Nobody likes to be lectured to. And everyone has ideas and experiences to contribute. So, if we put our heads together and share what we know, we can find new ways to tackle old problems.

That is the approach taken by a resilient band of international-development students and educators from Cornell—who partnered with farmer groups, a major international development organization, grassroots development practitioners in East Africa and northern India, and with fellow college students from host countries. Here, in their own words, is what they did.
“This activity built upon a partnership between the Cornell International Institute for Food, Agriculture, and Development (CIIFAD) and Catholic Relief Services (CRS) that began in 2007. CRS invited us to prepare and field test learning resources in several skill set areas—including group management, experimenting with innovations, basic marketing and business, and sustainable natural resource management—to strengthen educational programs for farmer groups and the extension practitioners who work with them,” says Beth Medvecky, PhD ’05, a CALS research associate with decades of experience in rural Africa.

“Each training session was tested and tweaked multiple times until it contained a blend of activities—stories, role plays, and skits—that engaged and energized the learners.”

—Beth Medvecky

“This work now falls under CIIFAD’s SMART [Student Multidisciplinary Applied Research Teams] program, which links Cornell students with experiential learning opportunities that develop their ability to work on complex problems related to food and nutrition, markets, agriculture, health, and livelihoods in developing countries,” Medvecky explains.

“We rarely start this sort of work with a blank slate,” says Terry Tucker, PhD ’98, director of academic programs in International Programs/CALS and a specialist in adult learning and international development. “Local organizations have a wealth of experience, and plenty of educational resource materials already exist. However, committed students bring to the table a number of valuable assets, including their academic training, creative ideas, enthusiasm for teamwork, and often significant development experience of their own. It really energized and inspired the field agents to have this group of bright and eager students join them in thinking about how to strengthen their community development programs.”

In 2008, Tucker and Medvecky led a seminar that enrolled 23 students from 10 countries and diverse disciplines at Cornell. The students evaluated existing reference and extension materials in the skill set areas and tried to create practical modules that emphasized the critical concepts and knowledge. “But even after trying to boil down the materials into more digestible bites, they were still too complex and weighty, as the five students who traveled to Kenya in 2008 soon found out,” Medvecky recalls. “During the process of field testing with farmer groups, students quickly realized that they needed to continue to strip away additional layers of complexity and nuance. Each training session was tested and tweaked multiple times until it contained a blend of activities—stories, role plays, and skits—that engaged and energized the learners.”

For example, one story involved a fictional farmer:

“Benard awoke early on the day he was to go to the new market. He arrived earlier than the other sellers. He piled his tomatoes on the stand. He sat back and waited for the customers to line up. Hours passed and nobody had bought a single tomato . . .”

The open question “What do you think Benard could have done to attract customers to his stall?” launched a learning session on product promotion strategies. “The farmers attending the session came up with virtually every idea that a facilitator would have mentioned if he or she had prepared a lecture on the topic,” Medvecky says. “But brainstorming as a group was a lot more fun and memorable. In fact, when I went back to visit a couple of months later, farmers were able to recount the do’s and don’ts of marketing that they learned from Benard’s trials and tribulations.”

New Training Frameworks

Back in Ithaca for the next CIIFAD seminar, Medvecky and Tucker integrated some of the lessons learned during the 2008 field experience. The 2009 group of students studied the “dialogue education” methods developed by Jane Vella, a pioneer in adult learning. Students said that Vella’s framework helped them to structure engaging sessions of suitable length and complexity. This came in handy as they focused on refining the skill-set modules and developing computer-based materials for field agents working on CRS’s Great Lakes Cassava Initiative in East Africa.

A grant from Intel provided 250 laptops. The computers would be handed over to the field agents, beginning in summer 2009, already loaded with courses to help field agents train farmers to recognize virus diseases that affect the root crop, cassava, among other topics. Five Cornell students and three graduate students from Kenyatta University introduced the computers, courses, and adult education principles and practices to field agents in Kenya, Uganda, Tanzania, and Rwanda.

“Although the field agents were already highly experienced, they were immediately attracted to the approach that we introduced them to,” says Carrie Howard ’10, a Nutritional Sciences major from Groton, N.Y. “Step 1 was to ask learners open questions to discover what they already knew

Beth Medvecky checks a cassava plant to see if it is infected with Cassava Brown Streak disease as a Kenyan farmer describes the symptoms that she learned to check for during a just-concluded training session.
about a topic. Step 2 was to build on that knowledge and fill in gaps. Step 3 was a practical activity that allowed participants to practice using new knowledge or skills immediately. Step 4 involved having the group reflect on ways that they would incorporate the new knowledge or skill into their daily lives."

"The field agents told us how much they appreciated the new training frameworks and pedagogical approach, without using words like pedagogical, of course," says Thomas Archibald ’02, a Cornell doctoral candidate in adult and extension education from Lexington, Mass., who collaborated with students from Kenyatta University in East Africa. "And the farmers were clearly energized by this new style of learning."

While the teams of students who summered in East Africa dealt with plant and computer viruses, those who participated in the CIIFAD/CRS India program in Gorakhpur and Chitrakoot districts of Northern India’s Uttar Pradesh state encountered blazing heat and the near absence of life-sustaining monsoon rains during the summer of 2009.

“These are resilient, hard-working students,” says Tucker. “They found ways to remain productive despite the oppressive heat—going to the field very early in the morning and then again in the evening to meet with farm families and to work with local community development practitioners. When it’s 115 degrees by 11:00 in the morning, it’s hard to keep your brain focused on the task at hand.”

“The scale of the work to be done is sobering. But these students are not given to hand wringing and despair. Far from it. The opportunity to work with thoughtful, inspired practitioners buoyed their optimism. Our comparative advantage is in the realm of ideas—sharing some of our own, of course, but, importantly, also to elicit and build upon the ideas of local people. Our work is also about strengthening capacity. We leverage these modest efforts in important ways by helping ‘frontliners’—development professionals and community volunteers alike—be more effective,” he says.

“Scaling out even the most successful agricultural development programs is a challenge,” Tucker says. “Of course, it takes organization and resources—things that large organizations are often called upon to provide. But that’s not enough. It takes local champions who bring a sense of purposeful optimism to their work every day. And it takes fresh ideas and a passion for innovation. There is no standard formula for alleviating poverty and food insecurity; contexts are too diverse and complex. We learn our way forward."

“Very few village women knew how to read or write,” says Anuradha Tulachan, a Hindi-speaking native of Kathmandu, Nepal, and a Cornell master’s student in International Development Studies. “So we quickly modified the existing modules on health and nutrition—topics like breastfeeding, complementary feeding, and anemia—to adapt adult-learning principles that were more appropriate to these specific learners’ needs and perspectives. The volunteer peer educators could foster dialogue with plenty of pictures and minimal text. Our team also enlisted a local artist to help us create flipcharts about agriculture and natural resource management, such as compost making, seed production and storage, and pest and disease management. Working closely with practitioners we tried to localize learning resources and approaches to meet specific needs of the community,” says Tulachan.

Between travels—briefly—in the frosty winter of 2010, Tucker reflects on the project’s accomplishments and future. He knows the few hundred farmers they reached through this program are but a tiny fraction of the hundreds of millions worldwide who face food insecurity and the health problems that so often accompany it. “The scale of the work to be done is sobering. But these students are not given to hand wringing and despair. Far from it. The opportunity to work with thoughtful, inspired practitioners buoyed their optimism. Our comparative advantage is in the realm of ideas—sharing some of our own, of course, but, importantly, also to elicit and build upon the ideas of local people. Our work is also about strengthening capacity. We leverage these modest efforts in important ways by helping ‘frontliners’—development professionals and community volunteers alike—be more effective,” he says.

For a look at another SMART program, see "Going for Global Gains" on page 19.