BAN: Coastal Towns Environmental Infrastructure Project

Inclusive Approach for Disaster Risk Management

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Background

- **Concept Paper and PDA**: 6 August 2012
- **TA:**
  - CDTA 7890 (JFPR): climate change adaptation study (2012-2013)
  - PPTA 8128 (JFPR, WFPF): feasibility study (January 2013-2014)
- **SRM:** 15 October 2013
- **Board Approval:** 2014

Key Issues in Coastal Towns

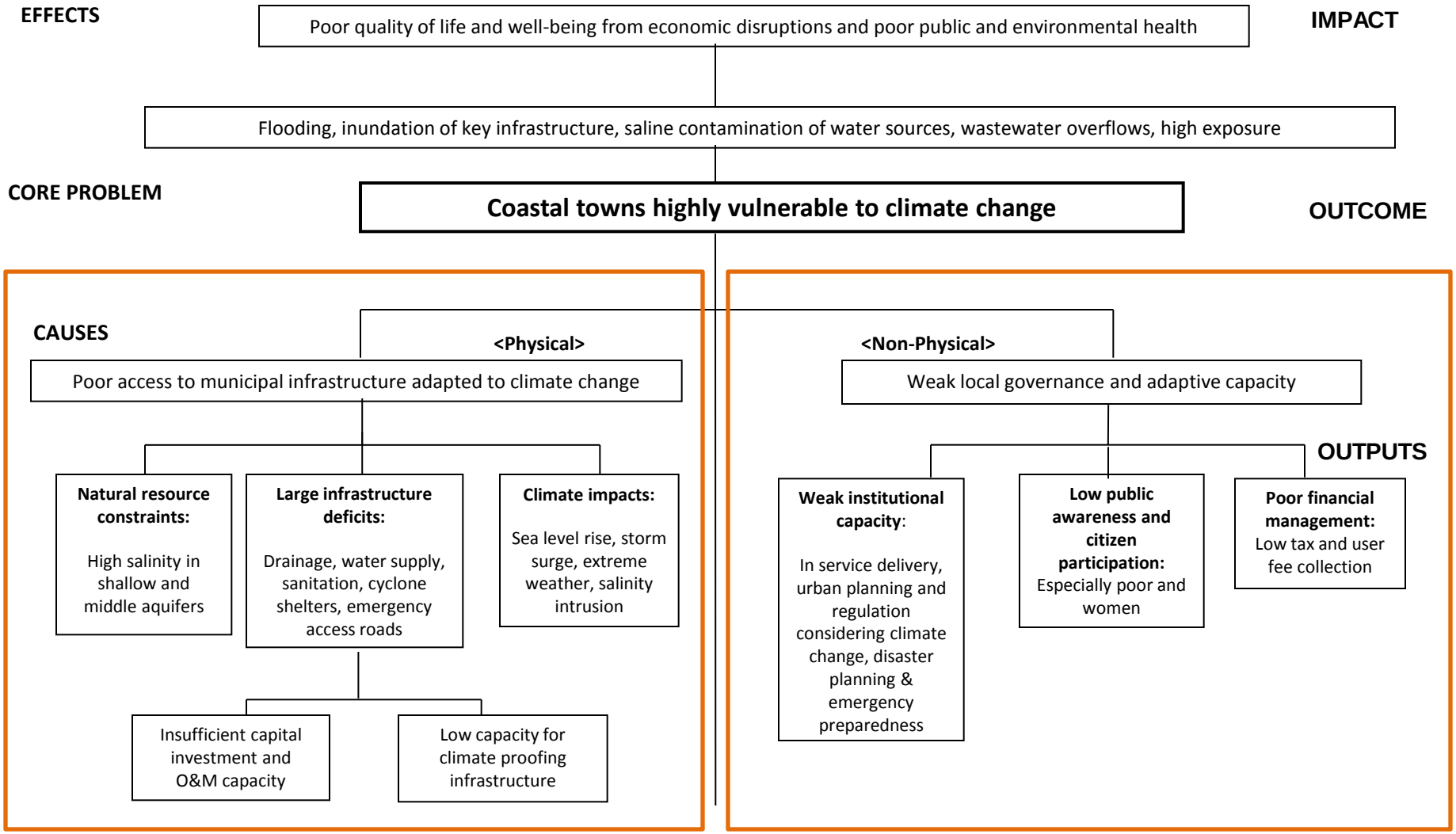
Physical

1. Large infrastructure deficits
2. High salinity in shallow and middle aquifers
3. High vulnerability to climate change

Non-physical

1. Poor capacity and weak governance
2. Low public awareness and citizen participation
3. High poverty

PROBLEM TREE



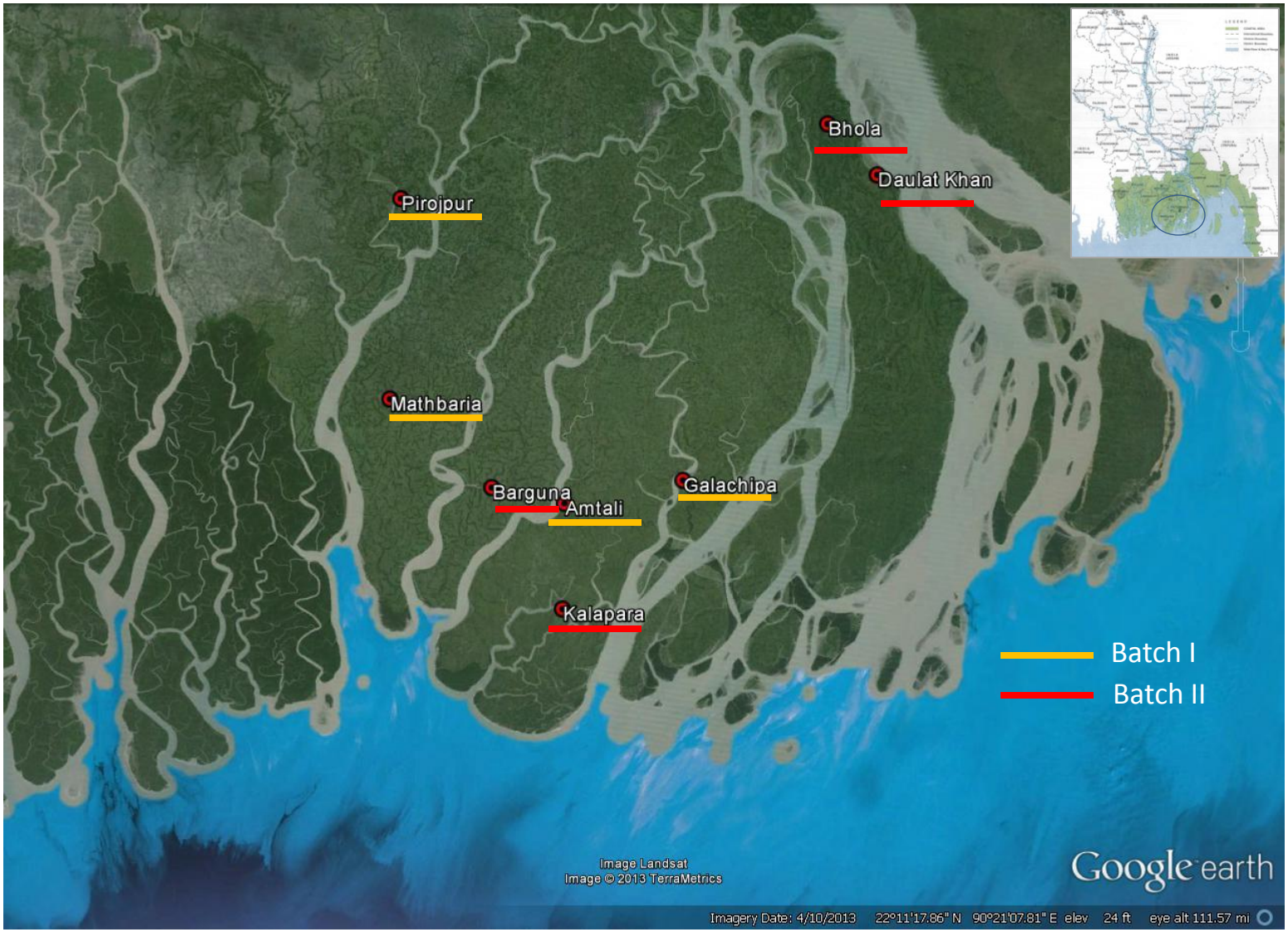
Poverty and Gender

- Findings of PPTA socioeconomic surveys
  - High poverty rates in coastal towns (50%) vs. national average (31.5%)
  - 18% live in slums
  - Poor live in less permanent structures (tin, thatch houses) in high risk areas
  - Employed in climate sensitive sectors (agriculture and fisheries)
  - Poor have few options for livelihood diversification and not competitive in the job market due to lack of education
  - Limited access to services which are women friendly - only 35% of cyclone shelters have separate facilities for women.
  - Around 74% of HHs lack access to HH water connections
  - Water sources contaminated with high salinity or arsenic
  - High incidence of diarrhea (55% surveyed HHs reported in past 6 months)

Project Design

- Holistic, integrated, participatory approach:
  - **Structural**: provide climate-resilient municipal infrastructure
  - **Non-structural**: strengthen institutional capacity, municipal governance, public awareness, community mobilization

Project Towns



Impact and Outcome

- The *impact* of the project will be improved well-being in coastal towns.
- The *outcome* of the project will be increased climate and disaster resiliency in coastal towns benefitting the poor and women.

Output 1: Improved Climate-Resilient Municipal Infrastructure

Performance-Based Investment Approach

Each town entitled to two stages of investment linked to demonstrated performance in governance reforms

Performance Categories

1. Institutional strengthening for disaster preparedness
2. Municipal financial management
3. Citizen participation and social accountability
4. Municipal planning, service delivery, and O&M

Stage 1 performance criteria →

Stage 1: Climate resilient infrastructure
(designed for 2040 climate projections)
Drainage
Water supply
Sanitation
Cyclone shelters
Emergency access roads
Solid waste

Stage 2 performance criteria →

Stage 2: Local economic infrastructure
Markets
Bus terminals
Boat landings
Commercial roads

Output 2: Strengthened Institutional Capacity, Governance, and Awareness

- Non-structural measures to reduce climate and disaster risk
  - update urban master plans, building codes, and engineering design standards considering climate change and disaster resilient measures
  - improve water safety planning and groundwater monitoring through the development of water safety plans and guidelines,
  - establish disaster management standing committees in each pourshava and deliver appropriate technical training for the members of such committees
- Municipal governance and service delivery
  - strengthen municipal finance systems to improve local revenues and financial sustainability of investments
  - enhance citizen participation in pourashava planning and decision making
  - strengthen technical capacity and institutional arrangements for improved service delivery and O&M
  - promote private sector participation in fecal sludge management. Town and ward-level committees will be formed under the project to improve the citizen participation.
- Public awareness, behavior change, community mobilization
  - conduct education and communication campaigns to raise public awareness of climate change and disaster related risks and preparedness, 3R and WASH
  - livelihood training programs for poor households targeting women
  - community mobilization to enable poor communities to access and use climate resilient infrastructure (developed under Output 1).

Gender Theme

- Needs assessment
- Community participation in urban planning
- Facilities for women
- Role of women in O&M
- Disaster committees
- Awareness campaigns
- Livelihood training
- Sensitization

Examples of Climate Resilient Infrastructure Designs

Roads and Bridges -Raise road levels -Increase BC thickness -temperature reinforcement in RCC concrete -Compaction	**Sanitation** -Raise latrine, septic systems above flood levels -Site in areas less prone to future flooding	**Cyclone Shelters** -Cyclone shelters open ground floor -Design for 260 km/hr wind speeds
Drainage -Increased capacity -Improved O&M, solid waste management	**Water Supply** -Secure potable source free of salinity -Increase design size of water supply -Site tube wells, pump houses from flood prone areas -Power backup generator	**Other Municipal Infrastructure** -Site markets, bus terminals in areas less prone to flooding -Use stronger materials

Inclusiveness in DRM

- Identified in the project goal **"building resilient communities…benefiting poor and women"**
- An **approach** adopted in all project outputs
  - Output 1: Improved Climate-Resilient Municipal Infrastructure
  - Output 2: Strengthened Institutional Capacity, Governance, and Awareness
- Integrated in both **structural and non-structural measures**
  - Important especially where capacity and governance is an issue
- Based on findings of FGD **"Lack of disaster preparedness identified as one of the reasons for poor being more vulnerable"**

Inclusiveness in DRM

- Institutional strengthening for disaster preparedness identified as a **criteria for performance-based investment approach**

- Integrated in **implementation mechanism**
  - Recruitment of **locally-based Pourashava Support Teams including community mobilizers** for community-based disaster preparedness
  - creating awareness on disaster risk among the people especially the poor and vulnerable in disaster prone areas,
  - awareness on safe evacuation routes,
  - understanding and dissemination on EWS,
  - facilitate community-based disaster preparedness specific to each pourshava

Integrating DRM in Non-Structural Measures – Urban Planning

- **Vulnerability and adaptation assessments** that will form backbone of urban planning
  - Based on intensive **participation of communities**
  - Develop **community hazard mapping** in hotspot wards
  - Develop improved disaster preparedness program targeting most **vulnerable**
  - Presentation of the **results of hazard mapping to vulnerable communities**, cyclone preparedness program staff, pourashava DM Standing Committee

- Revision of **urban master plan**
  - Protect **natural assets** critical to climate proofing (ponds, natural barriers) from destruction- assets are important for vulnerable community
  - Ensuring **escape routes** (roads and bridges) and adequate access of emergency services (fire fighting, ambulance, search and rescue)

- Strengthening **capacity** of local government in urban planning
  - Training for technical pourashava staff and elected representatives to include participatory planning and the **role of communities** in urban development and DRM

Integrating DRM in Non-Structural Measures –

Building Design & Development Controls

- **Planning and building control**
  - Review of current building standards and their adjustment to climate change covering both formal and informal (**slum housing in highly vulnerable areas**)

- **Development control systems**
  - Public information and awareness campaigns on significance of **compliant (enforced) development**
  - **Incentives** to encourage compliance with planning and building permissions.

Strengthening Community Level Disaster Preparedness

- **Community awareness raising**
  - Performed in conjunction with **community-level hazard mapping and planning**
  - **Identify priority communities** in each pourashava through consultation with NGOs, pourashava officials, direct community interviews
  - Train and advise Pourashava Support Teams on **community level CCA and DRM**
  - Prepare **pourashava-level communication strategy and action plan** in consultation with PSTs, community groups, local and national NGOs, school officials, pourashava officials

Strengthening Capacity of Pourashava DM Standing Committees

- Enhancing understanding and awareness on disaster risk
- Training:
  - Participatory climate hazard identification and mapping
  - Community-level DRM and CCA interventions
- Study tour for pourashava level officials (especially DRM committee members) to a city recognized as leader in a community-level adaptation planning and practice

Conclusions

- DRM needs to support change on ground - possible only by working with those most at risk
- Community-based organizations should be viewed as drivers of change – have the knowledge and capacity to identify, reduce risk, and manage risk
- Need not be standalone DRM projects - but by allowing vulnerable population to determine the priority many underlying root causes of vulnerability can be removed
- Financing DRM in urban areas is not just funding the incremental improvements to reduce current and future risk - it is equally about building the institutional, capacity to act, invest and govern well