

**"Drinking Water Security for Poor and Women in Five Climate
Vulnerable Eco-Zones in Bangladesh"**

A Community Based Adaptation Initiative

UNFCCC Technical Workshop on

**Water and Climate Change impacts and adaptation strategies under
Nairobi Work Programme on Impacts, Vulnerability and Adaptation to
Climate Change**

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Outline of the Presentation

- **Background and Project's Basic Information**
- **Climate Vulnerable Eco-Zones in Bangladesh**
- **Planning, Approach, Tools and Methods : Key Elements of community based adaptation practices**
- **Key Activities and Strategy**
- **Achievements and outcomes**
- **Some challenges**

Background

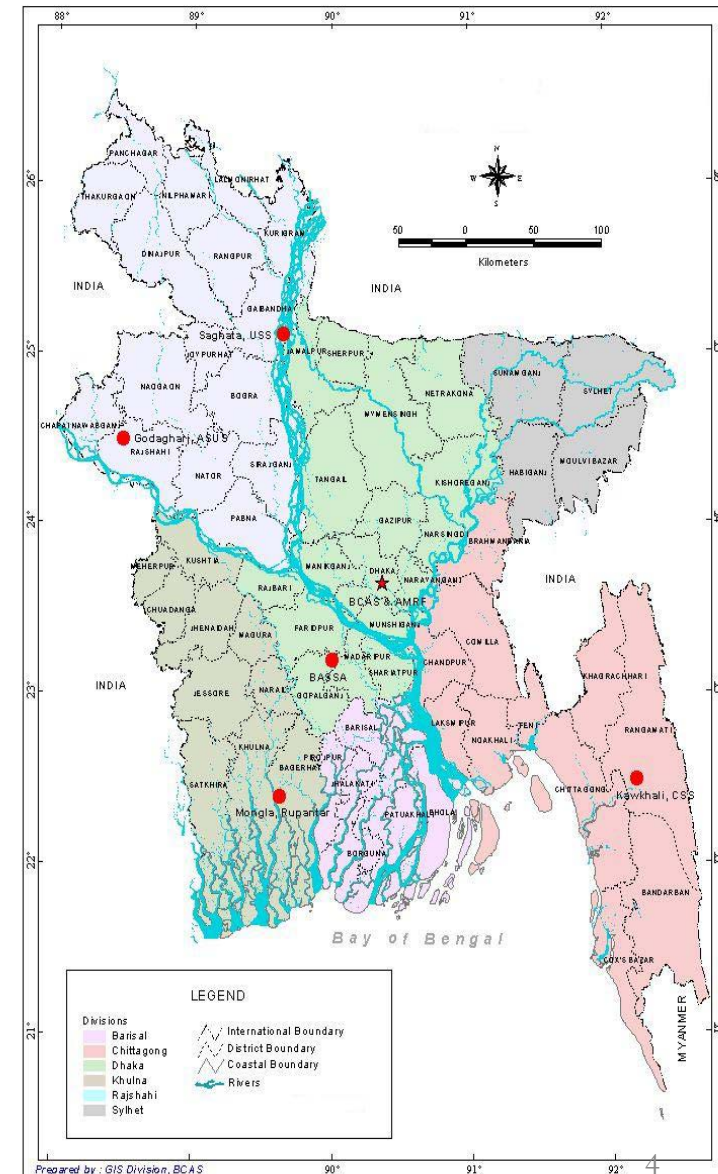
- Water is our lifeline and safe drinking water is a basic human need, last hope of a community/HH in sustaining life and livelihoods in particular ecosystem
- In Bangladesh, water supply coverage 80% (WHO-UNICEF, 2008, lower in Hard to reach areas)
- Sanitation coverage is still a challenge (53%)
- Climate Change induced hazards/disasters affect water supply, sanitation and health
- Challenges to meet MDGs



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Project Background

- Both availability and quality of safe water for drinking and access of the poor to the safe sources are hindered by:
 - Climate induced hazards including flood, drought, cyclone and storm surges, salinity intrusion and variations in rainfall
 - socio-economic factors such as poverty, social exclusion, marginalization and gender perspectives
 - lack of collective action, weak social capital and lack of institutional capacity of the poor and marginal groups



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Project Goal and Objectives

- The overall goal of the project was to establish safe drinking water systems and security for the poor and women in selected climate vulnerable zones
- The specific objectives are:
 - formation and strengthening people's institution (*Pani Parishad*) to address water crisis under climate change condition
 - to promote water technologies based on local knowledge, needs, priorities and social acceptance;
 - to promote improved sanitation and hygiene practices among the community people; and
 - Finally establish safe water access under changing condition

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Climate Vulnerable Eco-Zones in Bangladesh

- **Rajshahi –Barind Up-land Area**
 - Fewer surface water sources
 - Ground water level declining
 - Drought prone and under influence of desertification area
 - Wells and Pond water dries during dry season
 - Collect water from a long distance



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Climate Vulnerable Eco-Zones in Bangladesh

- **Charland in Gaibandah**
 - During flood, the whole *char* goes under water and all safe water sources are affected
 - *Char lands* are isolated from the main land, face extreme situation both in rainy and dry seasons
 - Spread of diarrhea and water borne diseases



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Climate Vulnerable Eco-Zones in Bangladesh

- **Flood Prone Area- Gopalganj**
- Floodplain area- frequent floods (almost every year)
- Difficult to collect water from tube-wells during rainy season;
- they used to drink canal/pond water



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Climate Vulnerable Eco-Zones in Bangladesh

- **Coastal Region- Bagerhat**

- Both the surface and ground systems are affected by high level salinity
- Cyclone and tidal surges affect the surface water sources and sanitation systems
- Fetch water from the ponds of far distance



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Climate Vulnerable Eco-Zones in Bangladesh

- **Hilly Area- Rangamati**
 - Surface water sources get dried in dry season
 - Springs are not functioning well due to rainfall variations
 - Travel long distance to collect water



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Planning, Approach, Tools and Methods : Key Elements of the project (community based adaptation) practices

Project approach- Key Elements of Local Adaptation Planning

1. community-led process (community identify problems and solutions)
2. based on communities' perception, priorities and needs
3. knowledge, and capacities, which should empower people to plan for and adapt with impacts of climate change
4. Incorporating climate change information
 - i. Consideration of Local knowledge about trends, changes and coping strategies that these communities have used in the past to cope with similar shocks or gradual climatic changes
 - ii. scientific knowledge/information (e.g. long-term predictions from climate change models, seasonal forecasts, information on trends based on data collected at nearby weather stations)



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Planning, Approach, Tools and Methods : Key Elements of community based adaptation practices

Tools	Uses
Community Mapping	<ul style="list-style-type: none"> • Resources and capitals • Types and causes of risks and threats • Extent of vulnerable areas • Vulnerable households and individuals • Planning adaptation measures
Seasonal Calendar	<ul style="list-style-type: none"> • Seasonality and links with livelihoods
Stakeholder analysis	Institutions, relationships.....
Theater, poems, songs	<ul style="list-style-type: none"> • Awareness raising of risks and risk reduction measures • Advocacy
Consultation	<ul style="list-style-type: none"> • hazards, impacts, vulnerabilities and adaptation options
Ranking	<ul style="list-style-type: none"> • Vulnerabilities and hazards • Adaptation strategies, e.g. water management options

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Key Activities and Strategy

- Project Key Activities
 - Baseline and participatory Vulnerability Assessment
 - Participatory needs assessment
 - Demonstration of context specific adaptation technologies for WATSAN
 - Social mobilization and local institution building for the poor and women
 - Promoting gender role in water, sanitation and health
 - capacity building, linkages and networking



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Achievements and Outcomes

- 54 Villages covered in five ecosystems
- 50 PPs formed and capacitated
- 5 Coordination Councils of PPs established
- Over 5000 families participated in the project
- Varieties of context specific water technologies tested and demonstrated

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- **Some Challenges**

- Threats of extreme events and climate change induced hazards
- Continuous maintenance and operation of water options
- Recognition of women's role and contribution in water, sanitation and health
- Promoting women's leadership, role and position in local institution and decision making
- Engagement of the LGIs
- Sustainability of the PPs

Acknowledgement

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