# Climate Change Training For Water Professionals

18-20 October, 2008

#### INTRODUCTION

Climate change is a reality now. It is happening and has already started to influence our life. So, action is needed to go for future activities to cope with climate change as well as make our community more resilient to climate changes. It is time to consider impact of climate change ahead and think how to implement adaptation through design and planning of water sector development works as well as redesign of existing water structures to cope with the climate change. Among the expected impacts of climatic changes on water resources are higher global and regional temperatures, increases in global average precipitation and evaporation, changes in the regional patterns of rainfall, changes in the intensity, severity, and timing of major storms, and a wide range of other geophysical effects. These changes will also have many secondary impacts on freshwater resources, altering both the demand and supply of water, and changing its quality.

Being a floodplain country with average low elevation, intensive river network, extreme poverty, high population density, poor institutional development etc., Bangladesh is to face yet more severe problems due to climate change. The main threats of climate change to Bangladesh are spatial changes in freshwater and wetlands, expanded flooding, prolonged drainage congestion, increased runoff and erosion, wetland losses, damage of water infrastructures, salt water intrusion to drinking water supply, inundation of treatment infrastructures, frequent cyclone and storm surge flooding, etc. A recent special report entitled "Bangladesh is set to disappear under the waves by end of the century" by Johann Hari is an example of the climate change risks that Bangladesh to face in future.

Over the years, Bangladesh government has constructed a good number of flood control, drainage, irrigation and coastal embankment projects in the country. The existing water structures are valuable resources to combat future impacts of climate changes, but they need incorporation of design changes coping with the climatic change.

Time is now to develop capacity of our water professionals to equip them with adequate knowledge on climate change issues for long-term water planning, design and construction of new water infrastructure as well as incorporation of design changes of the existing ones.

## **OBJECTIVES**

- To increase the understanding of the risks of climate change and possible impacts of climate change on water sector.
- To develop the capacity of water sector professionals to address climate change hazards in planning, design and management of water sector projects.

## CONTENTS

General background on Climate Change and Impacts; The climatic changes ahead and the corresponding impacts on the existing water management structures, Regional patterns and climate modeling – vulnerability analysis; Implication of new climate scenarios on water resources management; International and national policy and legislative for adapting actions; Planning for climate change risk management in Bangladesh; Adaptation through redesign of existing water structures; Design of new infrastructures and development works coping with climate change; Some detailing on key technologies available to help manage climatic risks with example; Socio-economic implications and adaptation of climate change.

## WHO SHOULD ATTEND

Project planners; design engineers; water project managers from implementing agencies and consulting farms; general water sector planners; academicians and researchers who will develop and transmit the climate change knowledge.

#### **RESOURCE PERSONS**

Resource persons for the short course have been selected from BCAS, CEGIS, IWM and IWFM of BUET.

#### DURATION

The short course will be offered during 18 to 20 October, 2008.

#### VENUE

Directorate of Continuing Education (DCE), BUET, Dhaka located on the third floor of the Institute Building of BUET (near Dr. M. A. Rashid Hall and BUET Gymnasium).

## LAST DATE OF APPLICATION

Nominations and applications for participation should reach the Directorate, DCE by 15 October, 2008.

## **COURSE FEE**

There will be no charge for the course. Tk. 500/would be paid each day to each participant as travel allowance.

## **CONTACT PERSONS**

#### Dr. Sujit Kumar Bala

Course Coordinator & Associate Professor Institute of Water and Flood Management BUET, Dhaka 1000 Email: <u>bala@iwfm.buet.ac.bd</u> Telephone: 9665650-89/ Ext. 7177, 7506 Mobile: 01712557271 Web: <u>http://www.buet.ac.bd/iwfm</u>

## $\operatorname{Or}$

#### Md. Golam Rabbani

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## <u>Or</u>

## Professor Dr. M. A. Rashid Sarkar

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## PROGRAMME

Presentation should 40 min lecture and 20 min discussions **Day 1: October 18, 2008** 

- 2:00 02:30: Registration and Inauguration (Introduction to Cap-Net activities in Bangladesh, Mr. Md. Golam Rabbani) : Topic 1: Climate Change Risks (Dr. 02:30 - 03:30Atiq Rahman, BCAS) : Tea Break 03:30 - 04:0004:00 - 05:00: Topic 2: International conventions and country programs (Mr. Mohammad Reazuddin, Director, DOE) 05:00 - 05:30: Tea Break : Topic 3: Economic Implications of 05:30 - 06:30climate change (Mr. Nitvananda Chakraborty, CEGIS) : Topic 4: Social Implications of climate 06:30 - 07:30change (Dr. Sujit Kumar Bala, IWFM, BUET) Day 2: October 19, 2008 : Topic 5: Implication of climate 2:00 - 3:00change in water sector of Bangladesh (Prof. Rezaur Rahman, IWFM, BUET) : Tea Break 3:00 - 3:30: Topic 6: Climate change modeling 3:30 - 4:30(Dr. A.K.M. Saiful Islam, IWFM, BUET) : Topic 7: Impact of climate change 4:30 - 5:30on flooding and sea level rise (Mr. Abu Saleh Khan/Mr. Emaduddin Ahmad, IWM) 5:30 - 6:00: Tea Break 6:00 - 7:00: Topic 8: Planning for climate change risk management in Bangladesh (Mr. Ahmadul Hassan, CEGIS) Day 3: October 20, 2008 2:00 - 3:30: Topic 9: Climate change mitigation technologies (Mr. Iftekhar Enavetullah, Waste Concern) 3:30 - 4:00: Tea Break : Topic 10: Climate proofing of water 4:00 - 5:30infrastructures: new design and rehabilitation considerations (Mr. Gerard
- Pichel, DHV) 5:30 – 6:00 : Certificate Awarding
- 6:00 6:30 : Tea Break

# **Climate Change Training** For Water Professionals

## Organized by

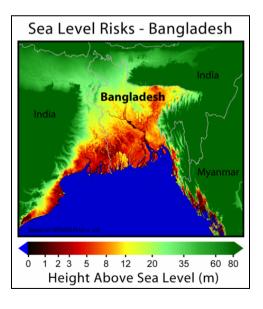
Climate Change Study Cell Institute of Water and Flood Management (IWFM) Bangladesh University of Engineering & Technology

#### in association with

Bangladesh Centre for Advanced Studies (BCAS) & Directorate of Continuing Education (DCE) BUET, Dhaka-1000

## Supported by

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