

Climate Resilience Coastal Embankment and Participatory Management



Bangladesh is most vulnerable in climate change context

- Recent Assessment: Bangladesh 7th most climate vulnerable country of the world
[Global Climate Risk Index 2020 – German Watch]
- 1 out of every 7 Bangladeshis will be displaced by 2050. (IDMC)
- 17% land of Bangladesh with 20-25 million people will be in risk of Displacement [BCCSAP 2009]

Risk of Coastal Area

- **Geographic & Population**
- One-third of the total area of Bangladesh & nearly 35% of total population live here
- 20 millions are extreme climate vulnerable
- **Impact & Risk**
- 13 % coastal land by 2080 will be submerged due to Sea level rise (SLR)
[Displacement Solution]
- Frequency and Intensification of natural disasters increased

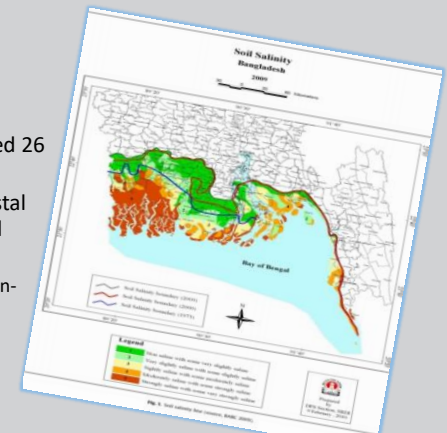


Risk of Coastal Area

Salinity Increase

- In last 35 years, salinity increased 26 percent in the country
- Salinity increased 3.5-4.5% coastal land affected per year in coastal areas

[Soil Resources Development Institution-SRDI]



Risk of Coastal Area

- **Economic Loss**
- 3% GDP's loss and 5% poverty increased due to Cyclone SIDR in 2007 [UN SIDR early recovery plan 2008]
- Embankments severely damaged and nearly BDT. 2500 core loss for Ayla
- Livelihood opportunities Reduce and Displacement
- People migrate to the big cities (Dhaka, Chittagong etc.)



Dealing vulnerability and climate adaptive infrastructures

- People's perception on Climate Infrastructure
- Embankment is considered as '**First Line Protection Infrastructure**' as it;
 - ✓ Will reduce the risk of livelihood & asset
 - ✓ Reduce the burden displaced people and their influx to the cities



Present scenario of Coastal Embankments

- Total Embankment length is 16,261 Km and Coastal Embankment is 5,757 Km (BWDB)
- Constructed in 60s decades of last century
- Effectiveness now a big question ...???



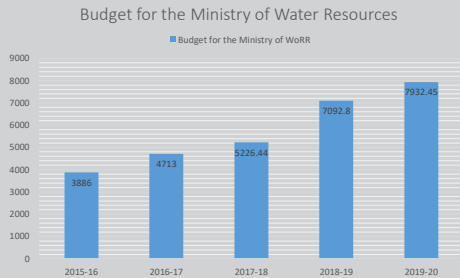
Can the BWDB meet the demands of the people?

- BWDB is the government responsible authority for coastal embankment
- Hardly aligned with the existing demand addressing climate change
- Transparency & Accountability (Inadequate people's participation on embankment management)



Government commitment and budget allocation

- Donor dependent financing impede the real time action
- Budget is still inadequate despite inclusion in climate finance strategy
- 2-3 billion taka investment needed per year (WB)



Participatory management save cost and sustainable: Case Study of Kutubdia & SEMPP

- KD Case: Instantly repaired 500m damaged embankment costing only 5.5 lac
- SEMPP (Sustainable Embankment Management Pilot Project), Bhola
- ✓Community Rehabilitation, Afforestation



CSO expectations/ recommendations on coastal embankment management

Effective participatory engagement is essential

- There should not rhetoric and political bias community engagement somehow being happened currently.
- We expect wider community participation process for taking opinion in planning and implementation process
- From PIC (Project Implementation Committee) and advisory committee including different level social actors following non-partisan principle



CSO expectations/ recommendations on coastal embankment management

Effective participatory engagement is essential

- Deployed and engage community for post constructed embankment and their maintenance.
- Budget need to be allocated and as it already proofed as low cost for maintenance.
- Engage forest department to sustainable afforestation



CSO expectations/ recommendations on coastal embankment management

Management and maintenance should be decentralized to local government

- WDB reportable relationship need to be set with district administration for their work and accountability
- Regular reporting mechanism to respective authority (dist. & upazilla level) need to develop and establish.



CSO expectations/ recommendations on coastal embankment management

Management and maintenance should be decentralized to local government

- Budget should be allocated directly to district, upazila and even union level. So that local authorities will be capable for instant decision making and implementation.
- Information are open, all related to embankment in both implementation (at field) and office (upzilla and district) level.



CSO expectations/ recommendations on coastal embankment management

Increase budget allocation

- Set priority for construction of embankment based on the vulnerability, risk and risk reduction
- Allocate budget from government own revenue.



Thank You!