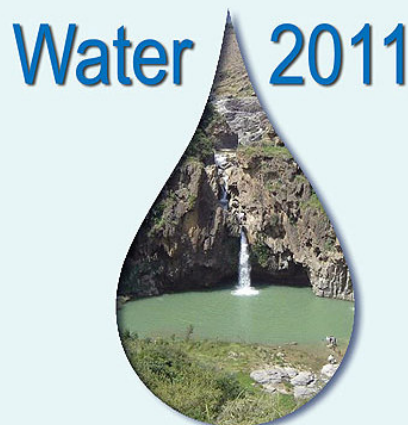


# International Congress: Water 2011

## Integrated water resources management in tropical and subtropical drylands

Location: Mekelle, Ethiopia  
Date: 19-26 September 2011

Over the last decade, significant advances have been made in tropical and subtropical drylands of Sub-Saharan Africa to boost sustainable use of water resources for increasing food production. This international symposium aims at creating a forum for those conducting research in drylands of Africa as well as in comparable regions around the globe to discuss results and to exchange experience during paper and poster sessions as well as during field excursions. The congress will be held at Mekelle, the regional capital of Ethiopia's northern province Tigray. Mekelle University has been spearheading interdisciplinary research on water resources management in the Ethiopian dry lands, covering issues that are of relevance for many tropical and subtropical regions in the world.



### Themes to be discussed

The congress will focus on various aspects of water management which will be elaborated upon into the six thematic sessions on the congress:

- **Aquatic Ecology:** water quality, eutrophication, cyanobacterial blooms, fish as protein source for livelihoods improvement, potential conflict between fish culture and water quality
- **Irrigation:** salinization, deficit irrigation, irrigation management, drip irrigation, long-term fertility, traditional systems, mechanization, modernization
- **Soil and Water Conservation:** water harvesting, soil and water conservation practices, conservation agriculture, watershed management
- **Water Resources:** runoff, discharge, sediment transport, flooding, infiltration, enhancing groundwater recharge, groundwater (over)exploitation, groundwater resources potential
- **Water and Livelihood:** household-level irrigation, institutional arrangements of water management, marketing of water products, cultural significance of water, water-related extension, sanitation
- **Climate Change Adaptation:** land-use change, adaptation to climate change
- **Stakeholders Forum on Water:** extension of water-saving technologies

### Rationale for the congress

Although farmers' living conditions in the Tigrinian highlands were considered relatively favorable, the ever-increasing population pressure has expanded agriculture into marginal mountainous areas as well as into lowland plains (below 1,500 m asl) with mean annual rainfall of less than 500 mm. Hence, the demand for water to irrigate crops has substantially increased and has resulted in a non-sustainable water use in the Tigray drylands.

When Mekelle University was awarded its status of "Unesco-Centre of Excellence on water issues", it has played its leading role in a number of national and international fora such as the Nile Basin Initiative, Friend Nile etc... The Government of Ethiopia, in its drive of meeting the Millennium Goals has written into its Poverty Reduction Strategy Paper (PRSP) a commitment to make its people in the dry lands less vulnerable to erratic rains. With this congress, Mekelle University wants to take advantage of sharing minds with the best water specialists in the world, so as to be empowered to better fulfill the challenges on water at the scale of the Blue Nile as well at scale of its tributaries. We aim at providing the researchers on water resources of Ethiopia a forum to reflect on where they are with their multidisciplinary research and with the cross-cutting issues. They will not only discuss among themselves but also with international peers from all over the world and hence gain from international experience with a holistic approach to water management.

## Specific objectives of the congress

- Evaluate past research efforts in integrated water resources management
- Streamline future scientific efforts in support of sustainable livelihood
- Draw recommendations for capacity building in land and water management

## Questions to be addressed

1. How limiting are water resources in East-Africa at present?
2. Which land management strategies can be followed to enhance ground and surface water resources?
3. How can we boost sustainable food production by introducing water-saving irrigation techniques?
4. Can conservation agriculture contribute to crop water efficiency and hence more food security?
5. How economical are deficit irrigation and water conservation techniques?
6. Which way do we have to manage water-harvesting reservoirs to ensure a sustainable supply of healthy drinking water and edible fish?
7. Which farm intensification/mechanization should be put in place to optimize water resources?

Invited participants are international scientists, leading farmers and experts from governmental and non-governmental organisations. Researchers, representatives of donor organisations and decision-makers are particularly invited to have an exchange of views with the farmers and experts.

Total number of participants will be limited to 150; persons will be admitted on a first come first served basis.

## Post-conference tour

- Scientific/cultural tour to Axum

## Conveners

- Mitiku Haile, Mekelle University, Ethiopia
- Jozef (Seppe) Deckers, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Dirk Raes, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Luc De Meester, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Okke Batelaan, Vrije Universiteit Brussel (Free University Brussels), Belgium
- Karen Vancampenhout, K.H.Kempen (University College), Belgium

## Scientific Committee

- Prof. Mitiku Haile, President Mekelle University, Ethiopia
- Dr. Kindeya Gebrehiwot, Vice-President Mekelle University, Ethiopia
- Dr. Nigussie Haregeweyn, Mekelle University, Ethiopia
- Dr. Amanuel Zenebe Abraha, Mekelle University, Ethiopia
- Dr. Hans Bauer, Research Coordinator, Mekelle University, Ethiopia
- Prof. Kristien Walraevens, Universiteit Gent (University of Gent), Belgium
- Prof. Wim Cornelis, Universiteit Gent (University of Gent), Belgium
- Prof. Jan Nyssen, Universiteit Gent (University of Gent), Belgium
- Prof. Luc De Meester, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Prof. Okke Batelaan, Vrije Universiteit Brussel (Free University Brussels), Belgium
- Prof. Dirk Raes, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Ir. Tom Deckers, PCFruit, Belgium
- Prof. Jean Poesen, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Prof. Jozef (Seppe) Deckers, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Dr. Stefaan Dondeyne, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Prof. Bas van Wesemael, Université catholique de Louvain (Louvain-la-Neuve), Belgium
- Dr. Jan Moeyersons, Royal Museum for Central Africa, Belgium
- Dr. Karen Vancampenhout, K.H.Kempen (University College), Belgium

## Keynote speakers

- Land-aspects: Dr. Bram Govaerts, CIMMYT , Mexico
- Geo-Hydrology aspects: Prof. Mike Edmunds, School of Geography and the Environment, Oxford University, England
- Aquatic Ecology aspects: Prof. Erik Jeppesen, National Environmental Research Institute, Aarhus University, Denmark
- Irrigation Agronomy aspects: Prof. Dirk Raes, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Water and Livelihood, Prof. Zinabu Gebre-Mariam, Hawassa University, Ethiopia
- Climate Change Adaptation: Prof. Bart Muys, Katholieke Universiteit Leuven (University of Leuven), Belgium
- Stakeholders Forum on Water: Prof. Mitiku Haile, Mekelle University