

Training course on RIBASIM: River Basin Planning and Management

11-15 October 2015

Introduction

RIBASIM is a generic model package developed by Deltares, the Netherlands, for simulating the behavior of river basins under various hydrological conditions. The model package is a comprehensive and flexible tool that links the hydrological water inputs at various locations with the specific water users in the basin.



Model Description

RIBASIM enables the user to evaluate a variety of measures related to infrastructure and operational and demand management, and to see the results in terms of water quantity and flow composition.



RIBASIM can also generate flow patterns that provide a basis for detailed water quality and sedimentation analyses in river reaches and reservoirs.

Demands for irrigation, public water supply, hydropower, aquaculture, and reservoir operation can be taken into account. Surface and groundwater resources can be allocated. Minimum flow requirements and flow composition can be assessed.



Course schedule

The course will be conducted at the Training Center of the Hydraulic Research Center

Date	Lecturer	Subject
SUN 11	Eng. Abdelnasir Khidir Eng. Tag elsir A. Mohammed Dr. Osman Eltom	 Registration Operation of Dams in Sudan Reservoir water balance
MON 12	Eng. Abdelnasir Khidir Eng. Sami Osman	 Introduction to RIBASIM: Software Installation Some example projects. hands-on exercise
TUE 13 & WED 14	Eng. Abdelnasir Khidir Eng. Sami Osman	 Introduction to the Nile model. Nile model: simulation cases, results and analysis
THU 15	Eng. Abdelnasir Khidir Eng. Sami Osman	Evaluation of results and conclusions.Graduation ceremony

Target group

River Basin modelers, River Basin planners, River Basin managers, Irrigation system managers, **Dam and reservoir operators**, researchers, educational staff, MSc and PhD students.

Date

The course is one week (40 contact hours) of theory and practice, from 11 to 15 October 2015, (daily from 09:00 to 17:00).

Instructors

Staff of international experience will deliver the course, with ample time for practice as well as for questions and answers.

Location

Training Center, HRC, Wad Medani, Sudan.

The Training Center of HRC is equipped with 20 modern PCs connected to a fast server.

Typical RIBASIM applications:

RIBASIM is designed for the following purposes:

- Evaluation of the options and potential for development of water resources in a river basin.
 - 1. Given the available water resources, to what extent can a river basin be developed in terms of reservoirs, irrigation schemes and water supply systems, while avoiding unacceptable crop damage or harm to other water users?



- 2. When and where will conflicts between water users occur, such as between hydropower production and agricultural development, in the basin?
- 3. What is the potential of hydro-power production in the basin?

Contact info

HRC-Sudan Wad Medani, P.O. Box 318 Sudan For more information please contact: Phone: 00249-121068234; 00249-918038023 Fax: 00249-511859700 E-mail: hrs_nassir@yahoo.com, samiosman347@hotmail.com

