# Awareness and Training Need for Integrating Climate Change Issues in Policies and Programme

By

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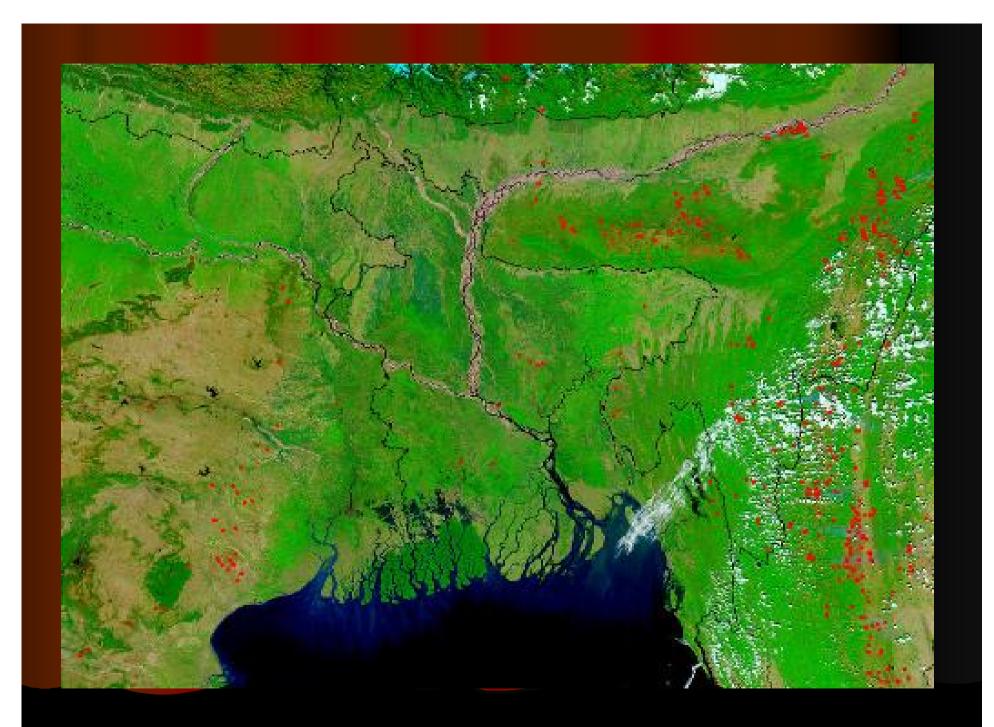
#### Bangladesh

- Bangladesh lies in the north eastern part of South Asia between 23° 34′ and 26°38′ north latitudes and 88° 01′ and 92° 41′ east longitudes.
- The country is bounded by India on the west, north and north-east and Myanmar the southeast and Bay of Bengal on the south.
- Area of Bangladesh is 147000 sq. km
- Population over 130 million



#### Bangladesh

- Bangladesh is basically a flat land washed regularly by water whether it is rain or flood.
- More than 90 per cent of the total area is lowland, the alluvial gift of the several great river systems that traverse the country to reach the Bay of Bengal.
- Bangladesh is located in one of the most hazardprone areas of the world.
- Several types of natural calamities such as tropical cyclones, storm surges, monsoon floods and river erosion occur frequently and often affect the country adversely.
- Dhaka is the capital city of Bangladesh
- Dhaka is now spread over an urban area of about 2000 sq. km and has approximately 11 million people.



#### **Outline of Most Severe Disasters**

#### • Cyclone:

- Cyclones are the worst killer;
- The severe cyclone of 12 November 1970 took a tool of 0.3 million human lives in Bangladesh and put property damages to more than one billion US dollars;
- Yet another worst cyclone which hit Bangladesh coast on April 1991 killed 0.14 million people and property damages were more than two billion US dollars;
- The cyclone of 1876, 1919, 1961, 1963, 1965, 1985 and 1988 were also of severe nature.

#### • Floods:

- Floods are another devastating recurring phenomena in Bangladesh;
- The flood of 1988 during August-September inundated 89,000 sq. Km. Areas of 52 districts of the country and caused loss of 1517 human lives;
- The 1998 flood in Bangladesh with unprecedented duration of 65 days inundated 53 districts covering about 100,000 sp. Km. Areas and it took lives of 918 people;
- The severe floods of 1922, 1954, 1955, 1974, 1984 and 1987 are worth mentioning.

#### **Outline of Most Severe Disasters**

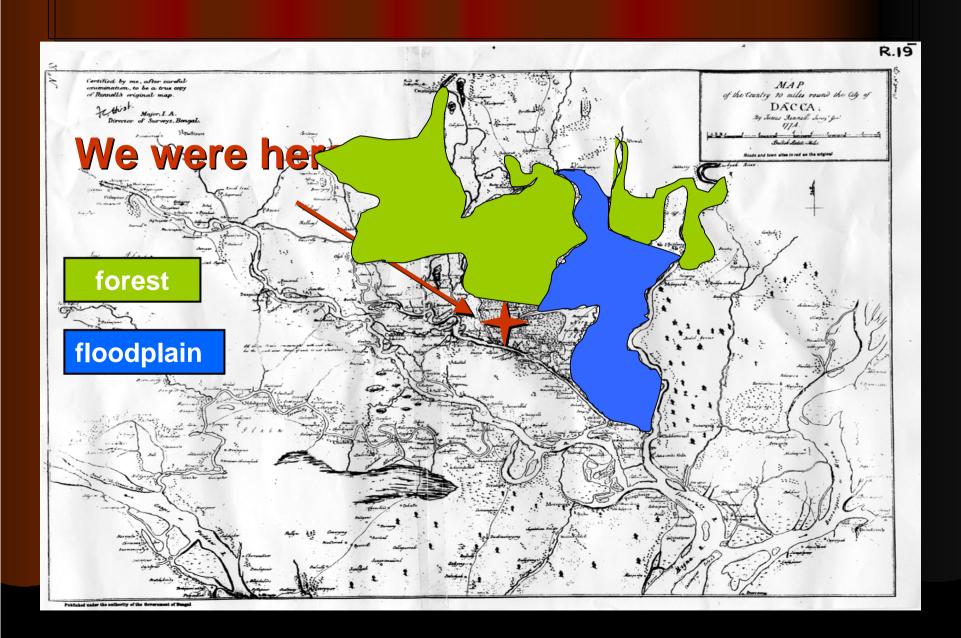
#### • Droughts:

- Drought is another severe natural phenomenon which at some intervals visits Bangladesh and causes disastrous crop failures.
- In 1979 the country was hit by a severe drought, which was termed by many as the worst in the recent past.
- Droughts of 1957 and 1972 were of severe nature.

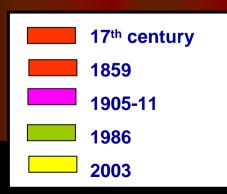
#### Tornado:

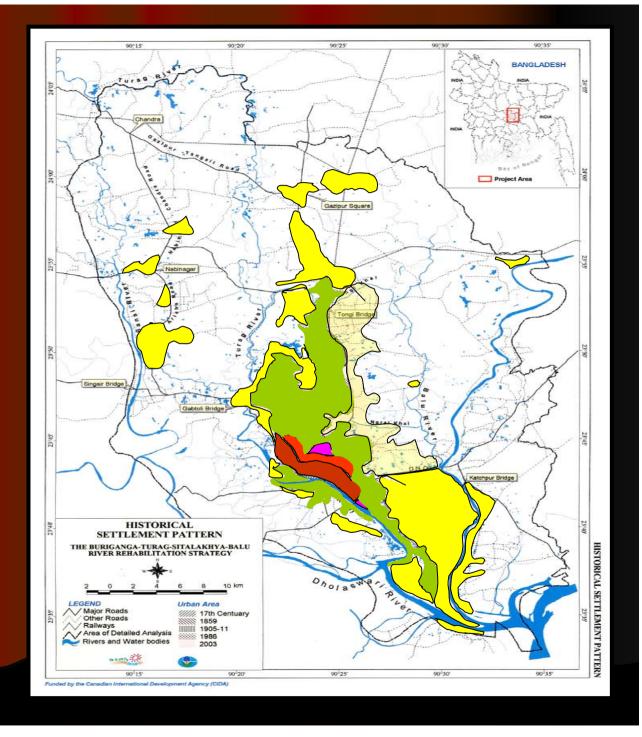
- Tornadoes during pre-monsoon period hit Bangladesh and cause localized devastation, both in terms of lives and properties.
- Tornadoes of 14 April, 1969; 11 April, 1974; 01 April, 1977 and 26 April, 1989 are noteworthy

## Dhaka – 230 Years Ago



# The Growth of Dhaka Since the 17<sup>th</sup> Century

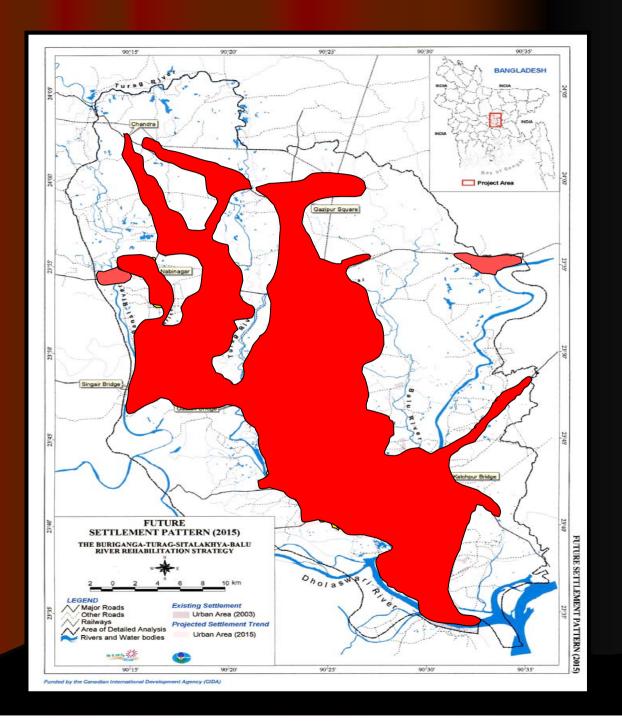




# Dhaka in the Future

**Urban Area 2003** 

Projected Urban Area 2015



#### Climate Change Issue

- Climate change and its direct and indirect effects are amongst the key environmental and development issues that the Government of Bangladesh is seriously addressing.
- GOB is very much aware and concerned about environmental degradation and global warming and their detrimental effects
- Sea level rising is the real threats of climate change

#### Climate Change Activities in Bangladesh

Bangladesh has become party of;

- United Nations Framework Convention on Climate Change (UNFCCC)
- United Nations Convention to Combat Desertification (UNCCD)
- Cartagena Protocol on Bio-safety
- Kyoto Protocol to the Framework Convention on Climate Change
- Stockholm Convention on Persistent Organic Pollutants

#### Study/Programme related to Climate Change

- Bangladesh undertook Climate Change Country Study in 1994
- Bangladesh has conducted Asia Least Cost Green House Gas Abatement Strategy (ALGAS) in 1995-96.
- The ALGAS project was designed to assist the countries to meet their commitments under UNFCCC.
- Bangladesh has submitted the Initial (First)
  National Communication to the UNFCCC.

#### Study/Programme related Climate Change

- Effect of Climate Change and Sea Level Rise on Bangladesh (1989)
- Bangladesh: Greenhouse Effect and Climate Change (1993)
- Vulnerability of Bangladesh to Climate Change and Sea Level Rise: Concepts and Tools for Calculating Risks Integrated Coastal Management (1994)
- Bangladesh Country Study on Climate Change (1993-1997)
- Assessment of the Vulnerability of Coastal areas to Climate Change and Sea Level Rise: A Pilot Study of Bangladesh (1994)
- Climate Change in Asia: Bangladesh (1992-1994)

#### Study/Programme related Climate Change

- Improve the Observational Basis for Studies of the Impact of Tropospheric Ozone on Climate in Developing Countries and Build up of Capacity
- Bangladesh: Climate Change and Sustainable Development (1998-2000)
- Climate Change in Asia: Regional Study on Global Environmental Issues (1992-1994)
- National Policies for Energy: Implication of and Opportunities from, the Climate Change Convention (1993)

#### Recent Project / Studies to Address Climate Change

- Sustainable Environmental Management Programme
- Bangladesh: Rural Electrification and Renewable Energy Development
- Regional Climate Prediction for National Vulnerability Assessments
- Impact of Climate and Sea Level Change in part of the Indian Subcontinent
- Dialogue on Water and Climate
- Promotion of Renewable Energy, Energy Efficiency and Greenhouse Gas Abatement
- National Water Management Plan Project
- Integrated Coastal Zone Management Programme
- Offshore Islands Renewable Energy development
- Comprehensive Disaster Management Programme
- Reducing Vulnerability to Climate Change Project

# Climate Change Cell and public awareness in Bangladesh

- CCC was established in 2004
- It provides the central focus for the Government's Climate Change related works
- Objective of the CCC is to establish a mechanism that facilitates management of long term climate risks and uncertainties as an integral part of national development planning.
- Strengthening the capacity of the disaster management system
- Creating awareness among related stakeholders

#### Work Programme of Climate Cell

- Building the capacity of MoEF/DoE to coordinate and integrate climate change issues in mainstream development activities and across government.
- Strengthening existing knowledge and information accessibility on impact prediction and adaptation to climate change.
- Awareness raising, advocacy and coordination to promote climate change adaptation and risk reduction in development activities.
- Improved Adaptive Capacity for Sustainable Livelihoods in the Agriculture Sector to reduce climate change risks to poverty reduction

# National Adaptation Programme: Polices and Purposes

- Integration of all existing policies and Programmes of different sectors relating to climate change
- Integration of climate change and sea level rise issue into all national policies
- Development of Countrywide program that encompasses the immediate and urgent adaptation activities with a view to address the current and anticipated adverse effects of climate change.
- Raising awareness of adaptation issues nation wide.
- Implementation of adaptation activities through participatory approach
- Developing a specific priority program of action for adaptation to climate change
- Assessments/analyses of previous work on climate change

# National Adaptation Programme: Policies and Purposes

- Mainstreaming adaptation to climate change into policies and programmes in different sectors (focusing on disaster management, water, agriculture, health and industry.
- Inclusion of climate change issues in curriculum at secondary and tertiary educational institution.
- Climate change and adaptation information dissemination to vulnerable community to raise awareness
- Development of eco-specific adaptive knowledge (including indigenous knowledge) on adaptation to climate variability to enhance adaptive capacity for future climate change.

#### National Adaptation Programme: Formulation Process

- Participatory Approach and Sectoral Working Group
- Forestry, Biodiversity, Land –use
- Agriculture, Fisheries and Livestock
- Water, Coastal Areas, Natural Disaster and Health
- Livelihood, gender, Local Governance and Food Security
- Industry and Infrastructure
- Institutional and Policy Issues

#### National Adaptation Programme: Formulation Strategy

- Engaging stakeholders, those representing local communities
- Making available appropriate technical information in a form that facilities quality and timely decision making
- Consultation with representative from different segments of the society, including those are most vulnerable to climate change
- Enhancement of roles of women and the poor in the sustainable development planning
- Training to build the technical knowledge and skills of relevant individuals
- Awareness raising in the urgent and immediate adaptation activities

#### Disaster Mitigation in Bangladesh: Structural

- GoB has so far constructed 2085 cyclone shelters and 200 flood shelters.
- About 3,931 km. long coastal embankment to protect coastal land from inundation by tidal waves and storm-surges, and drainage channels of total length 4,774 km. have so far been constructed.
- Planting of 10 million coconut trees in the coastal areas of Bangladesh are expected to be completed by this year

#### Disaster Mitigation in Bangladesh: Non-Structural

- Disaster Management Legislation has been drafted with the purpose of providing for the formulation of disaster management policy relating to preparedness and emergency measures, and rehabilitation program to deal with disaster.
- As part of training and public awareness nearly 45000 people related to disaster have been trained through 721 courses / workshops / seminars.
- As part of public awareness activities, booklets containing information about cyclone, flood etc. and calendar, posters depicting disaster points have been regularly printed and distributed up to the grass-root levels.

#### Disaster Mitigation in Bangladesh: Non-Structural

- To raise awareness among the students on various hazards/disaster management, a chapter on disaster management has been included in the educational curricula from classes V to XII.
- GoB has decided to make compulsory a session of at least 02 hours on disaster management in the training curricula of all types of Training Institutes to train officials and non-officials.

### Thank You