## Quarterly Activity Report: April 1<sup>st</sup> to June 30<sup>th</sup> 2006 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"

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## Quarterly Activities:

Administrative work took place this quarter to follow up and ensure the transfer of the first \$35,000 of the \$100,000 sub-contract to BRDC.

In general, technical activities from the NMSU side included supervising and supporting the processes of collecting, organizing and entering the data for the four main project activities that began during the previous quarter:

- (1) Economic feasibility analysis and business plan development for the A'naqued Al-Kahir diversified (crop and animal) and the Tal-Rimah milk purchasing/cheese production and marketing cooperatives;
- (2) Economic feasibility and socioeconomic impact analyses of a community based demonstration project of water harvesting techniques for range restoration and enhanced grazing capacity.
- (3) An assessment of the economic feasibility and sustainability of Wadi farming systems in the Al-Shamia/Ma'an area, based on a combined use of shallow-well and deep aquifer water sources for agricultural production.
- (4) A survey to characterize and analyze typologies of agricultural water users living within the boundaries of the Disi and Mafraq aquifers according to production and resource use patterns and socio-economic status.

The NMSU and the BRDC team members responsible for each of these project activities were in frequent long-distance communication coordinating and exchanging of information through Skype phone, e-mail and e-mail document attachments.

In general, from the BRDC side, this quarter's activities focused on collecting and systematizing additional data that will be needed for these analyses. Substantial efforts were devoted to conduct the extensive field survey of agricultural water users in the Disi and Mafraq basins. More than 500 farmers (over 50% of the total) have been surveyed to date. Each survey is conducted by at least two BRDC team members and takes an average of 90 minutes to complete.

NMSU team members Bill Gorman and Bob Grassberger traveled to the Middle East from May 15 to the 31<sup>st</sup> to work with their BRDC counterpart researchers on the feasibility analysis and business plan development for the A'naqeed Al-Kahir and Tal-Rimah cooperatives. The general purposes of their visit were:

- 1. To present seminars on preparing marketing plans, conducting feasibility studies and preparation of business plans.
- 2. To review the progress of the A'naqued Al-Khair and Tal-Rimah Cooperative Projects.
- 3. To collect and review financial, social, and marketing information available related to the two cooperative projects.

The training seminars on preparing marketing plans, how to conduct business feasibility studies, and preparing organizational/business plans were well attended and very favorably received. The consensus seemed to be that they learned several useful tools that will be highly beneficial in planning and conducting current and future projects.

Both of the cooperatives seemed to be experiencing some "growing pains." The Tal-Rimah dairy cooperative has not been able to achieve costs competitiveness in relation to the existing local farmer produced cheese and has not been able to operate at a profit under their present business plan. Possible solutions include 1) implement cost-cutting measures including a reduction in the number of employees, 2) branding and selling their product as government-inspected cheese to differentiate it from the lower cost farmer's cheese, and 3) packaging their products in branded consumer sized packages. Branding, consumer packaging and government inspection could possible allow them to command higher market prices and achieve profitability.

The A'naqued Al-Khair Cooperative has experienced problems with their honey production activity, mainly a high bee death loss. This appears to be related to management and/or insufficient bee food supply. There has been a recent change in the management of the honey production enterprise. This cooperative is also having difficulty in marketing their tents and in being cost competitive in wool processing.

Considerable progress was made in collecting production and financial data for these two cooperatives. The NMSU and BRDC team members reviewed this data extensively. However, the data has not been assembled using coordinated accrual financial accounting methods and thus it is not possible to make informed judgments as to the profitability of the cooperative as a whole or its different enterprises. The plan is to use the available data to prepare coordinated financial statements using accrual accounting techniques during the visit of BRDC team members Raed Altabini and Ismaiel Abu-Amoud to NMSU in September 2006. The objectives will be to train them on how to prepare these financial statements and to prepare statements that reflect the actual profitability of each of the cooperative's activities to date.

Gorman and Grassberger spend the last two days of their trip to the Middle East visiting with farmers, farmer cooperatives, farm input supply firms, produce markets, and food processing companies in the West Bank to gain an understanding of how these groups operate, the technology employed, markets and marketing procedures, problems and opportunities. It is hoped that the experience and information gained through this visit, which is summarized in their trip report, will be valuable if and when additional IALC activities can be started in this area.

NMSU team members Jim Libbin and Octavio Ramirez traveled to Jordan from June 28 to July 7 to work with BRDC counterpart researchers on the agricultural water use survey and the water harvesting for range restoration project. The general purposes of their visit were:

- 1. To participate in, observe and assess the BRDC survey teams' data collection visits to farmers in both the Disi and Mafraq basins, and to provide feedback to the teams on surveying issues.
- 2. To work with the BRDC staff person in charge of the survey data entry to develop the Excel template that will be used for this purpose, and to train him on the proper entry of the survey data.
- 3. To review a sample of the surveys that have been conducted to date.
- 4. To meet with representatives of Jordanian entities related to agricultural water use, including the General Manager of the Aqaba water company, the Land and Irrigation Director of the Ministry of Agriculture, and the Water Resources and Planning Director of the Ministry of Water and Irrigation; and secure information necessary for a proper understanding and analysis of the agricultural water situation in this country.
- 5. To review and complete the data base necessary for the economic feasibility analysis of the water harvesting for range restoration project.
- 6. To deliver a seminar on the development and use of crop budgets for research and extension purposes.

All objectives were fully accomplished. The BRDC survey teams are very well-trained and highly motivated, and the quality and reliability of the data being collected is excellent. One question was added to the survey that will allow for a more precise estimation of the economic value of water from the farmers' perspective. The survey instrument was also modified to begin the data collection process for the Wadi farming systems analysis in the Al-Shamia/Ma'an area. A wealth of information was collected from the Jordanian entity representatives, and all data needed for the economic feasibility analysis of the water harvesting for range restoration project is now available.

On the afternoon of July 7, Ramirez traveled to Tel-Aviv, Israel, to meet with Michael Martin, the USAID/West Bank-Gaza Mission officer in charge of agricultural programs. The two-hour meeting took place in the afternoon of July 8<sup>th</sup>. Martin indicated that he would still like to be able to count on NMSU and the IALC expertise in agribusiness to support and advance some of the Mission's programs and objectives in the West Bank and Gaza (WBG). However, the fact remains that all USAID/WBG programs are on hold. Martin indicated that the Mission Director is seeking approval from the State Department to resume funding for some of the ongoing activities that were not in support of or implemented through the Palestinian Authority Government. It is uncertain if any of the items in this request will be approved and whether there is a potential role for NMSU and the IALC in any of them, particularly after the recent upsurge of hostilities in the region. Ramirez reiterated NMSU and IALC interest on working in WBG and Martin indicated that he will continue to seek an opportunity for this to happen.

## Activities Planned for Next Quarter:

As planned, third quarter activities will focus on:

- ✓ Finalizing the survey data collection, inputting the data into the Excel template, and begin the data analysis process.
- ✓ Continue with the economic analyses of the A'naqued Al-Kahir the Tal-Rimah cooperatives.
- ✓ Continue with the economic analysis of the community based water harvesting and range restoration activity
- ✓ Finalize data collection for the economic feasibility and sustainability analyses of the Wadi farming systems in the Al-Shamia/Ma'an area

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, two BRDC team members (Raed Altabini and Ismaiel Abu-Amoud) will be in Las Cruces during the first two weeks of September working with NMSU team member counterparts on the previously discussed analyses.