



# ACTIVITIES IN ETHIOPIA



## The AgWater Solutions Project

The aim of the project is to identify the factors that influence successful adoption and upscaling of small-scale agricultural water management (AWM) interventions and to provide a set of evidence-based tools and recommendations that support increased investment and policies to improve AWM adoption. The project is being undertaken in Ethiopia, Zambia, Ghana, Tanzania, Burkina Faso and two states in India, Madhya Pradesh and West Bengal. This short update is designed to provide stakeholders with details of the current status of the project, including project activities to date and what is being planned for the future.

## Activities to Date

### Inception and Midterm Workshops

An inception workshop for the entire project was held in Addis Ababa, Ethiopia, in May 2009. The project plan was discussed and work plan details were agreed for all countries. In January 2010, a midterm project workshop was held in Lusaka, Zambia, which was attended by representatives from each country where the project is being undertaken. The participants reviewed progress, adapted work plans, and further detailed outputs and outreach plans for all countries.

### Situation Analysis of AWM Technologies

Three consultants were recruited to undertake a Situation

Analysis of AWM solutions in all regions of Ethiopia in 2009. The purpose of this was to provide background material on and analysis of:

- Existing environmental, hydrological and climatic conditions;
- National institutional and policy frameworks related to AWM;
- Typologies of existing AWM practices and their geographic spread;
- Key actors who are supporting the development of AWM in each region; and
- Promising AWM solutions that merit further detailed study.

The analysis covered a range of AWM practices including: river and stream diversion; micro-dams; hand-dug wells; lake and river pumping; rainwater harvesting and ponds; spate irrigation; soil and water conservation; motorized water-lifting pumps; and sprinkler and drip irrigation. The regional findings were compiled into a single report for Ethiopia. This has been summarized and is available as **a short briefing note on the project website**.

### National Consultation Workshop

A one-day National Consultation Workshop was held on November 19, 2009. About 30 participants representing different institutions participated in this workshop. The purpose of the workshop was to present the findings from the Situation Analysis and to prioritize areas for further research. The participants considered water storage in micro-dams and accessing groundwater to be two of the most important areas for further research. A summary of the workshop minutes is available as **a briefing note on the project website**.

### Mapping AWM Potential and Solutions in Ethiopia

A two-day workshop was held in Addis Ababa, Ethiopia, from September 24-25, 2010, to discuss the out-scaling of promising AWM solutions. The objectives of this session were to:

- Define a typology of livelihood zones in Ethiopia;
- Prepare a national map locating the main livelihood zones of Ethiopia; and
- Identify the potential of promising AWM solutions in Ethiopia for poverty reduction in each of these livelihood zones.

Experts from various relevant disciplines and institutes (e.g., agriculture, water management, geographic information

systems (GIS), sociology, anthropology) participated in the session to identify, locate and describe the main livelihood patterns in Ethiopia, and to discuss the relevance of AWM in relation to rural livelihoods. The initial set of maps prepared during the workshop formed the basis for additional data collection and analysis by the project team.



## Field Level Case Studies

Based on the results of the Situation Analysis and National Consultation, the project is carrying out case studies on the opportunities and constraints related to:

### Micro-dams (small reservoirs)

A rapid assessment has been made of 22 micro-dams in Tigray Region and in-depth case studies have been conducted in four of them. A half-day consultative meeting was held on August 5, 2010, where relevant stakeholders in the region were presented with the preliminary results of the rapid assessment and were given the opportunity to provide their input. A country synthesis report is being prepared based on the assessment and the stakeholder input.

### Ethiopia's groundwater potential

A study was commissioned to examine Ethiopia's groundwater potential. The study will draw on data already collected by the project team, including information on:

- Shallow- and hand-dug wells from Tigray and Amhara;
- Groundwater in two sites in Oromia and the Southern Nations, Nationalities, and People's Region (SNNPR); and
- Three types of irrigation technologies (micro-dams, groundwater and river diversion) from six sites in Tigray.

Additional studies planned for 2010 and 2011 are as follows:

A study on **water-lifting technologies** in four regions (SNNPR,

Oromia, Amhara and Tigray). The study will examine water-lifting technologies (such as treadle and motor pumps) to understand the potential, challenges and factors that constrain smallholders from adopting these technologies.

A study on **groundwater investment** in Raya Valley (Tigray and Amhara). In the Raya Valley (which covers the lowland part of South Tigray and Kobo area of Amhara), there is potential to use groundwater for irrigation, livestock and domestic use, and investment is taking place, but it seems to be unaffordable for smallholders. This study will examine the economic feasibility of these investments, compare the performance of smallholder and private farms, and identify the potential and challenges of out-scaling this type of investment. Based on the results, the project will suggest whether this is a viable AWM solution for smallholders.

A further study is being planned for 2011 to document experiences in **watershed management** and the potential benefits to the livelihoods of smallholder farmers.

## Future Plans

- The detailed case studies will be completed and reports produced in early 2011.
- Preliminary project findings will be shared at technical meetings as soon as the draft reports are complete.
- The case studies will be formulated into "solutions" and "business models" with the support of various stakeholders.
- Solutions that are seen as being applicable in several countries will be developed into "investment briefs".
- Stakeholder engagement will continue through a series of consultations to discuss emerging outputs and proposed solutions, and to support the development and implementation of business models.

## Key Project Contacts

- Country Coordinator and project contact point – Dr. Gerbrehaweria Gebregziabher, International Water Management Institute (IWMI)
- Project Ambassadors for Eastern Africa – Prof. Nuhu Hatibu, The Kilimo Trust, Uganda and Dr. Bancy Mati, independent consultant, Kenya

For more information and copies of the briefing notes mentioned in this update, please see the country page on the project website:

<http://awm-solutions.iwmi.org/ethiopia.aspx>

If you would like copies of any of the reports mentioned in this update please contact the Project Secretariat ([awmsolutions@cgjar.org](mailto:awmsolutions@cgjar.org))

