

**Emergency 2007 Cyclone Recovery and
Restoration Project (ECRRP) in Bangladesh:
An example of successful climate change
adaptation effort**

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Brief Overview of the Country

Area is about 147 thousand sq. km

- *80 percent Floodplain*
- *12 percent Hilly area*
- *8 percent Pleistocene Terrace;*
- Land-man ratio 0.06 hectare

Population of nearly 160 million with GDP about 1150 US\$ per capita

Climate is characterized by

- *high temperature, heavy rainfall, often excessive humidity, seasonal variations*
- Rainfall 1194 mm to 3445 mm (average during monsoon June-August)
- Humidity Highest 99% (July) Lowest 36% (December & January)

Diverse Agro-ecological System

Mainly four **seasons**:

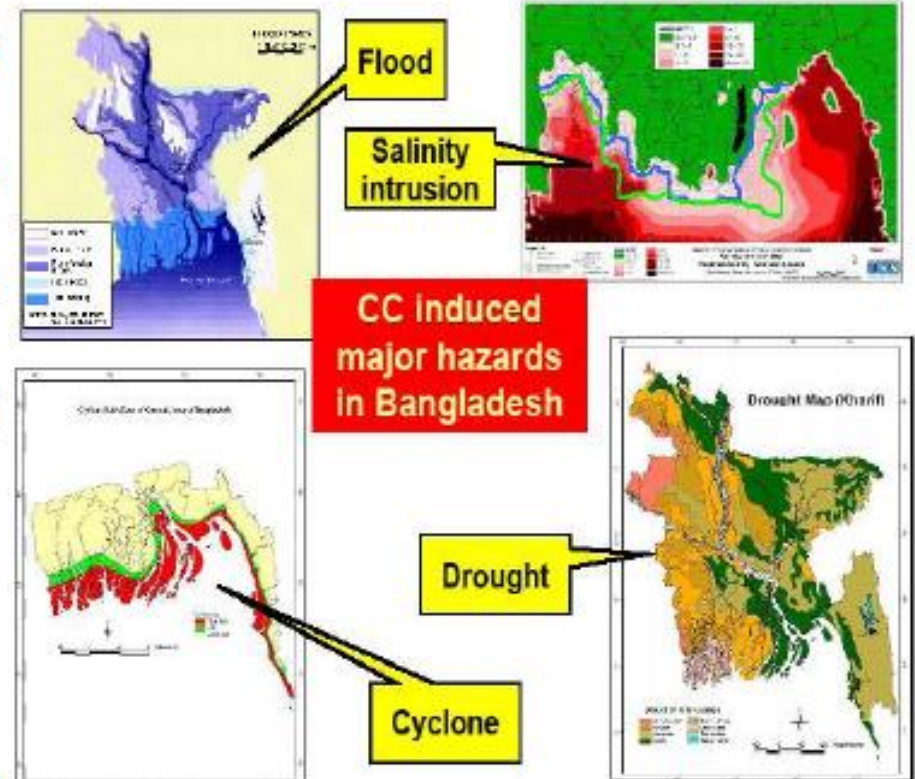
Summer (Mar-May), Monsoon (Jun-Sep),
Autumn (Oct-Nov) and Winter (Dec-Feb)



Climate Change Impact

- ✓ Summer are becoming hotter (**High temperature**)
- ✓ Monsoon irregular with **untimely rainfall**
- ✓ Increased **river flow and inundation** during monsoon
- ✓ Heavy rainfall over short period causing **water logging**
- ✓ Increased frequency, intensity and recurrence of **flood**
- ✓ Crop damage due to **flash flood**
- ✓ Very **little rainfall** in dry period
- ✓ Crop failure due to **drought**
- ✓ Prolonged **cold spell**
- ✓ **Salinity intrusion** along the coast region
- ✓ **Pest infestation**

Impact of climate change in Bangladesh



Climate change, a major barrier to food security and achievement of sustainable development goals in Bangladesh.

Objectives of ECRRP

- Recovery of **livelihoods** (i.e. crops, fisheries and livestock);
- Recovery of **infrastructure** (i.e. embankments, disaster shelters);
- Strengthening of **Disaster Risk Reduction and Management** (i.e. disaster risk mitigation, institutional capacity building);
- Building **Long-term Preparedness** to face Future Disaster (i.e. preparation of future projects for improvement of river bank, coastal embankment; construction of disaster shelters and up-gradation of the rural road network).

Cost of the Project

(In lakh Tk)

Source	Original	1 st Revised	2 nd Revised
GoB	Tk. 359.40	Tk. 598.37	Tk. 1,325.00
P.A.	Tk. 75,155.50 (US \$ 109 m)	Tk. 157,528.42 (US \$ 221 m)	Tk. 3,09,207.00 (US \$ 396.36 m)
Total	Tk. 75,514.90	Tk. 158,126.79	Tk. 3,10,532.00 (US \$ 398.11 m)

DONORWISE FINANCING

Donor	Signed Amount (In million \$)
IDA Original Credit	109.00
IDA Additional Financing I	75.00
GFDRR TF	2.96
BCCRF TF	25.00
KfW	4.90
IDA Additional Financing II	140.00
Others	39.50
Total	396.36

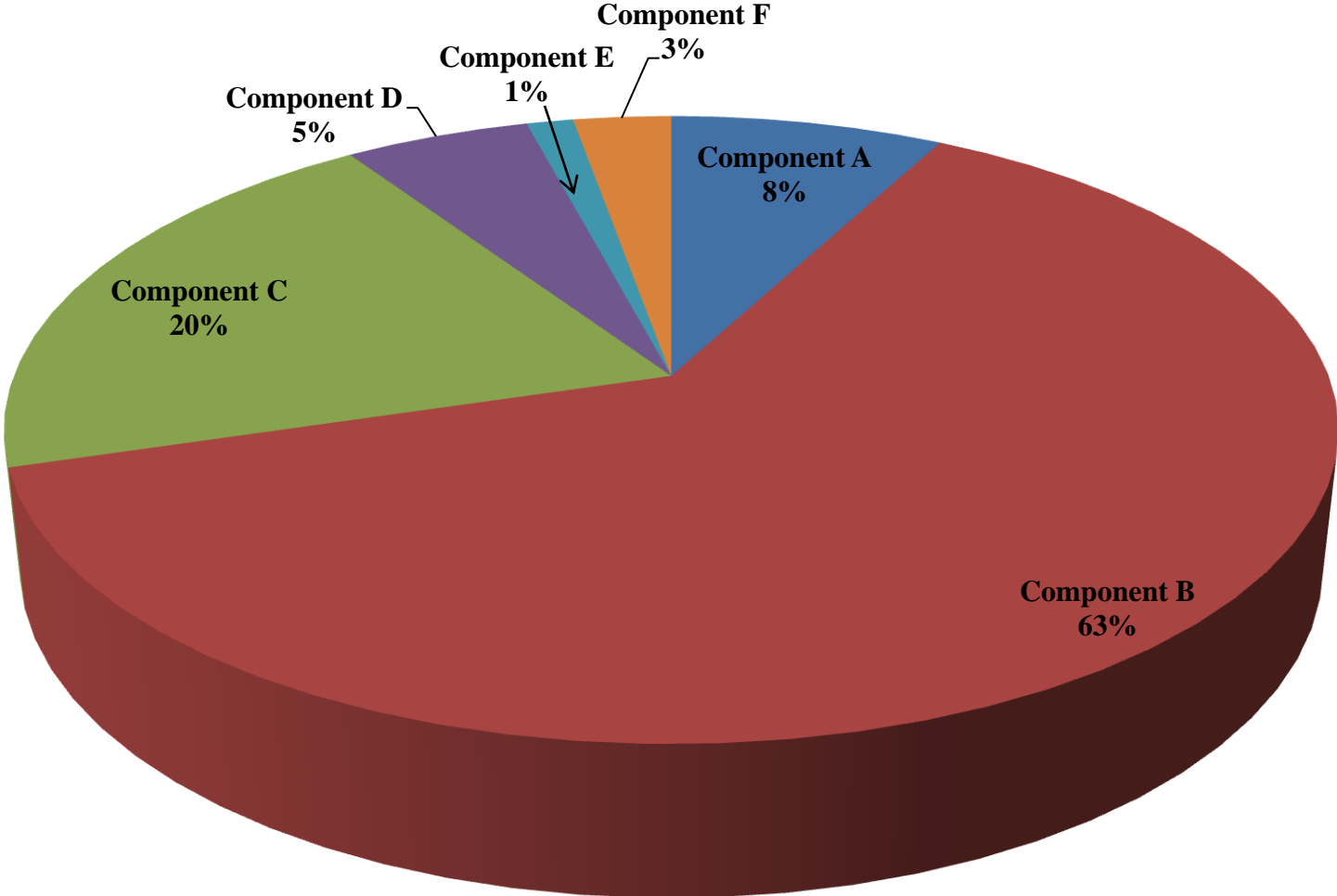
Project Components & PIAs

Component	Cost (in lakh Tk)	PIAs	Sponsoring Ministries/Divisions
A (1-3)	23,876.35	DAE, DLS & DOF (Contracted out to FAO)	M/o. Agriculture & M/o. Fisheries and Livestock
B (1-4) & D 3	1,95,170.00	LGED	Local Govt. Division
C (1-2) & D 2	70,310.00	BWDB	M/o. Water Resources
D 1	7,888.00	DMB	Food and Disaster Management Division
E & F	13,288.00	PCMU	Programming Division
Total	3,10,532.35		

Project Period

Approval Status	Commencement	Completion
Original	01.08.2008	30.06.2013
1 st Revised	01.08.2008	30.06.2014
2 nd Revised	01.08.2008	31.12.2017

Distribution of Funds by Component



Project Area

Thirteen Southern Districts of Bangladesh:

- **Sathkhira**
- **Khulna**
- **Bagerhat**
- **Barguna**
- **Patuakhali**
- **Pirojpur**
- **Jhalokathi**
- **Bhola**
- **Barisal**
- **Lakshmipur**
- **Noakhali**
- **Feni**
- **Chittagong**

Major Activities of ECRRP

- Distribution of 20,976 nos. agriculture machinery among 2,21,000 marginal farmers and 6,398 MT of fertilizer, 720 MT seeds among 94,129 farmers;
- Introducing saline tolerant paddy seed, improved corn and oilseed variety;
- Distribution of 2,62,950 nos. of ducks/chicken, 17,800 nos. of goats/sheep, 2075 nos. of cows, 2,061 MT of animal feed and 3,936 set of agro processing machinery among 37,925 nos. of poor families;
- Distribution of 15,550 carp package (feed, vaccine and training), 3,000 package galda and 6,300 package telapia/bagda among 37,014 nos. of fisherman families;
- Distribution of 93 nos. of Fibre Reinforced Plastic (FRP) Boats, 1,296 nos. of fishing nets, 1,110 nos. of poma jal (seine net), 1,623 nos. of fish processing machinery and 17,340 sets of sea safety equipments;

Major Activities of ECRRP

- 22 nos. of water vessel/transport (6-water ambulances, 12-rescue boats, 4-sea going rescue boats) and 2,608 nos. of different equipment procured for early warning and rescue work at the time of natural disaster;
- Construction of 360 nos. of new cyclone shelters, 30 nos. of killas, reconstruction/improvement of 457 nos. of existing cyclone shelters, 360 km of shelter connecting roads and construction/ reconstruction of 1200 metre of culvert/bridges;
- Construction/reconstruction of 514.24 km of embankment, 317 nos. of new water control structures, repairing of 162 nos. of existing structures and 19 km of river bank protection;
- Conducting 3 studies in order to design of future projects/ programmes.

Benefits of the Project

- Agriculture Sector has recovered with improved resilience to future disasters
- Agriculture Production (including Fisheries and Livestock) Increased due to supply of quality seeds, fertilizer, irrigation facilities, modern machineries, technology and training, which enhanced food security and livelihood.
- Employment generate and income level raised resulting in the reduction of poverty.

Benefits of the Project **continue.....**

- Access to safe shelters for men and animals during disaster has increased
- Early warning system on natural disaster has improved
- Road communication network has improved.
- People's awareness about disaster preparedness has increased and accordingly their participation to climate change adaptation has improved.

- Food storage capacity at house hold level has increased that ensures better food security and resilience to natural disasters

Key lessons and messages

- **Adaptation to climate change is a social learning process: learning how to adapt (better) takes time.**
- **Adaptation to climate change is very location specific – not all options fit to everywhere / every seasons.**
- **Responsibilities of concerned institutions should be clearly determined in promoting climate change adaptation.**
- **Promoting Public–Private Partnerships (PPP) is vital for large scale promotion and adoption of technologies.**
- **Farmers' acceptance of the CCA options is also a function of their awareness of Climate Change Impact.**
- **Local Governance is the key entry and Local Government Institutes are key partner for building local resilience.**
- **Strong focus on women and gender equity in designing adaptation programs is needed**

A faded background image showing two individuals wading through a river. They are carrying large bundles of harvested rice on their heads and backs. The scene is set in a rural, agricultural environment.

Thank You