Sharing Experiences

PRESENTATION ON

Role of WARPO

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Water Resources Planning Organization (WARPO)

Ministry of Water Resources
1. Delineation of the Coastal Zone of Bangladesh

2. Wealth - coastal resources

3. Causes of degradation of coastal resources

4. Role of WARPO in ICZM
1. Delineation of the Coastal Zone of Bangladesh

1.A. Global position

Total area: 156,000 sq. km.
Total population: 145 million
Coastal zone: 37,000 sq. km.
1.B. Criteria for Coastal Zone

- Tidal affect
- Salinity
- Storm Surge
1.C. Broad Division of Coastal Zone of Bangladesh

19 districts, 147 upazilas

Population 8.4 million in 1901,
12.8 in 1951 and 35.1 in 2001
2. Wealth - coastal resources
2. Wealth - coastal resources
3. Causes of degradation of coastal resources

- Human activity
- Natural disasters
- Climate change
Vulnerabilities of Coastal Zone of Bangladesh

- Cyclones, Storm Surges, Tornados, Floods, Drought, Earthquakes
- Arsenic-contamination
- Salinity Intrusion
- Land Erosion
- Drainage Congestion
- Ecosystem Degradation
- Climate Change
- Sea Level Rise
Opportunities of Coastal Zone of Bangladesh

- Shrimp/Prawn Culture, Marine Fishery, Inland Fishery/Aquaculture
- Tourism
- Gas & Oil
- Conservation of Sundarbans
- Port
- Land Accretion
- Salt Farming
Role of Water Resources Planning Organization

Took initiative of ICZM Project (2002-2006)

Major Outputs

- Coastal Zone Policy (CZPo)
- Coastal Development Strategy (CDS)
- Priority Investment Programs (PIP)
- Integrated Coastal Resources Database (ICRD)
The CZPo establishes the goal of integrated CZ management: “to create conditions, in which the reduction of poverty, development of sustainable livelihoods and the integration of the CZ into national processes can take place”.

More specifically, the following development objectives are determined in the CZPo:

a. economic growth;
b. basic needs and opportunities for livelihoods;
c. reduction of vulnerabilities;
d. sustainable management of natural resources;
e. equitable distribution;
f. empowerment of communities;
g. women’s development and gender equity and
h. conservation and enhancement of critical ecosystems.
The policy provides general guidelines so that the coastal people can pursue their livelihoods under secured conditions and in a sustainable manner without impairing the ecological and environmental balance.

The Coastal Zone Policy is a harmonized policy. In pursuance of this policy, all concerned ministries, agencies, local government institutions, NGOs, private sector and the civil society will put in their efforts in a coordinated approach for the development of the coastal zone.

Effective measures will be taken to reduce poverty through enhancing economic growth/livelihood activities.
The main features of ICZM approach would include:

- Integration through harmonization and coordination;
- Linkage to national planning mechanisms;
- Implementation through respective line agencies;
- Co-management and participatory decision;
- Participatory monitoring and evaluation;

Special measures will be taken for conservation and development of the natural environment of the Sundarbans;

A “Compendium on the Laws Relating to and/or having bearing on Coastal Areas” will be prepared.
As the main mechanism for implementation of the CZPo, it describes approaches for realistic translation of policies into concrete actions. It sets targets for priority actions and arrangements for their implementation.

Develop PIPs by groups of government and non-government agencies, local government institutions and development partners through multi level consultation, which will also be implemented by these agencies.

Attempts to unlock potentials of the coast by taking into account the emerging trends.

Establishment of the PCU & Operationalization of ICZMP.
23 projects identified through multi-level discussion and regional workshops

Each project, in the form of concept note, being formulated through dialogue between 2 or more GoB agencies

District Development Plans (DDP) have also been developed as a pilot area for two districts (Cox’s Bazar and Bhola) out of 19 districts on the priority basis
## Priority Investment Programs

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<th>Name of Agency</th>
<th>No. of CNs (Lead Agency)</th>
<th>No. of CNs (Co-agency)</th>
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<td>Coast Guard (CG)</td>
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Integrated Coastal Resources Database (ICRD)

National Water Resources Database (NWRD) (More than 400 layers)

Integrated Coastal Resources Database has been established as a sub set NWRD

These data are being disseminated widely to the project planners, researchers and various stakeholders contributing to the development of CZ.
Establishment of the PCU & Operationalization of ICZMP

Following the direction of the CZPo and CDS, a Project Coordination Unit (PCU) has been established within WARPO for operationalizing CZM activities.

A Steering Committee has been formed comprising members from the Ministry and different agencies to help PCU for smooth functioning.

Formulating the Laws to regulate CZM activities still remains in the pipeline.
Thank you all very much
The Sundarbans is the house of one of the richest natural gene pools for fauna and flora in the world. The flora contains a total of 425 species of wildlife so far identified in the Sundarbans. The most notable – the Royal Bengal Tiger – is endemic to the forest. In recognition of this richness in biodiversity, Sundarbans has been declared as a World Heritage Site by UNESCO.
Projected impacts of Climate change in Bangladesh

**Climate change** is threatening to alter established weather pattern and is set to accelerate:

**Stresses**
Regional rainfall pattern change (area becomes wetter or drier or both)

**Shocks**
Extreme events (floods, droughts and cyclones) may occur more frequently (Implications for water quantity and quality)

Sea level rise can pollute surface and groundwater sources
Implication of climate change in Bangladesh

- Monsoon may be intensified
- Date of onset may be shifted
- May influence characteristics of peak discharge of the major rivers
- Extent and depth of flooding may increase
- High floods may occur more frequently
- Coastal inundation may have serious consequences