



Within the frame of Water4Crops Project Meeting in Bangalore, organized by



International Crops Research Institute
for the Semi-Arid Tropics

WORKSHOP

"Managing irrigation with fresh and saline water using the SALTMED model as a management tool"



The limited fresh water resources require more efficient water management. Non-conventional water resources such as saline drainage or brackish groundwater and treated waste water could be used under suitable and careful management that safe guards the environment and minimizes the long term impact. Models when successfully calibrated and validated can be used as management tools to predict the impact of different management of crops, soils and water qualities. They can be used with "what if" scenarios instead of running short term expensive and labour intensive field experiments. Dr. R. Ragab, CEH has developed an integrated field scale management model, SALTMED that can be used as a management tool for water, crops, land and N fertilizers. SALTMED is a physically based model that

uses an integrated approach. Unlike existing models, which were designed for a specific irrigation system or a specific process, SALTMED model is generic. It can be used for a variety of irrigation systems, soil types, soil stratifications, crops and trees, water application strategies, different nitrogen applications and water qualities.

The model can run simultaneously with up to 20 different fields or treatments and produces daily output file and figures. The daily output includes: soil moisture, salinity and nitrogen profiles, plant water uptake/transpiration, soil evaporation, crop water requirement, nitrate and salinity leaching, nitrogen dynamics (mineralization, nitrification, and denitrification), nitrogen uptake, Relative yield, dry matter and final yield and groundwater level. The model has a database for soils and crops parameters and is friendly and easy to use

For further details on the SALTMED Model please visit: <http://www.water4crops.org/saltmed-2013-integrated-management-tool-water-crop-soil-n-fertilizers/>.

Presenter: Dr. Ragab Ragab, W4Cs EU partner from Centre for Ecology and Hydrology
Position: CEH, Wallingford, OX10 8BB UK
Vice President H. & Chairman of the WG on Water and Crops
& the Chairman of the Strategies and Organization Committee at
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Centre for
Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL



When: May 29th 2014
Time: 09:30 a.m. –17:00 p.m.
Where: The Capitol Hotel, No-3 Rajbhavan Road, Bengaluru – 560001, Karnataka, India
How many: 30 participants (first cum first served basis)

Who should attend:

- Farm managers, Farm operators
- Researchers, research organisations
- Wastewater Treatment Plant managers, operators
- Representatives from technology suppliers of wastewater treatment, irrigation systems, monitoring systems etc.
- Representatives from selected industries, industrial associations
- Representatives from water authorities, pollution control boards
- Technical staff of relevant central and state government department/agencies, viz. Departments of Agriculture, Irrigation Departments etc.

The participation is free of charge. However, travel and accommodation arrangements are to be made by the participants.

For participation please contact:

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Please bring along your laptop and pre-load the model (copy the folder from the link below to your desktop) to maximize your benefit from the workshop . You can download the model and its documents at:

<http://www.water4crops.org/saltmed-2013-integrated-management-tool-water-crop-soil-n-fertilizers/>