

Quarterly Activity Report: January 1 through March, 31 2009
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:

The main outcomes from the January through March quarter’s activities were;

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Water Resources activity:

- ✓ Continuing with the econometric analyses of the data of a report on the farmer’s willingness to accept compensation for giving up their water rights in the Mafraq aquifer.

Fiber Arts for Women Activities:

- ✓ Work continued on the feasibility study of starting a fiber arts crafts business that is mainly producing handmade products using domestic wool and where possible, natural dyes primarily for export markets as a means of providing employment to women in the Badia. Recommendations from our research

- Since women are the predominant buyers of gifts and fashion items focus has been on designing fashion bags, market bags laptop carriers and similar type of products. To create a different product with brand recognition when so many traditional weaving designs are similar around the world, we are preparing designs that update some of the traditional Bedouin patterns using local artists as a resource. While we will be including local patterns, it was also decided to research and develop designs from traditional Bedouin weavings. Motifs adapted from the geometric designs and mosaics that exist at the historic sites in Jordan such as in Madaba could also be used
- Needlepoint designs created from these sites and others such as Petra could appeal to the tourist trade and easily be adapted for worldwide export. This market is under study.
- There are two cooperatives in the **Badia** region that we believe would be suitable for this project. They are the **Al-Sadaqa Village and Cooperative** and the **Jordanian Women’s Qualifying and Training Society** in **Udreh**.
- Neither of these two groups currently have a marketing representative thus any representative hired would need to be paid from the money earned from the sale of the products. These groups already spin the wool from native sheep breeds, but their methods are very time consuming. They do not have a carding machine, which leads to wool full of plant fiber and dander. This affects the quality of their finished product diminishing their value in the export market.. They are using hand drop spindles instead of spinning wheels. By using wheels they could greatly speed up their wool processing time and give them more design versatility. The cooperatives still weave on the traditional ground looms that

Bedouins have been using for centuries. While these looms are perfect for long rugs, they weave very slowly and require two women to work each. A couple of 4 or 6 harness floor looms would be easier on the women, increase production speed and the versatility of designs.

- A listing of equipment needed to increase the productivity and quality of the
- It is our conclusion there is a definite need to increase the quality and marketability of the current status of Jordanian fiber based handicrafts. There are problems that have to be solved in order to please the US market. Among them are wool cleanliness and softness, product quality, cost of heating water for dyeing, design limitations and speed of production due to their antique methods. There is also a need to create an identifiable market brand. Research into historic Bedouin hand-woven products, exploiting the popularity of Petra, and the mosaics of Madaba provide a wealth of source material.
- A sample of the Awassii wool fiber was carried to the US for processing and to see if the quality could be improved. By careful carding and using Borax and vinegar, both inexpensive and readily available, it was possible to soften the yarn. The fiber wasn't suitable for fine wearable's even with this level of processing. However, it will work well for bags, pillows, rugs, and needlepoint.
- Bedouin designs are being adapted for use in the project. Several samples have been made and warp designs drawn to be given to the weavers to copy. With the existing skills the Jordanian women have in combination with the new equipment they will be trained to use, these women will be able to develop their own designs in the future to reflect market demand.
- The website for marketing their products is still in development, but is currently complete enough to put on the Internet at anytime.
- Work continued on appropriate market outlets for the fiber arts products including a focus on wholesale outlets in the US, world-wide Internet sales directly to consumers, and in-country sales outlets.
- Work also continued on assessing the financial feasibility of the proposed fiber arts business.

Range Restoration Activities:

- ✓ 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.
- ✓ Expand and formalize the data analysis to evaluate and identify superior shrub and perennial grass species from seeding evaluation study initiated in December 2007 for use in future restoration activities.
- ✓ Continue with field research to evaluate the impact of controlled grazing and stocking rates on the study site, and the economic implications of these treatments. Continue to monitor existing rangeland rehabilitation project and to investigate potential future sites.
- ✓ Completed preliminary analysis of data collected through the agricultural water use survey in the Al-Shamia area and prepared a draft report for internal review.

- ✓ The NMSU team members responsible for the different activities were in frequent long-distance communication with their BRDC counterparts.
- ✓ Libbin and Bailey traveled to Jordan on January 2 through 12, 2009. They established two new experiments, conducted evaluations, and planned public presentations of work progress at both the Tal Ramah and Ghrain (Al Muraygha) sites. During this visit, Libbin and Bailey met with BRDC, Royal Botanical Gardens, Al al- Bayt University, and University of Jordan.

Activities Planned for the April 1 – June 30, 2009 Quarter

Fiber Arts Activities:

- ✓ A list of equipment needed for the **Al-Sadaqa Village and Cooperative** and the **Jordanian Women’s Qualifying and Training Society in Udreh** has been prepared and purchasing of this equipment will be made and arrangements for delivery to Jordan. . This equipment will be either shipped to Jordan or hand carried scheduled to arrive in June.
- ✓ Work will continue on preparing designs that are most likely to sell in the US market
- ✓ Work will continue on locating retail stores in the US that would be interested in selling the Bedouin products and establishing a cost effective shipping and distribution network.
- ✓ Work will continue on refining the proposed website for the fiber arts products.
- ✓ Work will continue on sourcing markets and conducting the financial feasibility analysis.
- ✓ Gorman, Shifflett and possibly Bob Grassberger will travel to Jordan in June. The spinning and weaving equipment will be delivered to the **Jordanian Women’s Qualifying and Training Society in Udreh** and if there are sufficient funds available, some equipment will also be delivered to other organization. **Kim Shifflett will conduct a several day training sessions on use of the equipment and selecting designs appropriate for export markets. Gorman and Grassberger will work on in-country logistics and markets and costs.**

Range restoration Activities:

- ✓ Establish two new field experiments at both the northern (Tal Rimah) and southern site (Ghrain). One study will examine the efficacy of water harvesting with directing seeding of forage kochia and other species. The second study will evaluate broadcast seeding of forage kochia and arid –adapted perennial grasses in Jordanian rangelands and determine if prescribed use of livestock can facilitate establishment of seeded species.
- ✓ Submit a proceedings paper describing the results of the forage variety evaluation study that was initiated in December 2007 to the

International Farm Managers Association conference. The paper was accepted and will be presented during July 2009.

- ✓ Submit a refereed scientific journal paper summarizing the results of the forage variety evaluation study initiated in December 2007 to the Society for Range Management's international peer-reviewed scientific journal, Rangeland Ecology and Management.
- ✓ Complete the analysis of the data collected through the agricultural water use survey in the Al-Shamia area and publish the findings as Report Number 8.
- ✓ Libbin and Bailey will travel to Jordan June 23 through July 3, 2009. They will evaluate experiments planted in December 2007 and in January 2009 and will conduct public presentations of work progress at both the Tal Ramah and Ghrain (Al Muraygha) sites. During this visit, Libbin and Bailey will meet with BRDC, Royal Botanical Gardens, Al al-Bayt University, NCARE, and University of Jordan

Water use survey:

- ✓ Complete the analysis of the data collected through the agricultural water use survey in the Al-Shamia area and publish the findings as Report Number 8.

Rural Tourism:

- ✓ Ismaile is planning to go to Jordan on June 21st. During the first week (Jun 24-July1st); he will work with Jim and Derek at both the Tal Ramah and Ghrain sites. Then he will work on collecting data for his study on possible rural tourism sites in the Badia., He planning to visit the Ministry of Tourism, Ministry of Planning, Ministry of finance, Department of Statistics, Jordan University, and other related institutions.

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His project proposal for the Doctorate of Economic Development program (Tourism and Community Economic Development in the Northeastern Badia of Jordan.) has been accepted to be presented in the 2009 National Extension Tourism Conference, Utah, June 14-17