

## Water Management in the Dry Areas with special focus on Modeling Water Productivity

The Modeling of Water Productivity thematic working group conducted its first activity at ICARDA headquarters from December 03-13. The aim of this workshop was to provide participants with the necessary practical and theoretical knowledge to contribute to the improvement of water productivity in dry areas through proper analysis and use of field data, simulation of alternative management options and future trends, and production of scientific reports and articles. This workshop was organized jointly with the Challenge Program on Water and Food (CPWF) "Improving Water Productivity in Karkheh River Basin", in Iran.



The participants worked, in teams, on analysis, reporting, and modeling of their data, with the assistance and guidance of Prof. Theodore Hsiao (UC-Davis) and ICARDA scientists. The participants brought all the data collected from the KRB and Benchmark Project research trials; long-term daily, monthly, and annual climate data from their region; and their draft publications and reports.

## Training workshops on Monitoring and Evaluation (M&E) for the Water Benchmark Projects

Dr Mohammad Samir El-Habbab from the University of Jordan, prepared a manual for M&E for the Benchmark project. He then conducted training programs for the team members in the three Water Benchmark (WBM) projects, i.e., *Badia*, *Irrigation* and *Rainfed* benchmarks.

The *Badia* Benchmark Site workshop was conducted from July 1- 5, 2007 at NCARE, Amman, Jordan; the *Irrigation* Benchmark Site workshop was conducted from August 12-16, 2007 at the ICARDA Office, Cairo, Egypt; and the *Rainfed* Benchmark Site workshop was conducted from September 10-13, 2007 at the INRA Club, Settat, Morocco.

### Meetings of the thematic working groups

The Socio-economy and modeling thematic working groups held their first meetings in Cairo in 7-8 January, 2007

#### Socio-economy thematic working group

During the meeting, the socio-economy participants set the objectives and designed the future activities of the group.

The manuals on the monitoring/evaluation (M&E) and scaling-up were given to each Benchmark project partner.

### Modeling of water productivity thematic working group

The meeting focused on the presentation of the concept of water productivity (WP) and on the information required for modeling WP. For each partner, the type of model and data needed to run models were identified. The models chosen were Transpiration model (Tunisia), CropSyst (Morocco and Egypt), Production functions (Jordan) and others (Egypt).

## New Water Benchmark Coordinator

Dr Mohammed Karrou, a Moroccan national, is the new coordinator of the Water Benchmarks project. He joined the Integrated Water and Land Management Program of ICARDA on August 17, 2007 as the Water and Drought Management Specialist.



His field of expertise is Stress Physiology and Crop and Water Management. He has several scientific publications in these areas.

Dr Karrou earned his PhD in Crop Physiology from the University of Nebraska, Lincoln (UNL), USA in 1992. He worked as a scientist at the National Institute of Agronomic Research of Morocco (INRA-Morocco) for 25 years, 10 years of which, as the Head of Agronomy Department.

He was the National Coordinator of the "On Farm Water Husbandry in WANA" project; a member of the "Optimized Soil and Water Use or OSWU"; and the National Coordinator of the Water Benchmark (Rainfed Benchmark) during its initial phase (first two years).

## The Third Steering Committee Meeting

The Third Steering Committee Meeting of the project was held on 11 January 2007 in Cairo, Egypt. It was attended by Drs Theib Oweis (Project Manager), Abubakr Mohamed (IFAD), Arij Senussi (OFID), Abdulnabi Fardous (Jordan), Abdelmajid Idrissi (INRA - Morocco), Bogachan Benli (Coordinator), Nasri Haddad (University of Jordan), Khalid El Zubaidi (NCARE, Jordan), Bahri Abdeljabbar (INRA - Morocco), Rashad Abo El - Enei (Egypt) and Mohammad Samir El-Habbab (University of Jordan).

The committee discussed key issues such as M&E and dissemination strategies; and the progress of the *Badia*, the Rainfed and Irrigation Benchmarks and their Satellite Sites.

The presentation on the Monitoring and Evaluation Framework led to more discussions on the impact assessment than on monitoring.

On the *Badia* Benchmark and Satellite Sites, detailed presentations on the progress of work, work plans and the budget were made.

The following recommendations were made:

1. The Benchmark Site coordinators should strengthen the cooperation with the satellite sites with frequent visits.

2. A scientific reporting format should be developed consistent with the original project document.
3. An outline of monitoring and evaluation activity should be prepared, and
4. Adoption and impact of technologies should be evaluated at mid term.

The presentation on the Rainfed Benchmark and Satellite Sites detailed the progress of the project. After deliberations, the committee decided that there should be free exchange of information and experience among NARS, and the outputs from the project in Morocco and its socioeconomic and policy institutional links should be evaluated. A framework for dissemination of project outputs is under construction and will be finalized.

On the Irrigation Benchmark and Satellite Sites, a detailed presentation was made on the progress of work, work plans and the budget. The committee recommended that well-proven technologies should be disseminated in the region, and the benefits of these technologies should be reported. It is also recommended that a policy analysis document should be printed. The group agreed to meet again in Morocco.

## Support to the Mashreq / Maghreb project (M&M III project)

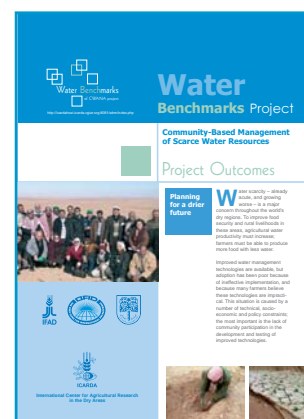
The M&M project was launched and funded by IFAD and AFESD with the technical backstopping of ICARDA. The objective of this project is the Development of Sustainable Livelihood of Agro-pastoral Communities of West Asia and North Africa. One of the major outputs expected of

M&M III is the evaluation of Technical, Institutional and Policy Options (TIPOS) for risk management and drought mitigation. This project has benefited from the results of the Water Benchmark project (BM) activities.

# New Water Benchmark Reports

## Water Benchmarks of CWANA: Project Outcomes

This document dwells on planning for a drier future, promoting participation and a new approach to watershed selection. It also briefly outlines the improved and proven technologies such as the mechanized water harvesting, raised beds for increasing productivity and supplemental irrigation packages. It also underscores the need for a change in the water allocation policies.



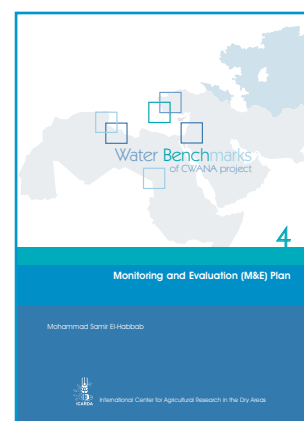
## Water Benchmarks of CWANA: Scaling-up Strategy and Action Plan

This document outlines the action plan and frame work, which was designed for the Benchmark project, to assist the project staff and help develop their thinking and ability to disseminate and institutionalize the findings of the project, to realize more benefits and maximize the impact on stakeholders. The document utilizes the experiences generated by ICARDA and other CG centers and adapt them to the project objectives and activities.



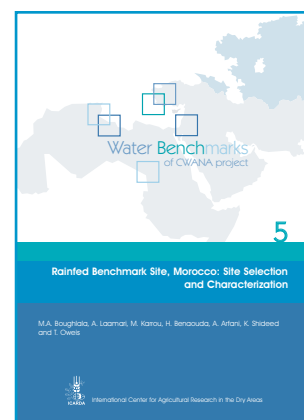
## Monitoring and Evaluation Plan (M&E) for the Water Benchmark of CWANA Project

The document describes the role of Monitoring and Evaluation (M&E) plan for the comprehensive Water Benchmark project in CWANA. The project consisted of three main components: the *Badia* Benchmark site in Jordan, with two satellite sites in Saudi Arabia and Libya; the Rainfed Benchmark site in Morocco, with three satellite sites in Tunisia, Algeria and Syria, and the Irrigation Benchmark site in Egypt, with two satellite sites in Sudan and Iraq.



## Rainfed Benchmark Site, Morocco: Site Selection and Characterization

This report describes the first phase of the Water Benchmark project in Morocco. It also considers the selection and characterization of the sites and the communities in the Rainfed Benchmark Project. It concludes that there are possibilities of improvement in water use, and they depend not only on the technical aspects, but also on the organization and policy considerations.



## Visit of Saudi Arabia Satellite team to the Badia Benchmark Site in Jordan

Two researchers from the *Badia* satellite site in Saudi Arabia- Dr Musa'ed Al-Sharari, the Coordinator of the satellite site and Dr Abdellah Hajoj, the rangeland team leader- visited the *Badia* Benchmark in Jordan from 7 to 11 November, 2007. The Saudi Arabian researchers,

along with the Jordanian national team and community members, participated in a TV program which reported the activities and achievement of the *Badia* benchmark project. During their visit, they discussed with the Jordan team their plans for the satellite site in the coming season.

### Water Benchmark News

**D**r Theib Oweis, the Water Benchmark Project Manager, gave a presentation to IFAD staff in Rome on February 14, 2007. It focused on the outcomes and potential impacts of the project. It was attended by the Vice President, Director Technical Assistance Division, Director of Near East and North Africa Division and several other staff members of IFAD, and the Director General of ICARDA and its other staff members.

**T**he annual Coordination and Steering committee meetings of the Water benchmark project will be held in Rabat, Morocco in January 07-09, 2008. These meetings will review the work conducted in the 2006/2007 season and the workplans for the next year. This event will be organized by ICARDA in collaboration with the National Institute of Agronomic Research (INRA) of Morocco.

**T**he workshop on "Drought Guidelines for Mediterranean countries: a methodology to develop risk management and a proactive approach in drought preparedness. Applicability in

countries that have not been partners in MEDROPLAN", will be organized on 15-16 January 2008, at ICARDA headquarters, Aleppo, Syria.

It is organized by CIHEAM Zaragoza, Spain, in collaboration with IWLMP of ICARDA.

**T**he new Vallerani-North Africa project entitled "Communal Management and Optimization of Mechanized Micro Catchment Water Harvesting in North African Marginal Drylands" will be launched at a meeting to be held in Morocco on 10-11 January, 2008.

For further information visit:  
<http://icardahost.icarda.cgiar.org:8081/wbm/index.php>.

**We wish our readers  
happy holidays  
and a prosperous 2008**

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