

Opportunities for agricultural water management interventions

Introduction

The Agricultural Water Solutions Project aims to unlock the potential of smallholder farming by identifying, evaluating and recommending a variety of agricultural water management (AWM) solutions - including technologies as well as the necessary supporting policies, institutions, financing arrangements and associated business models.

This is being achieved through a series of interlinked activities in the seven project sites in Africa (Burkina Faso, Ethiopia, Ghana, Tanzania and Zambia) and in India (Madhya Pradesh and West Bengal). These activities include:

- in-depth case studies,
- mapping areas to identify where solutions are likely to be most viable and have greatest impact,
- discussing AWM solutions and project findings with stakeholders, and
- formulating business models to turn these findings into practical plans.

This note presents the result of the analysis and mapping at state level. National livelihood maps have been established through an in-depth consultation process. Opportunities to invest in AWM at state level to improve rural livelihoods have been mapped, and the potential and suitability of different AWM solutions have been quantified.

More specifically, the work aimed to:

1. Map the main livelihood contexts in each project country or state, responding to the following questions:
 - what are the main constraints and needs in the different rural livelihood contexts?
 - what are the different farmer typologies and rural livelihood strategies?
2. Map the potential to improve smallholders' livelihood through water interventions:
 - where to invest in AWM to have the maximum impact on rural livelihoods?
 - where is AWM the entry point for improving rural livelihoods?
3. Map the geographical domain of specific AWM solutions:
 - where the specific AWM solutions have highest potential impact on rural livelihoods?
4. Estimate the potential benefits of investing in AWM:
 - how many potential beneficiaries for each AWM solution?
 - how much is the potential application area for each AWM solution?

These products have been developed through a stepwise approach including state level data collection and processing, case study analysis, and local consultation. The livelihood map was developed during a participatory mapping workshop which gathered a large number of national experts from different fields (agriculture, water, social sciences, geography, etc.) and institutions (government, universities, NGOs, etc.) as well as farmers groups. The outputs of the workshop have been enhanced through further consultation with national and international experts and through secondary data analysis using available national and sub-national datasets and statistics.

