

Quarterly Activity Report: October 1st to December 31st 2003
IALC Sustainable Development of Drylands in Asia and the Middle East Project
Yemen Component – Human Resource Development

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Work during this first quarter began with in-depth discussions of the proposed project strategies and activities involving the NMSU faculty members most likely to be in charge of their implementation. The group of professors that later traveled to Yemen (Dr. Octavio A. Ramirez, project coordinator; and Drs. Bill Gorman and Carlos Rosencrans) met several times to discuss and put together a preliminary scope of work for that visit.

Work during November focused on the logistical and operational planning for the December visit, which required numerous e-mails and phone call consultations with Professor Dr. Towfick Sufian (University of Sana'a); Dr. Doug Heisler, Mr. Scott Christensen and Mr. John Wilson from USAID; as well as Robert Freitas, Project Director from the UoA/IALC. Efforts to coordinate the work with the team of consultants from ARD that was in Yemen at the same time conducting an assessment of the development of agricultural sector initiatives for USAID/Yemen also began in November through contacts with Dr. Scott Thomas, team leader.

These consultations significantly altered the initial plans and helped redefine the main objectives of the first visit, as follows: To assess the quality and qualifications of the Faculty of Agriculture of the University of Sana'a; to learn what their role is and how they relate to the Ministry of Agriculture, the Regional Agricultural Development Authorities and the private sector; and to understand how they conduct and share applied research, provide outreach and extension, train students, and help farmers have a better life.

The goal of this assessment of the status and role(s) of the Faculty of Agriculture of the University of Sana'a (UOS), was to help USAID/Yemen decide if and how to best help strengthen the Faculty of Agriculture so that they can better support the development of the Agricultural Sector in this country and become a more productive partner with other governmental institutions related to agriculture. Particular attention was paid to what they might specifically do to improve agriculture in the USAID/Yemen target governorates.

To this effect, the IALC-NMSU team decided to devote the first visit to conducting extensive consultations with the University of Sana'a Administration and Faculty, the Ministry of Agriculture, the Ministry of Higher Education, the Eastern Regional Agriculture Authority, selected agricultural business leaders, USAID/Yemen mission officials, and other relevant parties. These meetings were coordinated with the team of ARD consultants that was in Yemen during the first two weeks of December.

The IALC-NMSU team prepared a draft report while in Yemen and provided a briefing to Ambassador Edmund Hull and USAID Mission Director Douglas Heisler before departing from Yemen (attached). This draft summarized the main findings of the mission and outlined a proposed course of action for the strengthening of the Faculty of Agriculture of the University of

Sana'a so that they can better support the Agricultural Sector development in a cooperative multi-institutional context. The main findings were:

1. The Faculty of Agriculture (FOA) houses 72 Professors, 19 of them with PhDs from U.S. universities, about 5 with PhDs from Western European Universities, and the remaining 48 with PhDs from Egypt, Iraq and the former Soviet Union. Although all professors have been trained at the PhD level, many could benefit from targeted training to refresh and upgrade their scientific and technical knowledge.
2. The FOA had adequate laboratory and experimental farm facilities and equipment ten years ago, but they have since lacked funds to maintain and update them as needed. They have no operational funds for research or extension activities.
3. As a result, the faculty's current focus is on teaching, with very little involvement in research or extension activities. However, they appear eager to develop or assist applied research and extension programs if provided with the necessary resources.
4. With some additional training, scientific/technical backstopping, basic equipment, and operational expenses the faculty would be well positioned to assist in the task of increasing agricultural productivity and income in Yemen's rural areas.
5. There are opportunities for small farmers to significantly increase their incomes by adopting better farming practices, changing crops and improving their marketing of farm products.
6. Currently, -unlike in the U.S.- the responsibility for direct public assistance to small farmers lies with the Extension Service, which is administratively under the Ministry of Agriculture and Irrigation (MAI).
7. The Extension Service has a large number of employees with centers and agents scattered throughout most rural areas where they can be in contact with farmers.
8. Delivery of expertise and information available at the various departments in the FOA to small farmers must involve the Extension Service as (unlike in the U.S.) the faculty does not have extension personnel in the field.
9. Currently, the FOA, the Extension Service, and the MAI-AREA (Agricultural Research and Extension Authority) research stations do not coordinate any of their activities.
10. Although the Extension Service has an adequate number of personnel, operating funds are extremely scarce. It has little or no money for extension equipment purchases and maintenance, travel, the development and reproduction of training/ information materials, and other basic extension program resources.
11. Extension agents also lack training on extension methods and have insufficient knowledge and little technical backstopping to help farmers deal with their main agronomic and pest problems.

12. Agribusiness professionals are needed to help develop a more “commercial” agricultural sector. The FOA is currently unable to provide specialized training in this field of Agricultural Economics.

The three main recommendations were:

1. To strengthen the organizational and technical capabilities of the FOA so that it can effectively participate in an integrated research-extension system that will support the long-term development of Yemen’s agricultural sector.

To accomplish this first objective, we recommended continuing with the implementation of the IALC/NMSU proposal -- expanded to include the possibility of “refresher” and “updating” training of faculty members in several other agricultural fields. Most of the other activities envisioned in the initial IALC/NMSU proposal, such as training and support on institutional/organizational and administrative development, are found to be in agreement with this first objective and with the needs and priorities of the FOA.

To promote agribusiness growth and support small holder – agribusiness interest linkages, we recommended that the graduate-level training envisioned in the IALC/NMSU proposal be focused on Food and Agribusiness Planning, Management, and Marketing. Because of the scarcity of specialists in this field, this training would have to begin at the Master’s level. Some Master’s graduates would return to work in Yemen’s agricultural sector while others could continue on for a PhD in Food and Agribusiness and go back as UOS faculty. This will allow this university to eventually organize its own educational programs to supply the country’s need for this type of professionals.

To strengthen the capability of the FOA to carry out their proposed “Agricultural and Environmental Research and Consultancy Center” initiative, we also recommended that the agreement be expanded to provide training and backstopping in:

- a) Procedures for participatory prioritization of research and extension efforts. These involve all relevant parties (farmers, extension agents, researchers, research administrators, agribusiness owners, policy planners, etc) in a systematic process of determining research and extension priorities (i.e. which crops to work on, on what ecosystems and farm scales, the most pressing problems, the specific technologies that should be investigated or promoted, etc.)
- b) Participatory problem-solving research strategies and methods, which involve farmers and extension agents in the research process thereby increasing the relevance, adequacy, and the likelihood that the research outputs are useful and eventually will be adopted by the target farmers.
- c) Extension strategies and methods directed towards technology “transfer” to small farmers, so that UOS faculty can in turn assist MAI extension personnel in their efforts to communicate and convey information to the farmers.

- d) Procedures to conduct feasibility, cost-benefit and risk analyses of agricultural production systems, agribusiness ventures, and environmental and rural development projects, as well as agricultural and food product marketing studies.

We recommended that the above activities be funded by USAID/Washington through the IALC, at a level of at least \$200,000/year for a minimum of three additional years.

2. To provide operational funding for specific short-term projects that will have an immediate impact on small farmer incomes and rural well being.

Although the FOA is strategizing to develop an eventually self-funded applied research and outreach program through a proposed “Agricultural and Environmental Research and Consultancy Center,” we concluded that the kind of research and extension effort needed to launch the development of Yemen’s agricultural and agribusiness sector can not be self-funded through the sale of services to the private sector only. In addition, this would provide an incentive for the FOA to focus on serving the larger farm operations and agribusiness interests that are able to pay for their services.

Therefore, we recommended that USAID/Yemen fund the procurement of essential equipment for problem solving research and extension support as well as operational resources needed for the FOA to implement priority short-term projects that would have an immediate impact on small farmer incomes and rural well being. The draft trip report provided a somewhat detailed description of four possible high-impact projects identified during our visit.

The report emphasized that a successful implementation of these projects would require further development and planning; specialized training for UOS and Extension Service personnel; and technical backstopping. Therefore, we recommended that NMSU faculty members assist USAID/Yemen and the FOA of the UOS in developing, monitoring, and evaluating the implementation of these projects; and in the identification and design of additional high-impact projects to be implemented in the future.

3. To provide for a long-term source of funding for problem-solving research and extension oriented projects.

We concluded that implementation of recommendation 1. above would institutionally and technically strengthen the FOA so that it can become a leading participant in an integrated problem-solving research and extension system for Yemen. Implementation of recommendation 2. would provide the basic equipment, operational resources, and the specialized training and technical backstopping required for carrying out select cooperative extension-oriented projects that could quickly impact small farmer incomes; i.e. for this system to become operational.

However, past experience suggests that critical applied research and extension activities like those discussed under 2 above would likely stop without continued external funds. Therefore, our third recommendation was that USAID/Yemen encourages the government of Yemen to fund the establishment of and commit to the monitoring of a long-term program that would, on a competitive basis, grant the FOA of the UOS, MAI (i.e. the AREA and the Extension Service),

and any other public or private sector entities to access operational resources for the implementation of specific high impact projects.

We recommended that this program be launched by conducting participatory “priority setting” workshops to determine the applied research, extension and service priorities at each of the five USAID target governorates. This would provide baseline knowledge for the program “manager(s)” to make more informed project funding decisions.

Subsequently, we envision that the program manager(s), in close consultation with UOS and MAI extension agents, specialists, researchers, and administrators, put out periodical calls for competitive project proposals (CCPP). Some of these could be very specific in nature, to address key needs identified by the program manager(s). Others could be more “open” in scope, so that the program can continuously benefit from the experience and ideas of UOS, MAI, and AREA researchers and extension agents.

As needed, some of the CCPP’s could require collaboration between UOS, MAI and AREA, to promote a more effective utilization of the available human resources. The program manager(s), particularly during the initial stages of implementation, should be given some latitude to fund projects on a non-competitive basis, to rapidly achieve a well-defined high priority objective.

In regards to the program administrative structure, we recommended funding for a small management office based in Sana’a, and for significant backstopping from USAID, USDA, and internationally experienced research and extension faculty from U.S. and Middle East universities and research/outreach centers such as ICARDA. We suggested that this backstopping comes mostly in two forms:

- a) A core group of advisors that would help organize and attend the research and extension prioritization workshops, recommend the funding of specific non-competitive projects, provide ideas and guidance for the preparation of the calls for competitive project proposals, review and decide on the funding of the proposals received, monitor and evaluate the progress and outcomes of the projects funded by the program, etc.
- b) Short-term consultants that can be called in to support or carry out specific initiatives that’s beyond the realm of expertise of the core group of program advisors.

Suggestions on how USAID/Yemen could secure the substantial amount of funding required for the establishment of this type of program were separately provided by USAID/Washington Senior Agricultural Development Advisor Scott Christensen.