

**Quarterly Activity Report: January 1<sup>st</sup> to March 31<sup>th</sup> 2007**  
**IALC Sustainable Development of Drylands in Asia and the Middle East Project**  
**Jordan Component: “Business and Socioeconomic Assessment of Water and**  
**Products for Community-Based Projects in the Badia Region”**

Principal Contact: Octavio A. Ramirez, New Mexico State University  
E-mail: [oramirez@nmsu.edu](mailto:oramirez@nmsu.edu), Phone (505) 646-3215

Quarterly Activities:

The main outcomes from this quarter’s activities are:

- ✓ Finalizing the basic data analysis and preparing a PowerPoint presentation and a technical report that summarizes the results of the agricultural water use survey in the Mafraq aquifer.
- ✓ Initiating more in-depth econometric analyses of the Mafraq data aimed at supporting better informed agricultural water use policy decisions and help farmers improve their irrigation water use efficiency.
- ✓ Finalizing comprehensive reports about the economic and financial accounting analyses of the A’naqeed Al-Kahir and the Tal-Rimah cooperatives that were conducted last year.
- ✓ On the basis of these analyses, began exploring the management and enterprise selection adjustments that could improve the financial and economic feasibility and performance of these two cooperatives in the future.
- ✓ Finalizing a report that summarizes the results of the economic analysis of the community based water harvesting and range restoration activity.
- ✓ Started planning a series of workshops involving Bedouin herders, government land-use agency officials, donor agency and NGO representatives, and other interested parties, to provide them with detailed information about the water harvesting and range restoration techniques used, the cost of implementing these techniques, and economic returns resulting from the enhanced biomass production.
- ✓ Began work to encourage others to initiate similar range restoration activities throughout the Badia region of Jordan.
- ✓ Initiated field research to evaluate the impact of control grazing and stocking rates on the study site, and the economic implications of these treatments.
- ✓ Initiated the economic feasibility and sustainability analyses of the Wadi farming systems in the Al-Shamia/Ma’an area.
- ✓ Provide campus support to Ismaiel Naser Abuamoud in preparation for beginning his doctoral program at NMSU.

The NMSU and the BRDC team members responsible for each of these activities were in frequent long-distance communication coordinating and exchanging of information through Skype phone, e-mail and e-mail document attachments. In addition, Dr. Octavio Ramirez and Rich Phillips traveled to Jordan in mid March to: a) Present to USAID’s Ross Hagan a detailed report on the results of the basic analysis of the agricultural water use survey data conducted in year 1 and discuss with him the on-going in-depth econometric analyses of these data aimed at supporting better informed agricultural water use policy decisions and help farmers improve their irrigation water use efficiency; b) Personally update and discuss the progress in these analyses

with the BRDC counterparts, and obtain their feedback to improve the quality of this work c) Conduct field visit with BRDC and local Bedouin to water harvesting rangeland site in Qrain (southeast of Maan) and d) Provide project management and high performance team training for BRDC. The NMSU team also presented the annual progress report to USAID-ANE in Washington D.C. During the same visit, a team member met with Ms. Jennifer Peterson, USFS-International ANE about collaborative work on the BRDC Water Harvesting Project. NMSU also hosted Dr. Mohammad Shahbaz, BRDC President, on a visit to Las Cruces aimed to strengthening the cooperation between the two institutions.

#### Activities Planned for Next Quarter:

In accordance to the year-two work plan, the fifth quarter activities will include:

- ✓ Finalizing the basic data analysis and preparing a PowerPoint presentation and a technical report that summarizes the results of the agricultural water use survey in the Disi aquifer. contingent on receiving the necessary water use data calculations from BRDC.
- ✓ Continuing with more in-depth econometric analyses of the Mafraq data, and initiating the econometric analyses of the Disi data, both of which are aimed at supporting better informed agricultural water use policy decisions and help farmers improve their irrigation water use efficiency in those two basins.
- ✓ On the basis of the economic and financial accounting analyses of the A'naqeed Al-Kahir and the Tal-Rimah cooperatives conducted in year one, identify and recommend management and enterprise selection adjustments to improve the financial and economic feasibility and performance of these two cooperatives.
- ✓ Explore the possibilities of conducting workshops using the A'naqeed Al-Kahir and the Tal-Rimah cooperatives as examples to train individuals involved in similar projects throughout Jordan on how to analyze their economic and financial feasibility and use the results from these analyses to improve the cooperatives' business performance.
- ✓ Begin a series of workshops involving Bedouin herders, government land-use agency officials, donor agency and NGO representatives, and other interested parties, to provide them with detailed information about the water harvesting and range restoration techniques used, the cost of implementing these techniques, and economic returns resulting from the enhanced biomass production.
- ✓ On the basis of the results of the economic analysis of the community based water harvesting and range restoration activity, continue work to encourage others to initiate similar range restoration activities throughout the Badia region of Jordan.
- ✓ Continue with field research to evaluate the impact of control grazing and stocking rates on the study site, and the economic implications of these treatments.
- ✓ Continue with the economic feasibility and sustainability analyses of the Wadi farming systems in the Al-Shamia/Ma'an area.
- ✓ Host Dr. Raed Tabini and members of the USFS-International ANE team in Las Cruces to prepare educational materials for project-related Bedouin training in Jordan.
- ✓ Provide BRDC requested technical support for Bedouin onion project in Disi basin via video conferencing with NMSU subject matter expert (approved by Ross Hagan during March visit).
- ✓ Purchase project support computer for BRDC in Jordan.

As in the previous quarter, the NMSU team members responsible for the different activities will be in frequent long-distance communication with their BRDC counterparts, coordinating and exchanging of information through Skype phone, e-mail and e-mail document attachments. In addition, Drs. William Gorman and Robert Grassberger will travel to Jordan during mid May to explore the possibilities of conducting workshops using the A'naqeed Al-Kahir and the Tal-Rimah cooperatives as examples to train individuals involved in similar projects throughout Jordan. Dr. Octavio Ramirez will travel to Jordan in June to work with BRDC counterparts on the econometric analyses of the Mafraq and Disi data.