

Meeting the Diverse Needs of Limited-Resource Producers

This guide is intended to inspire agricultural educators to improve their outreach to limited-resource groups. The bulletin showcases nine successful examples across the nation, then points to more detailed resources on the subject (see page 16).

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For close to two decades, educators at a California community-based organization have taught production and marketing skills to hundreds of immigrant farm laborers from Central America. Many have since become profitable independent farmers. (See story on p. 11) – Photo by Jerry DeWitt

IN THE MOUNTAINS OF SOUTHWESTERN VIRGINIA, WHERE jobs are scarce and the living is hard, agricultural educators and community advocates trying to encourage farmers to grow something other than tobacco or grain have a tough sell. Despite that mindset, a dynamic partnership known as Appalachian Sustainable Development (ASD) improves conditions for farmers living on the economic edge. They provide training in sustainable vegetable growing and, possibly more important, ferret out new markets – health food stores and restaurants in what's known as the tri-city area of Appalachian Virginia – willing to buy from them at a premium.

Today, southwest Virginia farmers sell a variety of produce, from cucumbers to watermelon, and have improved their net returns by a few to several thousand dollars per year, according to ASD. The effort, which the group hopes will expand, provides

a successful model for extension educators, nonprofit organizations and other groups trying to improve agricultural economies using environmentally friendly practices as a hook.

“We had a basic idea at the beginning – to create local economies that are better for people and better for the environment,” said ASD director Anthony Flacavento. “In agriculture, that translates to creating markets that reward sustainable practices and make farming economically viable.”

This bulletin was written for agricultural educators who want to improve their outreach to farmers and ranchers who do not usually participate in traditional government educational programs. It showcases innovative educational approaches for use by Extension, government agencies and community-based organizations trying to better connect with and improve the lives of diverse farmers and ranchers.

The Appalachian Sustainable Development story “describes a mountain county in southwest Virginia, but it could be in any county in the U.S.,” said John O’Sullivan, a state extension specialist with North Carolina A&T State University. “In many counties, there are two economies – one very successful and well-connected, the other poor and inhabited by limited-resource families. Small farmers frequently live in this ‘other’ economy.”

Sustainable agriculture, with its emphasis on profits, not farm size, offers a range of possibilities for producers with varied resources. Many sustainable methods, such as rotational grazing systems for livestock, inexpensive “high tunnel”-like greenhouses for vegetables and local marketing strategies for farm products, are more realistic for producers of limited means than embarking upon larger, more capital-intensive production systems.

Initially, the market for the new crops grown by the Appalachian farmers was small, limiting the number who could participate. In 1999, ASD offered to supply local tomatoes to a small, family-owned chain of supermarkets that was planning to introduce a limited line of organic produce. It was a gamble.

“There’s a high expectation that you’ll deliver,” Flaccavento said. “We had a huge risk because we had to fill the shelf space with a solid supply.”

When the group started their sustainable vegetable production project in 1997, partially funded by USDA’s Sustainable Agriculture Research and Education (SARE) program, tobacco farmers were looking for profitable alternatives, and ASD was providing them one, if they were willing to take the financial risk.

ASD’s series of about 75 hands-on workshops in sustainable vegetable growing, which were held mostly on farms and taught both by trained educators and farmer col-

laborators, yielded a pool of interested farmers.

When two of the more traditional farmers from their workshops agreed to grow tomatoes for the local grocery chain, Flaccavento knew the venture would work. As de facto leaders in the community, the two influenced others to grow tomatoes, and what had been an ambitious scheme became reality.

“We had enough success with solid on-farm workshops reaching farmers that we were able to get our first tobacco farmers to come on,” Flaccavento said. “The early adopters were young and willing to take risks.”

By 2002, 25 farmers affiliated with ASD were growing vegetables on up to 16 acres on their small, diversified farms. Their earnings provide a real success story for those working with growers of limited means who fall beneath the radar screen of many public programs. (See page 14 for a complete story about this project.)

WHAT IS A “LIMITED-RESOURCE” PRODUCER?

Educators face unique challenges working with producers who lack economic resources, formal education and/ or access to government resources. Those landowners, sometimes referred to as “limited resource producers,” can be found across the nation, from new immigrants to generations of the rural poor. Extension and education programs addressing such producers usually need different, innovative approaches.

“There is a reality of ‘limited resource’ out there that defines an audience without educational base, without capital and without a voice in their community that could really profit from extension educational programs to improve their well-being,” said O’Sullivan, who jointly drafted a guide of successful educational strategies with a team of university specialists.

O’Sullivan and others at the 1890s historically black university develop programs to benefit North Carolina’s under-served producers. Like many other extension educators, the NC A&T group is grappling with the best way to meet their mandate to help them.

WHAT DO FARMERS WANT?

THE GOALS OF MANY SMALL FARMERS REMAIN MODEST, according to a 2001 report, “Developing Programs from the Grass-roots,” which rated the needs of limited-resource farmers through focus groups. Most of the 119 participants, sponsored by the Rural Coalition, a nonprofit organization based in Washington, D.C., expressed a desire to earn a good living from the land. However, many feel that past and current discrimination toward them may hamper them from achieving that goal.

Limited resource farmers, as described by the U. S. Department of Agriculture’s Natural Resources Conservation Service, have one or more of the following characteristics:

- Gross farm sales average \$40,000 or less in each of the last three years, and there is no non-farm income.
- Total household net income, farm and non-farm, is 75 percent or less of the non-metropolitan median

income level for the state or county.

- Lack of access to capital, labor, or equipment.
- Farm or ranch size is significantly smaller than average size.
- Social, cultural, customs or language barriers, minimal awareness of USDA programs, limited management skills, the level of formal education is below the county average

or undereducated, and are less likely to take business risks and adopt new technology.

NRCS note:

The fifth category ... (is) being bypassed by the institutions that were set up to serve them. This is because agencies and institutions have not changed along with the technological and societal changes that have occurred during the past half-century.

SOCIO-ECONOMIC BARRIERS THAT MAY HINDER ACCESS TO INFORMATION

- ☞ Lack of land (in parts of the West, most ancestral lands are under U.S. government ownership)
- ☞ High levels of poverty. “Many can’t finance an enterprise,” said Marion Simon from Kentucky State University. “If I can show them how to save \$1,500 or increase production by 50 percent through a soil test, then we’ve got a believer.”
- ☞ Time constraints. Many farmers work off-farm jobs or are pressed to finish existing farm chores. Others have family obligations and may have limited child care options.
- ☞ Unemployment/underemployment
- ☞ Inadequate housing or lack of farm equipment, i.e. storage and cooling facilities
- ☞ Low levels of education
- ☞ Language and cultural barriers. “Our staff is bilingual, but our student farmers are not only communicating with us, but with folks outside, such as organic certifiers. They don’t read English, or in some cases, Spanish, and the record-keeping is a challenge for some of them,” said Brett Melone, ALBA executive director.

“Educators must be prepared for the mistrust and lack of credibility toward USDA that many producers feel, based on their past and sometimes current experiences,” said Lorette Picciano, Rural Coalition executive director. “This is a key reason why minority farmers have lost land and have small holdings. In the study, we found that over 30 percent of the farmers who had applied for USDA loans were denied.”

To reach their goals, the focus group participants expressed a need for equal access to government programs and credit for both short-term operating funds and long-term improvements. A big step forward for producers on Maryland and Delaware’s Eastern Shore was achieving a better understanding of credit and loan programs.

“When assistance programs are offered, progressive farmers respond first,” said Dean Purnell of Delaware State University, who runs a small farm program funded by USDA’s 2501 program for “socially-disadvantaged” producers. “Last comes the limited-resource farmers, partly because of social and psychological issues. Tradition carries a lot of weight, so many of these farmers are hesitant to change.”

Moreover, the focus group farmers said they need access to accurate information from service providers genuinely interested in their livelihoods.

“It is clear that they will need assistance to stay on the land and reach these goals,” the “Grassroots” report states. “They have shown that programs must be more responsive to local needs, easily accessible and use locally relevant communication channels.”

REACHING OUT

KENTUCKY STATE UNIVERSITY (KSU) SMALL FARM ASSISTANTS work in rural communities where small farmers seem most receptive to receiving information from people they know and trust. KSU “paraprofessionals” take

advantage of their local connections to spread information about sustainable farming throughout Kentucky, with real results. Typically, they spend five years with each farmer, with whom they work in mentor-student relationships.

Marion Simon, a small farm specialist with KSU extension, runs a popular, SARE-supported monthly training program at KSU’s research farm. In her six years of running the “Third Thursday” field days, a diverse set of participants has toured the university research and demonstration farm. In large part, the workshops educate small farm assistants, a group that reaches far into the hills of Kentucky.

“They’re outstanding,” said Simon of the team of paraprofessionals with whom she works. “The average farmer increases his income by \$10,000 or \$12,000 while enrolled in the program.”

Small farm assistant Scott Harne knows many of the farmers in Casey County, Ky., where just 6.5 percent of the population has graduated from college and the average income is \$11,774. Recently, he helped a tobacco grower diversify into tomatoes and peppers, which she now sells to neighbors and at another farmer’s roadside stand.

Harne feels he connects well with county residents. “People are pretty comfortable with me,” he said. “I’m not afraid to get my hands dirty.” (See page 10 for a complete story about this project.)

In the Great Plains, Lakota market gardeners unaccustomed to working the land now are finding new ways to improve their diets with freshly grown produce. Thanks to a team of Lakota leaders coordinated by Ann Krush of South Dakota’s Center for Permaculture as Native Science, the tribe is beginning to grow its own food, imperative in this reservation 50 miles from the nearest grocery store. The work is encouraged by Lakota pro-

RECRUITMENT TECHNIQUES

Door-to-door recruitment.

Delaware State University small farm program specialists literally knock on doors. “Be careful the first time you meet a farmer how you treat him or her,” said Dean Purnell of DSU. “Build a relationship where they trust you enough to know that if you recommend they take a look at something, they value your opinion enough to do so.”

Group recruitment.

Use a group that already serves the clientele (i.e. neighborhood organizations, churches, social groups/clubs).

Key contacts. Seek key individuals who know many people in the area. Mike Jones, who coordinates a North Carolina project establishing small-scale hog operations, is called “the pig whisperer” because of his empathy with animals. People trust him, too.

“It’s something I’m passionate about,” he said. “We want to create a program that’s beneficial to small farmers.”

Go where they go.

In Ohio’s stretch of Appalachia, county fairs are a great way to meet rural growers. “We’ve got lifetime residents of that township at the fair, talking to people they know,” said Colin Donohue of Rural Action, which is based in Trimble, Ohio.

MEETING THE NEED

MANY EDUCATORS HAVE FOUND INNOVATIVE WAYS TO HELP limited-resource producers. Their successes are a testament to the possibilities. The examples that follow range, literally, all over the map, but they share at least one commonality – the project leaders developed a set of local strategies to solve local problems. Such strategies may be easier for nonprofit organizations to carry out than extension educators, who may be limited by time and agency directives, but a little bit of creativity can go a long way.

Some of their strategies include:

Identifying the real barriers. The obstacles might range from finding child care to obtaining transportation. Help producers get to your educational events.

Creating effective materials. Provide materials that are designed with appropriate literacy levels in mind. John O’Sullivan of NC A&T recalls that a brochure he created had too fine a print. When he re-printed in a larger format, it was much better received.

Involving constituents in developing programs. Talk to your end users about what they need and how they like to learn.

Establishing trust. “You make commitments and you honor them,” said Craig Mapel, a marketing specialist with the New Mexico Department of Agriculture. “Say you’re going to do something and do it.”

Working together. Anthony Flaccavento and his colleagues at Appalachian Sustainable Development work informally and collegially with their farmers. “We’re very hands on, and they know I farm,” said Flaccavento, whose staff helped build a packing shed. “To a lot of these farmers, this was a surprise. We didn’t give advice and leave – we did it together.”

Going one-on-one in training settings. This strategy avoids teacher-centered approaches. “The most significant impact we’ve had is working with farmers one-on-one,” said Dean Purnell of Delaware State University. “That’s been the most effective because we can tailor our programming to each farmer’s needs.”

Demonstrating. Get the producers out on the farm. In California, ALBA’s Small Farmer Education Program combines classroom instruction with field experiences – five months of classroom agronomy, organic farming practices and business administration, followed by seven months of farming half an acre.

Tapping community leaders to run programs. Using paraprofessionals, volunteers and specially trained people to teach members of their own community might win over individuals suspicious of traditional government programs.

gram assistants – supported by funds from a SARE grant – who further the Center’s goals by working side by side with new gardeners.

As their skills and interest increase, so does their harvest. In 2001, the group started a small farmers market at the reservation’s only traffic light, selling their excess vegetables in a start at self-sufficiency. “Five years ago, you wouldn’t have noticed any gardens” on the reservation, Krush said. “Now there’s no question – they are very evident.” (See page 15 for a complete story about this project.)

In the productive fields of central California, a new crop of farmers has become financially independent thanks to their involvement in the Rural Development Center, a program run by the nonprofit Agriculture and Land-Based Training Association (ALBA). The farmers, most of whom immigrated from Mexico to pick vegetables in the Salinas Valley, enrolled in an intensive night and weekend course to learn the ins and outs of vegetable production and marketing.

The bilingual program includes several months of practical experience growing vegetables in the field. By advertising in Spanish-language media, ALBA staffers continue to draw applicants hungry for a better life.

“Most agree that the money and stability of being a farm proprietor is welcome compared to the seasonal fluctuations associated with migrant work and the itinerant lifestyle of farm workers,” said Patrick Troy, ALBA agronomist and education coordinator. (See page 11 for a complete story about this project.)

Opposite

Greg Duskey, an expert ginseng grower in Appalachian Ohio, passes on his experiences through a program that trains area growers and ag educators in specialty crop production. He works for a program that aims to increase incomes in the economically depressed area.

– Photo by Jana Pryor

HIGH-VALUE GINSENG COULD ELEVATE OHIO APPALACHIAN ECONOMY

IN THE SIXTH YEAR AFTER SOWING GINSENG SEED, PART-TIME Ohio farmer Greg Duskey began, cautiously, to examine his product. As he had expected, Duskey was still too early to harvest his wild-cultivated ginseng.

After seven or eight years, “the root finally has enough character to look like wild ginseng,” said Duskey, who has gathered the valuable herb from the foothills of southeastern Ohio since he was 12. Now, he helps educate others about how to grow ginseng in the wild for a nonprofit organization, Rural Action, which is trying to improve quality of life in Ohio’s stretch of Appalachia. Rural Action received a SARE professional development grant to increase knowledge of medicinal herb cultivation among agricultural educators.

Highly prized by Asian cultures, particularly the Chinese, for a variety of uses, from improving concentration to relieving fatigue, ginseng remains a hot commodity. Along with other medicinal herbs like goldenseal and black cohosh, ginseng grows well in the mature forest of the Appalachians, where a rocky, rolling terrain is inhospitable to most crops.

But while ginseng has been harvested for centuries in Ohio, few know how to grow it in wild-simulated conditions, the true route to value in the ginseng market. Wild-cultivated roots fetch as much as \$500 a pound, while roots grown in tilled beds underneath shade cloth – which lack the crooked appearance of its wild cousins – garner about \$8 a pound.

“Since Daniel Boone, ginseng has been part of the culture in Appalachia,” said Colin Donohue, of Rural Action. “Harvesting ginseng at the end of summer is part of the turn of the season.”

As wild ginseng gets scarcer, however, those looking to raise their incomes in an economically depressed area welcome opportunities to cultivate it in their woods. Such factors as shade, planting depth, soil management and harvest time become crucial to raising the right root for the marketplace.

Rural Action’s economic message is opening doors in what has been a closed community. “Investment in what some regard as a ‘savings account’ is also a hobby,” Donohue said. “Many people here like spending time in the woods and the promise of good returns from limited investment, no new equipment and no land requirements other than using your woodlands.”

The profit-making potential, as well as the production know-how, will be passed throughout the region thanks to



workshops hosted by Rural Action for agricultural educators. Duskey co-presented four workshops in 2002, reaching about 40 growers and 70 agricultural educators. His co-presenter, a West Virginia extension educator who specializes in ginseng production, tells them in a classroom setting about growing techniques and markets. When they go to the woods, Duskey takes the lead. He shows participants the best growing locations, outlines cultivating tips, conducts a planting demonstration and answers as many questions as are thrown at him.

Duskey’s tie to the community helps gain grower acceptance. A fifth-generation farmer in Morgan County, Duskey is close to harvesting and selling his first crop of ginseng, making him something of a rarity. He’s known among area farmers, and his training role allows Rural Action to reach out to people who often distrust government programs and perceived outsiders. “I’m just a local ‘Joe’ in the community, and people see me as such,” Duskey said. “I can build a rapport with folks in the local area and it works well.” Even though he has a graphic design business, Duskey finds time to work with growers on Rural Action’s behalf because tapping into the valuable ginseng market has the potential to elevate the economy in the entire area.

AUDIENCE

Appalachian woodlot owners in southeastern Ohio

EDUCATING TEAM

Rural Action, Trimble, Ohio
www.ruralaction.org

CHALLENGES ADDRESSED

Distrust of outsiders • Little access to profit-making jobs • Steeply forested terrain

CONNECTION STRATEGIES

Promise of profitable new markets • Attending county fairs and farmer gatherings

TEACHING METHODS

Training and supporting program assistants from within the community • One-on-one assistance • Development of a growers association for peer learning

A direct result of Rural Action workshops was the formation, in 2000, of The Roots of Appalachia Growers Association (RAGA). The group of medicinal herb growers shares research, cultivation techniques and marketing ideas, and now participates in Rural Action's education efforts.

Rural Action continues to home in on its goal to increase the number of farmers who can make a profit from ginseng and other herbs. Staffers attend county fairs and events to mingle with farmers, trying to gain their acceptance and willingness to hear their message. They are sure that one of the region's main assets, its forests, can yield high-value crops that can sustain small growers – and their communities.

"We go out and establish relationships, rather than just

advertise a workshop," Donohue said. "We've got lifetime residents of that township at the fair, talking to people they know"

Gradually, the organization is achieving acceptance. At one Rural Action herb workshop, 175 people attended, many of them the "early adopters," but also others who want to learn more. Developing growers as educators has gone far toward earning trust, as has the organization's focus on generating economic opportunities.

"If they're struggling to make a living, I want to work with them, not with large, off-site farmers who want to increase their opportunities," Donohue said. "We work with rural people who are part of the fabric of their communities."

PROFILE 2

THE NEW ENTRY SUSTAINABLE AGRICULTURE PROJECT: ASIAN IMMIGRANTS GAIN AN AGRICULTURAL EDGE

AUDIENCE

Hmong and Cambodian farmers in northeast Massachusetts

EDUCATING TEAM

The New Entry Sustainable Farming Project, Lowell, Massachusetts

CHALLENGES ADDRESSED

Language barrier •
Little access to capital, equipment or land

CONNECTION STRATEGIES

Training and supporting program assistants from within the community •
Long-term commitment from educating team

TEACHING METHODS:

Dual translation teams •
Videotaped demonstrations

AFTER MARIA MOREIRA BEFRIENDED A GROUP OF IMMIGRANT Hmong farmers in nearby Fitchburg, Mass., one of them asked to start a small garden on an unused corner of her dairy farm. The Hmong woman virtually transformed what had been an unsightly weedy patch, working early in the morning and late at night to grow cucumbers, squash and zucchini. Her yield astonished Moreira and encouraged her to start renting other parcels to Hmong growers who were aching to get their hands dirty.

"They love the land," said Moreira, who feels a special kinship to the Hmong because she, too, immigrated to the United States (from Portugal) in the 1960s. She and her husband, Manny, rent the land to the Hmong group partly for the income, but mainly to help them gain a foothold in their new land. "In what other country in the world can someone come in, not speak a word of English, and realize his dreams?" she asked. "Here, it can be done."

Moreira now teaches the Hmong group about environmentally benign pest management strategies – in a project partially funded by SARE – to discourage prolific use of agri-chemicals. "When they use chemicals, it can be harmful," said Moreira, who has enlisted experts from the University of Massachusetts to work with the Hmong farmers in the field. "Once they get the education, the farmers do it right."

Her efforts became the impetus for a coalition of agricultural advocates to form the New Entry Sustainable Farming Project. Since 1998, the project has helped beginning farmers, primarily Hmong and Cambodian immigrants, to access land and obtain the skills necessary to grow and market vegetables. Many of the crops are native to their homelands and, as "exotic" Asian produce, can command impressive prices at Boston and New York markets. These profits remain with the farmers.

The New Entry project places Asian immigrants with "mentor" farmers who lease land to them. Sharing machinery, irrigation and chores like plowing and tilling means farmers can minimize operating costs and time needed on the farm, particularly because many also hold full-time jobs.

The Massachusetts project faces impressive challenges, from the language barrier – many of the immigrants speak only Hmong or Khmer – to locating farmland in one of the most developed, expensive areas of the country.

"It's challenging to find farmland," said Hugh Joseph, director of The New Entry project at Tufts University's Agriculture, Food and Environment Program. "We're under enormous development pressure, and housing prices are booming." In fact, it takes the group up to three years to

find land and negotiate long-term leases for the Hmong and Cambodian farmers.

Yet, with local generosity, the program is growing. John Ogonowski, a former commercial airline pilot who was captain of one of the planes that crashed into the World Trade Center on September 11, 2001, had leased 12 acres, or one-fifth of his land, to the program. He also worked alongside the families as a true mentor, advising about production, harvest and marketing, and building them a greenhouse and irrigation pond. His efforts invigorated the project.

The concentration of Asians in the Boston area, particularly the Vietnamese community in Lowell and residents in the city's Chinatown, creates markets for locally produced Asian crops. For example, gardeners raising pea tendrils have found a lucrative market, with added nitrogen-building and soil-enhancing benefits from growing legumes. They cut the plant tops every few days, handle them carefully and deliver them promptly to high-end stores such as Bread and Circus, Asian grocery stores and other specialty wholesalers. Chefs are finding that the unusual-looking leafy vegetable makes an attractive addition to upscale plates, Joseph said.

The farmers also find a receptive audience at the Lowell Farmers Market and other venues. Joseph, who founded the market two decades ago, said Asian immigrants have trolled the area looking for fresh greens like they used to see in their homeland.

"People were flooding the market, looking for greens, but no farmers grew them," he recalled. "Here is an opportunity to put some of these folks on the land. A high percentage of them were small-scale farmers in their homelands, and farming is in their blood."

Part of the New Entry project dovetails with Moreira's efforts to better inform immigrant groups about pesticide use – and to lessen their reliance on chemicals.



Workshops on sustainable vegetable management often involve both Laotian and Hmong translators, punctuated by pauses for comprehension in their native languages. The project has developed videotapes that growers can watch in their homes to provide visual lessons, and the farmers seem an appreciative audience.

Joseph intends to increase the program's reach. In 2002, he hired Moreira and, with other new staff, wants to "graduate" the group of about 20 farmers to larger plots. Meanwhile, he juggles a waiting list of interested growers.

"We're trying to get the formula worked out so farmers can make a reasonable summer income from their limited production plots," he said.

New Hmong and Cambodian farmers in Massachusetts have found success growing ethnic produce and selling it at farmers markets and upscale Boston restaurants, in part thanks to a community-based organization that helps them access land.

– Photo by Gus Schumacher Jr.

U.S. LAWMAKERS PROTECT FARM PARCEL; RECOGNIZE SLAIN PILOT, FARMERS

In the new 2002 Farm Bill, legislators authorized Congress to fund conservation of 33 acres of farmland in Dracut, Mass., a parcel initially intended for housing and a golf course, as part of its federal farmland protection program. The farm had been identified by John Ogonowski, the American Airlines pilot who died Sept. 11, 2001, and others in the Dracut Land Trust, as a plot worthy of saving.

"He told us that he considered it the best piece of farmland in Dracut," said Hugh Joseph, director of The New Entry project at Tufts University's Agriculture, Food and Environment Program. In fact, Ogonowski intended to use some of his own money to buy the parcel before his death. After Sept. 11, members of his family and the Dracut Land Trust took up the cause with Massachusetts lawmakers.

Part of the land will be made available for use by immigrant farmers involved in the New Entry Sustainable Farming Project. Once secured, the parcel will become a memorial to Ogonowski in honor of his life and contributions to the project.

NEW MEXICO WHEAT GROWERS JOIN FORCES TO GROW, MARKET PREMIUM FLOUR



AUDIENCE

Hispanic or Native American descendants in northern New Mexico

EDUCATING TEAM

New Mexico Department of Agriculture • NMSU Extension Service

CHALLENGES ADDRESSED

Little access to capital or equipment • Small land holdings • Limited rainfall

CONNECTION STRATEGIES

Prospect of grant funding • Promise of profits

TEACHING METHODS

Demonstrations • Intensive, on-farm production workshops

Growing organic, unusually tasty wheat raised in the mountains of northern New Mexico has been a profitable route to a better quality of life for a new farmers cooperative.

– Photo courtesy of USDA

IN THE ARID MOUNTAINS NORTH OF TAOS, N.M., A GROUP OF residents struggling to stay on the land rather than move to Albuquerque for retail jobs heeded the advice of agricultural educators and began growing high-quality wheat. It's been years since the group decided to try farming, and their modest success is a testament to their hard work and never-say-die attitude.

Today, the Sangre de Cristo Cooperative sells about 400,000 pounds of flour to bakeries, restaurants and groceries. Their product, raised organically, has been hailed as unusually tasty and thus brings a high price in the upscale markets of Taos and Sante Fe.

"It's quality stuff – a better product than what you can get elsewhere," said Craig Mapel, a marketing specialist with the New Mexico Department of Agriculture, one of the founders of the co-op project. "The flour performs wonderfully."

It was Mapel, in fact, who went with county extension agent Rey Torres to visit northern New Mexico landowners in 1994 to propose a new crop for what had become one of the poorest communities in the country. A generation earlier, the people of the area farmed, but mining and tourism jobs lured many to the big cities. In their wake: impoverished communities with few economic prospects. Those who remained in farming contended with cycles of drought, little access to equipment and low commodity prices in the marketplace. Most had 10 acres or fewer.

Mapel's part of the project, funded by a SARE grant, focused on improving the incomes of families – most of them Latino or Native American – through good farming practices and savvy marketing.

"They said they had land and water and they didn't want a minimum wage job in Albuquerque," Mapel recalled. "They asked if we could help them stay on their land."

With guidance from the state Department of Agriculture, New Mexico Extension specialists and community development leaders, a group began small-scale farming in an area whose altitude seems ideally suited to producing premium wheat. About half a dozen Extension-led workshops held in the region educated the group of 30 farmers about the ins and outs of raising wheat.

"Basically, we started from zero," Mapel said. "Most of them didn't have a tractor."

Mapel helped them apply for grants, which enabled the co-op to form and buy equipment. They identified a mill in Texas to convert their raw product to flour and package it in five-, 25- and 50-pound bags. In 1995, the new growers harvested their wheat, milled it collectively and co-marketed their product under their new label, "Nativo" flour. When they found a dedicated customer – the owner of a Santa Fe bakery – the co-op took off.

Today, dozens of groceries and markets, a pizza chain and several coffee shops buy "Nativo" flour. The group hopes to purchase its own mill, using grant assistance, in the area. Not only would it save the long trip to Texas for processing, but building a mill also would bring job opportunities that could spread more income throughout the local economy.

Their main limitation has been something beyond their control: water.

"Nobody has ever seen it this dry, except maybe in 1950," said Lonnie Roybal, a Costilla wheat and alfalfa grower and tireless marketer of flour. This year, he is peddling flour from last year's harvest, and hopes it snows enough next winter to recharge the water supply for next spring's planting.

Roybal, who received his own SARE grant to explore irrigation methods, continues to appreciate the assistance that launched the project, attributing much of the credit to Mapel. "Craig has been there for us since the beginning," he said. "Today, people really like the flour. We have a good product."



GROUP-SELLING: RAISING VEGETABLES, CHICKEN FOR CHICAGO MARKETS LIFTS SMALL CO-OP

On Main Street, the ethnic produce – purple-hulled peas, speckled lima beans, okra, watermelons and collard greens – piles up in colorful displays for residents of rural Pembroke Township, Ill., who select their favorites on weekdays during the growing season. The buyers directly support their farming neighbors, who have been growing vegetables for generations but only recently began co-selling them at markets.

Once a week, the members of the Pembroke Farmers Cooperative take their show on the road. They pack up their refrigerated truck and bring their bounty to the Austin farmers market in Chicago, 70 miles away.

The young cooperative, started in 1999, has grown from a few members to more than 20, all eager to maximize the market potential for their chemical-free vegetables. Many of them also raise chickens using range methods that justify their “natural” labeling claims. Range chicken production, in fact, has increased partly thanks to two SARE farmer grants, which helped Pembroke producers perfect free-range and pen methods for raising poultry.

The co-op also has benefited from a USDA rural development grant, which helped set up the co-op with staff and a computer. The group leveraged a state grant to purchase a refrigerated truck, which hauls chickens to the processor and returns with fresh meat to sell to about six restaurants and a few health food stores in Chicago.

With help from the Kankakee County USDA-Farm Service Agency director, they located a small-scale processor to slaughter and package their birds, and created a simple co-op label. With processing secured, the families are able to sell their product within the county or, for an even better premium, in Chicago.

“It’s a system that really fits their lifestyles and the community,” said Merrill Marxman, the FSA director who helped establish the co-op. “They have small acreages and limited financial resources. We started it as an outreach effort to what we saw as an impoverished community, and now the co-op has a headquarters.”

The Pembroke farmers grew up raising garden vegetables, most with a few animals on the side. In the mid-1990s, more and more of them were taking advantage of the sales opportunities in Chicago, staffing booths at farmers markets and gaining store and restaurant customers with promises of locally raised, chemical-



free produce. When they started to notice their neighbors driving the same direction each weekend, a few began to piggyback sales on one another’s transactions.

“On weekends, you would see 10 or 12 pickup trucks leaving the community,” said Basu, the president of the Pembroke Growers Cooperative who uses only one name. “Many of them had old, raggedy trucks that were always breaking down. We started helping one another and buying things together.”

With little money – even buying seeds at the beginning of the season was challenging – farmers in Pembroke saw the advantage of pooling their limited resources. When two of them received SARE grants to study raising chickens outdoors, they shared their new practical experiences with others in the community.

“We’ve been raising chickens as a family for 40 years,” said John Thurman, a Pembroke farmer who received a SARE grant to evaluate methods to raise chickens. “Not only was our project a success, but we have been able to continue poultry production and teach community members about raising pastured poultry,” he said.

The interest from potential customers in buying pasture-raised chicken encouraged the group to jointly purchase the truck, enabling them to produce in bulk. Co-

AUDIENCE

Small-scale farmers in central Illinois

EDUCATING TEAM

USDA and state agencies

CHALLENGES ADDRESSED

Little access to capital or equipment • Small land holdings

CONNECTION STRATEGIES

Federal grant funding • Locating resources (i.e. refrigerated truck)

TEACHING METHODS

Field days

John and Ida Thurman, who raise vegetables, chickens and hogs in central Illinois, cooperate with 20 other families to jointly process and sell their products in Chicago.

– Photo courtesy of John Thurman

Lawrence Jenkins demonstrates sorghum processing with small, portable equipment, part of Kentucky State University's workshops to improve practices among owners of small farms.

— Photo by John Cosby Jr.

op members hope to build a local processing plant to save the 150-mile round trip to the processor.

The meat sells for \$2.40 a pound, and the group's customers seem happy with the co-op's product. If they have any complaint, it's that they do not have enough for them to feature every week.

"Our volume goes in spurts," explained Basu. On a given month, the co-op may slaughter 1,000 birds, then process another thousand in just two weeks. Basu, however, is sure the group could sell 10,000 birds a week.

"We have a good product and an arrangement with our customers," Basu said. "When we do have chicken, the chefs highlight fresh, free-range poultry on their menus."

The glue that keeps the group together, and what seems to be a key to their success, is the lack of agri-chemicals in their production. "Most of us have been organic farmers for years before the word became popular," said Basu. "We're a limited resource com-

munity, and we didn't have the money to pay for chemicals."

Instead, the farmers employ hot pepper sprays and garlic mixes to deter pests.

The co-op is trying to expand both production and its customer base. "By getting together, we can meet more [production] numbers," Thurman said. "It's working out pretty well."

Basu remains confident that the small group will survive, especially because they surmounted one of the biggest obstacles: encouraging independent farmers to work together.

"The hardest thing you can do is organize farmers because they're very independent, especially family farmers," Basu said. "We're still young and developing our marketing and our product – a 'Pembroke bird.' We want to get that message out there – that we have a good clean bird, produced off the land."

PROFILE 5

POPULAR, HANDS-ON TRAINING DRAWS THOUSANDS TO LEARN NEW FARM AND MARKET STRATEGIES

IN KENTUCKY, WHERE THE ROLLING HILLS SUSTAIN THE world's finest thoroughbreds but are home to some of the country's worst poverty, Kentucky State University (KSU) is trying to improve life for area farmers. An ongoing series of educational events, heavily

reliant upon agricultural demonstrations, has introduced thousands of Kentuckians to profit-making, sustainable farming techniques.

The brainchild of KSU's Marion Simon – who feels that the best way to understand agricultural research is to see it working on the ground, not in a seminar or presentation – the Third Thursday training program has become a hugely popular way to train Kentucky extension agents, paraprofessionals and farmers in the gamut of sustainable agriculture techniques.

Simon and others have brought about 2,500 people through the university's research farm in six years, up to 400 per field day, to see demonstrations of aquaculture, apiary production, organic fruit and vegetable production, sustainable forestry, grain storage, goat production, warm-season grass demonstrations and composting – to name just a few topics. In essence, Simon took the old adage, "seeing is believing," and opened KSU's research center to hordes hungry for information.

The Third Thursday program is funded in part by SARE and is now being copied at Tennessee State University as the Third Tuesday training program.



The KSU research farm was designed to have group walks around the research projects. “That way, agents and small farm assistants can actually see things growing and be able to recognize them,” Simon said.

The farm workshops were attended by ag educators eager for information about profitable, environmentally sound alternative production systems they could pass on to their farmer clients. As the word spread, farmers asked to come. Then, extension educators from other states began making the trip to see if they could replicate the idea.

“We’re working with small farmers, many of whom are at poverty-level,” Simon said. “These are farmers we know we have not seen at extension meetings, ones with marginal land, capital and education. Kentucky is notorious for people who don’t read and write well. Less than 30 percent of people in some counties have finished high school.”

While the Third Thursdays served as a conduit of information for many of those farmers, others benefit from working with KSU small farmer assistants, or paraprofessionals, who work one-on-one with farmers in their counties. In documenting their successes, KSU Third Thursday leaders cited the following:

- After numerous presentations about the use of cover crops, compost, manure and green manures to improve the soil, more than 30 farmers have adopted such systems.
- After a 1997 field day, five farmers constructed unheated greenhouses, then returned to teach workshops to discuss their experiences. All have expanded their green houses.

• Ten farm families who regularly attend KSU workshops developed a joint community supported agriculture (CSA) operation and now raise organic vegetables. Using some of the training about marketing they learned at Third Thursday, the group developed a logo and purchased a van for distribution.

A group of farmers and food-aware non-farmers who met at Third Thursday formed a non-profit group, Partners for Family Farms (PFF), to sustain family farms and rural communities by linking urban consumers and farmers. The group also informs the public at large about the benefits of purchasing local family farm products. To help open new markets for meat products, PFF obtained grants from the Kentucky Department of Agriculture, Heifer International and SARE to build a mobile processing unit for small, independent Kentucky farmers.

The informality of the KSU farm workshops adds to the welcoming atmosphere, said Simon, who once asked a visiting presenter to take off his jacket and tie before addressing the group. As a result, Third Thursday attracts diverse ethnic groups, women and young mothers who bring children.

“The Third Thursday meetings draw farmers and ag professionals from the highest income and education levels to the lowest,” Simon said. “Together, they share their ideas and experiences to help further our sustainable agriculture efforts.”

AUDIENCE

Small-scale, low-income
Kentucky farmers

EDUCATING TEAM

Kentucky State University
www.kysu.edu/landgrant/CRS/facilities/researchfarm

CHALLENGES ADDRESSED

Marginal land • Little capital • Illiteracy • Distrust of government services

CONNECTION STRATEGIES

Training and supporting ag professionals and program assistants • Welcoming atmosphere for small-scale farmers

TEACHING METHODS

Field tours • Workshops • Hands-on demonstration

PROFILE 6

FORMER FARM LABORERS BECOME FARM OWNERS, GAIN INDEPENDENT LIVELIHOOD

IN GUERRERO, MEXICO, MARIA INEZ CATALAN HELPED HER parents on the family farm. When she immigrated to the United States in 1986, Catalan tended broccoli and carrots as a field laborer, helping one of California’s big farms produce huge quantities of vegetables.

Catalan wanted to work the land, but she sought to have more control over how the crops were raised and the land was treated. Assessing herself, with limited education and English skills, but no shortage of energy, Catalan decided to enroll in a small Salinas Valley program at the Rural Development Center (RDC) that

provides agricultural training to Spanish-speaking immigrants with limited means.

The Programa Educativo para Pequeños Agricultores (Small Farmer Education Program) or PEPA combines classroom training in agronomy, organic farming practices and business management with practical field work actually raising a market crop. Upon completion of the free, five-month program, students can opt to farm a small parcel from the Rural Development Center for up to three years, applying what they’ve learned and gaining a foothold in the agricultural industry.

AUDIENCE

Immigrants from Mexico and Central America

EDUCATING TEAM

Agriculture and Land-Based Training Association (ALBA)'s Rural Development Center, Salinas, California

CHALLENGES ADDRESSED

Limited access to capital or equipment • Language barrier • Limited time

CONNECTION STRATEGIES

Advertising in Spanish language media • Flyers • Word of mouth

TEACHING METHODS

Classroom lessons plus field experience • Tours with local farmers • Bilingual teachers • Night and weekend classes

Combining classroom training – in agronomy, organic practices, marketing and finance – with field training over three years has created new, skilled farmers in California's Salinas Valley.

– Photo by Jerry DeWitt

Opposite

Michael and Russell Wright of Bladen County, North Carolina, have begun raising hogs outdoors, part of a project that combines land-grant university, foundation and community-based organization support to introduce low-cost hog systems.

– Photo by Chuck Talbott



The Center, part of the nonprofit Agriculture and Land-Based Training Association (ALBA), aims to help immigrants graduate from low-paying, low-satisfaction jobs to independent farming. Classes are held in the evenings and on weekends to accommodate student work schedules. “They don’t have anything to start out with,” said Brett Melone, ALBA executive director, “but they want to start their own businesses and become more independent, which is the goal of the program.”

ALBA also runs a farmer training center, where a demonstration farm promotes conservation by showing environmentally sound practices folded into an economically successful operation. Melone and others hope to enlist supporters from urban areas, particularly around the subject of watershed restoration.

To be received into the small farmer education program, applicants must have some farming experience and “need to be dedicated to the idea of a more sustainable agriculture,” Melone said. “They also must recognize the importance of family farming.”

The RDC adopted sustainable agriculture principles in its classes in the early 1990s, partly as a result of a SARE grant with the University of California at Berkeley that encouraged alternative farming practices such as soil-building with cover crops and compost, and biological and cultural practices to combat pests. After the SARE project, use of cover crops at the RDC expanded from near zero to nearly 100 percent.

Catalan did well at RDC, where she took the three-year apprenticeship and grew a diverse assortment of annual vegetables. She also gained valuable experience direct-marketing her fruitful harvest: jicama, radishes, garbanzo

and fava beans, tomatillos, broccoli, cilantro and lettuce greens, among other things. Catalan channeled her organizing skills into diverse projects: helping set up a community garden for Salinas residents and running a community supported agriculture project with other RDC graduates that serves residents in Monterey, Fort Ord and Salinas. Perhaps most important, Catalan co-founded a cooperative with fellow students.

The Asociacion Mercado Organica (AMO) co-op, comprised of 11 RDC graduates, leases 60 acres near the town of Hollister. There, each farmer tends about five acres and grows organic vegetables to sell – jointly, under the AMO label – at a premium. They share a new tractor and will soon own a refrigerated delivery truck.

Catalan credits the PEPA program for solidifying her decision to enter farming for herself. “It offered educational opportunities in many different areas: sales, bookkeeping, certification, production requirements, fertility management and community-building,” she said through an interpreter. “They taught me to put insectory plants near crops to attract beneficial insects and rotate crops to avoid disease buildup in the soil.”

She sells vegetables to local farmers markets and a direct-to-consumer retailer. After years of working for others, she relishes her hard-won independence.

Catalan is a model graduate of PEPA, although with an average of 15 graduates a year since 1985, the program boasts some 400 success stories. Many farmers from the primarily Latino community are interested in RDC; as many as 80 percent speak only Spanish and therefore lack access to information. Many also have low incomes and little access to credit or farm equipment. At RDC, farm equipment is available to all on a cooperative basis, and many of the lessons pertain to finances, record-keeping and organic certification processes.

“They are limited-resource farmers with language issues, so government programs don’t necessarily reach them,” Melone said. “They may not be getting the information they need to make intelligent land management decisions and apply them to conservation farm practices.”

Catalan and her four children spend about 12 hours a day in the field, tending her piece of the AMO land and a five-acre piece leased by one of her sons.

“My experience has been that if you want to get ahead, the U.S. offers the possibility,” she said. “You just have to be prepared to give it all your effort.”

NORTH CAROLINA HOG PRODUCERS GAIN HOOF-HOLD BY RAISING PIGS ON PASTURE

AT A TIME WHEN MOST OF NORTH CAROLINA'S HOG INDUSTRY is corporate-run, a group of independent-minded producers is experimenting with raising small herds of hogs outside. The farmers are gambling that pasture-based pork systems, gaining in credibility and acceptance, will bring them a slice of the marketplace and, perhaps more important, a satisfying livelihood.

In 2002, 10 North Carolina farmers each received 12 pregnant sows and a boar as part of a program run by North Carolina A & T University, funded by a private foundation and supported by a nonprofit organization that provides free livestock. The farmers also received portable huts for hog farrowing.

They are participating in a project that builds hope that small-scale producers can raise their own hogs, something rarely done in at least a decade in North Carolina because of the dominance of corporations. The corporations have a virtual lock on markets and own most of the processing plants, effectively blocking independent producers from the wholesale pork market.

"I want small-scale producers to have an option," said Chuck Talbott, an animal science researcher at North Carolina A & T State University who conceived of the project. "I thought that people like to raise hogs and want to raise hogs – but not if they have to lose money."

The NC A & T project seeks to give independent producers another choice: raising small herds outdoors. Talbott is researching pasture-based systems – rotations of pigs and organic vegetables in dry lots and in forest settings – as part of a SARE grant, and has reached out to small producers.

Hog farmers in the NC A & T project can choose their markets, but all of the participating farmers have the opportunity to sign contracts with Niman Ranch, a high-end retailer, or pursue other direct-marketing channels locally. The Iowa-based Niman Ranch buys pork from small-scale producers who adhere to a strict code of animal husbandry, including raising hogs on pastures or in deep bedding.

The North Carolina program is targeted at low-income, primarily African American farmers with an interest in raising hogs outside. All must have some experience raising hogs and fall within income thresholds required by Heifer International, the nonprofit organization providing the animals as part of its "pass-on" program.



"Everyone I've met is excited about the opportunity," said Steve Muntz, Appalachian project manager for Heifer, whose program requires farmers to give the same number of animals to another producer after the hogs have produced offspring. "They're getting inexpensive facilities, and the hogs are coming without cost."

The herds will stay small because North Carolina slaughtering laws require that farmers raise fewer than 250 hogs if they are going to process independently.

Farmer coordinator Mike Jones, who trains participating farmers for NC A & T, said the six farmers who enrolled for the first shipment seem ideal for the assignment.

"Most of the people I've met do not lack intelligence or education, but they feel depressed or discouraged because they've had so much difficulty," said Jones, who bred and grew out the sows. "The ones I've worked with have become more motivated and excited. That's the greatest benefit I've seen."

Jones will work with the group throughout the season. North Carolina's mild climate should prove perfect for the portable huts, which will be placed under trees to shelter them from the heat. While the outdoor system may be new for the farmers, others in the Midwest and Texas have achieved great success – lowering input costs, eliminating manure buildup concerns and raising a premium product that brings higher prices.

AUDIENCE

Small-scale hog farmers in North Carolina

EDUCATING TEAM

North Carolina A & T University and Heifer International

CHALLENGES ADDRESSED

- Little capital or equipment •
- Little access to processors •
- Few profitable markets

CONNECTION STRATEGIES

Identifying farmers through extension contacts • Providing free structures, livestock and market opportunities

TEACHING METHODS

Technical advice as needed in the field

FIELD-TO-TABLE STRATEGY HELPS TOBACCO GROWERS SWITCH TO MORE PROFITABLE CROPS

AUDIENCE

Former tobacco farmers in the Appalachian region of southern Virginia and eastern Tennessee

EDUCATING TEAM

Appalachian Sustainable Development

CHALLENGES ADDRESSED

Little experience with vegetable production • Little access to capital • Reluctance to try new crops

CONNECTION STRATEGIES

Gaining support from leaders in the farm community • Promise of substantial, high-value new markets

TEACHING METHODS

On-farm workshops • Involving farmers as collaborators in university-led research

Martin Miles is one of 25 farmers in southwest Virginia who have made the successful switch from growing tobacco to a diversified mix of crops and specialty vegetables. Their new cooperative packs produce at Miles' tobacco barn, part of which he reserves for that purpose.

— Photo by Ann Hawthorne

FOLLOWING THE MARKET, FORWARD-THINKING FARMERS IN southwest Virginia and eastern Tennessee re-tooled their operations to grow a wide range of vegetables, from the traditional to the exotic. Working with Appalachian Sustainable Development, a nonprofit organization in Abingdon, Va., about 25 farmers now supply three supermarket chains representing more than 100 stores. Others have begun working in a commercial kitchen that enables them to add value to their raw products.

The project marks a major shift for the Appalachian-area growers, who for decades grew tobacco before the market tumbled. The late 1990s lackluster economy and limited opportunities to earn a good living combined to give the region the unwelcome distinction of having the highest unemployment rate in Virginia. Accordingly, Appalachian Sustainable Development, or ASD, launched a project to teach area farmers about sustainable agriculture, from environmentally sound growing practices to reaching high-value markets.

The organization held about 75 on-farm workshops to teach production fundamentals, from planting cover crops to irrigation to harvesting. The training evolved as ASD staffers learned more about their audience's needs.

"Some of our early workshops went from a market garden orientation to 10-acre, tractor-based farms," said Anthony Flaccavento, ASD director. "We needed the farmers to teach us how to apply our ideas on a large scale."

Research conducted with scientists at Virginia Tech focused on real-life problems such as controlling tomato blight and cucumber beetles. The researchers conducted their experiments on 10 area farms, involving farmers in research design and monitoring results.

Working with producers and designing workshops more applicable to the area helped ASD gain credibility with the larger-scale farmers, who were seeking more profitable alternatives. ASD pledged to find a new market for certain products, so farmers began growing tomatoes and other vegetables to meet the promised demand.

Meanwhile, the organization beat the bushes to find markets in the tri-cities of southwest Virginia: Johnson City, Kingsport and Bristol. Small health food stores and specialty shops were happy to take local and sustainably produced food, but their shelf space was limited.

Then, ASD approached a local grocery store chain, and the project took off. Flaccavento had learned that the gro-



cery store wanted to begin offering organic produce, so the organization seized the opportunity.

"It was just a modest, working-class chain that decided to give organic a try," he said. "We started small with a partner that was willing to grow along with us. It was a perfect fit."

ASD brokered the deal in the fall, then approached farmers to present the opportunity for the coming season. The project gained rapid acceptance in large part because a few young tobacco growers known in the farming community agreed to try growing a few acres of vegetables for the first time.

"They were willing to take risks," Flaccavento said. "The next year, it opened the door for us to go to other farmers."

Now, up to 35 farmers supply the grocery stores under a new "Appalachian Harvest" label, growing organic produce on anywhere from 1 to 16 acres. Their annual gross returns vary, depending on acreage, skills and a good deal of luck, from \$3,000 to \$10,000 per acre – or half a million dollars for the fledgling group.

Other farmers, who have used the area's first commercial kitchen at the Jubilee Center in nearby Hancock County, Tenn., are developing high-value products like marinades and sweet potato butter. The kitchen, converted from an old rural school house, opens doors to specialty shops that pay a premium for unusual products.

With three-quarters of the farmers suffering from real economic distress before the project, and earning real dollars since, ASD has achieved one of its chief goals to revitalize the regional economy. "The farmers see our Appalachian Harvest brand as their project," said Flaccavento. "It's very exciting."

FROM SUBSISTENCE LIVING TO MARKET VENDORS: TRANSFORMING A TRIBAL POPULATION

LIFE ON SOUTH DAKOTA'S ROSEBUD SIOUX RESERVATION MIGHT be hard for most people to visualize. Residents lack outlets for nutritional food, money for gas to drive 50 miles to the nearest grocery and even fuel with which to cook. Many subsist on convenience-store food bought with welfare checks and government-distributed commodities such as flour and sugar. Both contribute to a perpetual feeling of dependence and a rising incidence of diabetes.

In the mid-1990s, reservation residents seeking a way to prevent diabetes decided to start gardening. They thought that exercise, fresh air and a harvest of fresh produce would improve their health. Today, with coordinator Ann Krush of South Dakota's Center for Permaculture as Native Science, Lakota community gardeners have encouraged scores of additional people to raise and eat their own vegetables. The practices have caught on, with some gardeners now supplying a new farmers market at the reservation's only lighted intersection.

"It's rural poverty – there is no money and there are no stores," Krush said. "We started with things that are the easiest to grow that people can eat without cooking. Many of them on [federal assistance] don't know fresh vegetables very well, and part of the motivation is a more nutritious diet."

The problems for the Lakota began, Krush said, in the late 1800s, when the Plains, which had provided them with a healthful diet, were taken over by settlers. The U.S. government agreed, by treaty, to provide food to the tribe,

(which calls its members the "People"), but their hunting and gathering grounds were no longer available to them. The People responded negatively to having their land taken and receiving hand-outs.

The health of the People deteriorated. In the early 1990s, the new gardeners formed an autonomous participatory center they named after permaculture practices, in which people learn and do for themselves. A decade later, some 80 families participate.

"The People say, 'We have to help ourselves, we can't just sit around through this situation,'" Krush said. "The timing was right because things had gotten bad enough."

An important part of the program centers on program assistants working in their own neighborhoods. The assistants receive a stipend – partly supported by a SARE grant – to work side by side with fledgling gardeners and encourage their new efforts. To start, the assistants learn about nutrition, vegetable gardening, tree-planting, fruit-bearing shrubs, and food drying and storage. Then, they work directly with their neighbors to share their new knowledge. The assistants also mentor youth interns as young as 10, who receive a SARE-supported stipend.

The early lessons counter a long-held Lakota antipathy against working the land. Instead, the network of gardeners fosters a group that is proud of its achievements coaxing food from the soil.

"New confidence shows clearly in the program assistants and, in turn, their neighbors, who are no longer embarrassed to garden, gather and dry," Krush said. "In fact, they are doing so proudly"

Crops range from peas, radishes, onions and tomatoes – raw foods that require no preparation – to corn, squash and honey from Lakota-tended hives. Raising honey bees, in fact, has been a rewarding enterprise and, Krush hopes, a bridge to understanding livestock care and small entrepreneurship.

The farmers market, supported by a second SARE grant, attracts both Lakota and white customers. Given the small size of the garden plots, Krush was amazed that gardeners had enough to sell after feeding their households, but the market has proved a small success.

"It's tiny, but it's real and it's happening," Krush said. "There are plenty of buyers, it's just a matter of producing enough of what people crave: fresh, healthy food."

AUDIENCE

Sicangu Lakota, Rosebud Sioux Reservation, Mission, South Dakota

EDUCATING TEAM

Center for Permaculture as Native Science

Note: The Center closed in 2004.

CHALLENGES ADDRESSED

Historical bias against gardening • Poverty

CONNECTION STRATEGIES

Training and supporting program assistants from within the community • Long-term commitment from educating team

TEACHING METHODS

Practical skills taught with participants in co-learning environment • Rearing honey bees as first step for livestock enterprises

Raising bees is one of the steps to a new agricultural livelihood envisioned by participants in an ongoing educational market gardening initiative run by a group of Lakota Sioux in South Dakota.

– Photo by Ann Krush



ADDITIONAL RESOURCES

PROGRAMS & ORGANIZATIONS

Alternative Farming Systems Information Center, National Agricultural Library, USDA. Conducts free specialized literature searches on various topics upon request, including limited-resource issues. (301) 504-6559; afsic@nal.usda.gov; www.nal.usda.gov/afsic

Appalachian Sustainable Development. Conducts sustainable agriculture and forestry projects in southwest Virginia and eastern Tennessee. Abingdon, VA; (276) 623-1121; asd@eva.org

Farm Services Agency, USDA. Administers farm commodity and conservation programs and makes loans to farmers unable to obtain conventional credit. One credit program places special emphasis on loans to limited resource and socially disadvantaged farmers and ranchers. Washington, D.C.; (202) 690-1098; www.fsa.usda.gov

Federal Crop Insurance Corporation, Risk Management Agency, USDA. Its Community Outreach and Assistance to Women, Limited Resource and Other Traditionally Underserved Farmers and Ranchers program funds community-based organizations and other programs geared at “under-served” groups. (202) 690-2686; www.rma.usda.gov/news/2002/06/020620outreachkit.html

The Federation of Southern Cooperatives/Land Assistance Fund. A service, resource and advocacy association for 25,000 low-income families organized into more than 100 cooperatives in rural communities across the South. (205) 652-9676; www.farmworkers.org/fscpage.html

Natural Resources Conservation Service Social Sciences Institute, USDA. Integrates customer opinion and field work with science-based analysis to apply human behavior to natural resource conservation programs, policies, and activities. Web site includes relevant publications such as “Core Conservation Practices: Adoption Barriers Perceived by Small and Limited Resource Farmers.” www.ssi.nrcs.usda.gov

New England Small Farm Institute. A private non-profit organization supporting beginning farmers and sustainable small-scale agriculture throughout New England. Belchertown, MA; (413) 323-4531; www.smallfarm.org

North Carolina Agricultural and Technical State University Cooperative Extension. Educational programs and outreach emphasize improving quality of life for individuals and families without the financial resources and educational backgrounds mainstream America enjoys. (See also USDA Land Grant Universities below.) www.ag.ncat.edu/extension

Rural Action. Works to revitalize Appalachian Ohio. Trimble, OH; (740) 767-4938; www.rurallaction.org

The Rural Coalition/Coalición Rural. An alliance of over 90 culturally diverse community-based groups in the United States and Mexico who collaborate to advance social justice and sustainable development in rural areas. Washington, D.C.; (202) 628-7160; ruralco@ruralco.org www.ruralco.org

Rural Development Center, Agriculture and Land-Based Training Association (ALBA). Provides agricultural training to Spanish-speaking immigrants of limited means. Salinas, CA; (831) 758-1469

The Rural Development Leadership Network (RDLN). Supports community-based development in poor rural areas through hands-on projects, education and skills building, leadership development and networking. www.ruraldevelopment.org

Sustainable Agriculture Research and Education (SARE) program, USDA. This nationwide grants program, administered by USDA-CSREES, funds grants to researchers, educators and nonprofit organizations to develop profitable and environmentally sound farming and ranching strategies, including assistance to limited resource groups. (301) 504-5230; www.sare.org

University of California Small Farm Center. This statewide program enhances the viability of small- and moderate-scale producers by stimulating research and extension education in production systems, marketing and farm management. Davis, CA; (530) 752-8136; sfcenter@ucdavis.edu; www.sfc.ucdavis.edu

USDA Land Grant Universities. State partners of USDA’s Cooperative State Research, Education, and Extension Service (CSREES), these universities provide technical assistance to farmers through their extension programs. Go to www.csrees.usda.gov/qlinks/partners/state_partners to get contact information for the universities in your state.



– Photo by John Cosby Jr.

CSREES Small Farm Program. Housed in the Cooperative State Research, Education and Extension Service agency, the program aims to improve the economic viability of small farm enterprises through partnerships with the Land Grant System and other sectors by facilitating research, extension and education programs to meet the specific needs of small farmers. Includes directories of state contacts. Washington, D.C.; (800) 583-3071; asimon@csrees.usda.gov; www.csrees.usda.gov/smallfarms

USDA Small Farms Web Site. Web site intended to be a one-stop gateway to resources, benefits and services offered by USDA for small farmers. Direct link to small farm coordinators in each state. www.usda.gov/oce/smallfarm

SARE works in partnership with Cooperative Extension and Experiment Stations at land grant universities to deliver practical information to the agricultural community. Contact your local Extension office for more information.

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