# Welcome to the Presentation on Bangladesh NAPA

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### NAPA: BANGLADESH

- Bangladesh NAPA has been prepared as a response to the decision of COP7 to the UNFCCC.
- NAPA preparation followed the Generic Guiding Principles outlined in NAPA annotated guidelines prepared by LEG
- Basic approach was along with sustainable goals and objectives, where it has recognized necessity to address environmental issue and natural resource management.

#### **Scope of Formulation of NAPA**

- Formulate a countrywide programme of action for adaptation to adverse effects of climate change;
- Encompass priority activities i.e. projects, integration into other activities, capacity building and policy reform for addressing the urgent and immediate needs and concern;
- Identify immediate and urgent measures to address current and anticipated adverse effects of climate change, including extreme events;
- Identify possible policy and institutional framework to guide and coordination of adaptation measures in the country;
- Building synergies with other multilateral environmental agreements and development programmes; and
- Promote sustainable development through resource management, and poverty alleviation.

#### **Preparation Process**

- Multi-disciplinary team of experts are involved in the process.
  - Steering Committee (26 members)
  - NAPA Team
  - Sectoral Working Groups and Co-ordinating agencies
    - Water, Coastal Zone, Natural Disaster, and Human Health
      - Water Resource Planning Organization (WARPO)
    - Agriculture, Fisheries and Livestock
      - Bangladesh Agricultural Research Council (BARC)
    - Industry and Infrastructure
      - Department of Environment (DoE)
    - Biodiversity, Forestry and Landuse
      - IUCN, Bangladesh
    - Livelihood, Food Security, Gender and Local Governance
      - Bangladesh Institute of Development Studies (BIDS)
    - ■Policies and Institutions
      - Bangladesh Centre for Advanced Studies (BCAS)

#### Stakeholder's Consultation

- Stakeholder's Consultation is an integral part of NAPA formulation process.
  - Inception Workshop
  - Sub-national Consultation Workshops
    - Identification of existing problems related to variability, and extreme events;
    - identification of existing coping mechanisms/measures to reduce these risk and impacts;
    - Suggestions on how these existing coping strategies /measures can be improved;
    - Identification of new measures and ideas, in case existing problems are aggravated in future.
- Validation of findings through expert level consultation
- Consultation with various Agencies, Departments, Programme, Projects and Donor Community
- National level consultation for prioritization of projects

## vuinerabilities

|  |  | Causes of Impacts, | vulnerable | areas and | <b>Impacted</b> | Sectors) |
|--|--|--------------------|------------|-----------|-----------------|----------|
|--|--|--------------------|------------|-----------|-----------------|----------|

| Climate and Related<br>Elements          | Critical Vulnerable Areas | Most Impacted Sectors   |
|--|---------------------------|---|
| Temperature rise and drought             | North-west                | Agriculture (crop, livestock, fisheries) Water Energy Health                          |
| Sea Level Rise and Salinity<br>Intrusion | Coastal Area<br>Island    | Agriculture (crop, fisheries, livestock) Water (water logging, drinking water, urban) |

Human settlement

Infrastructure

Water (urban, industry)

Agriculture (crop, fisheries, livestock)

Energy Health

Coastal and Marine Zone

Floods

Human settlement Health Disaster Energy Marine Fishing Cyclone and Storm Surge Infrastructure

Human settlement

Coastal Area Drainage congestion

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Life and property Water (Navigation) Urban Agriculture (crop)

Central Region

Char land

North East Region

#### **Vulnerabilities**

**Physical Vulnerability Context** 

|                   |                           | •                     | ·       |                |                |                 |         |                           |  |
|-------------------|---------------------------|-----------------------|---------|----------------|----------------|-----------------|---------|---------------------------|--|
| Extreme<br>Temper | Sea Le                    | vel Rise              | Drought | Flo            | ood            | Cyclone and     | Erosion | Sectoral<br>Vulnerability |  |
| ature             | Coastal<br>Inundati<br>on | Salinity<br>Intrusion |         | River<br>Flood | Flash<br>Flood | Storm<br>Surges |         | Context                   |  |
| +++               | ++                        | +++                   | +++     | +++            | ++             | +++             | -       | Crop Agriculture          |  |
| ++                | +                         | +                     | ++      | ++             | +              | +               | _       | Fisheries                 |  |
| ++                | ++                        | +++                   | +       | +              | +              | +++             | -       | Livestock                 |  |
| +                 | ++                        | -                     | -       | ++             | + 🔍            | +               | +++     | Infrastructure            |  |
| ++                | +++                       | ++                    | -       | ++             | +              | ++              | -       | Industries                |  |
| +++               | +++                       | +++                   | +       | ++             | +              | +               | -       | Biodiversity              |  |
| +++               | +                         | +++                   | ++      | ++             | -              | ++              | -       | Health                    |  |

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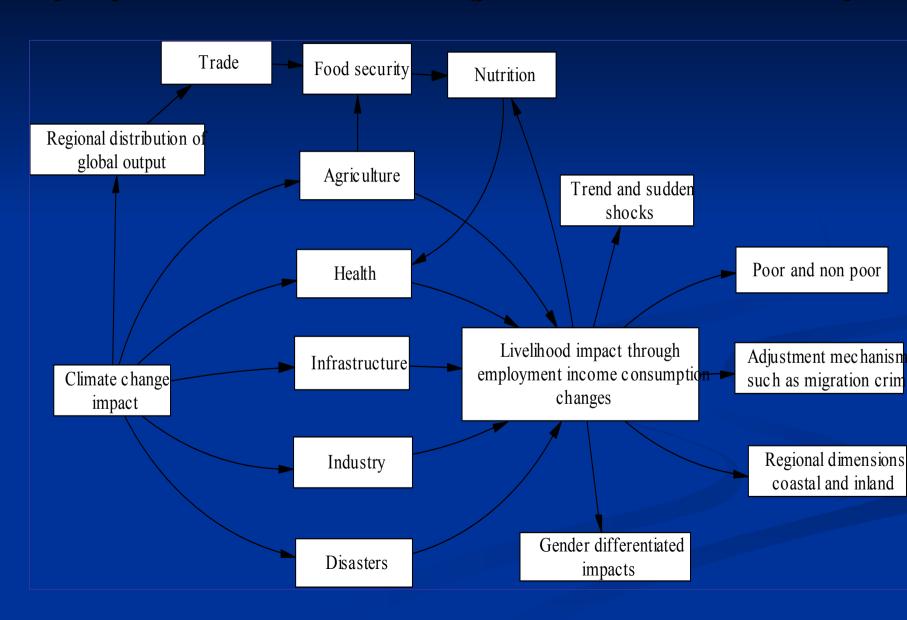
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**Human Settlement** 

Energy

## Vulnerabilities: Livelinood (Impacts of Climate Change on different sectors)



#### Existing Knowledge on Coping Strategies

- Cyclone Shelters
- Flood Shelters
- Coastal Embankment
- Digging of drainage channel
- Creation of green belt through Coastal Afforestation
- Rain Water Harvesting
- Floating Agriculture
- Saline Tolerant Species
- Shallow Tube-well for irrigation
- Supplementary Irrigation
- Drainage Control
- Short duration Crop variety based on situation (Depth and Duration of Flood, Timing of flood, recession of flood, etc.)
- Artificial Management of Temperature for Poultry and Livestock (Use of Wet