

Strategic Program for Climate Resilience

BANGLADESH



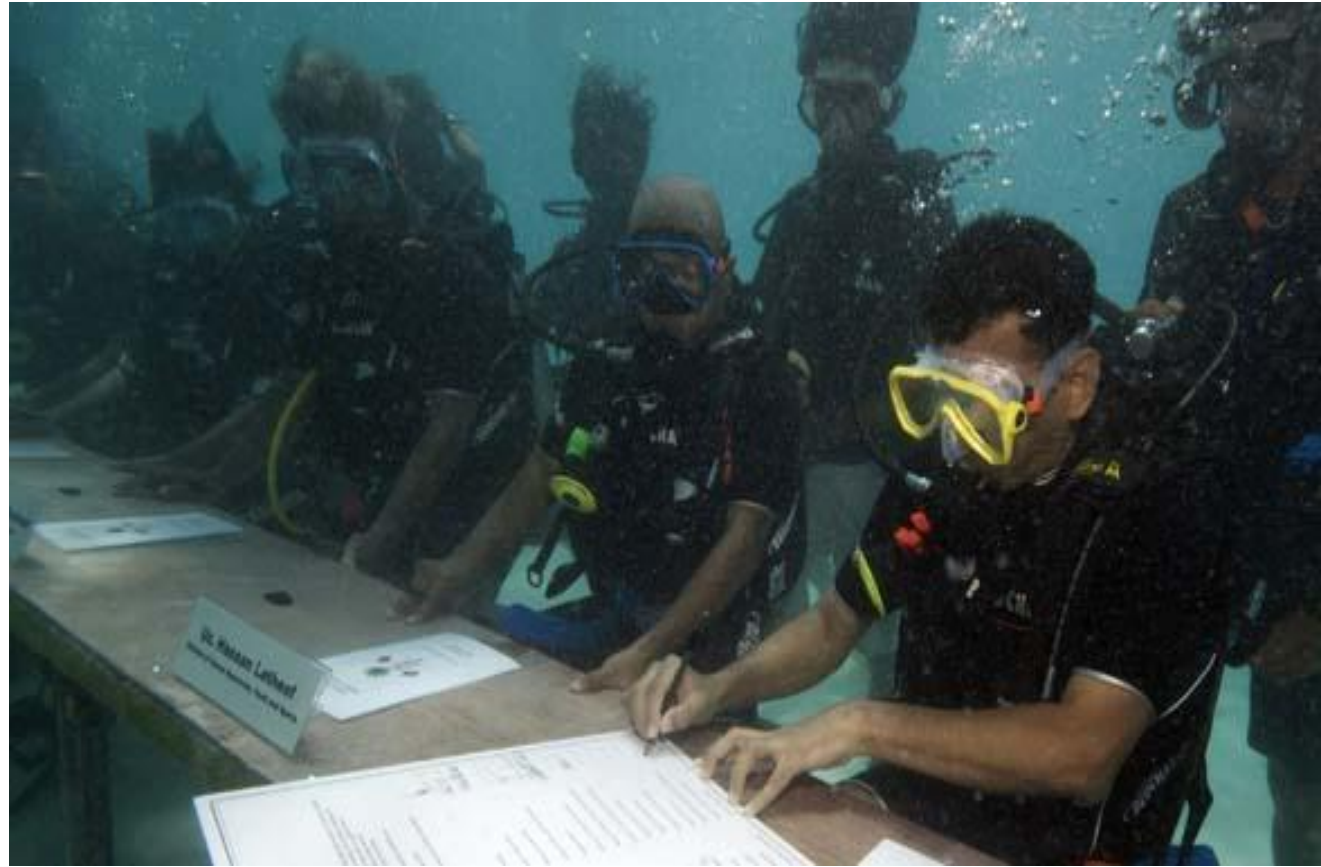
**Ministry of Environment & Forests and
Ministry of Finance**

Government of the People's Republic of Bangladesh

**PPCR Pilot Countries Meeting
12 November 2010, Washington D.C.**



Maldives Cabinet Holding Meeting at the Bottom of the Sea



Nepal Cabinet Meeting at Mountain top



As a country most vulnerable to climate change...

- one of the highest population densities worldwide
- about 40% of current population of 150 million live below the poverty line
- a low lying delta, farmlands are susceptible to daily and seasonal flooding
- increasing frequency and intensity of natural climate related disasters including salt water intrusion

The key challenges in tackling climate change are ensuring food and water security, managing disaster risk, protecting infrastructure, maintaining health and energy security, and tackling forced migration and overall environmental degradation

...adaptation is a fundamental development priority to achieving the MDG Goals



Some Effects of Climate Change

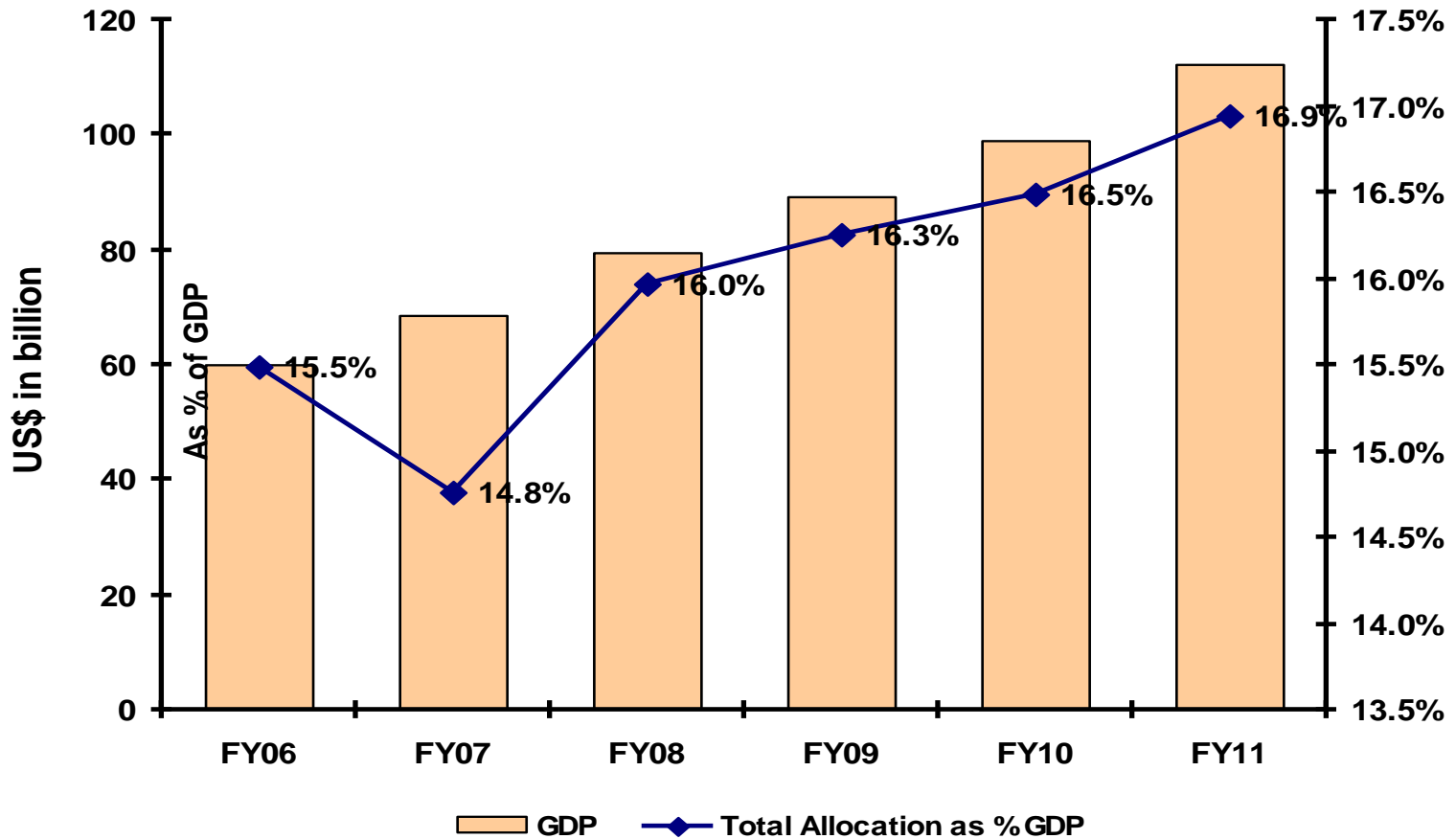


Bangladesh Response to Climate Change

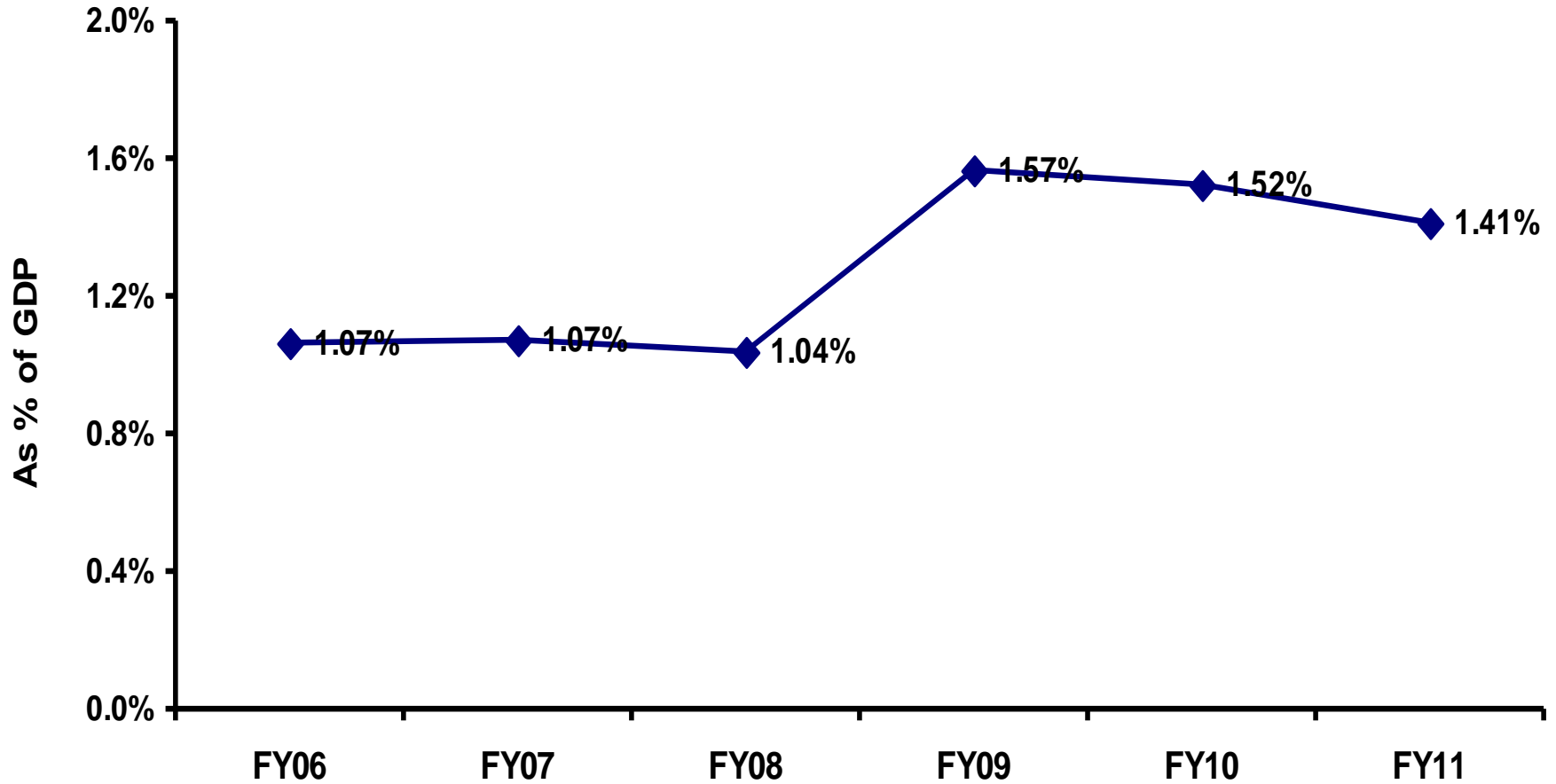
- **National Adaptation Program of Action (NAPA): launched in 2005, and revised in 2009**
- **Bangladesh Climate Change Strategy and Action Plan (BCCSAP): launched in 2008 and approved in 2009**
- **BCCSAP includes 44 programs under six thematic areas:**
 - ❖ **food security, social protection and health**
 - ❖ **comprehensive disaster management**
 - ❖ **infrastructure development**
 - ❖ **research and knowledge management**
 - ❖ **mitigation and low-carbon development**
 - ❖ **capacity building and institutional strengthening**



Budget and GDP of Bangladesh (FY06-FY11)



CC and DRR Investment Trend (FY06-FY11)



Rationale for PPCR Support

- Mobilize and leverage adequate and timely financing to meet huge needs for climate resilient development consistent with the MDGs
- Support GOB institutional capacity for research and application of knowledge on climate resilience in development
- Enable a more coherent planning, budgeting, implementation and monitoring of resources for climate resilience
- Explore innovative approaches in certain critical areas in climate adaptation – technology, financing, public/private collaboration



SPCR – outlines a comprehensive program to...

- **Assist GOB in implementing priority selected activities in line with BCCSAP and NAPA**
- **Focus interventions in poor and vulnerable coastal region**
- **Ensure effective coordination mechanism and institutional arrangements**
- **Leverage additional financing for adaptation**
- **Build capacity, raise awareness, monitor results**
- **Disseminate lessons for handling climate related risks**



SPCR Development Process

Led by: MOEF in close collaboration Economic Relations Div, MOF

Invitation to Participate: January, 2009

Submission of Expression of Interest: March, 2009

First Joint Mission: 1-11 February 2010

Multi-Stakeholder Consultation Workshop: 7-8 February 2010

Two Technical Missions to the coastal region: March, April 2010

Donor Consultations Workshop: 24 August 2010

Second Joint Mission/SPCR Wrap-up: 22 August – 2 September 2010



Consultations



Requested PPCR Financing

Project Concept Title	MDB	Requested PPCR Amount (\$'million)	Financing Modality	MDB Fee (\$'million)
Investment Project 1: Promoting Climate Resilient Agriculture and Food Security	IFC	13.1	Grant and Loan	0.262
Investment Project 2: Coastal Embankments Improvement and Afforestation	WB	25	Grant	0.436
Investment Project 3: Coastal Climate Resilient Water Supply, Sanitation, and Infrastructure Improvement	ADB	71	Grant and Loan	0.436
Technical Assistance 1: Climate Change Capacity Building and Knowledge Management	ADB	0.5	Grant	0.050
Technical Assistance 2: Feasibility Study for a Pilot Program of Climate Resilient Housing in the Coastal Region	IFC	0.4	Grant	0.050



Leveraging Potential of the PPCR

- The requested PPCR funds (US\$50 million grant, US\$60 million loans) will leverage an additional US\$515 million from ADB and the World Bank
- Other development partners may fund certain priority actions as identified in the SPCR e.g. CIDA



SPCR Interventions

Investment Project 1: Promoting Climate Resilient Agriculture and Food Security

Objectives

- Livelihood diversification through adaptive agriculture
- Scaling up climate resilient varieties of rice and crops including efficient irrigation system
- Early warning system for farming communities for field crop protection

Responsible MDB: IFC

Key Result: Agricultural products and practices that are adapted to the changing agro climatic conditions of the coastal zones ensuring food security and livelihoods for the most vulnerable

Government Implementing Agencies: Dept. of Agricultural Extension (DAE) of the Ministry of Agriculture and Bangladesh Meteorological Department (BMD)

Total Project estimate: \$13.1 million (including \$0.1 million for studies)

PPCR Request: \$3.1 million grant and \$10.0 million concessional financing



SPCR Interventions – cont'd

Investment Project 2: Coastal Embankments Improvement and Afforestation

Objective:

- Embankment stabilization, internal polder water management, afforestation

Responsible MDB: World Bank

Key Result: Strengthened coastal embankments to withstand daily, seasonal and erratic climate induced disasters including floods and cyclonic storms

Government Implementing Agencies: BWDB, the Forest Department (FD) and the Bangladesh Forestry Research Institute (BFRI)

Total Project estimate: \$325 million

PPCR Request: \$25 million grant

Co-Financing: Proposed \$300 million IDA credit



Coastal Afforestation, Denuded Embankments





SPCR Interventions – cont'd

Investment Project 3: Coastal Climate Resilient Water Supply, Sanitation, and Infrastructure Improvement

Objective: Climate resilient water supply, sanitation and drainage, Infrastructure improvement and small scale water resources improvement

Responsible MDB: ADB

Key Results:

- Improved water supply, sanitation and connectivity
- Reduced poverty and raised incomes in the coastal districts by sustained year round access to social services through construction and rehabilitation of all weather access roads that can withstand severe flooding

Government Implementing Agencies: LGED, DPHE, MOFDM, WSSA

Total Project estimate: \$286 million (including \$1.0 million for studies)

PPCR Request: \$21 million grant and \$50 million concessional financing

Co-Financing: proposed \$215 million ADB loan



SPCR Interventions- cont'd

Technical Assistance 1: Climate Change Capacity Building and Knowledge Management

Equip MOEF with requisite human resources and technology for managing and coordinating investments in and knowledge on climate resilient initiatives

- **Responsible MDB: ADB**
- **Government Counterpart: MOEF**
- **PPCR Request: \$0.5 million grant**



SPCR Interventions- cont'd

Technical Assistance 2: Feasibility Study for a Pilot Program of Climate Resilient Housing in the Coastal Region

Requisite information base for making economically, environmentally and socially investment decisions on low cost, storm and cyclone proof individual housing for coastal population and their livestock

Responsible MDB: IFC

Government counterpart: MOFDM/LGED

PPCR Request: \$0.4 million grant



Overall Expectations

- Increased resilience of coastal infrastructure to climate induced seasonal and natural disasters
- Reduced water and soil salinity and improvements in agricultural and fisheries production
- Improved capacity of MOEF to manage and coordinate investments in and knowledge on climate resilient initiatives
- Improved leveraging of public and private financing for climate resilient development





Questions?

Comments?

Thank you!

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