

Pilot Program for Climate Resilience

BANGLADESH



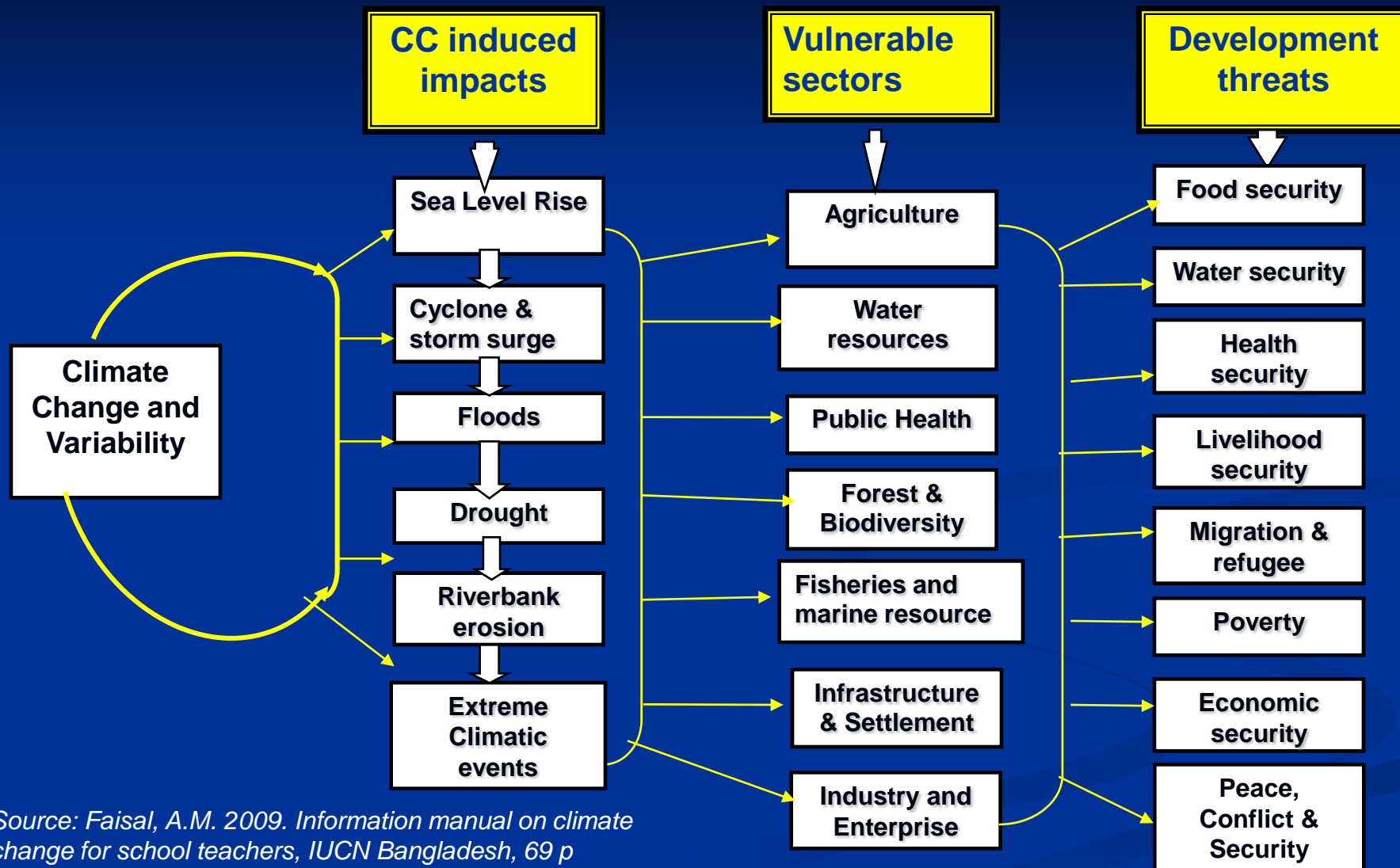
**Ministry of Environment & Forest and
Ministry of Finance
Government of the People's Republic of Bangladesh**

**PPCR Pilot Countries Meeting
15-16 March, Manila**

Country Context for Climate Change and Variability

- Bangladesh is one of the most vulnerable countries to climate change;
- Fallout of Climate change climate sensitive key sectors like agriculture, water resources, forest, fisheries & livestock, infrastructure & settlement, health, and social services;
- The key challenges in tackling climate change in Bangladesh are ensuring food and water security, managing disaster risk, protecting infrastructure, maintaining health and energy security, and tackling forced migration and overall environmental degradation;
- Climate Change is the pressing development concern of Bangladesh given the country's high vulnerability to its impacts

Climate change impacts, vulnerability and linkage with development- A country context



Source: Faisal, A.M. 2009. Information manual on climate change for school teachers, IUCN Bangladesh, 69 p

Country Progress to Address Climate Change and Variability

- **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 estimate \$500 million for first 2 years. Full implementation requires \$5 billion.**
- **BCCSAP includes 44 programs under six thematic areas:**
 - (a) food security, social protection and health;
 - (b) comprehensive disaster management;
 - (c) infrastructure development;
 - (d) research and knowledge management;
 - (e) mitigation and low-carbon development; and
 - (f) capacity building and institutional strengthening.

Country Progress to Address Climate Change and Variability

- GoB Climate Change Trust Fund: \$100 million;
- Multi-Donor Trust Fund of Bangladesh: in progress. To date MDTF received a commitment of about \$100 million from UK, Denmark, Sweden and European Commission;
- Over the last 35 years, the GoB invested over US\$10 billion to make the country less vulnerable to natural disasters;
- Until recently, Bangladesh chaired the LDC group in the international climate change negotiations and remains a strong LDC voice in it speaking on behalf of vulnerable countries

Country Institutional Arrangements for Climate Change

- MoEF established a '*Climate Change Cell*' in 2004 in DOE under CDMP to establish “an integrated approach to climate change risk management at national and local levels;
- GoB set up a '*Secretariat on Climate Change*' in MOEF to monitor activities for tackling climate change and manage the CC Fund. MOEF formed two committees—Strategy and Action Plan Committee and Fund Administration Committee;
- A Climate Change Unit has been set up to administer the Multi-Donor Trust Fund for BD with technical backstopping from World Bank/donors ;
- Climate change focal points set up in selected focal ministries;
- GoB is mainstreaming climate change in development planning and programming;
- The cabinet approved the draft '*Climate Change Trust Fund Act, 2010*, for 'protecting lives and property of the people from adverse effects of climate change';
- Parliamentary Group on Climate Change and Environment was formed on 2009 to establish strategic alliances and common positions and standards.

PPCR Joint Mission

Time: 1-11 February 2010

Led by: Ministry of Environment and Forests,
Govt. of the People's Republic of Bangladesh

Mission Objectives

- support Government thru multi-stakeholder consultation in formulating an agreed strategic approach and investment plan for integrating climate change adaptation into core national and local development plans and programs;
- stocktaking exercise on previous, ongoing and pipeline activities on climate adaptation;
- identifying priority vulnerable sectors and possible preliminary actions and activities
- Identifying priority sector-specific adaptation options and activities with focus on integrated project development and implementation in climate vulnerable zones;

Core Mission Team

Ministry and Agencies

Ministry of Environment and Forest (MoEF)

Ministry of Water Resources (MoWR)

Ministry of Agriculture (MoA)

Ministry of Food and Disaster Management (MoFDM)

Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C)

Ministry of Social Welfare (MoSW)

Ministry of Health and Family Welfare (MoHFW)

Economic Relation Division (ERD)

Planning Commission (PC)

Development Partners

Asian Development Bank (ADB)

World Bank (WB)

International Finance Corporation (IFC)

United Nations Development Programme (UNDP)

Department for International Development (DFID) and

Canadian International Development Agency (CIDA)

PPCR Participatory Process Followed

- PPCR meetings with relevant ministries and line agencies
- Multi-stakeholder consultation workshop from 7-8 Feb 2010 with participation of representatives from concerned ministries, line agencies, NGOs, civil society organization (CSOs), community-based organizations, research/academic institutes, private sector, and development partners
- Based on the priorities identified in the revised NAPA and BCCSAP, organized workshop in following four thematic groups:
 - Session 1:** Agriculture and Food Security (Chaired by the Ministry of Agriculture and Co-chaired by IFC)
 - Session 2:** Extreme Climate Events and Climate Induced Disasters (Chaired by Ministry of Disaster Management and Co-chaired by DFID)
 - Session 3:** Water Resource Management (Chaired by Ministry of Water Resources and Co-chaired by CIDA)
 - Session 4:** Public Health, Migration and Social Protection (Chaired by Ministry of Local Government and Co-chaired by UNDP)

Major Findings

Sector	Impacts & Vulnerability	Priority actions
Agriculture & Food Security	<ul style="list-style-type: none">▪ High temperature regimes, saline water intrusion, changing rainfall patterns, frequent flash floods, prolonged drought impacting crops, livestock, fisheries impacting crop production and food security;▪ Increased biotic stress on crops and changing phenological patterns and▪ Soil degradation, desertification and salinity leading to reduced crop production	<ul style="list-style-type: none">• Development and dissemination of climate resilient varieties of food grains/crops, modification of cropping systems for water-logged and salinity affected coastal areas;• Promotion of efficient irrigation practices and rainwater harvesting;• Provision of storage facilities and promotion of crop diversification;• Documentation of local indigenous knowledge and innovative practices;• Improved and expanded agricultural extension services; and• Fodder reserves and shelter for livestock during extreme events.

Major Findings

Sector	Impacts & Vulnerability	Priority actions
Extreme Climate Events and Climate Induced Disasters	<ul style="list-style-type: none">▪Frequent cyclones & tidal surges adversely affecting millions of coastal population;•Sea level rise and salinity intrusion affecting the lives of coastal communities;•Recurrence of frequent heat and cold waves.•Untimely and heavy rainfall in short periods of time disrupt drainage systems and create flooding and water logging	<ul style="list-style-type: none">•Multi-purpose Cyclone Shelter Centers where these are inadequate;•Extension of cyclone preparedness program (CPP);•Improved early warning and forecasting system;•Climate resilient livelihood diversification to support to coastal communities;•Greenbelts/mangroves along the coast as defense against storm surge and cyclones;

Major Findings

Sector	Impacts & Vulnerability	Priority actions
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Water Resource Management</p>	<ul style="list-style-type: none"> •Abundance of water in monsoons, scarcity in dry season, and increased salinity, adversely affecting water availability and quality; •frequency of intense rainfall severe floods, landslides, riverbank erosion and mud flows; •Increase in water borne diseases; 	<ul style="list-style-type: none"> •Adaptation for water-logging through tidal river management (TRM); •Climate proofing of coastal infrastructure including reconstruction, repair and maintenance; •Impact assessment of sea level rise on inundation, drainage congestion, salinity intrusion, change of surge height and coastal morphology in the coastal zone; •Excavation of silted riverbeds to contain river water and increase navigability •Upgrading the hydrological network and improvement of forecasting-system; and

Major Findings

Sector	Impacts & Vulnerability	Priority actions
Public Health, Migration and Social Protection	<ul style="list-style-type: none"> • Increasing incidence of water-borne, air-borne and vector-borne diseases • Increased suffering of children, women, elderly due to heat waves and cold waves • Displacement of vulnerable people due to cyclone and storm surge sea level rise (SLR), river erosion, etc. resulting in loss of livelihood and increase in climate migrants • Malnutrition and Psycho-sociological stress 	<ul style="list-style-type: none"> • Climate proofed water supply and sanitation infrastructure and finding innovative water supply systems and sanitation; • Small scale water resource management schemes for community level irrigation; • Improved diseases/vector surveillance and monitoring; • Monitoring of internal and external migration of adversely impacted population and providing safety net and support to them for rehabilitation; • Improved education facilities and skills training for migrants with financing for resettlement, rehabilitation and support for livelihood.

Cross sector issues

- Due to multi-sectoral nature of investment, a comprehensive assessment and evaluation of institutional issues (including private sector) would be carried out
- Women and children will be adequately integrated into pilot activities
- Integration of disaster risk management with climate change adaptation
- Address social dimension
- Institutional strengthening & capacity building
- Complementarities with the ongoing activities

Design and Implementation Arrangement

- **Adopt an integrated cross-sector approach**
- **Geographical focus & adaptation investments and activities in the most vulnerable coastal zones**
- **Ensure effective coordination mechanism and institutional arrangements**
- **Coordinated and implemented through single lead ministry**
- **Possible entry points for leveraging the private sectors**
- **Single Technical Assistance Project Proposal**

PPCR Institutional Arrangement

Joint Mission

- MoEF led, multi Ministry & agency
- MDBs, UN agency, and Bi-lateral support
- Multi-stakeholder consultation with CSO, private sector, academic, research institute and media

PPCR Phase1: SPCR

- MoEF will lead in coordination & work in close collaboration with MoEDM, MoA, MoWR, MoLGRDC, MoSW, MoHFW, etc.
- Multi-sectoral approaches

PPCR Phase 2: Piloting adaptation

- Deployment of local Govt. body (e.g. *Upazila* administration)/CSO/Private sector for piloting community-based adaptation
- Operationalization of climate proofing
- Implementation arrangements to be finalised after SPCR approved by PPCR-SC

Follow Up Actions and Time-line

- ✓ Draft SPCR will be completed by 31 May 2010
- ✓ Follow up Joint Mission to review and agree on the draft SPCR with the Government will be fielded by June 2010
- ✓ Submission of the SPCR by the Government to PPCR-SC through MDB for approval and allocation of Project Preparation funds by June 2010
- ✓ Preparation and approval of TAPP by the Government on the basis of approved SPCR to be completed by July 2010



Questions?

Comments?

Thank you!

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