



Climate Protection and Development: Budget Report 2017-18



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

Climate Protection and Development
Budget Report, 2017-18

June 2017

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

www.mof.gov.bd

Foreword

Bangladesh has made remarkable strides since independence in its endeavour to maintain sustained growth along with impressive social indicators. Its per capita income has increased and poverty rate has gone down significantly over successive years. It achieved significant success in meeting the Millennium Development Goals (MDGs) and joined hands with the world community in the pledge to implement Sustainable Development Goals (SDGs).

In its march towards a middle-income country Bangladesh is facing several development hurdles. It includes climate change that poses major threat to the hard-earned gains of years of sustained growth and development. The Government of Bangladesh has been forced to put climate change high in its development agenda. In 2008, the Government prepared and adopted **Bangladesh Climate Change Strategy and Action Plan (BCCSAP)** to align its changing development priorities and revised it in 2009 to add more areas of action. Subsequently, **Climate Change Trust Fund (CCTF)** was created by the Government from its own resources to finance projects for implementation of BCCSAP. Moreover, the Government adopted a **Climate Fiscal Framework (CFF)** for Bangladesh in 2014 to provide incentives and guidance for costed and prioritized climate actions. It is gratifying to note that in recognition of her strong leadership in taking forward all these landmark initiatives, Hon'ble Prime Minister Sheikh Hasina was bestowed the United Nations' highest award on Environment, "**Champions of the Earth**" in 2015 under the Policy Leadership Category.

I am delighted that the Finance Division is bringing out a report on '**Climate Protection and Development: Budget Report, 2017-18**' reflecting climate expenditures of six ministries. I understand that this initiative is being supported by a project titled **Inclusive Budgeting and Financing for Climate Resilience (IBFCR)** being implemented by the Finance Division with technical and financial support from UNDP and DFID.

Since this is the first ever attempt amidst many binding constraints, it may not have been possible to capture all aspects of analyses in the report to make it comprehensive. However, I am confident that in the next attempt, the Finance Division will bring out a more comprehensive report to meet the expectations of the readers. I am also hopeful that its analytical rigor will improve further in the coming years.

I believe this publication will be immensely useful for the NGOs, CSOs, International Organizations, policy makers and all other stakeholders concerned. I would like to thank everyone from the Finance Division, IBFCR project, other ministries concerned and UNDP for their hard work in bringing out this report.



(Abul Maal Abdul Muhith)
Minister
Ministry of Finance

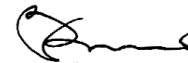
Preface

Climate change is having adverse impact on all facets of the global economic and social well-being. Given its geographical location, Bangladesh is extremely vulnerable to climate change and it has already experienced visible adverse effects in recent times. The climate of a country changes over time, but now climate change has become a grave concern for the global community as the changes are coming too fast. If this trend continues, human race will face its most critical challenge.

The Government of Bangladesh is committed to address the climate change induced risks and vulnerabilities given their significant bearing on our development agenda. As part of its commitment, the Government adopted **Bangladesh Climate Change Strategy and Action Plan (BCCSAP)** reflecting its priority agenda. It also established **Bangladesh Climate Change Trust (BCCT)** and placed at its disposal a fund called **Bangladesh Climate Change Trust Fund (BCCTF)** from its own sources to finance projects for implementation of BCCSAP. It also conducted **Climate Public Expenditure and Institutional Review (CPEIR) in 2012** which provided very useful recommendations having analysed the policy and institutional context together with the financial management arrangements of the agencies involved in climate activity in Bangladesh. In 2014 Bangladesh adopted its **Climate Fiscal Framework (CFF)** as a forerunner in this region and beyond in introducing a climate sensitive public financial management (PFM) system. The CFF prompted a set of specific interventions to make our budgeting exercise climate inclusive. **Inclusive Budgeting and Financing for Climate Resilience (IBFCR) Project**, being implemented by the Finance Division with support from UNDP, in its agenda embrace these interventions.

This publication '**Climate Protection and Development: Budget Report, 2017-18** is the maiden venture to bring to the fore budgetary analysis of six selected large spending ministries showing climate expenditure under different thematic areas of BCCSAP. The analytical framework presented in this report will surely serve as an important basis for undertaking comparative analyses and taking decisions over climate change expenditures.

I believe that this publication will be useful for policy makers, NGOs, civil societies, international organizations, researchers and relevant stakeholders in appreciating the Government's move towards addressing this pressing issue. I would like to place on record my sincere appreciation for the dedication of my colleagues in the Finance Division and other concerned ministries, IBFCR Project and UNDP for supporting us in bringing out this publication on time. Any suggestions for its further improvement will be much appreciated.



(Hedayetullah Al Mamoon)
Senior Secretary
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Message

I have been just briefed on the first ever presentation of a Climate Budget Report to the Parliament in Bangladesh, and it strikes me that Bangladesh is probably the first ever developing nation to do so. Undoubtedly, this is a ground breaking work done by the Finance Division with support from six ministries who are part of this pioneering effort.

In UNDP, we feel privileged to be associated to be part of this stellar effort and I take this opportunity to congratulate the Hon'ble Finance Minister for his leadership of this historic initiative. I would also like to record my special appreciation for the Senior Secretary of the Finance Division for guiding a highly motivated team towards this arduous task. The team comprised of the National Project Director and the National Project Manager of the UNDP Inclusive Budgeting and Financing for Climate Resilience (IBFCR) Project, colleagues of the Finance Division, contributing colleagues of the Ministries of Water Resources, Agriculture, Local Government Division, Primary and Mass Education, Disaster Management and Relief, and Environment and Forests.

Following the Paris Agreement, linking national budget to climate change related policy objectives and targeted results is a critical next step. The spectacular effort will not only help Bangladesh to usher a transformative shift towards greater resilience to disasters and climate change impacts, it will, with good outreach potentially serve as good-practice for other challenged nations. Henceforth, the Government of Bangladesh will be able to undertake public expenditure reviews, identify and assess budgetary and revenue implications of climate related policies and measures and demonstrate better utilization capacity of climate finance to attract external resources for climate related actions. The medium-term perspective for climate related actions in national and sectors budgets appears a logical next step.

The presentation of this report before the National Parliament represents the Government of Bangladesh's political commitment to the issues associated with climate change and disaster risk management. I am sure that other ministries whose representative mandate requires important climate change related actions will be included in subsequent climate budgeting exercises in next years. This is also a critical step towards achieving the Sustainable Development Goals.

I hope this **Climate Protection and Development Budget 2017-18 Report** will generate keen interest both locally and globally. Undoubtedly, that would help to make both the process and the resultant outcomes effective in reducing the vulnerability of the population and in turn strengthen them to contribute even better towards building a more prosperous, happy, healthy and resilient Bangladesh.



(Sudipto Mukerjee)
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List of Acronyms

ADP	Annual Development Programme
BCCRF	Bangladesh Climate Change Resilience Fund
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCTF	Bangladesh Climate Change Trust Fund
BECA	Bangladesh Environment Conservation Act
BINA	Bangladesh Institute of Nuclear Agriculture
BWDB	Bangladesh Water Development Board
CC	Climate Change
CCA	Climate Change Adaptation
CCTF	Climate Change Trust Fund
CCTFA	Climate Change Trust Fund Act 2010
CFF	Climate Fiscal Framework
CFP	Climate Fiscal Policy
CIPCC	Country Investment Plan for Climate Change
COP	Conference of Parties
CPEIR	Climate Public Expenditure and Institutional Review
DAE	Department of Agriculture Extension
DoE	Department of Environment
DPP	Development Project Proforma
EFCC	Environment, Forestry and Climate Change
FCDI	Flood Control, Drainage and Irrigation
FD	Finance Division
GoB	Government of Bangladesh
HLPW	High Level Panel of Water
iiid	International Institute for Environment and Development
INDC	Intended Nationally Determined Contribution
KPI	Key Performance Indicator
LGD	Local Government Division
LGED	Local Government Engineering Department
MBF	Ministry Budget Framework
MoF	Ministry of Finance
MTBF	Medium-Term Budget Framework
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
PPCR	Pilot Programme for Climate Resilience
SAARC	South Asian Association for Regional Cooperation
TAG	Technical Advisory Group
TPP	Technical Assistance Project Proforma
UNCBD	UN Convention on Biological Diversity
UNCCD	UN Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

1. Introduction

1.1 Background

Bangladesh like many other countries of the world is facing the adversities arising from climate change for no fault of its own. There is a growing concern all over the world on the issue of climate change (CC) and its adverse impact on countries more vulnerable owing to their respective geographical locations. Germanwatch, a non-profit research organisation of Germany in its latest research report (2017) ranked Bangladesh 6th among the countries vulnerable to climate change induced natural calamities.

In a study conducted by SAARC Meteorological Research Centre (SMRC) the researchers came up with a projection on climatic condition in 2030 and 2070 in this region. The study revealed that the average increase in temperature would be 1.3° C and 2.6° C for the years 2030 and 2070, respectively. It was found that there would be a seasonal variation in changed temperature: 1.4° C change in the winter and 0.7° C in the monsoon months in 2030. For 2070 the variation would be 2.1° C and 1.7° C for winter and monsoon, respectively. It was also found that there would be excessive rainfall in the monsoon causing flooding and very little to no rainfall in the winter causing drought. SMRC also studied surface climatological data on monthly and annual mean maximum and minimum temperature, and monthly and annual rainfall for the period of 1961-90¹. The study showed increasing trend of mean maximum and minimum temperature in some seasons and decreasing trend in some other seasons. Overall, annual mean maximum temperature has shown significantly increasing trend over the period of 1961-90. There may be slight variation in the studies' figures, but this is enough to raise alarm for the future of our country.

Situation did not change since 1961, rather worsened. Other research studies also ended with similar findings. One article in the *National Geographic* placed Bangladesh at the top of the countries vulnerable to climate change in future years. Bangladesh has become one of the most vulnerable countries of the world to tropical cyclones, storms and tidal surges because of geographical location. Formation of low-lying land of Bangladesh at the end of one of the world's largest river delta systems makes it prone to natural disasters. In

¹ Mainstreaming Adaptation to Climate Change in Least Developed Countries (LDCS), Rahman, Atiq and Alam, Mazharul, iied (April 2003)

addition, the land is surrounded by active Asian monsoon zone. Sixty (60) per cent of the country's land is barely 5 metres above sea level. Pointing to the stark reality, a study report by the World Bank (2010) noted that up to two-thirds of Bangladesh is inundated by floods that cause extensive damage to infrastructure, housing, agriculture, and livelihoods once in every three to five years. Low-lying coastal areas are also at risk from cyclones and storm surges. On average once every three years, a severe cyclone makes landfall on the Bangladesh coastline, either before or after the monsoon, creating storm surges that are sometimes more than 10 meters. Crops and the livelihoods of the rural poor in low-lying coastal areas are also devastated by saline water intrusion into aquifers and groundwater and land submergence.² UNDP Global report ranks it 6th among the most vulnerable countries of the world to surface flooding. In their research report referred to above, IIED recommends that better information and more financial support are necessary for countries like Bangladesh, to encounter future adverse impacts of climate change.

Huge investment is required for infrastructural development and improvement of the early warning and awareness raising system to meet the challenges Bangladesh is facing. While dwelling upon investment scenario, the aforesaid study report of the World Bank reveals that since the sixties, the Government of Bangladesh invested \$10 billion on structural (polders, cyclone shelters, cyclone-resistant housing) and non-structural (early warning and awareness raising systems) disaster reduction measures and enhanced its disaster preparedness systems. These investments have significantly reduced damages and losses from extreme climatic events over time, especially in terms of deaths and injuries. Despite the increased resilience, climate related disasters continue to result in large economic losses — reducing economic growth and slowing progress in reducing poverty. The 1998 monsoon flood inundated over two-thirds of Bangladesh and resulted in damages and losses of over \$2 billion, or 4.8 per cent of annual GDP. Similarly, Cyclone *Sidr* resulted in damages and losses of \$1.7 billion, or 2.6 per cent of GDP in FY 2007-08³. When averaged over the past decade, the direct annual costs from natural disasters to the national economy—in terms of damages to infrastructure and livelihoods and losses from forgone production—have been estimated at 0.5 percent to 1 percent of GDP. These statistics do not include the significant loss of life that has also occurred during these events. These

² World Bank (2010) Economics of Adaptation to Climate Change, Bangladesh

³ *ibid*

damages and losses are geographically concentrated in areas that also have higher concentrations of the poor, affecting them disproportionately. The study observes that the existing investments, which have reduced the impacts of cyclone-induced storm surges, provide a solid foundation upon which to undertake additional measures to reduce potential damages now and in the future. However, these investments are not sufficient to address the existing risks, much less the future risk from climate change. By 2050, total investments of \$5,516 million and \$112 million in annual recurrent costs will be needed to protect against storm surge risk, including that from climate change⁴.

Bangladesh is fully aware of the threats posed by climate change and is in the process of developing comprehensive national plans as part of its preparedness. This is aptly reflected in the government's move to take climate change as one of its major policy issues and create a climate change trust fund (BCCTF) by allocating resources from its own sources. Besides, its move towards adoption of climate change responsive fiscal policy is another example of its preparedness.

The Government has been launching projects having direct or indirect link to climate change risk mitigation and adaptation. To counteract climate vulnerability, the Government finalized its national strategy called Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2008 covering all facets of interventions for climate resilience. It also conducted Climate Public Expenditure and Institutional Review (CPEIR) in 2012 which analysed the policy and institutional context together with the financial management arrangements of the agencies involved in climate activity in Bangladesh and advanced recommendations for next steps. Following CPEIR recommendations, the Government formulated a Climate Fiscal Framework (CFF) in 2014 aiming at (a) establishing greater national ownership of climate finance, (b) promoting Government – NGO - Private Sector Partnership harmonization, (c) enhancing result management, (d) increasing mutual accountability, and (e) broadening the opportunity for resilient development and green growth in Bangladesh. The CFF essentially laid the foundation for pursuing the agenda of a climate inclusive public financial management (PFM) system in Bangladesh through a project titled “Inclusive Budgeting and Financing for Climate Resilience” being implemented by Finance Division.

⁴ ibid

1.2 Climate Change Related Conventions, Protocol and Agreements

There is a worldwide concern over the issues of greenhouse gas emission, deforestation and destruction of natural resources arising from a few nations' frantic bid to further accelerate economic growth using fossil energy. Studies on factors responsible for climate change have been continuing over the last few decades. Since 1990, the move for reversing the trend of using fossil fuels and destroying nature for short term economic growth has been gaining ground. International organisations, NGOs, social and voluntary organisations and independent institutions have made several moves to motivate people around the globe for raising voice against the adverse impacts of fossil fuel dependent development. Efforts of international organisations and other concerned bodies are summarised here.

The United Nations (UN) took up the environmental issue as early as in 1972 and set up United Nations Environment Programme (UNEP) with the responsibility of overseeing environmental issues for UN agencies. In 1992 representatives from 154 nations at Rio Earth Summit, where Bangladesh was a party, signed the United Nations Framework Convention on Climate Change (UNFCCC) which outlined the need to reduce greenhouse gas emissions as a global response to climate change. Article 3(1) of the Convention states that Parties should act to protect the climate system based on "common but differentiated responsibilities", and that developed country parties should "take the lead" in addressing climate change. The UNFCCC formally came into effect in March, 1994. Kyoto Protocol was a follow up of all the UNFCCC efforts. In December 11, 1997, at a meeting of the UNFCCC in Kyoto, Japan, industrialized nations agreed to cut their greenhouse gas emissions to a level below 1990 percentage. The year 1990 was chosen as a baseline because in that year negotiations on climate change were initiated by the UN⁵.

Since UNFCCC formally came into effect, the international community met on different occasions to strengthen global response to the threat of climate change. Some of the landmark engagements of international community include Durban Platform for Enhanced Action 2011, 19th Conference of Parties (COP) in 2013 in Warsaw, and COP 21 in Paris in 2015 which prompted the parties to take concrete actions to adopt nationally appropriate climate change mitigation and adaptation plans.

The second outcome of Rio Earth Summit is the Convention on Biological Diversity (CBD) which stressed on the need for protection on climate in the interest of preservation of

⁵ Decision of CBD Conference of the Parties held in Cancun, Mexico on 10 December 2016

biological diversity. The Paris conference recognized that cooperation among the communities dealing with biodiversity, climate change adaptation, mitigation and disaster reduction results in greater ability to design interventions that deliver multiple benefits. It also recognised raising awareness, particularly among decision makers in relevant sectors and at different levels of government about ecosystem-based approaches to climate change adaptation, mitigation and disaster risk reduction plays an important role.

The third outcome of Rio is the UN Convention to Combat Desertification (UNCCD) which was established in 1994. It aimed at forging *“a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas to support poverty reduction and environmental sustainability”*. The Convention’s 195 parties agreed to work together to improve the living conditions of people in dry lands, to maintain and restore land and soil productivity, and to mitigate the effects of drought. Gradual increase of desertification made this issue pertinent to the wider issue of climate change.

1.3 Legal and Policy Framework

In the last few decades, different policies, plans, laws, rules and regulations have been adopted in Bangladesh for conservation of environment and protection of people against the harmful effects of climate change. The most relevant of them are:

Bangladesh Environment Conservation Act (BECA), 1995, empowers the Director General (DG) of the Department of Environment (DoE) to take such measures as s/he considers necessary and expedient for the conservation of the environment and improvement of environmental standards and s/he may issue necessary directions in writing to any person for the discharge of his/her duties under BECA (Section 4.1). Another provision under the Act allows a person affected or likely to be affected because of degradation of the environment to apply to the DG for remedy of the damage or apprehended damage (Section 8.1). The DG may hold a public hearing and take other measures for disposing the case.

Climate Change Trust Fund Act 2010 (CCTFA) was introduced in acknowledgement of the need for a specific legislation for transparent handling of Climate Change Trust Fund (CCTF) of the Government of Bangladesh so that benefits accruing from any project financed by the CCTF could reach the affected people properly. Other objectives of CCTF are, enhancing the adaptability of the people within an area or region endangered by climate change, making and implementing plans to combat long term risks of climate change, and taking necessary steps to ensure adaptation, mitigation, technology transfer and finance and

investment to combat the adverse effect of climate change. In support of this law, there are rules, regulations and guidelines which provide operational procedures for submission, approval and amendment of project proposals as well as release and utilization of fund.

The Perspective Plan (2010-2021) highlights the government's commitment of following a low carbon path in pursuing its development agenda, without compromising the need for accelerated economic growth and poverty reduction. The major environmental, climate change and disaster risk reduction strategies have been articulated in the plan.

7th Five Year Plan (2016-2020) proposes several activities for Climate Change Adaptation (CCA). Important among those are, promoting a whole-of government approach for climate change, enhancing understanding, knowledge, capacity and coordination, prioritizing programmes and projects, enhancing CCA financing, integrating gender sensitivity in project design, food security, social protection and health, managing hazards and disasters etc.

Bangladesh Climate Change Strategy and Action Plan (BCCSAP) was formulated in 2008 and revised in 2009. It elaborates the framework of actions to face climate change based on six pillars. These are (i) ensuring access to basic services like food, safe housing, and employment to most poor and vulnerable groups, (ii) comprehensive disaster management, (iii) maintenance of existing Infrastructure, like, river and coastal embankment, cyclone shelter and urban drainages, etc. (iv) research and knowledge management, (v) mitigation and low carbon development, and (vi) capacity building and institutional strengthening.

Country Investment Plan for Climate Change (CIPCC) was developed in May 2016 within the framework of BCCSAP. It has been made public for receiving feedback from wider stakeholders and is expected to be presented before the Environment Council within a few months. The CIPCC provides a strategic framework for planning and coordination of national and international investments for the environment, forestry and climate change (EFCC) sectors in Bangladesh. It is a 5-year framework that identifies areas for investment under EFCC. It also discloses the actions and targets that the Government has submitted to the UNFCCC in pursuance of Paris Agreement.

The overall goal of the CIPCC is to increase the contribution of the EFCC sectors to the sustainable development of the country, help reduce poverty, improve environmental and human health and increase resilience to climate change. Enhanced utilization of natural resources, pollution control, climate change mitigation and adaptation and efficient environmental stewardship will be the means through which the goals will be attained.

Nationally Determined Contributions (NDC) of Bangladesh: Among South Asian nations, Bangladesh was the first to submit its INDCs (intended nationally determined contributions) to the United Nations Framework Convention on Climate Change (UNFCCC).

Unconditionally, the country has pledged to cut emissions by 5 per cent from business-as-usual level by FY 2030 from the high emission sectors like power, transport and industry. The 5 percent carbon emissions reduction target of Bangladesh can be increased to 15 percent if the country gets adequate international assistance in the form of finance, technical help and capacity building support. Despite its minimal contribution to the global warming – its emissions being less than 0.35 percent of the global total – Bangladesh’s mitigation efforts show commitment to building a low carbon future. Moreover, its NDC contains measures that have already been undertaken using its own resources and demonstrating initiatives led by the Government.

1.4 Concept of Climate Public Finance

The concept of climate finance is decidedly complex. Several entities--think-tanks, banks and other financial institutions, international institutions, governments, and public sector agencies--are involved in myriad activities related to climate finance. Understanding how they operate, interact, and contribute can be confusing.⁶ However, climate finance generally refers to the flow of funds that is required to support activities aimed at reducing greenhouse gas (GHG) emission and adapting to the adverse effects of climate change. Low carbon and climate resilient development calls for investments from both public and private actors like development financing institutions, governments and private sector investors. These investments will essentially address long-term opportunities and risks arising from climate change, promote wider socio-economic welfare and minimize social and environmental hazards.

In the context of Bangladesh, climate finance refers to flow of funds to programmes on adaptation and to a limited extent to those on mitigation⁷. However, the Government of Bangladesh (GoB) has demonstrated its commitment to undertake both adaptation and mitigation efforts as part of its agenda for sustainable development. It is proved by the fact that every year the Government channels a lot of resources for significant investment in projects/programmes for ensuring climate resilience and encourages mitigation efforts by embarking on solar energy projects, afforestation programs in climate hotspots, programmes for promoting the use of new technology to replace coal-fired kilns, etc.

⁶ <http://www.wri.org/insights-topics/climate-finance-faqs>

<http://www.wri.org/blog/2013/04/why-climate-finance-so-hard-define>; accessed on 14 May 2017

⁷ Finance Division (2014). *Climate Fiscal Framework*. Finance Vision. Dhaka.

1.5 The State of Climate Finance in Bangladesh

Climate Public Expenditure and Institutional Review (CPEIR) of Bangladesh was published in October 2012 following a study conducted by the General Economics Division. The CPEIR analysed the policy, institutional and financial arrangements of the agencies engaged in climate sensitive activities in Bangladesh. Although the review focused mainly on government's financial policy and activities, it acknowledged at the same time the role played by the civil society and international organisations. The summary of findings of CPEIR presented in Appendix-1 provides an overview of the state of Climate Public Finance in Bangladesh up to FY 2011-12.

The definition of climate expenditure developed and used in the CPEIR covers any expenditure incurred to take measures to reduce risks, mitigate or address the impacts of climate change. The methodology applied included identification of CC relevant expenditures incurred under different classification codes by the CC relevant programmes/projects, allocation of weight to each of the codes identified and review and analysis of the expenditures based on weighted value.

1.6 Climate Fiscal Framework: Rationale and Bangladesh Experience

The concept of Climate Fiscal Framework (CFF) is still at an infant stage. It is a framework designed to ensure that external and internal finances are used most effectively in addressing climate change. By introducing such a framework, countries would be able to identify the demand (expenditure) and supply (revenue or finance) of funds needed to finance climate projects. It establishes a transparent and sustainable system to track and verify climate finance use.

As a follow-up of the recommendations set out in the Bangladesh CPEIR, the Government of Bangladesh developed and adopted CFF in 2014. The need to manage climate-related challenges by adopting budget priorities, pricing policies, and financial market rules was the driving force behind developing CC related principles and policies. One of the outcomes of this was development of a comprehensive climate fiscal policy (CFP) to study and map out fiscal issues about climate change. The CFP was first laid down in BCCSAP 2008, and subsequently revised in BCCSAP 2009.

The CFF that emerged from this whole process provides principles and tools for climate fiscal policy-making, helping to identify the demand and supply sides of climate funds and to ensure that CFP is transparent and sustainable in the longer term. The objective of combating adverse CC effects in Bangladesh requires a framework for tracking climate-related expenditure while estimating potential costs of long-term finance. To meet this objective, the CFF aims at promoting an updateable country system to (i) cost and prioritize climate actions; (ii) access international and national sources for climate finance; (iii) deliver

climate finance; (iv) track climate expenditures; and (v) make climate finance and expenditure accountable. More specifically, the CFF aims to develop a framework that incorporates the following recommendations.⁸

Box 1. CFF Recommendations

- There is a need for CFF becoming stronger, presenting more reliable cost projections. Both public and private entities should be encouraged and materially supported to develop further capacity. It is necessary to take it as one of the aims of upcoming Inclusive Budgeting and Financing for Climate Resilience project for the Ministry of Finance.
- Changes in climate-change scenarios, and the associated new realities are emerging, so, there is a need for updating BCCSAP. The cost of BCCSAP implementation also needs assessment. Providing additional information for the updates will be the responsibility of the upcoming new project and the current CFF.
- Establishment of a Climate Fiscal Cell in the Finance Division of MoF with immediate effect to operationalize CCF recommendations.
- In updating BCCSAP, the GoB should take initiatives to develop a National Adaptation Plan (NAP) and, if possible, 'Nationally Appropriate Mitigation Action (NAMA)' for Bangladesh when BCCSAP is updated, maintaining linkages with CPEIR and CFF.
- Government fund flow to BCCTF has declined and expected flow of funds from development partners to BCCRF has not yet materialized. In view of this situation Government needs to increase budgetary allocations for BCCTF.
- The Climate Fiscal Framework (CFF) should be regularly updated through the upcoming IBFCRP, aiming at establishing Bangladesh's framework as a landmark model for other countries.

1.7 Aligning Climate Finance with Budget Setting Process

Bangladesh is meeting the challenges of climate change with whatever resources it can mobilize from both domestic and external sources. In Bangladesh, thirty-seven (37) ministries and divisions and hundreds of government agencies active in CC related areas are part of climate finance. Aligning climate finance with the budget setting process is therefore, important for Bangladesh in this context. It is even more important for ensuring wider accountability about allocation of public resources. In addition, its importance in the context of overarching economic and political agenda of the government, cannot be overemphasised. Government needs to set budget priorities, pricing policies, and financial market rules for meeting the emerging challenges of climate change.

⁸ Climate fiscal framework: Bangladesh leads on climate actions

Bowen Wang - See more at: <http://archive.dhakatribune.com/environment/2015/may/09/climate-fiscal-framework-bangladesh-leads-climate-actions#sthash.ny9bqB2t.dpuf>; accessed on May 15 2017

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The CFF stipulates the necessity for tracking revenue generation in CC fund and flow of funds from these sources to CC related programmes and projects. This will help integrate the expenditures of different climate sensitive programmes and projects under an identifiable budget code. It will also ensure accountability by tracking the spend area, amount spent and programme involved.

The first step towards preparation of a climate budget is to define objectives of CC related expenditure. This will translate in financial terms the goal of overcoming the adverse effects of climate change. In pursuance of recommendation of the CFF it is necessary to bring about changes in the structure of the MBF in addition to those that are required to be made in the guidelines set out in the Budget Call Circular 1 for MBF preparation. Aligning climate finance with the Medium-Term Budget Framework (MTBF) requires inclusion of a brief description of the six thematic areas identified in BCCSAP in the Budget Call Circular, as is done in the case of poverty and gender related issues.

1.8 Purpose of the Report

The report is intended to bring to light the share of climate spending subsumed in total public expenditure and draw the attention of wider stakeholders to the Government's commitment to address the issues arising from the adverse impacts of climate change. The analyses presented in the report are also meant to give them a fair idea about the distribution of climate spending across six thematic areas set out in BCCSAP. The present report with its limited coverage will pave the way for presenting a comprehensive report using more robust methodology in the next fiscal year.

1.9 Methodology, Scope and Limitations

Methodology

This chapter presents the approach and methodology of conducting the study as part of the process of preparation of the report. These included the following:

- (i) Desk review was undertaken of documents relevant to the study and more specifically BCCSAP 2009, Ministry Budget Frameworks (MBFs) of six ministries covered by this study, DPP/TPP and programmes under non-development budget, projects funded by BCCTF, Annual Development Programme (ADP) of the current and previous years, CFF 2014, CPEIR 2012, Child budget series

- published by Finance Division and Gender budget reports published by Finance Division.
- (ii) Key Informant Interview (KII) was conducted by interviewing relevant officials involved at the policy level in the Ministries, of the Department and the Agencies. Data collected from them were verified using ADP, MBFs and other relevant documents and thus systematically arranged for review.
 - (iii) Visits were undertaken to the Department of Agriculture Extension (DAE), Bangladesh Water Development Board (BWDB), Bangladesh Climate Change Trust (BCCT), Forest Department, Department of Environment (DoE) and the Local Government Engineering Department (LGED) to interview the project personnel of CC related projects.
 - (iv) Stakeholders' input was gathered from workshops held on 25th April, 2017. This was attended by the budget and planning desk officials of selected six ministries and their relevant key departments/ agencies as well as the senior officials and relevant budget desk officials of FD. The workshop was aimed at sensitizing the participants about the preparation of climate sensitive MBFs using the Operational Guidelines for Inclusion of Climate Dimension in MBFs.
 - (v) Feedback was gathered from the meeting of Technical Advisory Group (TAG) of IBFCR Project held on 30th April and 18th May 2017.

Climate relevance assessment methodology

- (vi) Appendix 2 of CFF was reviewed to make realistic adjustments of the weights assigned to each category of climate interventions in the current context. The results of review are presented in Appendix 2. This appendix covers only activities of selected ministries. Full review of climate relevance criteria will take place while reviewing the CFF.
- (vii) Weights were assigned against projects and programmes undertaken by the selected ministries and division (about 600 development projects and programmes financed from non-development budget) "following the CC Relevance Review Criteria" and factored in the FY 2017-18 budgetary allocation for those to get the CC relevant budget portion.
- (viii) The percentage of CC relevance in development budget and non-development allocation for programmes was then factored in the Non-Development allocation for 'Secretariat' and associated 'Operational Units' to apportion their CC relevance and added up with the CC relevant project and programme allocation to get the overall CC relevance of the Ministry budget. For example,

given the total ministry budget is Tk. 100 crore of which Tk. 60 crore is meant for development budget and Tk. 40 crore for non-development budget (Tk. 20 crore for programmes and Tk. 20 crore for Operational Unit costs). Now if 30% of the development budget (i.e. Tk. 18 crore) and 15% of the programme budget (i.e. Tk. 3 crore) is climate sensitive, the resultant amount for projects and programmes is Tk. 21 crore. That means 26.25% (Tk. 21 crore) of Tk. 80 crore (Tk. 60 crore development allocation + Tk. 20 crore non-development programme allocation) is climate relevant. Therefore, 26.25% of Tk. 20 crore, total operational unit cost for the ministry, is then added up (Tk. 5.25 crore) with Tk. 21 crore calculated earlier and this makes up Tk. 26.25 crore which is 26.25% of the total budget. Hence, the climate relevance of the ministry is 26.25%.

Scope

The report extends its coverage to five big spending ministries which include the Ministry of Agriculture, Ministry of Water Resources, Ministry of Disaster Management and Relief, Ministry of Primary and Mass Education and Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives, and climate relevant lead ministry, the Ministry of Environment and Forests. The report provides analysis on climate relevant budget data during the period from FY 2014-15 to FY 2017-18. For analysis, revised budget for the FY 2014-15, FY 2015-16 and FY 2016-17, and proposed budget estimate for FY 2017-18 have been used.

Limitations

Comprehensiveness of the report had to be compromised to a certain extent due to several limitations that the study team came across while carrying out this exercise. Firstly, all relevant DPPs and TPPs of all CC related programmes and projects (including those funded by non-development budget) of the concerned ministries, divisions and departments were not available and, therefore the CC relevance was assessed based on project title and broad objectives. Secondly, during assessment it was found that the Climate-dimension relevant criteria in Appendix 2 of CFF needs further evidence based review in the current context. Thirdly, limited understanding of the climate financing issues among the relevant stakeholders at the policy level as well as at the operational level posed problems for the study team during the interviews and data collection. Finally, delayed availability of the ADP for FY 2017-18 left insufficient time and the report, therefore, had to be finalized quickly to meet the deadline of its presentation in the forthcoming budget session.

2. Budget Analysis of Relevant Climate Spending Ministries

2.1 Overview

This chapter of the report aims at reviewing the CC related expenditure trend of five of the top spending ministries of the government and that of the lead ministry for climate change issues i.e. Ministry of Environment and Forests. The CC relevance of the budget has been worked out based on weighted value of climate relevance presented in the Appendix-2 of CFF 2014. However, because of time lag between formulation of weighing method of climate relevance and preparation of this report, to accommodate change in the type and intensity of climate actions, certain adjustments have been made in the CC relevance weight. The revised matrix may be seen in the Appendix-2.

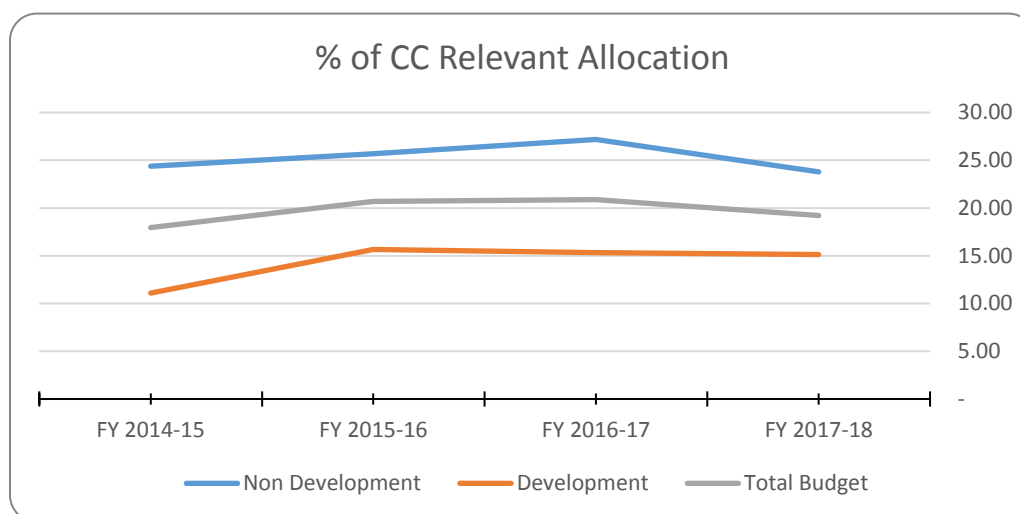


Figure 1: Trend of Climate Relevance in Selected Ministry Budgets

Source: Finance Division, Ministry of Finance

The figure-1 illustrates the trend of CC relevant allocation since FY 2014-15 as part of both development and non-development budget of the selected ministries. The total CC relevant percentage shows a slight increase from FY 2014-15 to FY 2017-18 by 1.25 percentage point. The development and non-development budget also followed the similar trend across the years.

Table 1: Trend of Climate Relevance in Selected Ministry Budgets

Budget Description	Annual Budget (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Non-Development Budget	358,797,697	309,209,969	300,456,768	270,827,806
<i>climate relevant allocation</i>	85,334,676	84,036,986	77,193,807	65,982,855
<i>as % of non-development</i>	23.78	27.18	25.69	24.36
Development Budget	403,219,100	350,529,332	297,119,124	253,047,122
<i>climate relevant allocation</i>	61,001,430	53,701,881	46,513,505	28,066,412
<i>as % of development budget</i>	15.13	15.32	15.65	11.09
Total Budget	762,016,797	659,739,301	597,575,892	523,874,928
<i>climate relevant allocation</i>	146,336,106	137,738,867	123,707,312	94,049,267
<i>as % of total budget</i>	19.20	20.88	20.70	17.95
<i>as % of GDP</i>	0.66	0.70	0.71	0.62

Source: Finance Division, Ministry of Finance

The table-1 shows that, in FY 2014-15, it began with an allocation in absolute terms of Tk. 9,404 crore and stood at Tk. 14,633 crore in FY 2017-18 which is 0.7 percent of GDP on an average during this period. The CC allocation in development budget increased by 117.35% since FY 2014-15. Non-development budget also increased by 29.33% during the same period.

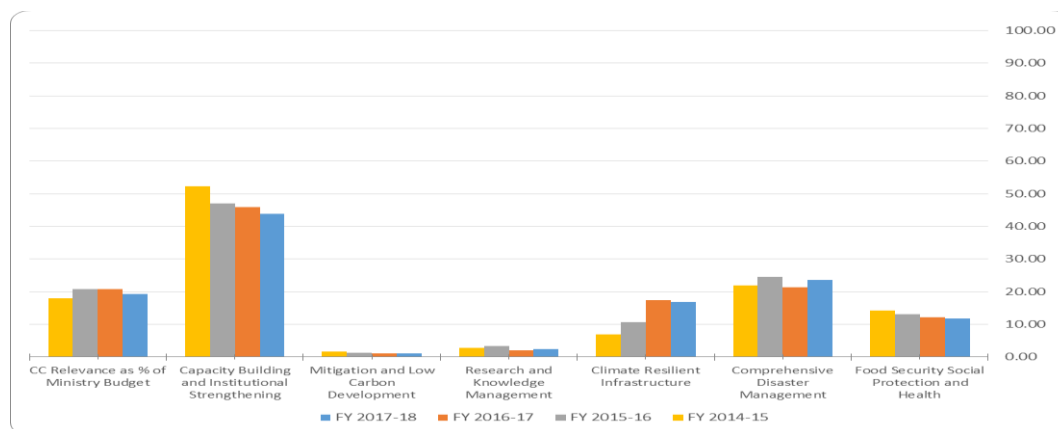


Figure 2: Allocation to BCCSAP Thematic Areas in Selected Ministry Budget

Source: Finance Division, Ministry of Finance

Figure-2 shows the CC related allocation percentage as part of the total ministry/division budget is shown in the figure above in accordance with the six BCCSAP Themes. Among the thematic areas, maximum allocation was made to Capacity Building and Institutional Strengthening followed by Comprehensive Disaster Management and Climate Resilient Infrastructure.

Table 2: Allocation in BCCSAP Thematic Areas in Selected Ministry Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	17,353,924	16,678,265	16,146,944	13,304,421
<i>% of total CC relevant allocation</i>	11.86	12.11	13.04	14.15
<i>% of Ministry budget</i>	2.28	2.19	2.12	1.75
Comprehensive Disaster Management	34,671,966	29,434,227	30,318,387	20,687,257
<i>% of total CC relevant allocation</i>	23.69	21.37	24.49	22.00
<i>% Ministry budget</i>	4.55	3.86	3.98	2.71
Climate Resilient Infrastructure	24,743,940	23,947,171	13,248,641	6,559,625
<i>% of total CC relevant allocation</i>	16.91	17.39	10.70	6.97
<i>% of Ministry budget</i>	3.25	3.14	1.74	0.86
Research and Knowledge Management	3,658,676	2,804,454	4,165,926	2,631,410
<i>% of total CC relevant allocation</i>	2.50	2.04	3.37	2.80
<i>% of Ministry budget</i>	0.48	0.37	0.55	0.35
Mitigation and Low Carbon Development	1,699,220	1,613,205	1,653,730	1,639,602
<i>% of total CC relevant allocation</i>	1.16	1.17	1.34	1.74
<i>% of Ministry budget</i>	0.22	0.21	0.22	0.22
Capacity Building and Institutional Strengthening	64,208,380	63,261,544	58,246,322	49,226,953
<i>% of total CC relevant allocation</i>	43.88	45.93	47.06	52.34
<i>% of Ministry budget</i>	8.43	8.30	7.64	6.46
Total CC Relevance (Tk)	146,336,106	137,738,867	123,779,950	94,049,267
<i>% of Total Budget - 6 Ministries</i>	19.20	20.88	20.71	17.95

Source: Finance Division, Ministry of Finance

The table-2 shows allocation according to BCCSAP thematic areas for FY 2014-15 to FY 2017-18 of selected ministries. Of the six thematic areas, Capacity Building and Institutional Strengthening across the years under review got the highest allocation followed by Comprehensive Disaster Management and Climate Resilient Infrastructure. It appears that out of the total CC relevant allocation, the share of Capacity Building and Institutional Strengthening in FY 2014-15 was 52.34%, 47.06% in FY 2015-16, 45.93% in FY 2016-17 and 43.88% in FY 2017-18.

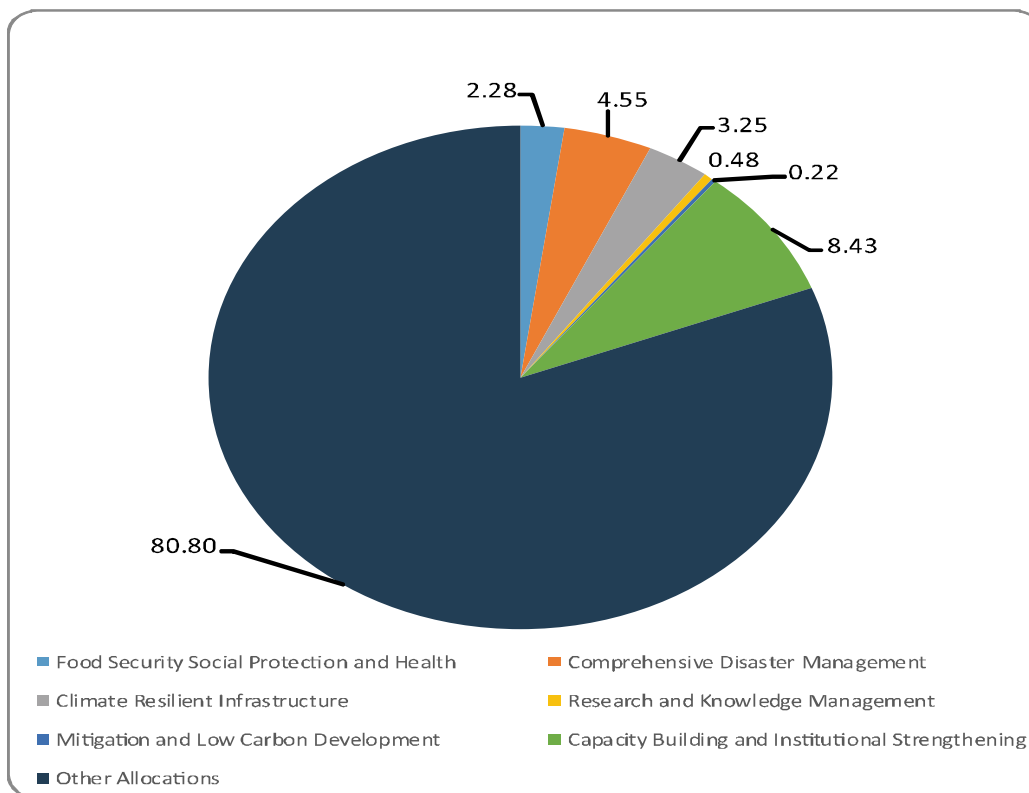


Figure 3: Climate Relevance in Selected Ministry Budgets for FY 2017-18

Source: Finance Division, Ministry of Finance

The figure-3 presents the distribution of allocation as per the BCCSAP themes in FY 2017-18 for six selected ministries. Out of total allocation, 19.20% is CC relevant. The CC relevant allocation is further distributed in six thematic areas where the largest share of 8.43% goes to Capacity Building and Institutional Strengthening. The allocation across the ministries in Research and Knowledge Management and Mitigation and Low Carbon Development measures remain as low as 0.48% and 0.22% respectively.

The summary Table-3 shows details of budget allocation of the selected ministries and their CC relevance in both non-development and development budget across the years since FY 2014-15. Cumulative budget of six ministries during FY 2014-15 to FY 2017-18 shows that on an average 19.73% is climate sensitive. In FY 2017-18 the CC relevance for non-development budget is 23.78% while it is 15.13% in the case of development budget.

Table 3: Climate Relevant Budget Profile for selected Ministries for FY 2014-15 to FY 2017-18

Ministry/Division	Ministry Budget (Selected Ministries) (amount in thousand taka)												Total Budget (6 Ministries)		
	FY 2017-18			FY 2016-17			FY 2015-16			FY 2014-15			FY 2014-15 to FY 2017-18		
	Non-Development	Development	Total	Non-Development	Development	Total	Non-Development	Development	Total	Non-Development	Development	Total	Non-Development	Development	Total
Primary and Mass Education	132,714,019	87,518,800	220,232,819	115,356,360	62,625,000	177,981,360	116,002,706	52,473,600	168,476,306	80,872,155	43,332,800	124,204,955	444,945,240	245,950,200	690,895,440
% of Ministry budget	60.26	39.74	100	64.81	35.19	100	68.85	31.15	100	65.11	34.89	100	64.40	35.60	100
CC allocation	6,613,768	3,126,295	9,740,063	7,226,411	3,375,300	10,601,711	11,850,142	2,446,532	14,296,673	7,397,907	1,910,426	9,308,333	33,088,228	10,858,552	43,946,781
CC allocation as % of-	4.98	3.57	4.42	6.26	5.39	5.96	10.22	4.66	8.49	9.15	4.41	7.49	7.44	4.41	6.36
Local Government Division	31,495,600	215,245,500	246,741,100	28,469,280	194,065,000	222,534,280	24,854,357	167,357,200	192,211,557	20,998,260	148,606,700	169,604,960	105,817,497	725,274,400	831,091,897
% of Ministry budget	12.76	87.24	100	12.79	87.21	100	12.93	87.07	100	12.38	87.62	100	12.73	87.27	100
CC allocation	1,691,018	16,156,315	17,847,333	1,508,948	12,677,095	14,186,043	1,406,230	15,463,475	16,869,705	1,113,851	9,504,520	10,618,372	5,720,046	53,801,405	59,521,452
CC allocation as % of-	5.37	7.51	7.23	5.30	6.53	6.37	5.66	9.24	8.78	5.30	6.40	6.26	5.41	7.42	7.16
Agriculture	118,042,800	17,998,800	136,041,600	86,070,673	17,718,400	103,789,073	93,311,519	18,114,200	111,425,719	108,512,120	14,316,400	122,828,520	405,937,112	68,147,800	474,084,912
% of Ministry budget	86.77	13.23	100	82.93	17.07	100	83.74	16.26	100	88.34	11.66	100	85.63	14.37	100
CC allocation	46,932,807	8,274,185	55,206,992	47,030,257	7,566,825	54,597,082	37,329,991	8,177,580	45,507,571	35,402,282	5,695,459	41,097,741	166,695,336	29,714,049	196,409,385
CC allocation as % of-	39.76	45.97	40.58	54.64	42.71	52.60	40.01	45.14	40.84	32.63	39.78	33.46	41.06	43.60	41.43
Environment and Forest	5,359,700	5,845,900	11,205,600	14,945,186	3,562,900	18,508,086	5,623,115	4,214,600	9,837,715	5,163,082	4,197,600	9,360,682	31,091,083	17,821,000	48,912,083
% of Ministry budget	47.83	52.17	100	80.75	19.25	100	57.16	42.84	100	55.16	44.84	100	63.57	36.43	100
CC allocation	2,091,353	2,143,625	4,234,978	2,290,077	1,599,915	3,889,992	2,146,460	1,927,755	4,074,215	2,756,338	1,385,889	4,142,226	9,284,228	7,057,184	16,341,411
CC allocation as % of-	39.02	36.67	37.79	15.32	44.90	21.02	38.17	45.74	41.41	53.39	33.02	44.25	29.86	39.60	33.41
Water Resources	12,517,300	46,747,100	59,264,400	9,563,493	37,892,300	47,455,793	9,302,529	28,613,300	37,915,829	7,880,000	21,417,800	29,297,800	39,263,322	134,670,500	173,933,822
% of Ministry budget	21.12	78.88	100	20.15	79.85	100	24.53	75.47	100	26.90	73.10	100	22.57	77.43	100
CC allocation	2,508,996	18,815,725	21,324,721	1,913,033	13,965,100	15,878,133	1,864,408	9,808,985	11,673,393	1,562,917	7,071,316	8,634,233	7,849,354	49,661,126	57,510,480
CC allocation as % of-	20.04	40.25	35.98	20.00	36.85	33.46	20.04	34.28	30.79	19.83	33.02	29.47	19.99	36.88	33.06
Disaster Management and Relief	58,668,278	29,863,000	88,531,278	54,804,977	34,665,732	89,470,709	51,362,542	26,346,224	77,708,766	47,402,189	21,175,822	68,578,011	212,237,986	112,050,778	324,288,764
% of Ministry budget	66.27	33.73	100	61.25	38.75	100	66.10	33.90	100	69.12	30.88	100	65.45	34.55	100
CC allocation	25,496,734	12,485,285	37,982,019	24,068,261	14,517,646	38,585,907	22,596,576	8,689,178	31,285,755	17,749,560	2,498,802	20,248,363	89,911,132	38,190,912	128,102,043
CC allocation as % of-	43.46	41.81	42.90	43.92	41.88	43.13	43.99	32.98	40.26	37.44	11.80	29.53	42.36	34.08	39.50
Total Budget (Tk)	358,797,697	403,219,100	762,016,797	309,209,969	350,529,332	659,739,301	300,456,768	297,119,124	597,575,892	270,827,806	253,047,122	523,874,928	1,239,292,240	1,303,914,678	2,543,206,918
% of Ministry budget	47.09	52.91	100	46.87	53.13	100	50.28	49.72	100	51.70	48.30	100	48.73	51.27	100
CC Relevant allocation	85,334,676	61,001,430	146,336,106	84,036,986	53,701,881	137,738,867	77,193,807	46,513,505	123,707,312	65,982,855	28,066,412	94,049,267	312,548,324	189,283,228	501,831,552
CC allocation as % of	23.78	15.13	19.20	27.18	15.32	20.88	25.69	15.65	20.70	24.36	11.09	17.95	25.22	14.52	19.73

Source: Finance Division, Ministry of Finance

2.2 Ministry of Water Resources (MoWR)

Ensuring sustainable development of water resources through balanced and integrated management for the sake of lives and livelihood of the people is the stated mission of the Ministry of Water Resources. Three out of eight major functions of the ministry listed in the FY 2017-18 MBF directly address the adverse impact of climate change. These are,

- Formulate national policy and provide technical assistance for irrigation, flood control, removal of water logging, improvement of drainage systems, protection from river erosion, prevention of salinity and desertification;
- Execute all activities related to flood forecasting and warning, flood control infrastructures, identification of causes of flood and assessment of the damage done by flood;
- Conduct basic and applied researches on river basin management and development, flood control infrastructures and conduct hydrological survey for data collection.

The activities ascribed under the above-mentioned functions are directly linked to climate change resilience programmes/projects. Other functions are somewhat relevant to climate change. Although the MBF do not directly mention strategies and actions to combat adverse effect of climate change, activities under project and programmes undertaken by the ministry focuses on the climate change agenda of the MoWR.

Projects strongly relevant to climate change under the MoWR mentioned in the MBF are: rehabilitation, protection, strengthening of polders; repair of breaches of polders; and coastal embankments improvement projects. Implementation of these projects has direct impact on climate change adaptation. Significantly relevant CC projects under MoWR are flood control and livelihood in hoar areas, emergency cyclone rehabilitation, erosion protection, river bank protection, dredging of river, pre-monsoon flood protection and restoration and reconstruction of submerged embankments. There are some other projects which fall under the categories of 'somewhat' and 'implicitly relevant' climate change criteria also contribute to CC adaptation.

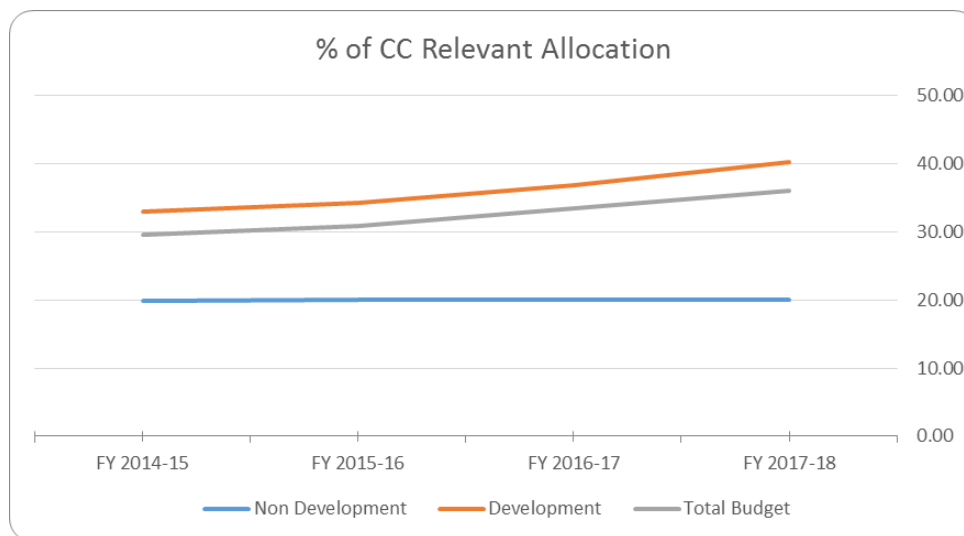


Figure 4: Trend of Climate Relevance in Ministry of Water Resources Budget

Source: Finance Division, Ministry of Finance

Figure-4 shows the trend of budget allocation in CC relevant areas shows a rise in percentage in the total allocation of resources, and development, since FY 2014-15. The share of development budget of this ministry is higher than that of non-development budget. Across the years, the percentage of CC relevant allocation under non-development budget remained plateaued.

Table 4: Trend of Climate Relevance in Ministry of Water Resources Budget

Budget Description	Annual Budget (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Non-Development Budget	12,517,300	9,563,493	9,302,529	7,880,000
<i>climate relevant allocation</i>	2,508,996	1,913,033	1,864,408	1,562,917
<i>as % of non-development</i>	20.04	20.05	20.04	20.00
Development Budget	46,747,100	37,892,300	28,613,300	21,417,800
<i>climate relevant allocation</i>	18,815,725	13,965,100	9,808,985	7,071,316
<i>as % of development budget</i>	40.25	37.66	34.28	35.00
Total Budget	59,264,400	47,455,793	37,915,829	29,297,800
<i>climate relevant allocation</i>	21,324,721	15,878,133	11,673,393	8,634,233
<i>as % of total budget</i>	35.98	33.46	30.79	29.47

Source: Finance Division, Ministry of Finance

Table-4 shows a steady increase in the total climate relevant allocation across the years both in absolute terms and in percentage. In the case of development budget, there is also a steady increase in percentage with a negligible fall by 0.72% in FY 2015-16. However, in absolute term there is always an upward trend. In non-development budget, it remained plateaued in percentage but in absolute terms the CC allocation had a significant rise in FY 2017-18 compared to FY 2016-17.

Table 5: Allocation in BCCSAP Thematic Areas in Ministry of Water Resources Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	2,606,360	2,355,650	2,064,080	1,297,993
<i>% of total CC relevant allocation</i>	12.22	14.84	17.68	15.03
<i>% of Ministry budget</i>	4.40	4.96	5.44	4.43
Comprehensive Disaster Management	11,473,070	8,384,545	6,194,950	4,524,513
<i>% of total CC relevant allocation</i>	53.80	52.81	53.07	52.40
<i>% Ministry budget</i>	19.36	17.67	16.34	15.44
Climate Resilient Infrastructure	3,611,770	2,683,440	1,222,110	1,039,804
<i>% of total CC relevant allocation</i>	16.94	16.90	10.47	12.04
<i>% of Ministry budget</i>	6.09	5.65	3.22	3.55
Research and Knowledge Management	406,575	149,405	103,025	66,205
<i>% of total CC relevant allocation</i>	1.91	0.94	0.88	0.77
<i>% of Ministry budget</i>	0.69	0.31	0.27	0.23
Mitigation and Low Carbon Development	-	-	-	-
<i>% of total CC relevant allocation</i>	-	-	-	-
<i>% of Ministry budget</i>	-	-	-	-
Capacity Building and Institutional Strengthening	3,226,946	2,305,093	2,089,228	1,705,719
<i>% of total CC relevant allocation</i>	15.13	14.52	17.90	19.76
<i>% of Ministry budget</i>	5.44	4.86	5.51	5.82
Total CC Relevance (TK)	21,324,721	15,878,133	11,673,393	8,634,233
<i>% of Total Budget</i>	35.98	33.46	30.79	29.47

Source: Finance Division, Ministry of Finance

Table-5 presents an analysis on the allocation trend of the Ministry of Water Resources per BCCSAP thematic areas. In FY 2017-18, maximum allocation has been made to the BCCSAP thematic area of Comprehensive Disaster Management, 19.36% of the total budget and more than half of the allocation has been made to this CC relevant area. In absolute term, the allocation in this thematic area shows a gradual increase from FY 2014-15 to FY 2017-18. Climate Resilient Infrastructures showed an increasing trend in absolute term from FY 2014-15 to FY 2017-18. The share of Capacity Building and Institutional Strengthening allocation in absolute term increased across the years. Allocation in Research and Knowledge Management has been on the increase since FY 2014-15. Figure-5 shows the allocation to BCCSAP thematic areas in Ministry of Water Resources.

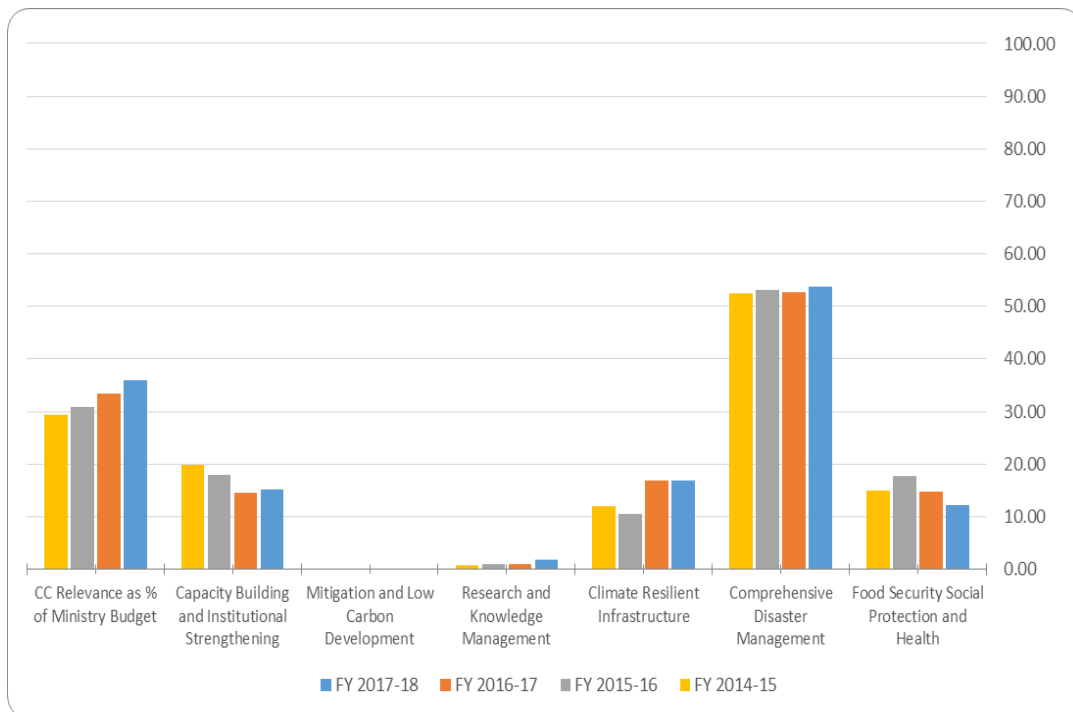


Figure 5: Allocation to BCCSAP Thematic Areas in Ministry of Water Resources Budget
Source: Finance Division, Ministry of Finance

Figure-6 shows climate relevance in MoWR Budget for FY 2017-18. Total allocation of MoWR in FY 2017-18 budget is Tk. 5,926 crore, of which 35.98% has been allocated for CC related projects/programmes. Highest allocation of 19.36% has been made to Comprehensive Disaster Management, followed by Climate Resilient Infrastructure, 6.09%, Capacity Building and Institutional Strengthening is 5.44%, Food Security, Social Protection and Health is 4.40%, and Research and Knowledge Management is 0.69%. Comprehensive Disaster Management and Climate Resilient Infrastructure together account for 25.45% of the total ministry budget.

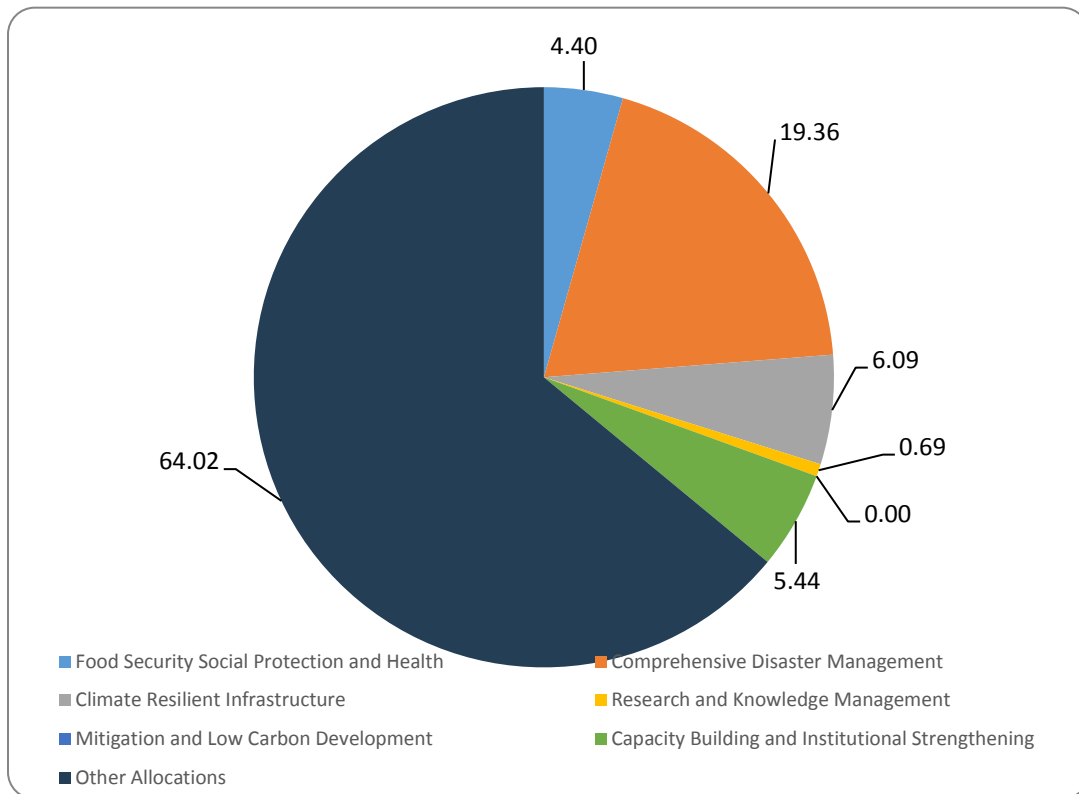


Figure 6: Climate Relevance in MoWR Budget for FY 2017-18

Source: Finance Division, Ministry of Finance

2.3 Ministry of Agriculture (MoA)

Ensuring food security by enhancing productivity, increasing production in the crop sector, improving marketing system as well as diversification of crops and production of more crops with more nutrient value are the stipulated goals of the Ministry of Agriculture. The following five out of 8 major functions of the ministry listed in the FY 2017-18 MBF directly address the adverse impact of climate change:

- Agricultural research and education program;
- Agricultural extension and training;
- Production, standardisation, certification, preservation and distribution of quality seeds;
- Agricultural support and rehabilitation;
- Minor irrigation programs.

For achievement of MBF objectives the MoA has initiated many investment programmes/projects among which CC related projects are prominent. The projects and programmes outlined in the activity list of MBF of MoA include increase of agricultural productivity and sustain the growth in the face of adverse effect of climate change. Analysis of FY 2017-18's MBF of the MoA highlights these points. In line with Medium-Term Strategic Objectives, the MBF targeted following objectives in formulating agriculture budget. The impact of budgetary intervention also assesses the issue of climate change. One of the strategic objectives - innovation of technologies and varieties of rice and other crops tolerant to salinity, drought, water submergence and other adverse conditions may be cited here. The CC relevant programmes mainly centred around 'Capacity Building and Institutional Strengthening' involving capacity enhancement of scientists and agricultural workers at different levels and farmers to meet the challenges of climate change. The projects on innovation of crops tolerant to saline, draught and water submergence, and improved technologies and other CC relevant areas have been included in the FY 2017-18 budgets. Allocation of 40.58% in FY 2017-18 budgets in the CC relevant activities demonstrates the importance of climate budget in Ministry of Agriculture.

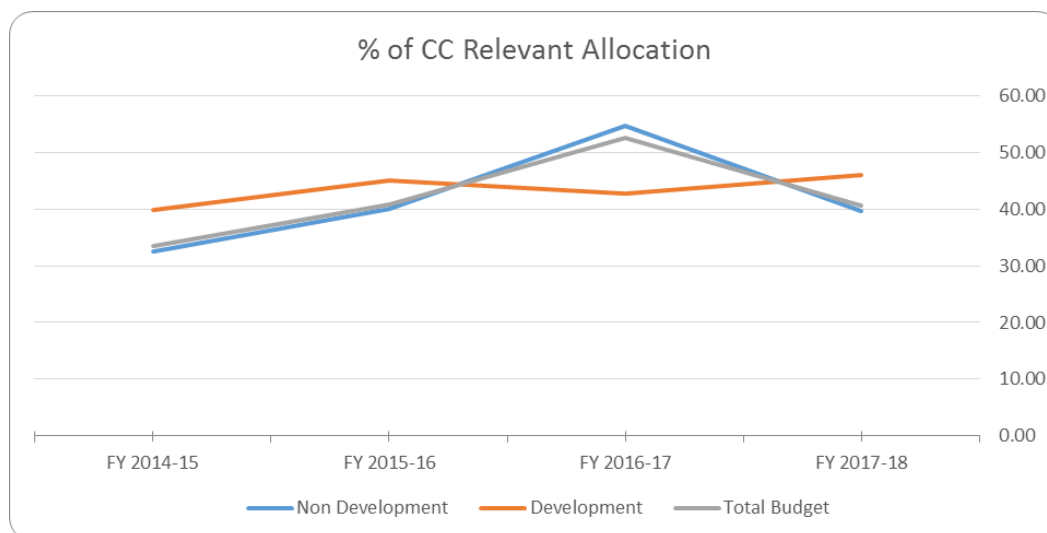


Figure 7: Trend of Climate Relevance in Ministry of Agriculture Budget

Source: Finance Division, Ministry of Finance

Figure-7 presents the trend of non-development and development budget allocation since FY 2014-15. Total CC relevant allocation together with non-development budget in percentage continued to increase till FY 2016-17. The development budget in percentage shows an upward trend except FY 2016-17.

Table 6: Trend of Climate Relevance in Ministry of Agriculture Budget

Budget Description	Annual Budget (amount in thousand taka)			
	FY 2017-18	2016-17	2015-16	2014-15
Non-Development Budget	118,042,800	86,070,673	93,311,519	108,512,120
<i>climate relevant allocation</i>	46,932,807	47,030,257	37,329,991	35,402,282
<i>as % of non-development</i>	39.76	40.00	40.01	40.00
Development Budget	17,998,800	17,718,400	18,114,200	14,316,400
<i>climate relevant allocation</i>	8,274,185	7,566,825	8,177,580	5,695,459
<i>as % of development budget</i>	45.97	44.14	45.14	45.26
Total Budget	136,041,600	103,789,073	111,425,719	122,828,520
<i>climate relevant allocation</i>	55,206,992	54,597,082	45,507,571	41,097,741
<i>as % of total budget</i>	40.58	52.60	40.84	33.46

Source: Finance Division, Ministry of Finance

Table-6 presents the trend of CC relevance allocation in Ministry of Agriculture since FY 2014-15. There is a rise in allocation since FY 2014-15, in absolute terms. In FY 2014-15 the allocation to CC relevant budget was Tk. 4,109 crore; in FY 2017-18 it rose to Tk. 5,520 crore in absolute terms. There was a steady rise in allocation during the years in between. In FY 2016-17 the CC relevant allocation was the highest which stood at 52.60%.

Table 7: Allocation in BCCSAP Thematic Areas in Ministry of Agriculture Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	5,148,024	4,842,600	5,551,804	4,010,707
<i>% of total CC relevant allocation</i>	9.32	8.87	12.18	9.76
<i>% of Ministry budget</i>	3.78	4.67	4.98	3.27
Comprehensive Disaster Management	34,860	22,840	22,040	-
<i>% of total CC relevant allocation</i>	0.06	0.04	0.05	-
<i>% Ministry budget</i>	0.03	0.02	0.02	-
Climate Resilient Infrastructure	275,650	379,825	600,230	419,216
<i>% of total CC relevant allocation</i>	0.50	0.70	1.32	1.02
<i>% of Ministry budget</i>	0.20	0.37	0.54	0.34
Research and Knowledge Management	2,064,591	1,210,955	1,205,560	770,088
<i>% of total CC relevant allocation</i>	3.74	2.22	2.64	1.87
<i>% of Ministry budget</i>	1.52	1.17	1.08	0.63
Mitigation and Low Carbon Development	-	-	-	-
<i>% of total CC relevant allocation</i>	-	-	-	-
<i>% of Ministry budget</i>	-	-	-	-
Capacity Building and Institutional Strengthening	47,683,867	48,140,862	38,200,575	35,897,729
<i>% of total CC relevant allocation</i>	86.37	88.17	83.81	87.35
<i>% of Ministry budget</i>	35.05	46.38	34.28	29.23
Total CC Relevance (Tk)	55,206,992	54,597,082	45,580,209	41,097,741
<i>% of Total Budget</i>	40.58	52.60	40.91	33.46

Source: Finance Division, Ministry of Finance

Table-7 and figure-8 shows the allocation in BCCSAP thematic areas in Ministry of Agriculture Budget. 'Capacity Building and Institutional Strengthening' received maximum allocation, throughout the period, in absolute terms and in percentage. It remains at the top of the CC spending areas and is about 86.37% of CC relevant allocation in FY 2017-18. CC relevant allocation in Research and Knowledge Management has been on the increase across the years from 0.63% in FY 2014-15 to 1.52% in FY 2017-18.

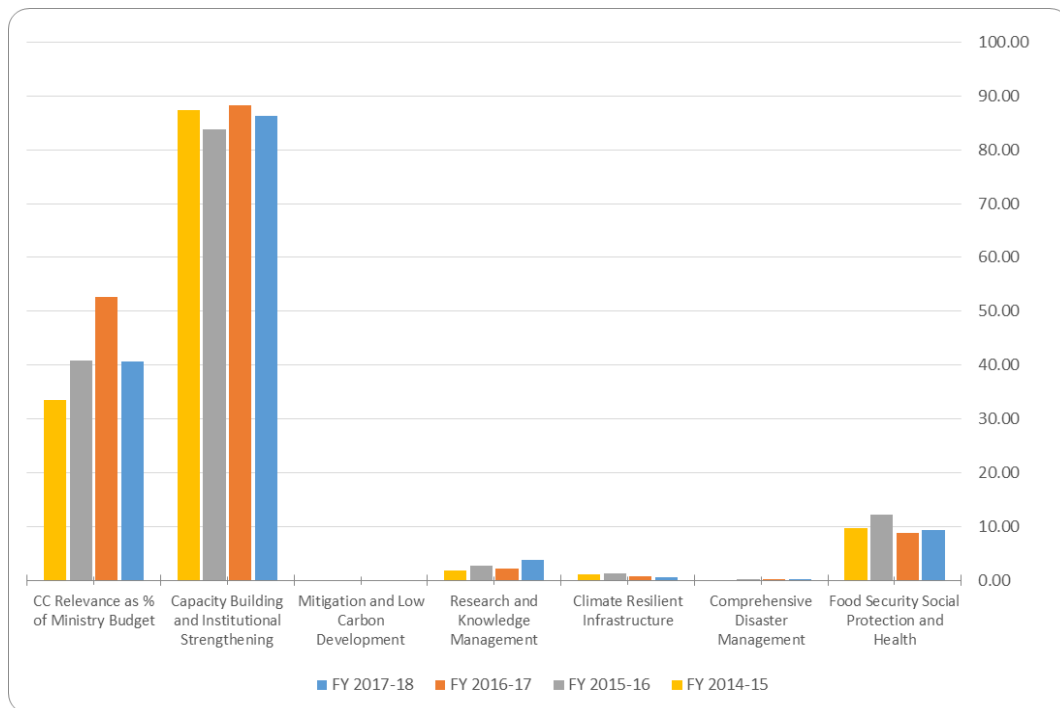


Figure 8: Allocation to BCCSAP Thematic Areas in Ministry of Agriculture Budget
 Source: Finance Division, Ministry of Finance

Figure-9 shows the climate relevance in MoA Budget for FY 2017-18. Food Security, Social Protection and Health has been allocated 3.78% of the ministry budget in FY 2017-18. 'Capacity Building and Institutional Strengthening' has been given highest priority which is reflected in the allocation (35.05%). Budget allocation for Research and Knowledge Management is 1.52% in FY is 2017-18.

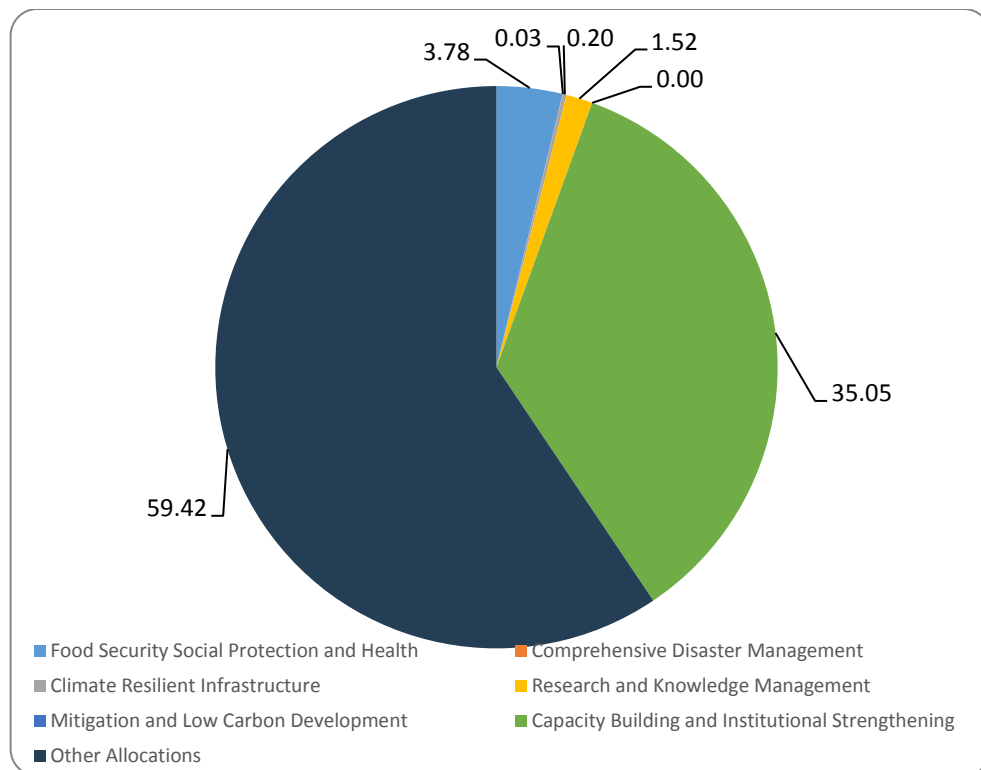


Figure 9: Climate Relevance in MoA Budget for FY 2017-18
 Source: Finance Division, Ministry of Finance

2.4 Ministry of Disaster Management and Relief (MoDMR)

The Ministry of Disaster Management and Relief aims at mitigating the risks of the people, especially the poor and vulnerable, during disasters by strengthening the overall capacity of disaster management and establish an efficient and capable emergency disaster response system to face large scale disasters. Major functions of the Ministry include preparation of disaster risk reduction plan, taking up activities for training and research, and coordination, monitoring and evaluation among local, regional and international development partners. Strategic objectives described in the MBF precisely define the functions. Two of the strategic objectives with direct link to CC relevance criteria are:

- Implementation of risk reduction and climate change adaptation programmes;
- Identification of internal risks and reducing loss of lives and properties through early warning.

Two on-going projects, viz., *Construction of Multipurpose Cyclone Shelters in Coastal Areas* and *Construction of Flood Shelter in Flood Prone Areas across the Country*, fall within the category of strong CC relevance. Similarly, *Cyclone Preparedness Programme (CPP)* with Tk. 80.2 crore allocations in FY 2017-18 belongs to the Strongly Relevant category, while *Employment Scheme for Extremely Poor People* project belongs to the significantly relevant category. *Urban Resilience Project* and *Procurement of Rescue Equipment* fall within the category of somewhat relevant. Together all these projects and programmes have been grouped under Comprehensive Disaster Management.

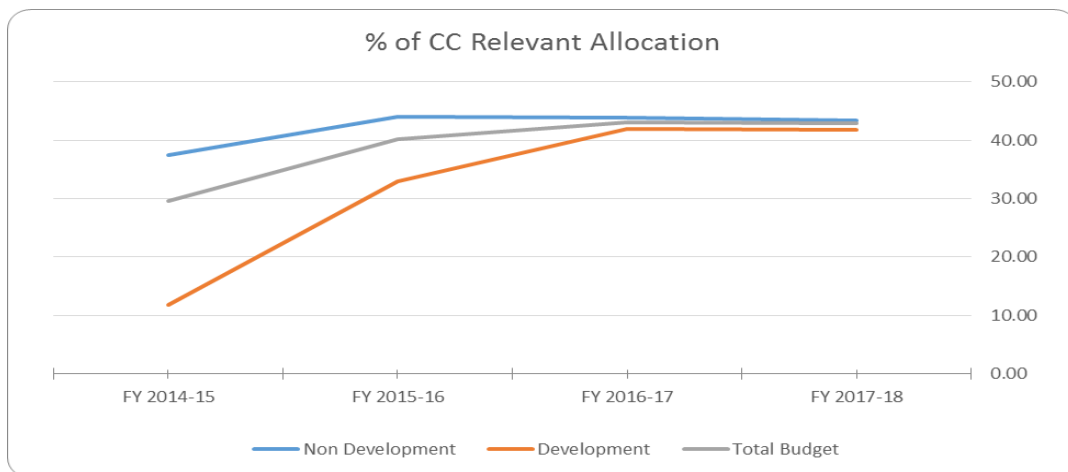


Figure 10 : Trend of Climate Relevance in Disaster Management and Relief Budget

Source: Finance Division, Ministry of Finance

Figure-10 presents the trend of climate relevance in the Ministry of Disaster Management and Relief since FY 2014-15. From FY 2014-15 to FY 2017-18, there is an overall rise in total allocation of the ministry (Tk. 2,024 crore and Tk. 3,798 crore accordingly). In the case of development budget there is a sharp increase in the CC relevant allocation from FY 2014-15 to FY 2016-17.

Table 8: Trend of Climate Relevance in Disaster Management and Relief Budget

Budget Description	Annual Budget (amount in thousand taka)			
	FY 2017-18	2016-17	2015-16	2014-15
Non-Development Budget	58,668,278	54,804,977	51,362,542	47,402,189
<i>climate relevant allocation</i>	25,496,734	24,068,261	22,596,576	17,749,560
<i>as % of non-development</i>	43.46	44.51	43.99	47.57
Development Budget	29,863,000	34,665,732	26,346,224	21,175,822
<i>climate relevant allocation</i>	12,485,285	14,517,646	8,689,178	2,498,802
<i>as % of development budget</i>	41.81	41.88	32.98	26.75
Total Budget	88,531,278	89,470,709	77,708,766	68,578,011
<i>climate relevant allocation</i>	37,982,019	38,585,907	31,285,755	20,248,363
<i>as % of total budget</i>	42.90	43.13	40.26	29.53

Source: Finance Division, Ministry of Finance

Table-8 shows that the climate relevant allocation against total budget had a significant rise between FY2014-15 to FY 2015-16. The amount allocated to CC relevant themes was Tk. 2,024 crore in FY 2014-15, and it stood at Tk. 3,798 crore in FY 2017-18. Since FY 2015-16, more than 40% of the total budget has been allocated to CC relevant activities.

Table 9: Allocation in BCCSAP Thematic Areas in Ministry of Disaster Management Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	6,600,000	6,600,000	6,000,000	5,962,296
<i>% of total CC relevant allocation</i>	17.38	17.10	19.18	29.45
<i>% of Ministry budget</i>	7.45	7.38	7.72	8.69
Comprehensive Disaster Management	19,490,651	16,793,367	18,511,267	12,622,088
<i>% of total CC relevant allocation</i>	51.32	43.52	59.17	62.34
<i>% Ministry budget</i>	22.02	18.77	23.82	18.41
Climate Resilient Infrastructure	10,853,000	14,094,946	5,937,488	1,289,493
<i>% of total CC relevant allocation</i>	28.57	36.53	18.98	6.37
<i>% of Ministry budget</i>	12.26	15.75	7.64	1.88
Research and Knowledge Management	170,290	183,541	149,331	86,517
<i>% of total CC relevant allocation</i>	0.45	0.48	0.48	0.43
<i>% of Ministry budget</i>	0.19	0.21	0.19	0.13
Mitigation and Low Carbon Development	-	-	-	-
<i>% of total CC relevant allocation</i>	-	-	-	-
<i>% of Ministry budget</i>	-	-	-	-
Capacity Building and Institutional Strengthening	868,079	914,052	687,669	287,969
<i>% of total CC relevant allocation</i>	2.29	2.37	2.20	1.42
<i>% of Ministry budget</i>	0.98	1.02	0.88	0.42
Total CC Relevance (Tk)	37,982,019	38,585,907	31,285,755	20,248,363
<i>% of Total Budget</i>	42.90	43.13	40.26	29.53

Source: Finance Division, Ministry of Finance

Table-9 shows the allocation in BCCSAP thematic areas. ‘Comprehensive Disaster Management’ has the largest share of the CC relevant allocation in FY 2017-18. The estimated outlay in this area is Tk. 1,949 crore or 22.02% of the total ministry budget and 51.32% of the CC relevant allocation. Percentage-wise this is 3.25% increase from FY 2016-17 ministry budget and 7.8% increase in CC relevant allocation. Since FY 2014-15 this thematic area maintained the largest share. Allocation in ‘Climate Resilient Infrastructure’ had a significant increase to 15.75% in FY2016-17 from 1.88% in 2014-15.

Figure-11 illustrates the distribution of CC allocation among the six thematic areas of BCCSAP across the years since FY 2014-15. Most of the climate relevant allocation was made in ‘Comprehensive Disaster Management and Climate Resilient Infrastructure’.

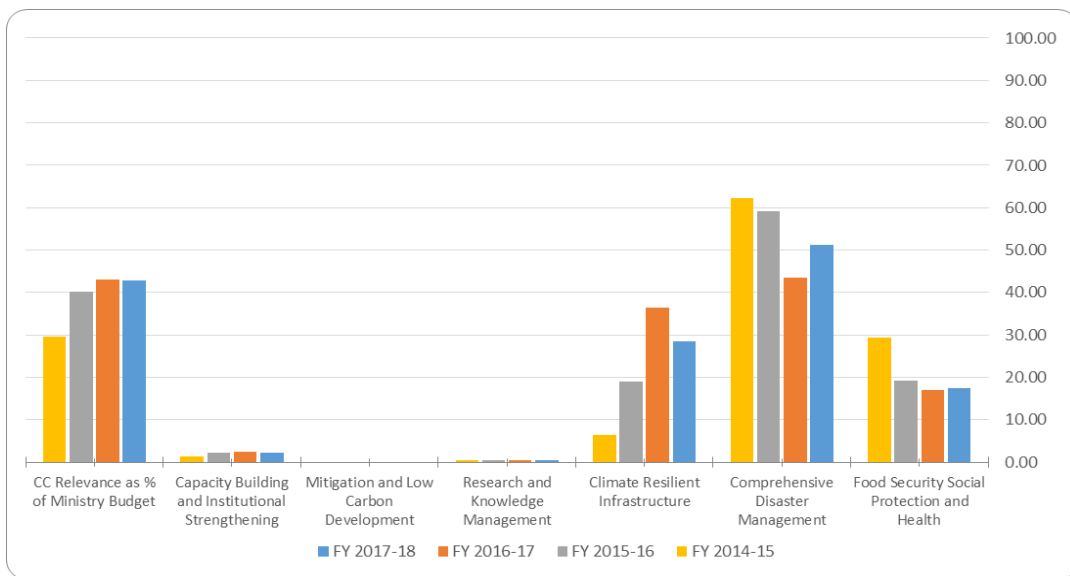


Figure 11: Allocation to BCCSAP Thematic Areas in Ministry of Disaster Management Budget
 Source: Finance Division, Ministry of Finance

Figure-12 shows climate relevance in MoDMR Budget in FY 2017-18. The share of CC relevant expenditure is 42.90%. Among the BCCSAP themes, 22.02% of ministry budget is allocated for Comprehensive Disaster Management, which is the main function of this ministry. Climate Resilient Infrastructure has the share of 12.26% and Food Security, Social Protection and Health have 7.45% of ministry budget as CC relevant allocation.

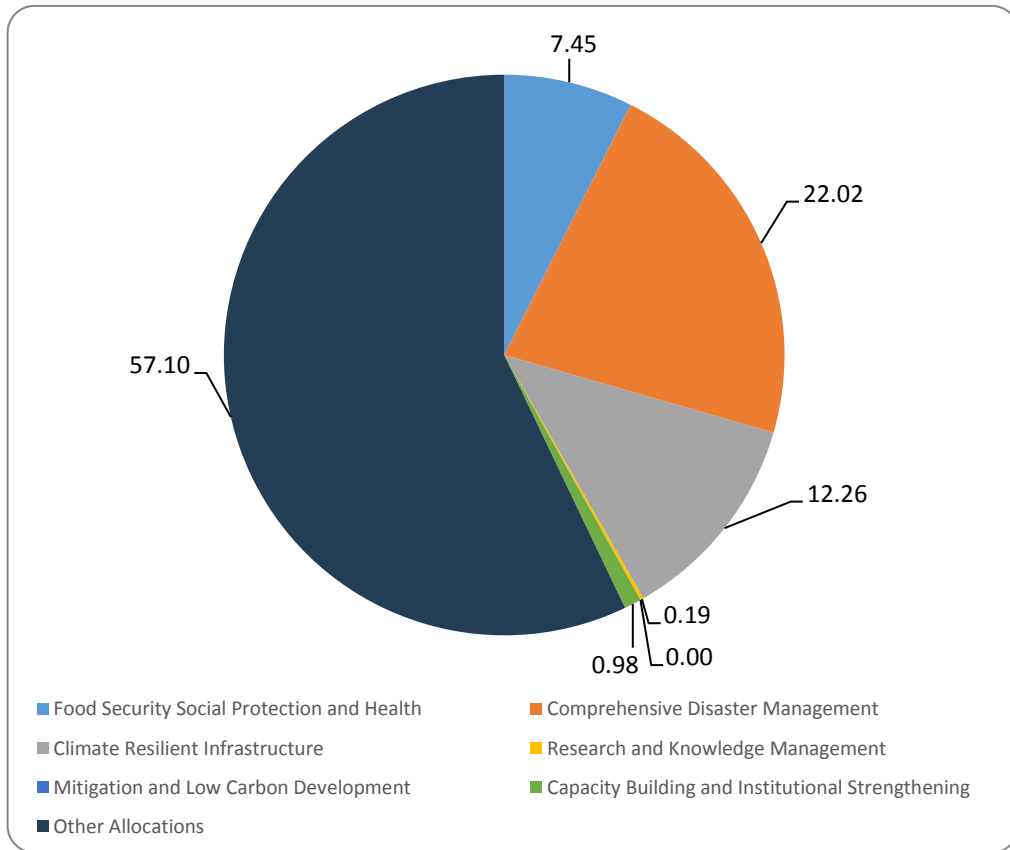


Figure 12: Climate Relevance in MoDMR Budget for FY 2017-18

Source: Finance Division, Ministry of Finance

2.5 Ministry of Environment and Forests (MoEF)

Importance of Ministry of Environment and Forests in the battle against adverse effect of climate change lies in its central role as the lead ministry for framing rules, regulations and policies relating to CC. Ensuring habitable and sustainable environment for the present and the future generations of the country is the mission of the MoEF. Its two major functions amply illustrate its role as the lead ministry of the government for protection, conservation and improvement of the environment and its quality, and control of environmental pollution and to undertake adaptation and implementation of appropriate clauses contained in different regional and international conventions, agreements, and protocols relating to environment, forestry and wild life. The Medium-Term Strategic Objectives like mitigating the adverse effects of climate change, conservation and sustainable management of forest resources, control of pollution and conservation of bio-diversity have direct link with CC relevant criteria. The MoEF selected following priority areas/programmes in the MBF of 2017-18 in line with Medium-Term Strategic Objectives described above. These are:

- Tackling the risks arising from climate change;
- Conservation and sustainable management of forest;
- Control of pollution;
- Conservation of bio-diversity.

All the projects undertaken by this ministry are CC relevant. Of these projects, *Afforestation in five Coastal Districts of Bangladesh*, *Char Development and Settlement Project-4*, *Integrating community based adaptation into Afforestation and Reforestation in Bangladesh* and *Climate Resilient Ecosystem and Livelihoods (CREL)* belong to the category of Strongly Relevant criterion of climate dimension. Other projects are small but they are also in the margin of 'Strongly Climate Relevant'.

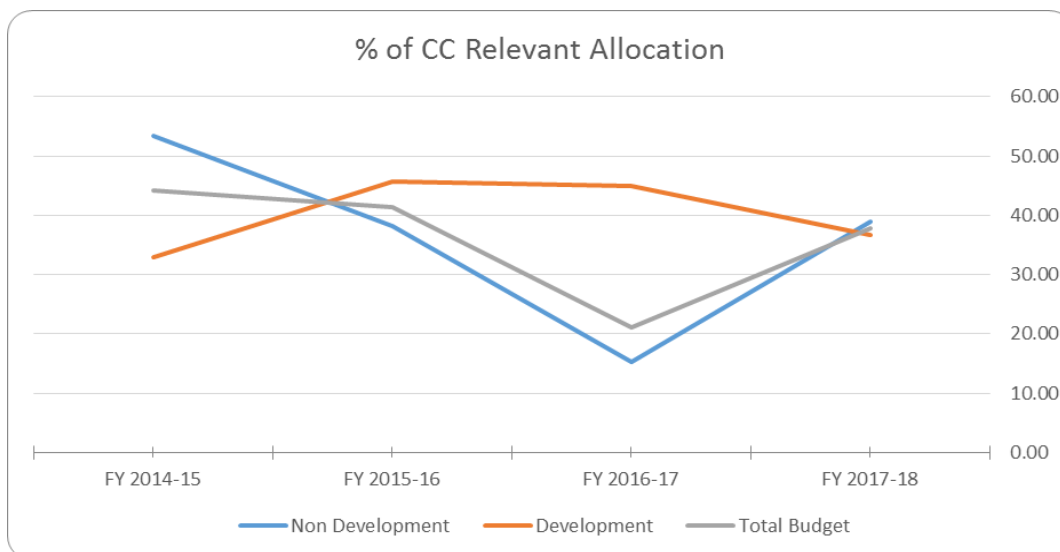


Figure 13: Trend of Climate Relevance in Environment and Forests Budget

Source: Finance Division, Ministry of Finance

Figure-13 shows that the total CC relevant allocation increased by 16.78 percentage point from FY 2016-17 to FY 2017-18. The non-development budget also followed the similar pattern of increase during the same period. In the case of development budget the CC relevant allocation increased in FY 2015-16, remained stable till FY 2016-17.

Table 10: Trend of Climate Relevance in the Ministry of Environment and Forests Budget

Budget Description	Annual Budget (amount in thousand taka)			
	FY 2017-18	2016-17	2015-16	2014-15
Non-Development Budget	5,359,700	14,945,186	5,623,115	5,163,082
<i>climate relevant allocation</i>	2,091,353	2,290,077	2,146,460	2,756,338
<i>as % of non-development</i>	39.02	15.32	38.17	54.87
Development Budget	5,845,900	3,562,900	4,214,600	4,197,600
<i>climate relevant allocation</i>	2,143,625	1,599,915	1,927,755	1,385,889
<i>as % of development budget</i>	36.67	44.90	45.74	42.05
Total Budget	11,205,600	18,508,086	9,837,715	9,360,682
<i>climate relevant allocation</i>	4,234,978	3,889,992	4,074,215	4,142,226
<i>as % of total budget</i>	37.79	21.02	41.41	44.25

Source: Finance Division, Ministry of Finance

Table-10 shows the trend of climate relevance in the budget for the Ministry Environment and Forests. Total climate relevant budget remained broadly stable across the years under review. Total CC relevant allocation remained almost same across the years with a decrease in FY 2016-17.

Table 11: Allocation in BCCSAP Thematic Areas in Ministry of Environment & Forests Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	229,240	254,480	246,020	409,661
<i>% of total CC relevant allocation</i>	5.41	6.54	6.04	9.89
<i>% of Ministry budget</i>	2.05	1.37	2.50	4.38
Comprehensive Disaster Management	344,605	472,800	500,995	607,319
<i>% of total CC relevant allocation</i>	8.14	12.15	12.30	14.66
<i>% Ministry budget</i>	3.08	2.55	5.09	6.49
Climate Resilient Infrastructure	199,380	171,370	192,090	289,972
<i>% of total CC relevant allocation</i>	4.71	4.41	4.71	7.00
<i>% of Ministry budget</i>	1.78	0.93	1.95	3.10
Research and Knowledge Management	651,581	376,329	482,710	457,931
<i>% of total CC relevant allocation</i>	15.39	9.67	11.85	11.06
<i>% of Ministry budget</i>	5.81	2.03	4.91	4.89
Mitigation and Low Carbon Development	640,050	581,405	605,870	589,057
<i>% of total CC relevant allocation</i>	15.11	14.95	14.87	14.22
<i>% of Ministry budget</i>	5.71	3.14	6.16	6.29
Capacity Building and Institutional Strengthening	2,170,123	2,033,608	2,046,531	1,788,288
<i>% of total CC relevant allocation</i>	51.24	52.28	50.23	43.17
<i>% of Ministry budget</i>	19.37	10.99	20.80	19.10
Total CC Relevance (Tk)	4,234,978	3,889,992	4,074,215	4,142,226
<i>% of Total Budget</i>	37.79	21.02	41.41	44.25

Source: Finance Division, Ministry of Finance

Analysis of the table-11 shows that the maximum amount has been allocated to the thematic area of Capacity Building and Institutional Strengthening, which is 19.37% of the ministry budget in FY 2017-18. Since FY 2014-15 it remained around the same percentage of total ministry budget with an exception in FY 2016-17; 19.10% in FY 2014-15, 20.80% in 2015-16 and 10.99% in FY 2016-17. Research and Knowledge Management thematic area accounts for 5.81% of FY 2017-18 ministry budget. In FY 2016-17 it was 2.03% of the total ministry budget. Figure-14 illustrates the budget allocation to BCCSAP thematic areas in Ministry of Environment & Forests.

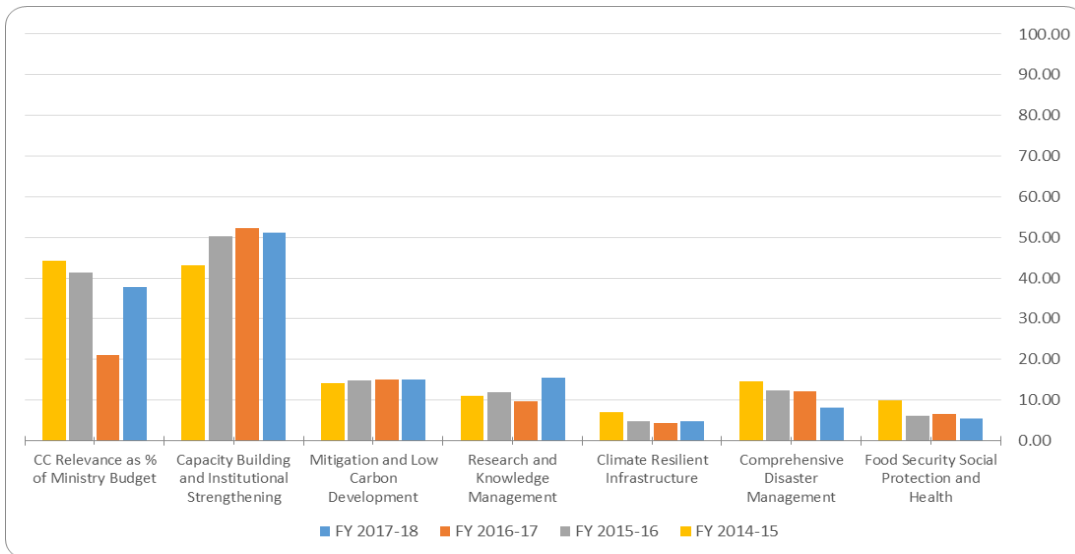


Figure 14: Allocation to BCCSAP Thematic Areas in Ministry of Environment & Forests Budget

Source: Finance Division, Ministry of Finance

Figure-15 illustrates percentage of CC allocation in different thematic areas in FY 2017-18. Out of the CC relevant allocation, climate related capacity building and institutional strengthening received the highest allocation 19.37% of Ministry budget. The Research and Knowledge Management received 5.81% of Ministry budget. It may be mentioned that the Mitigation and Low Carbon Development received 5.71% of the total ministry budget.

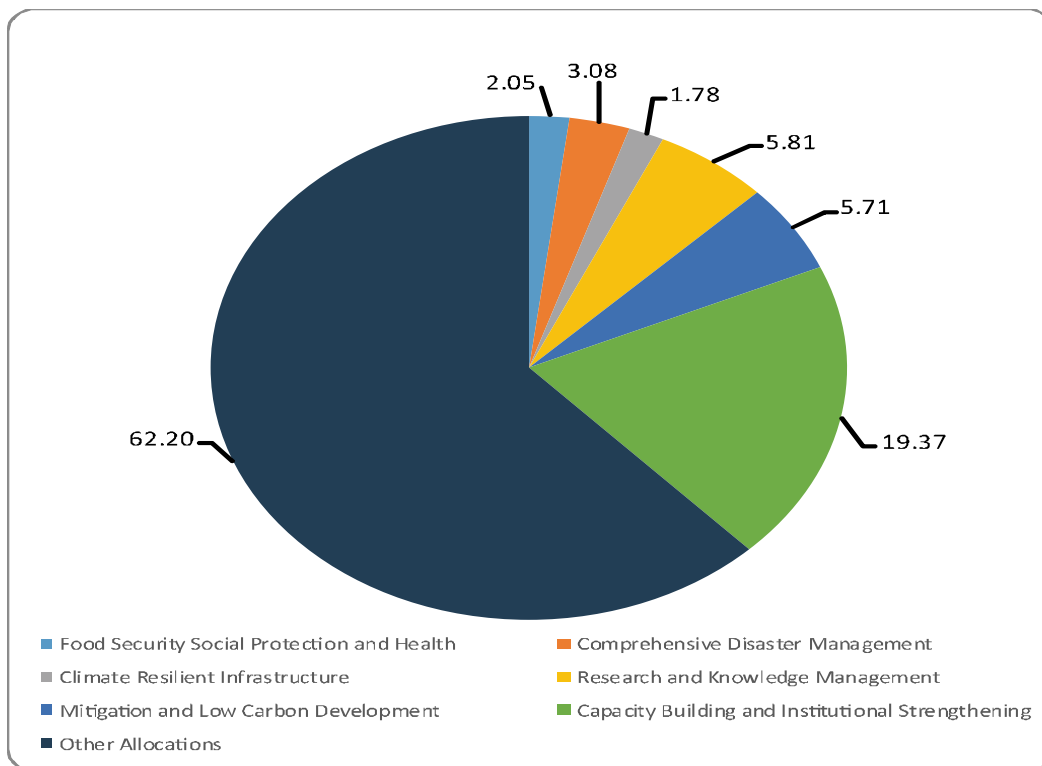


Figure 15: Climate Relevance in MoEF Budget for FY 2017-18

Source: Finance Division, Ministry of Finance

2.6 Local Government Division (LGD)

Improving the living standard of the people by strengthening local government system, developing rural and urban infrastructure and implementing socio-economic activities is the stated mission of the Local Government Division. Out of eight major functions two functions are directly CC relevant, namely manage matters relating to drinking water; and develop, maintain and manage small-scale water resource infrastructures within the timeline determined by the government. There are several activities undertaken by the division linked to climate change, these are:

- Canal digging and re-digging for water discharge and irrigation;
- Construction and maintenance of regulators, cross dams and dams for flood management.

The following on-going major projects have been allocated resources in FY 2017-18 budget:

- Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP) Cyclone Shelter Connecting Road with Bridges/ Culverts;
- Char Development and Settlement Project-4.

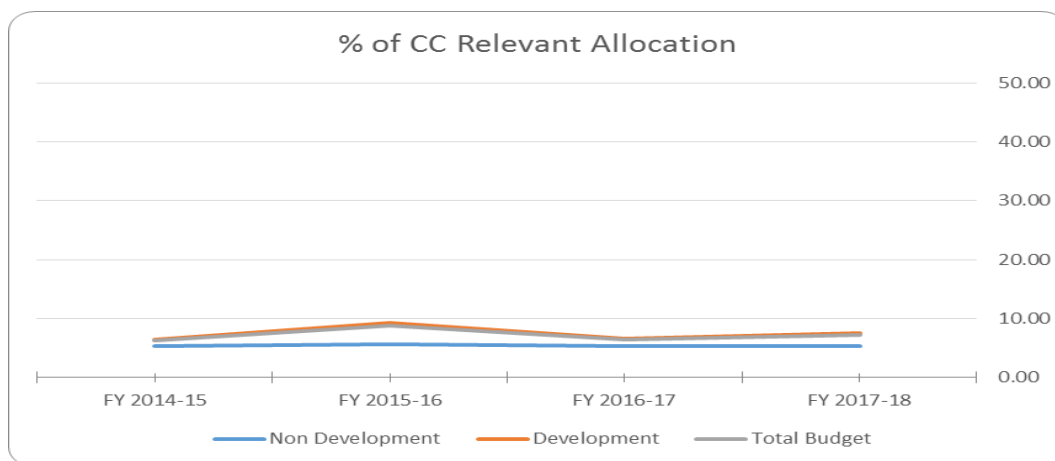


Figure 16: Trend of Climate Relevance in Local Government Division Budget

Source: Finance Division, Ministry of Finance

Figure-16 shows the trend of CC relevant allocation since FY 2014-15. The total allocation and the allocation under development budget do not show any marked swings across the years. In the case of non-development budget, the allocation trend remained plateaued during the period.

Table 12: Trend of Climate Relevance in Local Government Division Budget

Budget Description	Annual Budget (amount in thousand taka)			
	FY 2017-18	2016-17	2015-16	2014-15
Non-Development Budget	31,495,600	28,469,280	24,854,357	20,998,260
climate relevant allocation	1,691,018	1,508,948	1,406,230	1,113,851
as % of non-development	5.37	5.44	5.66	5.57
Development Budget	215,245,500	194,065,000	167,357,200	148,606,700
climate relevant allocation	16,156,315	12,677,095	15,463,475	9,504,520
as % of development budget	7.51	6.75	9.24	7.55
Total Budget	246,741,100	222,534,280	192,211,557	169,604,960
climate relevant allocation	17,847,333	14,186,043	16,869,705	10,618,372
as % of total budget	7.23	6.37	8.78	6.26

Source: Finance Division, Ministry of Finance

Table-12 shows the trend of climate relevance resources allocation in Local Government Division. The climate relevant allocation as percentage of total ministry budget during the period was above 7% on an average. CC relevant allocation for both Development and Non-Development budget has been increased in absolute terms.

Table 13: Allocation in BCCSAP Thematic Areas in Local Government Division Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	1,232,950	1,005,235	840,060	435,989
<i>% of total CC relevant allocation</i>	6.91	7.09	4.98	4.11
<i>% of Ministry budget</i>	0.50	0.45	0.44	0.26
Comprehensive Disaster Management	3,328,780	3,760,675	5,089,135	2,933,338
<i>% of total CC relevant allocation</i>	18.65	26.51	30.17	27.63
<i>% Ministry budget</i>	1.35	1.69	2.65	1.73
Climate Resilient Infrastructure	9,542,790	5,682,590	4,996,723	2,800,041
<i>% of total CC relevant allocation</i>	53.47	40.06	29.62	26.37
<i>% of Ministry budget</i>	3.87	2.55	2.60	1.65
Research and Knowledge Management	188,400	184,225	1,525,300	1,250,670
<i>% of total CC relevant allocation</i>	1.06	1.30	9.04	11.78
<i>% of Ministry budget</i>	0.08	0.08	0.79	0.74
Mitigation and Low Carbon Development	1,059,170	1,031,800	1,047,860	1,050,545
<i>% of total CC relevant allocation</i>	5.93	7.27	6.21	9.89
<i>% of Ministry budget</i>	0.43	0.46	0.55	0.62
Capacity Building and Institutional Strengthening	2,495,243	2,521,518	3,370,627	2,147,789
<i>% of total CC relevant allocation</i>	13.98	17.77	19.98	20.23
<i>% of Ministry budget</i>	1.01	1.13	1.75	1.27
Total CC Relevance (Tk)	17,847,333	14,186,043	16,869,705	10,618,372
<i>% of Total Budget</i>	7.23	6.37	8.78	6.26

Source: Finance Division, Ministry of Finance

Table-13 presents the trend of CC relevant expenditure for BCCSAP thematic areas since FY 2014-15. In FY 2014-15, the allocation for 'Climate Resilient Infrastructure' was 1.65% of the LGD budget and 26.37% of its CC relevant allocation. It has increased over the years and rose to 3.87% of the ministry budget and 53.47% of the CC relevant allocation in FY 2017-18. The Comprehensive Disaster Management received an allocation of 27.63% of the climate allocation in FY 2014-15 and 18.65% in FY 2017-18. However, in absolute term it has increased significantly. Figure-17 shows thw allocation to BCCSAP thematic areas in Local Government Division.

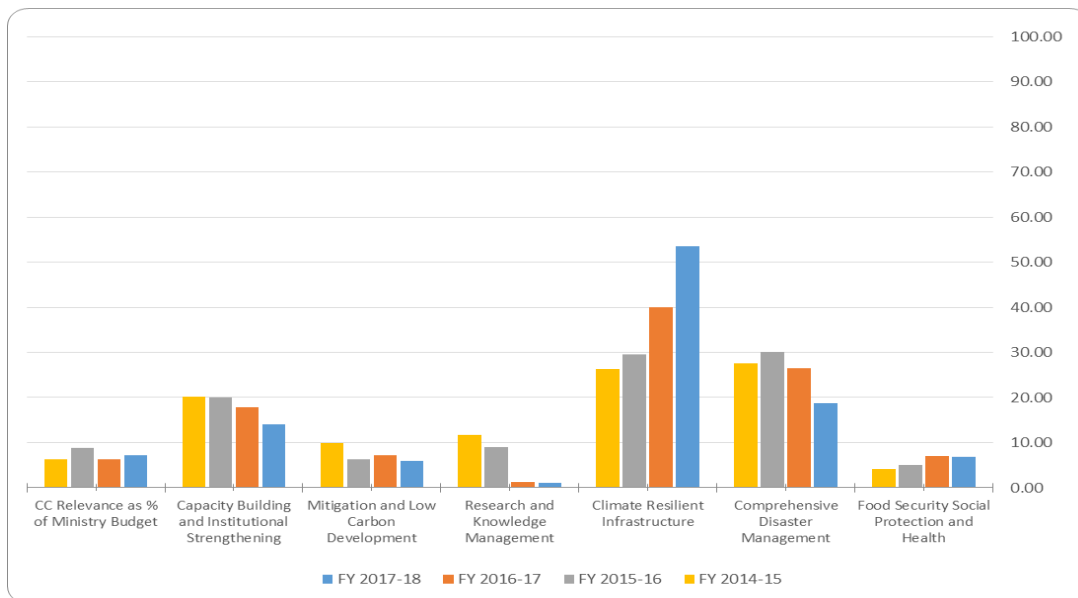


Figure 17: Allocation to BCCSAP Thematic Areas in Local Government Division Budget

Source: Finance Division, Ministry of Finance

Figure-18 shows that in FY 2017-18 the CC relevant allocation is 7.23% of LGD budget, of which maximum allocation has been made to 'Climate Resilient Infrastructure', representing 3.87% of the division's budget and 53.47% of climate relevant allocation.

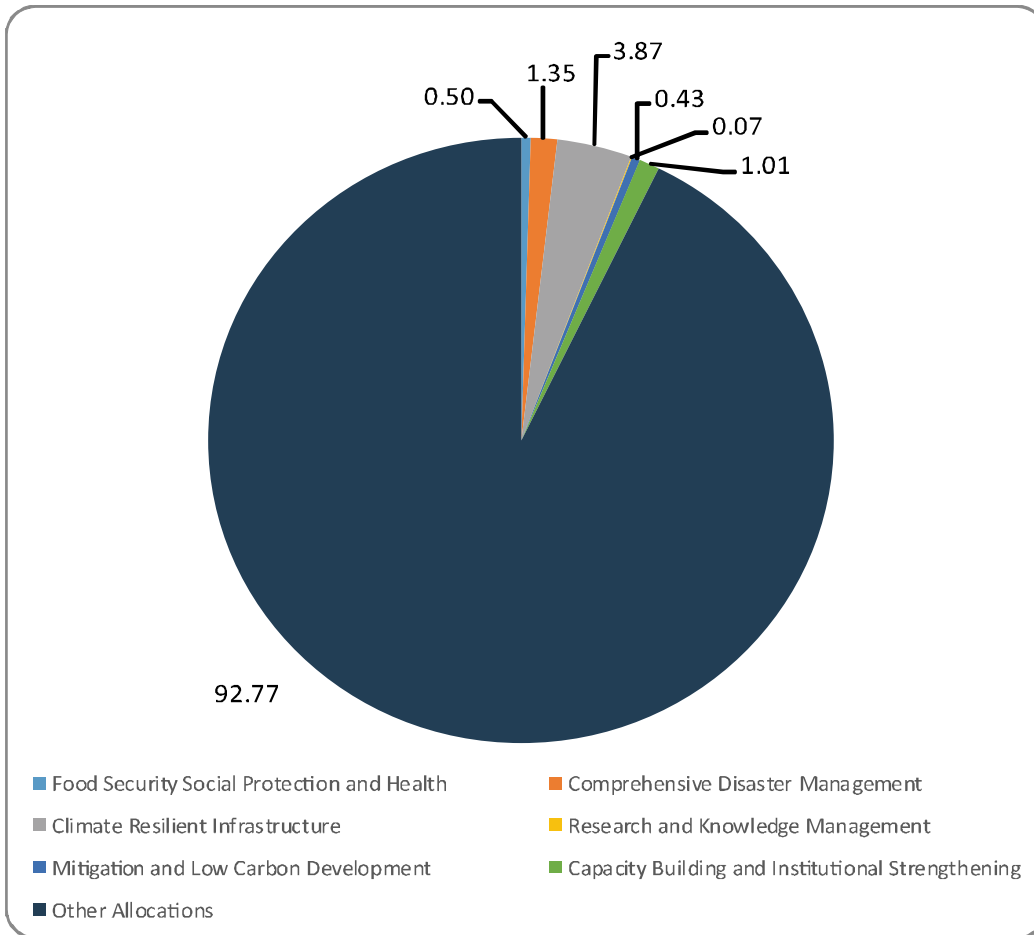


Figure 18: Climate Relevance in LGD Budget for FY 2017-18

Source: Finance Division, Ministry of Finance

2.7 Ministry of Primary and Mass Education (MoPME)

Ensuring primary and basic education for all through improvement of the quality of education is the mission of the Ministry of Primary and Mass Education. Though there is no direct relevance of Primary and Mass Education to Climate Change activities, the ministry has a number of projects which has relevance to adaptation in the climate sensitive areas. The *School Feeding Programme in Poverty Prone Areas* covers the entire country including students in the CC affected areas has direct impact on ensuring school attendance by the affected children. Similarly, the project, *Establishment of 1500 New Schools in Un-schooled areas* by constructing multi-purpose schools in coastal and flood prone areas ensure shelter for people affected by flood, cyclone and tidal surge.

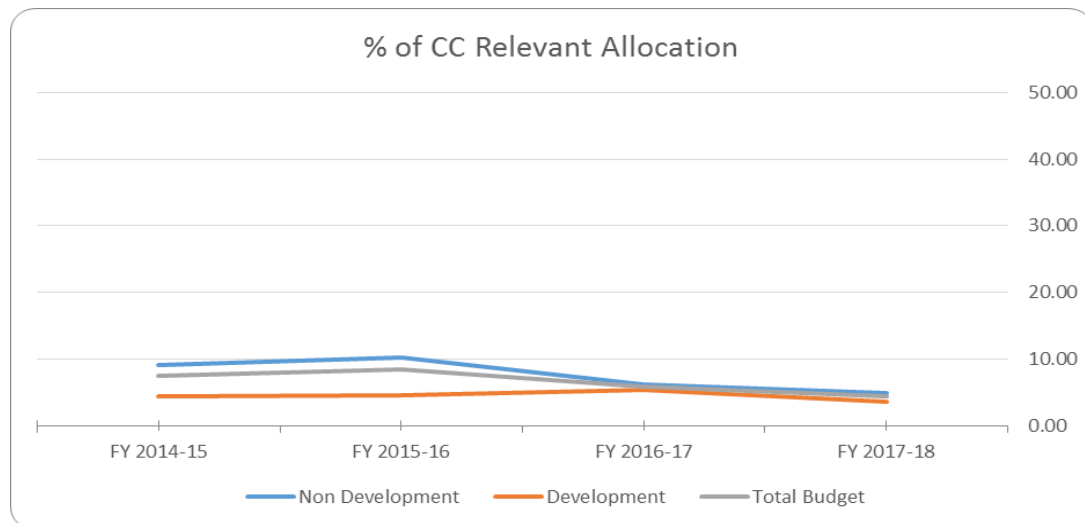


Figure 19: Trend of Climate Relevance in Primary and Mass Education Budget
Source: Finance Division, Ministry of Finance

Figure-19 illustrates the trend of allocation to climate relevant activities of the ministry from FY 2014-15 to FY 2017-18. The total CC relevant allocation in the budget and allocation made in non-development budget remained broadly stable.

Table 14: Trend of Climate Relevance in Ministry of Primary and Mass Education Budget

Budget Description	Annual Budget (amount in thousand taka)			
	FY 2017-18	2016-17	2015-16	2014-15
Non-Development Budget	132,714,019	115,356,360	116,002,706	80,872,155
<i>climate relevant allocation</i>	6,613,768	7,226,411	11,850,142	7,397,907
<i>as % of non-development</i>	4.98	5.00	10.22	9.36
Development Budget	87,518,800	62,625,000	52,473,600	43,332,800
<i>climate relevant allocation</i>	3,126,295	3,375,300	2,446,532	1,910,426
<i>as % of development budget</i>	3.57	5.39	4.66	21.31
Total Budget	220,232,819	177,981,360	168,476,306	124,204,955
<i>climate relevant allocation</i>	9,740,063	10,601,711	14,296,673	9,308,333
<i>as % of total budget</i>	4.42	5.96	8.49	7.49

Source: Finance Division, Ministry of Finance

Table-14 shows the percentage of CC relevant allocation in non-development budget of FY2017-18 is almost the same as that of FY 2016-17.

Table 15: Allocation in BCCSAP Thematic Areas in Ministry of Primary & Mass Education Budget

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Food Security Social Protection and Health	1,537,350	1,620,300	1,444,980	1,187,775
<i>% of total CC relevant allocation</i>	15.78	15.28	10.11	12.76
<i>% of Ministry budget</i>	0.70	0.91	0.86	0.96
Comprehensive Disaster Management	-	-	-	-
<i>% of total CC relevant allocation</i>	-	-	-	-
<i>% Ministry budget</i>	-	-	-	-
Climate Resilient Infrastructure	261,350	935,000	300,000	721,100
<i>% of total CC relevant allocation</i>	2.68	8.82	2.10	7.75
<i>% of Ministry budget</i>	0.12	0.53	0.18	0.58
Research and Knowledge Management	177,240	700,000	700,000	-
<i>% of total CC relevant allocation</i>	1.82	6.60	4.90	-
<i>% of Ministry budget</i>	0.08	0.39	0.42	-
Mitigation and Low Carbon Development	-	-	-	-
<i>% of total CC relevant allocation</i>	-	-	-	-
<i>% of Ministry budget</i>	-	-	-	-

BCCSAP Themes	CC relevant Allocation (amount in thousand taka)			
	2017-18	2016-17	2015-16	2014-15
Capacity Building and Institutional Strengthening	7,764,123	7,346,411	11,851,693	7,399,459
<i>% of total CC relevant allocation</i>	79.71	69.29	82.90	79.49
<i>% of Ministry budget</i>	3.53	4.13	7.03	5.96
Total CC Relevance (Tk)	9,740,063	10,601,711	14,296,673	9,308,333
<i>% of Total Budget</i>	4.42	5.96	8.49	7.49

Source: Finance Division, Ministry of Finance

Table-15 shows the allocation in BCCSAP thematic areas in the Ministry budget. Maximum allocation has been made to Capacity Building and Institutional Strengthening activities which is 6.36% of the ministry budget and 77.85% of the CC relevant allocation on an average. Food Security, Social Protection and Health has the second highest allocation of CC budget, 15.78% in FY 2017-18. Figure-20 illustrates the allocation to BCCSAP thematic areas in the ministry budget.

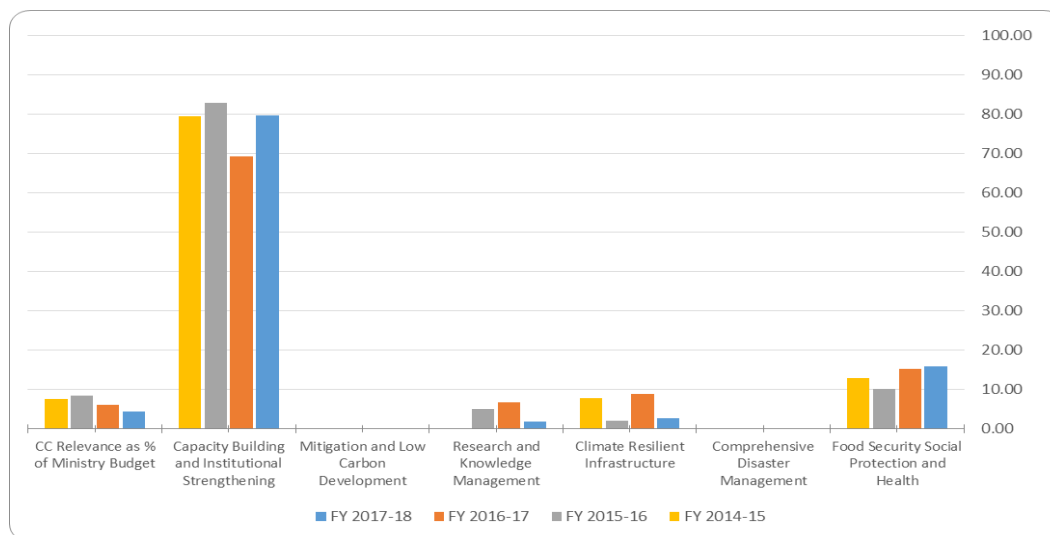


Figure 20: Allocation to BCCSAP Thematic Areas by Ministry of Primary & Mass Education Budget

Source: Finance Division, Ministry of Finance

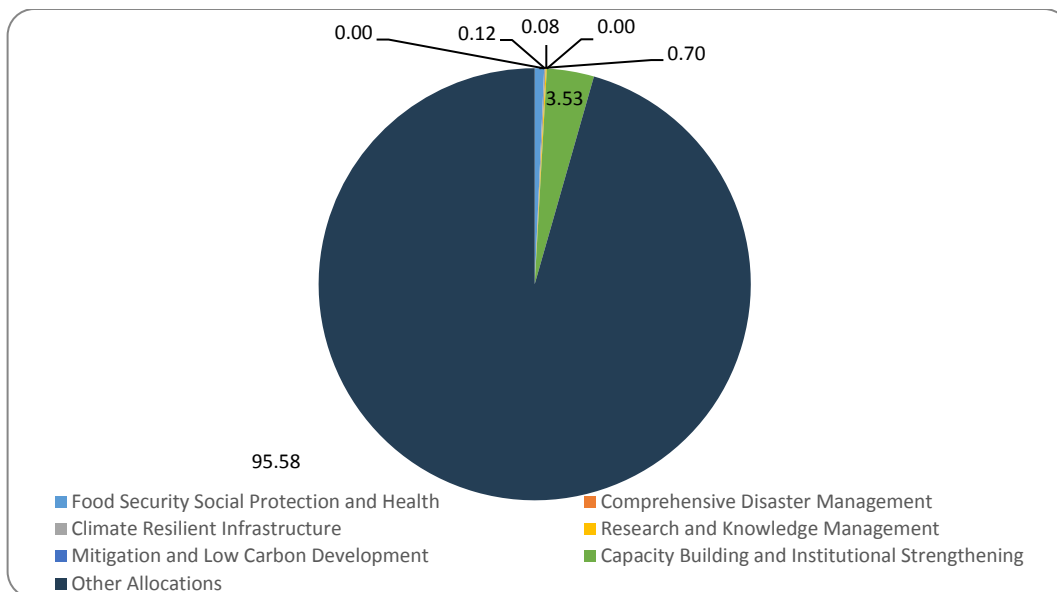


Figure 21: Climate Relevance in MoPME Budget for FY 2017-18

Source: Finance Division, Ministry of Finance

Figure-21 illustrates composition of CC relevant budget of MoPME in FY 2017-18. It is observed that out of the total CC relevant allocation of 4.42% of the ministry budget, capacity building and institutional strengthening has an allocation of 3.53%.

2.8 Bangladesh Climate Change Trust (BCCT)

Recognizing the uncertainties and inadequacies of international climate adaptation finance from both multilateral and bilateral sources, the Government decided to establish the Bangladesh Climate Change Trust Fund (BCCTF). To provide BCCTF a legal footing, a law titled **Climate Change Trust Act 2010** was enacted. These are the landmark initiatives of the Hon’ble Prime Minister Sheikh Hasina. In recognition of her strong leadership in implementing these initiatives for combating unseen and unprecedented natural hazards and safeguarding the environment, the UN honoured the Hon’ble Prime Minister with the highest Award on Environment, “Champions of the Earth” in 2015 under the Policy Leadership Category.

The BCCTF was created in FY 2009-10 from the Government's own revenue sources to combat climate change impacts as well as to implement Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009. All projects taken up under BCCTF are based on the thematic areas mentioned in BCCSAP 2009. Since its establishment in 2010, BCCT has grown in strength and stature for effective management of its fund- BCCTF. Up to FY 2016-17, BCCTF received a total allocation of Tk. 3100 crore to implement the CC agenda of both public and private sectors. Up to April 2017, a total of 487 projects under BCCTF have been approved of which 424 belong to government ministries/divisions while the remaining 63 are being implemented by different research organization, Public Universities and different NGOs under the supervision of Palli Karma Sahayak Foundation (PKSF).

Table 16. Projects and Allocation from BCCTF

(amount in crore taka)

SL.	Implementing Ministries	Total Estimated Allocation	Fund Release up to Jan, 2017	Approved projects	Implemented Projects	% Total Allocation
1	MoWR	1136	609	135	26	44
2	MoLGRD&C	668	277	184	23	25
3	MoEF	328	223	42	14	13
4	MoA	117	95	16	7	5
5	MoDMR	120	106	7	6	5
6	Other Ministries	270	143	40	17	9
Total		2639	1453	424	93	100

Source: BCCTF

The table-16 presents a summary of progress of projects undertaken by different ministries. It is observed from the table-16 that the Ministry of Water Resources is the highest recipient of allocation (Tk. 1136 crore) having 135 approved projects followed by the Ministry of Local Government, Rural Development and Cooperatives which has taken up as many as 184 approved projects with an allocation of Tk. 668 crore. An analysis of the allocation pattern of approved projects per BCCSAP themes reveals that Infrastructure Sector accounts for 69% of total allocation which is the highest among the allocations for other sectors. Research and Knowledge Management Sector also has significant weight. To date BCCT has undertaken research projects with a total amount of TK. 108.80 crore which is 4% of total project investment. These projects are being implemented by different research organizations and public universities. Many of these research initiatives have received national and international recognition and awards.

Through the implementation of these projects so far, 16.4 kilometres of coastal sea dyke and 7,218 cyclone resilient houses have been constructed in the cyclone affected areas. About 352.12 kilometres of embankments and 157 kilometres of protective work have been completed to save the people from river bank erosion. For Agriculture management and irrigation, 872 kilometres of canals have been excavated/re-excavated and 65 water control infrastructures including regulators/sluice gates have been constructed. Besides, 263 kilometres of drainage system have been constructed in the urban areas to reduce water logging.

To provide pure safe drinking water, 2859 deep tube wells, 30 pond-sand-filters (PSF) and 50 water treatment plants have been installed. Besides, 1061 water sources and 55 rain water reservoirs have been established. As part of disaster management, early forecasting agro-met stations have been set up in 4 upazilas. 4500 metric tons of stress tolerant seeds have been produced and distributed.

For biodiversity conservation and carbon mitigation 144.2 million trees have been planted in coastal area and 5,121 hectares of land have been brought under afforestation. To minimize the use of firewood, 12,813 (twelve thousand eight hundred thirteen) biogas plants have been installed and 5, 28,000 improved cook-stoves have been distributed. As many as 17,145 solar home systems have been installed in the remote off-grid areas.

As part of recognition of the successes achieved so far by Bangladesh Climate Change Trust, a project titled “Revegetation of Madhupur Forest through Rehabilitation of Forest Dependent Local and Ethnic Communities” has received ‘*Daily Star* Climate Champion Award, 2012’ and another project titled “Biogas and improved stove expansion” has received ‘Environment Award, 2013’. For the invention of salinity tolerant crops Bangladesh has also could draw the attention of the international community. This project being implemented by ‘Bangladesh Institute of Nuclear Agriculture (BINA) has received ‘Environment Award 2015’. In a side event of COP 21 held in Paris in November 2015, the pioneering role of Bangladesh in addressing challenges of climate change was profusely appreciated and Bangladesh signed the historical Paris agreement and submitted its NDC (National Determined Contribution) to reduce greenhouse gas emission.

3. Conclusion and Way Forward

Bangladesh is well ahead of many countries in spearheading the climate change agenda in South and South East Asia and beyond. Over the past two decades, the country has been reflecting its commitments to combat the adverse impacts of climate change by putting in place supportive policy and legal regime. These commitments are well articulated in its overarching national policy documents including the ongoing 7th Five Year Plan and other policies and strategies. In addition, as part of its concrete set of actions, Bangladesh took a landmark initiative to create a Climate Change Trust Fund from its own resources to prepare, initiate and implement short, medium and long term programs and projects to adapt to and reduce loss of, climate change⁹.

This publication is the first attempt to present budget analysis of six ministries having climate priorities and actions. Preparation of the report was preceded by a series of engagements with relevant ministries to collect data on climate spend and finally the compiled data were validated in a workshop in presence of focal points of those ministries. Publication of disaggregated data on climate spending in the respective MBFs which had hitherto been subsumed in their total budget from now on will be a regular feature of MBF submission. This year data has been collected and collated by using operational guidelines for the ministries by setting some criteria.

The insights that the Finance Division gathered this time from the experience of compiling this report will be very useful in guiding its actions in a variety of ways in the next publication. The gaps and limitations that exist as of now will be largely addressed by bringing in methodological improvements and scaling up actions aimed at enhancing capacity of relevant ministries.

The Government of Bangladesh is pursuing a policy of environment protection driven 'Development Project Proforma' for projects for a long period. Several changes in DPP format have been made to cater to the needs of environment protection and also identifying climate actions in our investment programmes as well as tracking climate expenditure. The Government is also working out modalities to put in place realistic plans and necessary institutional arrangements to sustain the process that has begun with the publication of the report. In tandem, a robust climate sensitive PFM system will be delivered to ensure that the country's fiduciary arrangements are credible, the use of public resources for climate resilience achieve the best value for money and support Bangladesh's consistent moves to achieve higher trajectory of prosperity while being a climate resilient nation.

⁹ BCCT(2015).Climate Change Trust Fund Pamphlet. BCCT. Dhaka

Appendix-1: Key Findings of the Climate Public Expenditure & Institutional Review

Budgets and Expenditure

- The Government spends around 6% to 7% of its annual combined development and non-development budget on climate sensitive activities (equalling US\$1 billion).
- The climate sensitive budget increased between 2009/10 and 2011/12 by 22%.
- Over the period 2009/10 to 2011/12 the funding of climate sensitive budgets has been of the order of 77% from domestic resources and 23% from foreign donor resources.
- Loan funding increased from 58% to 82% of foreign donor resources between the 2009/10 and 2011/12 programmes.
- The special donor funds of BCCRF and PPCR contribute relatively small incremental amounts (around 2% to 3% each) to the overall climate sensitive spend. Over the three financial years reviewed, an 11% increase in donor resources yielded a 16% increase in overall climate sensitive expenditure.
- There is no costed plan of Bangladesh's assessed needs with respect to climate change.
- Around 60% of the budget for climate related programmes is sourced from the development programme budget, and around 25% from the government budget.

Institutions

- There is a wide and complex constituency of interests in climate change that include central Ministries, line Ministries, local government, NGOs, the private sector (including households) and development partners. In the central government alone at least 37 Ministries (plus their departments and autonomous bodies) have at least one climate sensitive programme. The study also identified at least 10 donors on a bi-lateral and multi-lateral basis.
- Based on sample surveys, local government institutions at Upazilla and Union Parishad level also undertake climate sensitive activity.

- The highest spending Ministries with respect to climate sensitive activities are Local Government Division (22.1% of spend over three years), Agriculture (19.7%) and Disaster Management and Relief Division (17.5%).
- The Ministry Budget Framework of the Local Government Division makes no references in the Key Performance Indicators (KPIs) or targets to climate.
- The institutional architecture to promote accountability has been identified as a central aspect of a Climate Fiscal Framework and could be in place and developed in the government. The MTBF has made a significant contribution to financial management in the government, and is presently being strengthened and deepened through a financial reform project under the Finance Division.
- The study identified many NGOs that undertake climate sensitive activities. There is also interest and activity at household level, private sector and in the media and universities.

Strategy and Policy:

- The main climate change strategic framework is the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) – published in 2008 and updated in 2009. There are six themes within the plan but no detailed costing or priority was noted beyond initial infrastructure spend of US\$500m in years 1 and 2 and a total figure of US\$5bn over five years.
- This costing does not go beyond a description of the annual climate change response and does not address the long term needs in respect of thematic requirements or how this should be funded.
- Existing programmes, policy, institutional and budget architecture are being utilised by the Government to deliver climate sensitive activities, including responses to climate change.
- The study identified five funding mechanisms, six International climate change policy initiatives, national climate change policy initiatives, ten supportive sectoral policy documents, neutral policy documents and at least three non-supportive policy documents in this area. In addition to the supportive national policies, there is an array of contributory policies which does not reference climate change directly, but contributes to resilience, including social protection and livelihoods programmes.

- A significant policy dilemma facing Bangladesh is the conflict between the need to expand energy capacity, while reducing reliance on natural gas in the process, and the need for climate adaptation initiatives. This is reflected in the allocations of expenditure in the Annual Development Plan (ADP) budget in FY 2011/12 where transport and energy attracted greater increases and, in comparison, the budget for climate sensitive activity fell. It was noted from the National Energy Policy Road Map (July 2009) that no reference was made to climate change and that there is an intended shift towards the use of coal as well as renewables in the strategy.
- A significant issue was found to be balancing the policy influences that drive climate sensitive spend with national and international climate strategy. The volume and diversity of the primary focus of sector policy that drives climate sensitive spend in Bangladesh presents transactional challenges to the act of balancing policy.
- The main government mechanisms for matching policy and spend is the MTBF managed by the Finance Division and the ADP managed by the Planning Commission. The study reviewed the MBFs of all thirty-seven Ministries involved in the delivery of climate spend and noted that, on a value basis in FY 2011/12, around 45% of planned climate sensitive expenditure was not referenced in the MBF. Most Ministries involved in climate sensitive activity make no reference to climate in their key performance indicators or KPIs. This removes a significant proportion of the climate sensitive spend from the performance management architecture and disconnects climate policy at the operational level.

Appendix-2: Climate Relevance Criteria for Six Selected Ministries

Activity relevance	Type of project/programme ¹⁰	Weight	Rationale
Strongly relevant (climate-dimension weight 75-100%)	<ul style="list-style-type: none"> ▪ Climate change risk management ▪ Projects directly and fully related to the improvement of one or more of the BCCSAP thematic areas 	100%	All the projects undertaken from the CCTF, BCCTF, SPCR are to be rated in this category. In addition, when other projects or programmes are fully contributing to any of the BCCSAP themes are considered.
	<ul style="list-style-type: none"> ▪ Investment in disaster early warning system – flood, cyclone, storm surge, flash flood, drought ▪ Solar, wind and other renewable sources of energy 	90%	Warning system development or operationalizing for climate related hazards e.g. cyclone and storm surges, flood and flash flood, cold wave, drought.
	<ul style="list-style-type: none"> ▪ Afforestation programme – coastal/mangrove forest and forest reserve across the country ▪ Construction, protection, and rehabilitation of coastal polders 	80%	Forests that are meant for climate and disaster risk reduction and carbon sink. Investment in coastal area protection e.g. polders are considered here.

¹⁰ This set of criteria is used to assess the projects and programmes of the Ministry of Agriculture, Environment and Forests, Primary and Mass Education, Water Resources, Disaster Management, and Local Government Division. This may be updated when more Ministries and Divisions are considered for the analysis in the Climate focused Budget Report in the years to come.

Activity relevance	Type of project/programme	Weight	Rationale
	<ul style="list-style-type: none"> ▪ International/cross boundary framework cooperation on climate change and desertification ▪ Construction, protection, and rehabilitation flood control embankments, Flood Control, Drainage and Irrigation (FCDI) projects ▪ Cyclone Preparedness Programme (CPP) & Flood Volunteers Corps ▪ Technology transfer for Adaptation and Mitigation in sectors vastly affected by climate change impacts e.g. Agriculture, water 	75%	<p>Actions and participation in CC related framework conventions, treaties, studies and research are captured here. Disaster preparedness e.g. early warning dissemination and technology transfer to the local level users are to be rated here. All the FCDI projects along with disaster recovery initiatives are considered here.</p>
Significantly relevant (climate-dimension weight 50–74%)	<ul style="list-style-type: none"> ▪ Improvement of drinking water supply and sanitation facilities in climate vulnerable zones ▪ Recovery and rehabilitation of livelihoods lost and damaged infrastructures by natural disasters ▪ Climate resilient crop variety improvement and extension ▪ Employment generation in climate friendly activities 	70%	
	<ul style="list-style-type: none"> ▪ Coastal and River Island development, land stabilization and protection ▪ Excavation and re-excavation of canal and river dredging for flood control and removal of water logging ▪ Enhance Food security through improvement in crop productivity (crop, fishery and livestock) ▪ Development of crop irrigation and infrastructure facilities ▪ Improving cropping diversity and intensity in the climate vulnerable areas – <i>haor, barind</i>, etc. 	60%	<p>Agriculture and food security issues e.g. irrigation system development, improvement in agriculture practices, and drainage capacity enhancement are considered here.</p>

Activity relevance	Type of project/programme	Weight	Rationale
	<ul style="list-style-type: none"> ▪ Comprehensive disaster management ▪ Climate change and disaster management curricula development ▪ Formulating and updating national and sectoral plans for climate change issues (both mitigation and adaptation) ▪ Institutional capacity building for the improvement of climate resilience ▪ Studies, research, and information management on climate change issues – SLR, EIA, etc. ▪ Flood and cyclone shelters (multipurpose shelters) ▪ Women empowerment in planning and decision making ▪ Social safety net programmes – FFW, VGD, VGF ▪ Drinking water supply in disaster emergencies 	50%	Comprehensive disaster management esp. planning, preparedness, risk reduction, response and recovery are considered here.
Somewhat relevant (climate-dimension weight 25–49%)	<ul style="list-style-type: none"> ▪ Biodiversity (plant, fish and wildlife) and ecosystem conservation ▪ Sustainable wetland and natural resources management ▪ Integrated water resources management ▪ Integrated agriculture development programme ▪ Sustainable watershed management ▪ Expansion of social forestry programme ▪ Poverty reduction in climate and disaster vulnerable areas 	45%	Reducing pressure on integrated water management, ecosystem services, sustainable harvest of natural goods, biodiversity and wildlife protection are considered here.

Activity relevance	Type of project/programme	Weight	Rationale
	<ul style="list-style-type: none"> ▪ International/cross boundary framework cooperation on environment, ecosystem and biodiversity ▪ Integrated pest management for agriculture ▪ Improvement & multiplication of seeds, demonstration plots ▪ Small scale resilient-infrastructure development (e.g. housing, bridge, culverts, drainage system improvement etc.) in the climate vulnerable areas 	40%	Small scale climate resilient infrastructures, agricultural research, and cross boundary climate initiatives are considered here.
	<ul style="list-style-type: none"> ▪ Air, water, and land pollution abatement and improvement of other environmental issues ▪ Hazardous waste disposal and management ▪ Resilient urban/township development in climate vulnerable areas ▪ Urban water and drainage system development ▪ Agriculture support services – smallholders’ awareness, etc. ▪ Disaster Preparedness works – emergency planning, capacity building ▪ School feeding programme 	30%	Pollution abatement, waste management, coastal town drainage improvement projects, are mainly considered here.
	<ul style="list-style-type: none"> ▪ Institutional capacity building for the improvement of environment and ecosystem quality and standards ▪ Human resources development in the climate vulnerable sector – e.g. agriculture, water, conservation, infrastructure ▪ Formulating and updating national and sectoral plans for environment, ecosystem and conservation issues ▪ Establishment of eco-park and game reserve ▪ Research, studies, and information management on environment, ecosystem, biodiversity & biosafety 	25%	Institutional capacity improvement, development of strategies and plans, study and research on environmental issues are considered here.

Activity relevance	Type of project/programme	Weight	Rationale
Implicitly relevant (climate-dimension weight 5 –24%)	<ul style="list-style-type: none"> ▪ Eco-tourism promotion ▪ Social protection and health ▪ Storage facility improvement - crops, seeds, fertilizer ▪ Improvement of crop/product marketing and value chain ▪ Disaster Relief operation 	20%	
	<ul style="list-style-type: none"> ▪ Strengthening governance ▪ Primary and mass education development ▪ Protection against river bank and coastal erosion 	10%	
	<ul style="list-style-type: none"> ▪ Knowledge management- library, documentation, digital archive, resilient rural and small-town infrastructure development ▪ Money transfer/Block allocation to approved/un-approved projects ▪ Stipend programme for education 	5%	
Not relevant (climate-dimension weight less than 5%)	<ul style="list-style-type: none"> ▪ All other activities that have no connection to climate adaptation, mitigation and poverty reduction in the climate and disaster vulnerable areas ▪ Actions that are damaging for the ecosystem, environment and potentially changing climate ▪ Infrastructure development that blocks natural drainage, creating waterlogging, flooding, loss of agricultural land 	0%	

Appendix-3: Example of a Climate Sensitive Ministry Budget Framework

47 - Ministry of Water Resources Medium Terms Expenditure

(Taka in Thousands)

Description	Budget FY 2017-18	Projection	
		FY 2018-19	FY 2019-20
Non-Development	1251,73,00	1376,87,97	1514,56,89
Development	4674,71,00	5077,58,20	5586,84,22
Total	5926,44,00	6454,46,17	7101,41,11
Revenue	1634,90,50	1646,87,97	1774,41,67
Capital	4291,53,50	4807,58,20	5326,99,44
Total	5926,44,00	6454,46,17	7101,41,11

1.0 Mission Statement and Major Functions

1.1 Mission Statement

Ensure sustainable development through balanced and integrated management of water resources for the sake of lives and livelihood of the people.

1.2 Major Functions

- 1.2.1 Formulate national policy and provide technical assistance for irrigation, flood control, removal of water logging, improvement of drainage systems, protection from river erosion, prevention of salinity and desertification to enhance resilience against climate change impacts;
- 1.2.2 In the face of increasing frequency of floods and associated losses due to climate change, execute all activities related to flood forecasting and warning, flood control infrastructures, identification of causes of flood and assessment of the damage done by flood;
- 1.2.3 Conduct basic and applied researches on river basin management and development, flood control infrastructures and conduct hydro-meteorological survey for data collection;
- 1.2.4 Strengthen international co-operation for flood control and development of water resources;
- 1.2.5 Excavate/re-excavate and maintain canals excavated under canal excavation program, construct, maintain and operate water control infrastructures to improve dry season irrigation and reduce waterlogging;
- 1.2.6 Deal with the issues related to land conservation and reclamation, expansion of drainage system, removal of water logging and development of *Haor* and Wetlands areas as well;
- 1.2.7 Deal with the issues related to construction of water reservoirs, embankments and barrages;
- 1.2.8 Carry out dredging to enhance the water retention capacity of the rivers and protection against erosion.

2.0 Medium Term Strategic Objectives and Activities

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
1. Ensuring resilience of water resources to climatic shocks and stresses through balanced, integrated and sustainable management.	<ul style="list-style-type: none"> Excavation and re-excavation of Canals River dredging Construction and repair of irrigation structure Construction of Rubber Dams and barrages Formation and registration of Water Management Group, training and transfer the responsibility of service charge collection to the Group 	<ul style="list-style-type: none"> Bangladesh Water Development Board (BWDB)
	<ul style="list-style-type: none"> Conduct feasibility study 	<ul style="list-style-type: none"> Bangladesh Water Development Board Department of Bangladesh Haor and Wetlands Development Water Resources Planning Organization
	<ul style="list-style-type: none"> Update the National Water Management Plan(NWMP) Act as Clearing House Update national data on water resources Monitoring the programs in Coastal areas 	<ul style="list-style-type: none"> Water Resources Planning Organization
	<ul style="list-style-type: none"> Collection, analysis and preservation of data and information regarding water resources 	<ul style="list-style-type: none"> Water Resources Planning Organization Joint River Commission.
	<ul style="list-style-type: none"> Sample test in laboratory 	<ul style="list-style-type: none"> River Research Institute
	<ul style="list-style-type: none"> World Water Day celebration 	<ul style="list-style-type: none"> Secretariat
2. Flood control and protection of river bank from erosion	<ul style="list-style-type: none"> Construction and repair of flood control and coastal embankment Excavation and re-excavation of drainage canals Construction, repair and rehabilitation of flood control and drainage infrastructures Protection of river bank to protect important infrastructure and territorial land from erosion of border rivers 	<ul style="list-style-type: none"> Bangladesh Water Development Board
3. Development of Haor and Wetlands and water management of Coastal region	<ul style="list-style-type: none"> Development of Haor and Wetlands 	<ul style="list-style-type: none"> Department of Bangladesh Haor and Wetland Development
	<ul style="list-style-type: none"> Construction of cross dams in the coastal area to reclaim land from the sea and river Distribution of reclaim land for the development of habitat Protection of coastal wetland and the Sundarban from salinity. 	<ul style="list-style-type: none"> Bangladesh Water Development Board

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
4. River Basin Management	<ul style="list-style-type: none"> Flood forecasting and Warning 	<ul style="list-style-type: none"> Bangladesh Water Development Board
	<ul style="list-style-type: none"> Conduct study of physical and mathematical models 	<ul style="list-style-type: none"> River Research Institute
	<ul style="list-style-type: none"> Arrangement of bi-lateral and multi-lateral meetings Receive data regarding trans boundary rivers Joint Flow observation 	<ul style="list-style-type: none"> Joint River Commission

3.0 Poverty, Gender and Climate Reporting

3.1 Impact of Strategic Objectives on Poverty Reduction, Women's Advancement, and Climate Change Resilience

3.1.1 Ensure balanced, integrated and sustainable management of water resources

Impact on Poverty Reduction: Marginal and poor farmers along with other beneficiaries will be able to increase agricultural production by using the irrigation water available due to excavation of 186 km irrigation canals. This will also augment their income. The irrigation facility and excavation/re-excavation of canal will create employment opportunities for the poor. Construction of 292 irrigation structures, repair and rehabilitation of 838 irrigation structures and dredging of 456 km river will also have a positive impact on the marginal farmers along with other beneficiaries and will create employment opportunities for the poor communities. It is expected that the projects which will be implemented during the next 3 fiscal years will create about 15 crore man-days employment opportunities.

Impact on Women's Advancement: Excavation/Re-excavation of canals/river, irrigation programme by Bangladesh Water Development Board will create employment opportunities for 1.70 crore man-days by involving rural women. This will increase their social status, including an increment in their income. As a result of increased agricultural production women's financial and social security will be ensured.

Climate Change Resilience: There are 10.87 lakh hectare irrigable land in the country. Until FY 2015-16, 8.44 lakh hectare were brought under irrigation coverage through re-excavation of canals excavated under canal excavation program, construct, maintain and operate water control infrastructures. In the budget year 2017-18 coverage of flood free and drainage areas will increase from 8.79 lakh hectare to 8.56 lakh hectare. By FY 2019-20, the irrigable area should increase up to 8.68 lakh hectare which is 82.95% of the total irrigable land in the country. This will significantly contribute to the national food security (supporting Theme-1 of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP)).

3.1.2 Flood control and River Bank protection

Impact on Poverty Reduction: Drainage systems countrywide will be improved through construction of 250 km flood control embankment, repair and rehabilitation of 1623 km of flood control embankment, excavation and re-excavation of 1748 km of drainage canal and construction and repair of 821 flood control structures (sluice/regulator). This will reduce damage to the crops and property of the poor people. The above activities will create employment opportunities for the poor people. In order to protect land from river erosion, 272 km of river bank protection work will be done by involving poor people. These activities will create employment opportunities for them, protect their properties and make a positive impact on poverty reduction.

Impact on Women's Advancement: Activities for the development of flood control and drainage systems, construction, repair and rehabilitation of flood control embankments, excavation and re-excavation of drainage canals and flood control structures will protect women's property which will enhance their social security. Implementing these activities will also create employment opportunities for women.

Climate Change Resilience: There are around 110 lakh hectare land which are prone to recurrent flood risk and drainage congestion in the country. Until FY 2015-16, risk of flood and drainage congestion were reduced for 61.55 lakh hectare. In the budget year 2017-18, the area will be increased from 61.6 lakh hectare (up to FY 2016-17) to 62.93 lakh hectare. The ministry is also investing in the improvement of the flood early warning system from 3 days to 10 days' lead time. The ministry is also making demonstrations for flash flood early warning in the haor region.

3.1.3 Development of *Haor* and wetlands and water management of Coastal region

Impact on Poverty Reduction: By excavating 32 million cubic meters of soil in the *Borni Baor* project, implemented by the Department of Bangladesh *Haor* and Wetland Development, fish cultivation of local species and rice cultivation has increased through irrigation which has played an important role in reducing poverty. About 9 lakh metric tonnes of *boro* rice is being produced every year in the *Haor* area because of flood prevention. Reclamation of land from sea by implementation of Nijhum Island and Cross Dam Project in Hatiya Upazila of Noakhali District and the activities to protect wetland and the Sundarban from salinity will create employment opportunities for the poor. Re-claimed land from the sea will be distributed properly among the landless poor. About 20,000 families will be rehabilitated with 1.50 acres of reclaimed land each through implementation of CDSP-4 project. Besides, poor men and women will be able to protect their lives and property during cyclone by taking shelter in the cyclone shelters in the coastal areas. With the implementation of the projects, land will be protected from salinity. This will increase the fertility of the coastal land and make a positive impact on poverty alleviation. Participation of rural marginal farmers in the Water Resources Management Groups and in other related common resources will be ensured. Involvement of the water management groups in the planning, implementation and management activities of water management development project will be ensured, and management responsibilities will be transferred to the groups after one year of completion of the project. The responsibility of collecting service charge of the Teesta Project will be given to the rural-end farmers along with the W.M.O. They will be imparted training on water management. As result, opportunity for income generation will be created from them. Poor people will be benefitted from the implementation of "Landless Contracting Society (LCS) Policy" adopted by the Water Development Board in earth work for implementation of the project.

Impact on Women's Advancement: Involvement of women in water management and training in water resource management will be ensured. As per guidelines of water management, 33% of total members of water management group must be women. This will promote women's, empowerment and augment their income. 25% of the earth-work of BWDB's project will be executed by women under LCS which will enhance their financial solvency. In FY 2015-16, ownership of 45% to 50% of khas land reclaimed in different irrigation projects will be distributed through associated implementing agencies. Social security of the destitute women will be ensured by such distribution of reclaimed land in coastal area. The houses being constructed in the island and wetland area will also be distributed among the destitute women. Their involvement in "protection of river banks from erosion" projects will be increased. All these activities will create positive impact on women development. Gender issues will be resolved by implementing ongoing projects which have been started for improvement of the livelihood of the people of haor area. Women's participation in economic and social activities in development of haor and wetland area will also enhance their development.

Climate Change Resilience: This will enhance flood protection in polders by rehabilitation of the embankments and water inlets and outlets and by improving the water distribution and drainage systems; rehabilitates the infrastructural works of selected polders; and creates an effective operational partnership between government agencies and community groups (WMG/WMA) to reduce the climate change risks and vulnerabilities. Planning, design and implementation of civil works are carried out based on the principle of participatory water resource management. The WMG/WMA's are involved in quality checking of the construction works.

3.1.4 River Basin Management

Impact on Poverty Reduction: If the availability of water is increased by water basin management, the poor farmers will be able to increase their productivity by using increased irrigation facility. As a result, their income will be augmented and it will make a positive impact on poverty reduction.

Impact on Women's Advancement: There is no direct impact.

Climate Change Resilience: Re-excavation of connecting rivers, development of Irrigation Facilities and Fish Culture project is one of the priorities in the current MBF. Rehabilitation of Buriganga River is one such project which is also a priority project from the prime minister's office. Alongside, Kushiara River Management Project, DND water drainage project, Dakatia beel basin rehabilitation project, re-excavation of Titas river project, Gopalganj integrated water management and Sureswar canal re-excavation project are few of the many basin management projects. When all these projects are completed, the risk of flooding and waterlogging will significantly decrease in those areas. In addition, with the improvement of irrigation system and dry season water availability due to increased retention of water for winter cropping, crop production will increase remarkably.

3.2 Poverty Reduction and Women's Advancement Related Spending

(Taka in Thousands)

Particulars	Budget FY 2017-18	Projection	
		FY 2018-19	FY 2019-20
Poverty Reduction	45,244,293	54,215,170	6160,2,747
Gender	27,293,920	38,044,443	44,311,524
Climate Change Resilience	20,948,621	22,815,057	25,101,877

4.1 Priority Spending Areas/Program

Priority Spending Areas/Program	Related Strategic Objectives
<p>1. Excavation/Re-excavation of canals, construction and maintenance of infrastructures to provide irrigation facilities to arable land: Although rivers and canals are the main sources of water for irrigation, they are gradually being silted up. In this situation, necessity of the excavation and re-excavation of the rivers and canals has become indispensable. Accordingly, excavation and re-excavation of rivers and canals, construction and maintenance of the infrastructures have been given the highest priority.</p>	<ul style="list-style-type: none"> • Ensure balanced, integrated and sustainable management of water resources.
<p>2. Undertaking repair, modification, re-construction and development of existing embankment, infrastructures; construction and maintenance of new embankments, and forestation in coastal areas: For protection of human lives, forests, fisheries, animals and valuable resources from natural calamities such as storms, floods, deluges, high tides etc., re-construction, repair and modification of existing coastal embankments, construction of new embankment and forestation program in the coastal areas have been accorded 2nd priority.</p>	<ul style="list-style-type: none"> • Flood control and protection of town from erosion

Priority Spending Areas/Program	Related Strategic Objectives
<p>3. Construction and maintenance of flood control embankments to protect economically important areas, towns and establishments, human life, property and agricultural crops:</p> <p>Due to river erosion, the existence of many important cities e.g. Chandpur, Sirajganj (including important factories, business establishments, etc.) of the country is at stake. This has been causing a heavy economic loss to the country. To protect the country from this loss, Ministry of Water Resources has taken the responsibility for protection of economically important area, cities/towns and establishments, life and property of people, crop and agricultural land etc. To ensure normal life and sustainable economic development in the flood affected areas, construction and maintenance of flood control embankment have been given 3rd priority.</p>	<ul style="list-style-type: none"> Haor and Wetland Development and Coastal area water management.
<p>4. Conducting studies to prepare water resources planning/Master plan:</p> <p>The availability of reliable water resources data is essential to prepare, implement and manage different development activities in connection with flood control, drainage systems and construction of embankments. To ensure availability of necessary data, surveys are carried out on various aspects of water resources. For this reason, the above programs have been given 4th priority.</p>	<ul style="list-style-type: none"> Study Programme
<p>5. Reclaiming the fair share of the water of border and common rivers:</p> <p>Establishment of the rights of fair share of water of border and common rivers entails bi-lateral and multilateral programs to collect data and conduct research on climate change, alignment of rivers, floods and draughts. This program, therefore has been given 5th priority.</p>	<ul style="list-style-type: none"> River Basin Management

4.2 Medium Term Expenditure Estimates and Projection (FY 2017–18 to 2019–20)

4.2.1 Expenditure by Department/Agencies/Operational Units

(Taka in Thousands)

Description	Budget	Revised	Budget	Projection	
	FY 2016–17		FY 2017-18	FY 2018-19	FY 2019-20
Bangladesh Water Development Board	4562,17,08	4689,50,04	5732,30,39	6285,56,21	6916,45,22
Joint River Commission	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60
WARPO	10,73,31	11,73,31	20,90,39	59,76,90	64,62,83
River Research Institute	12,43,00	14,45,00	37,67,30	44,19,95	50,13,25
Secretariat	68,52,63	8,60,75	98,73,90	24,21,70	26,41,27
International Organisations	6,00	6,00	6,60	7,26	7,99
Department of Bangladesh Haor and Jolabumi Development	52,46,31	26,81,11	29,29,44	32,43,59	34,67,95
Grand Total:	4713,17,00	4755,57,93	5926,44,00	6454,46,17	7101,41,11

4.2.2 Expenditure by Economic Group Wise

(Taka in Thousands)

Economic Group	Description	Budget	Revised	Budget	Projection	
		FY 2016-17		FY 2017-18	FY 2018-19	FY 2019-20
	Revenue Expenditure					
4500	Pay of Officers	3,52,27	3,30,00	4,76,58	10,45,77	12,18,19
4600	Pay of Establishment	99,37	79,00	1,29,90	6,26,80	6,53,28
4700	Allowances	2,75,21	6,55,54	4,37,09	3,86,36	4,19,58
4800	Supplies and Services	441,60,83	326,52,66	370,11,91	270,65,91	262,94,58
4900	Repairs and Maintenance	25,16,85	23,47,16	17,82,36	5,40,45	3,08,37
5900	Grants in Aid	933,78,06	955,90,07	1236,46,06	1350,15,42	1485,39,68
6100	Contributions to International Organisation	6,00	6,00	6,60	7,26	7,99
6300	Pensions and Gratuities	9,64,91	0	0	0	0
	Total: - Revenue Expenditure	1417,53,50	1316,60,43	1634,90,50	1646,87,97	1774,41,67
	Capital Expenditure					
6800	Acquisition of Assets	253,77,50	73,91,33	311,03,58	193,02,25	140,25,22
6900	Acquisition / Purchase of Land & Landed Properties	132,50,00	159,66,55	396,86,53	203,75,00	105,70,00
7000	Construction and Works	2908,26,00	3205,29,62	3576,90,39	4408,70,95	5079,94,22
7400	Advances to Government Employees	10,00	10,00	10,00	10,00	10,00
7900	CD VAT on Development Imports	0	0	3,48,00	2,00,00	1,00,00
7980	Capital Block Allocation & Misc. Capital Expen.	1,00,00	0	3,15,00	0	0
	Total: - Capital Expenditure	3295,63,50	3438,97,50	4291,53,50	4807,58,20	5326,99,44
	Grand Total:	4713,17,00	4755,57,93	5926,44,00	6454,46,17	7101,41,11

5.0 Key Performance Indicator (KPIs)

Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
			FY 2015-16		FY 2016-17		FY 2017-18	FY 2018-19	FY 2019-20
1	2	3	4	5	6	7	8	9	10
1. Coverage of irrigation area (irrigable area 10.47 lakh hectare)	1	Percentage	80.70	80.70	80.94	80.85	81.80	82.25	82.95
2. Coverage of flood free zone and drainage improvement areas (Flood free and drainage areas 110 lakh hectare) and	2	Percentage	55.95	55.95	56.81	56.00	57.21	58.00	58.90
3. Protection of important establishments	2	Percentage		20		20	35	36	35
a. Coverage of flood free area in haor (12.00 lakh hectare)	3	Percentage	10.20	10.20	10.45	10.35	11.00	11.25	11.50
b. Coverage of flood free zone in other areas (106 hectare)	2	Percentage	45.75	45.65	46.36	45.90	46.21	46.75	46.95
4. Coverage of Salinity control areas (26.37 lakh hectare of salinity controllable areas)	3	Percentage	50.80	50.80	51.20	51.35	51.80	52.10	52.75
5. Basin Management of River	4	Percentage	100	84	100	100	100	100	100

6.0 Recent Achievements, Activities, Output Indicators and Targets and Expenditure Estimates of the Departments/Agencies

6.1 Secretariat

6.1.1 Recent Achievements: The ministry is working with a view to implementing the objective of vision 2021, Delta Plan 2100, and 7th Five Year Plan. Recently Bangladesh is being treated worldwide with importance for achieving the Sustainable Development Goals (SDG). Honorable Prime Minister is included as one of the respected members of the High Level Panel on Water (HLPW). The World Water Day is observed on 22nd march every year in accordance with the selected slogan of the United Nations. National Water Policy 2013 has been promulgated. Bangladesh Haor and Water Land Development Board has been promoted to directorate. For protecting the biodiversity, lives and livelihoods of Haor region, and building resilience to climate change, a 20 yearlong Haor development Master Plan has been formulated.

6.1.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		
1	2	3	4	5	6	7	8	9	10	11
1. World Water Day	Day	1	Number	1	1	1	1	1	1	1

6.1.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates		
			FY 2016-17		FY 2017-18	FY 2018-19	FY 2019-20
1	2	3	4	5	6	7	8
Operational Units							
4701-0001 - Secretariat		11,11,49	18,14,63	8,60,75	13,23,90	24,21,70	26,41,27
4706-4353 - ICID		2,50	2,75	2,75	3,00	3,20	3,40
4706-4355 - INWARDAM		3,50	3,25	3,25	3,60	4,06	4,59
Total : Operational Units		11,17,49	18,20,63	8,66,75	13,30,50	24,28,96	26,49,26
Total : Non Development		11,17,49	18,20,63	8,66,75	13,30,50	24,28,96	26,49,26
Approved Projects							
4701-5010 - Block allocation for unapproved projects.		0	50,38,00	0	85,50,00	0	0
Total : Approved Projects		0	50,38,00	0	85,50,00	0	0
Total : Development		0	50,38,00	0	85,50,00	0	0
Total :		11,17,49	68,58,63	8,66,75	98,80,50	24,28,96	26,49,26

6.2 Bangladesh Water Development Board

6.2.1 Recent Achievements: With the aim of attaining food self-sufficiency different programs for construction of flood control embankment, excavation and reescalation of drainage canal, construction of necessary infrastructure and

irrigation facilities have been implemented. As a result, 8.44 lakh hectares of total 10.47 lakh hectare arable land have been brought under irrigation coverage in FY 2015-16. During the same period, out of 110 lakh hectare, 61.545 lakh hectare lands have been made flood-free. Due to construction of new embankments, repair and maintenance of existing ones and forestation programs, out of a total of 26.37 lakh hectare land under salinity threat in the southern coastal areas, 13.39 lakh hectares were protected from risk of salinity intrusion in 2015-16. The causes of river bank erosion, siltation on river bed and water logging can be attributed to the climate change. To resolve these problems, a 15 year project called "Capital Dredging and River Management" has been undertaken. Till to date, 286.00 km. river bed of different rivers has been dredged. Under Climate Change Trust Fund, 51 projects have been implemented with a cost of Taka 47990.64 lakh while the implementation of another 79 projects underway with cost of Tk. 60991.56 lakh. 16.5 sq. km. land has been reclaimed after Construction of 4 Nos. of Cross bars in the river Jamuna which creates opportunities to increase the production of grains, and contributes to climate change adaptation. By implementing the CDSP project a total no of 11298 landless families are allotted 15903 acre of land. By this time CDSP-4 project has allotted 8000.40 acres of land to 6667 families. 300 hecters of land were regained from the downstream closure of Musapur of Laxmipur District.

6.2.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20		
1	2	3	4	5	6	7	8	9	10	11
1. Excavation and re-excavation of irrigation canal	Excavated canals	1	KM	59	18	59	21	61	60	65
	Re-excavated canal			112	75	113	114	117	120	85
2. River dredging	River dredging	1	KM	140	140	151	151	156	150	150
3. Construction and repair of irrigation structures	Constructed structures	1	Number	98	36	113	35	117	115	60
	Repaired structures			355	75	362	14	373	400	65
4. Construction of Rubber Dams and Barrages	Constructed Barrages and Rubber Dams	1	Number	1	0	1	0	1	1	1
5. Formation and registration of Water Management Group, arrange training for them and transfer the responsibility of collection service charge to the Group	Formed Group	1	Number (thousand)	5.57	0.347	5.68	0.280	5.85	5.90	0.250
	Trained people			1440	0.1440	1500	0.1420	0.1520	1550	0.1500
	Transferred responsibility			300	0.140	250	0.11	0.060	0.028	0.015
6. Conduct feasibility study	Completion of survey	1	Number	2	2	4	1	6	5	7
7. Construction and repair of flood control and coastal embankment	Constructed embankment	2	KM	74	57	82	83	84	86	80
	Repaired embankment		KM (thousand)	0.482	0.426	0.518	0.290	0.533	0.540	0.550
8. Excavation and re-excavation of drainage canals	Excavated and re-excavated of drainage canals	2	KM	625	302	629	324	648	650	450

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20		
9. Construction, repair and rehabilitation of flood control and drainage infrastructures	Constructed and repaired infrastructures	2	Number	239	238	263	132	271	290	260
10. Protection of river bank in order to protect important infrastructures and save territorial land from erosion of border rivers	Protected of river bank	2	KM	75	75	96	62	99	98	75
11. Construction of cross dams in the coastal area in order to reclaim land from the sea and rivers	Constructed cross dams	3	Number	2	1	3	2	4	2	2
	Reclaimed land		Acre	30	16	40	300	60	50	60
12. Distribution of reclaim land for the development of habitat	Development of habitat	3	Number	4000	2000	4000	2000	5000	3000	2500
13. Protection of costal wetland and the Sundarbans from salinity	Reduction of salinity	3	PPT	20	20	20	20	20	20	20
14. Flood Forecasting and Warning	Forecasting and Warning	4	Number	180	184	180	156	156	156	156

6.2.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
Operational Units								
4705-3281 - Bangladesh Water Development Board	1-14	891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00	2,409,647.80
Total : Operational Units		891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00	2,409,648
Total : Non Development		891,55,00	905,23,08	928,60,04	1204,82,39	1316,47,01	1448,83,00	2,409,648
Approved Projects								
4705-5000 - Rehabilitation of Polder No. 36/1 in Bagerhat District. (01/12/2014-30/06/2019) (T2-80%)	9-10	1,00,00	30,00,00	7,50,00	60,00,00	50,00,00	40,00,00	480,000.00
4705-5001 - Protection of Embankment of Polder No. 56/57 from erosion of the Meghna river at Daulatkhan & Borhanuddin Upazila in Bhola District (01/01/2016-30/06/2020) Approved (T3-80%)	9-10	87,90	40,00,00	40,00,00	80,00,00	75,00,00	70,00,00	640,000.00
4705-5002 - Protective work of left bank of Padma River from Aworagabad to Braha Bazar under Dohar Upazila of Dhaka District (01-01-2015-30/06/2018) Approved (T2-10%)	9-10	0	50,00,00	50,00,00	90,00,00	50,00,00	0	90,000.00
4705-5003 - Bank Protective work against Erosion of the Meghna river at rajapur and east ilisha union of Bhola sadar upazilla in Bhola district (T2-10%)	9	0	25,00,00	75,00,00	65,00,00	50,00,00	50,00,00	65,000.00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5004 - Strengthening Hydrological Information Services and Early Warning Systems (Component: B) (01/01/2016-30/06/2017) (T4-25%)	14	0	6,68,00	62,00	0	0	0	0
4705-5005 - Rehabilitation of Kashimpur Pump House under Manu River Irrigation Project (01/05/2016-30/06/2018) (T3-10%)	1	0	5,00,00	3,00,00	65,16,00	16,10,00	0	65,160.00
4705-5006 - River Bank Protection work for protection of Tajumuddin upazilla sadar in Bhola District from erosion of the Meghna river (01/07/2016-30/06/2019) (T3-10%)	9	0	10,00,00	40,00,00	75,00,00	70,00,00	60,00,00	75,000.00
4705-5007 - Strengthening of Dumping Zone of Protective work of Jamalpur town protection project in Jamalpur sadar upazilla of Jamalpur District (01/02/2016-30/06/2018) (T3-10%)	9-10	0	2,00,00	8,00,00	12,24,00	0	0	12,240.00
4705-5008 - Temporary Bank Protective work along the left Bank of the Padma at West Narisha Bazar & Meghula Bazar at Dohar Upazila in Dhaka (01/05/2016-30/06/2017) Approved (T2-10%)	7, 10	0	0	9,00,00	1,00,00	0	0	1,000.00
4705-5009 - Protection of Charfession Pourasava Town from the Erosion of Meghna River in Bhola District (T2-10%)	7, 9	0	0	40,00,00	70,00,00	75,00,00	50,00,00	70,000.00
4705-5012 - Bank Protective work with CC block along the both bank of Shialjani khal from 0.00m to 2000.00m at Mohangonj Municipal area of Mohanganj up (01/07/2016-30/06/2018) Approved (T2-10%)	10	0	0	11,00,00	4,00,00	0	0	4,000.00
4705-5013 - Bank Protection works along the Teesta right bank in Gangachara and Rangpur Sadar Upazila in district Rangpur (01/04/2016-30/06/2018) Approved (T2-10%)	10	0	0	25,00,00	90,00,00	50,00,00	0	90,000.00
4705-5014 - Protection of Sonaikandi to Bolonpur area in Rajshahi City Corporation from erosion of the Padma River (01/07/2016-30/06/2017) Approved (T2-10%)	10	0	0	10,00,00	85,00,00	50,35,00	0	85,000.00
4705-5015 - Drainage Improvement and sustainable water Management of Bhairab River basin (01/07/2016-30/06/2021) Approved (T2-10%)	8	0	0	1,00,00	45,00,00	50,00,00	60,00,00	45,000.00
4705-5016 - Rehabilitation of G.K. Irrigation Project (T1-60%)	1-2	53,00,00	35,00,00	35,00,00	4,50,00	0	0	27,000.00
4705-5017 - Protection of Bank from erosion of Atrai River in 3 nos. Area in Upazila Patnitola and Re-Excavation of Plashbari Khal in Upazila Manda (01/04/2016-30/06/2018) Approved (T2-10%)	8, 10	0	0	2,00,00	20,00,00	5,10,00	0	20,000.00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5019 - Drainage Improvement of Dhaka-Narayangonj-Demra (DND) Project (Phase-2) (01/07/2016-30/06/2020) Approved (T3-10%)	9	0	0	3,00,00	145,00,00	120,40,00	75,40,00	145,000.00
4705-5022 - Bank Protection work on the right bank of the Matamuhuri river near Alikadam Sena Nibash, Bandarban (01/07/2016-30/06/2018) Approved (T2-10%)	10	0	0	3,00,00	19,00,00	0	0	19,000.00
4705-5023 - Re-excavation of Bhadra & Salta River for Removal of Drainage Congestion in Khulna District. (01/07/2016-30/06/2019) Approved (T1-40%; T2-20%)	2	0	0	2,00,00	35,00,00	25,00,00	0	210,000.00
4705-5024 - Rehabilitation of BWDB infrastructure for erosion Protection Drainage and Irrigation improvement in the Coastal Area of Polder No. 61/1 (Sitakunda), (Mirsarai) & 72 (Sandwip) in Chittagong District (01/07/2016-30/06/2018) Approved (T1-20%)	1, 3, 10	0	0	6,00,00	52,54,00	35,00,00	0	105,080.00
4705-5025 - Rehabilitation of Coastal Polder No. 62 (Patenga), 63/1A (Anowara) & 63/1B (Anowara & Patiya) in Chittagong District (01/05/2016-30/06/2020) Approved (T2-80%)	4	0	0	10,00,00	70,00,00	50,62,00	40,32,00	560,000.00
4705-5026 - Protection of Dhaka-Mawa-Bhanga-Khulna National Highway Adjacent to Hazi Shariatullah Bridge from the Erosion of Arial Khan River. (01/07/2016-30/06/2019) Approved (T2-10%)	10	0	0	9,20,00	20,00,00	15,00,00	0	20,000.00
4705-5027 - Rajoir-Kotalipara Flood Control, Drainage and Irrigation Project (01/08/2016-30/06/2019) Approved (T2-50%; T3-25%)	3, 9	0	0	2,00,00	35,00,00	25,75,00	0	262,500.00
4705-5029 - Protective Work on The Right Bank of Bhairab River at a Length of K. M. 0.430-0.895 Total 465.00m at Bnstitumir. (01/07/2016-30/06/2018) Approved (T2-10%)	10	0	0	1,00,00	16,16,00	12,00,00	0	16,160.00
4705-5031 - Mirsarai Bangladesh Economic Zone Area (BEZA) Flood Control, Road Cum Embankment Protection & Drainage Project in Chit (01/07/2016-30/06/2019) Approved (T2-10%)	7	0	0	6,00,00	245,00,00	2642,30,20	3846,88,22	245,000.00
4705-5032 - Bank Protective Work Including Dredging of Char Along the left Bank of the Madhumati River at Dignagar/Pabanbeg Bazar Alfadanga Upazila in Faridpur District. (01/01/2017-30/06/2018) Approved (T2-10%)	2,10	0	0	4,00,00	15,00,00	11,00,00	0	15,000.00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5033 - Flood Control & Drainage Improvement Project for Removal of Drainage Congestion in Noakhali Area (01/07/2015-30/06/2020) Approved (T2-50%; T3-25%)	9	0	0	90,00	40,00,00	52,27,00	76,72,00	300,000.00
4705-5034 - Bakkhali River Flood Control, Drainage, Irrigation & Dredging Project (1st Phase) in Cox's Bazar District (T2-50%; T3-25%)	2, 3, 9	0	0	1,00,00	55,90,00	30,00,00	25,00,00	419,250.00
4705-5041 - Re-construction of Embankment with Protective work in polder 68 of Shahaparir Dwip (Sea-dyke) in Upazila-Teknaf & District-Cox's Bazar (T2-80%)	7	0	0	1,00,00	45,00,00	30,00,00	0	360,000.00
4705-5042 - Re-Excavation of Sureswar Khal & Drainage Project (01/07/2016-30/06/2018) Approved (T1-40%; T2-20%)	1	0	0	1,00,00	35,00,00	2,60,00	0	210,000.00
4705-5043 - Construction of Combined Water Control Structure over Punarbhaba Rver for Supplementary Irrigation (01/01/2017-30/06/2020) Approved (T1-60%)	3	0	0	1,00,00	20,00,00	15,00,00	0	120,000.00
4705-5044 - Jabaibeel flood control, drainage & irrigation project in Saphar and Porsha upazillas under Naogaon District (01/01/2017-30/06/2020) Approved (T2-50%; T3-25%)	3, 7	0	0	1,00,00	20,00,00	10,00,00	5,00,00	150,000.00
4705-5046 - Construction of "Pani Bhaban"	5	29,91,00	50,00,00	50,00,00	70,00,00	11,52,00	5,26,00	0
4705-5047 - Bank Protection work of Korotoya river at Nazirganj & Doikhata Chitmohol (former) in Upazila Boda, District Panchagarh (01/07/2016-30/06/2018) Approved (T1-30%; T2-40%; T3-5%)	10	0	0	2,00,00	15,00,00	20,00,00	0	112,500.00
4705-5048 - Re-Excavation of Kumar River Project (01/07/2016-30/06/2019) Approved (T1-40%; T2-20%)	2	0	0	6,00,00	80,00,00	53,00,00	45,00,00	480,000.00
4705-5049 - Protection of Ramneoz Launchghat area of Monpura upazila from the erosion of Meghna River and (01/01/2017-30/06/2019) Approved (T2-10%)	10	0	0	10,00,00	80,00,00	50,26,00	40,16,00	80,000.00
4705-5050 - Re-Excavation of 83 Rivers/Khals and Increase Navigation of Mongla-Ghasiali Channel in Bagerhat District. (01/12/2016-30/06/2021) Approved (T1-30%; T2-30%)	2, 1	0	0	2,00,00	75,00,00	70,00,00	50,00,00	450,000.00
4705-5051 - Pilot Project for the River Bank Erosion Protection of Different Location in the Jamalpur and Sherpur District (01/01/2017-30/06/2019) Approved (T2-10%)	2	0	0	1,00,00	12,00,00	29,16,00	35,00,00	12,000.00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget		Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	Revised	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18
4705-5052 - The Pilot Project of the Bamboo Bandalling Structures for protection from the erosion of the Old Brahmaputra, the Dasani River at Jamalpur Sadar, Melandha and Islampur Upazila of Jamalpur District (01/01/2017-30/06/2019) Approved (T2-10%)	2	0	0	1,00,00	12,00,00	84,00	0	12,000.00
4705-5054 - Feasibility Study and Detailed Engineering Design of Brahmaputra Barrage (01/01/2017-30/06/2021) Approved (T1-40%; T3-20%)	1, 6	0	0	1,00,00	9,50,00	48,49,00	52,22,00	57,000.00
4705-5055 - River bank protection along the left & right bank of Dharla river at Goshpara, Dayaltari & Boshtari for the protection of former 119 no Bashkata Chhitmahal area in UZ-Patgram, Dist-Lalmonirhat (01/01/2017-30/06/2019) Approved (T2-10%)	10	0	0	1,00,00	15,00,00	8,00,00	0	15,000.00
4705-5057 - Climate Smart Agricultural Water Management Project (CSAWMP) (01/01/2017-31/12/2017) Approved (T1-60%)	3	0	0	2,50,00	3,55,00	0	0	21,300.00
4705-5059 – Bangladesh Flood Management Plan (01/01/17-30/06/2019) Approved (T4-50%)	2, 7, 9	0	0	0	14,22,00	0	0	71,100.00
4705-5060 – Dredging of Padma River in Kusthia District to Protect Kuthibari of Great Poet Rabindranath Tagore from Erosion (01/07/16-30/06/2020) Approved (T2-60%)	2	0	0	0	20,00,00	0	0	120,000.00
4705-5061 – Bank Protection of Halda River from Erosion in Hathajari and Rawzan Upazillas in Chittagong District (01/07/17-30/06/2020) Approved (T2-10%)	10	0	0	0	60,00,00	0	0	60,000.00
4705-5075 – Strengthened Water Related Information and Forecasting (Component-B) (01/07/2016-30/06/2021) Approved (T4-50%)	6, 14	0	0	0	25,00,00	0	0	125,000.00
4705-5109 - Protection of Alatuli Area of Chepai Nababgonj District from Padma River Erosion (01/09/2012-30/06/2015) (T2-10%)	9	75,12,00	110,00,00	120,00,00	31,50,00	25,00,00	30,00,00	31,500.00
4705-5110 - Protection of Sonahat Bridge and Bhurungamari-Madarganj Road from the Erosion of Dudhkumar River at Bhurungamri Upazila & Bank Revetment work at left bank of Tista River from Gunaigach to Bazras Senior Madrasa at Ulipur Upazila in Kurigram District (01/07/2012 - 30/06/2015) (T2-10%)	9	6,00,00	20,07,00	22,51,00	0	0	0	-

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5113 - Protection of Left bank of Padma River from Komorpur of Irshardi Upazila of Pabna District to Sara Jhaudia and Tilacpur-Garipur of Nator District Project (01/07/2012-30/06/2017) (T2-10%)	9	55,00,00	95,00,00	118,20,00	0	0	0	-
4705-5114 - Protection of Boiragihat and Chilmari Port of Chilmari and Ulipur Upazila of Kurigram District from the Erosion of Bhrmaputra River (2nd phase) (01/11/2012-30/06/2016) (T3-10%)	9	56,00,00	66,00,00	129,50,00	0	0	0	-
4705-5119 - Bank protection work along the left and right Bank at Different of Karnofuli river, Boalkhali and Raikhali khal in Chittagong District (T3-10%)	10	25,00,00	17,46,00	6,00,00	0	0	0	-
4705-5120 - Bank River Bank protection of Vulnerable Part at lalmohan Upazila Under Bhola District (T3-10%)	10	35,00,00	45,00,00	75,00,00	0	0	0	-
4705-5122 - Rehabilitation of Bhutiar Beel and Barnal-Salimpur-Kolabashukhali Flood Control and Drainage Project Khulna District (Phase-II) (T2-75%)	9	36,95,00	62,00,00	60,00,00	70,00,00	0	0	525,000.00
4705-5123 - Blue Gold Program (T1-10%; T3-20%; T4-10%)	7	59,15,43	77,21,00	88,03,00	137,60,00	95,55,00	75,05,00	825,600.00
4705-5124 - Coastal Embankment Improvement Project Phase-1 (T2-80%)	7	149,91,67	450,00,00	225,00,00	400,00,00	72,12,00	66,62,00	3,200,000.00
4705-5129 - Bhairab River Re-Excavation Project (T2-60%)	2	34,98,00	27,60,00	32,20,00	0	0	0	-
4705-5130 - Flood and Riverbank Erosion Risk Management Investment Program (Tranche-1) (T2-10%)	7-11	208,43,12	260,40,00	203,20,00	272,35,00	131,00,00	95,00,00	272,350.00
4705-5131 - Irrigation Management Improvement Project (IMIP) (For Muhuri Irrigation Project) (T1-60%)	1-2	17,80,59	92,44,00	50,00,00	68,71,00	59,11,00	56,11,00	412,260.00
4705-5132 - West Gopalganj Integrated Water Management Project (T1-45%)	1-13	57,00,00	40,00,00	55,00,00	0	0	0	-
4705-5133 - Protection of Ramgati and Komol Nagar upazila and adjacent areas under Lakshmipur district from the continuing erosion of Meghna River (Phase-1) (T2-10%)	10	45,73,00	60,68,00	50,68,00	35,70,00	25,00,00	0	35,700.00
4705-5134 - Bank Protection of Jamuneswary, Chikny and Charalkata river in Kishorganj, Taraganj and Badarganj Upazila (T2-10%)	10	25,00,00	50,00,00	46,00,00	0	0	0	-
4705-5135 - Haor Flood and Livelihood Improvement Project (BWDB Part) (T1-20%; T3-20%)	1-13	27,53,65	162,00,00	108,00,00	200,00,00	144,70,00	144,70,00	1,200,000.00

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5136 - Protection of Left Bank of Meghna River through Bank Revetment Work at Maniknagar of Nabinagar Upazila in Brahmanbaria District (T2-10%)	10	2,77,25	15,00,00	20,00,00	7,16,00	0	0	7,160.00
4705-5137 - Rehabilitation of Damaged Polders under the District of Cox's Bazar (T2-80%)	9-10	6,00,00	49,57,00	60,00,00	80,00,00	70,00,00	50,00,00	640,000.00
4705-5138 - Rehabilitation of BWDB infrastructures Damaged by Natural Disaster in the Coastal Area of Polder No. 64/1A/64/1B & 64/1C at Banskhal Upazilla in Chittagong District (T3-70%)	9-10	1,00,00	60,00,00	90,00,00	120,00,00	80,00,00	70,00,00	840,000.00
4705-5139 - River Bank Protection work on the both banks of Shangu & Chandkhali river in Chandanaish and Satkania Upazilas of Chittagong District (T2-10%)	10	8,00,00	50,00,00	90,00,00	35,00,00	10,00,00	0	35,000.00
4705-5140 - Protection of the Kuthibari and adjacent areas of Great Poet Robindranath Tagore along the right Bank of Padma River (T2-10%)	10	1,43,80	50,00,00	50,00,00	100,00,00	17,99,00	0	100,000.00
4705-5141 - Development of Smart Project Monitoring and Management Information Systems (SPMMIS) (T4-25%)	1-13	0	1,76,00	1,87,00	0	0	0	-
4705-5144 - Protection work along the right Bank of Padma River at Philipnagar, Abed's ghat and Islampur are of Daulatpur Upazilla under the District Kushtia (T2-10%)	10	25,00,00	50,00,00	61,66,00	0	0	0	-
4705-5145 - Shibpur Flood Control, Drainage and Irrigation Project under Shibpur Upazila in Narsingdi District (T2-75%)	10	2,00,00	15,00,00	13,00,00	15,00,00	8,00,00	0	112,500.00
4705-5146 - Re-excavation of Titas River (Upper) Under Brahmanbaria District (T2-60%)	1	42,00	15,00,00	10,00,00	30,00,00	32,00,00	35,00,00	180,000.00
4705-5147 - Re-excavation of Curzon khal and its adjacent branch khal for irrigation and drainage improvement Project in the district Comilla (T1-60%)	1	50,00	8,25,00	8,25,00	2,52,00	0	0	15,120.00
4705-5148 - Construction of Retired Embankment including Protection of Right Bank of the Jamuna River from Kurnibari to Chandanbaisha at Sariakandi Upazila in Bogra (T2-75%)	10	21,06,00	47,84,00	80,00,00	100,00,00	0	0	750,000.00
4705-5149 - Protection of the Rajshahi Cadet College and adjacent important establishment from the erosion of the Padma River (T3-10%)	10	8,00,00	50,00,00	60,00,00	14,00,00	0	0	14,000.00
4705-5150 - Maliara-Bakhhine-Vandergaon Flood Control Drainage and Irrigation Project (2nd Phase) in Upazila-Patiya, District-Chittagong (T1-75%)	1-5	2,25,00	15,00,00	20,00,00	0	0	0	-

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-5151 - Southwest Area Integrated Water Resources Planning & Management Project – 2nd Phase (T3-45%)	1-14	2,28,93	35,35,00	20,15,00	70,00,00	71,30,00	79,45,00	315,000.00
4705-6000 - Protection of left bank of the Jumuna river Bahadurabad Ghat to Pingna Bazar and Islampur Upazilla, Harindora in Hargilla under Jamalpur District (01/04/10 - 30/06/13) Approved (T3-10%)	9	135,00,00	95,00,00	80,00,00	0	0	0	-
4705-6010 - Buriganga River Restoration project (01/04/10 - 31/12/13) Approved (T2-10%) (T2-10%)	5	25,00,00	30,00,00	45,00,00	60,00,00	45,10,00	39,10,00	60,000.00
4705-6020 - Capital (Pilot) Dredging of River System in Bangladesh (01/03/10 - 30/06/14) Approved (T2-60%)	5	90,36,85	95,00,00	94,08,00	0	0	0	-
4705-7115 - Removal of Water Logging of Kopatakkho River Basin (T2-60%)	8	72,30,00	91,83,00	100,35,00	0	0	0	-
4705-8050 - Emergency Cyclone Recovery and Rehabilitation Project (SIDR) (01/08/08 - 31/12/2017) Approved (T2-70%)	6	117,37,57	145,80,00	100,80,00	178,60,00	0	0	1,250,200.00
4705-8150 - Gorai River Restoration Project (2nd phase) (T2-60%)	9	30,00,00	40,00,00	81,58,00	0	0	0	-
4705-8180 - Char Fassion and Monpura town protection project in Bhola district (T2-10%)	9	30,00,00	30,00,00	45,00,00	0	0	0	-
4705-8200 - Re-excavation of Connecting Rivers, Development of Irrigation Facilities and Fish Culture project of Gazner Beel area under Sujaganar Upazila in Pabna district (T1-60%)	1,8	82,00,00	60,00,00	52,00,00	60,00,00	45,00,00	0	360,000.00
4705-8250 - Protection of right bank Jamuna river at Sirajganj sadar and Kazipur upazila in Sirajganj District. (01/10/2010-30/06/2017) (T2-10%)	9	120,00,00	80,00,00	80,00,00	0	0	0	-
4705-8260 - Purchase of Dredgers and Ancillary accessories for dredging Rivers of Bangladesh (01/07/2010-31/12/2016)	5	217,65,00	250,00,00	65,25,00	150,00,00	101,00,00	91,00,00	-
4705-8310 - Char Development and Settlement Project-4 (T3-60%)	10	39,10,60	80,00,00	78,94,00	51,07,00	0	0	306,420.00
4705-8636 - Water Management and Improvement Project (WMIP) (1/7/2004-30/6/2016) Approved (T1-45%)	4	40,86,61	30,00,00	4,36,00	0	0	0	-
4705-9120 - New Dakatia & Old Dakatia Little Feni River Drainage Project Part of South Comilla and North Noyakhali Comprehensive Project (01/07/03 - 30/06/17) Approved (T2-25%; T3-20%)	7,8	100,00,00	30,00,00	36,92,00	0	0	0	-

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
4705-9160 - Teesta Barrage Project (2nd Phase) (1st Unit) (2nd Revised) (01/07/06 - 30/06/2015) Revised Unapproved (T3-60%)	3	52,00,00	13,00,00	54,00,00	20,00,00	0	0	120,000.00
4705-9324 - Kalni-Kushiyara River Management Project (01/04/11-30/06/16) Approved (T1-20%)	5,6,11	30,00,00	40,00,00	40,00,00	50,00,00	44,45,00	45,35,00	100,000.00
4705-9498 - Tarail Panchuria Integrated Water Management project (01/03/2010-30/06/15) Approved (T1-25%; T2-20%)	4	36,90,36	45,00,00	115,00,00	0	0	0	-
4705-9533 - Protection of Shahbazpur Gas field from the erosion of Meghna river under Bhola District (01/03/10 - 30/06/15) Approved (T2-10%)	9	17,27,00	9,00,00	78,00,00	0	0	0	-
4705-9548 - River bank protection work along River Padma at Sujanager in Pabna district and at Raghunatpur ghat D/S. under Bera Upazilla (01/01/11-30/06/2016) Approved (T2-10%)	9	60,00,00	50,00,00	35,00,00	0	0	0	-
4705-9552 - Re-excavation of Bemalia, Longon and Balvadra river in Nasirnagar Upazilla at district Brahmanbaria (01/11/10 - 30/06/15) Approved (T2-60%)	1	10,70,76	10,00,00	17,65,00	0	0	0	-
4705-9589 - Pre-Monsoon Flood Protection and Drainage Improvement in Haor Areas (T2-60%)	8	45,00,00	80,00,00	100,00,00	75,00,00	60,50,00	50,50,00	450,000.00
Total : Approved Projects		2431,69,09	3656,94,00	3763,90,00	4560,98,00	5047,58,20	5554,84,22	18,700,100
Total : Development		2431,69,09	3656,94,00	3763,90,00	4560,98,00	5047,58,20	5554,84,22	18,700,100
Total :		3323,24,09	4562,17,08	4692,50,04	5765,80,39	6364,05,21	7003,67,22	21,109,748

6.3 River Research Institute

6.3.1 Recent Achievements: 8 Physical model studies and 5 mathematical model studies have been conducted and reports have been submitted to the client. Total 16880 Nos. of Soil, Concrete, sediment & chemical samples have been tested. Besides, a study named "Investigation of the sustainability and effectiveness of the material used in the launching apron to protect the river bank" had started from FY 2014-15 and was finished in FY 2015-16, on river pollution around Dhaka and ways to reduce pollution.

6.3.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		
1	2	3	4	5	6	7	8	9	10	11
1. Sample tests in Laboratory	Sample test	1	Number	9.50	6540	6000	5000	6000	6200	6200
2. Conduct study of physical and mathematical models	Model study	4	Number	11	6	7	7	8	9	10

6.3.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	
1	2	3	4	5	6	7	8	9
Operational Units								
4705-3289 - River Research Institute	1-2	10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25	27,346.00
Total : Operational Units		10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25	27,346
Total : Non Development		10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25	27,346
Total :		10,71,32	12,43,00	12,45,00	13,67,30	14,19,95	15,13,25	27,346

6.4 Water Resources Planning Organization

6.4.1 Recent Achievements: Bangladesh Water Act-2013 has been enacted in FY 2013. During the period of 2009-2015, the additional 145 data layers were added to the existing no. of 406 of National Water Resources database (NWRD). Likewise, additional 138 layers have been included to the Integrated Coastal Resources Database (ICRD) of 421 layers. As described in the National Water Policy (NWPo), WARPO has been performing "Clearing House" activities to examine the project of Bangladesh Water Development Board (BWDB) in the light of National Water Management Plan (NWMP) on experimental basis. Under Clearing House function, WARPO has already made comments on the 210 DPP of BWDB and provided clearance certificate. Moreover, comments and clearance were made to the 8 small scale projects of Local Government Division (LGD). Assessing the condition of surface water (SW) and ground water (GW) is also going on.

6.4.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20		
1	2	3	4	5	6	7	8	9	10	11
1. Conduct Feasibility Study	Report	1	Number	3	0	4	4	2	3	5
2. Update the National Water Management Plan	Updated Planning	1	Number	4	0	4	0	2	3	5
	Collected Data			4	4	4	4	4	1	4
3. Act as Clearing House	Review of projects	1	Number	35	35	35	35	35	50	60
4. To update national data on water resources	Increase data layer	1	Number	50	50	50	10	10	10	10
	Collected Data			25	25	50	50	50	50	50
5. Monitoring the programmes in coastal areas	PIP implementation monitoring	3	Number	1	0	2	0	2	2	2
	Development planning report of 19 districts			1	0	1	0	1	1	1
6. Collection analysis and preservation of data regarding water resources	Preserved data	1	Number	1	1	1	1	1	1	1

6.4.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual 2015-16	Budget		Medium Term Expenditure Estimates			CC Relevant Allocation
			Budget	Revised	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
1	2	3	4	5	6	7	8	9
Operational Units								
4705-3287 - WARPO	1-4	7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83	20,507.80
Total : Operational Units		7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83	20,508
Total : Non Development		7,06,06	9,33,31	9,33,31	10,25,39	11,27,90	12,40,83	20,508
Approved Projects								
4705-5127 - Institutionalization of integrated Water Resources Management (IWRM) Process in Compliance with Bangladesh Water Act-2013	1-4	85,37	1,40,00	1,40,00	1,15,00	0	0	5,175.00
Total : Approved Projects		85,37	1,40,00	1,40,00	1,15,00	0	0	5,175
Total : Development		85,37	1,40,00	1,40,00	1,15,00	0	0	5,175
Total :		7,91,43	10,73,31	10,73,31	11,40,39	11,27,90	12,40,83	25,683

6.5 Bangladesh Haor and Wetlands Development Board

6.5.1 Recent Achievements: 20 years long Haor Development Master Plan has been formulated to improving the living standard and enhance climate change resilience of 20 million peoples of the north eastern seven districts of Bangladesh at the cost of Tk. 280430 million for the period of 2012 – 2032, which is being implemented by various ministries. Aquaculture of indigenous fish species by excavation of 3.2 million cubic meter earth, increase in production of rice cultivation by irrigation and plantation to conserve environment has been done under the Borni Baor Development project. Along with that study projects on classification of wetlands and hydro-morphology of haor's rivers were also carried out to enrich integrated wetland database.

6.5.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20		
1	2	3	4	5	6	7	8	9	10	11
1. Feasibility Study	Study	1	Number	1	1	1	1	1	1	1
2. Development of Haor & Wetlands	Development	3		30	2	20	1	20	20	20

6.5.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/Project	Related Activity	Actual 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
					2016-17	FY 2017-18	2018-19	FY 2019-20
1	2	3	4	5	6	9	8	9
Operational Units								
4705-3287 – Bangladesh Haor and Wetland Development Department		28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95	9,964.80
Total : Operational Units		28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95	9,965
Total : Non Development		28,39	2,01,31	2,88,11	2,21,44	2,43,59	2,67,95	9,965
Approved Projects								
4731-5000 - Study for Investigation and Expansion of Ground Water Irrigation in Habiganj, Maulvibazar, Sylhet, Sunamganj, Netrokona and Kishorganj Districts.		0	10,00,00	5,00,00	5,00,00	4,81,90	4,81,90	12,500.00
4731-5001 - Impact Assessment of Structural Interventions on Haor and Innovation for Solution		0	3,02,00	1,00,00	2,08,00	0	0	5,200.00
4731-5002 - Study of Interaction bet Haor and River Ecosystem including Development of Wetland Inventory and Wetland Management Framework		0	35,00,00	15,50,00	20,00,00	25,18,10	27,18,10	50,000.00
4731-5142 - Classification of Wetlands of Bangladesh(01/07/2015-30/06/2017)		47,90	1,14,00	1,14,00	0	0	0	-
4731-5143 - Model Validation on Hydro-Morphological Process of the River system in the Subsiding Sylhet Haor Basin.		39,11	1,29,00	1,29,00	0	0	0	-
Total : Approved Projects		87,01	50,45,00	23,93,00	27,08,00	30,00,00	32,00,00	67,700
Total : Development		87,01	50,45,00	23,93,00	27,08,00	30,00,00	32,00,00	67,700
Total :		1,15,40	52,46,31	26,81,11	29,29,44	32,43,59	34,67,95	77,665

6.6 Joint River Commission

6.6.1 Recent Achievements: Initiatives have been taken for international cooperation to improve people's living standard through sharing and management of 54 trans-boundary rivers between India and Bangladesh. The framework of interim agreements for sharing the waters of the Teesta and the Feni rivers has been finalized. Bangladesh and India share the Ganga/Ganges waters at Farakka, India from 01 January to 31 May every year. During the last three years 17 meetings were held between Bangladesh and India at different levels. Besides, Joint Working Group on sub-regional cooperation with Bhutan, India and Bangladesh held one meeting. Bangladesh is conducting a joint study on Impact Assessment of the proposed Tipaimukh Hydro-electric (Multi-purpose) project of India and preparation of position papers including database of trans-boundary rivers. In this regard discussions are being continued. India assured that it would not take any step that would adversely affect Bangladesh. Bangladesh is being able to provide 120 hours lead time flood forecasting using the flood related data provided by India, Nepal and China. River bank protection works of border rivers along the border areas are being implemented since 2009-10 that had been stopped for long. Consequently, valuable lands, BOPs, and important installations can be protected.

6.6.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				FY 2015-16		FY 2016-17		FY 2017-18	FY 2018-19	FY 2019-20
				5	6	7	8	9	10	11
1. Collection analysis and preservation of data regarding water resources	Prepare river based position papers of trans-boundary rivers	1	Number	1	1	1	1	1	1	1
2. Arrangement of bi-lateral and multi-lateral meetings	Holding meeting on Joint River Commission and different committees	4	Number	47	5	5	5	6	5	6
	Holding meeting on Nepal- Bangladesh joint expert committee			0	0	1	1	1	1	1
	Holding meeting on China - Bangladesh joint research- oriented and technical committee			1	1	1	1	1	1	1
3. Received data regarding trans-boundary rivers	Receiving flood related data from India, Nepal and China	4	Number	7	7	7	7	7	7	7
4. Joint observation of flow	Observation and sharing of Ganges waters at Farakka as per Treaty	4	Number	1	1	1	1	1	1	1

6.6.3 Medium Term Expenditure Estimates by Operational Unit, Programmes and Projects

(Taka in Thousands)

Name of the Operational Unit/Programme/ Project	Related Activity	Actual FY 2015-16	Budget	Revised	Medium Term Expenditure Estimates			CC Relevant Allocation
			FY 2016-17		FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18
			4	5	6	7	8	9
Operational Units								
4705-3283 - Joint River Commission		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60	14,919.60
Total : Operational Units		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60	14,919.60
Total : Non Development		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60	14,919.60
Total :		5,86,00	6,78,67	4,41,72	7,45,98	8,20,56	9,02,60	14,919.60

Appendix-4: Projects with Strong Climate Relevance

(amount in thousand taka)

Name of the Operational Unit/Programme/Project ¹¹	Allocation
Ministry of Water Resources (MoWR)	
4705-5000 - Rehabilitation of Polder No. 36/1 in Bagerhat District. (01/12/2014-30/06/2019)	600,000
4705-5001 - Protection of Embankment of Polder No. 56/57 from erosion of the Meghna river at Daulatkhan & Borhanuddin Upazila in Bhola District. (01/01/2016-30/06/2020)	800,000
4705-5025 - Rehabilitation of Coastal Polder No. 62 (Patenga), 63/1A (Anowara) & 63/1B (Anowara & Patiya) in Chittagong District (01/05/2016-30/06/2020). Approved	700,000
4705-5027 - Rajoir-Kotalipara Flood Control, Drainage and Irrigation Project (01/08/2016-30/06/2019) Approved	350,000
4705-5033 - Flood Control & Drainage Improvement Project for Removal of Drainage Congestion in Noakhali Area. (01/07/2015-30/06/2020) Approved	400,000
4705-5034 - Bakkhali River Flood Control, Drainage, Irrigation & Dredging Project (1st Phase) in Cox's Bazar District.	559,000
4705-5041 - Re-construction of Embankment with protective work in polder 68 of Shahaparir Dwip (Sea-dyke) in Upazila-Teknaf & District-Cox's Bazar	450,000
4705-5044 - Jabaibeel flood control, drainage & irrigation project in upazilla Saphar and Porsha under Naogaon District (01/01/2017-30/06/2020) Approved	200,000
4705-5047 - Bank Protection work of Korotoya river at Nazirganj & Doikhata Chitmohol (former) in Upazila Boda, District Panchagarh (01/07/2016-30/06/2018) Approved	150,000
4705-5122 - Rehabilitation of Bhutiar Beel and Barnal-Salimpur-Kolabashukhali Flood Control and Drainage Project Khulna District (Phase-II)	700,000
4705-5124 - Coastal Embankment Improvement Project Phase-1	4,000,000
4705-5137 - Rehabilitation of Damaged Polders under the District of Cox's Bazar.	800,000
4705-5145 - Shibpur Flood Control, Drainage and Irrigation Project under Shibpur Upazila	150,000
4705-5148 - Construction of Retired Embankment including Protection of Right Bank of the Jamuna River from Kurnibari to Chandanbaisha at Sariakandi Upazila in Bogra.	1000,000
Ministry of Disaster Management and Relief (MoDMR)	
4905-3481 - Cyclone Preparedness Programme (C.P.P.)	200,000
Local Government Division (LGD)	
3731-8211 - Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP)	1,606,000
Ministry of Environment and Forests (MoEF)	
4501-0002 - Risk Management Fund on Climate Change	1,000,000
4506-4351 - UNCCD	180

¹¹ Projects from six selected Ministries are considered here. Ministry of Primary and Mass Education (MoPME) do not have any Strongly Climate Relevant project in the FY 2017-18 budget. However, there are many significantly climate relevant projects.

Name of the Operational Unit/Programme/Project ¹¹	Allocation
Ministry of Water Resources (MoWR)	
4506-4356 - United Nations Framework Convention on Climate Change	1,250
4531-5001 - Afforestation in five Coastal Districts of Bangladesh	44,200
4531-5004 UN-Redd Bangladesh National Programme	104,300
4531-5006 Integrating Community based Adaptation into Afforestation and Reforestation Programmed in Bangladesh	153,000
Ministry of Agriculture (MoA)	
4301-5002 - National Agriculture Technology Program Phase-2 Project (NATP-2) (PMU Part) (01/10/2015-30/09/2021)	154,200
4331-5001 - National Agricultural Technology Program Phase-2 Project (NATP-2) (DAE Part) 01/10/2015-30/09/2021	1,821,800
4331-5002 - Establishment of Farmers Service Centre and Technology Transfer Union Level Pilot Project	415,800
4331-5023 - Transfer of Technology for Agriculture Production under Blue Gold Program	22,900
4396-4355 - Assessment of Biogas and Solar Energy as a Source of Energy to Produce Sugar and Molasses	2,350
4305-5004 - National Agricultural Technology Program Phase-2 Project (NATP-2)	1,288,500
4305-5039 - Development and Dissemination of Agricultural Technologies of Jute and Allied Fiber Crops	60,400