

#### **Consultative workshop on:**

**Gezira Irrigation water management** 

مركز البحوث الهيدروليكية Hydraulics Research Center

# 21-26 February, 2016





## Introduction

The water management in the Gezira Scheme (GS) is challenged by the immense size of the scheme (0.88 million ha), the extensive canal network (10,000 km), and huge number of water users (136,000). This has directly impacted the performance of the scheme with regard to productivity level (kg/ha and kg/m<sup>3</sup>).

The level of irrigation services has deteriorated during recent decades. Major policy and institutional changes, and lack of (experienced) irrigation engineers have been reported as key problems, among other factors. Therefore, one of the starting steps is to strengthen the capacity of the institutions and staff responsible for the irrigation water management in the scheme .



## **Objective:**

The main objective of this consultative workshop is to bring together key international experts on management of mega irrigation systems & senior irrigation managers of the ministry of water resources, irrigation & electricity (MWRI&E) Sudan to discuss innovative ideas applicable for upgrading and modernization of irrigation water management in the Gezira Scheme.

#### Key issues to be discussed:

- Present status and problems in the Gezira Irrigation Scheme?
- What would be needed to get the Gezira Irrigation Scheme back in a good condition?
- What are the Global experiences in irrigation water management that are useful for the Gezira?
- Why have some institutional frameworks succeeded while others have failed?
  - How can sustainable operation and maintenance of the Gezira irrigation schemes effectively be organized and financed?

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# **Expected Outcome:**

After successful completion of the training workshop, It is expected that the participants will be able to:

- Comprehensively, identify main challenges of irrigation water management of Gezira Scheme.
- Be aware of relevant experiences of irrigation revitalization and modernization of similar projects around the world.
- Identify, key steps (phases) and requirements (hardware, software, human resources) for the revitalization and modernization of the Gezira Scheme.
- Identify main technical and organizational de requirements of proper operation and maintenance of Gezira Irrigation Scheme.
- Provide (rough) cost estimate, and (tentative) work plan for the revitalization and modernization, as well as for the resulting required operation and maintenance of the Gezira Scheme.

## **Pre-course Requirements:**

Participants will prepare reviews (2-3 pages) of the followings topics for the purpose of discussion during the workshop:

- O&M of irrigation system in GS: past & present;
- O&M Financing modalities;
- Sediment Removal Practices;
- Crop water requirements and indenting: Past & present;
- On-farm water management; Past & present;
- Irrigation water delivery & control system: design & operation requirements;

• Drainage system in GS; and Irrigation management in sugarcane schemes.

At close to one million ha, the Gezira Scheme shoulders the giant pillars for sustainable economic growth in Sudan and the region. It is believed that, the struggle for the revival of the Gezira Scheme, can be won with the good vision, planning, and commitment.

#### **Facilitators:**

Prof. Bart Schultz, Netherlands, Former President of ICID

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Dr. Frank Van Steenbergen, Director of MetaMeta Com.

Dr. Rama Raji, India

Prof. Yasir A. Mohamed, HRC/UNESCO-IHE

Dr. Abraham M. Haile, HRC/Metameta



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