



# More effective and sustainable investments in water for poverty reduction

## Needs assessment in Tanzania

### 1. Introduction

A needs assessment analysis has been carried out in Tanzania in order to identify the needs, relevance, potential and opportunities for improving the impact and effectiveness of agricultural water management (AWM) interventions in terms of:

#### research



#### technical assistance



#### training



#### policy support



The methodology was structured in five steps: (1) Stakeholders analysis; (2) Inception workshop; (3) Interviews and field visits; (4) Discussion with country team on the preliminary results; and (5) Validation workshop. These activities culminated in the preparation of a needs assessment report. This brief presents the main findings of this report.

### 2. Methodology

#### 1. Stakeholders consulted

01-13 August 2015

Stakeholders from the following organizations and projects in the area of AWM have been consulted:

- Ministry of Agriculture, Food Security and Cooperatives, Dar es Salaam
- Ministry of Agriculture and Natural Resources, Zanzibar
- Ministry of Livestock, Dar es Salaam
- Ministry of Water, Dar es Salaam
- Division of Environment, Vice President Office
- Rufiji Basin Development Authority (RUBADA)
- MVIWATA (NGO)
- Policy Analyst, Morogoro
- Tanzania Meteorological Agency
- Zonal Irrigation Unit, Morogoro
- Morogoro District Council
- Mkindo Farmers Training Centre
- Farmers from Bahi Sokoni
- Farmers from Msemembo.

#### 2. National Inception workshop

13 August 2015

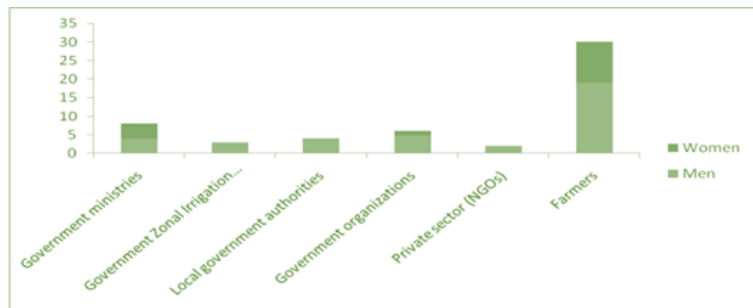
The inception workshop gathered 13 participants from the organizations above-listed. The following items were discussed:

(i) Presentation of the project | (ii) Identification of stakeholders to interview | (iii) Survey and data collection methodology | (iv) Identification of constraints, challenges and priority areas in AWM | (v) Proposals of AWM interventions to overcome these constraints.

3. Interviews and field visits

27 July – 19 August 2015

Overview of the 43 people interviewed:



Field visits included two past IFAD funded projects:

- Bahi Sokoni project (Dodoma region)
- Msemembo project (Manyoni, Singida region).

A total of 30 farmers were interviewed.

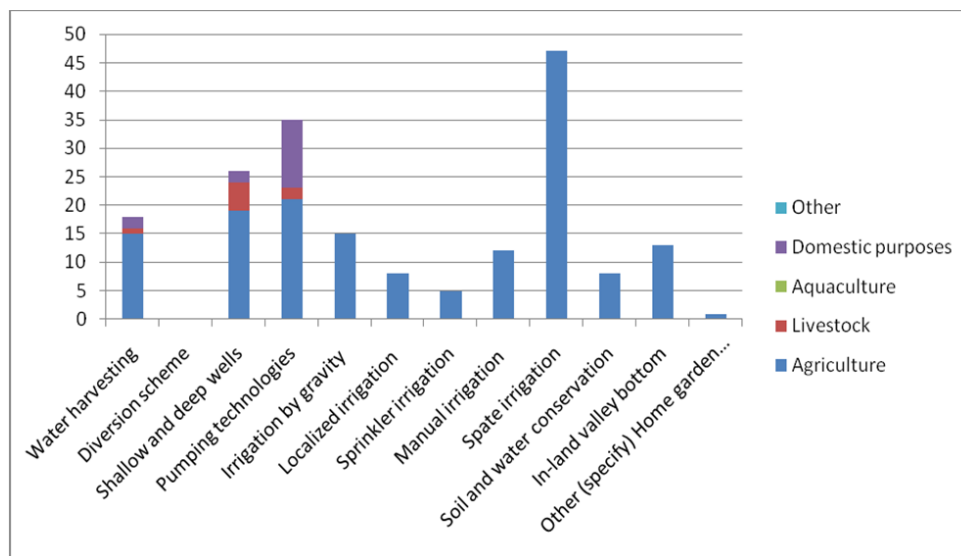
4. Validation workshop

08 October 2015

The validation workshop gathered 10 participants from some of the organizations above-listed.

3. Relevant AWM interventions identified in the country

The criteria used to define the most relevant technologies was their contribution to poverty reduction. The following graph shows the main technologies identified during the consultations and interviews held in the framework of this project.



The most relevant technologies identified are:

**Spate irrigation**



The water lifting technologies include treadle pumps, motor pumps, drip and sprinkler irrigation systems.

**Conservation agriculture**



In spate irrigation farmers grow mostly rice under flooded conditions. This technology is strongly supported by the government.

**Water lifting and application technologies**







Farmers usually use a combination of conservation agriculture practices that can include terracing, contour farming and composting; deep tillage, ripping, micro-catchment rain water harvesting and pit cultivation.

**4. Stakeholder priorities to improve AWM interventions**

Views from stakeholders at national level	Views from farmers
<ul style="list-style-type: none"> <li>▪ Improve the traditional small-scale irrigation schemes</li> <li>▪ Build multipurpose dams for livestock, agriculture and domestic purposes in semi-arid areas</li> <li>▪ Build cascading dams in areas of waterfalls and high water catchments to ensure a sustainable supply of water</li> <li>▪ Increase awareness of stakeholders on the importance of improved AWM</li> <li>▪ Enhance coordination in planning and implementation of AMW projects among key stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Involve the community from the initial stages of a project</li> <li>▪ Train farmers and water user associations on project management, operation and maintenance, water use and good agronomic practices</li> <li>▪ Enhance integrated planning of AWM interventions, including other sectors such as forestry, fisheries and environment</li> <li>▪ Facilitate the access to funding to implement AWM requirements such as operation and maintenance</li> <li>▪ Use qualified technical team during design and implementation of AWM technologies</li> <li>▪ Invest in AWM technologies that have been proved to give immediate benefits.</li> </ul>

## 5. Areas with high potential to contribute to better AWM management

Field of action	Proposed improvements
 <p>Research</p>	<ul style="list-style-type: none"> <li>▪ Build business models in AWM investments (value chain approach including marketing).</li> </ul>
 <p>Technical assistance</p>	<ul style="list-style-type: none"> <li>▪ Increase the number of technical staff dealing with AWM technologies, in terms of services and information delivery, operation and maintenance of systems and building of AWM structures</li> <li>▪ Increase funds for operation and maintenance activities (for canal cleaning, weir repair)</li> <li>▪ Increase availability of reliable data for better planning water facilities</li> <li>▪ Establish a database on AWM technologies/projects</li> <li>▪ Improve watershed management</li> <li>▪ Provide support to water user associations with a professional management team.</li> </ul>
 <p>Training</p>	<ul style="list-style-type: none"> <li>▪ Provide training on AWM</li> <li>▪ Promote exchange of knowledge between farmers (e.g. cross visits/field visits amongst farmers/farmer groups)</li> <li>▪ Improve information sharing and dissemination of research results.</li> </ul>
 <p>Policy support</p>	<ul style="list-style-type: none"> <li>▪ Implement participatory planning approach</li> <li>▪ Strengthen coordination between planning and implementation</li> <li>▪ Prioritize plans for AWM implementation</li> <li>▪ Create and search external sources of funds</li> <li>▪ Coordinate investment initiatives</li> <li>▪ Implement reforms in institutions dealing with AWM</li> <li>▪ Regulate land ownership and rights</li> <li>▪ Promote the farmers association.</li> </ul>