



Within the frame of Water4Crops Project

WORKSHOP ON "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 files 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

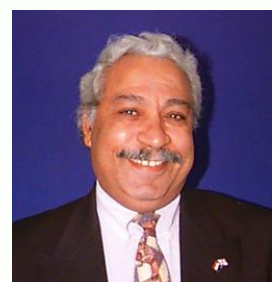
For further details on the SALTMED Model please visit:

<http://www.water4crops.org/saltmed-2015-integrated-management-tool-water-crop-soil-n-fertilizers/> .

Presenter: Dr. Ragab Ragab, W4Cs EU partner from Centre for Ecology and Hydrology
Position: Principal Research Scientist and Water Resources Management Specialist at Centre for Ecology and Hydrology - CEH Wallingford
Vice President H. & Chairman of the WG on Water & Crops at International Commission on Irrigation and Drainage, ICID
Email: rag@ceh.ac.uk



**Centre for
Ecology & Hydrology**
NATURAL ENVIRONMENT RESEARCH COUNCIL



When: Monday, October 12th 2015
Time: 08:30 a.m. – 12:30 p.m.
Where: SupAgro. Montpellier (<https://www.supagro.fr/>)
2 place Pierre Viala
34060 MONTPELLIER Cedex 02

Who should attend?

- Irrigation Engineers
- Agriculture Water Management Engineers
- Farm managers, Farm operators
- Researchers in Agriculture Field Management
- Poor quality water users (wastewater, saline/ brackish water)
- Representatives from water authorities, pollution control boards
- Technical staff of relevant central and state government department/agencies, viz. Departments of Agriculture, Irrigation Departments etc.
- Students, Junior Researchers, Practitioners

The participation in the 'SALTMED Workshop' is free of charge and will be certified by a Certificate of Attendance. Please concede:

“First come, first served”

The number of participants is restricted to 20 participants! So, please let us know whether you and/or your colleague(s) will participate latest by Monday 25 September 2015.

For participation and/or further information please contact:

| | | |
|--|--------|--|
| Aaron Krämer | Phone: | +49241/9019995 |
| STEP Consulting GmbH | Fax: | +49241/9019975 |
| Eupener Straße 30, 52066 Aachen, Germany | Email: | kraemer@stepconsulting.de |

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-2015-integrated-management-tool-water-crop-soil-n-fertilizers/>