Training Course 2014

Integrated Watershed Management and Flood-based Farming Systems

In ASAL Areas, Horn of Africa

Mekelle University
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we really care!

Mekelle University Ethiopia, 13 – 25 October 2014

Background and Relevance

The majority of land mass at the Horn of Africa is arid and semi-arid (ASAL) with limited water sources and a (agro-) pastoral population of 30M. Due to climate change, droughts, floods and degradation of natural resources increase, leading to recurrent food crises and vulnerability. ASAL areas are endowed with numerous seasonal rivers that bring huge seasonal, short and heavy floods. These floods are often unpredictable and can be destructive, if not managed properly, leading to eroded and degraded river valleys, loss in arable and pasture land, and depletion of soils.

Flood-based farming systems (FBFS) are the only option to transform such seasonal floods from forces of destruction to sources of livelihood for the most vulnerable ASAL community. FBFS are for multiple uses: crop, rangeland and agro-forest production, domestic and livestock water supply, recharging groundwater, soil conservation and rehabilitation of degraded land as well as climate change adaptation. The techniques are (1) spate irrigation, (2) flood recession and inundation, (3) flood-spreading weirs (FSW). FBFS already cover 15 M. hectare in Sub-Saharan Africa, supporting 75 M. people, are the quintessential adaptation to climate change, strengthen resilience and support food security in ASAL areas. However, capacities for FBFS are limited and for successful introduction and modernization, the watershed perspective is essential.

The short course at Mekelle University was established in 2013 following extensive field research to the ASAL lowlands of Ethiopia.

It is designed in to

- reduce the acute shortage of FBFS planners, designers, managers and researchers
- support participatory planning, implementation and maintenance of FBFS
- develop capacities in watershed approaches for the development of FBFS

Course Objective

To qualify professionals with a comprehensive understanding and technical skills in participatory approaches, integrated watershed development in ASAL areas as well asFBFS and techniques to enable them to better plan, design, and manage FBFS.

Target Participants

Applicants are

- working in public institutions, private companies, development organizations, or research and academics
- mid-career professionals in water, agriculture, NRM, rural development
- living and working in ASAL areas, Horn of Africa
- expected to be proficient in English and to have at least a BSc level

In Cooperation with: giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; UNESCO-IHE Institute for Water Education; Spate Irrigation Network Ethiopia; META

Course Modules

Module 1	Module 2	Module 3	Module 4	Module 5	Module 6
Introduction to Flood-based Farming Systems	**Watershed Management**	**Participatory Planning, Implementation**	**Water and Land Management**	**Participatory Design of FBFS**	**Field Visit**
Provides a comprehensive overview of FBFS	*Provides the bigger, territorial picture*	*Provides concrete awareness and skills*	*Provides skills for the command area development*	*Provides technical skills for the design*	*Provides practical experience and learning in the field*
- History, status and potential - Differences with conventional irrigation systems - International and regional examples (Sudan, Yemen, Pakistan, Kenya and Ethiopia)	- IWRM - Participatory water allocation - River basin water balance - River basin development phases - Irrigation demand calculation - Impact of watershed management on sustainability of FBFS	- Target group participation – concepts and resourcing - Setting up and resourcing participatory management process - Techniques and methods (stakeholder mapping, PRA and triangulation)	- Water governance - Water rights and rules - Field water management - Soil moisture conservation - Modelling tools - Institutional development and strengthening	- Spate irrigation design approach and principles - Flood analyses - Design for intake, operation, maintenance - Hydrology - Sediment control and management - Design of FSW - Impacts of FSW (groundwater recharge, rangeland, rehabilitation, agricultural productivity)	- Good examples and failed systems - Practical knowhow through discussions with experts, farmers, (agro-) pastoralists, engineers, development planners and extension workers - Practical group exercise

Course delivery

The course

- covers six modules in 14 days
- is conducted by national and international experts assuring high quality of content, delivery and organization
- uses a broad variety of interactive and modern teaching methods, formats and instruments
- supports regional experience, knowledge and technology sharing
- includes a field trip with practical field work

Further practical information

- Maximum No of 45 participants
- Application procedure: Apply by sending an email to ***tesfa_alemge@yahoo.com***. You will receive a confirmation and more information within a week.
- Registration fee includes course related costs: teaching, training material, tea breaks, lunch, administration, excursion and some pocket money.
- It is payable to
  - ***Commercial Bank of Ethiopia-Mekelle Branch***
  - *Account holder-**College of Dryland Agriculture and Natural Resources***
  - *Account number-**1000012005915***
  - *Swift code-**CBETET AA***
- Not covered are food, accommodation and travel costs.
- Participants will be granted a certificate of attendance.

Organized by	**Mekelle University**
Training fee	**1500 EURO**
Deadline Subscription	**October 1, 2014**
Contact Person	**Tesfa-alem G. Embaye**

tesfa_alemge@yahoo.com

or

tesfaalemg@gmail.com

Location and Contact

Mekelle University, Endayesus Campus
P.O. Box 231,
Mekelle, Ethiopia
Tele-251344409015