2012

Of the total activities funded by the BCCRF, 84.6 percent will be implemented by government institutions, 10 percent by NGOs and other civil society organizations, and 2 percent by the World Bank to provide analytical work, technical assistance and fiduciary risk management. The fund aims to support Bangladesh in implementing BCCSAP, with the GoB taking the lead in the management and implementation of BCCRF projects. These projects are designed to achieve BCCSAP goals and support one or more of the BCCSAP pillars (see Section 1.2, above, and Annex 4, below). These projects are expected to augment food security and improve capacity to cope with disasters. As of February 2014, about 83 percent of the Fund had been sanctioned for 13 projects. Table 2.10, below, lists these projects and associated grants so far disbursed.

**Table 2.10: List of BCCRF projects and amount of grants**

Name of the Projects	Amount of Grants from BCCRF (Million US\$)
1. Multipurpose cyclone shelter project	25.0
2. Climate resilient participatory afforestation and reforestation project	33.8
3. Community climate change program	12.5
4. Agriculture adaptation in climate risk prone areas of Bangladesh	22.8
5. Modern food storage facility project	25.0
6. Solar irrigation project	35.0
7. Establishment of the BCCRF secretariat /capacity building project, phase-1	0.2
8. Analytical and advisory assistance	
8.1 Urban flooding of greater Dhaka area in a changing climate: vulnerability, adaptation and potential costs	0.5
8.2 Detailed design of environmental studies for construction of Urir char Noakhali cross dam	0.7
8.3 Eco-engineering, climate adaptation and innovations in flood risk mitigation	0.3
8.4 Impact of cc on climate-sensitive diseases and implications for the health sector	0.3
8.5 Scaling up innovation in disaster risk management in Bangladesh: a proposal to support human and financial resilience to natural hazards	0.2
8.6 Making climate data relevant to decision making in Bangladesh: spatial and temporal downscaling	0.3
<b>Total: 13 projects</b>	<b>156.60</b>

Source: BCCRF

### Issues relating to the BCCRF

- More than four years after BCCRF's inception, the Fund has yet to achieve the desired momentum, and initiatives are needed to fully operationalize it. Resources already committed need to be disbursed more quickly, and more assistance from development partners can be mobilized.
- Pending a decision to merge BCCRF and BCCTF, special initiatives should be taken to strengthen coordination between these two funds and avoid unwarranted duplication of activities.
- The Climate Change Unit at the Ministry of Environment and Forest is to supervise and coordinate the activities of the two funds. Only officially established at the time of this writing, the Unit needs to become fully functional before it can successfully coordinate these funds.

### 2.3.1.3 Strategic program for climate resilience (SPCR)–Bangladesh

The Pilot Program for Climate Resilience (PPCR) is another financing facility for supporting adaptation and resilience activities in the country. In October 2010, US\$110 million — \$50 million in the form of grants and \$60 million in concessionary loans — was approved for Bangladesh. The Asian Development Bank (ADB) is the lead agency operationalizing PPCR in Bangladesh. The World Bank (WB) and International Finance Corporation (IFC) operationalize specific investment components. The GoB chose SPCR components from among the 44 priority themes detailed in the BCCSAP and NAPA. SPCR primarily focused on integrating climate-resilient interventions into specific sectors, i.e. agriculture, food security, water and sanitation, and 'climate proof' coastal infrastructure — water, sanitation, roads, and embankments. The technical assistance component was designed to address specific technical needs, including capacity building and knowledge management for MoEF (GoB, 2010). SPCR for Bangladesh comprises three investment and two technical assistance projects (see the following table).

Programs	Expected key results	Amount (in us\$)	Implementing agencies
1. Promoting Climate Resilient Agriculture and Food Security	-Agricultural products and practices that are adapted to the changing agro climatic conditions of the coastal zones ensuring food security and livelihoods for the most vulnerable ones	Grant and loan: \$325m (SPCR and IDA)	MDB: IFC GoB: DAE, Ministry of Agriculture and Bangladesh Meteorological Department (BMD)
2. Coastal Embankments Improvement and Afforestation	-Strengthened coastal embankments to withstand daily, seasonal and erratic climate induced disasters including floods and cyclonic storms	Grant and loan: \$325m (SPCR and IDA)	MDB: World Bank GoB: BWDB, Forest Department (FD) and BFRI
3. Coastal Climate Resilient Water Supply, Sanitation, and Infrastructure Improvement	-Improved water supply and sanitation systems that are resilient to climate change impacts  - Reduced poverty and raise incomes in the coastal districts by sustained year round access to social services through construction and rehabilitation of all-weather access roads that can withstand severe flooding	Grant and loan: \$281m (SPCR, ADB, and GoB)	MDB: ADB GoB: LGED, Department of Public Health and Engineering (DPHE), Ministry of Food and Disaster Management, WASA
4. Climate Change Capacity Building and Knowledge Management	-Equip Ministry of Environment and Forests with knowledge and resources to foster climate resilient planning	Grant only: Total \$0.5m	MDB: ADB GoB: MOEF and ERD
5. Feasibility Study for a Pilot Program of Climate Resilient Housing in the Coastal Region	Requisite information base for making housing more storm/cyclone proof and affordable	Grant only: Total \$0.4m	MDB: IFC GoB: MOFDM/LGED

Source: Bangladesh: Strategic Program for Climate Resilience (SPCR); IIED, Country Report 2013 (PPCR in Bangladesh –a status review by Neha Rai and Barry Smith)

## 2.3.2 Designing a Climate Expenditure Tracking Framework (CETF)

### a) Need for a CETF

The GoB assigns high priority to addressing short-, medium-, and long-term CC issues. And, if Bangladesh is to deal successfully with the multi-dimensional adverse impacts of CC, it must establish an appropriate funding framework.

**Climate expenditure database.** Generating information on past and current climate expenditure that would help track and maintain financial records of such expenditures in future can eventually help build the necessary climate financial framework.

**Prerequisites of such a database.** The extent and nature of existing climate-related expenditures must be determined and regularly updated in light of changing circumstances. This requires supporting institutional mechanisms and coordination among those institutions involved in climate-related activities, including the monitoring and reporting of what impact climate-related expenditures are having.

**Domestic and external funding to meet investment needs.** Establishing the nature and extent of current climate expenses will support projections concerning future investment requirements and possible financing sources. If future investment needs are to be met in addressing CC challenges, initiatives are needed both to muster domestic resources and to mobilize external resources.

**Tracking and prioritizing investment in vulnerable areas and sectors.** A mechanism is needed to routinely acknowledge how important it is to address CC-related issues and then act upon this in terms of budgetary allocation. Such a mechanism should also help track public expenditures and prioritize development investment in the most vulnerable areas and sectors.

The existing classification structure of Government budget and accounts does not have any specific code for capturing climate expenditure as well as categorical recognition of CC investments. As it stands, government financial statements do not show climate expenditures, making it difficult either to monitor existing climate-related expenses or to plan such for the future. It currently remains infeasible to include separate segment- or CC-related budget heads in the classification framework, since only a handful of activities receive full, 100 percent CC allocations. In most cases, climate-related expenditures are subsumed under funds directed to objectives in other sectors. For example, climate-related expenditures are often subsumed under infrastructure development, research, disaster risk management, ecosystem management, and other activities.

Rather than recommending separate code segments or separate budget heads, however, the following sections of this chapter outline the development of a mechanism that instead identifies activities within the government budget that subsume climate-change expenditures as a percentage of outlay for other types of item. This mechanism also generates various kinds of analytical report regarding CC-related expenditures designed to help policy analysis, planning, and decision-making at various government levels. This mechanism will also benefit many individuals and organizations concerned with the issue of climate change. In the subsequent revision of classification structure of Government budget and accounts, a separate climate change code could be introduced for better tracking of climate change budget and expenditures.

### b) Structure of a CETF module

The current national budget and accounts classification does not include CC-related expenditure information. Thus a new module is herewith proposed, one that adds a new column — ‘proportioned percentage’ — together with a 13-digit classification code (detailed budget level) for capturing and identifying CC-related expenditure. This CETF Module can address the acute need for improved monitoring and reporting of financial resources allocated to CC-related issues.

A database tool attached to the Computerized Budget Database at the Ministry of Finance (MoF) and the Computerized Accounts Consolidation System at CGA, the CETF includes the following features:

- development of a separate module, independent yet closely linked with the budget database and the CGA accounts module;
- tagged proportion estimates (user-friendly and customizable if so desired) in percentage terms for the six thematic areas of CC-related expenditure (see Section 2.2.1.1 and Table 2.6, above);
- the capacity, having defined the proportion, to generate different types of budget and account reports at different levels;
- the ability to provide comparative budget and account reports;
- proportion percentages data calculated from a standard defined logic set in the new database, one that minimizes data entry as well as data entry errors;
- the ability to generate yearly trend analysis summaries by ministry, thematic area, and source of funding; and
- the capacity to generate climate public expenditure trend analyses, graphs, etc.

#### Financial Information Flow at Ministry of Finance:

The Finance Division of the MoF database contains more than 22,264 lines of data related to the 2013–14 budget.

#### Revenue Budget

The following table contains, under relevant heads, items of CC-related expenditure contained in the revenue budget.

**Table 2.11: The Relevant Heads/Items of Expenditure under Revenue Budget**

SL No.	Ministry/Division	Items tagged as climate expenditure
1	General Public Services National Parliament Ministry of Public Administration Planning Division IMED  Statistics and Informatics Division	<ul style="list-style-type: none"> <li>• Development programs on capacity building</li> <li>• Development programs on capacity building</li> <li>• Development programs of capacity building and climate related issues</li> <li>• Development programs on capacity building</li> <li>• Development programs on survey and capacity building</li> </ul>
2	Local Govt. & Rural Development Local Govt. Division  Rural Development & Co-operative Division  Ministry of Chittagong Hill Tracts Affairs	<ul style="list-style-type: none"> <li>• Local Infrastructure – LGED</li> <li>• Public Health &amp; Sanitation – PHE</li> <li>• Grants to Municipality and City</li> <li>• Corporation – Participatory governance</li> <li>• Rural Dev. Establishment</li> <li>• Departments of Co-operatives</li> <li>• BRDB Rural development and micro-credit</li> <li>• VGD &amp; VGF programs</li> <li>• Grants to local bodies</li> </ul>

SL No.	Ministry/Division	Items tagged as climate expenditure
3.	Defense Ministry of Defense	• Development programs of Meteorological Department
4.	Public Order and Safety Ministry of Home Affairs	• Development programs of Coast Guard, Fire Service and Civil Defense
5	Social Security and Welfare Ministry of Social Welfare Ministry of Women and Children Affair Ministry of Disaster Management & Relief	• Social protection programs • Social protection programs • Employment scheme, FFW, VGF, CPP
6	Recreation, Culture and Religious Affair Ministry of Cultural Affairs	• Small ethnic group
7	Agriculture Ministry of Agriculture Ministry of Fisheries and Animal Resources Ministry of Environment and Forests Ministry of Water Resources	• Subsidy, Agriculture rehabilitation, All dev. programs • Fish and livestock dev. Programs, especially in disaster- prone areas • CCTF, BCRF, All dev Programs • WDB, River Research Institute
9	Transport and Communication Ministry of Shipping	• Reconstruction and rehabilitation of river ports and ferries

### Development Budget

Following types of projects under the ADP have been tagged as climate related expenditure under different Ministries/Divisions:

**Table 2.12: The Relevant Heads/Items of Expenditure of Development Budget**

SL No	Ministry/Division	Projects/Areas
1.	National Parliament	Capacity building, Solar panel
	PM Office	FFW, Abason (Poverty reduction and rehabilitation), Development of special areas
	Ministry of Public Administration	Capacity building
	Planning Division	Poverty, women, climate and capacity building
	IMED	Capacity building
	Statistics And Informatics Division	All Surveys and capacity building
	Ministry of Commerce	Environmental standard related projects
	Ministry of Defense	Meteorological projects
	Ministry of Law and Justice	Violence against women
	Ministry of Home Affairs	Projects of Coast Guard, Fire Service
	Ministry of Primary and Mass Education	School cum cyclone shelter projects
	Ministry of Education	Secondary Education sector dev. Project(s) University Grants Commission – Research on agriculture & fisheries
	Ministry of Science and Technology	Biotechnology
	Ministry of Health & Family welfare	Community based health and coastal belt health projects
	Ministry of Social Welfare	Social protection
	Ministry of Women & Children Affairs	Social protection , women advancement
	Ministry of Labor & Employment	Social protection
	Ministry of Works & Housing	Disaster resilient building construction
	Local Government Division	LGED – rural roads, infrastructure and employment PHE – water supply and sanitation
	Rural Development and Co-operative Division	Rural development and HRD – All
Ministry of Industry	Environment related projects	
Ministry of Textiles	Capacity Building	
Petroleum and Mineral Resources Division	Gas development & gas supply	



SL No	Ministry/Division	Projects/Areas
	Ministry of Agriculture	Crop diversifications Seed Horticulture & nutrition Irrigation Afforestation Training & research Block allocation
	Ministry of Fisheries and Animal Resources	Fisheries development Livestock development Block allocation
	Ministry of Environment and Forests	All projects
	Ministry of Land	FFW Land development & settlement
	Ministry of Water Resources	Water development Irrigation
	Ministry of Food	Food storage Early warning & networking-ICT
	Ministry of Disaster Management & Relief	FFW Rural infrastructure Disaster management
	Roads Division	Projects of disaster prone areas
	Ministry of Railway	All projects of rail road development
	Ministry of Shipping	Reconstruction and rehabilitation of river ports and ferries
	Ministry of Posts, Tele Communication and ICT	Capacity building and communication development ICT
	Ministry of Chittagong Hill Tracts	Rural and community development projects
	Power Division	Rural electrification

### Scaling and Weighing of Climate Public Expenditure

In Bangladesh, the DPP/PPNB format cannot capture the exact weight of a project/programme's climate relevance. CPEIR applies criteria that determine the climate relevance of a project/programme, and assigns a weight according to the nature of the activity in question. These activities are rated according to perceived CC relevance on a scale ranging from strongly to significantly, somewhat, or implicitly relevant. (This classification by magnitude, it should be said, is subjective in nature.)

CPEIR uses a classification range to establish each group's degree of relevance, e.g. (i) strongly relevant: 75 percent+; (ii) relevant: 50–74 percent; (iii) somewhat relevant: 25–49 percent; and (iv) implicitly relevant: 0–24 percent. The present CFF instead assigns a specific weight percentage to various types of projects/programmes with respect to their relevance to CC-related activities in each of the four CPEIR classifications. For instance, the types of projects/programmes classified under the first group, given a CPEIR weight of 75 percent+, are divided into five sub-classes, and each is assigned a specific weight, e.g. 75, 80, 85, 90, and 95 percent. Likewise, those in the second category — which CPEIR designates 'significantly relevant' with a range of weight of 50–74 percent — have been shown to belong to three sub-groups with weights of 50, 60, and 70 percent. The third category of projects/programmes, which CPEIR classifies as 'somewhat relevant' and weights as 25–49 percent, have been sub-divided into five groups with weights of 25, 30, 35, 40, and 45 percent. Finally, the types of project/programme assigned a 0–24 percent weight and perceived as only 'implicitly' relevant have been given weights of 5, 10, 15, and 20 percent. Detailed information regarding the respective types of project/programme and the subdivision of CPEIR's four-category classification range is presented in Appendix 2. The design of the CETF model appears in Appendix 3.

### 2.3.3 Climate Public Expenditure: Future Outlook

Initially this study proposed a method of projecting future climate costs based on 'demand estimates' from other agencies involved in climate-related activities. BCCT, however, proved to be the only such entity able to provide estimated future demands for climate-relevant activities.

Therefore, projected climate expenditures for FY 2015 through FY 2017 were instead based on trending CC expenditures over the last four years, i.e. FY 2011 through FY 2014. Of course this approach has limitations, especially in a country like Bangladesh, where concerns about CC-related damage grow stronger every day. Widespread apprehension prevails that an ever larger share of the national budget will be needed to combat CC-related adversities in future. But the review of current and past climate expenditure shows that about 80 percent of climate dimension budget merely belongs to the 'somewhat relevant' and the 'implicitly relevant' categories.

Another finding is that about 43 percent of the climate dimension budget over the past three years has been administered by the Ministry of Agriculture and the Local Government Division. Rudimentary analysis of the climate dimension projects/programmes of these two agencies suggests that many of these activities are in effect 'routine' ministry programmes. As a climate-vulnerable country, Bangladesh has historically been implementing many adaptation projects/programmes that have climate relevance (implicit to strong). In the light of this experience, the present study endeavours to project future climate costing using the above-mentioned trending method of projection. The projected amount of nominal GDP is taken from the MTBF document.

**Table 2.13: Projection of climate dimension projects/programs (Scenario: 1)**

(Core Taka/BDT 10million)

	Budget				Projection			Trend Equation
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	
Climate Dimension Non-Development	13349	13628	19294	17981	20952	22908	24864	$y = 11172 + 1956t$
Climate Dimension ADP	18051	15400	29314	30208	35837	40875	45913	$y = 10647 + 5038t$
Total Climate Dimension	31400	29028	48608	48189	56789	63783	70777	
Total Budget	130011	161213	189326	222491	252147	282702	313257	$y = 99372 + 30555t$
Nominal GDP	787495	914784	1037987	1188800	1356900	1552900	1778700	
Climate Dimension Budget as % of total Budget	24.15	18.01	25.67	21.66	22.52	22.56	22.59	
Climate Dimension Budget as % of GDP	3.99	3.17	4.68	4.05	4.19	4.11	3.98	

Sources: iBAS, ADP, MTBF

The above table shows that for FY 2015, FY 2016, and FY 2017, the projected climate dimension non-development budgets are BDT 20,952 crore (BDT 209.52 billion, equivalent to USD 2.793 billion), BDT 22,908 crore (BDT 229.08 billion, equivalent to USD 3.054 billion) and BDT 24,864 crore (BDT 248.64 billion, equivalent to USD 3.315 billion), respectively, higher estimates than for the previous year. During the same period, the projected climate dimension annual development budgets are BDT 35,837 crore (BDT 358.37 billion, equivalent to USD 4.77 billion), BDT 40,875 crore (BDT 408.57 billion, equivalent to USD 5.44 billion) and BDT 45,913 crore (BDT 459.13 billion, equivalent to USD 6.12 billion), respectively. Beginning from FY 2015, each year's projection amount

exceeded that of the previous year by 18.63, 14.06, and 12.33 percent, respectively. For the above-mentioned fiscal years, the value of total climate dimension projects/programmes is a projected BDT 56,789 crore (BDt 567.89 billion, equivalent to USD 7.57 billion), BDT 63,783 crore (BDt 637.83 billion, equivalent to USD 8.50 billion) and BDT 70,777 crore (BDT 707.77 billion, equivalent to USD 9.43 billion), respectively. From FY 2015, each year's projection exceeds that of the previous year by 17.82 percent, 12.32 percent, and 10.97 percent, respectively. On average, between FY 2015 and FY 2017, the projected climate dimension budget is about 22.56 percent of total budget and 4.1 percent of GDP. Considering the future demand-estimate for BCCTF as prepared by BCCT, another projection is made for non-development (excluding BCCTF) climate dimension. This is presented in the following table.

**Table 2.14: Projection of climate dimension projects/programs (Scenario: 2, considering the future demand of BCCTF prepared by BCCT)**

(Crore Taka/BDT 10 million)

	Budget				Projection			Trend Equation
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	
BCCTF	700	700	400	200	700	900	1100	Prepared by BCCT
Climate dimension non-development	12649	12928	18894	17781	20902	23038	25174	$y = 10222 + 2136t$
Climate dimension ADP	18051	15400	29314	30208	35837	40875	45913	$y = 10647 + 5038t$
Total climate dimension	31400	29028	48608	48189	57439	64813	72187	
Total budget	130011	161213	189326	222491	252147	282702	313257	$y = 99372 + 30555t$
Nominal GDP	787495	914784	1037987	1188800	1356900	1552900	1778700	
Climate dimension budget as % of total budget	24.15	18.01	25.67	21.66	22.78	22.93	23.04	
Climate dimension budget as % of GDP	3.99	3.17	4.68	4.05	4.23	4.17	4.06	

Sources: iBAS, ADP, MTBF

Table 2.14 shows that, excluding BCCTF allocations from non-development budget, the projected non-development climate budgets for FY 2015, FY 2016, and FY 2017 are BDT 20,902 crore (BDT 209.02 billion, equivalent to USD 2.78 billion), BDT 23,038 crore (BDT 230.38 billion, equivalent to USD 3.07 billion) and BDT 25,174 crore (BDT 251.74 billion, equivalent to USD 3.356 billion), respectively. During the same period the total projected climate dimension budgets are BDT 57,439 crore (BDT 574.39 billion, equivalent to USD 7.65 billion), BDT 64,813 crore (USD 648.13 billion, equivalent to USD 8.64 billion) and BDT 72,187 crore (BDT 721.87 billion, equivalent to USD 9.62 billion), respectively, slightly higher sums than those described in Scenario 1. According to Scenario 2, from FY 2015 to FY 2017 the projected climate dimension budget will on average amount to about 22.92 percent of total budget and 4.15 percent of GDP. The projected theme-wise budget allocations for climate-change activities are presented in Table 2.15, below.

**Table 2.15: Projection of Theme-wise Climate Expenditure**

Theme	Budget				Projection			Trend Equation
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	
1	2219.28	2181.18	4197.81	4241.02	5229.5	6037.6	6845.7	$y=1189+808.1t$
2	1541.15	1634.94	2438.17	2277.37	2724.5	3025.6	3326.7	$y=1219+301.1t$
3	1586.85	1483.62	2188.89	2266.35	2566.5	2840.8	3115.1	$y=1195+274.3t$
4	732.78	678.97	1123.24	1052.91	1247.8	1388.2	1528.6	$y=545.8+140.4t$
5	323.4	210.23	687.43	720.89	902.57	1069.47	1236.37	$y=68.07+166.9t$
6	2453.09	2366.22	3556.72	3597.99	4149.5	4612.00	5074.5	$y=1837+462.5t$
<b>Total</b>	8856.56	8555.17	14192.26	14156.51	16820.37	18973.67	21126.97	
<b>Increase/Decrease</b>					<b>18.82%</b>	<b>12.80%</b>	<b>11.35%</b>	

Table 2.15 clearly shows that projected theme-wise budget climate expenditures are BDT 16,820 crore (BDT 168.20 billion, equivalent to USD 2.24 billion), BDT 18,974 crore (BDT. 189.74 billion, equivalent to USD 2.53 billion) and BDT 21,126.97 crore (BDT 211.26 billion, equivalent to USD 2.82 billion), respectively, which is 18.82 percent, 12.80 percent, and 11.35 percent higher than in the previous year. During this period, BDT 18,974 crore (BDT. 189.74 billion, equivalent to USD 2.53 billion) on average would be spent for CC activities, about 66 percent more than the previous average. From FY 2015 to FY 2017, projected budget allocations for climate-change activities are 18.82 percent, 12.80 percent and 11.35 percent, respectively.

### 2.3.4 Linking climate change policy (BCCSAP and others) with planning (SFYP and ADP) and budgeting (MTBF)

#### a) Climate Change and MTBF

As part of a public expenditure management reform process, Bangladesh embarked upon the medium-term budget framework (MTBF). This multi-year approach to budgeting provides a framework for government receipts and expenditures, and links government spending plans to policy objectives. Since FY 2004/05, it has also linked spending plans to performance of the spending entity. MTBF now covers all the ministries/divisions and other institutions. It requires decision-makers to balance what is affordable against government policy and priorities. MTBF thus brings the policy planning and budgeting processes together.

Five features distinguish MTBF from the traditional budget process: (i) it prepares an estimate for the budget year and projections for the two outer years; (ii) it prepares a budget under one resource ceiling, ensuring better integration of the development and revenue budgets; (iii) it allocates resources on a priority basis to meet strategic objectives, not on an incremental basis; (iv) it clearly demonstrates key performance indicators of the respective ministries; and (v) it empowers line ministries to make budgetary decisions, including allocation and use of resources, thus making them more accountable. Indeed, MTBF may be seen as an accountability framework.

CPEIR finds that the Government spends about US\$1 billion annually on climate-sensitive activities, which represents 6-7 percent of its annual budget and roughly 1.1 percent of GDP. Having reviewed the MBF of the 37 ministries/divisions involved in the delivery of climate-related activities, CPEIR noted that 'on a value basis in 2011/12 around 45 percent of planned climate sensitive expenditure was not referenced in the MBF'. It further remarked that most ministries involved in climate-sensitive activity made no reference to climate change in their key performance framework, and this removed 'a significant

proportion of the climate sensitive spending from the performance architecture and disconnects climate policy at the operation level' (CPEIR, p. 5).

To ensure ministry accountability for CC activity, performance management, and governance structure, CPEIR recommends setting a climate-change marker in the MTBF, as is done for poverty and gender. CPEIR also underscored the necessity of bringing all climate-related spending under the umbrella of one country system, i.e. bringing them under a single budget monitoring, reporting, and auditing framework.

CPEIR noted the climate response in Bangladesh evinces a high level of integration with existing government institutions, policies, and programmes. That is, climate finance is primarily driven by sector policy, rather than climate strategy. It is managed within the existing government institutional structures, and is delivered substantially as a component, often only implicitly, of existing programmes. Consequently, climate strategy often goes unrecognized in the MBF strategic objectives, performance monitoring, and evaluation framework, by high climate-spending government agencies. The similarly cross-cutting issues of gender and poverty, however, are explicitly recognized both on a policy level in the ministry budget framework and in activities to realize these policies.

The MBF is a key document under the MTBF process, one that could enhance BCCSAP influence. The MBF consists of five parts: (i) a mission statement and major functions; (ii) medium-term strategic objectives and activities; (iii) impacts of medium-term strategic objectives on poverty reduction and women's advancement; (iv) priority spending areas/programmes; and (v) key performance indicators (KPIs). MBF perhaps represents the widest potential opportunity to develop a clear linkage between BCCSAP and budget compilation, implementation, monitoring, and evaluation systems in Bangladesh.

### **Observations and recommendations**

This CFF, aiming to establish a climate-change marker in the MTBF, revisits the MTBF process, relevant guidelines, circulars, and other documents. The MTBF process for the line ministries essentially starts with issuing the Budget Call Notice-1 (BC1), where detailed guidelines for MBF preparation are laid down. It may be noted here that BC1 contains instructions regarding identification of a ministry's strategic objectives, prioritization of activities, and setting of the KPIs that basically link policy planning and resource allocation, as well as resource allocation with performance.

In identifying strategic objectives and priorities, ministries are advised to refer to the Perspective Plan, the Sixth Five-Year Plan, and other, ministry-specific, documents. No explicit mention of BCCSAP has been made here. When mainstreaming BCCSAP in the MTBF process, the major climate-spending ministries should make clear mention of BCCSAP in the BC1 and in the setting of specific strategic objectives. Instructions that require these ministries to demonstrate CC-related KPIs should also be integrated in the BC1. Instructions should stipulate that the relevant line ministries properly identify climate-related activities in the MBF's priority spending areas/programmes section.

The BC1 also includes instructions that promote poverty- and gender-specific analysis of expenditures (see Appendix 7). Similarly, the MBF can include an additional section for analyzing the impact of CC activities undertaken by the relevant ministries. Appendix 5 illustrates how poverty- and gender-specific analyses may be conducted, but an additional BC1 annex could describe the six BCCSAP thematic areas and 44 programmes under the six thematic programs as well as other important BCCSAP information. Appendixes 5 and 6, respectively, outline such changes as part of proposed BC1 and MBF drafts.

## **b) Climate change issue in the preparation of development project**

As mentioned above, in FY 2011–12 the GoB spent about US\$1 billion for CC-related activities, 60 percent of this from the Annual Development Program budget. As CPEIR has noted, sectoral policy, rather than CC strategy, is what mostly drives spending among those ministries making significant climate-related expenditures. To ensure that BCCSAP influences sector policy and resource allocation, CPEIR recommended that, just as gender and poverty dimensions have been, the climate dimension should be embedded in the DPP/TPP format. Thus the existing DPP and proposed DPP formats have been reviewed with the aim of determining how a climate-related ‘marker’ could be entrenched in the DPP format. In August 2013, under the auspices of the Public Investment Project, a World Bank-led trust fund project sponsored by a number of development partners, and aiming to improve ADP implementation, the Planning Commission took the initiative of revising the ADP approval guidelines, ‘Instructions for Preparation of Development Project Proforma’ (Planning Commission, Ministry of Planning, Dhaka, 2013). This review revealed that, while existing guidelines essentially neglected the CC dimension, they did incorporate an environment dimension that incidentally included aspects of climate change.

There follows a summary of CC issues included in the proposed development project proforma (DPP) guidelines.

### **Risk associated with climate change, disaster, and the environment**

The proposed DPP suggests that, since CC will have significant impacts on almost the entire ecosystem in Bangladesh, tools of CC risk assessment must be used to scrutinize any major project with a fairly large investment, applying rigorous methods to assessing the risks, current and future, and to addressing them in as timely a fashion as possible.

### **Climate change related effect and responses**

The proposed DPP recommended first examining all basic information regarding a project, including its background in terms of such matters as development, sectoral importance, rationale, linkages with earlier projects/programmes, linkages with MDG/SDG, FYP, and BCCSAP. It also explained how CDE concerns will interact with the overall development objectives of the project in question, providing a bird’s-eye view of the scope, size, location description, and hydro-geophysical realities of the project area, including its seasonality and environment.

### **Climate change related risk assessment**

One section is dedicated to assessing types of risk related to the project in question. It also explains the scope of activities, processes, and outcomes envisaged for the project; linkages of the project activities; processes and outcomes with development goals and interactions with other sectors; and what the CC risk assessment might lead to in terms of achieving project objectives.

### **Climate change related risk in the project areas**

This sub-section of the proposed DPP provides an assessment of risks in relation to climate vulnerability and change in the project areas. The hydro-geophysical realities described in Sub-section 2.1 of the DPP should interact strongly with climatic realities, and these interactions will vary over time. This sub-section therefore ought to include, for each time slice, assessment of the consequences of climate sensitivity to hydro-geophysical parameters. It should also provide indicators for typical CC risks in Bangladesh, among these increased flood intensity and cyclonic storm surges.

### **Climate Change, Disaster and Environmental (CDE) assessment framework**

This section of the DPP provides management and institutional perspectives on what can be done now to significantly reduce or ameliorate risks associated with climate variability and change, including disasters and environmental degradation.

### **Potential impacts of climate change on project outcomes and related deliverables**

This section assesses potential impacts of climate variability and change on project-related activities, outcomes, and deliverables. The resultant adverse effects after institutional and autonomous societal responses are this section's key concerns.

### ***Further measures to mainstream BCCSAP in the ADP process***

The proposed DPP/TPP format effectively addresses climate-related concerns, and may be seen as contributing significantly to a proper CC marker in the DPP/TPP process. Yet the following issues need to be addressed as BCCSAP is mainstreamed into the ADP process:

- Section 24.0 of the proposed DPP still recommends identification of specific linkages with the Perspective Plan, Five-Year Plan, MDGs/SDGs, and ministry sector priorities.
- Section 28.3 of the proposed DPP format specifies linkages with the MDG/SDG, FYP, and BCCSAP, but provides no details regarding, for example, which thematic area (Appendix 3) a proposed project falls under or what its impact might be on CC adaptation and mitigation. This suggests that development planning will still be seen as sector driven instead of policy driven.

## **2.3.5 Climate fiscal policy options**

Fiscal policies generally refer to government policy decisions that alter the production, distribution, and consumption of real output in the economy. These deliberate decisions, also known as 'discretionary' fiscal policies, are implemented through two types of fiscal instrument: taxation, and government spending on a variety of products and individuals. Either or both instruments can be applied to address negative impacts of climate change, i.e. by imposing taxes on polluters, and/or subsidizing efforts to reduce pollution.

## **2.3.6 Taxation policy**

### ***2.3.6.1 Exploring the CO<sub>2</sub> emission tax option***

Carbon dioxide is a major GHG, and is partly responsible for climate change. The concept of a carbon tax stems from the idea of mitigating CC effects by limiting the release of CO<sub>2</sub> into the atmosphere through combustion of fossil fuels such as coal, oil, and natural gas. The carbon tax can be levied on the production, import, distribution, or use of fossil fuels, according to the quantities of CO<sub>2</sub> produced by such fuels.

Carbon taxes increase the costs of carbon-emitting fossil fuels, compared to non-carbon emitting energy sources such as renewable energy and nuclear power. Thus carbon taxes are expected to reduce carbon emissions into the atmosphere through reduced use of carbon-emitting fuels, while encouraging the use of environment-friendly renewable energy resources. The revenue generated through such taxes may be used to finance clean energy and energy-saving projects.

From 2012 or 2013, the Chinese Government Ministry of Finance proposed introducing a carbon tax based on CO<sub>2</sub> output from hydrocarbon fuel. In July 2010, India introduced a nationwide carbon tax of 50 rupees per metric tons of either imported or domestically produced coal. The revenue generated from this carbon tax was expected to help finance a National Clean Energy Fund. In October 2012, Japan introduced a carbon tax with the goal of mitigating the effects of climate change. The Government planned to use the revenues generated from this tax to finance clean energy and energy-savings projects. Countries such as Australia, the Republic of Korea, and South Africa, and the economy of Taiwan, China, took similar initiatives of introducing carbon taxes to reduce CO<sub>2</sub> emissions.

In Bangladesh, carbon taxation is a new concept. Senior officials of the Tax Policy Wing of the National Bureau of Revenue (NBR) of Bangladesh, report that the NBR, from FY 2014–15, may impose a carbon tax, on a test basis, on comparatively higher CO<sub>2</sub>-emitting private vehicles. Specific proposals in this regard will appear in the FY 2014–15 finance bill. NBR is now working on a modus operandi for the proposed tax. However, the NBR officials have yet to decide whether revenue generated from this tax should be classed as part of general tax revenues, or whether it should go to a special fund for clean-energy initiatives.

#### **2.3.6.2 Options for other tax related interventions**

Existing tax law exempts the following CC-related items: renewable energy (e.g. energy-saving light bulbs, solar energy plants, wind turbines and related equipment), and waste treatment plants.

In the upcoming Finance Bill for FY 2014–15, tax exemptions for the above items will continue, and further items will be included.

#### **2.3.7 Removing fossil-fuel subsidies and providing subsidies for green energy: Exploring the options**

For decades, like many other countries in the world, Bangladesh has used subsidies to promote a wide range of social and economic objectives. The GoB subsidizes a wide range of areas, including fuel, electricity, agriculture, food, education, and health services. Subsidies have wide-ranging impacts on the distribution of wealth, economic growth, and the environment.

The International Energy Agency, OECD, and World Bank define energy subsidies, as these are commonly applied, as any government action that 'lowers the cost of energy production, raises the revenues of energy producers or lowers the price paid by the consumers'. This definition suggests that energy subsidies fall into two main categories: (i) those designed to reduce the cost of consuming energy; and (ii) those aimed at assisting domestic production. In Bangladesh, energy subsidies comprise the largest proportion of such government assistance. The following table summarizes such subsidies over the



last 10 years.

**Table 2.16: Government fuel subsidies over last 10 years**

(crore taka/BDT 10 million)

Sector	Budget	Actual								
	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05
Agriculture	9000	12000	6700	5699	4922	5185	3871	1040	595	769
Food	1725	840	1613	1652	985	656	743	696	273	437
Export	2592	2398	2750	1840	1589	1500	1100	712	544	651
Fuel	7950	13558	8550	4000	900	1500	3600	8123		
Electricity	5500	4486	6357	4000	994	1007	600	300		
Jute Industry	445	100	2599	200	200	225	150	-	-	-
Others	5142.00	17.98	144.26	77.61	10.10	46.29	60.19	608.50	13.50	13.50
Total Subsidy	32354	33399.98	28713.26	17468.61	9600.10	10028.29	10124.19	11479.50	1425.50	1870.50
As % GDP	2.7	3.2	3.14	2.2	1.4	1.6	1.9	2.46	0.34	0.51
ADP as % GDP	5.5	4.7	4.1	4.2	3.7	3.2	3.5	3.9	4.2	4.9

Source: Integrated Budget and Accounting System, Finance Division

Subsidies tend to encourage over-consumption and inefficient use of energy. Investment decisions may also be altered by changes in relative prices, thereby discouraging energy diversification and creating disincentives for building necessary energy infrastructure. Subsidized prices, in many cases, fail to recover immediate costs, and the pricing system does not allow for fund accumulation to support expansion and development or recuperate depreciation cost. Furthermore, the benefits of such energy subsidies, allegedly, are disproportionately reaped by those who need them the least.

By developing natural gas infrastructure, developing coal resources, and bolstering generation and distribution of electricity, the GoB focuses on strengthening energy security. Prevailing energy subsidy policy appears to run counter to that end, however, and this warrants urgent policy reforms. Subsidized energy also discourages initiatives aiming to expand green energy alternatives such as solar power and nuclear energy. The initial heavy investment needed makes these energy sources relatively more expensive, and fossil-fuel subsidies put these alternative sources at a further disadvantage, thus hindering their adoption.

Bangladesh has one of the lowest per capita rates of CO<sub>2</sub> emission in the world (CDIAC, Carbon dioxide emissions per capita from 1990 through 2009). This is because (i) the country lacks energy-intensive industries such as steel and aluminum manufacturing; and (ii) nearly two-thirds of the country's commercial energy comes from natural gas. But urban air pollution is one of the most significant environmental issues relating to the energy sector in Bangladesh. Old and badly maintained battered vehicles are the main sources of urban air pollution, and the problem is exacerbated by the brick fields around the big cities that use biomass fuel and emit black smoke.<sup>4</sup> And energy subsidies arguably lead to inefficient fuel consumption in the transport sector, resulting in increased air pollution, especially in the city.

The GoB has a standing redistributive policy of providing affordable access to fuel and electricity to all. Given the general nature of the subsidy, however, the affluent often derive comparatively greater benefits from this policy than do the less well-to-do. Richer

<sup>4</sup> See this Al Jazeera story for a brief account of Bangladesh's 'brick fields': <http://www.aljazeera.com/indepth/inpictures/2014/05/pictures-brick-fields-banglade-2014517134431553324.html>.

families who own private transport vehicles and travel, for example, are among those who benefit most from the reduced fuel price. About half of Bangladesh households lack access to electricity (World Bank Group, 2014). Rural households, moreover, are given the lowest priority as consumers, often having to endure power cuts during peak hours.

Given severe resource constraints, various issues need to be resolved before a national consensus regarding subsidy policies can be established. Among these are the following: (i) how efficient are current energy subsidies, given the Government's limited fiscal resources vis-à-vis its development priorities; and (ii) would fuel subsidies be better spent if allocated to expanding to the rural electricity network, investing in power generation and distribution, and improving service delivery? These and other, related issues must be considered within a broader macro framework, keeping both short and medium term options in view.

Outright abrogation of subsidies could have short-term negative impacts on some groups, especially those who consume the most energy. These groups may have to adjust their consumption in the light of higher fuel costs. The adverse consequences of subsidy reduction on some segments of the population, however, could be offset in the longer term by economy-wide benefits such as better fiscal sustainability, increased social spending targeting the poor, more efficient resource allocation, increased investment, and higher growth.

The GoB has repeatedly expressed its strong commitment to rationalizing fuel prices and electricity tariffs, and to reducing energy subsidies to promote efficient and sustainable development. In practice, however, reducing subsidies has proven problematic, with the action plan experiencing frequent slippages and delays. The following table presents increased fuel prices amid government efforts to restructure fuel and electricity prices.

### 2.3.7.1 Fuel

**Table 2.17: Increases in fuel prices**

(BDT per liter)

Item name	May 2011	September 2011	November 2011	December 2011
Diesel	2.00	5.0	5.0	5.0
Petrol	2.00	4.0	6.0	5.0
Octane	2.00	5.0	5.0	5.0
Kerosene	2.00	5.0	5.0	5.0
Furnace Oil	2.00	8.0	5.0	5.0

Source: Ministry of Energy and Mineral Resources, Government of Bangladesh

The current government position is that it will continue providing subsidies of as much as BDT 10 per liter on average, and, should price differentials in the domestic market go beyond this level, Government will consider readjusting fuel prices.

### 2.3.7.2 Electricity

The following table presents the government's bulk energy tariff adjustments since 2008. Electricity distributors' retail tariffs also have been adjusted in line with the bulk tariff adjustment shown below.

**Table 2.18: Bulk electricity tariff increase 2008-2012**

Effective Date	01 Mar, '07		01 Oct, 08		01 Feb, 11		01 Aug, 11		01 Dec, 11		01 Feb, 12		01 March 12		01 Sep, 12		Total increase 2008-12	
	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.	Tariff Tk/kwh	% Incr.
PDB-132 KV	2.1132		2.4150	14.28	2.7575	14.18	2.9410	6.65	3.5650	21.22	4.2050	17.95	4.5300	7.37	5.3250	17.55	2.91	120
PDB-33 KV	2.1069		2.4452	16.06	2.6710	9.23	2.8490	6.66	3.4250	20.22	3.9850	16.35	4.2550	6.78	4.9775	16.98	2.53	104
DPDC- 132 KV	2.1132		2.4150	14.28	2.7575	14.18	2.9410	6.65	3.5650	21.22	4.2050	17.95	4.5300	7.37	5.3250	17.55	2.91	120
DESCO- 33KV	2.1069		2.4452	16.06	2.7825	13.79	2.9680	6.67	3.6050	21.46	4.2450	17.75	4.5700	7.66	5.4050	18.27	2.96	121
WZPDCL-33 KV	2.1069		2.4452	16.06	2.6415	8.03	2.8175	6.66	3.1550	11.98	3.4750	10.14	3.7400	7.63	4.4300	18.45	1.98	81
REB – 33 KV	2.3089		2.3089	-	2.4745	7.17	2.6395	6.67	2.9150	10.44	3.1750	8.92	3.4225	7.80	4.0325	18.45	1.72	75
Avg. BST Increase	2.04		2.37	16	2.63	11	2.80	6.66	3.27	16.79	3.74	14.39	4.02	7.49	4.70	16.92	2.33	98

Note: Because of the delay in establishing energy-saving base power plants, reliance on short-term quick and rental power plants prevails and electricity subsidies remain large.

### 2.3.7.3 Gas

Since 9 August 2009, the Bangladesh Energy Regulatory Commission has re-fixed the price of natural gas, as shown in Table 2.19.

**Table 2.19: Gas price adjustments since 2009**

Sl. No.	Client Class	Existing Rate of Price (Tk/MCF)	Re-fixed Rate of Price (Tk/MCF)
1	Electricity (PDB, IPP)	73.91	79.82
2	Fertilizer	63.41	72.92
3	Captive Power, SPP	105.59	118.26
4	Industry	148.13	165.91
5	Tea Garden	148.13	165.91
6	Commercial	233.12	268.09
7	Household (Meter based)	130.00	146.25
	Household one burner (per month)	350.00	400.00
	Household two burners (per month)	400.00	450.00

On 5 October 2011, the Bangladesh Energy Regulatory Commission re-fixed the price of Compressed Natural Gas (CNG), as shown in Table 2.20, below.

**Table 2.20: Price adjustment of compressed natural gas (CNG) since 2009**

SL. No	Client Class: CNG	Existing Price	Re-fixed price
1	Sale price at consumer level (TK per cubic meter)	25.00	30.00

CNG price should be at least BDT 45 per cubic metre to bring it to par with the price of other types of fuel such as diesel and kerosene. Additional revenue generated by fixing the price of natural gas at an appropriate level can be used to develop natural-gas exploration and distribution infrastructure, which is vital for ensuring energy security and economic development of the country.

## **2.3.8 Climate investment and green banking**

Sustainable development plans can best be achieved by involving all players in the economy — the Government, NGOs, markets, corporate entities, local businesses, civil society and, of course, the financial sector. An efficient, environment-friendly market system therefore demands the existence of environment-friendly financial systems and regulations. Green banking is one component of an global initiative by a group of stakeholders to save the environment, and is considered a major financial initiative in the banking sector, influencing overall industrial activity and economic growth. Bangladesh, one of the world's most CC-vulnerable countries, needs to undertake similar initiatives, attending to issues of environmental degradation and climate change. The financial sector in Bangladesh can and should play an important role as a key stakeholder.

### **2.3.8.1 Green banking corollaries**

Green banking is a method of finance that encourages environmentally responsible investment, extending priority to enterprises and industries that attempt to 'grow green'. One way the banking system can go green is by going online. Online bill payment, remote deposits, fund transfers, and statements are just a few of the ways in which online banking can help preserve the environment, reducing the use of paper, energy, and natural resources in banking activities. Similarly, by supporting projects that use energy-saving devices, green loans can promote eco-friendly house building. For consumers, this shift towards green banking means that more deposit and loan products will be available through online and mobile banking. It also means better deposit rates on money-market and savings accounts. Green banks should also charge lower fees and allow rate reductions on loans that support energy-efficient projects.

The Bangladesh Bank (BB) remains a core leader in this regard. BB has instructed all Bangladeshi financial institutions to frame lending policies that feature more effective green banking. Evidence suggests that this type of banking is one of the major drivers of sustainable economic growth in Bangladesh. BB has been working to turn the entire banking system green. For that to happen, however, banks need to adopt more specifically green policies for various sectors. BB is also performing its designated role by formulating guidelines on environmental risk management and green banking (Appendix 9).

### **2.3.8.2 Green banking Imperatives and strategies**

Green banking imperatives can best be realized by helping to mitigate credit, legal, reputation, and security risks to economic development. A green banking business model for sustainable banking may include the following strategies: carbon-credit business, green banking financial products, green mortgages, and carbon footprint reduction.

### **2.3.8.3 State of green banking in Bangladesh**

#### *Environmental risk management (ERM) guidelines*

These guidelines include relevant definitions and describe sources and types of environmental risk (e.g. direct, indirect, reputation, business/industry, management, security/collateral, and legal risk). They outline the

interrelationship between credit risk and environmental risk, and the integration of ERM with credit risk management (Bangladesh Bank, 2011, 2013).

The technical manual section of the guidelines provides rating requirements as well as rating and evaluation procedures for environmental risk. In Bangladesh, the Environmental Conservation Act (1995) and the Environmental Conservation Regulations (1997) comprise the key environmental management legislation. The guidelines call for using environmental due diligence (EDD) checklists in environmental risk review: both a general EDD checklist, and sector-specific EDD checklists (for 10 sectors).

Environmental risk ratings are required for all individual customers (corporate, institutional, personal, and SME) whose aggregate facilities surpass the following financing thresholds:

- for SMEs, financing > BDT 2.5 million;
- for corporate customers, financing > BDT 10 million; and
- for real-estate financing > BDT 10 million.

### *Green banking in operations*

In 2009, aiming to promote the use of environment-friendly and low-carbon energy including solar power, BB constructed a revolving refinancing scheme for banks, with BDT 2.0 billion (equivalent to USD 26 million) from its own funds available for financing six green products including solar power, bio-gas, and effluent treatment plants. As of December 2012, BB had allocated BDT 853.54 million (USD 11.38 million) from a BDT 2.0 billion (USD 26 million) revolving fund to different green categories (Bangladesh Bank, 2013). The BB is also concentrating on in-house green activities through more effective use of such resources as power, gas, fuel, water, and paper.

In 2013, given the scheme's growing popularity, BB restructured the fund, extending the associated product line to include various types of solar power plant (solar home system, solar mini grid, solar irrigation pumping system, solar PV assembly plant), bio-gas plant, effluent treatment plant, substitution of energy-efficient kilns for conventional lime kilns, vermi-compost, hydropower (pico, micro, and mini), PET bottle recycling plant, solar battery recycling plant, LED bulb manufacturing plant, and Hybrid Hoffman Kiln (HHK)/tunnel kiln/ equivalent technology in the brick manufacturing industry (Appendix 8).

In 2011, BB issued indicative guidelines for green banking for banks and, in 2013, for non-bank financial intermediaries (NBFIs). Previously, BB issued ERM guidelines to banks and NBFIs for understanding and managing risks arising from environmental and CC concerns in financing decisions.

In 2012, aiming to help improve brick-kiln efficiency and to reduce carbon and other GHG emissions, BB constructed another revolving refinancing window for banks and FIs amounting to US\$50 million supported by the Asian Development Bank (ADB) Fund Facility. This scheme facilitates financing for conversion of fixed chimney kilns (FCKs) to improved zigzag kilns, and construction of such high-efficiency projects as Vertical Shaft Brick Kiln (VSBK), Hybrid Hoffman Kiln (HHK), and tunnel kiln (Millat, 2012; Bangladesh Bank 2013).

**Table 2.21: The disbursement status of BB refinance scheme for renewable energy**

Green Product Category	In million taka				
	June 10	June 11	June 12	June 13	De 13
Bio gas plant	1.95	50.24	133.22	113.62	94.84
Solar home system	0.00	59.37	10.49	40.18	13.15
Solar irrigation pump	3.08	12.39	8.40	0.00	17.90
Effluent treatment pump	0.00	10.78	22.19	57.40	10.00
HHK technology in brick kiln	0.00	0.00	55.00	172.19	50.00
Solar photovoltaic assembly plant	0.00	0.00	248.80	122.72	49.64
<b>Total</b>	<b>5.03</b>	<b>132.78</b>	<b>478.10</b>	<b>506.11</b>	<b>235.54</b>

Under the ADB-supported refinance scheme, US\$9.62 million had been disbursed as of December 2013.

**Table 2.22: The progress status of green banking activities of banks is cited below**

Environmental risk management			
Year	Number of projects rated	No. Of projects financed after rating	Amount disbursed to the Rated projects (in million taka)
2011	4,394	4,315	270,951.14
2012	12,088	11,165	703,633.21
2013 (till September)	19,701	17,479	974,885.69

**Table 2.23: Green financing**

Green finance (in million taka)			
Year	Direct green finance	Indirect green finance	Green finance
2012	11,821.48	259,100.05	270,921.53
2013 (till September)	24,933.97	214,750.26	239,684.23

#### 2.3.8.4 Issues related to green banking

##### *Climate finance and gender*

Women constitute a disproportionately large segment of the world's poorest 1.2 billion people. As noted in Chapter 1, CC is not gender-neutral, and harmful CC consequences affect women. This is specially true of rural women who, aside from being subject to persisting gender norms and discrimination, assume heavy responsibilities for providing food and other care for their families. The Cancun Agreements acknowledged that the ideal of equal and effective participation of women should figure prominently in the design and implementation of all measures in the battle against CC adversities, especially in terms of adaptation. The Agreements also emphasized acknowledgement of women's rights as inalienable human rights, and equal participation of women in the decision-making process.

In addition, they recommended actions for making climate financing instruments more gender-sensitive. Effective use of climate finance entails mainstreaming CC considerations into broad development perspectives to achieve equitable

and sustainable development, which in turn involves, of necessity, gender considerations (Overseas Development Institute, London, UK, 2013). BB has emphasized promoting gender equality in the workplace, describing this as an important element of corporate social responsibility (CSR) obligations, both in terms of ensuring basic human rights and as a prerequisite for inclusive socio-economic growth. As part of this, since December 2011 half-yearly CSR reports from all banks have included gender equality-related performance indicators. Since April 2013, moreover, banks have been required to submit reports on CSR, gender equality, and education budget-related activities on a half-yearly basis to the newly established Green Banking and CSR Department (GBCSRD) of BB.

### *Green financing*

As the guardian of the banking system in Bangladesh, BB has promoted green financing by (i) establishing its own internal Green Financing Unit; (ii) by formulating environment risk rating guidelines; (iii) by creating a special, dedicated fund; and (iv) by extending special credit for green initiative efforts.

BB should also monitor the compliance of all scheduled banks and FIs with its green banking guidelines. To this end, BB may consider establishing a high-level committee comprising directors from the boards of scheduled banks, giving it a mandate to review banks' environmental policies, strategies, and programmes.

Green initiatives should be considered for preferential treatment. Special funds at the central bank could incentivize climate-related projects. The Equity and Entrepreneurship Fund (EEF), a fund for providing loans at a subsidized rate to agro-based and information and communication-related small entrepreneurs in Bangladesh, might serve as one model. The GoB could consider yearly fiscal transfers to this fund, thereby adding sustained momentum to green financing activities in Bangladesh.

Bangladesh Bank may plans to take special initiatives to review the progress of green financing schemes from time to time, so that necessary amendments can be introduced to its green banking guidelines and policies.

## 2.4 Institutional and capacity development related issues

### 2.4.1 Establishing a climate fiscal cell in the finance division

In Bangladesh, many entities — from government, semi-government, and autonomous bodies to local government, non-government, and various private-sector organizations — are involved in CC-related activities. In the Government alone, as CPEIR showed, 37 ministries/divisions and other institutions pursue climate-related activities. Institutional involvement on this scale entails vast and complex coordination mechanisms. CPEIR describes the following three distinct kinds of coordination:

- **Policy and planning coordination.** This kind of coordination seeks to balance the influence of sector policy and plans, CC strategy and action plans, and other policy/planning areas. The influence of both sector policies/plans and national CC strategy and action plans need to be adequately balanced. The Planning Commission performs this balancing act in coordination with the relevant ministries, including the Ministry of Environment and Forest.
- **Financial planning and performance coordination.** The Finance Division of the Ministry of Finance (FD) performs this role through the MTBF, which acts as a governance and performance management mechanism, while linking policy with resource

allocation. FD plays a crucial role in the coordination of funding, budgeting, and enabling performance management and expenditure. At least five CC-related sources of funding were identified in a sphere where such sources continue to proliferate.

- **Technical coordination.** Here, the Ministry of Environment and Forest plays a major role, one that has evolved from an environmental mandate. However, many climate-sensitive activities related to adaptation strategies — e.g. infrastructure development, social protection, and disaster management — are instead implemented by the Ministry of Agriculture, Local Government, Water Resources and Disaster Management.

For the foreseeable future, widely anticipated CC effects are expected to incur additional costs, with concomitant increases in financing needs. These incremental costs will affect the Annual Development Program as well as the recurrent part of government expenditure. The challenge will thus involve identifying the extent of top-up required for each sector, and establishing an effective mechanism to ensure that these resources are appropriately mobilized. Climate finance represents a critical challenge for mainstreaming public financial management, and can be linked to a new funding stream across the national budget in its entirety. The Finance Division should therefore assume a prominent role in the administration of climate finance.

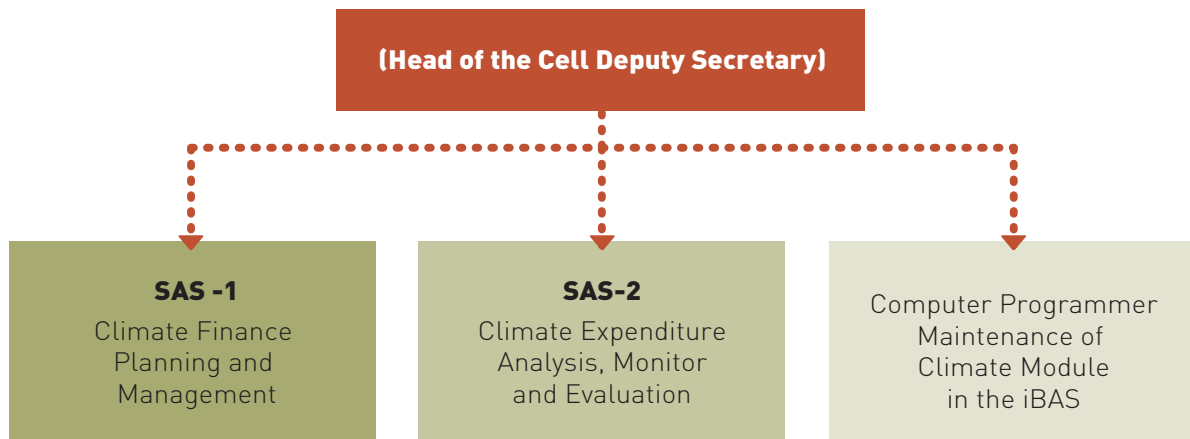
In view of the above, it is suggested that a climate finance cell be established in the Finance Division. Such a cell would (i) identify the extent of top-up required for each sector due to CC adaptation and mitigation activities, and (ii) identify potential sources of financing and related resource mobilization. Applying the Climate Expenditure Tracking Framework (CETF), discussed in Section 2.2.3 (above), the cell would prepare regular reports on CC-related expenditure and policy to assist policy-making and monitoring as well as evaluation of CC-related activities. Despite the variety of its coordinating roles, such a FD cell should not be seen as duplicating the existing Ministry of Environment and Forest's climate unit. In setting up the FD cell, and in identifying its terms of reference, care should in fact be taken to avoid such duplication, ensuring that the two cells instead serve complementary roles, establishing a synergy in BCCSAP implementation.

#### ***2.4.1.1 Structure of the proposed climate fiscal cell***

Budget Wing 2 of the FD is currently responsible for preparation, implementation, and monitoring of most ministry/division budgets that support significant CC-related activities (e.g. budgets of the Ministry of Environment and Forest, Ministry of Agriculture, Ministry of Water Resources, Local Government Division). To optimize coordination, the proposed climate fiscal cell might best be placed in Budget Wing 2. That cell could then establish branches in the administrative structures of relevant ministries, with both the FD-based climate fiscal cell and its branches each structured in the following way:



### Organizational structure of the proposed climate finance cell in the finance division



#### Terms of reference of the proposed climate cell

- Identify the extent of top-up required for each sector in implementing climate-related adaptation and mitigation activities.
- Prepare a plan for mobilizing climate financing.
- Prepare reports on CC-related expenditure, applying the Climate Expenditure Analysis Template (CEAT).
- Maintain and update the Climate Expenditure Tracking module to be created in the iBAS System of the Finance Division.
- Provide secretarial assistance to the committee, once it has been established, to identify climate-related expenditure among the new and upcoming expenditure items.
- Communicate with other institutions that have significant CC-related activities.
- Advise line ministries on monitoring and evaluation of the climate-related activities.
- Ensure flow of information to and from NGOs, BB, the National Board of Revenue, and public and private organizations concerned with CC financing.
- Communicate with the Bangladesh Climate Change Trust Fund and the Bangladesh Climate Change Resilience Fund on climate financing issues.
- Communicate with IMED and the Comptroller and Auditor General's Office on monitoring and evaluation of CC-related activities.
- Assist relevant line ministries with preparing CC-related performance indicators.
- Provide technical assistance to BCCTF, BCCRF, and MoEF on climate financing issues, especially on BCCSAP updating.
- Implement/administer the climate-related activities.

These terms of reference are only indicative. Before setting up such a 'climate finance cell', there should be exchanges of ideas with various stakeholders, especially with officials from the Ministry of Environment and Forest, such that final terms of reference for the proposed cell will prove widely acceptable, effective, and enduring.

## 2.4.2 Audit and oversight issues

The role of audit institutions is to conduct independent audits of government activities. Such assessments provide the national Parliament with substantial information that can facilitate examination of both government spending and the outputs/outcomes of this spending. Audits can also help to assess the readiness of the government financial management system to deal with CC-issues, and to suggest necessary improvements.

Development partners want to see that taxpayer money for climate financing is spent prudently, ensuring the best value for money. Objective evaluation of climate-related activities by independent audit offices would reassure development partners, which in turn would encourage an inflow of international climate financing. In Bangladesh, the Comptroller and Auditor General's Office, as the supreme audit authority, performs auditing tasks through its directorates. The following sections examine the present status of CC issues in the audit policy, problems of CC auditing, and how CC issues may be embedded in the auditing policy in future.

### 2.4.2.1 Current situation

- The Comptroller and Auditor General's Office has established a Performance Audit Directorate aside from the nine previously existing audit directorates.
- The Performance Audit Directorate has begun performance audits of the different offices and projects/programmes. The directorate has already completed audits of projects related to ecotourism and the environment around Saint Martin Island, which includes the only coral reefs of the country facing environmental degradation.
- The Performance Audit Directorate follows the INTOSAI Guidelines on conducting audit activities with an environment perspective.
- Climate change has yet to establish itself as an issue in Bangladesh's audit system, though the Directorate recently prepared a plan to conduct audits of activities implemented under the auspices of the Bangladesh Climate Change Trust Fund.

### 2.4.2.2 Obstacles to inclusion of climate change in the audit policy

- Lack of clear policy and guidelines.
- Capacity constraints.
- Lack of a CC marker in the Ministry Budget Framework, especially the absence of CC-related KPIs against which actual achievement could be evaluated.
- Lack of information on CC-related activities and expenditure.
- Lack of demand from the stakeholders.

### 2.4.2.3 Prospect of integration of CC in the audit policy

- Establishing the CFF will create necessary conditions for mainstreaming CC issues in the audit policy.
- Successfully addressing capacity-constraint issues may presuppose proper training and knowledge sharing with supreme audit institutions (SAIs) other than INTOSAI.

### 2.4.3 Climate expenditure and parliamentary oversight

Oversight of the executive branch is one of the most important responsibilities with which a parliament is generally entrusted. Generally, this function refers to parliamentary supervision and monitoring of the executive and administration, all the more so of income and expenditure accounts. Parliamentary oversight includes these functions:

- detection and prevention of abuses, arbitrary behaviour, or illegal/unconstitutional conduct on the part of the Government and public agencies;
- holding the Government accountable in respect of spending taxpayer money;
- ensuring appropriate implementation of policies announced by the Government and authorized by Parliament; and
- improving the transparency of government operations, and thereby enhancing public trust in the Government.

Upon completion of this study, and once a CCF is ready and implemented, revenues and expenditure of all CC-related activities will automatically come under the purview of the routine audit system and, therefore, under the oversight of the Parliamentary Standing Committee on Public Accounts. The Parliamentary Standing Committee for the Ministry of Environment and Forest should be strengthened such that it can perform this oversight function effectively.

A parliamentary 'climate caucus'; similar to those regarding food security and gender issues, could be separately constituted for dedicated oversight/monitoring of CC-related activities.

# CHAPTER

## CONCLUSIONS AND RECOMMENDATIONS

- 3.1 Limitations and challenges
- 3.2 Conclusions
- 3.3 Recommendations





3

### 3.1 Limitations and challenges

- This study has been based entirely on a desk review, documentation, cross-country experience of the issues, and information obtained through discussions with stakeholders. No field survey or primary data collection was involved.
- Scant previous experience regarding the subject presented another limitation. No other country has so far prepared a full-blown CFF — this one presents a pioneering effort.
- This study did not involve primary data collection, nor was there any available record of a similar task undertaken in Bangladesh or any other country in the past. With no precedents to refer to, the study team had to rely mostly on the limited and often disorganized documents available in various government offices. Nevertheless, the team benefited from extensive discussions with assorted stakeholders, both within and outside government circles. The team held meetings, seminars, group discussions and, at times, one-to-one exchanges of view, including conversations with officials from all ministries concerned with CC-related activities. Discussions were also conducted with representatives from other concerned agencies, including the National Board of Revenue (Internal Resources Division), the Auditor General, Bangladesh Bank, BCCTF, and BCCRF. A separate seminar was arranged by the General Economic Division (GED) of the Planning Commission that was attended by a cross-section of NGOs. All officials, government and non-government alike, were highly receptive to such overtures, and the extended their fullest and sincerest cooperation in terms of providing the study team with available information and suggestions.

However, these sources could not provide much information in terms of future planning. Many offices lacked clear plans regarding future projects/programmes to combat the negative effects of CC, much less estimates of future expenditure in that regard. This led the study team to make projections about probable future climate costs based solely upon past trends, a standard forecasting practice. The degree of variance in the resulting estimates will depend, among other factors, on (i) the number and intensity of CC-related calamities, as well as (ii) the number and extent of projects/programmes executed by the Government and the private sector to address these adverse impacts.

At the outset, this study contemplated devising a separate code for tracking CC-related activities, but it soon became clear that adding a separate code would prove misleading at best, if not indeed so messy as to render matters incomprehensible, since no segment of the population is immune to adverse CC effects, though some groups might be more affected than others. Moreover, CC effects could not be fruitfully detached from overall poverty, development, or gender issues — i.e. CC presents a cross-cutting constellation of issues.

A framework has therefore been designed to track all CC-related expenditures, one that will need updating in a trial-and-error manner as events unfold.

### 3.2 Conclusions

- As remarked earlier, the CFF study team had no other landmark study to rely on as a starting point. And CFF remains an inchoate concept, one that continues to evolve. As the world becomes increasingly aware and proactive regarding the detrimental effects of CC, and other relatively more CC-vulnerable countries develop their own strategies for combating such effects, the sharing of information and experiences will present continuing opportunities to update and revise Bangladesh's own CFF.
- Currently, most government ministries and NGOs lack concrete plans to adapt to CC-related activities. Consequently, in the absence of clear plans regarding future activities, even guesstimates of impending costs would be only ad hoc at best. By and large, however, that is exactly what this study has accomplished. Projections of probable costs of future CC-related

projects/programmes have been based on expenditure trends over recent years. The climate-related costs of both those already completed and those that remain on-going have been calculated by assigning assumed weights (following CPEIR) to such activities.

- BCCSAP identified 44 programmes under six thematic areas that would presumably help ameliorate adverse CC effects. CC-related projects/programmes have yet to directly address a number of these thematic areas, however. Neither has BCCSAP been updated or revised since 2009.
- Both CPEIR and the current study aim to facilitate BCCSAP's implementation. Indeed, these two studies are supposed to serve as BCCSAP's 'financial backbone'. As new projects/programmes are adopted and put into practice, the CETF suggested in this study will need updating and revision. It is hoped that CETF, by helping to track all varieties of climate expenditure, will assist with policy-making vis-à-vis climate change.
- As indicated earlier, a wide variety of organizations and institutions in Bangladesh, including the Government, NGOs, and even many households expend resources, however sporadically, to mitigate or adapt to CC impacts. Within the Government alone, as many as 37 ministries/divisions and other agencies have climate-related activities underway. But no organization or institution is currently charged with coordinating financial performance among this array of entities. To facilitate this type of coordination, to track expenditures incurred in both public and private sectors while mitigating CC adversities, and to help with policy decisions regarding CC-induced effects, it has become imperative that a climate fiscal cell be established in the Finance Division of MoF.

### 3.3 Recommendations

- The CETF suggested in the present study needs to be implemented with immediate effect and then regularly updated in the light of any changes of priority and needs.
- Many government agencies and private-sector institutions evince no clear plan regarding projects/programmes to be undertaken in the near future. Hence, they can have little idea of what future expenses might be incurred. Changes in the natural environment tend to be slow, but they also tend to be irreversible. Therefore, climate change and its harmful effects should also be perceived from longer-term perspectives that acknowledge the concomitant need for longer-term plans. A more robust CFF, one that can provide more reliable cost projections, requires that encouragement and material support be extended to both public and private entities for developing further capacity. This should be one aim of the upcoming Inclusive Budgeting and Financing for Climate Resilience project<sup>5</sup>.
- Updating BCCSAP is a prerequisite to modifying this Strategy and Action Plan such that it can respond successfully to CC realities on the ground as they emerge. BCCSAP implementation costs also need to be assessed. Inclusive Budgeting and Financing for Climate Resilience, a new FD project is underway. Once successfully completed, this project, together with the present study, is expected to promote a climate finance readiness of the Bangladesh.
- As proposed in this study, a climate fiscal cell in the FD of MoF should be implemented with immediate effect. CETF needs to be put into operation and regularly maintained so that it can generate updated reports on CC-related expenditures and disseminate these to assist policy-makers.
- Following the Cancun Adaptation Framework (CAF), least-developed countries were advised to develop national adaptation plans (NAPs) as a means of identifying medium- and long-term adaptation needs, and of developing strategies for implementing activities to address those needs. NAPs were expected to be country-driven, gender-sensitive, participatory, and

<sup>5</sup> Finance Division has principally agreed to undertake a new project to facilitate the implementation of the Climate Fiscal Framework. The project is already designed and UNDP has also principally agreed to finance the initiative. The title of the project is Inclusive Budgeting and Financing for Climate Resilience. The indicative cost of the project is around US\$2.2 million and the Implementation period is 4 years. The project is likely to start in September 2014.

transparent. The GoB should undertake initiatives to develop NAP and in applicable cases, NAMA for Bangladesh, maintaining linkages with NAPA, BCCSAP, CPEIR and CFF.

- As are the self-financing projects, projects implemented under BCCTF should be included in the ADP document. On the one hand, then, these projects will be included in the ADP document, though they will not be a constituent of ADP, yet they will come under the standard IMED monitoring purview while still being processed and approved by BCCT, thereby sustaining BCCTF's distinctive character.
- As was envisaged at the outset, steps should be taken to merge BCCTF and BCCRF. Until that is accomplished, an interim mechanism is needed to coordinate the two funds to avoid project duplication.
- Government budgetary allocation for BCCTF shows a declining trend. Meanwhile, the expected flow of funds from development partners to BCCRF has not yet materialized. In the absence of this flow of funds from abroad, the GoB needs to increase its allocation of funds to BCCTF so that that battle against harmful CC effects can continue unabated.
- The CFF developed in this study should be regularly updated through the upcoming project, such that it becomes a landmark model for other countries.





# APPENDIX

Appendix 1: Number of climate development and non-development projects/programmes, by ministry

Appendix 2: Climate-dimension relevant criteria for development and non-development programmes

Appendix 3: Design of the Climate Expenditure Tracking Framework (CETF)



## Appendix 1: Number of climate development and non-development projects/ programmes, by ministry

Ministry/division	Development projects	Non-development programmes	Total projects/ programmes
Agriculture	90	115	205
Local Government	113	23	136
Disaster Management and Relief Division	13	10	23
Primary and Mass Education	10	0	10
Railway Division	40	0	40
Water Resources	60	0	60
Social Welfare	6	7	13
Women and Children's Affairs	2	9	11
Education	31	1	32
Power Division	14	0	14
Environment and Forest	26	3	29
Fisheries and Livestock	36	2	38
Other ministries/divisions (34)	171	36	207
<b>Total number (46 ministries/divisions)</b>	<b>612</b>	<b>206</b>	<b>818</b>

Source: iBAS.

## Appendix 2: Climate-dimension relevant criteria for development and non-development programmes

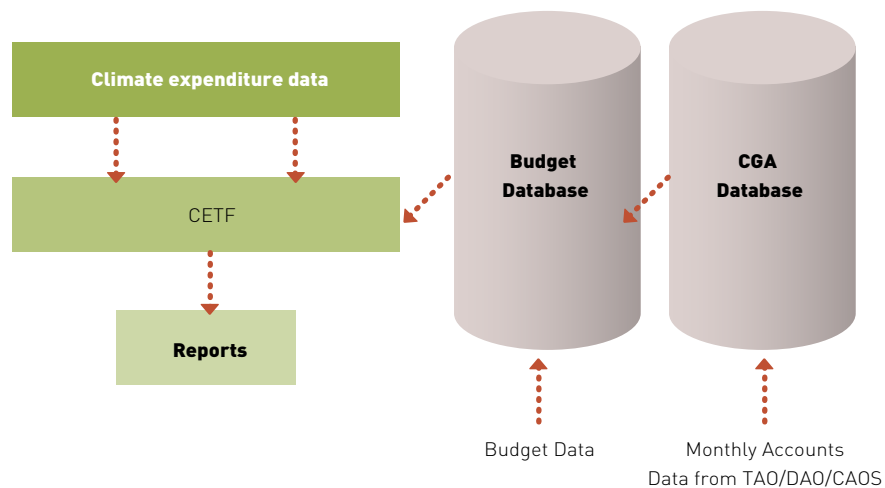
Scale	Activity relevance	Type of project/programme	Climate weight	Rationale
1.	Strongly relevant (climate-dimension weight 75%+)	<ul style="list-style-type: none"> <li>• Cyclone shelters/preparedness</li> <li>• Disaster relief and food-related programmes</li> <li>• Coastal climate-resilient infrastructure improvement</li> <li>• Bangladesh Climate Change Trust Fund</li> </ul>	95%	These programmes are climate-sensitive hotspots. [check: Will readers understand 'hotspot'?...]They are also directly related to highly visible adaptations to and mitigations of harmful CC effects. [check: Is that okay?..]
		<ul style="list-style-type: none"> <li>• Forestation</li> <li>• Estuary development</li> <li>• Nuclear power</li> </ul>	90%	These programmes may be described in terms of either CC mitigation or adaptation. They mitigate hydrocarbon pollution and maintain reverie water-flow directions. They also foster development of national economic and social sectors.
		<ul style="list-style-type: none"> <li>• Eradication of pests and diseases</li> <li>• Grain quality improvement</li> </ul>	85%	These programmes facilitate mitigation of and adaptation to adverse CC effects, including associated disasters.
		<ul style="list-style-type: none"> <li>• Soil ecosystems</li> <li>• Raising roads and homesteads in coastal areas</li> <li>• Emergency disaster damage/ haor-area rehabilitation (a haor is a bowl or saucer-shaped wetland ecosystem also known as a backswamp; see <a href="http://en.wikipedia.org/wiki/Haor">http://en.wikipedia.org/wiki/Haor</a>), rural infrastructure in coastal areas</li> <li>• Integrated flood protection for communities</li> <li>• Power/solar energy</li> <li>• Water supply and sanitation activities in cyclone prone coastal areas, etc.</li> </ul>	80%	These programmes provide visible outcomes, effectively safeguarding against events causing massive CC-related destruction.
		<ul style="list-style-type: none"> <li>• Conservation</li> <li>• New/redesigned dykes</li> <li>• Coastal areas barrage/ river erosion protection (a 'barrage' dams a watercourse either to increase water depth or to divert water into an irrigation or navigation channel)Warning and forecasting/ meteorological/weather/hydrology</li> <li>• Climate-related capacity building/rehabilitation</li> <li>• Cyclone recovery and restoration</li> <li>• Coastal town infrastructure</li> </ul>	75%	Outcomes of these programmes are everywhere visible, [check: I've changed 'somewhere' to 'everywhere'; is that okay?...] and contribute directly to reducing negative CC impacts.
2.	Significantly relevant (climate-dimension weight 50–74%)	<ul style="list-style-type: none"> <li>• New irrigation facilities, improved irrigation efficiency</li> <li>• Health initiatives (arsenic mitigation, water supply, etc.)</li> <li>• Vulnerable group development</li> <li>• Coastal-area crop diversification</li> <li>• Coastal-area biotechnology</li> <li>• Coastal-area lifesaving/ livelihoods</li> <li>• Coastal-area development, e.g. chars (silt islands in rivers)</li> <li>• Agricultural productivity/ development, etc.</li> </ul>	70%	These programmes contribute to both adaptation to and mitigation of CC distortions and disruptions in sectors such as agriculture, health and life saving activities, livelihoods, and coastal development.
		<ul style="list-style-type: none"> <li>• Quality seed supply, storage and modernization</li> <li>• Cyclone-area fish farmers and fishermen related</li> <li>• Coastal environmental</li> <li>• Flood control</li> <li>• Coastal town protection</li> </ul>	60%	These programmes directly or indirectly support mitigation and adaptation measures in CC and disaster scenarios. They present highly visible outcomes in restoring coastal-area environment, livelihoods, infrastructure, agriculture, etc..

Scale	Activity relevance	Type of project/programme	Climate weight	Rationale
		<ul style="list-style-type: none"> <li>• Eliminating water-logging in city areas</li> <li>• Crop diversification</li> <li>• Biotechnology/pesticides/biodiversity</li> <li>• Development of new crop varieties</li> <li>• Social protection</li> <li>• City outer ring-road</li> <li>• City beree badh (protection wall)</li> <li>• Ashroyan (shelter) projects</li> <li>• Natural disasters</li> <li>• Coastal-area nagors (port towns) poverty reduction</li> <li>• Border-area electrification through solar power</li> <li>• Fire service and civil defense</li> <li>• Economic development for poorest people</li> <li>• Rural livelihoods, poverty reduction through livestock/fisheries/agricultural production</li> <li>• Irrigation facilities for fish cultivation</li> <li>• Water management/surface water/rainwater</li> <li>• Agricultural technology</li> <li>• Vegetable production, development through organic waste uses</li> <li>• River dams for augmenting food production/food security</li> <li>• Agricultural information system</li> <li>• Sea/marine eco-system</li> <li>• Town protection</li> <li>• Environment (clean air)</li> <li>• Hill-area afforestation</li> <li>• River restoration/dredging/ erosion protection</li> <li>• Agricultural sector support programmes, etc.</li> </ul>	50%	Indirectly helpful, these programmes are expected to contribute to sustainable improvement of disaster and undesirable CC effects and distortions. They add value to prior preparations for averting or ameliorating disaster or CC events. Consequences of these programmes, moreover, are informative and contribute to achieving long-term sustainability.
3.	Somewhat relevant (climate-dimension weight 25–49%)	<ul style="list-style-type: none"> <li>• Rural development through water-resource management</li> </ul>	45%	This programme directly helps to protect populations from the shock of disaster or adverse CC effects. It bears directly on the development of the national agricultural economy, and its associated effects help restore livelihoods.
		<ul style="list-style-type: none"> <li>• Rehabilitation of embankments (integrated project areas)</li> <li>• Livelihood enhancement</li> <li>• Roads and highway construction in critical regions/hotspots</li> <li>• Emergency measures/water supply</li> <li>• Extension services/farmers' services</li> <li>• Measures to respond to changing climate</li> <li>• Health, nutrition, and population projects</li> <li>• Horticulture</li> <li>• Social and environmental standard industries project</li> <li>• Animal resources development</li> <li>• Char (riverine silt island)/coastal market development</li> <li>• River maintenance/fish production</li> <li>• Bio-fertilizer plant/hydrocarbon unit</li> <li>• Oil-gas exploration/energy</li> <li>• Wildlife protection</li> <li>• Food policy</li> </ul>	40%	These programmes are part of indirect preparations for protection against CC shock. Such advance preparation directly helps to improve national economic conditions. Agriculture and health are among beneficiary sectors.
		<ul style="list-style-type: none"> <li>• Human capital development</li> </ul>	35%	Human capital is a key to national economic development. A country with abundant human capital can achieve its development objectives better and faster.
		<ul style="list-style-type: none"> <li>• Water logging</li> <li>• Ruminant breeding</li> <li>• Storage facility expansion</li> <li>• AIGs</li> <li>• Rural area poverty reduction</li> <li>• Capacity/resilience building</li> </ul>	30%	These programmes aim to improve long-term absorption capacity with respect to CC-related shocks. Outcomes function as backward linkages, so to speak, raising public confidence and awareness

Scale	Activity relevance	Type of project/programme	Climate weight	Rationale
		<ul style="list-style-type: none"> <li>Awareness building</li> <li>Coastal town water supply and sewerage/drainage</li> <li>Water treatment/water supply/sanitation and drainage development</li> <li>River erosion</li> <li>Coastal-area rural/urban infrastructure improvement</li> <li>Canal improvement</li> <li>Coastal-area rural development/resource management</li> <li>Small-farmer development</li> <li>Mushroom projects</li> <li>Tuber crops</li> <li>Deep Tube Wells</li> <li>Haor management</li> <li>Safari/eco-park</li> <li>Coastal-area infrastructure research, etc.</li> </ul>		
		<ul style="list-style-type: none"> <li>Land-use change</li> <li>Training/research</li> <li>Information and communications technology (ICT) education/training/work,</li> <li>Policy support for water supply</li> <li>Chittagong Hill Tracts infrastructure development, etc.</li> </ul>	25%	The Chittagong Hill Tracts area is a sensitive environment currently undergoing restoration. [check: Is that accurate?...]More generally, water supply policy, training, research, ICT development, and changing land-use have considerable impact on the restoration of the whole country's environment. Therefore, such programmes help with background preparation and indirectly contribute to developing resilience in face of disaster and CC-related shocks. [check: Is that interpretation okay?...]
4.	Implicitly relevant (climate-dimension weight 0 –24%)	<ul style="list-style-type: none"> <li>Local/feeder roads</li> <li>Bridge/culvert construction</li> <li>River training</li> <li>Railway sector improvement</li> <li>Rural infrastructure improvement</li> <li>Development policy/planning</li> <li>Rural development/resource management</li> <li>Secondary and higher education development</li> <li>Sericulture development, etc.</li> </ul>	20%	By their very nature, these programmes address the interests of the general public. Easy access to such outcomes brings enormous benefit to ordinary people. Public participation in such programmes may help boost the status of their preparedness against disaster and CC-related shocks.
		<ul style="list-style-type: none"> <li>International trade promotion</li> </ul>	15%	Trade policies that take disaster and CC-related effects into consideration would guard against unanticipated consequences both internally and externally. This would raise resilience levels and foster more secure business activities both at home and internationally. The practice of green banking is related to this kind of trade outcome.
		<ul style="list-style-type: none"> <li>Access to information</li> <li>Protection of women's/child's rights</li> <li>Primary education development</li> <li>Infrastructure research</li> <li>Supportive legislative measures</li> <li>Highway/road improvement</li> <li>Broadcasting networks</li> <li>Telecommunication</li> <li>Local government assistance allocation</li> <li>Rural transport improvement</li> <li>Urban infrastructure development</li> <li>Development of urban slum dwellers, etc.</li> </ul>	10%	These programmes promote basic knowledge and skills needed in the campaign against adverse CC effects. Most projects leading to building or upgrading transportation and communication systems, disseminating and enhancing relevant information, helps to protect against disaster and CC impacts.
		<ul style="list-style-type: none"> <li>Identity cards</li> <li>Fund transfer development programme</li> <li>Tourism facilities development, etc.</li> </ul>	5%	These programmes, though they have no direct, substantive impact on CC-related activities, do promote quality of life among beneficiaries, broadening their interest in and their knowledge and awareness of their world and its environment.

## Appendix 3: Design of the Climate Expenditure Tracking Framework (CETF)

### Financial information flow and area of CETF Module



Key CETF inputs, outputs

### System inputs

- Climate weight of project(s)/programme(s) including share of six thematic areas
- Scaling of climate relevance
- Amount of foreign aid for development partner-assisted projects

### System outputs

- Budget allocation (expenditure) reports

#### - Climate expenditure allocation

- Summary
- Summary by ministry/division
- Summary by revenue and development
- Summary by source of funding
- Summary by climate thematic area
- Summary by degree of relevance
- As percent of GDP
- As percent of total budget, revenue budget and development budget

#### - Trend analysis

- Summary
- by ministry/division
- by revenue and development
- by source of funding
- by climate thematic area
- by degree of relevance



**- Graph**

- by ministry/division
- by revenue and development
- by source of funding
- by climate thematic area
- by degree of relevance

**Security system**

While the system will be secured against unauthentic user access, certain classes/groups of users will have specific permissions regarding system data and processes.

**User groups***Administrator*

Access to all modules

*Supervisor*

Access to all modules except User Creation and Security Maintenance

*Read only*

Can only view reports

**CETF security matrix**

Module	Permission of user groups		
	Administrator	Supervisor	Read only
Parameter data entry	√	√	
<b>Reporting</b>	√	√	√
<b>System security</b>	√		

**Hardware and software platform****Hardware**

- Intel-based computers as servers and workstations

**Software***Operating system*

- Windows 2003 Server for servers
- Windows XP/7 for workstations

*Backend DBMS*

SQL Server 2008 R2

*Front-end tool*

ASP.Net (VB)

## DETAIL DESIGN

### Table structure

#### Transaction tables

The following transaction tables will hold proportioned percentage data for each budget line, and will be used in the Budget Database.

#### Thematic area

S/N	Field name	Type	Width	Description
1.	Thematic area ID	Int(AutoID)		Primary key
2.	Thematic Area E	varchar	100	English Name field for thematic area (mandatory).
3.	Thematic Area B	varchar	100	Bangla Name field for thematic area (optional).

Primary key: ThematicAreaID.

#### Climate header

S/N	Field Name	Type	Width	Description
1.	Climate Header ID	Int(AutoID)		Primary key
2.	Fiscal year	char	7	Not null,(ex-'2013-14')
3.	Legal ID	smallint		Not null,(ex-2,3,5)
4.	Opunit ID	bigint		Not null (ex-1011)

Primary key: Climate header ID.

Foreign keys: legal ID, OpunitID.

#### ClimateNonDevEcon5

S/N	Field Name	Type	Width	Description
1.	Climate NonDevDetID	Int(AutoID)		Primary key
2.	Climate HeaderID	Int		Not null
3.	EconomicSID	int		Not null
4.	Climate Per	Numeric(5,2)		Default 0 (ex-40.60%)

Primary key: ClimateNonDevDetID.

Foreign keys: ClimateHeaderID, EconomicSID.

#### ClimateNonDevThematicDetail

S/N	Field Name	Type	Width	Description
1.	ThematicNondevDetailID	Int(AutoID)		Primary key
2.	ThematicAreaID	Int		Not null
3.	ClimateNonDevDetID	int		Not null
4.	ThematicPer	Numeric(5,2)		Default 0 (ex-40.60%)

Primary key: ThematicNondevDetailID.

Foreign keys: ThematicAreaID, ClimateNonDevDetID.

### ClimateFundSource

S/N	Field Name	Type	Width	Description
1.	DonorID	Int(AutoID)		Primary key
2.	DonorNameE	varchar	100	English Name field for donor's name (mandatory)
3.	DonorNameB	varchar	100	Bangla Name field for donor's name (optional)

Primary key: DonorID.

### ClimateDevEcon4

S/N	Field Name	Type	Width	Description
1.	ClimateDevDetID	Int(AutoID)		Primary key
2.	ClimateHeaderID	Int		Not null
3.	Economic4ID	int		Not null
4.	ClimatePer	Numeric(5,2)		Default 0 (ex-40.60%)

Primary key: ClimateDevDetID.

Foreign keys: ClimateHeaderID, Economic4ID.

### ClimateFuncSourceDetail

S/N	Field Name	Type	Width	Description
1.	FundSourceDetailID	Int(AutoID)		Primary key
2.	ClimateHeaderID	Int		Not null
3.	DonorID	int		Not null
4.	Amount	Numeric(18,2)		
5.	LoanAmount	Numeric(18,2)		
6.	GrantAmount	Numeric(18,2)		

Primary key: FundSourceDetailID.

Foreign keys: ClimateHeaderID, DonorID.

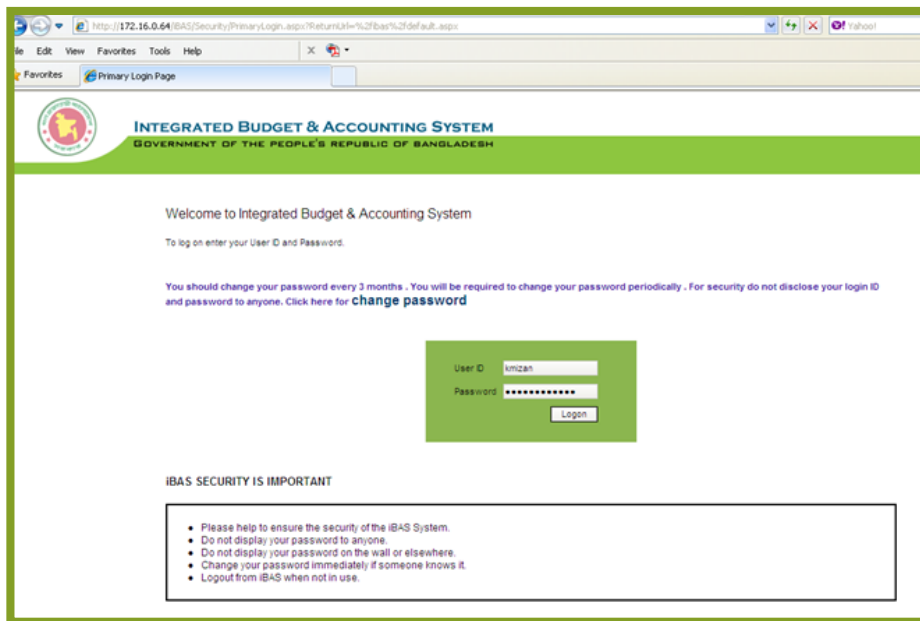
## User interface

### System LogOn

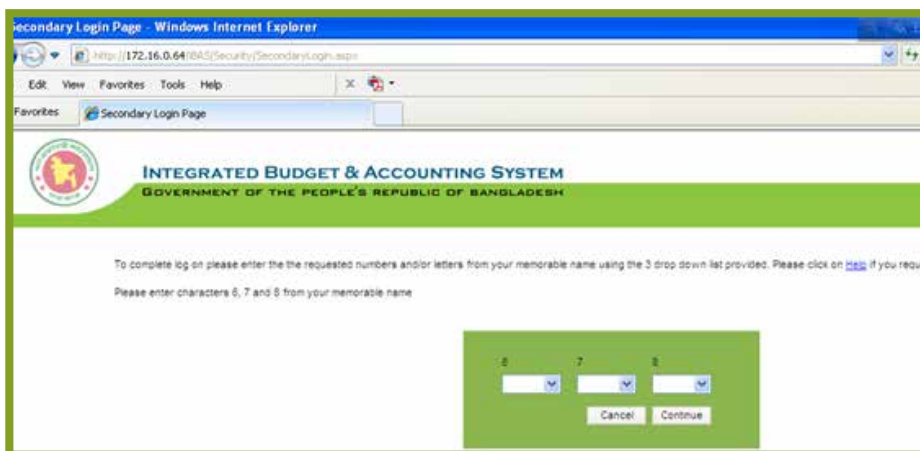
- CETF Module is integrated with iBAS.
- After running Internet Explorer, a user has to type the following address into the address bar:

**http://172.16.0.64/iBAS**

If the address is typed correctly, a system login screen will appear.



After a user types the valid login ID and password and clicks on the logon button, a new window will come up, one known as a secondary login screen, to provide additional security.

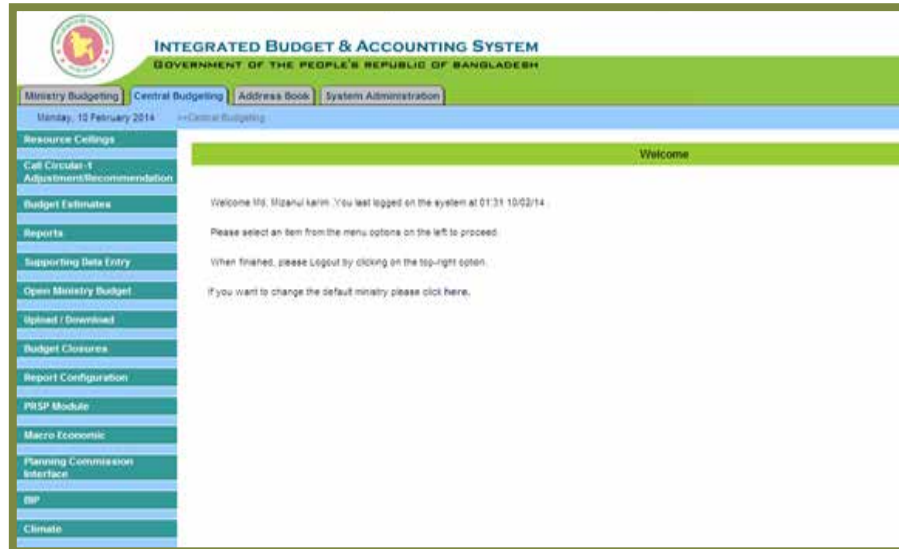


This screen requires entries from the 'memorable word' specified for every user. A memorable word is a pre-defined, user-specific word that provides a second layer of security. The user should enter three random characters from the memorable word where the numbers indicate, as shown on the screen above.

## Module structure

### CETF Module

The climate submenu is under the central budgeting screen, shown below.



This menu is divided into two more sub-options. One is for Data Entry and another one is for Report.

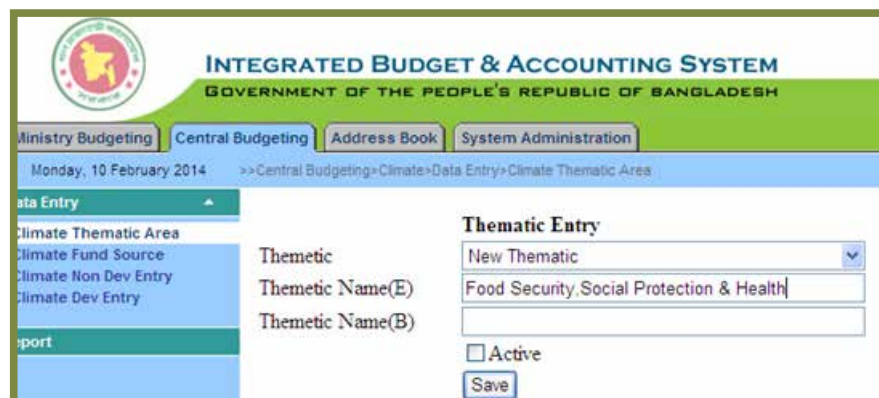
### Data Entry

The Data Entry sub-option has four optional items:

- (1) Climate Thematic Area
- (2) Climate Fund Source
- (3) Climate Non-Dev Entry
- (4) Climate Dev Entry

#### 1) Climate Thematic Area

Data will be saved when the Save button is clicked after filling the fields.



## 2) Climate Fund Source

Users enter a donor's name (a funder of development projects) in this entry screen. Clicking on the Save button after filling the donor name saves the data.

## 3) Climate Non Dev Entry

Moving the cursor to the Climate Non Dev Entry option and clicking on it will bring up the following screen, where the user has to enter climate (%) and thematic area (%) against a specific entity (operational unit).

Economic Desc	Climate (%)	Thematic
4817-Telex/Fax/Internet	25.00	4817-Telex/Fax/Internet 81746 Thematic (%)
4823-Petrol, Oil and Lubricants	26.00	Food Security, Social Protection & Health 60.00
4828-Stationery, Seals and Stamps	25.00	Comprehensive Disaster management 30.00
4829-Research Expenses	25.00	Infrastructure 0.00
4840-Training Expenses	25.00	Research & Knowledge Management 10.00
4851-Labour Wages	25.00	Mitigation & Low-carbon Development 0.00
4888-Computer Consumables	25.00	Capacity Building & Institutional Strengthen 0.00
4899-Other Expenses	25.00	
4921-Office Buildings	26.00	Set Thematic(%)
6815-Computers and Accessories	25.00	Set Thematic(%)

To save the data, the user has to select the fiscal year, ministry, function, operational unit code, and legal code and then click the Go button.

After this button is clicked, all available economic codes for the operational unit become visible in a grid where the user has to enter the climate (%) data and thematic area (%) data against an economic code that includes budget.

After filling in these details, the user has to click the Save button.

#### 4) Climate Dev Entry

Moving the cursor to the Climate Non Dev Entry option and then clicking on it brings up the following screen, where the user has to enter climate (%) and thematic area (%) against a specific entity (operational unit).

Economic Desc	Climate(%)	Thematic	(%)	Set for all Economic
4500-Pay of Officers	40.00	4500-Pay of Officers 2400		<input type="checkbox"/>
4600-Pay of Establishment	40.00			
4800-Supplies and Services	40.00	Food Security, Social Protection & Health	10.00	<input type="checkbox"/>
6700-Revenue - General	40.00	Comprehensive Disaster management	50.00	<input type="checkbox"/>
6800-Acquisition of Assets	40.00	Infrastructure	0.00	<input type="checkbox"/>
7000-Construction and Works	40.00	Research & Knowledge Management	0.00	<input type="checkbox"/>
7980-Capital Block Allocation & Misc. Capital Expen.	40.00	Mitigation & Low-carbon Development	0.00	<input type="checkbox"/>
		Capacity Building & Institutional Strengthen	40.00	<input type="checkbox"/>

To save the data, user has to select the fiscal year, ministry, function, project code and then click on the Go button.

After the button is clicked, all available economic codes for the project become visible in a grid where the user has to enter the climate (%) data and thematic area (%) data against an economic code which includes budget.

After filling in the details, the user has to click on the Save button.

### Reports

A list of reports is provided by the reporting sub-module, and clicking the Report option brings up the following screen:

**The following reports are available in this reporting sub-module:**

- Parameter data
- Recurrent and capital parameter data
- Climate parameter data
- Thematic area parameter data
- Budget data
- Summary by ministry
- By op unit/project
- Details
- Summary by sector

- Development climate summary
- Trend analysis by ministry
- Trend analysis by op unit
- Detailed trend analysis
- Graph
- Graph by sector
- Summary graph

### Sample report: Climate expenditure at a glance

*Reporting Date and Time: 10/02/2014*

**CLIMATE RELATED EXPENDITURE**

(Taka in Crore)

Description	2013-14				2012-13				2012-13			
	Budget	Climate	Climate as % of Budget	Climate as % of GDP	Revised	Climate	Climate as % of Revised	Climate as % of GDP	Budget	Climate	Climate as % of Budget	Climate as % of GDP
<b>Expenditure</b>												
<b>Non-Development Expenditure</b>	13,44,49				11,06,27				11,16,75			
<b>Non-Development Revenue Expenditure (Statement III)</b>	11,34,71				9,59,85				9,94,96			
<b>Non-Development Capital Expenditure (Statement IV)</b>	2,09,78				1,46,42				1,21,79			
<b>Net Outlay for Food Account Operation (Statement VIII)</b>	1,65				1,83				3,58			
<b>Loans &amp; Advances (net) (Statement VIA)</b>	1,55,04				2,07,65				1,95,68			
<b>Development Expenditure</b>	7,22,75				5,77,51				6,01,37			
<b>Development Programmes Financed from Revenue Budget (Statement IV)</b>	19,34				8,01				12,25			
Non-ADP Project (Statement VA)	30,14				30,91				24,73			
Annual Development Programme (Statement IX)	6,58,70				5,23,68				5,50,00			
Non-ADP FFV and Transfer (Statement X)	14,57				14,93				14,39			
<b>Total - Expenditure :</b>	22,24,91				18,93,26				19,17,38			



## Sample report: Non-dev summary by ministry

Reporting Date and Time: 10/02/2014

## Climate Related Expenditure

## Non-Development Summary BY Ministry (Gross)

(Amount in thousand taka)

Ministry	Ministry/Division	2013-14		2012-13		2012-13	
		Budget	Climate	Revised	Climate	Budget	Climate
01	Office of the President	131,700		126,674		112,100	
02	Parliament	1,583,500		1,356,483		1,323,500	
03	Prime Minister's Office	2,395,200		2,092,571		2,037,300	
04	Cabinet Division	320,000		298,440		278,000	
06	Election Commission Secretariat	11,874,295		2,133,980		2,076,300	
07	Ministry of Public Administration	10,758,400		3,871,512		3,476,800	
08	Public Service Commission	306,660		266,079		207,500	
09	Finance Division	1,726,645,374		1,268,141,354		1,355,913,823	
10	Finance Division - Comptroller & Auditor General	1,276,500		1,220,300		1,220,300	
11	Internal Resources Division (IRD)	12,383,400		11,576,600		11,373,500	
12	Bank and Financial Institution Division	5,822,500		10,531,134		5,040,880	
13	Economic Relations Division (ERD)	110,236,915		97,870,092		95,387,900	
14	Planning Division	473,700		421,213		409,000	
15	Implementation, Monitoring and Evaluation Division	140,700		140,222		134,200	
16	Statistics and Informatics Division	1,525,600		1,303,033		1,370,000	
17	Ministry of Commerce	1,025,100		1,206,195		904,600	
18	Ministry of Foreign Affairs	6,324,800		6,339,338		6,424,600	
19	Ministry of Defence	13,221,000		13,753,912		12,400,008	
20	Armed Forces Division	131,700		136,000		137,400	
21	Law and Justice Division	5,843,015		5,297,664		5,116,400	
22	Ministry of Home Affairs	2,211,990		83,103,523		79,465,451	
23	Legislation and Parliamentary Affairs Division	93,300		90,715		79,600	
24	Ministry of Primary and Mass Education	66,573,700		55,409,810		54,500,000	
25	Ministry of Education	100,792,300		93,059,112		90,452,300	
26	Ministry of Science and Technology	2,045,600		2,007,591		1,992,800	
27	Ministry of Health and Family Welfare	58,930,000		55,292,087		55,296,200	
28	Ministry of Information and Communication Technology	1,027,062		727,557		730,000	
29	Ministry of Social Welfare	20,218,528		18,281,549		18,293,020	
30	Ministry of Women and Children's Affairs	11,568,013		11,337,006		10,806,382	
31	Ministry of Labour and Employment	470,200		538,669		735,800	
32	Ministry of Housing and Public Works	3,163,600		3,015,658		8,727,200	
33	Ministry of Information	4,370,758		4,215,397		3,945,000	
34	Ministry of Cultural Affairs	1,724,156		1,523,840		1,592,700	
35	Ministry of Religious Affairs	1,320,900		1,465,557		1,127,200	
36	Ministry of Youth and Sports	4,461,200		5,518,817		4,192,900	
37	Local Government Division	17,690,000		19,495,688		16,210,000	
38	Rural Development and Co-operatives Division	2,634,223		2,579,881		2,446,400	
39	Ministry of Industries	1,697,800		2,809,631		1,070,563	
41	Ministry of Textiles and Jute	747,500		1,798,474		1,751,900	
42	Ministry of Fisheries and Livestock	250,000		400,000		400,000	

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Sample report: Dev ministry-wise summary

*Printing Date and Time: 10/02/2014*

**Climate Related Expenditure  
Development Summary By Ministry/Division**

(Amount in thousand taka)

Ministry Code	Ministry Name	2013-14		2012-13		2012-13	
		Budget	Climate	Revised	Climate	Budget	Climate
02	Parliament	343,700		435,800		446,700	
03	Prime Minister's Office	3,850,823		2,883,076		3,306,342	
04	Cabinet Division	0		75,500		5,000	
06	Election Commission Secretariat	4,613,300		1,322,600		1,354,700	
07	Ministry of Public Administration	888,600		1,088,041		1,200,500	
08	Public Service Commission	0		124,700		124,700	
09	Finance Division	2,193,200		1,585,100		1,377,300	
11	Internal Resources Division (IRD)	877,200		149,200		457,000	
12	Bank and Financial Institution Division	144,300		1,434,500		1,047,500	
13	Economic Relations Division (ERD)	428,800		328,700		330,500	
14	Planning Division	5,013,300		6,108,844		15,817,200	
15	Implementation, Monitoring and Evaluation Division	1,074,400		416,350		489,300	
16	Statistics and Informatics Division	898,600		1,465,500		1,658,900	
17	Ministry of Commerce	76,000		1,064,500		1,335,400	
18	Ministry of Industries	355,000		300,000		310,000	
19	Ministry of Defence	2,200,000		2,138,100		2,458,100	
21	Law and Justice Division	2,160,000		1,230,462		1,138,800	
22	Ministry of Home Affairs	7,310,300		6,057,330		5,313,800	
23	Legislative and Parliamentary Affairs Division	120,000		10,400		60,600	
24	Ministry of Primary and Mass Education	52,780,000		39,163,200		43,820,800	
25	Ministry of Education	31,000,000		22,530,600		25,539,100	
26	Ministry of Science and Technology	1,633,000		1,563,580		1,717,000	
27	Ministry of Health and Family Welfare	36,020,000		36,225,300		38,253,300	
28	Ministry of Information and Communication Technology	5,300,000		1,373,000		2,343,100	
29	Ministry of Social Welfare	1,315,500		2,127,000		2,276,300	
30	Ministry of Women and Children's Affairs	2,325,800		2,000,628		2,253,800	
31	Ministry of Labour and Employment	1,335,300		806,300		1,278,300	
32	Ministry of Housing and Public Works	8,650,000		4,325,400		5,830,200	
33	Ministry of Information	743,000		502,000		637,700	
34	Ministry of Cultural Affairs	630,000		315,200		333,000	
35	Ministry of Religious Affairs	1,531,600		1,684,100		1,529,800	
36	Ministry of Youth and Sports	2,634,700		2,403,700		2,683,200	
37	Local Government Division	111,950,000		112,741,100		108,151,700	
38	Rural Development and Co-operative Division	8,218,300		3,444,300		8,682,100	

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## Sample report: Non-dev summary by OPUnit

Reporting Date and Time: 10/02/2014

### Climate Related Expenditure Operational Unit Wise (Non-Development)

(Amount in thousand taka)

Ministry and Func. Code	Op. Unit Code	Description	2013-14		2012-13		2012-13	
			Budget	Climate	Revised	Climate	Budget	Climate
<b>43</b>		<b>Ministry of Agriculture</b>						
<b>4301</b>		<b>Secretariat</b>						
	0001	Secretariat	202,33,83		194,75,05		143,24,87	
	0010	Subsidy Management	3000,00,00		12000,00,00		6000,00,00	
	0012	Agriculture Rehabilitation Assistance	62,15,00		52,10,00		52,10,00	
		<b>Total - Secretariat :</b>	<b>3264,54,83</b>		<b>12246,85,05</b>		<b>6201,34,87</b>	
<b>4305</b>		<b>Autonomous Bodies &amp; Other Institutions</b>						
	3241	Bangladesh Agricultural Development Corporation.	303,41,90		367,94,06		249,94,06	
	3243	Bangladesh Agriculture Research Council	12,09,12		12,61,60		12,51,50	
	3245	Bangladesh Rice Research Institute (BRRI)	36,72,64		36,61,66		36,25,56	
	3247	Bangladesh Agriculture Research Institute	142,10,02		136,23,78		136,10,77	
	3251	Bangladesh Jute Research Institute	18,91,77		19,54,03		19,33,71	
	3253	Bangladesh Institute of Nuclear Agriculture	14,23,75		14,47,03		13,38,00	
	3257	Bangladesh Sugarcane Research Institute	9,26,00		13,57,00		13,90,00	
	3259	Bangladesh Institute of Research and Training on Applied Nutrition (BIR TAN).	21,60,25		21,60,25		13,02,08	
		<b>Total - Autonomous Bodies &amp; Other Institutions :</b>	<b>633,35,73</b>		<b>620,18,30</b>		<b>434,55,33</b>	
<b>4306</b>		<b>International Organisations</b>						
	4311	Food And Agriculture Organisation (FAO)	55,00		52,00		52,00	
	4313	Commonwealth Agriculture Bureau	7,00		7,50		7,50	
	4317	C.A.P.S.A.	1,30		1,30		1,30	
	4319	A.P.A.A.R.I.	7,25		7,00		7,00	
	4320	I.S.T.A.	7,00		6,20		6,20	
	4321	C.G.I.A.R.	33,00		88,00		88,00	
	4457	UNESCAP	4,30		4,25		4,25	
	4459	International Treaty on Plant Genetic Resources for Food and Agriculture	1,00		35		35	
	4461	Asia and Pacific plant protection Commission (A.P.P.P.C.)	50		50		50	
		<b>Total - International Organisations :</b>	<b>1,76,35</b>		<b>1,67,70</b>		<b>1,67,70</b>	
<b>4331</b>		<b>Department of Agricultural Extension</b>						
	0000	Department of Agricultural Extension	20,05,64		21,98,82		24,42,26	
	0005	Project Implementation Wing	76,88		73,44		54,95	
		<b>Total - Department of Agricultural Extension :</b>	<b>20,82,52</b>		<b>22,72,26</b>		<b>24,97,21</b>	
<b>4332</b>		<b>Field Service Division</b>						
	0000	Field Service Division	71,68,94		69,11,48		72,81,96	
		<b>Total - Field Service Division :</b>	<b>71,68,94</b>		<b>69,11,48</b>		<b>72,81,96</b>	
<b>4333</b>		<b>Plant Protection Department</b>						
	0000	Plant Protection Department	3,48,60		3,33,16		3,60,02	

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Sample report: Dev summary by project

Printing Date and Time: 10/02/2014

Climate Related Expenditure  
Project Wise Summary

(Amount in Thousand Taka)

Function Code	Project Code	Description	2013-14		2012-13		2012-13	
			Budget	Climate	Revised	Climate	Budget	Climate
4301		<b>Secretariat</b>						
	5090	National Agricultural Technology Project (NATP) Fez-1, (PCU-Component) (01/07/07 - 31/12/13) Approved	18,57,00		13,18,00			13,12,00
	5130	Integrated Agricultural Productivity Project (IAPP) (Secretariat Part)	25,20,00		32,79,00			42,64,00
	8030	Block allocation for unapproved projects.	75,01,00		0			6,68,00
		<b>Total - Secretariat :</b>	<b>118,78,00</b>		<b>45,97,00</b>			<b>62,44,00</b>
4305		Autonomous Bodies & Other Institutions						
	5011	Mujibnagar Integrated Agriculture Development Project-(BARI Part)-Approved-01/07/2011 - 30/06/2016	1,00,00		1,60,00			1,72,00
	5013	Improving Surface Water Irrigation in Coastal Areas and Sylhet Division in Bangladesh	1,37,00		3,31,00			0
	5014	Integrated Agricultural Development Project in Pirojpur-Gopalganj-Bagerhat	9,14,00		1,29,00			0
	5015	Integrated Agricultural Development Project in Pirojpur-Gopalganj-Bagerhat	1,00,00		30,00			0
	5016	Integrated Agricultural Development Project in Pirojpur-Gopalganj-Bagerhat	1,00,00		28,00			0
	5018	Development and expansion of research and research infrastructure of BARI	20,00,00		1,00,00			0
	5019	Eastran Integrated Irrigation Project	23,00,00		3,70,00			0
	5031	Research Skill Development for BRFI (01/01/2012-31/12/13) Approved	1,10,00		12,25,00			9,00,00
	5075	Development of Safe Vegetables Production Technology Utilization Municipal Organic Waste In the Peri-urban Areas (01/07/2010-30/06/2014) (Approved)	1,54,00		3,70,00			3,70,00
	5076	Keep Running of Pesticide Research In Pesticide Analytical Laboratory at BARI (01/07/2010-30/06/2015) (Approved)	1,10,00		1,06,00			1,06,00
	5080	Pabna-Natore-Shirajgonj-Irrigation Area Development Project-(Phase-III) - (01/03/2011 - 30/06/2014)-Approved	23,00,00		23,50,00			24,00,00
	5160	Survey & Monitoring Project for Development of Minor Irrigation (Phase-III)	10,00,00		8,00,00			8,00,00
	5170	Establishment of Integrated Seed Cold Storage Complex at Kurigram.	22,06,00		9,50,00			12,00,00
	5180	Create Employment Opportunities of Char Dwellers in Greater Rangpur Districts Through Sugarcane Cultivation	1,66,00		1,30,00			2,00,00
	5190	Create Pilot Project for Development of Sugarbeet Cultivation Technologies in	1,46,00		1,00,00			1,37,00

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## Sample report: Non-dev detail

Reporting Date and Time: 10/02/2014

### Climate Related Expenditure

#### Detail Estimates (Non-Development)

(Amount in Thousand Taka)

Legal	Func.& Op.Unit	Econ. Code	Description	2013-14		2012-13		2012-13	
				Budget	Climate	Revised	Climate	Budget	Climate
	4301	Secretariat							
3		<b>Non-Dev. Revenue Expenditure</b>							
	4500	<b>Pay of Officers</b>							
	4501	Pay of Officers		26,250		25,000		27,000	
		<b>Sub-Total - Pay of Officer :</b>		<b>26,250</b>		<b>25,000</b>		<b>27,000</b>	
	4600	<b>Pay of Establishment</b>							
	4601	Pay of Establishment		7,350		7,000		7,000	
		<b>Sub-Total - Pay of Establishment :</b>		<b>7,350</b>		<b>7,000</b>		<b>7,000</b>	
	4700	<b>Allowances</b>							
	4705	House Rent Allowance		8,925		8,500		8,500	
	4709	Rest and Recreation Allowance		930		900		900	
	4713	Festival Allowance		200		5,000		200	
	4714	Medical Allowance		1,680				1,600	
	4755	Tiffin Allowance		150		150		150	
	4756	Conveyance Allowance		178		170		170	
	4773	Educational Allowances		525		500		500	
	4794	Cell Phone Allowance		210		200		200	
	4795	Other Allowances		840		800		800	
		<b>Sub-Total - Allowances :</b>		<b>18,696</b>		<b>17,820</b>		<b>18,820</b>	
	4800	<b>Supplies and Services</b>							
	4801	Travel Expenses		5,000		5,000		3,500	
	4805	Overtime		160		160		160	
	4813	Customs Duty/VAT		110		100		100	
	4815	Postage		150		150		150	
	4816	Telephones/Telegram/ Teleprinter		1,400		1,400		1,400	
	4817	Telex/Fax/Internet		400		300		800	
	4823	Petrol, Oil and Lubricants		4,000		3,500		2,900	

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Sample report: Non-dev by sector

Reporting Date and Time: 10/02/2014

**Climate Related Expenditure**  
Non-Development Summary by Sector

(Amount in thousand taka)

Ministry Code	Ministry/Division	2013-14		2012-13		2012-13	
		Budget	Climate	Revised	Climate	Budget	Climate
<b>Public Services</b>							
01	Office of the President	131,700		126,674		112,100	
02	Parliament	1,589,500		1,356,489		1,323,500	
03	Prime Minister's Office	2,395,200		2,092,571		2,037,300	
04	Cabinet Division	320,000		298,440		278,000	
06	Election Commission	11,874,295		2,133,980		2,076,300	
07	Ministry of Public Administration	10,758,400		1,512		9,476,800	
08	Public Service Commission	3,236,600		266,079		2,716,500	
09	Finance Division	1,726,645,174		1,238,141,354		1,355,913,823	
10	Finance Division, Comptroller and Auditor General	1,276,500		1,220,300		1,220,300	
11	Internal Resources Division (IRD)	12,983,400		11,576,600		11,373,500	
12	Bank and Financial Institution Division	5,822,500		10,531,134		5,040,880	
13	Economic Relations Division (ERD)	110,236,915		97,870,092		95,387,900	
14	Planning Division	473,700		421,213		409,000	
15	Implementation, Monitoring and Evaluation Division	140,700		140,222		134,200	
16	Statistics and Informatics Division	1,525,600		1,303,033		1,370,000	
18	Ministry of Foreign Affairs	6,924,800		6,830,938		6,424,600	
<b>Total-Public Services:</b>		<b>1,893,405,244</b>		<b>1,414,180,631</b>		<b>1,492,785,703</b>	
<b>Local Government and Rural Development</b>							
37	Local Government Division	17,690,000		19,495,688		16,210,000	
38	Rural Development and Co-operatives Division	2,634,223		2,579,881		2,446,400	
55	Ministry of Chittagong Hill Tracts Affairs	2,557,355		2,568,457		2,510,352	
<b>Total-Local Government and Rural Development:</b>		<b>22,881,578</b>		<b>24,644,026</b>		<b>21,166,752</b>	
<b>Defence Services</b>							
19	Ministry of Defence	143,237,615		133,753,912		127,400,608	

## Sample report: Dev summary by sector

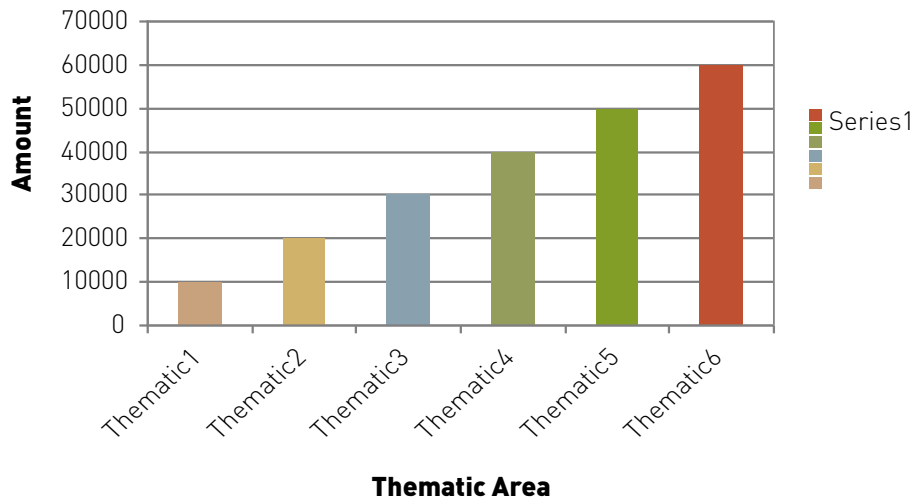
Reporting Date and Time: 10/02/2014

### Climate Related Expenditure Development Summary by Sector

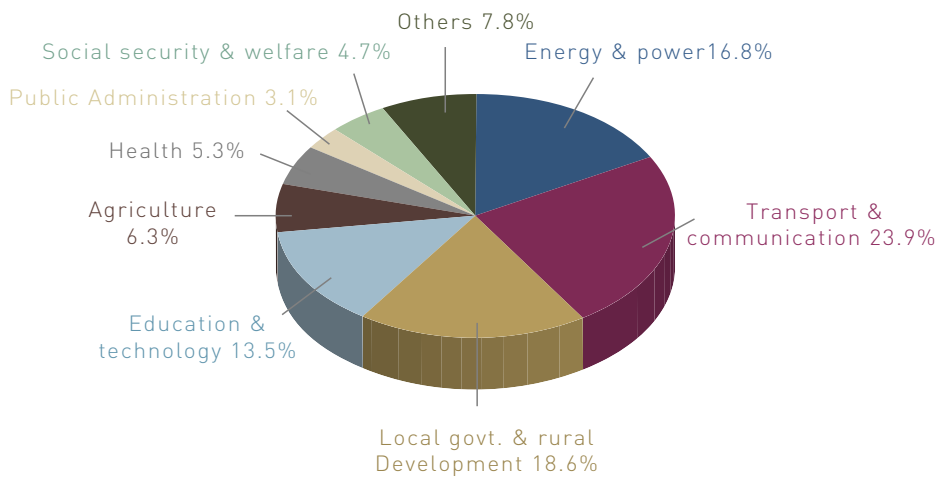
(Amount in thousand taka)

Ministry Code	Ministry Name	2013-14		2012-13		2012-13	
		Budget	Climate	Revised	Climate	Budget	Climate
<b>Public Services</b>							
02	Parliament	343,700		435,800		446,700	
03	Prime Minister's Office	3,850,823		2,883,076		3,306,342	
04	Cabinet Division	0		75,500		5,000	
06	Election Commission Secretariat	4,619,900		1,322,600		1,954,700	
07	Ministry of Public Administration	888,600		1,088,041		1,200,500	
08	Public Service Commission	0		124,700		124,700	
09	Finance Division	2,199,200		1,585,100		1,977,300	
11	Internal Resources Division (IRD)	877,200		149,200		457,000	
12	Bank and Financial Institution Division	144,900		1,434,500		1,047,500	
13	Economic Relations Division (ERD)	428,800		328,700		330,500	
14	Planning Division	5,013,300		6,108,844		15,817,200	
15	Implementation, Monitoring and Evaluation Division			416,950		488,200	
16	Statistics and Economics Division	898,600		1,000,000		1,658,900	
18	Ministry of Foreign Affairs	395,000		200,000		510,000	
<b>Total-Public Services:</b>		<b>20,694,423</b>		<b>17,559,761</b>		<b>29,326,242</b>	
<b>Local Government and Rural Development</b>							
37	Local Government Division	111,950,000		112,741,100		108,151,700	
38	Rural Development and Co-operatives Division	8,218,900		9,444,900		8,682,100	
55	Ministry of Chittagong Hill Tracts Affairs	4,989,100		3,259,100		4,189,900	
<b>Total-Local Government and Rural Development:</b>		<b>125,158,000</b>		<b>125,445,100</b>		<b>121,023,700</b>	
<b>Defence Services</b>							
19	Ministry of Defence	2,281,200		2,138,100		2,458,100	
<b>Total-Defence Services:</b>		<b>2,281,200</b>		<b>2,138,100</b>		<b>2,458,100</b>	
<b>Public Order and Safety</b>							
21	Law and Justice Division	2,160,000		1,230,462		1,138,800	

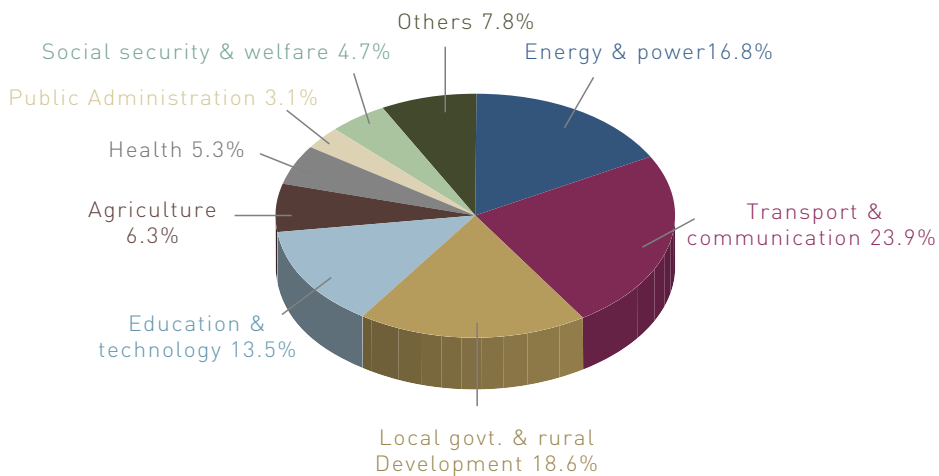
**Sample chart: Thematic area-wise expenditure**



**Sample chart: Non-development expenditure, sector-wise**

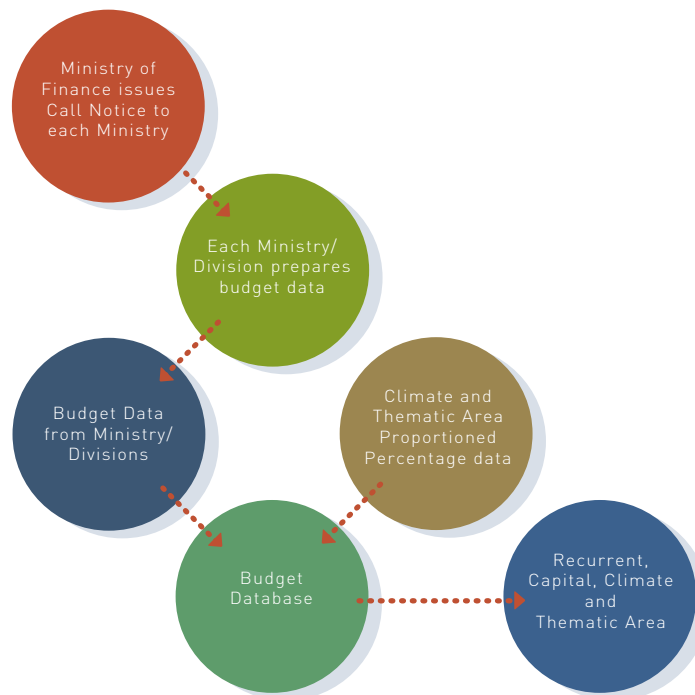


**Sample chart: Development, sector-wise**





## Business activity model for CETF Module

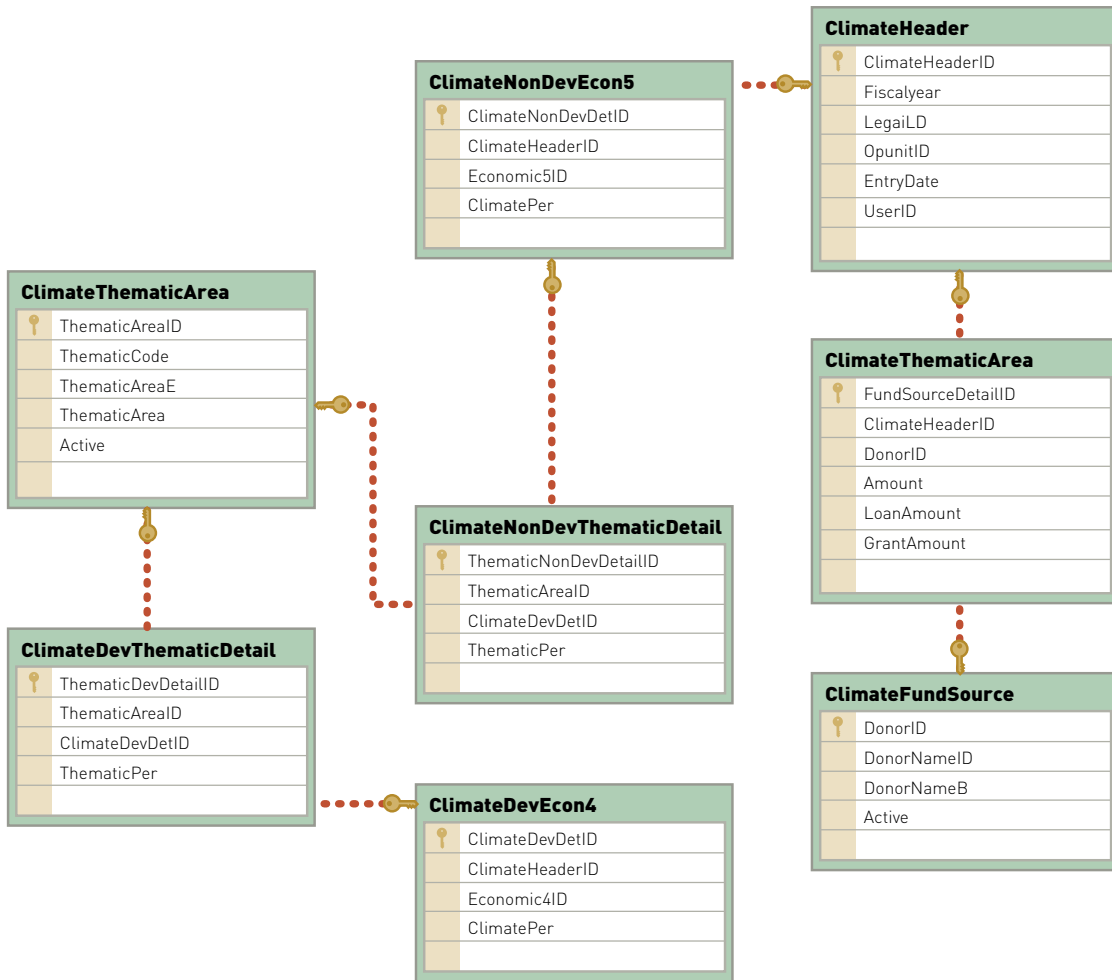


## Work practice model for CETF Module

Business activity	D/N <sup>6</sup>	Who conducts this activity?	Brief description of the business activity
Ministry of Finance prints and issues call notice to each line ministry.	N	Senior Asst. Secretary at the budget section.	MoF prints and issues call notice.
Each ministry prepares its own budget data.	D	Respective person in line ministry.	Line ministry prepares their own budget
MoF, Budget receives data from different ministries.	N	Respective person in the budget section.	Ministries/divisions send budget data to MoF.
Budget estimates data entered into the budget database during budget preparation.	D	Respective person in budget section, MoF.	The person responsible for entering the data into the budget database.
Enters the recurrent, capital, and climate data into budget database.	D	Respective person in budget wing.	Recurrent, capital, and climate proportioned data has been entered into budget database.
Generate different analysis reports on climate and thematic area-related expenditure.	N	Respective person in budget wing.	Print the analysis reports from budget database.

<sup>6</sup> D – Data related, N – Non-data related.

## Data/entity-relationship model for CETF Module



## Appendix 4: Thematic areas and programmes under the Bangladesh Climate Change Strategy and Action Plan (BCCSAP)

The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) identifies six thematic areas and 44 programmes under them. Details of the six BCCSAP pillars follow:

<b>Theme</b>	<b>T1: Food security, social protection, and health</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Institutional capacity for research towards climate-resilient cultivars and their dissemination</li> <li>P2. Development of climate-resilient cropping systems</li> <li>P3. Adaptation against drought</li> <li>P4. Adaptation in fisheries sector</li> <li>P5. Adaptation in livestock sector</li> <li>P6. Adaptation in health sector</li> <li>P7. Water and sanitation programme in climate-vulnerable areas</li> <li>P8. Livelihood protection in ecologically fragile areas</li> <li>P9. Livelihood protection of vulnerable socio-economic groups (including women)</li> </ul>
<b>Theme</b>	<b>T2: Comprehensive disaster management</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Improvement of flood forecasting and early warning</li> <li>P2. Improvement of cyclone and storm-surge warning</li> <li>P3. Awareness-raising and public education towards climate resilience</li> <li>P4. Risk management against loss of income and property</li> </ul>
<b>Theme</b>	<b>T3: Infrastructure</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Repair and maintenance of existing flood embankments</li> <li>P2. Repair and maintenance of cyclone shelters</li> <li>P3. Repair and maintenance of existing coastal polders</li> <li>P4. Improvement of urban drainage</li> <li>P5. Adaptation against floods</li> <li>P6. Adaptation against tropical cyclones and storm surges</li> <li>P7. Planning and design of river training works</li> <li>P8. Planning, design, and implementation of restriction of river and <i>khals</i> (canals) through dredging and de-siltation work</li> </ul>
<b>Theme</b>	<b>T4: Research and knowledge management</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Establishment of a centre for CC knowledge management and training</li> <li>P2. Climate-change modelling at national and sub-national levels</li> <li>P3. Preparatory studies for adaptation to sea-level rises</li> <li>P4. Monitoring ecosystem and biodiversity changes and their impacts</li> <li>P5. Macroeconomic and sectoral CC economic impacts</li> <li>P6. Monitoring of internal and external migration of adversely affected populations, and providing support to them through capacity development for their rehabilitation in new environments</li> <li>P7. Monitoring of impact on various issues related to management of tourism in Bangladesh and implementation in priority action plan</li> </ul>
<b>Theme</b>	<b>T5: Mitigation and low-carbon development</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Improved energy efficiency in production and consumption of energy</li> <li>P2. Gas exploration and reservoir management</li> <li>P3. Development of coal mines and coal-fired power stations</li> <li>P4. Renewable energy development</li> <li>P5. Lower emission from agricultural land</li> <li>P6. Management of urban waste</li> <li>P7. Afforestation and reforestation programme</li> <li>P8. Rapid expansion of energy-saving devices e.g. compact florescent lamps (CFLs)</li> <li>P9. Energy and water efficiency in built environments</li> <li>P10. Improvement in energy consumption patterns in transport sector and options for mitigation</li> </ul>
<b>Theme</b>	<b>T6: Capacity building and institutional strengthening</b>
<b>Programme</b>	<ul style="list-style-type: none"> <li>P1. Revision of sectoral policies for climate resilience</li> <li>P2. Mainstreaming CC in national, sectoral, and spatial development programmes</li> <li>P3. Strengthening human resource capacity</li> <li>P4. Strengthening gender consideration in CC management</li> <li>P5. Strengthening institutional capacity for CC management</li> <li>P6. Mainstreaming CC in the media</li> </ul>

## Appendix 5: Proposed Budget Circular 1

**Government of the People's Republic of Bangladesh**  
**Finance Division, Ministry of Finance**  
**Budget Wing, Section 1**  
**Budget Circular 1**

No. ....

Date: .....

**Sub: Revising and updating Medium-term Budget Framework of Ministries/Divisions and other institutions.**

**1. Purpose of the Medium-term Budget Framework (MTBF).** The MTBF has been rolled out across the Government of Bangladesh to improve the efficiency and effectiveness of public expenditure and to ensure the attainment of the strategic goals and objectives of the Government. The MTBF specifies that the budget preparation process should be completed in three phases: (i) strategizing, (ii) estimating, and (iii) budget approval. In the strategic phase, Ministries/Divisions and other institutions should update the Ministry Budget Framework (MBF). MBFs should be revised and updated in accordance with the guidelines contained in this circular, and then sent to the Finance Division and Planning Commission. The Planning Commission and the Finance Division will finalize MBFs in consultation with individual Ministries/Divisions and other institutions.

**2. Objectives of revising and updating MBFs.** MBF revision and updating aims to (i) strengthen links between government policy priorities for specific Ministries, Divisions, and other institutions and the budgetary allocations within these agencies; [check: Is that okay? ...](ii) to strengthen links between internal budgetary allocations and the performance of Ministries/Divisions/other institutions and their subordinate departments and agencies; and (iii) prepare a realistic expenditure plan for Ministries/Divisions/other institutions on the basis of resources available in the medium term.

**3. Preliminary indicative expenditure ceilings and revenue target.** Preliminary revenue targets propose medium-term revenue collection objectives for Ministries/Divisions and other institutions. Preliminary indicative expenditure ceilings, recommended by the reconstituted Working Group for Preparation of Ministry-Wise Ceilings (involving participation of senior government officials from the Finance Division and the Planning Commission), and approved by the Budget Monitoring and Resources Committee (BMRC), will suggest to the Ministries/ Divisions and other institutions what resources will be available for them in the medium term, given that they must submit a single consolidated budget comprising both non-development and development expenditures. Preliminary revenue targets and preliminary indicative expenditure ceilings for the Ministries/Divisions and other institutions are enclosed at **Annex 1[A]**, and the preliminary indicative expenditure ceiling at **Annex 1[B]**. In addition, indicative projections for foreign assistance are presented in **Annex 1[C]**, which is included in the preliminary indicative expenditure ceiling. Note that the indicative expenditure ceiling for the concerned Ministry/Division or other institution will be reduced by the same margin if the amount of foreign aid is reduced after preliminary expenditure estimates and projections are formulated. It will increase by the same margin, however, if foreign aid is increased.

**4. Composition of the MBF.** The MBF will be divided into two major parts and six sections. Part A will be prepared by the concerned Ministry/Division, and Part B will be prepared by Departments or Agencies under the respective Ministry/Division or other institution. Format and instructions/guidelines to update the MBF are enclosed at **Appendix 5**. The following table summarizes sections and forms included in the MBF, Parts A and B.

<b>MBF Part A</b> (to be prepared by Ministry/Division/other institution)	<b>MBF Part B</b> (to be prepared by Department/Agency)
<p><b>Section 1</b> Mission statement and major functions of the Ministry/Division</p> <p><b>Section 2</b> Medium-term strategic objectives and activities</p> <p><b>Section 3</b> Poverty and gender reporting</p> <p><b>Section 4</b> Impact of the activities on climate-change adaptation and mitigation</p> <p><b>Section 5.1</b> Priority spending areas/programmes</p> <p><b>Section 5.2</b> Medium-term expenditure estimates and projections (FY 2014–15 to FY 2016–17)</p> <p><b>Sub-section 5.2a</b> Department/operational unit/agency-wise expenditure data</p> <p><b>Sub-section 5.2b</b> Expenditure by group economic codes</p> <p><b>Section 6</b> Key performance indicators (KPI) of the Ministry/Division/other institution</p> <p><b>Form 1</b> Preliminary revenue estimates and projections</p> <p><b>Form 2</b> Expenditure ceilings for Departments and Agencies</p>	<p><b>Section 7.1</b> Recent achievements of the Department/Agencies</p> <p><b>Section 7.2</b> Activities, output indicators, and targets</p> <p><b>Section 7.3</b> Medium-term expenditure estimates</p> <p><b>Form 3</b> Preliminary expenditure estimates and projections for Departments/Agencies under the Ministry.</p>

## 5. Procedure for revising and updating MBF.

**5.1 Revising and updating Part A of MBF.** Head of the Budget Management Branch (BMB)/Wing of the Ministry/Division or other institution will supervise and coordinate all activities related to revising and updating the MBF. Officers of the Budget Management Section/Branch/Wing will prepare the draft MBF.

**5.2 Determination of revenue targets and preliminary expenditure ceilings for the Departments and Agencies.** After the necessary revision and update of the MBF Section 1.5, preliminary revenue targets and preliminary expenditure ceilings for the Secretariat part of the Ministry/Division or other Institution and all Departments/Agencies and grant-receiving private organizations will be set in accordance with the guidelines provided in **Annex 3**.

**5.3 Review of Part A of the draft MBF by the BWG.** The Budget Working Group (BWG) will scrutinize Part A of the draft MBF, including preliminary revenue targets and preliminary expenditure ceilings for Departments/Agencies, and prepare recommendations for the Budget Management Committee (BMC).

**5.4 Review and approval by the BMC of Part A of the draft MBF.** Part A of the draft MBF will be presented to the BMC along with BWG analysis and recommendations. The BMC will scrutinize all sections and duly fill in forms, especially sections related to the strategic objectives and activities, key performance indicators, and the preliminary revenue targets and Department/Agency ceilings. The BMC will approve Part A of the MBF after necessary corrections and improvements as needed.

**5.5 Request to Departments/Agencies for revising and updating Part B of the MBF.** Following BMC approval, the concerned Ministry/Division/other institution will send Part A of the MBF, along with revenue target and preliminary expenditure ceiling, to all Departments/Agencies. The Departments/Agencies will then revise and update Part B of the MBF as necessary, including preliminary expenditure estimates and projections as per Form 3. Grant-receiving private organizations will fill in Form 3 only, and submit this to the administrative Ministry.

**5.6 Revising and updating Part B of MBF by the Department/Agency.** The Head of the Department/Agency will supervise and coordinate all activities related to the MBF, Part B. Each Department/Agency will so designate one responsible officer associated with the preparation of non-development budget and one officer associated with the preparation of ADP/development budget to prepare, revise, and update a draft of Part B of the MBF. They will prepare Part B of the MBF following the instructions provided in **Annex 2** of this circular.

**5.7 Preparation of preliminary expenditure estimates and projections.** Following preparation of Part B of the MBF by the respective Department/Agency, preliminary estimates for FY 2014–15 and projections for 2015–16 and 2016–17 for the relevant operational units/programmes/projects

will need to be prepared. Guidelines as provided in **Annex 4** of the Circular must be prepared while preparing the preliminary estimates and projections.

**5.8 Examination and finalization of Part B of the MBF.** Designated officers of the Department/ Agency will prepare Part B of the MBF and place it before the departmental BMC for approval. The BMC will scrutinize Part B of the MBF along with the preliminary expenditure estimates for FY 2013–15, 2015–16 and projections for 2016–17 and finalize Part B after necessary corrections/ improvements, if any, following the guidelines provided in this circular.

**5.9 Forwarding Part B of the MBF to the administrative Ministry/Division.** After approval by the departmental BMC, the concerned Department/Agency will forward Part B of the MBF, along with preliminary expenditure estimates and projections, to the respective administrative Ministry/Division.

**5.10 Examination and finalization of Part B of MBF.** Upon receipt of Part B of the MBF from the Departments/Agencies, the officers responsible in the Ministry/Division and other institutions for the preparation of the MBF will scrutinize Part B of the MBF and preliminary expenditure estimates and projections. The designated officers must ensure that, in preparing Part B of the MBF, departments/agencies duly followed the instructions/guidelines provided in this circular. They will then conduct further scrutiny, and perform necessary modifications/revision of Part B of the MBF, and send it to the respective Sector Division and Programming Division of Planning Commission for their consent regarding the over-all volume of the non-development and development expenditure, as well as regarding programme/project-wise expenditure proposals.

**5.11 Consultation with the Planning Commission.** The overall development expenditure of the Ministry/Division/other institution has to be aligned with the Perspective Plan and Sixth Five-Year Plan. To comply with that stipulation, the overall resource ceiling of the respective Ministry/ Division/other institution should be divided, following the guidelines set out in Paragraph 5.2, into development and non-development (recurrent) expenditure in the first instance. The Department/Agency-wise preliminary resource ceiling (showing development and recurrent separately) will then be determined. Following the instructions mentioned in Paragraph 5.7, above, attached Departments/Agencies will prepare their estimates and projections. Upon receipt of such estimates and projections from the attached Departments/Agencies, the administrative Ministry, with consent from the concerned Sector Division and Programming Division of the Planning Commission, will prepare the project/programme-wise expenditure proposal as well as the overall sum of the development expenditure. The respective Sector Division will communicate their written consent to the administrative Ministry/Division and Programming Division following the timelines provided in Annex 6, after finalizing the project-wise expenditure proposal in consultation with the expectant Ministry/Division.

**5.12 Finalization of the ministry budget framework.** After receipt of Planning Commission consent, the overall MBF of the Ministry/Division must be submitted to the BMC for review and approval.

**5.13 Submission of MBF.** Following approval of the MBF by the BMC of the Ministry/Division/ other institution, the MBF will be sent to the Finance Division and Planning Commission. The BMC will ensure that the MBF, including the preliminary estimates/projections, has been prepared in accordance with the guidelines set out in this circular. Minutes of the BMC meetings should be enclosed with the proposed budget framework.

**6. Poverty- and gender related-information.** Section 3 of Part A of the MBF requires that the Ministry/Division or other institution justify the expenditure proposal in terms of its direct impact in reducing poverty and promoting women's advancement. Ministries/Divisions will specify in percentage terms, in **Columns 9 and 10 of Form 3**, to what extent expenditure on that project/ programme will benefit the poor and women. **Annex 5** provides detailed instructions for completing the poverty and gender information.

**7. Impact of the proposed activities on climate-change adaptation and mitigation.** The Ministry/Division or other institution that has CC-related expenses is required by Section 4 of Part A of the MBF to describe the activities identified in Section 2 of the MBF that are expected to directly help reduce challenges imposed by climate change. In analyzing the impact of the proposed expenditure on adaptation and mitigation of CC-related hazards, Ministries/Divisions and other institutions should refer to the six thematic areas and 44 programmes identified in the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). These are presented in Annex 4, below.

**8. Training of relevant officials.** Immediately after issuance of Budget Circular 1, the Finance Division will provide necessary training to the relevant officials of the Ministry/Division and other institutions and Departments/Agencies on procedures for revising and updating of the MBF.

**9. Working papers of meetings.** The working papers for the BMC/BWG meetings should be circulated among all members of the committee at least one day in advance of a scheduled meeting.

**10. Steps and deadlines for MBF preparation.** Annex 6 outlines what steps Ministries/Divisions/other institutions and Departments/Agencies are required to take upon receipt of Budget Circular 1, and specifies associated deadlines. All concerned are requested to strictly meet these deadlines.

**11. Clarification.** For further clarification, please consult the relevant help desk officers in the Finance Division and Planning Commission (telephone numbers are provided in **Annex 7**).

**12. Deadline for submission of budget framework.** All Ministries/Divisions are requested to send their MBF to Finance Division and Planning Commission (one copy each to the Programming Division, General Economic Division, and concerned sector divisions) by 15 January 2014. If more than one sector division is involved with the ADP/development budget of a particular Ministry, the MBF copy must be sent to all the relevant sector divisions.

**13. Request to comply with the deadline.** Secretaries/principal accounting officers of the Ministries/Divisions/other institutions are requested to follow the guidelines/instructions provided in Budget Circular 1, and ensure that MBFs are sent to the Finance Division and Planning Commission before the stipulated date (15 January 2014).

Signed:  
Additional Secretary (Budget 1)  
Telephone 9511050

## Appendix 6: Proposed Ministry Budget Framework

### Ministry Budget Framework: Part A

Name of Ministry/Division:.....

#### Medium-term expenditure

(BDT in thousands)

	Budget 2014–15	Projections	
		2015–16	2016–17
Non-development			
Development			
<b>Total</b>			
Revenue			
Capital			
<b>Total</b>			

### Section 1: Mission statement and major functions of the Ministry/Division

#### 1.1 Mission statement of the Ministry/Division

'Mission statement': A succinct expression of an organization's reason for being. It serves as an ongoing guide without a timeframe.

Briefly describe the mission statement of the Ministry/Division. To develop a clear mission statement, the Ministry must consider the following:

- What is the purpose of this Ministry; what does it intend to achieve:
- By what broad areas of operation will the Ministry accomplish this?
- Who are the intended beneficiaries?

#### 1.2 Major functions of the Ministry/Division

List the major functions of the Ministry/Division. These should be summarized from the Allocation of Business. These should be limited to a maximum of eight functions.

##### Ministry/Division functions

- 1.
- 2.
- 3.
- 4.
- 5.



## Section 2: Medium-term strategic objectives and activities

Strategic objectives	Activities	Concerned Departments/ Agencies
1	2	3
<p>Summarize the key strategic objectives for the Ministry/Division as a whole. These should be derived from the Perspective Plan 2010–21, 6th Five-Year Plan, Bangladesh Climate Change Strategy and Action Plan (BCCSAP), and/or ministry/sector policy documents. Keep the list of strategic objectives short by combining some closely related objectives.</p> <p>Ministry/Division/other institutions that have significant CC-related expenditures should identify at least one strategic objective related to the adaptation/mitigation of the problems imposed by the climate change.</p>	<p>'Activities' are specific tasks undertaken to deliver the required outputs to an external party — usually the public, individually or collectively</p> <p>Identify the activities of the Ministry/Division that are expected to contribute to the realization of the strategic objective.</p> <p>These activities should be consistent with the functions of the Ministry/Division.</p>	<p>List the directorates/agencies that will be responsible for implementing the activities.</p> <p>Only include Departments/ Agencies that play a direct and significant role in undertaking the activities listed against each objective.</p>

## Section 3: Poverty and gender reporting

### 3.1 Impact of strategic objectives on poverty reduction (PR) and women's advancement (WA)

- Ensure that the strategic objectives listed in this section are the same as those listed in Section 2.
- Describe separately how the strategic objective and its associated activities first of all relate to the Government's wider objectives of poverty reduction and women's advancement, and then contribute to achieving them.
- Follow the detailed instructions provided in Annex 5 for completing the poverty and gender information.

### 3.2 PR- and WA-related spending

The final MBF document will include a table generated from the RCGP database identifying the poverty- and gender-related expenditure allocations within the Ministry/Division's budget. The FD will provide this table during finalization of the MBF.

## Section 4: Impacts of the proposed activities/proposed expenditure on addressing CC challenges

Any Ministry/Division/other institution with climate-related expenditure in this section should describe in 120–160 words what impacts the proposed expenditure is expected to have on problems arising out of CC challenges. In identifying the climate-related expenditure, they may refer to the definition provided in the *Climate fiscal framework* (2014) — a document prepared by the Finance Division that will essentially guide financing of CC-related activities in Bangladesh. In analyzing the impact of the proposed expenditure on adaptation and mitigation of CC-related hazards, the Ministry/Division or other institution should refer to the six thematic areas and 44 programmes identified in the Bangladesh Climate Change Strategy and Action Plan (BCCSAP).

## Section 5: Priority spending areas/programmes

Priority spending area/programmes	Related strategic objectives
<p>A 'priority spending area' is a defined programme of activities or works that makes a significant contribution towards the realization of the strategic objectives of an organization.</p> <p>Identify and describe the main priority spending areas for the Ministry/Division, those expected to make the greatest impact in achieving the strategic objectives.</p> <p>These should relate to the main functions of the Ministry/Division and should be ranked in order of priority. Limit the number of priority spending areas to a maximum of six.</p> <p>Summarize the description within a single paragraph (40–60 words).</p> <p>The Ministry/Division that can be seen as a frontline ministry in combating the CC challenges should identify CC-related programme as a priority.</p>	<p>For each priority spending area, list the relevant strategic objective to which it is expected to contribute.</p>

## 5.2 Ministry-wise medium-term expenditure estimates and projections (FY 2014–15 to 2016–17)

### 5.2.a Department/operational unit/agency-wise expenditure and projection

(BDT thousands)

Description	Budget 2013–14	Revised budget 2013–14	Estimates 2014–15	Projections	
				2015–16	2016–17
Operational units					
<b>Total</b>					

### 5.2.b Expenditure and projection by group economic code

(BDT thousands)

Economic code	Description	Estimates			Projections	
		Budget 2013-14	Revised 2013-14	Budget 2014-15	2015-16	2016-17
	Revenue expenditure					
	<b>Total–Revenue expenditure</b>					
	Capital expenditure					
	<b>Total–Capital expenditure</b>					
	<b>Total expenditure</b>					

Note: The above tables will be generated from iBAS.

## Section 6: Key performance indicators (KPIs)

**Column 1:** Identify key performance indicators (KPI) for the Ministry/Division. Describe the KPI (outcome or higher-level output) against which progress towards attainment of the strategic objectives can be assessed. Limit the number of KPIs to between four and six.

**Column 2:** Specify the related strategic objectives mentioned at Section 2.

**Column 3:** Specify and describe the unit of measurement for the indicator.

**Columns 4 and 5:** Specify the revised target value for 2012–13 and actual achievement for 2012–13.

**Columns 6 and 7:** Specify the existing target value for 2013–14 and revised target value for 2013–14.

**Columns 8–12:** Specify the medium-term target values for 2014/15–2016/17.

**Ministry/Divisions/other institutions that have sizeable climate-related expenses should identify at least one KPI related to climate change**

Indicator	Related strategic objectives	Unit of measurement	Revised target 2011–12	Actual 2011–12	Target 2013–14	Revised Target 2013–14	Medium[-term targets		
							2014–15	2015–16	2016–17
1	2	3	4	5	6	7	8	9	10

KPIs should be consistent with the outcome and/or output indicators identified in the national and/or ministry/sector policy documents.

**KPIs should meet the SMART criteria:**

- Specific. The indicator is clearly defined.
- Measurable. Data are available.
- Achievable. The indicator targets are realistically set.
- Relevant. The indicator is relevant to the objective.
- Time bound. There is a clear timeframe for achieving the target.

## Appendix 7:

### Detailed guidelines for completing poverty- and gender-related tables and forms

Briefly describe (not more than in 50 words) the impacts of Ministry strategic objectives on poverty reduction and women's advancement in line with the following considerations:

- linkage with the poverty and women's advancement strategies of the Five-Year Plan and the Perspective Plan;
- where readily available, number and percentage ratio of poor people, especially numbers of poor women, directly benefiting from these strategies; and
- whether these impacts are short term (e.g. one-time benefit under the social safety net programme) or long term (e.g. efficiency enhancement, training, micro credit, public investment through which poor people/ women will benefit).

**Note:**

1. The Bangladesh Bureau of Statistics (BBS) uses the 'basic needs method' in defining poverty: people who remain below the minimum basic needs intake of 2,122 kilocalories per head per day are called poor.
2. Human poverty is determined by way of the Human Development Index (HDI). HDI is a function of education, health, and nutrition. Improvements in these areas reduce human poverty.

Standards to verify the impacts of strategic ministry objectives regarding poverty reduction and women's advancement are described below. The more these standards are reflected in strategic objectives, the stronger the impact on poverty reduction and women's advancement.

All standards may not be applicable to all Ministries, however, and Ministries are therefore requested to complete the following sections to determine which standards are applicable. If a medium-term strategic objective does not have a direct impact on poverty reduction or women's advancement, that also needs to be mentioned.

#### 1. Standards used for assessing impact of strategic Ministry objectives on poverty reduction

- **Employment/income-generating activities**

What opportunities for employment/income-generating activities will be created for the poor people? How?

- **Monitoring and evaluation systems**

Are monitoring and evaluation systems for government poverty reduction programmes in place? If so, what steps have been undertaken to strengthen them? If monitoring and evaluation system are not in place, will achieving the stated strategic objectives introduce monitoring and evaluation? If so, how?

- **Access to public properties and services**

Will more opportunities become available to the poor in terms of receiving public properties (e.g. khas, or state-owned, land; wetland; social afforestation) and services (e.g. education, health, electricity, pure water, sanitation)? If more, how will this be achieved?

- **Improved access to information and technology/development of information technology**

Will access to information and technology in respect of agriculture, fisheries, and non-agricultural activities improve? Have the necessary steps have been undertaken to accelerate the development of technology (including ICT) and its dissemination and extension among the poor? If so, how?

- **Human skills development**

Have effective measures been undertaken for skills development, particularly among people involved in non-formal economic activities? If so, how?

- **Preparation and development of law and policies**

Have effective steps been undertaken for the development of law and policies to facilitate social safety nets, social insurance, and access to labour markets among the poor? If so, how?

- **Provide/develop health, nutrition, and education**

Has any programme has been undertaken for the development of health, nutrition, and education among the poor? If so, how?

- **Training**

Is there any programme to provide necessary training to the poor? If so, how has that been undertaken?

- **Access to pure water and sanitary latrines**

Have measures been undertaken to provide pure water and sanitary latrine for the poor? If so, what are these measures?

- **Raising awareness**

Have measures been undertaken to create awareness among poor people regarding access to their due rights and services to which they are entitled and, above all, to increase their social awareness? What are these measures?

- **Information technology training for the poor**

Have any measures been undertaken to provide the poor with training in information technology and to promote opportunities for their gainful use of such training? If so, what measures?

- **Empowerment of the poor**

Have steps been undertaken to empower the poor through encouraging their participation in decision-making in the society, in the workplace, and the political sphere? How have such steps been undertaken?

## 2. Standards for assessing impact of strategic Ministry objectives regarding women's advancement:

- **Access to health care and improved nutrition**

Are specific and effective actions being taken to address women's reproductive and general health needs, including nutritional needs, particularly among pregnant and lactating women. If so, what are these measures?

- **Access to public properties and services**

Are measures being taken to expand access for women to public properties (e.g. khas land, wetland, social afforestation) and services (e.g. education, health, electricity, pure water)? If so, how?

- **Access to education and training**

Have opportunities to access education and training been created or expanded for girls/women? If so, how?

- **Reduction of daily working hours for women**

Have any measures been undertaken to reduce daily working hours among women? If so, what are they, or how can they effectively reduce working hours?

- **Women's participation in the labour market and income-generating activities**

Are effective measures in place to increase and facilitate women's entry into the labour market and opportunities to take up income-generating activities? How those have been undertaken?

- **Improved social safety for women and reduced vulnerability to risk**  
Have steps been undertaken to increase social safety and to reduce probable risks and vulnerability among women, especially in face of natural calamities?
- **Women's empowerment**  
What steps have been undertaken to promote women's empowerment process through ensuring participation in decision-making in the family, the society, and the workplace, as well as through increased participation in the political sphere? How are those steps being undertaken?
- **Women's participation in various forums**  
Have effective measures been undertaken to include gender-related issues within national and international forums. What are those measures, and how have they been undertaken?
- **Ensure safety and free movement for women**  
Have measures been undertaken to ensure free movement for women in public places, and to ensure women's safety in the family, in public places, and in society at large? If so, how have those steps been undertaken?
- **Monitoring and evaluation**  
Have measures been undertaken to strengthen monitoring and evaluation systems pertaining to gender-equality issues? If so, how, and in what processes?
- **Increased social status among women**  
Have measures been undertaken to raise the social status of women (e.g. reducing the incidence of childhood/early marriage and dowry)? If so, how?
- **Access to law and justice for women**  
Have measures been taken to create or expand opportunities for women to access processes of law and justice? How have those steps been undertaken?
- **Information technology for women**  
Are opportunities being created for women to take advantage of training in information technology, and subsequently to use it in gainful occupations? How is access to such training and occupational opportunities being ensured?
- **Reduce violence and oppression**  
What measures have been taken to reduce violence and oppression against women? How is violence/oppression against women being reduced within families and in public spaces?

## Appendix 8: List of green products under BB refinance scheme

Sector	Description	Loan limit	Loan tenure	
1.	a. Solar Home System	Both rural and urban areas	Maximum BDT 175,000	Maximum 4 years
	b. Solar mini grid	Rural area	Maximum BDT 15,000,000	Maximum 5 years with 6-month grace period
	c. Solar irrigation pumping system	Rural area	Maximum BDT 3,500,000	Maximum 10 years with 6-month grace period
	d. Solar PV assembly plant	n.a.	Loan limit will be determined on the basis of the assembly capacity of the plant to a maximum of BDT 6,000,000	Maximum 5 years with 6-month grace period
2.	Bio-gas plant	Setting up of bio-gas plant in existing cattle/poultry farm	Maximum BDT 50,000	Maximum 4 years with 3-month grace period
		Integrated cow-rearing and setting up of bio-gas plant	Maximum BDT 450,000	Maximum 4 years with 3-month grace period
		Organic manure from slurry	Maximum 200,000	Maximum 4 years with 3-month grace period
		Mid-range bio-gas plant	Maximum BDT 2,500,000	Maximum 5 years with 6-month grace period
3.	Effluent treatment plant (ETP)	a. Biological ETP	Maximum BDT 40,000,000	Maximum 5 years with 6-month grace period
		b. Combination of biological and chemical ETP	Maximum BDT 20,000,000	Maximum 5 years with 6-month grace period
		c. Conversion of chemical ETP to (a) and (b) types, above.	Maximum BDT 10,000,000	Maximum 5 years with 6-month grace period
4.	Substitution of energy-efficient kiln for conventional lime kiln	n.a.	Maximum BDT 3,500,000	Maximum 5 years with 6-month grace period
5.	Vermi-compost	n.a.	Maximum: BDT 290,000 (2 lakhs) with purchase of 2 cows	Maximum 4 years with 3-month grace period
			Maximum: BDT 90,000 without purchase of cow	
6.	Hydropower (pico, micro, and mini)	n.a.	Maximum BDT 5,000,000	Maximum 5 years with 6-month grace period
7.	PET bottle recycling plant	n.a.	Maximum BDT 50,000,000	Maximum 5 years with 6-month grace period
8.	Solar battery recycling plant	n.a.	Maximum BDT 10,000,000	Maximum 5 years with 6-month grace period
9.	LED bulb manufacturing plant	n.a.	Maximum BDT 50,000,000	Maximum 5 years with 6-month grace period
10.	Setting up of Hybrid Hoffman Kiln (HHK)/ tunnel kiln/equivalent technology in brick manufacturing Industry	n.a.	Maximum BDT 50,000,000 for new Project and Maximum BDT 5,000,000 for the conversion of conventional FCK (fixed-chimney kiln) to Zig-Zag/VSBK technology	Maximum 5 years with 9-month grace period

## **Appendix 9:**

### **List of circulars and guidelines regarding green banking**

1. BRPD Circular No.01 (30 January 2011): 'Guidelines on environmental risk management (ERM).'
2. BRPD Circular No.02 (27 February 2011): 'Policy guidelines for green banking for banks'.
3. BRPD Circular Letter No. 07 (22 July 2012): 'Reporting format for green banking activities'.
4. ACFID Circular No. 02 (16 September 2012): 'Refinance scheme for financing brick kiln efficiencyimprovement'.
5. GBCSRD Circular No. 02 (1 July 2013): 'Refinance scheme for renewable energy finance and green finance'.
6. GBCSRD Circular No. 04 (11 August 2013): 'Policy guidelines for green banking for FIs'.
7. GBCSRD Circular Letter No. 05 (11 September 2013): 'Policy guidelines for green banking for new banks'.
8. GBCSRD Circular No. 08 (24 December 2013): 'Amendments in policy guidelines for green banking for banks'.



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