



**"Application of near-real time monitoring systems for irrigated agriculture in MENA"**

**Supported by USAID: Policy, Research and Development grants program  
MENA NWC –FABRI**

**Quarterly Progress Report Jan-March 2015**

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Compiled from the reports submitted by the Co-PIs from each institution by 12 April, 2015:

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DAI	USAID

## Executive summary

This quarter was dedicated to reporting on obtained data and measurements from the field sites and the training. Measures for water conservation and productivity actually constitute the heart of discussions between partners in order to provide reliable recommendations to the farmers and the stakeholders. ICBA is assembling the data for the website that is currently in progress for routine data sharing with other USAID funded Programs: MAWRED and FewNet.

وخصص هذا الربع إلى الإبلاغ عن البيانات والقياسات التي تم الحصول عليها من المواقع الميدانية وعلى التدريب. تدابير للحفاظ على المياه والإنتاجية في الواقع تشكل قلب المناقشات بين الشركاء من أجل تقديم توصيات موثوقة للمزارعين وأصحاب المصلحة. يتم تجميع البيانات للموقع لتقاسم البيانات الروتينية مع غيره من برامج ممولة من USAID : مورد و FewNet.

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#### 1. Reporting on data and measurements

The majority of the technology platforms, including weather stations and sensor systems for monitoring the biophysical conditions of the project, have been established. Data from these platforms have been collected, analyzed as shown in the example from Oman (Figure 1).

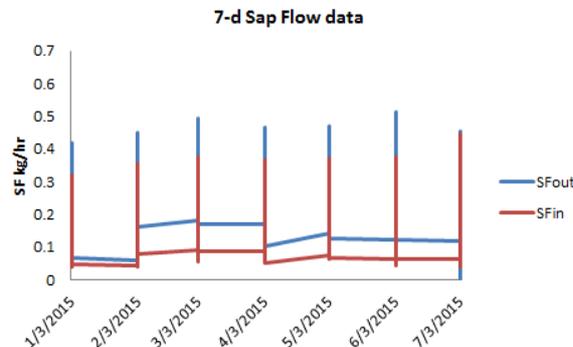


Figure 1. Example data collected by SQU in Oman: sap flow measurements in lime trees (Aflaj Irrigated).

Most of the series of on-farm trials have been established. An example is shown in figure 2 for date palm in UAE. Such data are used for calibrating crop and water models and for ensuring the link with another USAID funded project coordinated by ICBA: MAWRED.

A work plan and budget for Yemen was submitted to DAI and approved by USAID. The practical steps regarding implementation in Yemen in light of the current instability and security concerns are being

discussed with DAI. It is expected that a final agreement will be approved with ICBA, DAI and ICT during April, 2015.

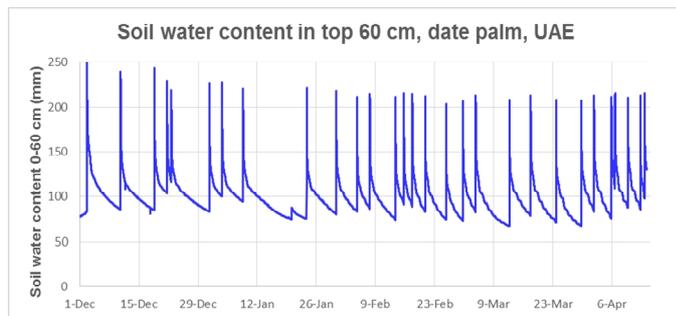
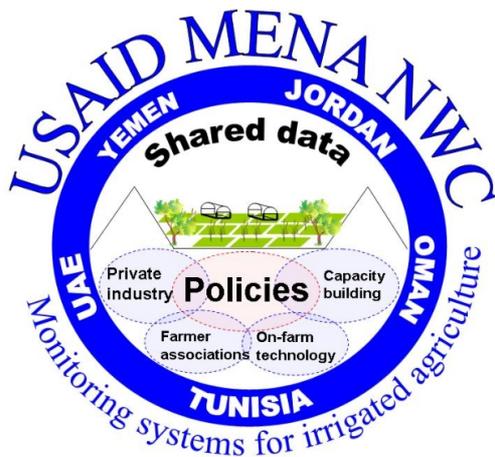


Figure 2. Example of soil water data from UAE in which the measurements at 3 depths in the top 60 cm of soil are integrated to obtain the total water content, measured as a depth (mm)

Project management is frequently discussed with DAI in order to ensure smooth implementation and to accomplish the planned milestones, deliverables and project meetings. The milestones are delivered according to the revised schedule as agreed with DAI to ensure achievement of all the deliverables in 2015.



The partner centers are providing the coordinating center with the needed data for the project website that is being hosted on the ICBA portal. ICBA is upgrading its server capacity in order to accommodate all the expected data.

## 2. Training

Extensive training took place at two times in each center. The farms staff, young scientists, and technicians from the centers were trained by the private sector partner on the understanding of the data in relation to water conservation and crop water productivity. In addition the partner centers analyzed the data and start the sharing of results with the stakeholders: farmers associations, national research and outreach and policy makers.

## 3. Activities planned for next quarter

Following are the activities planned for the next quarter. Note that activity 1 has already started:

1. ICBA contracted an IT services company earlier this month in order to upgrade its website. Initially, we placed the data from the technology platform (including two ICBA weather stations) on the ICBA website, and we are currently creating a link for the FABRI data on the newly designed ICBA knowledge hub which also includes MAWRED data. ICBA staff is actively working on adding all the generated outputs from the equipment and the experiments of the present project.
2. Datasets on crop management; precision measurement from various probes; continuous soil water reserve variation; water models; and empirical water consumption of main crops
3. Dissemination materials for technology transfer
4. Training program materials
5. Monthly newsletter on drought monitoring

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We did not add the centers individual reports in an appendix as all their quarterly reports have already been sent directly to DAI.