

BRINGING AFGHANISTAN'S AGRICULTURE BACK

Afghan farmers have been burdened by more than 25 years of war, civil unrest and political instability that have left the agricultural sector virtually destroyed. Now, the University of Illinois is helping to rebuild the agricultural industry in the country by training researchers, university faculty and aid workers in the latest agricultural practices.

Women attending the animal health short-courses were exposed to training in the classroom as well as on the farm. This tour of cattle facilities showed examples of how to set up cattle facilities for the health of their herds



“A long war, years of drought, Soviet occupation and the Taliban have taken their toll on the agriculture and people of Afghanistan,” said John Santas, associate

director in Afghanistan,” funded by the U.S. Agency for International Development (USAID), to revitalize agricultural education in Afghanistan as part of postwar reconstruction efforts.

TIPAN

For both Myers and Santas, it's a return to a part of the world and an agency they know well. They were among the leaders of a long-term USAID grant project, launched in 1983, to expand the capabilities of Northwest Frontier Province Agricultural University in Peshawar, Pakistan.

The \$60 million project, officially called Transformation and Integration of the Provincial Agricultural Network (TIPAN), modernized the curriculum, constructed new buildings, integrated agricultural research stations into the university, developed outreach services for farmers, and gave some 130 faculty graduate education in the United States.

Although TIPAN came to a premature end in 1994, when U.S. legislation barred aid to Pakistan, the university continued to flourish. Now, under the guidance of Santas and Myers, some of its faculty and researchers are training Afghans in up-to-date agricultural methods. It was a natural choice for USAID to select the U of I to help in achieving some its goals in Afghanistan: Peshawar is only a day's drive east of Kabul via the Khyber Pass.

director of ACES Global Connect, the international arm of the college of ACES.

With some 21 million acres of land under cultivation, Afghanistan has about the same amount of cropland that Illinois does. Most of the Afghan population lives in rural areas and depends on agriculture for its livelihood.

“Afghanistan once did quite well for itself agriculturally, and it has the capability to be more than self-sustaining in terms of food production,” says Santas.

Santas and Dr. Oval Myers Jr., a retired professor of plant genetics at Southern Illinois University Carbondale, are heading a new project entitled “Human Capacity Development for the Agriculture Sec-



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Short-Courses

The new USAID training project began in August 2003 with month-long, hands-on short courses taught at Peshawar on irrigation and water management practices, enterprise development skills, and crop storage and marketing. “The educational system in Afghanistan has been virtually shut down for the past 25 years, leaving a pathetically thin human resource base,” said Santas. A total of 19 courses have now been taught since the program’s inception.



The participants have included Afghan ministry workers, university teachers, personnel with non-government organizations, and agricultural industry representatives. “It’s a train-the-trainers concept,” Myers explains. “These people will work directly with the farmers, who need to know how to improve production practices using whatever resources they’ve got to work with. They’ve gone essentially 25 years without a viable extension service.”

Some 360 Afghans, 10 percent of them women, have attended one or more of the short courses. The hope is that eventually thousands of farmers across the country will receive training from these and future personnel taking the courses, many more of which are planned for the next few years. The project will continuously evaluate the success of the outreach efforts.

Training the Faculty

More than 90 percent of the agriculture faculty remaining at Afghan universities has only bachelor’s degrees, further producing graduates with bachelor degrees of a lower quality than those in other countries in the region. Curriculum is obsolete, and textbooks in native languages are not available. With funding from the project, 10 Afghan agricultural faculty, five each from Kabul University and Nangarhar University, have begun master’s degree work in Peshawar. This group will finish in December, 2006.

To also assist with this university-strengthening effort, two recently retired professors from the Northwest Frontier Province Agriculture University, who received U.S. Ph.D. degrees during the TIPAN era, spent the spring 2005 semester at Kabul Univer-

sity teaching courses in entomology and agronomy. The courses, identified through the Kabul University Dean of Agriculture, were instituted to fill current gaps in the faculty of agriculture at the university. The visiting professors were funded through a grant from the USAID Islamabad office. Two other faculty members are currently being pursued for the fall semester 2005. Santas noted that if more funding can be obtained, additional visiting professors can be brought to the university, something the Dean of Agriculture at Kabul is eagerly anticipating.

In addition, the project funded the printing of more than 10,000 textbooks written by local agricultural scientists. The series of six books on subjects such as crop production, animal husbandry, and horticulture have been delivered to Nangarhar University in Jalalabad and Kabul University. The books were created during TIPAN, and reprinted to provide one of few reference materials suited for the Afghanistan-Pakistan area. In the near future, the remainder of the books will be dropped at the doors of cooperating non-government organizations, USDA, and others.

Twenty more master’s candidates from five different Afghan universities have also been selected to complete the advanced degree program. Santas and others are seeking funding for these students to begin.

A research program pairing Afghan scientists with Pakistani mentors is also part of the training component for faculty and researchers. Several Afghan agricultural scientists from research institutes in Kabul and Jalalabad have begun collaborative research with Pakistani colleagues at the Cereal Crops Research Institute in Pirsabak and at a second agricultural research station in Mingora. This “twinning” program, as it’s called, has already worked with 24 researchers from Afghanistan in areas of agronomy, horticulture, soil science and plant production. The Afghan researchers took with them teaching, plant and seeding materials from the Northwest Frontier Province Agricultural University in Pakistan for use in Afghanistan.

Support

USAID has committed nearly 1.9 million dollars to help fund the training through 2007. The grant is officially to the International Arid Lands Consortium (IALC), a group of universities and research institutes of which the University of Illinois is a member. In addition, the USAID-funded Rebuilding Agricultural Markets in Afghanistan Program (RAMP) has provided \$400,000 in 2004 and \$178,000 in 2005 to the Afghanistan effort. The project is being implemented by Chemonics International, a Washington D.C.-based consulting firm to USAID, which manages RAMP.

Earl Kellogg, the UIUC/IALC liaison, said, “One of the keys to successful development in Afghanistan is the growth of its agriculture sector where a large proportion of the people in Afghanistan earn their incomes. The University of Illinois is pleased to be able to contribute to agricultural development in Afghanistan which is consistent with our public engagement mission and international involvement.”

The field office director in Peshawar, Abdul Qayyum Khan, is a former USAID veteran who previously worked with Myers and Santas in Peshawar. Khan did a preliminary needs assessment on



short courses to offer and the three men have met several times with representatives from Afghan government and nongovernmental agencies to do long-term planning about activities.

“Dr. Qayyum is vital to the success of the program,” said Santas. “He coordinates the complicated logistics required to get qualified Afghan agriculturalists enrolled in training programs and offering short courses on relevant agricultural topics. These Afghans take the information and share it with the other farmers in their districts and provinces, in much the same way our Illinois extension educators do.”

Soybean Utilization for Women and Children

Malnutrition continues to plague the Afghan population, with reports of more than 75 percent of the people suffering from hunger, especially women and children. There is a high rate of female deaths, especially during and after childbirth. The University of Illinois’s National Soybean Research Laboratory (NSRL) and its International Soybean Program (INTSOY) are working with a California-based non-government organization to help find a solution.

Nutrition and Education International (NEI), a U.S.-based non-profit organization focusing on improving nutrition in Afghanistan, is educating the Afghan population on the value of soybeans as a high-quality protein source. The Afghan government has partnered in the effort, which is now working in 12 of Afghanistan’s 32 provinces.

The group has partnered with the U of I to teach Afghans about home processing of soybeans, and creation of mini-enterprises for women for making and selling soy foods. In addition, INTSOY and NEI will be involved in the creation of a soy nutrition research and development center for the country. The group also hopes to expand the program to other parts of Afghanistan and may be able to work with other U of I units on other aspects of the soybean industry.

“NSRL has worked in close to a dozen countries to educate on how to use soy in indigenous foods. We’re looking forward to cooperating with NEI on their efforts in Afghanistan,” says Pradeep Khanna, Associate Director of the National Soybean

Research Laboratory. “Our partnership will provide a high-quality protein product to help alleviate malnutrition and malnutrition-related death among Afghan women and children.”

NEI foresees soybeans being grown in all 32 provinces in the next five years, ultimately producing up to 300,000 metric tons of soybeans. The group has plans to set up a soy factory to process the beans into soy flour and soy oil, the basis for the nutritional products for both humanitarian and commercial use. However, the country will have to import large quantities of soybeans for many years to meet domestic demand. NSRL staff and INTSOY will partner with NEI to help them with technical assistance in building the plant, and follow up education to incorporate soy into traditional Afghan foods.

Future Plans

Santas says more technical short courses are planned for the 2005-06 year with locations shifting between Pakistan and Afghanistan. In addition, Pakistani scientists will be sent to research stations in Afghanistan to provide on-the-job training through the “twinning” program.

To continue to boost the quality of faculty at Afghan universities, some of the NWFP Agricultural University professors who earned their U.S. doctorate during TIPAN will serve as visiting professors at the Afghan universities this year. In addition, some of the faculty will be sent to NWFP AU for work on advanced degrees.

An international programs unit has been set up at NWFP AU to help that university become a regional center of excellence through facilitating cooperation among universities in the area. Work is planned for next year to encourage the international center to facilitate several cooperative agreements among institutions.

Funding continues to be a concern the group is trying to overcome. Agricultural development funds handled by USDA, are being solicited through a relationship with the agricultural attaché in Afghanistan and Pakistan. The group is also researching possibilities with the Association Liaison Office for University Cooperation in Development (ALO) through a joint U.S.-Japan project that would link U of I to a grant to work cooperatively on the project with Japanese higher education to continue to build a stronger faculty at Kabul and other Afghan universities.

In addition, another ALO project already funded will begin the task of fortifying the education of the faculty at Balkh University in Mazar-e-Sharif. The Balkh program will again pair Southern Illinois University in Carbondale with the U of I staff.

“We hope to get the attention of USAID or others to see the need to invest in the Afghanistan Universities, using the TIPAN model,” said Santas.

Santas is optimistic about the ability to help Afghan farmers improve production after years of political instability, war, and government neglect. With the Taliban out of power, he says there is a “great hunger for knowledge” among the Afghan people – men and women alike.