Higher Education for Development
Knowledge, Partnership, Results

USAID
FROM THE AMERICAN PEOPLE

PROMISING PRACTICES/LESSONS LEARNED AND SUCCESS STORIES

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Dear Conference Attendees,

In preparation for **Synergy in Development 2006**, 63 currently funded partnerships that were expected to attend were asked to submit brief examples of a "promising practice" and/or "lesson learned." In addition, they were asked to provide a "success story" related to their partnership work.

Thirty-nine partnerships, or 62 percent, responded with submissions to one or both of the requests. These brief qualitative pieces are often one of the most effective ways to help us document partnership program impact. For example, HED is regularly asked to produce examples of successful partnerships for our stakeholders, whether it is USAID or the higher education associations.

As promised in the request for these submissions, we are sharing the partners' stories with all of the **Synergy in Development 2006** attendees. We want to share this wealth of information because we often include these stories in our outreach efforts to various government agencies in Washington, the higher education community, and donors to reinforce the idea that these requests for information from you are not idle appeals, but important evidence of the value of HED partnerships.

Thank you,

Christine A. Morfit

Christine A. Morfit
Executive Director
Higher Education for Development

Lessons Learned/Promising Practices and Success Stories

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#1
Alamo Community College District
Universidad Tecnológico de Coahuila
Country: Mexico
TIES Program
SUCCESS STORY
Mexican Students Benefit from Hands-On Learning: Training, Internships, Exchanges, and Scholarshps (TIES) Partners Grateful for Cooperation from Mexican Customs

When Texas State Technical College (TSTC) instructor Diego Villarreal prepared to teach Programmable Logic Controllers (PLC) in Matamoros, Tamaulipas, México, he learned that the Universidad Tecnológica de Matamoros (UTM) lacked the necessary equipment to provide its students with a hands-on experience. TSTC stepped in and agreed to loan 12 PLC units to its Mexican counterpart. Villarreal was prepared for a hassle at the border, so what happened surprised him. Mexican customs, the *aduana*, was very cooperative.

Prior to his departure, Villarreal met with the aduana, when he received detailed instructions for the legal crossing of the PLC equipment. He carefully prepared his documentation for the temporary importation of the units.

Villarreal crossed the equipment at El Puente Internacional Ignacio Zaragoza/Veteran's Bridge between Brownsville, Texas, and Matamoros, Tamaulipas. He provided a letter on official TSTC letterhead, detailing the purpose for transporting the tools and equipment, which served as a *solicitud de internación*, or request for admission. Additionally, he provided a detailed list of the items to cross the border. Villarreal also completed the required *permiso de internación temporal* (temporary admission permit) at the customs office.

"I have to take my hat off" to the Mexican customs officials, said Villarreal, "when it comes to getting our equipment across. They were courteous and helpful all the time. As a person who grew up in Mexico, I know this is unheard of."

The entire process took only about 15 minutes. Villarreal was granted a temporary admission permit for one month and crossed the equipment. Once at UTM, his students, technicians, professionals from local maquiladoras, and UTM faculty benefited from the hands-on experience of using PLC equipment.

The return was equally as simple. Villarreal personally picked up the equipment from UTM and crossed at the same point as where he had entered Mexico. He presented the equipment and his documentation to prove he was returning it to the United States. The aduana quickly cleared the items and sent him on his way.

Villarreal, UTM, and TSTC are very grateful for the cooperation of Mexican officials. "Our TIES students received the best possible education from our partner institution thanks to the assistance of Mexican customs," said Eduardo I. Conrado, program manager for the Partnership to Improve Productivity in Mexico's Maquiladora Manufacturing Sector. "We recognize and applaud the bilateral cooperation of all who were involved in moving this equipment."

#2
Arizona State University
Instituto Tecnológico y de Estudios Superiores de Monterrey
Country: Mexico
TIES Program
SUCCESS STORY
By Trisha Coffman

Arizona State University (ASU), along with its Ira A. Fulton School of Engineering, is getting to know its neighbors. That aim is at the heart of an unprecedented partnership with one of Mexico and Latin America's premier and far-reaching educational institutions, Tecnológico de Monterrey. The relationship fits squarely with ASU President Michael Crow's global engagement design initiative, and as such will further establish and broaden the presence of ASU's research and curricula. The list of benefits to both parties is of a neighborly standard: shared effort, global experience, international perspective, and mutual understanding.

Tec de Monterrey is the second-largest private educational institution in Mexico, encompassing high school, university, graduate, and postgraduate schools across Latin America, with 33 campuses in Mexico. "Tec de Monterrey is not a typical institution in Mexico," said Fulton School Dean and Vice Provost for Global Engagement Peter Crouch. "It's quite entrepreneurial. It's also a very influential institution within engineering in particular, and many Mexican leaders are alumni of Tec de Monterrey."

Taken together, the institution's quality and location made for a logical first step toward engaging ASU with the world. "It's a good idea since they're our closest neighbor. If you are going to expose students to another place, the first place you might think of is where the significant Arizona culture originates, which is of course Mexico. We should get to know our neighbors maybe as well as we know ourselves," Crouch said.

The Fulton School played a key role early in the partnership. ASU and Tec de Monterrey, headquartered in Monterrey, Mexico, began a student exchange in 2002. But "the true birth of the relationship was in summer 2003, when the engineering deans established a faculty exchange and research between colleges," said Sophie Rigollet, strategic relations associate for Pan American Initiatives in the ASU president's office. Since then, several collaborative areas, throughout the university and with the Fulton School, have progressed.

Today, the Fulton School and Tec de Monterrey have several partnerships either underway or being formulated, all of which are relevant to Mexico's current growth pattern.

A 2003 grant awarded by the United States Agency for International Development (USAID) Training, Internships, Exchanges and Scholarships (TIES) program makes it possible for Tec de Monterrey students to pursue a joint master's degree in logistics from both institutions, with a focus on the aerospace industry. "There is a lot of interest in Mexico to attract aerospace companies to put production facilities there, and there is a lot of interest by U.S. companies to put production facilities in Mexico," said Rene Villalobos, professor in the industrial engineering department.

A total of 21 students will participate, and the first cohort of seven arrived at ASU in fall 2004, with five currently at the Fulton School. The participants study at ASU for nine months.

It's win-win, as this sharing of knowledge also exposes ASU's faculty and research to a new, international angle. "The research portfolio of the Fulton School is important to Tec de Monterrey, because we can provide expertise in the areas they are looking for," Villalobos said.

A flow of students from Mexico to here and from here to Mexico is Villalobos's vision for the program's future. That's similar to how Howard Bashford, director of graduate studies and professor with the Del E. Webb School of Construction, sees the purpose of the dual master's degree program in construction management.

"The idea is that a U.S. student will have experience working in Mexico and a Mexican student will have experience working in the United States," Bashford said. The degree program, with an emphasis on international construction management, was formalized in July and takes the shape of an exchange program, with students spending a year at each institution.

The curriculum includes traditional coursework in construction management, enhanced by a semester-long internship with a construction company. "Culture and personal relationships are very important in construction. The internship will give students the opportunity to experience the culture and practices of another country," Bashford said. Upon completion, the first cohort of students, commencing in fall 2006, will have earned a master of science in construction from both ASU and Tec de Monterrey.

The flow of information is also being expedited via Tec de Monterrey's virtual university—a broad online and satellite network that is the second largest in the world and extends throughout Mexico, Latin America, and into Europe. This past August, the Fulton School marked the launch of a Six Sigma Black Belt Professional Certification program as a complement to Tec de Monterrey's master's degree in quality and productivity systems.

Tec de Monterrey's virtual university administers courses from Fulton's industrial engineering department. "We were instrumental in cultivating the partnership and then in packaging and supporting the delivery of the courses,"

said Jeff Goss, assistant dean with the Center for Professional Development and executive director for professional programs. Goss explained that Tec de Monterrey manages the course and administers all exams and grades. However, Fulton faculty will integrate live or synchronous components or lectures through videoconference.

The course content, in effect, adds value to the Tec de Monterrey degree, Goss said, because "in some respects it's from the folks who wrote the books. The ASU faculty involved are representative of the industrial engineering department, and are some of the most renowned in their fields in the country."

The program has 20 students this fall from seven Mexican cities, and it is expected that 50 will arrive for spring semester. They will receive the professional certification from ASU in addition to a degree from Tec de Monterrey.

As these programs mature and new collaborations are coordinated, lessons are being learned—and not just by students. "We're trying to mow down the obstacles so there's less impediment to the natural flow from institution to institution. If there are fewer obstacles, then people will be more inclined to take the opportunity," Crouch said, as future opportunities are in the making. And, as Rigollet points out: "It sounds simple, but Tec de Monterrey and ASU can accomplish more together than duplicating our efforts individually." In essence, by being good neighbors.

#3
Arizona State University
Instituto Technológico de Sonora
Country: Mexico
TIES Program
SUCCESS STORY

Arizona State University (ASU) faculty and Instituto Technológico de Sonora (ITSON) students, in collaboration with ITSON faculty, recently met at ITSON to discuss a collaborative multi-year research and outreach project focused on the Alamos region. The Alamos region is one of the most beautiful natural regions in Mexico and the town of Alamos is an important city, recently placed on UNESCO's list of Heritage sites.

The bi-national team decided to work together in a student-faculty studio to help produce data both to assist the economic development of Alamos by establishing sustainable tourism, and to work with Mexico's regional agencies to promote conservation of one of Mexico's largest natural reserves. The team is putting together regionally focused databases, the ITSON-ASU faculty is working with Mexico's conservation planning agency, and ITSON students from ASU are doing their master's research projects in this area. While ITSON students at ASU are conducting thesis research linked to Mexico government interests in conservation, ASU graduate students are conducting additional research in that region, with support from funding sources outside TIES. The outstanding partnership synergies are also leading to a major funding proposal this year.

ASU, as part of the TIES initiative, recently funded agency personnel from Mexico, ITSON faculty, and U.S. and Mexican students to attend an ASU workshop to discuss these matters. Mexican government personnel also juried an ASU studio class on this topic. This was a first.

#4
Bowling Green State University
Institute de Presse et des Sciences de l'Information (IPSI) at the Université de la Menouba
Country: Tunisia
U.S. – Middle East University Partnerships Program
SUCCESS STORY
Tunisian Students Plan for Master's Degrees at BGSU

Two students involved in workshops funded by the IPSI/BGSU partnership will be in Bowling Green in August to begin graduate work in communication studies.

A year ago, Mohamed Aziz Ben Ameur and Mehdi Ben Hamza had little idea where Ohio was, and would never have considered packing their bags to study there. Then Mehdi spent three weeks at Bowling Green State University

(BGSU) as a participant in an intensive workshop titled Women, Democracy & Media, and Aziz spent 10 days on campus in a print press workshop.

More importantly, perhaps, both were involved in workshops at the Institute de Presse et des Sciences de l'Information (IPSI) in which they got to know BGSU professors and began to imagine a future that involved study in the United States. Having visited BGSU through two separate workshops funded by MEPI grants, the journalism graduates of IPSI are excited about the possibilities open to them to get an education in Ohio, an education that will help them help Tunisia.

Now, Mehdi has been admitted and funded to study at BGSU, and Aziz is in the process of applying. The admissions and assistantship funding came about in large part through the personal relationships the students developed with BGSU faculty, administrators, and students. Mehdi has been funded with a special assistantship from the BGSU Graduate College and Aziz has an assistantship working with the BGNews, sponsored by the university's vice president of Student Affairs.

The two men are very different. Mehdi will undoubtedly go on to get a doctorate and go home to Tunisia to work as a professor, probably at IPSI. Aziz plans a career as a media manager and as an agent of change for his country. Both men, however, will find help and support for their work at BGSU—thanks in large part to the connections built through workshops funded by the IPSI/BGSU partnership.

#5
Colorado State University
Helwan University
Countries: Egypt and the United States
U.S. – Middle East University Partnerships Program
SUCCESS STORY
Building Bridges Through Cultural Exchange

Learning to partner with people from different cultures is critical in today's global economy. In Egypt, construction management courses are theoretical in nature and lack a business management focus. At Colorado State University (CSU) in the United States, construction management courses lack an international perspective. These factors have a limiting effect on a student's outlook on future opportunities and possibilities, which in turn, limits the possibilities for the country in which he or she lives.

Recognizing that student opportunities are limited because of this narrow view of the world, and that the global market continues to expand, prompted the collaborative program between Helwan University in Egypt and CSU in the United States. As part of this project, students from both countries are given the opportunity to work together in groups to conduct research and learn about project management from the perspective of their partnering country.

Several groups of four—two students from each country—were formed to collaborate on research to investigate the similarities and differences of project management concepts from the view of each country. Topics of investigation included construction materials and methods, financial management, project controls, and contracting methods.

In addition to the knowledge gained through research, students also gained experience in working with people from another culture. As stated by a student from the United States: "This project was enlightening and progressive. I highly recommend its use in the application of future studies, especially as part of an integrated curriculum. The variation in international cultures is fascinating and explores an entire separate, but equal, facet to the construction industry worldwide." A student from Egypt echoed this sentiment: "The project was very cooperative and important for exchanging information and expressing different cultures with different ideas. Also, it was a kind of new and effective way of application on the subject because different students with different cultures want to integrate their efforts to combine cultures. This integration will give the students some flexibility in the way of thinking and cooperating. They will discover things that, I think, have never crossed their minds before."

These quotes, along with many others, show the power of cultural exchange through collaboration. This experience will have an impact on the student participants and the higher education institutions involved for many years to

come and in turn could be a positive influence on their respective countries and cultures. This experience and others have the potential to change a country, one student at a time.

#6
Cornell University
Universidad Autónoma de Yucatán
Country: Mexico
TIES Program
SUCCESS STORY
TIES Students Visit 'Living Labs' of Southeastern Mexico

Grinning broadly, Don Leonardo leads the student explorers through the *monte* of his farm. His manner and tone tell that the numerous healthy sheep trotting before us are his pride. He talks of plans to expand their numbers. Minutes later and a couple of kilometers down the road, Don Teobaldo and Don Sebastian show us much-less-thrifty animals penned behind the house. They tell how lack of feed, low access to technical assistance, and disease has made them despair of ever seeing a financial return from sheep production. As the group assembles for lunch, the questions on everyone's mind are, "Why are these farmers having such different experiences?" and "What could or should be done for Don Teobaldo and Don Sebastian?"

Moments like these were commonplace during two weeks in January 2006, when students from Universidad Autónoma de Yucatán and Cornell University, aided by scientists from INIFAP and the Colegio de Posgraduados-Campus Cárdenas, engaged in a "living laboratory" study of agriculture and rural development in the Gulf region of Mexico. Hailing from six countries, these 31 explorers interacted with farmers, extensionists, researchers, and policy makers in rural and urban Yucatán, Tabasco, and Veracruz to develop their own perspectives on the needs of farmers and rural communities.

Truly amazing was the development of thought processes and group camaraderie during this brief lab experience. Initially, there was little interaction between the Mexican and Cornell students in the newly formed group. By the end of two weeks, however, the students had developed friendships that continue even now. These bonds among fellow explorers resulted from a group structure that intermingled students from all institutions, from class and group meetings that facilitated interpersonal contact and idea-sharing, and from a growing sense of joint responsibility to learn based on the truly pressing needs of the individual farmers visited. Overcoming language barriers, students figured out day by day how to exchange ideas effectively, integrate their efforts, and work together to better understand the complexity of agricultural systems. They shared individual interpretations and analyses of need and development approaches, negotiated views about priority information and actions, and facilitated learning processes for one another. Ultimately, the participants became both active learners and teachers, to the mutual benefit of all involved.

#7
Duke University
Effat College
Country: Saudi Arabia
U.S. – Middle East University Partnerships Program
SUCCESS STORY
Creating Synergy Through a Successful Global Partnership: Partnership in Women's Engineering Education

Women and Engineering: these two terms together strike a chord with many people, as it is well known that woman are a minority in the engineering field in the United States and even more so in Saudi Arabia. However, the female dean of Effat College, a private all-female college in Saudi Arabia, proposed to partner with the first female dean of Duke University's Pratt School of Engineering to develop and offer the first program in computer engineering for Saudi women. Currently, no engineering programs are open to women in the Kingdom of Saudi Arabia. The partners are working to change this by establishing a new and innovative curriculum in computer engineering for female students at a Bachelor of Science (B.S.) level that will include instruction in information processing, information technology, and networks. These two institutions are trailblazers, working to enhance the role of women in the Kingdom's development.

Beyond the successful completion of program activities, the partners have given much thought to what creates a successful international partnership and what the term *partnership* really means. The partners have put together a presentation on the characteristics of the new model of partnership versus some of the characteristics of an "old" or traditional model. These include:

Traditional Model	**New Model**
Export U.S. program	Programs develop organically
Business commodities	Personal relationships
One-way flow of information	Two-way flow of information
Thou shalt . . .	What do you think?
Skepticism	Trust
Contract for commodities	Memorandum of understanding
My people will talk to your people	Joint responsibility
Competition	Dialogue

This new model of global partnership includes characteristics that should be in place at the beginning of the relationship: respect for the challenge, awareness of risks, flexibility, shared vision, creativity, not being afraid to bring up problems and concerns, understanding partner constraints, culture and context, and understanding partners' physical environment.

The partners also believe that there are two criteria for change management: People must desire change, and people must be ready for change. These two criteria may seem obvious, but neglecting to observe them before a partnership gets started will lead to serious difficulties and perhaps disappointment and failure to achieve objectives. From the beginning, Effat College has been willing to make changes and take risks to make the institution a vital force for excellence in education.

#8
Florida International University
Universidad Nacional Atónoma de Mexico
Country: Mexico
TIES Program
SUCCESS STORY
Survey Team Visits Durango and Michoacan: Community Forestry Is Focus of CATIE Conference

Members of the USAID-TIES partnership project, Community Forest Enterprises and Forest Ecosystem Conservation in Mexico, successfully launched their survey effort in Durango and Michoacan as part of a major research project to provide information on a little-understood aspect of forestry management. About a quarter of the world's forests are controlled or owned by communities rather than individuals, yet the decision making by this community represents new ground for study in economic development strategies. While forests play a major role in several sectors of the economy, there is a serious lack of investment (and political support) by governments for the owners of these resources. This lack is even larger when the ownership is collective among a set of individuals rather than concentrated in one private firm.

For this reason, the project partners led a team to further explore this phenomenon, selecting the Michoacan and Durango states for a random community survey. One member of the partnership, Dr. Camille Antinori, had previously surveyed the state of Oaxaca, and she applied her experience to the current project. The team selected communities according to their level of participation in the forestry sector: those with commercially viable forests but no production, those that negotiate stumpage contracts, those that extract and sell primary material, and those that have further processing capability to transform primary material into secondary products, like saw wood.

The team successfully organized in Michoacan last year, where they were well-received and met with the Mexican partner in Morelia, Dr. Alejandro Velasquez, to launch the survey. The team then moved to Durango, where it discovered that many forms of organization are possible in the nexus between the "community" and private sectors. Durango has a strong history of parastatal company presence, which has no doubt shaped current production activity. While land is owned by the community members, some communities have informally subdivided the

production activity among work groups. The implications of all of these organizational possibilities will be further studied in the coming year.

As an indicator of the emerging importance of this topic, Dr. Antinori was invited to speak at a conference focusing on small and medium-sized enterprises (SMEs) for forestry management. The conference was held at the Centro Agronómico Tropical de Investigación y Ensenanza in Turrialba, Costa Rica, and attracted about 200 participants from around the world, including Africa, India, Latin America, and Papua New Guinea. She spoke on a common theme concerning SMEs in forestry: the political-legal frameworks of forest SMEs and the linkages to poverty alleviation. Based on evidence provided by international organizations like the Food and Agricultural Organization in Rome, SMEs in rural areas conduct the most forestry operations worldwide. However, the macro- and microeconomic linkages with other market sectors are often not recognized, leaving much room for economic development through government and nongovernmental programs that could increase awareness and lower market information barriers.

In sum, the project partnership is well poised to address a serious policy issue through their efforts in data collection and dissemination of results. Conflict over natural resource management has increasingly become more public over the past 20 years. Issues of ownership and control will continue to be contested as groups and individuals struggle for access to resources. And, as the conflicts are linked to a larger constellation of policies and practices, this current research will help clarify paths to poverty alleviation through better management of natural resources.

#9

Iowa State University
University of Agricultural Sciences-Bangalore
Country: India
U.S.-India Higher Education Partnerships in Agriculture Program
SUCCESS STORY

The Next Generation: Developing India's Institutional Capacity to Confront Agriculture's 21st Century Challenges

Finger millet (*Elusina coracana*) is an important cereal and staple food crop in the village selected for this study. This crop is primarily grown for food security for human consumption, and fodder security for milch animals and cattle.

Finger millet is considered a poor man's crop but is highly nutritious with a high amount of calcium. Using finger millet flour, farmwomen prepare what is called *Mudde* (ragi ball) to eat with vegetable curry as a compulsory daily menu in rural areas. Preparing Mudde is a bit cumbersome and hence not common among many urban women. However, because of its nutritional importance, there is a vast opportunity for converting finger millet to many value-added products that can be sold in the market place. Regular use of finger millet can greatly reduce micronutrient deficiency.

Iowa State University initiated several training programs for rural women related to transfer of technology on value addition for locally available agricultural and horticultural products. In the villages, the self-help groups (SHGs) took keen interest in the preparation of finger millet malt. Since finger millet is the dominant millet in the study villages and is spread over 27 percent of the cultivated area, the availability of raw material is not a constraint. Before this project began, value addition for finger millet was virtually absent in the project area. Motivation through training, demonstration, and effective market linkages enabled farmwomen to get involved in the processing of finger millet into malt.

Empowerment of rural women through training has been instrumental in promoting finger millet processing into value-added products. In order to prepare one kilogram (kg) of finger millet malt flour, it costs around Rs.75.63, and has a market value of Rs.100 per kg. SHGs realized a net profit of Rs.24.37 per kg of malt preparation. In both villages, 14 farm families have benefited from this value addition activity. These village families are marketing the ragi malt to hospitals and Food Chain stores in Bangalore, which are certified by the University of Agricultural Sciences for using the resources of this project.

LESSON LEARNED

Small-scale agro processing, involving SHGs, has significant scope to enhance income options of rural women. However, effective market linkages with quality assurance are crucial for success.

#10
Iowa State University
University de Colima
Country: Mexico
TIES Program
LESSON LEARNED

What began as visits by University de Colima (UC) administrators to key community program sites in Iowa and meetings with Iowa State University (ISU) faculty and administrators in order to see both traditional and Latino community outreach/extension programs, has become much more. The effort has resulted in new models for programs and courses, in which ISU and UC continue to assist each other in a number of ways. For instance, UC students have fulfilled their social service requirement by working with Latino youth in Iowa communities; the basics of the TIES project have been used to expand and sustain programs in an indigenous Mexican village; and economic opportunities have been developed, such as those involving embryo transfer and possible development of an egg production unit in Colima, with U.S. investment.

#11
Madonna University
Notre Dame University
Country: Lebanon
U.S. – Middle East University Partnerships Program
SUCCESS STORIES

1. Both universities have offered full scholarships to two students for a year, which is exciting for students and an indication of the goodwill of each university
2. Several faculty members have discussed the partnership on television programs, which have been aired on the Catholic Television Network, and which will be aired on TV Orient, a national Arabic network.
3. Madonna University inaugurated an Arabic class for our faculty. The class is now in its second year and we have average of 15 teachers per semester.
4. Area studies of the Middle East have become a priority for Madonna University's curriculum.

LESSON LEARNED

Perhaps the most difficult practice for our Lebanese colleagues was to look at American studies in an interdisciplinary way. When we began to talk about American studies, we had to attempt to dissuade them from the idea that American studies meant American history or American literature. To begin to understand Americans—in all their forms—it is necessary to delve into the humanities, including art, music, theatre, science, and social issues. With so many possible areas to study, there had to be some limitations, BUT the minor or major HAD to be interdisciplinary. This meant having the deans of the various schools collaborate—not an easy task. It can take only one person to make the task difficult.

#12
Mel and Enid Zuckerman College of Public Health, University of Arizona
El Colegio de Sonora
Country: Mexico
TIES Program
SUCCESS STORY
Completion of a Binational Certificate Program Creates Collaboration to Decrease Health Disparities on Both Sides of the Arizona-Sonora Border

There is no question that the real success story of this partnership has been the planning and implementation of our ***diplomado en salud publica.***

As the project began, we imagined that many public health professionals might enroll in several of the courses, while a smaller number would enroll in all of the courses in order to receive the *diplomado.* Much to our surprise, the initial group of 35 students formed a cohort that participated in all of the courses. Not only did we have the opportunity to increase their knowledge and skills in public health, we also learned about unique skills and knowledge of each of the participants. As a result, we built a stronger curriculum and program that includes opportunities for students to share their skills and knowledge with the group.

We also did not imagine that the *diplomado* would provide the context in which a binational group could become more involved in some of the serious health disparity issues that are present in the U.S.-Mexico border regions. Together, we examined in depth the issues that surround disparities in indigenous health, farm worker health, and migrant health. We developed binational action teams focusing on environmental health, farm worker health, migrant health, prevention interventions, and universal access to health care.

Today as we prepare to develop the final course, Successful Interventions in Public Health, our action teams are beginning to develop specific interventions for each of the action areas and will be searching for human and financial resources to move forward. Plans are underway to continue the work of the participants as an umbrella of *"alumno/as del diplomado,"* under the auspices of a Sonoran non-governmental organization, to receive funds and provide an *espacio* for all participants to become involved in policy and advocacy that affects public health issues in our region.

#13
Michigan Technological University
Universidad de Sonora
Country: Mexico
TIES Program
SUCCESS STORY

One of Michigan Technological University's projects concerns water and sanitation problems in a poverty-stricken, rural town in Sonora State, Mexico. Our involvement in this project began in our field engineering class in which we took on the design of a wastewater treatment system for the town of Rosario de Tesopaco. The design was eventually submitted to the Mexican government for its approval. However, when the approval ran into roadblocks in the federal bureaucracy, one of our TIES students, Agustin Robles Morua, took it upon himself to champion the project and almost single-handedly won the approval. If the project had not been approved, it is likely that the project's funding would have evaporated.

Agustin's interest in community attitudes and participation aspects of the project inspired his MS thesis. Both the unique nature of the technology that is being adapted for use in Tesopaco (constructed wetlands) and Agustin's research into in community attitudes and participation has generated interest from government agencies around Mexico. In fact, we have had several requests to design similar systems for other rural towns in Mexico.

Construction of the wastewater treatment system began two years ago and there have been several roadblocks along the way. We have offered assistance in the technical and managerial aspects of the construction during this process, and it appears that, finally, the project will be completed this summer.

LESSON LEARNED

We have slowly begun to learn how water resources management decisions are made in Sonora, which, in many respects, is quite different from practices in the United States. This knowledge is especially valuable for us as we apply traditional methods for analyzing water resources problems. That is, we are shaping the way we study the problems and are choosing particular results on which to focus, so that our work will be meaningful to government and water users in the state. In summary, we have learned that we cannot force people to think the way we do; instead, we are appreciating the differences.

We also are slowly learning about the most critical social and technical problems in the rural towns. Again, we have our way of thinking when it comes to targeting or prioritizing environmental problems in the United States. But the way of thinking in these small, poor towns is quite different. For example, we would like to engage the community in making decisions about how to solve environmental problems. However, it does not seem that rural inhabitants have traditionally participated in this type of decision making; rather, solutions are imposed in a top-down approach from the federal or state governments.

#14
Montana State University
Al Akhawayn University
Country: Morocco
U.S. – Middle East University Partnerships Program
LESSON LEARNED

A good lesson learned is the need to tailor traditional program structure/contents for a new context. In our case, offering a traditional doctoral program in the Moroccan context would essentially be training highly capable Moroccan computer scientists to be employed outside Morocco, and would have relatively little impact on the country itself. The current state of industry and research platform in Morocco is not prepared to demand pure research capabilities at the level of a doctorate.

However, the industry is developing in certain key areas, and is anticipating a demand for people with advanced applied research capability. The challenge has been to emphasize aspects of advanced study that will support innovation and application in a few key niche areas, while not losing the rigor and depth of doctoral work.

#15
Murray State University
University of Bahrain
Country: Bahrain
U.S. – Middle East University Partnerships Program
SUCCESS STORY
True Capacity Building, English Language Teacher Training Cohort Initiative

By strengthening the ability of an Arab university to train English-language teachers, Murray State University (MSU) and the University of Bahrain (UB) are working together to bridge the gap between two cultures and ensure continued communication between two countries.

To accomplish their objective of establishing UB as a high-quality institution in the teaching of English and the training of English teachers, the partners provided four master's level scholarships to Bahraini students to study the teaching of English to speakers of other languages (TESOL) at MSU. UB guaranteed faculty positions to the students upon completion of their degree program.

To date, two students have graduated with master's degrees and are now UB faculty, and the other two scholarship recipients were expected to graduate in the spring of 2006. The knowledge and understanding of the latest methodologies and teaching techniques in TESOL that the students have brought to UB have already had a tangible effect on UB's ability to serve Bahraini students. UB's provost lauded the partnership as one of the most effective international collaborations in which the institution has been involved.

To their surprise, the partners found that their activities achieved an unexpected result, the strengthening of MSU's internationalization efforts. Many MSU students had never met someone from Bahrain, let alone the greater Middle East, until the UB students arrived on campus. The UB students became goodwill ambassadors for their country and organized panels and open forums for the campus and local community about the Middle East and their country.

Student interest in the Middle East grew, and MSU began offering instruction in Arabic. Approximately 10 to 12 students enroll in the language class each semester. The Bahraini students proved pivotal in the development of the course, and served as the first Arabic instructors on campus.

With the signing of a Memorandum of Understanding between the two institutions, the important transformations achieved by the partnership are now formal institutional policy. The new knowledge gained and passed on to students in both Bahrain and the United States, the tremendous goodwill generated on both sides, and the new ability to communicate across cultures illustrate the valuable contribution higher education partnerships make in strengthening institutions.

#16
New Mexico State University
Universidad Autónoma de Chihuahua
Country: Mexico
TIES Program
SUCCESS STORY
From an Indigenous Isolated Community to a Master's Program

Manuel Lopez has two bachelor's degrees, one in education and the other in animal sciences. He also speaks English—which he taught himself—as a third language (Spanish and the indigenous language Raramuri are his first and second languages). Without previous exposure to the English language or culture, this middle school teacher was selected as a candidate to work on a master's in education at New Mexico State University (NMSU) because of his great capacities. Even living and teaching in an isolated community eight hours from the closest small city, Lopez was able to meet all of the NMSU requirements to work toward a master's degree under the USAID-TIES program.

Lopez's journey was not an easy one. He was not able to cross the border to take the TOEFL because he lacked a passport, visa, and other documents needed to become an international traveler. Twice he came to the U.S. border with an NMSU letter of support to negotiate with a U.S. Immigration official for a three-hour visa to take the TOEFL exam in El Paso, Texas (the closest border city from his hometown). Both times he was denied. Therefore, NMSU arranged for an English-language evaluator to test Lopez in the Mexican border city of Ciudad Juarez.

Once he met all of the NMSU requirements, the Mexican Teacher's Union denied Lopez permission to move to the United States to begin his master's degree program, because the union required at least five years of experience before it would grant such permission. He explained that he was not expecting to receive money, salary, or other support from the union, just the permission to be absent from his job for the time needed to complete his master's degree. Still the answer was "no." So, once again he was required to shuttle back and forth with demands for additional documentation. Finally, the day before moving to the United States, he received the required permission from the Mexican Teacher's Union.

Lopez's obstacles continue, as he learns how to live in a totally different society with different cultural norms. He also continues to work on his use of the English language and to understand U.S. culture. Despite these challenges, he has done well in his first semester at NMSU. He learned how to make connections with his professors and other students and has worked hard to do well in all of his classes. He has recently decided on a research topic for his thesis project: Lopez is going to be researching the best ways to teach indigenous languages. This is critical to the Sierra, in that many of the indigenous languages are being lost because instruction is in Spanish with no effort made to teach native languages. He is excited about the opportunity to pursue his education and to give back to his own community.

Despite his achievements, Lopez's future plans make it clear that he will never forget the approximately 70,000 Raramuri of his community, his roots. Indeed, his research project focuses on helping them maintain their culture, their language, and their way of life under vastly improved socioeconomic conditions.

#17
Northern Kentucky University
United Arab Emirates University
Country: United Arab Emirates
U.S. – Middle East University Partnerships Program
LESSON LEARNED
Take time to involve all participants so that all agree to the project's big ideas.

In March 2006, Northern Kentucky University gave a five-day workshop at United Arab Emirates University (UAEU) for three Omani partners, our Saudi partner, and 30 Emirati partners. During the first day of the workshop, we met with UAEU dignitaries and visited several schools. We then modified our plan for the four days that followed because our partners were not yet ready to tie service learning to the teaching of English as a foreign language, and our participant audience shifted from day to day. We modified the plan each day to meet the needs of our audience. By the end of the workshop, we had achieved acceptance of the idea of service learning as a useful concept. We agreed to several research projects and divided our focus among the following areas: Oman elementary, UAE middle grades, and Saudi Arabia secondary. We also made plans to publish a newsletter, maintain a web site, and purchase books for partner libraries.

#18
The Ohio State University/Michigan State University
Makerere University/Sokoine University of Agriculture/Egerton University
Countries: Uganda, Tanzania, Kenya
SUCCESS STORY
Training in Africa and the USA: Some Personal Experiences

Note: This story originally appeared in RUFORUM News, Vol. 1, Issue 2, which can be accessed at www.ruforum.org.

My basic education, from primary to master's degree, was all done in Tanzania. Both my undergraduate and master's training were done at Sokoine Unviersity of Agriculture, Morogoro, Tanzania. In August 2005, I left for Michigan State University to pursue a sandwich PhD training program. Before coming to the United States, I believed that a master's degree cannot be truly exceptional unless it fulfills three crucial criteria. First, it must pursue innovation and improvement. Additionally, it must address international issues that should prepare students for the challenges of working in a global economy. Lastly, it should combine theoretical training with practical skills, thereby allowing students to keep abreast of current friends and to master most aspects of a particular field of study.

To take full advantage of the above, I had to make some adjustments. These adjustments were necessary for me to meet the challenges that I face during my stay in the United States. The challenges include coping with American English and accent and ability to exploit web advantages in accessing different academic resources.

The first thing I learned in the United States is that most students have a strong practical grounding right from their elementary schools and one needs to put much effort into reading and constantly trying to associate theoretical knowledge with real world situations. Second, future students should make sure they can effectively use the web to their best advantage in this era when Internet technology is the way of life. This can be done by familiarizing themselves with the use of computers and the Internet, especially in searching for academic resources. Third, there is a perception, especially among young people, that U.S. life is an "easy to go" kind of life. This is wrong—I came across numerous illegal immigrants who regret coming to the USA and desire to go back to their home countries. **Whatever Americans have achieved so far can be achieved in Africa, and we, as young people, are the ones to make that happen.**

In the United States, syllabi are regularly updated and have a good balance between theory and practical skills. So, there is the need to incorporate a strong theoretical base and practical studies in our syllabi. This should be done

from our primary schools in such a way that students are made to think more on practicing what they have learned in class and relating what they learn to the real world, but NOT by merely passing exams. The most effective way to address this challenge is to focus on experiential learning and designing approaches to motivate and actively engage both the teachers and the students in an action-learning mode. Further, more points (marks) should be allocated to practical sessions such as student participation in class, and group and individual practical assignments. Additionally, there is a need to invest in modern technologies such as fast Internet so that students have a wide range of resources at any time to keep them up to date with current trends and important issues. This will also help simplify communication between instructors and students. The number of students per instructor also needs to be reduced. This will make it possible for instructors to effectively incorporate theories and practice by being in a better position to manage their classes.

#19
The Ohio State University
Punjab Agricultural University
Country: India
U.S.-India Higher Education Partnerships in Agriculture Program
LESSON LEARNED
Punjab Agricultural University and Food Processing: Private Sector Linkages

There are no shortcuts to success. The goal of this project is to shift the focus of Punjab Agricultural University (PAU) from primarily production agriculture to market-oriented food processing enterprise with increased participation of the farming community. When developing a major new area of emphasis for an institution—an ambitious objective—one must realize that time and persistence are important ingredients for success. One needs to work with both the targeted institution and its clientele. For this project, this implied facilitating bridges between the two groups by identifying mutually satisfying activities that required input from both groups. PAU has a proud history of strong interaction with farmers. Its reputation with them is excellent. This relationship needs to be recreated with the food processing industry. Because of the limited interaction of agricultural scientists with agro-processing industries, big industrial houses may take time to participate in this project. On the other hand, public sector organizations, along with small- and medium-scale industries, appear to be more responsive and are thus being involved at the initial phase of this partnership development.

This activity requires continuous nurturing. The key is to identify the largest number of common activities possible to solve the larger issues identified, and engage both groups in carrying them out.

#20
The Pennsylvania State University
Universidad de Guanajuato
Country: Mexico
TIES Program
SUCCESS STORY

This project has launched several successful cases:

1. In the rural community of El Huaricho, citizens have applied biodigestor technology, using goat manure to produce methane for cooking and thus decreasing the use of firewood, reducing the incidence of emphysema, producing organic fertilizer, and improving the environment by avoiding the diseases that come from discomposing manure;
2. The people from Colonia de Altamira are very proud to have formed the first 4H Club in Mexico. They are very enthusiastic, helping their children learn useful skills that make them better citizens;
3. About 56 people from communities in the Irapuato, Salamanca, Silao, and Abasolo municipalities are anxious to start small businesses, such as making cheese, yoghurt, sausages, ham, and bread.
4. A fourth success story can be found in the more than 45 students who participated in this project and have experienced a positive change in attitude, ability to compromise, and responsibility, and have acquired a new vision and knowledge of how the world works.

We also successfully awakened producers to accepting changes in the way of operating and learning new and useful knowledge and skills to achieve a better standard of living.

The next steps are:

- To continue the training process and the appropriate technology transfer;
- To start training people on how to initiate and maintain a small business in their communities;
- To involve more students in these extension projects, selecting students with the best potential to develop professional work on these activities;
- To find the best way of multiplying these actions, maximizing the positive effects on rural areas of Guanajuato, especially by involving more people, not only from the universities, but also from the broader society.

#21
Southern Illinois University Carbondale/University of Illinois at Urbana-Champaign
Balkh University Agriculture Faculty Development
Country: Afghanistan
Special Initiative
SUCCESS STORY
Two Illinois Universities Assist an Afghan University in Modernizing Its Agricultural Curriculum: U.S. Professors Share Expertise and Experience with Balkh University Faculty of Agriculture

Twenty-five years of war have left their toll on Afghan universities. The Russian occupation, followed by internal conflict, and then Taliban rule dominated life in general and academic life in particular. Buildings were gutted, libraries were destroyed, and faculty were dispersed. Because of these setbacks, students perceived little future in academic training.

Balkh University's Faculty of Agriculture (BUFA) located in Mazar-e-Sharif in northern Afghanistan had only seven students when the Taliban left at the end of 2001. By 2004, student numbers had increased to more than 200, and the 15-member faculty, with only four MS degrees among them, were struggling to teach students now eager to learn. Books were few and outdated, and the professors had received little updated information in the last two decades. As of spring 2006, student numbers are almost 700, the faculty still numbers 15, and the already limited space remains the same.

Recognizing a need to help improve the situation, in 2005, the USAID mission in Kabul provided Higher Education for Development (HED) with funds for a one-year competitive project to assist BUFA in curriculum and faculty development. Southern Illinois University Carbondale in partnership with the University of Illinois at Urbana-Champaign won that competition. Both institutions had worked in USAID-funded institutional development in Pakistan from the mid-1980s to mid-1990s at the Northwest Frontier Province Agriculture University in Peshawar, and they asked this university to help with the Balkh project.

Beginning in May 2005, eight professors made targeted technical assistance visits to BUFA. Several books and CDs, six computers, three projectors, and a remodeled computer room have been provided to date. In addition, practical training for students and faculty during the growing season has been provided by an NGO, Joint Development Associates International. A second NGO, Nutrition and Education International, has provided funds for BUFA staff to visit our Pakistan university partner to learn how to deal with student and academic matters related to the semester credit hour–based system.

Although the project has only been operative for a year and the $120,000 in funding is minimal, considerable progress has been made. *"It has been rewarding to observe what even a small amount of regular external technical and commodity assistance can do to improve the capability and morale of the faculty,"* notes Oval Myers, project director.

#22
Southern Methodist University
Instituto Tecnológico y de Estudios Superiores de Monterrey
Country: Mexico
TIES Program
My Experience in Southern Methodist University: Changing My Academic and Personal Life
By Sara Oropeza

I had heard from a friend about the opportunity to study at Southern Methodist University (SMU). She told me that if I wanted to study for a master's degree, I should apply. Time passed, and suddenly I had finished my undergraduate work and was ready to enroll in a master's program. When I applied to SMU, I thought, "Well, let's take a chance and leave everything to luck." Some months after, I received the big news. I still remember the letter that said, "Congratulations, you were selected to participate in the program." After some problems, I was finally at the university, just wondering how to reach my room.

From the moment I arrived at SMU, many changes started to hit me. Even the small things were an adventure. Classes started, and soon I was talking to people from different latitudes. I noted some interesting aspects about the teaching system, and the change allowed me to learn more because I mixed the habits that I learned in my country with those that I learned from the education system of the United States.

The most extreme experience for me was participating in a research group. In the first session, I saw presentations related to the work of the PhD students in the group. All of their work was very impressive, but I was not able to understand their research. I talked to my adviser and he proposed that I give some presentations as part of a class I was taking. Those were my first presentations about a new topic, in a new language. Eventually I made progress on my presentations, and by the end of the first semester, I felt more confident and capable to understand a difficult topic and explain it to the public. Another important aspect of my studies that helped me a lot was developing my thesis. Because of the courses I took and the interaction with the research group, I was able to delineate my research topic and understand the heart of my research in a deeper way.

Some of the benefits that I received were not obvious to me. The academic benefits were well known the moment I started to interact with my professors and classmates. When I came back to my country, I was able to share my experience with other students in order to encourage them to participate in the program. In addition, I participated in an informal talk in which I exposed the advantages of interacting with people from different cultures. This talk served to encourage first-year students to start planning what they want to do in the future to improve their lives and their country.

This experience was very enriching for me, and I'm very sure that it has not yet shown all the benefits that it had on me. Most of them are visible now; however, some will not appear until the future.

This program was an experience in which I was able to enrich myself both academically and personally. In addition, this program directly affected the people around me, by seeding the idea that it is always possible to find opportunities to improve our lives, but we have to seek out those opportunities.

#23
Southern Methodist University
Université de Tunis El Manar
Country: Tunisia
U.S. – Middle East University Partnerships Program
SUCCESS STORY

One of the key elements of success in all the activities so far is the remarkable willingness of each side to learn from and about the other side. The Tunisian PhD students and postdoctoral students who spent extended periods at SMU were very eager to learn about SMU, the American educational system, and American culture. They have participated in all kinds of activities: research, educational, social, and cultural.

One success stories is the experience of students Faiza Najjar and Rooudha Kcherif, who spent one semester at SMU. They conducted research with SMU faculty, attended English classes, attended advanced graduate classes, participated in the Computer Science and Engineering weekly colloquium, and participated in cultural and social events organized by SMU. They returned to their country full of excitement and enthusiasm about their future and their career.

During their visits to Tunisia, SMU faculty experienced the great hospitality of and an immediate connection with their Tunisian hosts. The Tunisian audiences in the lectures given by SMU visitors were eager to learn and ask questions. Although English is not the spoken language in Tunisia, there was no language barrier. Everybody made an effort to communicate in English. After returning to the United States, SMU faculty received e-mails from students who are excited about the joint program, the potential for collaboration, and the possibility of doing even more.

LESSON LEARNED

One of the lessons learned from this partnership endeavor is the importance of ongoing evaluation and assessment of the effort, and making changes if necessary. For example, we realized that the activities hosted by Southern Methodist University (SMU) faculty members in Tunisia were popular and well attended by audiences at all levels. We also noticed, after a couple of attempts, that it was not easy for Tunisian senior faculty members to get time off from their work to participate in the training at SMU. A decision was made by the directors and approved by HED to cancel some of the visits by Tunisian senior faculty members to SMU and replace them with training in Tunisia. We also learned that the time we allocated for Tunisian postdoctoral students at SMU (one semester) should have been extended to maximize the benefits of these visits.

#24
Texas A&M University–Kingsville
Instituto Tecnologico y de Estudios Superiores de Monterrey
Country: Mexico
TIES PROGRAM
SUCCESS STORY

- Texas A&M University–Kingsville and Instituto Tecnologico y de Estudios Superiores de Monterrey presented an irrigation project to the irrigation district 26 to increase the efficiency of water and to reduce the water demand. The study includes the feasibility of the project with description of the results and costs involved.
- The use of polypipe as an instrument to eliminate water losses in conducting earth channels is another success story. Also, solidarity between U.S. and Mexican farmers was evident.
- Before the water forum in the irrigation district 4 in Anahuac, NL, there was a negative perception toward CAN (National Water Commission). After the forum, the producers begin to interact in a more positive way.

LESSON LEARNED

- We learned to identify a real problem that falls in the competencies and interest of both countries. The problem of water use efficiency in agriculture is an old problem that affects both sides of the border and therefore, because of the common use of the water, potential difficulties have been raised.
- With this project, we think that mutual understanding and education can solve those difficulties. The participation of universities, organizations, and producers is of paramount importance and should be increased in the future.

#25
University of Arizona
El Colegio de Sonora
Country: Mexico
TIES Program
LESSONS LEARNED

It is clear to the individual course organizers, *diplomado* organizers, and teaching faculty that all of the courses that stemmed from this partnership were greatly enhanced by moving from a local public health focus to a regional and binational focus. This broader focus allowed us to look at issues that affect farm worker, indigenous, and migrant populations.

- Indigenous populations—The states of Arizona and Sonora share indigenous populations, including the Tohono O'Oodham nations and the Pascua Yaqui Tribe. Our diplomado course provided the opportunity for public health professionals from both states to look at common issues. Additionally, we looked at migrating indigenous populations, moving from southern Mexico to northern Mexico and to Arizona.
- Farm worker populations—The states of Arizona and Sonora share common occupational and environmental health issues that affect farm workers in both states. We also share a very fluid farm worker population, which moves back and forth across the border, depending on the crops. Again, the diplomado allowed us to address these issues in new and creative ways.
- Migrant populations—With Arizona and Sonora serving as staging grounds for the undocumented migrant stream as it moves across the desert, our binational collaboration course allowed the public health community to look at migration from the perspective of a shared public health responsibility.

#26
University of Arizona
Universidad Autónoma de Chapingo
TIES Program
Country: Mexico
SUCCESS STORY

The Mexican National Commission for Science and Technology (CONACYT) recently notified Universidad Autónoma de Chapingo (UACh) that the newly established MS graduate program Agricultural Engineering and Integrated Water Use has been designated as a National Program of Excellence (PNP).

The MS program is part of a graduate program initiated in 2002 by UACh. The overall graduate program offers both MS and PhD degrees in three different orientations: biosystems engineering, integrated water use, and agricultural mechanization. These programs further the main goal of the UACh-UA TIES Partnership, which is to "enhance the capability of UACh to provide training and continuing education in emerging and unique areas relevant to agriculture in Mexico." Mauricio Carrillo, UACh-UA partnership co-director and founding director of the graduate programs, said: "This is very good news! This means that students enrolled in the MS program can now receive scholarship support for their studies and, in addition, they can receive additional support for their research." Donald Slack, the other UACh-UA partnership co-director, worked with UACh faculty to assist them in developing the graduate programs. The graduate program has 20 PhD faculty members from two UACh departments (Agricultural Machinery Engineering and Irrigation) participating in the program. Currently, about 25 students are enrolled in the MS program and four students are enrolled in the PhD program.

Raquel Salazar Moreno, one of the faculty members involved in the program and a visiting scholar at the University of Arizona under the TIES partnership, notes, "The TIES program has been instrumental to the successful development of this graduate program by supporting faculty members to improve their research, providing short courses for faculty and students, and providing scholarships for Mexican students who will be faculty members in this program in the future!"

PROMISING PRACTICE

The most promising practice or outcome of this project will likely be the research resulting from the collaboration with Tequilaria Herradura. This research investigated bacteria, which breaks down the cellulose in the *bagasse* (residual agave waste left from the tequila manufacture) into a bio-plastic. The MS research demonstrated that a bio-plastic product is, indeed, one of the products resulting from the bio-reaction. While additional work is needed to actually bring this process to a commercially viable level, it is an exciting result. Tequilaria Herradura and Universidad de Guadalajara are continuing to pursue this process and the University of Arizona (UA) will continue to be involved in various ways.

#27
University of Arizona
Universidad Autónoma de Tamaulipas
Country: Mexico
TIES Program
SUCCESS STORY
Sustainable Coastal Aquaculture: Reducing Environmental Effects from Shrimp Farming While Improving Profitability

The universities of Arizona, Tamaulipas, and Tabasco have made sustainable aquaculture a central aspect of their Aquaculture TIES project. Through the use of short-courses, scholarships, interns, and technical workshops and conferences, we have been educating students, faculty, farmers, and regulators to the concept that improved farming practices will protect the environment, improve product quality, and increase profitability.

Former Mexican President Vicente Fox was briefed on the sustainable coastal aquaculture concept and he instructed the Fisheries Ministry to consider these techniques. Several commercial producers also have taken the concept to heart and are beginning to adopt aspects of it. In addition, technical conferences are using sustainability as a theme and we have focused research and development activities in this direction. Field research experiments are also underway; findings will be presented at a technical conference in September 2006.

One important aspect of the program is working with environmental groups to develop an environmental certification for seafood farmed in a sustainable manner. To this end, University of Arizona has been meeting with World Wildlife Fund representatives and others to develop such an effort. The next meeting of the group will be held in conjunction with the Aquaculture Symposium we are sponsoring and hosting in Veracruz, Mexico in September 2006. Our eventual goal is to have an environmental certification program and product label that will allow producers to gain a premium for their products while also improving food safety for the consumer. The initial focus will be on shrimp and tilapia and the other seafood products (seaweeds, oysters, mussels, sea cucumbers, and halophytes) that are produced from polycultures with these major aquaculture crops.

Another important TIES product will be a book on tilapia farming, which will make its debut at the Veracruz symposium. The book will be a joint publication with the TIES project and several co-sponsors. We expect that English and Spanish versions will be published and that it will become an important learning and production tool well after the TIES program has ended.

The proceedings of the symposium in Veracruz will be an additional major publication from the project.

Finally, we expect that the students, interns, and faculty who have participated most directly in the Aquaculture TIES project will have the most lasting influence on the aquaculture industry. We expect hundreds of jobs will be created from some aspect of this work and we hope it will not be long before we see the effects of improved environmental conditions, coupled with higher seafood quality and profitability for seafood farmers in freshwater and marine ecosystems across Mexico.

#28
University of California, Berkeley
Instituto Nacional de Salud Pública
Country: Mexico
TIES Program
PROMISING PRACTICES

- A formalized application and selection process demonstrated the importance that the institution was placing on our newly established HIV/AIDS/TB track. Establishing criteria for selection and the awarding of scholarships resulted in a fair and transparent process. Students selected for the program understood the expectations for their performance because it was announced as an excellence scholarship and considered it an honor to be chosen.
- In order to follow up on students' performance, we have developed a quarterly report mechanism in which students report all the activities related to the project in which they were involved in the past three months, as well as thesis project progress.
- Opening the seminars and courses developed for the HIV/AIDS/TB track to other master's students brought added strength to the school as a whole, increasing awareness of the economics of the epidemic.
- Collaboration between two U.S.-based schools or two Mexican schools can be challenging. This is multiplied several-fold when it becomes a cross-border agreement. Exceptions to established policies and procedures may need to be sought to facilitate the funding and reporting requirements. It has been important to engage the U.S.-based administrative staff in understanding the project, its impact for Mexico and the United States, and their importance in meeting objectives. Ongoing communication will be key to ensuring the flow of funds to Mexico for the students and the program.
- Regular on-going communication between the key administrative personnel at the collaborating partners is key to moving the objectives of the program forward. We have found that a monthly teleconference with more frequent e-mail communication has been our best method. Face-to-face meetings twice a year focused on planning for the subsequent 12 months allow us to anticipate any issues or program adjustments with adequate time to keep things on track.

#29
University of California, Davis
Tamil Nadu Agricultural University
Country: India
U.S.-India Higher Education Partnerships in Agriculture Program
PROMISING PRACTICES

At a conference in Chennai in January 2006, the faculty of Tamil Nadu Agricultural University (TNAU) announced a complete set of new courses. The TNAU faculty, who attended a University of California, Davis program that instilled principles and practices leading to a more complete curriculum for TNAU's Center of Food Safety and Quality, will offer these courses.

For the UCD/TNAU project, these courses represent both promising practice and lessons learned. The faculty members are in the process of incorporating the lessons they learned into their everyday courses and courseware. At the same time, the practices that they can now apply are state-of-the-art practices for the food industry that will lead to safer practices, as well as a healthier industry and healthier consumers.

The following courses were announced at the conference:

- Conduct training on post- harvest technology
- Conduct training on sanitation control procedures
- Conduct training on basic HACCP
- Conduct training on food safety
- Conduct training on food quality

#30
University of California, San Diego
Centro de Investigacion y Docencia Economicas
Country: Mexico
TIES Program
SUCCESS STORY

It was a week in which a lot of light bulbs went on. For a month, two students from University of California, San Diego (UCSD) and two students from Centro de Investigacion y Docencia Economicas (CIDE) had been in Oaxaca, identifying which rural communities were served by wireless and wireline connectivity, and mapping the location of non-bank financial institutions in the communities. A group of five researchers joined the students for a week to talk about what they had found, and fix the next steps for the project.

The students were all in a social science oriented MA program. Two of the researchers were social scientists as well. The other three were scientists. The first light bulbs went on in the heads of the social scientists. Suddenly, abstract ideas of connectivity became a reality. The technology people could point to yellow poles along the road and identify fiber optic cables buried below the ground. They could see working microwave connection towers carrying voice and data through the air. And, they could inspect telephone lines well enough to see how recently the phone company had upgraded equipment, and therefore, what the capabilities of the equipment were likely to be. Connectivity was no longer an abstract concept. All these real devices, for the first time, gave social scientists a concrete impression of what was possible, and where it would be possible.

But what was possible in a technological sense raised other questions that the technology experts could not answer. If we build what is technological possible, will it be used? What do people do in the area? How can technology be incorporated into their work and lives? What are their needs? Most importantly, what would drive them to adopt new, unfamiliar technologies that are difficult to understand? Here, the social scientists' work could offer potential answers to the questions. Students provided insight from their fieldwork of the past month. Social science researchers showed maps of migration patterns that would influence the technology's use. The lights lit up in the minds of the technology researchers.

The collaboration in the field, working on a concrete, applied problem, allowed this group composed of people from very different backgrounds and different nations to communicate with one another, to teach each other, and work together to design solutions.

LESSON LEARNED
Adopting new technologies involves a cost. The barriers can be overcome in two ways. First, the technology can be made more user friendly. That is, the barrier itself can be lowered. Second, the benefits of the technology can be increased or made more tangible. That is, the incentive to overcome the barrier can be increased. The first of these is the natural response of people trained in technology; the second the natural response of those trained in the social sciences. The point is that they complement each other

#31
University of Chicago
Universidad de Iberoamericana, Ciudad de México
Country: Mexico
TIES Program
SUCCESS STORY
Public Policy to Enhance Democracy

The Harris School of Public Policy Studies at the University of Chicago and the Universidad Iberoamericana in Mexico City are collaborating to promote better public policy practice in Mexico's young democracy and enhance international understanding.

Democracy needs highly trained policy analysts at all levels of government. And contributing to this training has been the objective of the partnership between the University of Chicago and the Universidad Iberoamericana. We are convinced that only through rigorous training in policy analysis and through adequate in-field study of policy

practice can we hope to positively influence Mexico's policy development in a democratic setting, as well as our two countries' understanding of shared policy issues.

The institutions have thus devised a joint program that comprises two objectives: providing scholarships for the graduate Master in Public Policy (MPP) program at University of Chicago's Harris School to Mexican students who are linked or have strong commitment to the Universidad Iberoamericana; and creating a graduate policy program in Mexico run by Universidad Iberoamericana, with student and faculty exchanges with the University of Chicago, as well as several internship projects for Mexican and American graduate students in Mexico and the United States.

Karla Mendoza and Liliana Ruiz Ortega are two Mexican first-year students currently enrolled in the MPP program who have benefited from this partnership and who are expected, once they have concluded their studies at Chicago, to share their acquired knowledge and skills in the Iberoamericana graduate program. Mendoza says: "The knowledge I am getting at the University of Chicago will allow me to understand the dynamic of a system with three powers. It also will allow me to understand more about the complexity of the bureaucracy in the government agencies. My intention is to take advantage of this understanding in order to propose more educated public interventions or to consider, under more well-informed grounds, public policies in my country."

Ortega adds: "All the tools and theories that I am learning will allow me to continue working in the Mexican Congress and help improve the legislative work there. With the knowledge I am acquiring, I will be able to stand my opinions in a more technical and realistic manner. Also, the master's program has given me the opportunity to analyze topics in which I am interested, like poverty and inequality. Mexico needs highly skilled professionals with the willingness to propose and promote new policies to alleviate the conditions of the people that live in poor conditions. I believe the Master in Public Policy is giving me those grounds."

Our added partners in this joint effort include several Mexican institutions, such as the Ministry of Social Development (SEDESOL), the federal Institute for Information Access (IFAI), the National Ecology Institute (INE), and the Ministry of Foreign Affairs (SRE). These institutions have provided internship projects for Mexican and American students and the benefits have been mutual. In a recent meeting between USAID staff and officials from several of these institutions, it became clear how this effort has paid off for both students and agencies. As a result, we hope to continue with this partnership beyond the three years initially set by the TIES initiative. We believe we have set the groundwork to do so.

#32
University of Georgia
Universidad Vaeracruzana
Country: Mexico
TIES Program
SUCCESS STORY
Reflections on Community Service in a Foreign Land: Learning About Myself
By Carmen L. Antonio Cruz, M.Ed., Middle School Education, Department of Education, University of Georgia

It's so easy to lose your identity in a new environment. But for me, teaching Mexican culture to elementary and middle school children through songs, poems, and stories helped me gain insights about immigrant culture and the importance of knowing about my roots. I also taught an ESOL class every Thursday night during the spring semester 2006. What an experience!

While the Universidad Veracruzana in Xalapa has community service programs in which university students—mainly in medicine, education, agriculture, and social work—spend time helping rural communities in Veracruz, doing community service in Georgia is a new and unique experience for the university and its students.

Teaching English to adults, mainly Mexican immigrants, at St. Joseph's Catholic School made me aware of the difficulties newcomers face acquiring language skills in a new country. I also learned that there is more to teaching language than just vocabulary, and that is why I turned to using music as a pedagogical tool and cultural communicator. On the last day of class, I divided the adults into groups of four and they competed to put the English phrases to a popular Beatles song, "Hello, Goodbye," in proper order as they listened to the music.

My other service-learning experience, teaching Mexican culture to Latino immigrant children at the Pinewood Estates Learning Center, also helped me gain insights about immigrants' situation and broaden my understanding of the community of Athens, Georgia. These interactions are strikingly different from the ones I am familiar with and I consider them extremely valuable for my personal and professional growth.

Both settings gave me the unique opportunity to get involved with the community in a tangible way, combining classroom learning with community service. They enabled me to connect topics, theories, and approaches in teaching-learning and teacher education with real-life situations. Undoubtedly, this experience has increased my understanding and learning, by allowing me to actively use my skills and knowledge in real-life situations; extending learning beyond the classroom and into the community; and fostering a sense of caring for others. I am really grateful for the opportunity.

#33
University of Illinois at Urbana-Champaign
Universidad de Queretaro
Country: Mexico
TIES Program
LESSONS LEARNED
Training Young Mexican MS Students

Growing up, one absorbs the ideas and values of one's community, including one's self-image and one's potential. If we are to help individuals reach their full potential, it is sometimes necessary to change that image. This is true not only for the Mexican university students with whom we interacted, but also for their seniors who they encountered before and during their U.S. training, faculty from the United States, and faculty from Mexico. One successful method to recast old images is to utilize the exuberance and lack of fear of young people. The program that we ran, which brought young Mexican MS students to study at a university in the United States for a portion of their studies, not only helped them realize their dreams, but also helped reformulate the images of all the faculty with whom they interacted both in the United States and Mexico.

By comparing themselves with the young people they met in the labs in the United States, these students were able to see that they can compete in a world market. And, of course, they made friendships with colleagues that will last a lifetime. They found the U.S. university labs filled with people of diverse backgrounds—many of their colleagues were American, some were Russian, some South American—who could speak the common language of science and pass on the excitement of their studies, regardless of their birthplace. The experience also gave these students courage to step into new ground in the future and can become great leaders in Mexico. Further, it gave them respect for the Mexican faculty who had trained them to this point by providing the tools that allowed them to see the scientific world through new eyes. This respect then helped re-mold the images that those faculty had of themselves in a global education and research system, an image that was further changed by their visits to the United States as part of the AID program to present their research at international meetings.

Finally, the experience of this influx of more than 30 bright and enthusiastic young Mexican scientists in our college, has done much to change attitudes, not only of those faculty directly involved in training the Mexican students, but also throughout the college. The college has established an exciting program named Global Connect to extend international programs across the world. These small steps can have a great impact on international relations in general.

#34
University of Notre Dame
Universidad de Guadalajara
Country: Mexico
TIES Program
SUCCESS STORY
Looking for Diversification and Production Increase: Ameca, Jalisco
By R. Haydeé Argáez Huante, Guadalajara, Jalisco, Mexico

In the past, Mexican agricultural producers have grown sugar cane and corn as the principal products. They have cultivated these staples as part of their traditional crops or simply as a result of cultural or family conditions. But now, some producers are looking to diversify their crops and enter into successful new markets.

Our student internship experience, made possible by the TIES partnership between Universidad de Guadalajara in Mexico and the University of Notre Dame, made clear that the road to diversification and growth sought by the small Mexican farmers is not an easy one. But the TIES program also enabled us to help a group of these agricultural producers improve their operations.

Mr. Gilberto and Mr. Casimiro are growers in Ameca; they are members of an 18-member cooperative of producers who sell vegetables in the Mexican national market. In the first stage of our project, the growers were principally concerned with production problems, which would have required strong capital investments.

As the project progressed, one of the main goals was to increase the producers' standards of living by helping them successfully produce and commercialize their crops. Specifically, our bi-national student team wanted to expand the farmers' market and entrepreneurial knowledge. We sought to assemble and provide the necessary information that would give them the confidence and hope to fulfill their objectives.

Early on, we conducted market research that involved price analysis, alternative agricultural products, requirements to apply for credit, and the viability to invest in greenhouses as a new production technique. We then developed a plan of work with the producers that concentrated on their needs. The work plan focused mainly on the viability of new production techniques (in this case, greenhouses), undertaking all the necessary steps so that the producers could qualify for credit (because the greenhouses would require a substantial capital investment), and recommending new national markets. Our group also provided the agricultural producers with new and potential customers and contacts.

One year after the project's conclusion, we have made several visits to the producers to evaluate the impact of our work and the project. The producers are more involved in their projects at the individual rather than the cooperative level. Mr. Gilberto is already evaluating the possibility of investing in a greenhouse, sacrificing one part of the production to open field. For his part, Mr. Casimiro continues with his normal production and is looking to apply for credit that would allow him to invest in one greenhouse hectare, in order to sell his products in new markets.

The diversification has allowed both growers to have greater gains in some seasons and investment in greenhouses will help them further in the national level; working as a cooperative will allow them to successfully enter the international market. It is important to mention the great participation of Mr. Gilberto and Mr. Casimiro in the project. Without their involvement, many goals would not have been achieved.

#35
University of Texas at Austin
Benemérita Universidad Autónoma de Puebla
Country: Mexico
TIES Program
PROMISING PRACTICE

One good experience related to student exchanges is the Summer Institute. This exchange includes a six-week visit to the American university. During the exchange, the students take two intensive graduate courses together with American, Canadian, and Mexican colleagues.

This approach proves to be more adequate than regular courses because of the expense and the time. Groups specially formed for this opportunity make easier adaptation for exchange students. Besides, the topics covered in the courses are of special interest for our main subject in this consortium, i.e., the nonprofit sector. This way, students have a deep immersion in the field with the help of the best teachers and researchers on campus.

A good practice derived from this relationship with the University of Texas is having tri-national groups of students in a relatively short period engage in a specific course with a primary focus on the project with the collaboration of a large number of scholars and practitioners.

#36
University of Texas at San Antonio
Universida Autónoma de Guadalajara
Country: Mexico
TIES Program
LESSON LEARNED

Think big. Instead of transferring a successful model between two universities, one should think in models that may be transferred from country to country.

#37
University of Wisconsin–Madison
Instituto Tecnológico y de Estudios Superiores de Monterrey-Querétaro
Country: Mexico
TIES Program
LESSON LEARNED

Investing in faculty professional development can have far-reaching, long-term payoffs. The Instituto Tecnológico y de Estudios Superiores de Monterrey-Querétaro (ITESM-CQ) faculty who participated in professional development programs at the University of Wisconsin–Madison (UW–Madison) have designed new laboratory instruments (based on instruments used at UW–Madison), and initiated new courses and modified existing courses and curriculum based on training they received. These additions will benefit not only ITESM-CQ students, but also local dairy producers and low-income farmers in Queretaro State. Some ITESM-CQ faculty members have established continuing relationships with UW–Madison faculty. These relationships have resulted in new proposals for funding of collaborative research efforts, and professional visits by UW–Madison faculty to Mexico.

Professional development programs have a far-reaching impact on students, dairy producers, and dairy processors. As Professor Ortiz González stated in his evaluation following his professional development program: "Education and training is the best way to become competitive. My training will enable me to explain to farmers how feeding affects quality and composition of dairy foods and is going to be very useful in the future development of research in my country."

#38
University of Wisconsin–Madison
Universidad de Guadalajara-Centro Universitarias de la Costa Sur
Country: Mexico
TIES Program
SUCCESS STORY

We all want clean water and air, healthy farms, vibrant cities, and beautiful natural areas to uplift the spirit. But how do we achieve those things? Progress requires coordinated action over large areas, but for this to happen, a broad long-term vision is needed. The belief that universities play a central role in fostering such region-wide collaborations is what motivated a group of professors at Centro Universitarias de la Costa Sur (CUCSur) and their colleagues at the University of Wisconsin–Madison (UW) to obtain a USAID-TIES grant to further a watershed-based approach to the environmental problems of the Ayuquila River basin.

Like all other rivers, the Ayuquila is crucial to the region through which it flows. Its waters are used for irrigation and drinking water, and the fish and crustaceans that live in it are important resources to the many people who live along its banks. But the Ayuquila has been heavily used and is in need of repair because of past exploitation and piecemeal management decisions. Professors and students at CUCSur have thus worked to bring the municipalities of the watershed together to devise a region-wide plan. An early success was the formation of an intergovernmental organization to accept funding for carrying out joint watershed environmental projects. Since then, aided by TIES funding, CUCSur, with UW assistance, put together a proposal for a new graduate degree that would train the next generation of students to work on regionally coordinated environmental projects.

Students trained in the TIES-sponsored exchange program using the Ayuquila project as a case study will be able to move into their post-graduation careers with a solid grounding in a multidisciplinary approach to dealing with regional environmental problems. Such comprehensive efforts will be necessary to maintain the healthy environment on which all other human endeavors depend.

LESSONS LEARNED
Our experience underscores the importance of planning for change in a university by carefully considering the broader social, economic, and environmental possibilities and problems. In addition, it highlights the importance of governments, and especially local governments, in understanding how to utilize the expertise of the university and its graduates to further programs that have a prospect of improving citizens' lives. For those of us involved, the ability to compare and contrast approaches in different systems is invaluable in providing insights into the basic elements that must be addressed regardless of varying system attributes. Considering multiple approaches also highlights the importance of considering the many specific and very local attitudes and challenges that require the fine tuning necessary to make a generic theory into a successful application.

The USAID funding has made possible meetings and workshops that have stimulated a higher level of commitment to coordinated activities than has traditionally existed. The success that we have achieved is because we have emphasized solutions to environmental problems that members of any political party or interest group can agree need solutions. For example, everyone along the political spectrum can agree that clean water is necessary, and so therein lies the basis for discussion and joint action.

The long-term benefits of the approach we have fostered will be realized as the next generation of professionals move into positions of authority and responsibility. Thus, our work toward a new degree program, incorporating experience drawn from our watershed project, is critical in institutionalizing this manner of collaborative, regional problem solving.

#39
University of Wisconsin–River Falls
Instituto Tecnológico Agropecuario
Country: Mexico
TIES Program
LESSON LEARNED
Organizational Training for Agricultural Producers in Tierra Caliente
By Ma. Cristina Albarran Farias

We began a training program for mango producers in Tierra Caliente in September 2005. We worked with two groups, the first in the municipality of Ajuchitlan and the second in the municipality of Pungarabato.

The first group was in the process of registering a co-op known as Los Nueve Amigos, a group that is now looking to enroll in a productive and financed project.

The second group of producers, many of who were tough old men, presented some challenges. We started the training in January 2006 and failed to initiate a price information center for the 2006 growing season. That failure led us to believe that we had lost the men's confidence. But once the crop season ended, the men came to us and asked, "What is the next steep now? We want to work hard this year to get better results for the next crop."

I think that shows that we were able to instill a successful attitude in them. They have realized that training is important and that they can achieve more by working together than they can by working individually.

#40
Virginia Polytechnic Institute and State University
Arab Academy for Science and Technology
Country: Egypt
U.S. – Middle East University Partnerships Program
PROMISING PRACTICES

- Visits, especially long term, had a great impact on strengthening the partnership and collaboration.
- Use of videoconferencing in communications improved the quality of communications and personal interaction.