

The Ruaha Basin Decision-Aid

By J. Cour

Location of Project: MATII-Igurusi, Usangu Plains, Mbeya Region, Tanzania

RIPARWIN (Funded by DFID, UK Govt). **Raising Irrigation Productivity and Releasing Water for Intersectoral Needs** A project that examines the science and roles of irrigation productivity and efficiency within intersectoral allocation in, and management of, river basins

What is a Decision Aid (DA)?

A DA is an interactive system consisting of « any and all data, information, expertise or activities that aid or contribute to options selection ». In other terms a DA can be paper based, physical or computer based; and assists decision making by providing data and information on the physical characteristics, the institutional framework, the water uses, etc.

What is RUBDA?

RUBDA is a DA for the management of water in the Great Ruaha Catchment, within the Rufiji Basin in Tanzania. Its aim is to support users, such as the Rufiji Basin Water Office or the District Councils in making decisions regarding the allocation of water between sectors. It provides means of running policy-driven scenarios, physical changes scenarios and water demand scenarios. RUBDA is constituted of several models, it is based on a Hydrological model: the Usangu Basin Model upgraded which is sustained by an Outcome Model and Water Management Modules (WMM). The orientation and contents of the decision aid will be determined by the potential range of decision makers that will use RUBDA. It is therefore fundamental to highlight the decision making mechanisms that stakeholders are using or will use when managing water and land resources in the Great Ruaha Catchment in order to deliver answers and solutions supporting these mechanisms. RUBDA is accompanied by a GIS viewer allowing the user to view, extract and print the comprehensive database using tables or dynamics maps. To ensure success RUBDA needs to be user-friendly and flexible enough to meet the different users expectation.

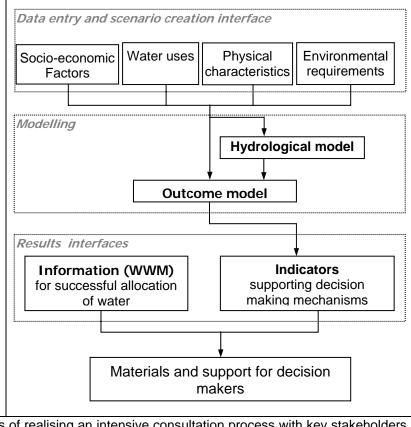
How does it work?

The data required to run RUBDA and obtain the results expected are various and cover a wide range of domains. These inputs are processed and used to run scenarios, a range of indicators are then generated. Some indicators have been defined and are as follows:

- Water available at the basin level
- Water available per capita
- Sectoral water uses at the basin level
- Environmental flows requirements
- Subsistence flow requirements
- Irrigation flow requirements
- Wet and dry season size of the wetlands
- Area under different land-uses
- Costs/benefits of rice production
- Costs/benefits of water used for the HEP
- · Costs/benefits of water utilization in other sectors
- Percentage area under different land uses
- Population benefiting of each water use

This list is not exhaustive and needs to be completed by consultation with stakeholders.

The results given will be sustained by the Water Management Modules which will attempt to briefly explain how inter-sectoral allocation might be effected successfully and sustainably.



The next step in the development of RUBDA consists of realising an intensive consultation process with key stakeholders to review, complete or modify the DA. The motivations, the needs and the constraints affecting the stakeholders will give its "perspective" to RUBDA.

Further questions? We hope you have found this leaflet interesting and useful. Inevitably it may raise more questions than it will answer. Please contact the RIPARWIN team:

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