

BACKGROUND NOTE

SHARING LESSONS AND EXPERIENCES ON CURRENT WATER MANAGEMENT ISSUES, OPPORTUNITIES AND CHALLENGES FACED BY THE DELTAIC REGIONS IN SOUTH ASIA INCLUDING IMPENDING CLIMATE CHANGE IMPACTS

28 and 29 March 2014
BRAC Centre, 75, Mohakhali, Dhaka-1212

1.0 Background

Over population across the world especially in South Asia is a grave concern today. This has aggravated by the climate change in the region and resulted severe stress in natural resources management. The purpose of the workshop which is to be organised jointly by Bangladesh Water Partnership (BWP) and Institute of Water Modeling (IWM) is to make the best use of available water in South Asia through introduction of climatic information and mitigations of water resources management problems with the especial reference to issues related to deltas.

IWM provides world-class services in the field of Water Modeling, Computational Hydraulics and Allied Sciences for improved Integrated Water Resources Management (IWRM). The applications of IWM tools cover a wide range of water related areas such as; flood control, flood forecasting, irrigation and drainage, river morphology, salinity and sediment transport, coastal hydraulics, port, coast and estuary management, environmental impact assessment, bridge hydraulics and related infrastructure. BWP encourages for possible solutions of water related problems through the consultants including IWM, Center for Environmental and Geographic Information Systems (CEGIS) and Bangladesh Center for Advance Studies (BCAS) etc.

2.0 The proposal

Water resource is key for sustainable development and careful planning is necessary to manage water resources during extreme periods such as droughts, floods and natural calamities in major deltas in the world. The water management also plays a vital role in developing food security in the world.

The objectives of the workshop are:

- ❖ to share lessons learnt on current issues and opportunities in addressing water and climate change issues in Deltaic Regions in Countries in South Asia.
- ❖ to promote regional cooperation among the countries for improved water management in deltaic regions of South Asia to ensure water security under impending climate change scenario.

- ❖ to share water and climate related lessons and experiences.
- ❖ to assess the impacts on vulnerability of water resources in the management of deltas.

Representatives from Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka will attend the two day workshop to share their views, knowledge and experiences on 28 and 29 March 2014. on **“Sharing Lessons and Experiences on Current Water Management Issues, Opportunities and Challenges from Deltaic Regions in South Asia including Impending Climate Change Impacts”**. The first day of the workshop, 28 March is assigned for country perspective presentations on Water Management and related issues. The day two, 29 March six additional papers on Water Resources concerns will be presented focusing limitations in Bangladesh covering a broad spectrum of partner Organisation of GWP.

3.0 Few research questions for consideration for formulating future research agenda are as follows:

1. Identify the ongoing research activities which are related to Climate Change and Water Resources Management in South Asia. ?
2. Do the researchers use any type of mathematical Modelling Software?
3. How these research works are being utilised to check the impacts of Climate Change?
4. What is the best way to use available water without any conflict?
5. What are the mitigative measures for severe climate change, inundation, salinity, severe drought and heavy rainfall etc.?
6. Is there any initiative taken for irrigation in salinity prone areas?
7. How do these research activities can be utilized for addressing the below topics,
 - a. Use of climate change information for coastal area protection,
 - b. Disaster risk assessment and management – current trends and lessons to be learned,
 - c. Salinity control in areas which are not affected significantly at present,
 - d. Land-use change and related changes in agriculture, fisheries and livestock production systems, markets and consumption,
 - e. Investigation of challenges of ecosystem and wetland,
 - f. Ground water management in deltaic regions,
 - g. Combined use of surface water and ground water,
 - h. Water resources management during extreme conditions (drought, flood and cyclone etc.).

The Global Water partnership (GWP), established in 1996, is an international network open to all organizations involved in water resources management, developed & developing country institutes, agencies of the United Nations, bi-multilateral development banks, professional associations, research institutes, non-governmental organizations, and, private sector. GWP Head Office is in Stockholm. GWP SAS is the Regional Network comprises of Country Water Partnerships in India, Nepal, Pakistan, Bangladesh, Bhutan and Sri Lanka

www.gwp.org/en/gwp-south-asia