

## Commentary

## Co-op business model well suited for next-generation biofuel development

## By Dallas Tonsager, Under Secretary USDA Rural Development

Editor's note: The following commentary is based on remarks Tonsager delivered in January at the Fourth Annual Iowa Renewable Fuels Association Conference in Des Moines, Iowa.



hen Congress passed the Energy Independence and Security Act of 2007, it established a significant challenge to the nation to produce 36 billion gallons of biofuels by 2022 to power cars, trucks, jets,

ships and tractors. However, only 15 billion of the 36 billion gallons can come from corn ethanol. We are nearing that point. The Energy Information Administration predicts that ethanol production will grow from about 11 billion gallons in 2009 to 12.95 billion gallons in 2010.

This poses a substantial challenge to the nation as we tap other renewable fuel sources. But we can achieve it if the technology and lender confidence are there.

Biofuel production is an evolutionary process. As with computer technology, the newest version is always just ahead of us. To reach our goal, second-generation biofuel technologies will need to become commercially viable, including those that turn crop residue (such as corn stover) and energy crops (such as switchgrass) into ethanol. Thirdgeneration biofuel technologies that turn feedstocks into advanced biofuels will also be needed. USDA's Research, Education and Economics Service is researching the technology needed for this effort, while USDA Rural Development is working to forge the necessary business

The conversion efficiency of ethanol production has improved markedly in the past decade. For example, just 200 bushels of corn can now be processed into about 540 gallons of ethanol. It would take no more than 40 gallons of fuel to produce that crop, so we would net about 500 gallons to distribute. That's a huge improvement over the conversion rate of the early 2000s. It is reasonable to expect we will see similar advances in next-generation biofuels, given the current rate of advances in technology.

USDA has been promoting the economic opportunities derived from emerging local and regional food systems. In

the Midwest, we should also consider the economic opportunities afforded by a regional energy system. The production and use of renewables on a regional basis make economic sense



and represent a historic economic opportunity for agricultural producers and rural America.

How do we do this?

By working backward from the 36 billion-gallon target, using a regional supply-chain approach. We should focus on a diverse group of dedicated feedstocks, including: 1. perennial grasses; 2. energycane (similar to sugarcane); 3. biomass sorghum; 4. oil seed crops and algae; 5. woody biomass. In using crop residues and planting special "energy crops" to produce biofuels, we must do so in a way that doesn't deplete soil fertility or create problems for other crops (see page 19 of this issue for more on this topic).

A business model similar to how we developed the ethanol industry can be used in this effort. Capital was found for ethanol projects in the 1990s by issuing proposals that asked for public participation in a project. With the membership fees paid, business plans were developed and prospectuses were issued to sell stock in a company.

If enough people were willing to invest, we would be able to complete a project. We could spread the investor risk and the credit risk as widely as possible.

To encourage public support, cooperatives are a great business model. New-generation cooperatives, unlike traditional cooperatives, are financed through the sale of delivery rights. Delivery rights represent a member's right to deliver a specific amount of commodities to the cooperative.

A Rural Development staff member in Iowa told me about a new-generation cooperative operating a producer-owned ethanol plant that is producing more than 30 million gallons per year. Within two months of its formation, 400 area residents had invested in the plant and become memberowners of the company. The shareholders are area farmers who are also the primary suppliers of the corn processed in the facility. The producers are contractually obligated not

continued on page 36

## Features

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p. 12 p. 20

## 4 What Cooperatives Do

Market access, countervailing power and yardstick roles enhance economic efficiency By Charles Ling

## 8 Better Beginnings

FarmStart offers a helping hand to new farmers and ag co-ops By Stephen Thompson

## 12 The Little Co-op That Could

Vermont food co-op overcomes initial skepticism to win hearts (and wallets) of city By Dan Campbell

## 19 Cellulosic biofuel development must balance need to maintain soil quality

By Stephen Thompson

## **20** Community Wind

Maine island community lowering energy costs with wind-power project By Alan Borst

## **24** Controlling Counterparty Risk

How country elevators can protect against the downside By Paul Narduzzo

## **26** Regional Network Boosts Competitiveness

Diverse interests in S. Minnesota come together to tap new business opportunities, markets By Anne Todd

## Departments

- 2 COMMENTARY
- **UTILITY CO-OP CONNECTION**
- **CO-OP EDUCATION**
- **CO-OP DEVELOPMENT ACTION**
- **NEWSLINE**
- PAGE FROM THE PAST

#### ON THE COVER:

City Market/Onion River Co-op in Burlington, Vt., started life as a fullservice grocery store amid a swirl of controversy, but it now counts nearly one in four city residents as co-op members. See page 12. Photo bv Ben Sarle





### By Charles Ling, Ag Economist

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**Editor's note:** This article is a sequel to "What Cooperatives Are (and Aren't)," Rural Cooperatives, Volume 76, Number 6, November/December 2009.



he year 2012 has been declared by the United Nations General Assembly as the International Year of

Cooperatives in order to highlight the contribution of cooperatives to socioeconomic development worldwide. That same year also will be the 90th anniversary of the publication of "Economic Philosophy of Cooperation," the first academic paper on the theory of cooperation, published in the American Economic Review (Nourse, 1922; Hess). The piece was written by Edwin G. Nourse, who later became the first chairman of the Council of Economic Advisers, Executive Office of the President, 1946-49.

This may be an opportune time to review Nourse's ideas on cooperation and see if they have relevance to the reality of the market performance of cooperatives today and, therefore, if they deserve to be relearned.

Nourse's primary focus, along with the oft-quoted "brief remarks" he made years later (Nourse, 1945), was on the role agricultural cooperatives played in the marketplace. This arose from his observation that the attempt to apply the cooperative form of organization to economic needs and problems in agriculture was critically important.

## Purposes of cooperation

The following examples are taken from Nourse's paper to illustrate how farmers organize cooperatives to perform various market functions jointly and efficiently in various market situations — functions that cannot be satisfactorily carried out alone by individual farmers:

1) Cooperation for market access — An example is a small fruit-producing area far from any large market. The product is perishable, hence both risk and

marketing expense are high. Volume is not large enough to attract a private distributor. Facing this situation, producers have the option of organizing a cooperative association to market their products. These cooperatives have frequently demonstrated the ability to achieve successful results where private outside entrepreneurship fails to perform.

- 2) Local to regional coordination A local cooperative creamery may initially be effective in meeting the competition of other small, private creamery operations. However, when competing creameries have grown to be entities of great size, the competition must be met by a distributing organization of equal scope. This will often be achieved through federation of the cooperative creameries across a region which may embrace an entire state, several states or parts of a state.
- 3) Region-wide associations In many instances, growers in horticultural regions have organized and integrated highly efficient businesses that serve producers across an entire production region by assembling, processing and

distributing their products. These agencies have eliminated wasteful competition both at the local shipping point and at the central markets. Furthermore, they are the instruments of the producer and owner of the goods, and hence are likely to be more aggressive in the effort to reduce expense and wastage in the handling process and to improve quality and enlarge outlets.

idea that a means must be found for giving agriculture a type of organization whose productive and bargaining units respectively will expand in step with the growing needs of the agricultural techniques (and its accompanying capital demands) and of the size requisite to an effective bargaining position in contact with the units of commercial organization with which they must deal."

1) "It is to make the most economical and efficient market channel by which whatever volume of product farmers see fit to produce gains access to the attention and the purchasing power of all who might use such a product. (For supply-buying coops, most economical access to the best sources of the goods they need.) Thus, a true supply-and-demand price is allowed (and aided) to express itself for the guidance of producers."



(Author's note: Cooperative organizations covering entire production regions have been most prevalent in California because of the characteristics of the state's economic geography. This type of cooperative organization was called "the California plan" and was promoted on a national scale in the 1920s by Aaron Sapiro, with varying degree of successes and failures (Sapiro; Larsen, et al).)

#### Countervailing power

The above examples show how cooperatives are organized and grow to enable farmers to exercise "countervailing power" in the market-place, although the term was not coined until the 1950s when economist John Kenneth Galbraith cited the type of cooperatives made famous by Sapiro as an example for his explanation.

Nourse certainly recognized the importance of countervailing power if cooperatives are to have a strong market position. As he stated: "Possibly the keynote of the philosophy lies in the

#### Pro-market

Nourse said that the theoretical implication of agricultural cooperation "is preeminently that of functional reorganization rather than comprehensive economic regeneration." In other words, the farmer takes the essential facts of the market as given and, working together with other producers through the cooperative, seeks to be in the most effective market position to compete. Thus, the distinctive economic philosophy of this business form is viewed "as a means to improve the lot of both farmer and consumer by improving the efficiency of the economic machine."

Cooperatives enable farmers to effectively compete in the marketplace and garner market signals that put them in a position of prompt and sensitive response to the reaction of the consuming public and guide their farming business decisions. According to Nourse, the cooperative objective is twofold (Nourse, 1945):

2) "It aims to reflect these market conditions back most promptly and fully to producers in ways that will both guide and, so far as possible, assist them in changing their methods so as to continue production and to prosper or to shift to more suitable lines of production."

### Competitive yardstick

In Nourse's view, the cooperative is a means for promoting and maintaining competition in the marketplace. The supply-demand-price dynamic "provides a powerful stimulus to the association to devise further economies of method which will enable them to maintain the level of net returns to the grower. Such competition also spurs the private agency to outdo the cooperative in its efficiency in order to hold its business."

He used the term "yardstick" years

later (Nourse, 1945), when he said the place for the agricultural cooperative in the nation's business "is primarily that of 'pilot plant' and 'yardstick' operation. Its objective is not to supersede other forms of business but to see that they are kept truly competitive."

The cooperative is to "occupy certain strategic points, and there to set a plane or pace of competition which will assure for the farmer efficient service at true long-run cost." When such services (manufacturing, distributing, transporting, financing, etc.) are furnished efficiently and economically (which means in a truly competitive manner), "there is no occasion for the farmer to occupy the field and divert some of his capital and some of his managerial time and effort to these tasks and away from his main enterprise of farm production."

Farmers should remain vigilant. Nourse cautioned: "It is of the upmost importance, however, that farmers shall have both the legal institutions and the organizational 'know-how' to step into these fields when and to the extent that service is inadequate or unduly high in cost. It is important also that they remain in each of these fields with an organization sufficiently large to attain high efficiency so that farmers shall be protected against any subsequent lapse in the quality of service or temptation to profiteer in charges by the noncooperative service agencies.

"But it is just as important that the cooperatives recognize when they have in fact attained their real objective by demonstrating a superior method of processing or distribution or by breaking a monopolistic bottleneck, and that they should then be content merely to maintain 'stand-by' capacity or a 'yardstick' operational position rather than try to occupy the whole field or a dominating position within it. In some

"The cooperative is a means for promoting and maintaining competition in the marketplace...lts objective is not to supersede other forms of business, but to see that they are kept truly competitive."



cases, they may be well advised in entirely terminating operations once they have stimulated regular commercial or manufacturing agencies to competition amongst themselves."

Nourse's economic philosophy of cooperation may be summed up in a nutshell: Cooperatives make it feasible for farmers to jointly market their products. The cooperative may evolve to a scale large enough to effectively bargain with other market participants and/or to avail itself of scale economies in processing and marketing operations. Subject to the same market disciplines and supply-demand-price dynamics as any business, the presence of the cooperative challenges other market participants to operate efficiently and thus strengthens the competitive market mechanism. When the market for members' products has become truly competitive, the cooperative may want to assume only a stand-by position but maintain the legal institutions and organizational capacity to reenter the field, if necessary. Table 1 summarizes all these points in the left column.

Examples in real life show that Nourse's ideas on cooperatives are still

very relevant today. Consider dairy cooperatives, which as a group are the most prominent U.S. agricultural marketing cooperatives. A point-bypoint comparison of dairy cooperative practices to Nourse's theory is summarized on the right column of table 1. It shows that market performance of dairy cooperatives coincides with the basic principles posited by Nourse's economic philosophy of cooperation.

With current renewed interest in the cooperative form of doing business, it may be worthwhile for the newgeneration of cooperators to relearn Nourse's ideas and fully understand the roles cooperatives play in the marketplace.

Editors note: More details on cooperative theory and practice using dairy cooperatives as a case study will be available in a forthcoming research report from the Cooperative Programs office of USDA Rural Development.

**Table 1** — Comparison of Nourse's cooperative theory and dairy cooperative practice

Economic philosophy of cooperation	Market performance of dairy cooperatives
Cooperatives are organized for efficiently carrying out specific business functions.	49,675 dairy farmers in 155 cooperatives marketed 83 percent of U.S. milk in 2007.
Cooperatives can be of any size (and can be local, regional or national in scope) that allows them to function efficiently in the marketplace.	The smallest local cooperative has a few members marketing less than 1 million pounds of milk per year; the largest one has more than 10,000 members in the 48 contiguous states and markets tens of billions of pounds of milk.
Cooperatives afford farmers the organizational sizes for exercising countervailing power.	Collective bargaining for better prices and terms of trade is the exercise of countervailing power.
Cooperatives are pro-market; they let the market supply-and-demand price be the guidance for producers.	Dairy cooperatives and their member-farmers are subject to the disciplines of the market in a free economy.
Cooperatives are a means for farmers to promote and maintain competition — as the competitive yardstick.	To be competitive, processors must match the effectiveness and efficiency of dairy cooperatives.
In those fields where the market has become truly	Dairy cooperatives have comparative advantages

competitive and farmers can be well served by other firms, cooperatives may want to cede the field and assume only a stand-by position (to preserve members' capital, time and efforts for use on the farm), while maintaining the legal institutions and organizational capacity to step in if there is a relapse of market inadequacy.

Note: Data from "Marketing Operations of Dairy Cooperatives, 2007," USDA/RD Research Report No. 218, 2009.

in procuring milk and have major shares in making hard products (71 percent of butter, 96 percent of nonfat and skim milk powder, and 26 percent of cheese — the latter decreased from 34 percent in 2002). Their shares are less significant in sectors that are capital-, technology- and service-intensive and that carry high product and market risks (7 percent of fluid milk, 4 percent of ice cream, 11 percent of yogurt, 14 percent of sour cream. Their share of cheese has also declined in recent years). However, dairy cooperatives have the wherewithal to take up the slack if the market fails to perform well.

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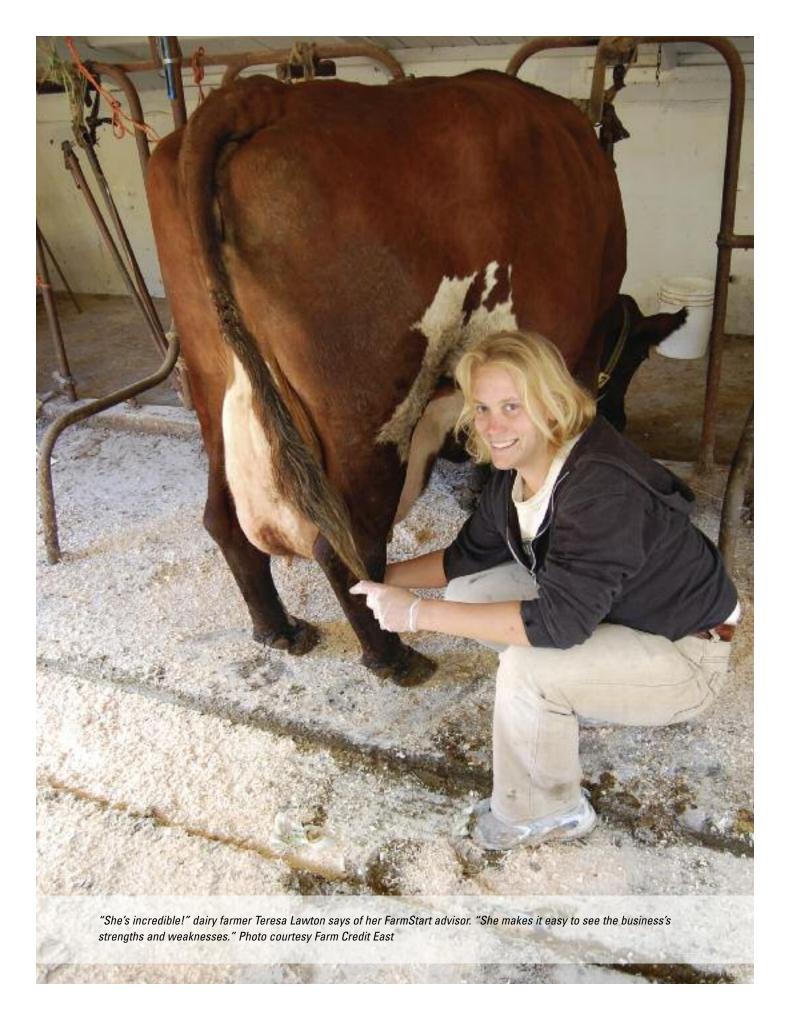
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#### By Stephen Thompson, Assistant Editor



eginning farmers and small agriculture cooperatives often find it hard to raise the necessary working

capital for a successful launch. But in the Northeast, there is a new resource they can tap into. Farm Credit East and CoBank are offering a new program — FarmStart LLP — a credit and training program designed to help new farmers and farm-related businesses get off to a solid start. As part of the producerowned Farm Credit System, both of these cooperative lending institutions have service to agriculture as their top

"Our field consultants noticed that new farmers needed working capital," says David Boone, program manager. "They'd put everything they had into their new businesses, they were carrying mortgages and equipment loans, but they had nothing to spend on operating expenses. They were using credit cards to buy what they needed."

Both the management and the board of directors of Farm Credit East thought that a program addressing this problem would mesh well with the Farm Credit Administration's mandate to its member banks to help more beginning farmers. The board decided to set aside funding for high-risk loans

to small beginning farmers and small farm-related businesses and cooperatives.

In partnership with CoBank, Farm Credit East established FarmStart as a separate limited liability partnership (LLP) to administer the program. FarmStart offers loans of up to \$50,000 for working capital to qualifying applicants.

## Solid business plan a must

The requirements are stringent. The applicant must be able to show that he or she is of good character, demonstrate business ability and produce a solid business plan that shows that the borrower has the capacity to repay the loan. He or she also must agree to accept help and supervision from a FarmStart representative, to undergo regular reviews of the business' books and to attend educational seminars on financial management.

To help participants keep on top of their finances, Red Wing Software, a firm specializing in farm and business software, donates a copy of its CenterPoint accounting software to each participant. Participants are expected to graduate to conventional credit within five years of enrolling in the program.

Good character and good credit rating requirements are key to making the program work, says Boone. "A

credit score under 650 probably isn't going to work. We ask for two character references; sometimes our loan officers know the [people used as] references. And we do a little research on our applicants."

The program's first participant, in 2006, was a young producer who grew his crops in greenhouses. Farm Credit East had provided him with a long-term real estate loan of \$150,000, an equipment loan of \$50,000 and a Farm Service Agency-guaranteed operating loan of \$100,000. However, the young farmer still needed additional operating money. With only 16 percent equity in his operation, he wasn't very likely to get it through conventional credit channels. A \$50,000 FarmStart loan gave him what he needed to get over the top; three years later, he's well on his way to paying off the loan.

The FarmStart program currently has 52 participants; only one borrower is currently delinquent. Since the program started three years ago, only one loan has shown a loss. Advisors are all qualified business consultants and are required to take a one-day training course every year.

"They help the borrowers develop a monthly cash-flow budget," says Boone. "They sit down with them and talk about how things are going and do a review every two or three months. If they're getting off budget, they talk about how to get back on track."

## Generation to generation

The program also tries to address the problem of passing a farm business down between generations. "We have a program called Generation NeXt, where we sit down with father and son and discuss how to make the transition," says Boone. "And we do a seminar on taking over the family business."

Ben Fisk, a 21-year-old maple syrup producer in New Hampshire, had different problems. He'd started his business as a child, using gifts and inherited equipment from parents and relatives and, later, with funds from a full-time job. He slowly built up the

# Better Beginnings

FarmStart offers a helping hand to new farmers and ag co-ops business by reinvesting the profits. All was going well until a severe ice storm ruined much of his equipment.

A FarmStart line of credit helped him rebuild the business. However, Fisk found the training offered by the program just as helpful as was the loan. "It wasn't just borrowing money — it was help in learning how to budget," he says. "You learn different ways to look at your operation and to use money."

Help he received learning how to use bookkeeping software was also important. And although he hasn't been able to yet use everything he's learned, he says: "If I can learn what I need to before I get there, all the better."

## Advisor proves invaluable

In March 2006, Teresa Lawton started a small dairy on a 25-acre Massachusetts farm that's been in her family for 200 years. "I needed to find a way to make a small operation pay, because you can't expand here like you can in other places," she says.

Lawton had worked for the Massachusetts Department of Agriculture as a dairy inspector, where she learned about the growing market for whole, unpasteurized milk. She decided to try producing raw, grass-fed milk, which would fetch a premium price.

With the proper license and labeling, farmers are permitted to produce and sell raw milk in Massachusetts. However, the milk must be sold on the farm; retail stores are not allowed to stock it.

She started out with just five Ayrshire cows, a hardy breed known for low somatic cell counts and efficient milk production from a grass diet. After she started to expand production, she applied to Farm Credit East for a line of credit to buy hay, and learned about FarmStart.

"I don't like to borrow," says Lawton, "but sometimes, I'm just a little short. Now I don't have to use credit card debt."

However, like Fisk, she found the training just as helpful as the credit. Lawton sees her relationship with her FarmStart advisor, Briana Bebee of Farm Credit East, Middleboro, Mass.,

## **Merger creates Farm Credit East**

Farm Credit East is a new association with 19 offices that combines the credit and financial services teams of First Pioneer Farm Credit and Farm Credit of Western New York. The merger of these two co-op lending institutions, which became effective Jan. 1, 2010, was approved by more than 90 percent of both associations' stockholders in separate votes conducted last November.

With more than \$4.2 billion in assets, the merger allows Farm Credit East to offer more capacity and resources to its members. It has nearly 11,000 customers in a six-state territory that includes New Hampshire, Massachusetts, Connecticut, Rhode Island, New York and New Jersey.

Both predecessor associations have a shared history providing tax, record keeping, consulting, appraisal and other services to members. Farm Credit East is part of the cooperative Farm Credit System.

"We will continue to work everyday on the credit and financial services needs of farmers, commercial fishermen, forest products businesses and farm related businesses," says CEO Bill Lipinski.

In a recent column, Lipinski noted that the real value of being a Farm Credit member is in knowing that agriculture remains the focus of Farm Credit in good times and bad. And times have been pretty rough recently for many members in the Northeast, including those in the dairy, nursery, tobacco and timber industries.

Lipinski notes that the staff has worked hard to develop contingencies with many customers suffering through the slump. "We did careful projections and credit analysis," Lipinski writes. "Based on the best industry advice, we recommended and approved substantial increases in operating lines to help keep many businesses afloat. For some, we added new conditions and FSA [USDA Farm Service Agency] guarantees. And, most importantly, our customers stepped up with more collateral, better business plans and more frequent financial reporting.

"Sometimes, even with our best efforts, a single increase in a line of credit was not enough. That's when we considered an additional increase to fund operating losses above those of our original projection."

While these efforts can't save the day in every case, they have proved the difference for many.

office, as one of the great benefits of the program. "She's incredible," Lawton says. "I really enjoy meeting with her and going over things. She makes it easy to see the business's strengths and weaknesses."

Lawton says that the methods she's learned under the program have given her a new understanding of her operation's efficiency and profitability. "I'm now milking 25 cows," she says, "And I'm making less profit per cow than when I only had five or six." That kind of knowledge is vital in making investment decisions.

Other new ventures owned by young operators that have been helped by

FarmStart include a dairy cow hooftrimming service, a welding business and a fertilizer- and lime-spreader. A trucker and various types of small farming operations have also received help from FarmStart.

However, so far no new farm cooperatives — one of the primary targets the program was designed to help — have yet applied for assistance.

"We'd like to find some co-ops to work with," says Boone. "We've had some discussions, but nothing definite." Interested co-ops, or farmers interested in starting one, can contact Boone at dave.boone@ farmcrediteast.com for more information.

## Utility Co-op Connection

## Electricity service transformed rural America

### By Anne Mayberry

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ay 11 is the 75th anniversary of the Rural Electrification Administration (REA), the predecessor agency

to the Rural Utilities Service of USDA Rural Development. When President Franklin Roosevelt signed the executive order creating the REA in 1935, unemployment was 20 percent. Average annual wages — for those employed were \$1,600. You would expect to pay 10 cents for a gallon of gas. If you lived on a farm, you — along with 5.5



million other farm families nationwide probably would not have had electricity.

Without electricity, residents in rural areas were not able to enjoy the same economic advantages as their urban counterparts. Water for livestock, cooking and cleaning had to be hauled from a well. There was no refrigeration. During warm weather, dairy

farmers risked milk spoilage, which meant that all their milk had to be thrown out. Work was finished in darkness, or by lantern light.

For years, electric utilities insisted that it was not profitable to sell electricity to farmers. But rural electrification was viewed as a desirable step toward improving the lives of rural residents. Signing the executive order was the first step toward creation of the agency.

Yet, while the executive order established the importance of rural electrification, it did not spell out details of how the program was to be designed or implemented. For example, the agency was originally intended to be part of the U.S. Department of the Interior. While there was general agreement that low-cost financing was key to bring electric power to rural areas, many expected the electric industry to participate in the program.

Established as a temporary agency, one of REA's first decisions was to determine how to best fund



Well into the 1940s, much of rural America still relied on kerosene lamps for light. Below, electric co-op line crews brought life-changing energy to farms and rural towns.

construction of electric systems in rural areas. Again, the utility industry, which had the expertise and capability of acting on short notice, seemed to be the preferred course of action. The plan they set forth was to connect 351,000 rural residents and businesses.

But according to the utility industry, rural electrification was a social, rather than an economic, problem. There was no agreement on the definition of profitable service or the extent of the work to be done. These divergent views, along with utility industry concerns about the rural electrification program, resulted in a shift that eventually led to the creation and funding of rural electric cooperatives.

## Farm co-op roots led to electric co-ops

Farmers had a history of working with agricultural marketing cooperatives. It was this experience that led to an agreement under which REA would furnish the engineering and legal

continued on page 23



## By Dan Campbell, Editor dan.campbell@wdc.usda.gov



hen word got out that the city of Burlington, Vt., had awarded a lease to a natural foods co-op to operate the

downtown area's only full-service grocery store, it sparked an intense, emotional debate among residents. One local senior cut to the heart of the matter at a town hall meeting when he shouted: "You better not take away our red meat and make us eat granola!"

But fears that tie-dye-clad hippies would be taking away their deep-fried corn chips and force feeding them with

tofu proved unfounded. Today, Tony the Tiger entices shoppers from boxes of Kellogs Sugar Frosted Flakes, while nearby shelf-mate EnviroKidz Organic Amazon Frosted Flakes call out to shoppers who are equally interested in preserving the rain forest as in filling their bellies.

In the words of Clem Nilan, the store manager, City Market has become a "hybrid co-op store," offering members a wide variety of natural and organic foods, as well as a full line of conventional groceries. Providing this choice to members has proven to be a highly successful business formula for what Nilan calls "The Little Co-op that Could." Last year, City Market/Onion

River Co-op rang up \$27 million in sales. Receipts have risen by at least 10 percent the first seven years of operation and by 7.5 percent during last vear's recession.

The reasons for the co-op's success go well beyond offering both conventional and organic/natural foods. City Market also goes all out to procure as much locally and regionally grown food as possible, operates popular community outreach programs to better serve senior citizens and low-income residents, supports and interacts with other farm and food co-ops and is striving to make the store a "green" operation.

Evidence of the latter can be seen in



the 136 solar panels recently installed on the roof, which are expected to provide up to 3 percent of the store's annual power needs (with payback on the investment expected in five years).

## Store closure opens door for co-op

As is often the case with food co-ops, the Onion River Cooperative began life as a food-buying club. When it started in 1973, the co-op focused on procuring staple foods, such as organic flour, for its members. As demand increased, it offered more foods and eventually rented a storefront. Further growth resulted in the co-op making several moves to larger quarters around Burlington.

Big things come in small packages: Although City Market covers only 16,000 square feet, more than 1 million people entered it last year. Local foods are big sellers, such as the 100,000 gallons of milk from two small Vermont dairy co-ops that the store sold during the past two years. Photo by Ben Sarle

The opportunity to leap into the ranks of full-service grocery stores occurred in 1999, when the downtown area's only major grocery store closed.

"The city wanted to make sure there was still a grocery store downtown, in part to serve the needs of seniors, people with limited mobility and recent immigrants," said Nilan, speaking as part of a co-op panel at the USDA Ag Outlook Forum in February. The city put out a request for proposals to lease a vacant city property and operate a new grocery store there.

Since the co-op was getting ready to move again anyway, it decided to submit a bid. The competition eventually came down to the co-op and a popular regional grocery chain. Winning the bidding competition "should have been a walk in the park," for the regional grocery, Nilan says. But the chain store placed a number of demands on the city, including the construction of a parking garage next to the store.

The city had a number of demands of its own, ranging from the hours of operation to requiring a plan for how the store would meet the needs of seniors and people with low-tomoderate incomes. The store operator would also be required to carry an array of home-grown Vermont products. Onion River Co-op readily agreed to meet those demands and did not ask for



Media gave extensive coverage to the protests that followed the awarding of the store lease to a natural foods co-op.

a parking garage.

The city council eventually voted 12-2 in favor of offering a 100-year lease to the co-op. The result was what Nilan terms a "firestorm" of protest. "The question came up over and over: how could a natural foods store meet the needs of all the people of the city?" Many people were worried that prices would shoot up under the co-op if it replaced conventional groceries with organic and natural foods.

The chain store backers launched a petition drive to force a referendum, calling for the city to provide an \$800,000 subsidy (primarily to pay for the parking garage). The referendum was defeated, but many residents still felt the city was ignoring the will of the people.

## Early success and struggle

The co-op used a \$3 million Business and Industry (B&I) guaranteed loan from USDA Rural Development to convert the vacant building into a modern grocery store. Despite the controversy surrounding its birth, the co-op was a hit with the public as soon as the doors opened in early 2002.

"Sales were never an issue," Nilan says. Burlington is a city of 38,000 people (the state's largest city), and City Market counts 9,000 of its households as co-op members. Even in the severe recession, membership climbed sharply. The co-op business model and the sense of trust and goodwill it fosters "really resonates" in the community, Nilan says.

But as many a co-op manager or director can attest to, strong sales do not always convert to profitability, and City Market's success was far from assured. Shortly after the store opened, the work force was unionized, and cost controls for both goods and labor seemed to go out the window.

"We nearly went under, even with

great sales," Nilan says. It took a couple of years of struggle to get the ship turned around.

Products purchased for resale are a grocery store's largest cost center, so getting the co-op's cost-of-goods in line was the biggest challenge faced in improving the store's margins. Target margins were set for each department and best practices were identified.

Early on, the store had been foundering due to not keeping a "live time" connection between changing costs and retail prices, Nilan says. The situation began to improve with a push to keep point-of-sale (or POS) records accurate and with the introduction of back-door scanning. The latter occurs on the receiving dock as each newly purchased item is electronically scanned to verify that the cost is the POSrecorded cost. If there is a discrepancy, this scan raises a warning if there is a margin issue.

Costs are now well in hand, and the store has been profitable enough to see its patronage per member shoot up from \$27 in 2008 to \$77 last year. That meant an extra \$250,000 was pumped back into the community around Thanksgiving.

## Valuing workers

The co-op operates on the basis of a triple bottom line that stresses commitment to: people/social responsibility, environmental stewardship and financial success. "Coops pride themselves on treating people fairly," Nilan notes, and the success of a food co-op is highly dependent on the performance of its workers. So, City Market does all it can to keep good people on board.

The store has 173 employees, including 129 full-time workers (or 75 percent of the total workforce). "That's many more workers than a conventional grocery our size would typically have," Nilan says. That's because grocery chain stores have a much more centralized infrastructure for functions such as marketing.

Unlike many other stores — where



Co-op staff members gather about the National Award of Excellence the store won in 2008 from the National Co-op Grocers Association. Facing page: Community outreach programs, such as the free lunches and teas it provides at local senior centers, have helped gain many new members for the co-op. Photos courtesy City Market

the goal is to maintain as many parttime workers as possible to avoid having to extend health and retirement benefits to them — City Market takes the opposite tack, trying to provide benefits for as much of the staff as it can.

Nilan says the co-op pays wages that average 25 percent more than those paid by conventional supermarkets in the region. Its wages average 93 cents per hour above the "livable wage" for Burlington, where 65 percent of the workers reside.

The co-op does a dollar-for-dollar match, up to 6 percent, of the pay workers route into their 401(k) retirement plans. Employees earn four weeks of paid vacation in their first year on the job, get benefits for riding mass transit to work and receive a 15-percent discount on purchases at the co-op.

Perhaps best of all, the co-op pays 100 percent of the cost for healthcare insurance premiums for its full-time staff. "Once staff begins contributing to paying premiums, you are really just reducing their wages - taking it out of one pocket instead of the other," Nilan says.

The co-op has worked hard to recruit workers of varied racial and ethnic backgrounds to better reflect the diverse demographics of the city, which

is changing due to immigration.

## Promoting local/regional foods

City Market sold about \$4 million in locally grown foods last year. "We could easily double or triple that amount if more was available," Nilan says. "We have a lot of 'holes' that we would like to fill with local foods."

The goal is to offer at least 1,000 Vermont-produced products. Last November it far exceeded that benchmark, selling 1,700 home-grown products.

Not only are co-op members eager to buy more locally produced foods, but this trade also has a big impact on the local economy. Nilan notes that the multiplier effect for agricultural trade in Vermont is 2.5 (meaning every dollar spent on farm products changes hands two and half more times), one of the highest rates for any industry. He estimates that 65 cents of every dollar spent at City Market stays in Vermont.

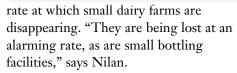
"When we buy from local producers, even more of our money stays in Vermont," Nilan says. "Our state's No. 1 export is money; our No. 1 import is food. So growing more local food is a great way to make Vermont's economy more sustainable."

A big concern in New England is the

## Going loco for local

City Market sold \$4 million worth of local/regional foods last year. The top 10 selling local/regional foods were:

- 1. LaPlatte River Angus Ground Beef
- 2. Vermont Maple Syrup
- 3. Cabot "Seriously Sharp" Cheddar
- 4. Co-op Milk Gallons
- 5. Misty Knoll Chicken
- 6. Cabot Butter
- 7. Maple Meadow Farm Brown Eggs
- 8. Local Honey Crisp Apples
- 9. Organic Local Carrots
- 10. Local Potatoes



To help support family dairy farms while supplying members with highquality milk, City Market and two other Vermont Co-ops — Hunger Mountain in Montpelier and the Middlebury Coop — are buying whole milk from one of the two remaining Vermont family bottling facilities, Monument Farms. The three co-ops retail the gallons under the Co-op label. The label lists the three dairy co-ops next to their pledge not to use bovine growth hormones.

"We told the farmers we will pay you what you think you need for the milk, and pay you the same rate every single month, so that there's none of this up and down stuff," Nilan says. "We like to call this our way of promoting domestic fair trade. When we put this label on our milk, sales took off." More than 100,000 gallons have been sold in two years.

"Selling local food is not easy — it is a labor of love," Nilan says. "You have a lot more vendors to work with, and you



need more people on the receiving

City Market has developed a spreadsheet to help keep track of what foods are coming from what growers and when. Missing all too often from the local food matrix are products that require more infrastructure, such as oatmeal, because of the loss of processing facilities in Vermont during the past 20 years or so. "The lack of this infrastructure and the high price of land are serious hurdles to providing Vermont with more local food," Nilan says.

The co-op works hard on in-store signage to let members know more about the foods for sale. Helping in this effort is a color key under which purple means local, green means organic, and orange means conventional. The store often posts signs about the farms that produce the food.

City Market offers a discount of 5 cents for every reusable cloth bag a customer fills, which resulted in 14 percent fewer disposable bags being used last year. But Nilan says he thinks it will require a statewide ban on plastic bags to really wean most shoppers from their "disposable bag dependency."

He cites the co-op's membership in the National Cooperative Grocers

Association (NCGA) as a major factor in its success. NCGA's 112 member coops support each other by sharing financial and marketing information and working as a virtual buying group. "For example, if we want to see how our produce section is doing compared to others, we can pop online and see the figures from other members," Nilan says. "This is very helpful when you operate an independent store and need some comparative data to see how you are doing."

## Reaching out to the community

More than 1 million people entered the store last year. "And we're not a real big store — just 16,000 square feet." The average size for a grocery store these days is closer to 70,000 square feet, he notes.

"None of the things we do, socially or environmentally, would work unless we won the hearts and minds of the people," Nilan says.

Burlington has won awards as one of the healthiest cities and best places to live in America. "It is a gorgeous place to live," Nilan says. But even here, one in five children is living in food insecurity. "And while we were doing a good job redeeming food stamps, we

continued on page 36

## Co-op Education



Tour helps co-op concepts 'come alive' for future cooperative leaders

## By Maria Miller, Director of Education

**National Farmers Union** 



he next generation of co-op leaders is taking time not only to learn the history of cooperatives, but also what really makes them work in today's economic and social environments.

Nearly 100 students from nine states came together recently in Minneapolis, Minn., to learn about cooperatives from co-op experts, employees and – perhaps most importantly – co-op members of all ages. The students were participants in the College Conference on Cooperatives, sponsored by the CHS Foundation and hosted by the National Farmers Union (NFU) Foundation.

Facing page: Students learned about what it takes to run a successful food co-op at Mississippi Market Food Co-op in St. Paul. From left are: Simone Cahoj, Jeremy Gragert, Brock Grewe, Todd Speltz and Bjorn Bergman. Below, Allison Melius (left) and Mingwei Huang check out the produce section. Photos by Maria Miller, courtesy National Farmers Union



"The conference provided me the opportunity to gain a very broad perspective of youth involvement in the U.S. cooperative moment," said conference attendee and speaker Mingwei Huang of Illinois. "I come from a student housing co-op background - a very small niche of the co-op movement. I learned a lot about agriculture, retail, food and rural electric co-ops, credit unions and rural community economic development."

Huang agreed with others that to foster a vibrant generation of co-op leaders, it's necessary for youth to

understand all kinds of co-ops and to learn from leaders in the various cooperative businesses.

The Feb. 20-22 event included participants from Minnesota, Wisconsin, South Dakota, Nebraska, North Dakota, Kansas, Iowa, Illinois and Colorado. Many of the participants are attending a community college, working on a bachelor's degree or pursing a master's degree, for which an understanding of the cooperative business structure is important.

To make cooperative education come alive for the participants, students

visited the headquarters of CHS Inc., one of the nation's leading agricultural cooperatives. "Don't limit your learning to your current education," said William Nelson, president of the CHS Foundation. He challenged the visitors to "get involved in things that you cannot complete in your own lifetime" as a way to truly make a difference.

The students also visited REI, a consumer cooperative that is one of the nation's leading sporting equipment retailers. Other stops on the tour included Mississippi Market Natural Foods Co-op and 7500 York Cooperative. The latter is a retirement housing cooperative where residents said they appreciate being

able to play an active role in determining their living environment.

"The conference expanded my knowledge of cooperatives," said Angie Koch of South Dakota. "Meeting speakers and others in attendance allowed me to make many connections."

Presenters included members, directors, employees and managers from traditional and value-added agricultural cooperatives. Attendees also gained perspectives from electric, housing and worker-owned co-ops, as well as consumer cooperatives, such as

The co-op tour included a stop at 7500 York, a memberowned/member-run housing cooperative – the nation's first senior housing co-op and considered to be a model of successful independent living for seniors. Below: Tour participants walked away with a better understanding of what can be accomplished with co-ops.





"Cooperatives are corporations where people work together to solve common problems, seize exciting business opportunities and provide themselves with goods and services." credit unions. Representatives from USDA Rural Development and the Peace Corps provided perspectives on cooperative development in the United States and abroad.

"Cooperatives are corporations where people work together to solve common problems, seize exciting business opportunities and provide themselves with goods and services," said Greg McKee, assistant professor and director of the Quentin Burdick Center for Cooperatives on the North Dakota State University campus. "Coops are here to stay."

By touring cooperatives and being able to quiz co-op leaders, members and government experts, participants

> walked away with a better understanding of the current challenges facing today's co-ops and the future opportunities for co-op structured businesses.

Twin City co-op industry leaders attended the conference luncheon, giving the attendees a chance to network. Amy Gales, central region president of CoBank, also addressed the group.

Conference coordinator Cathy Statz, education director for the Wisconsin Farmers Union, said the activities of Farmers Union involve cooperation, education and civic activism. "Our own history is closely tied with the cooperative movement," said Statz. "Cooperatives were made possible by legislative activity, and brought to life in communities both rural and urban. Events like these bring

these topics together."

Additional supporters of the conference included CoBank, The Cooperative Foundation, SPIRE Federal Credit Union, CHS Inc., MAC Education Foundation, Federated Youth Foundation and FUI Foundation.

For more information about NFU and its programs, visit: www.nfu.org. ■

## Cellulosic biofuel development must balance need to maintain soil quality



biofuels. USDA Photo

By Stephen Thompson, Assistant Editor stephenathompson@wdc.usda.gov

ellulosic biofuels offer

promise for a sustainable future, but only if certain precautions are taken, according to speakers who addressed: "Biomass for Energy & Conservation: Can We Do Both?" It was one of dozens of panel talks that focused on a wide array of agricultural and rural issues at the 2010 USDA Agricultural

Outlook Forum in February, held just

outside Washington D.C.

the gap.

Rattan Lal, professor of soil science at Ohio State University, called for restraint in using crop residues for generating fuels such as ethanol. Lal reminded the audience that ethanol produced from corn alone will be unable to meet future production targets, leaving "second generation" ethanol produced from cellulose to fill

Crop residues offer a tempting source of cellulose for this purpose, said Lal. However, he continued, these residues are extremely valuable for the maintenance of soil quality. Good crop production, he said, is dependent on returning most crop residues back to the soil, maintaining what he called "humus capital."

Removing an excessive amount of crop residues can lead to loss of soil nutrients, erosion and the reduction of vital biological activity, such as beneficial microbes and earthworms, Lal said. Soil loss from erosion, he noted, is directly related to loss of mulch cover, while earthworm activity is vital for proper hydraulic conductivity in the soil. He told the audience that higher levels of soil organic carbon, maintained by retaining crop residues, are correlated with higher grain and soybean yields.

Lal said that up to 25 percent of total biomass could be harvested safely. However, he cautioned against the idea that cellulosic ethanol can be produced using low inputs on marginal soils. He maintained that replacing 10 percent of petroleum fuel requirements in the United States would require using 43 percent of current cropland. He suggested that mitigation of carbon dioxide emissions could be better accomplished by increasing fossil fuel efficiency, conserving and restoring forests and grasslands and sequestering carbon in soils.

Joe DiTomaso, an ecologist at the University of California-Davis, told participants that perennial grasses grown as cellulosic biofuels crops could pose a danger of escaping fields and becoming invasive. Such grasses include switchgrass, Miscanthus X. Giganticus, and giant reeds. Many of the characteristics that make them attractive as biofuel crops are also the characteristics of weeds, he said. Those traits include competitiveness, pest resistance and tolerance to drought, salinity and low fertility. Indeed, some of the species now proposed as cellulosic crops are already listed as noxious weeds in some localities, he said.

DiTomaso suggested that precautions be taken before a perennial grass crop is adopted. Those would include choosing crops that have been shown not to have high risks of invasiveness in the target area and taking active measures to minimize escape. For instance, he said, standard, non-sterile switchgrass is not suitable for cultivation in California because of a high escape risk. Cultivation areas must be chosen with caution as well, he said, and the conversion of natural habitats should be avoided.

Other suggestions included breeding crop varieties to minimize invasive traits; developing individual antidispersal, management and eradication protocols before planting; and establishing and funding an industry plan to quickly detect and eradicate escaped crops.

Douglas Karlen, of the Soil, Water, and Air Resources Research Unit of the USDA Agricultural Research Service in Ames, Iowa, repeated Lal's assertion that crop residues are vital for

continued on page 23



Maine island community lowering energy costs with wind-power project



**Alan Borst, Ag Economist Cooperative Programs USDA** Rural Development



onventional electricity generation from fossil fuels is associated with several policy problems, including pollution,

import dependency from countries with hostile or troubled governments, trade deficits and periodic price shocks. Renewable energy sources are clean fuels that are domestically-based and substantially local.

Wind is one of the lowest cost and fastest growing renewable energy sources in the United States. Wind



power provides clean and cost-effective energy generation, increases rural incomes, hedges against fuel price shocks and increases energy security.

Most U.S. wind-energy projects are remotely owned by large corporations, while the remaining fraction is owned, wholly or in part, by local residents and businesses — referred to as "community wind." According to Windustry, a Minneapolis-based nonprofit organization working to increase wind energy opportunities for rural residents, as of January 2010, community wind makes up 1,521 megawatts (MW) of the total 35,170 MW of U.S. wind energy. Community wind energy projects have all the benefits of remotely owned wind

projects and some important additional ones.

Community wind developer Own Energy identifies three important benefits:

- Ownership is retained in the community and profits are "recycled" there, creating incremental jobs, wages, business income and local pride.
- Community wind developers and their financial partners are typically U.S.-based, further ensuring that profits from these projects are pumped back into the home economy, not shipped overseas.
- Increased success rate of community wind projects leads to increased

knowledge, awareness and acceptance of wind power, thus reducing public opposition.

The bottom line: few would dispute that community wind is good for the economic development of rural communities and for the entire U.S. wind-energy industry.

## Best in the West. Least in the East

Community wind is geographically concentrated in five states: Minnesota, Washington, California, Iowa and Texas. These five states have 88 percent of developed U.S. community wind power. States east of the Mississippi River have 2.5 percent of U.S. community wind. This is partly due to the more limited wind resources available in much of the East, especially the Southeast. It is also because of higher population density and real estate patterns. Landowners tend to own smaller parcels of land, which makes project development more difficult. Mark Anderson summed up the New England situation in the May 2007 edition of Windpower Monthly by commenting that it is a region "where vistas are sacred and naysayers can be rich and powerful."

Massachusetts has by far the most community wind of any eastern state, with 15 megawatts (MW). Massachusetts has been relatively successful at promoting community wind development through a series of programs and incentives over the last decade. The coastal town of Hull, outside of Boston, installed the first community-owned utility-scale wind turbine in New England in 2001. It proved to be popular enough that a second, larger wind turbine was installed in May of 2006.

With the success of the Hull project as precedent, several other community wind projects were developed in Massachusetts. All of these projects have been developed by either municipalities or a single business or organization. The cooperative model that has been so successful with community wind projects in the Midwest and West had not been used in New England until recently. All that changed recently on a Maine island.

#### Wind Power Down East

The largest community-owned wind project in the East was recently completed on the island of Vinalhaven — one of the Fox islands — in Penobscot Bay off the central Maine coast. The hope of the project developers and local community wind advocates has been that this project could serve as a template that would stimulate similar projects. There is evidence that this is happening.

On Nov. 17, 2009, the \$14.5-million Fox Islands Wind Project was officially

commissioned. Governor Baldacci and Maine House Speaker Hannah Pingree joined community and project leaders to dedicate this wind-energy venture. The three General Electric 1.5megawatt wind turbines were installed in the summer of 2009 and started generating electricity in December. This project is providing stabilized power supplies and lower energy costs for the islands' residents, who had been paying more than double the national average for their electricity.

Since wind speed is not constant, the three turbines actually generate just under 30 percent of their total rated capacity of 4.5 MW — about 1.3 MW per hour — or 11,600 MW hours per year. Residents consume about 10,500 megawatt hours of electricity per year. Any surplus energy will be sold to Central Maine Power, their electricity supplier. Residents consume about 10,500 megawatt hours of electricity per year. Any surplus energy will be sold to Central Maine Power, their electricity supplier.

There will be a surplus in the winter, when the wind blows harder, and a deficit in the summer, when electricity will be purchased from the Central Maine grid. The electricity generated from the project is expected to offset 5,400 tons of carbon dioxide emissions.

The Fox Islands have a history of generating their own power. Maine's strong offshore winds historically made these communities viable by filling the sails of ships carrying granite, timber and other vital products between islands and the mainland. There was once a mill system that used hydropower for a granite-cutting operation. There have also been coal-fueled and dieselpowered generating plants on Vinalhaven. Now this wind energy project is considered a model for communities along the Atlantic Coast. Several other Maine island and coastal communities are now looking at wind power as a viable alternative or complement to conventional energy sources, including Monhegan, Swans Island and Frenchboro.

The Island Institute in Rockland, a

development group that focuses on Maine's 15 year-round island communities, is one of the entities that was involved with the development of the Fox Island project. It reported that a neighboring island has already voted to develop wind energy: "This past summer Monhegan ... voted with a 75percent majority of ratepayers and taxpayers to proceed with plans to erect a small turbine on the island's highest hill: Lighthouse Hill. This proposed turbine will supply more power than can be used to meet all the island's winter electric needs and about a third of its summer needs."

## Co-op Wind

The Fox Islands wind project has been successful because of the combination of the residents being faced with relatively high electricity costs and the presence of an excellent wind resource. The economics for the project were solid. This has been the same combination that has spurred the recent development of several community wind projects in coastal Alaska. In both Alaska and Maine, rural electric cooperatives have been the project developers.

For most of the last century, the Fox Islands have secured their electricity through a small investor-owned electric utility — Vinalhaven Light & Power Co. In October 1974, the islanders voted with an 80-percent majority to organize the Fox Islands Electric Cooperative and to buy out Vinalhaven L&P. In 2001, the co-op began to explore the idea of developing wind power.

The timeline shows that:

- In spring 2007, the Island Institute organized a co-op meeting to discuss wind power on the islands.
- In the fall of 2007, the co-op funded a feasibility study for a wind project.
- In the spring of 2008, community meetings were convened to discuss the proposed project.
- In early 2008, the cooperative formally requested assistance in pursing the wind-power project from the Island Institute.

• In August 2008, the co-op voted to approve the wind project by a vote of 284 to 5.

The project was financed with a combination of loans from the Rural Utilities Service of USDA Rural Development and a tax-equity investor. As reported on the Fox Islands Wind website (http://www.foxislands wind.com/background.html), a forprofit firm had to be formed to take advantage of the tax credits.

Philip Conkling, president of the Institute, worked with Dr. George Baker, a seasonal resident of Frenchboro Island who is also on the faculty of the Harvard Business School, to complete a preliminary economic analysis for the cooperative as well as a financial model suggesting how the island communities might finance a local wind-power project by finding a tax equity investor and by selling power and renewable energy credits via the Fox Islands Co-op's submarine cable.

Because such a tax investment was not available to the nonprofit Fox Islands Electric Cooperative, a separate for-profit Fox Islands Wind LLC (FIW) was formed to take advantage of the tax credits, with Baker selected as CEO. He and the Island Institute secured the commitment of a Maine company for a roughly \$5-million investment in exchange for the tax credits the federal government allows to encourage investments in renewable energy projects. Permanent financing was obtained via a loan from the Rural Utilities Service."

While the Fox Islands wind project is currently negotiating a turbine noise issue with some dissatisfied neighbors, it is moving forward and setting an example that is stimulating the development of other coastal community wind projects.

## Utility Co-op Connection continued from page 11

expertise, in addition to loans, for newly formed rural electric cooperatives. One year to the date of the executive order, Congress approved legislation creating the REA.

The 1937 Report of REA noted that the most spectacular increase of rural electrification in the history of the United States had been achieved. More than 1.2 million farms had electric service, and the gap between urban and rural standards of living was closing. For the first time in history, thousands of rural communities had hope of securing electricity.

During the 1940s, REA funded cooperatives, which built rural electric systems with tremendous speed. In 1944, still over one-half of the nation's farms did not have electric service. Yet by 1953, over 2.5 million farms had electricity and REA had loaned nearly \$2.8 billion to 983 rural electric cooperatives, 44 public power districts

and 25 electric companies.

Seventy-five years later, there can be no doubt that REA has had a tremendous impact on rural America. It is credited with transforming a life of darkness and drudgery into one of productivity and prosperity. REA's successor, the USDA Rural Utilities Service (RUS), loans approximately \$6.6 billion annually to rural electric cooperatives to continue to bring modern, reliable service to rural America.

"The electrification of rural America is considered one of the biggest engineering triumphs of the last hundred years," says RUS Administrator Jonathan Adelstein. "The role of the Rural Electrification Program was one of the greatest successes in government technology programs of all time."

Editor's note: Sources for this article include: Electricity for Rural America, by D. Clayton Brown, Greenwood Press, 1980; Rural Lines newsletters and Report of the Administrator (various dates), both published by the Rural Electrification Administration of USDA.

## Cellulosic biofuel development must balance need to maintain soil quality continued from page 19

maintaining soil quality. He said that an "industrial" approach must be avoided when contemplating feedstocks for biofuels in order to avoid causing environmental damage. Preserving landscape diversity allows the land to fulfill vital functions beyond growing crops, including sequestering carbon, providing wildlife habitat, recycling nutrients and protecting soil and water quality.

Karlen said that each farm should be approached as a system, and that addressing individual problems separately should be avoided. "There's no single solution," he told the audience. Instead, local landscape characteristics and other factors should be taken into account when choosing feedstock crops, and different

conversion methods - such as thermochemical pyrolisis and traditional fermentation — should be evaluated in each instance.

According to Karlen, questions that should be answered when evaluating farming practices include:

- What are the water and air quality impacts of current practices?
- What is the best spatial arrangement of plants on the landscape?
- Is the soil degrading or improving?
- Are crop and livestock production affecting environmental quality?

In all cases, he said, resource needs must be matched with appropriate conservation practices, and landscape plans must be constantly evaluated and modified as needed.



# Counterparty

## How country elevators can protect against the downside

### By Paul Narduzzo, Executive Vice President

CoBank, Regional Agribusiness Banking Group

Editor's note: Narduzzo oversees the financial services provided to CoBank's U.S. agricultural cooperative customers and the institutional lending relationships with agricultural credit associations. CoBank is a \$58-billion cooperative bank that provides loans, leases, export financing and other financial services to agribusinesses and rural power, water and communications providers in all 50 states.



deal is a deal. But what happens if one of the parties in that deal can't uphold his or her end of the bargain? In rural America, even in the best of times, it can mean the difference

between a profitable season and financial ruin.

In today's economic environment, businesses of all sizes and across every sector of the economy have ample reason to worry whether supply-chain partners can deliver on their contracts. American agribusiness is not immune from economic challenges, and now is a critical time for country grain elevators — a linchpin of the U.S. grain handling and grain marketing system — to evaluate their business relationships and to take steps to protect themselves from counterparty risk.

"Counterparty risk" is a term that has received a great deal

of media attention in recent months in relation to the financial crisis that rocked Wall Street last year. At the most basic level, one of the driving forces behind the credit crisis was the failure of complex hedging strategies — used to mitigate counterparty risk — employed by large banks and insurance companies. The consequence: some of the most storied names in the financial world were brought to their knees and forced into bankruptcy or liquidation.

The concept of counterparty risk, however, is not limited to Wall Street, and it isn't new to the nation's agribusiness complex. During a commodity price run-up in the mid-1990s, some country grain elevators experienced a string of producer defaults. That specter reared its head again in recent years as soaring commodity prices spurred fears that some producers who locked in sale contracts before the dramatic market run-up might walk away from contracts in order to sell their corn, soybeans or wheat to another buyer at a higher price.

Fortunately, those fears did not turn into reality in terms of any kind of meaningful trend.

### Situation for 2010

For the 2010 growing season, the situation has changed. The national and global downturn has reduced demand for some products produced by U.S. agribusiness, putting some sectors of the agricultural industry under significant financial stress. Commodity prices, while still volatile, have softened dramatically from the record highs realized in 2008. Corn, which peaked near the \$8-per-bushel level, is now trading between \$3 and \$4 per bushel. Wheat and soybean prices have also retreated sharply.

As a result, the nature of counterparty risk in agribusiness has been transformed as well. From our standpoint at CoBank, as one of the largest financiers of grain in the country, we believe the new counterparty risk for elevators is on the selling side of the house.

The reality is that, in some cases, once-dependable customers for country grain elevators are facing difficult market conditions. Dealing with this new risk requires managers and boards to shift their way of thinking and employ available risk management strategies. In Cobank's view, grain elevators need to consider taking the following steps:

• Grain elevators should consider limiting cash-sale contracts. It can be a recipe for problems if a third-party finds itself in a financial bind — or worse, bankruptcy and can't live up to the contract. Instead, elevators should consider using basis-sale contracts and maintaining a short futures position, which will protect them from most of the counterparty risk resulting from price swings. This is not a new process for most country elevators.

Let's say an elevator has a cash sale contract to deliver corn in November for \$5 per bushel. But there is a problem in the industry of the third party, and that third party can't buy the corn from the elevator when it comes time for delivery. For this example, let's also assume the price of corn has dropped to \$3 a bushel at the delivery date. The elevator may be able to sell the corn to someone else, but it's going to be at \$3 a bushel, meaning the elevator will take a \$2-perbushel loss on the deal. That can have a big impact on a country grain elevator's balance sheet.

Under a basis-sale contract, an elevator and the thirdparty buyer agree on the basis level — which is the difference between the local cash price and the futures price for a commodity on the Chicago Board of Trade. Let's say the agreed upon basis is negative 30 cents, with a cash price of \$5 per bushel and the futures price at \$5.30. Under this scenario, the elevator would have a short futures position at \$5.30 per bushel.

Fast forward to delivery time. Just as in the first example, let's assume that demand has softened, and the spot price of corn has dropped to \$3 per bushel; the futures price is \$3.30 per bushel, meaning the basis remains at negative 30 cents. As the delivery date approaches, the elevator would exchange its futures position with its counterparty, showing a \$2-perbushel gain from the futures contract in its margin account.

The elevator's final cash sale price is established by the combination of the price at which the futures contract was exchanged (\$3.30-per-bushel) plus the basis of negative 30 cents, which yields \$3-per-bushel. The country grain elevator got \$2 per bushel from the futures contract — and therefore maintained its \$5-per bushel selling price.

Under such an example, if the counterparty were to back out of the contract at the last minute, the elevator would be OK. The elevator could turn around and sell to another buyer at the spot price and still be made close to whole, depending on the basis level at the time of the sale as well as freight costs. Country elevators that are doing business with any sector of the agribusiness industry - good or bad should strongly consider adopting this practice if they are not doing so already today.

• Grain elevators need to know their customers. When elevators sell to a third party and deliver the product, they often receive most of the funds when the grain leaves on a rail car, but some customers are given 10 days or longer to pay. These credit terms, too, are a counterparty risk.

But how should an elevator decide which customers should be required to pay cash upfront and who should be given 10 days or longer to pay? A good practice is to require all customers to fill out a standardized credit application. Such forms require the customer to disclose basic business information as well as more in-depth financial information, such as whether they have been subject to any judgments, collections or liens in the past. In addition, these forms typically require the customer to disclose credit references, including the name of their bank. As a matter of practice, grain elevators should check those references thoroughly before extending credit terms.

Additionally, elevators should take supplemental steps to find out about the businesses they are selling to by keeping an ear to the ground and talking to industry contacts to see if there is any word on the street that might raise red flags. Often, industry insiders have information that will not appear on a credit application that may be pertinent to a decision about extending credit to a customer.

Some economists predict that the economy may begin to rebound in the next six to nine months, which would be good news for U.S. agriculture and every other industry. But even if stronger commodity prices do return as part of a broader turn around, country grain elevators must continue to be vigilant on the issue of counterparty risk. Employing appropriate mitigation strategies will safeguard elevators from the possibility that, one day, a deal might not be a deal.

Creating new business opportunities by developing synergy between southern Minnesota's base industries of agriculture, manufacturing and health care is a primary goal of the Southern Minnesota Regional Competitiveness Project. Below right: The Mayo Clinic in Rochester, Minn., has an expansive research program, extending from basic science to clinical trials. Farm photo by Stephen Thompson/USDA; research photo courtesy Mayo Clinic.



## Regional Network Boosts Competitiveness

Diverse interests in southern Minnesota come together to tap new business opportunities, markets

## By Anne Todd, **USDA** Rural Development

Note: USDA's 2010 Agricultural Outlook Forum included a session that examined how the investment strategies of organizations from government, private and nonprofit sectors are helping to support business development and job creation in rural America. This article draws from the presentation of AgStar's John Monson about efforts to build a strategic, long-term regional network to increase business opportunities for southern Minnesotans.



ur perspective in how we invest matters greatly. Informing our investment decisions from a regional

perspective is a cultural shift in thinking," says John Monson, vice president of the AgStar Rural Capital Network, referring to the Southern Minnesota Regional Competitiveness Project. This initiative was launched in 2008 to encourage strategic planning for southern Minnesota on a regional, collaborative basis to better spur investment and sustainable economic growth.

For 90 years, AgStar Financial Services, a financial services cooperative serving rural Minnesota and northwest

Wisconsin, has worked to enhance life for its customers who work in agriculture and live in rural America. In 2007, to further its mission, AgStar formed the Rural Capital Network — a team devoted to supporting community and economic development, infrastructure needs and revitalization projects.

In 2008, AgStar's Rural Capital Network (RCN) began focusing on the concept of tying rural economic opportunity to economic research. The ultimate objective is to strengthen the region's economy by forging a common regional perspective and providing support for sustained private leadership. The result should be that local businesses become more competitive on a global scale, rather than just operating in a "survival" mode.

To launch the initiative, RCN introduced the concept to a group of organizations. The group hired staff from the Rural Policy Research Institute (RUPRI), based at the University of Missouri-Columbia and led by Mark Drabenstott, to research a new regional investment plan for southern Minnesota. Thus, the Southern Minnesota Regional Competitiveness Project was born.

## Local solution to global challenge

The Southern Minnesota Regional Competitiveness Project is a partnership of organizations, businesses and government agencies that are working together to create a strategic economic development plan for southern Minnesota.

The project encompasses a region made up of 38 counties with a population of 988,000 people. Southern Minnesota is ag-intensive and has a strong manufacturing base and worldrenowned medical research facilities, including the Mayo Clinic and the Hormel Institute.

The project is self-funded and led by AgStar, RCN and 15 other partners from the private sector, nonprofit groups and government agencies. This collaborative project made funds available to RUPRI to provide the analysis and facilitative leadership at regional roundtable meetings. Private investment and leadership has been a big differentiator of the process, compared to many other initiatives, Monson notes.

The project's goals are for southern Minnesota to be able to better compete in the global economy, to form partnerships to cooperate on a regional basis, to identify investment opportunities and to enhance the region's ability to innovate and grow wealth.

Project leaders have collected background data and held 13 regional meetings throughout southern Minnesota with stakeholders to identify

## **Rural Capital Network:** small team, big results

The Rural Capital Network (RCN), a division of AgStar Financial Services, serves public and private for-profit and nonprofit organizations, primarily through investing in bonds issued by local communities, organizations or businesses. RCN's area of focus includes light manufacturing, nonagriculture businesses, multi-family housing, low- to moderate-income housing, apartment complexes and cooperative housing. It also focuses on hospitals, assisted-living facilities, dental facilities and other such health-related facilities.

RCN works closely with all parties involved to help rural communities leverage existing, locally-based resources and skills to put these programs and facilities in place. RCN has also worked to establish a network of community banks to help finance projects. Since its inception in 2007, RCN has established 27 community bank relationships in Minnesota and Wisconsin. AgStar boasts 150 such relationships nationwide, and its overall rural bond investments totaled \$127 million in the last three years. It has more than \$200 million in managed assets.



the region's economic potential and most promising economic opportunities. The project was kickstarted when it received broad bipartisan support from major political leaders across the state at the Future's Summit in Mankato, Minn.

The project has identified six sectors of opportunity for the region.

Core sectors are:

- Agriculture and Food
- Healthcare
- Manufacturing. Emerging sectors are:
- Bioscience
- Renewable Energy
- High Tech companies.

Monson says that the best opportunities for job creation and economic growth are found where sectors converge. Project leaders are looking for ways to create synergy between southern Minnesota's base industries of agriculture, manufacturing and healthcare in order to help them tap into business opportunities that arise from the emerging sectors.

## What's next for the project?

Next steps for the project include creation of a region-wide debt capital fund to spur business development, recycle wealth and create more wealth for southern Minnesota. The debt side of the regional capital fund is currently operational.

The fund leverages a developing regional debt-capital network comprised of community banks, farm credit associations, real estate agents and regional consultants. The collaborative investments so far total more than \$20 million. It is also responsible for 290 new jobs and 320

Monson says using USDA Rural Development programs are a vital part of the effort, because its loan guarantees serve as a key to spreading capital investment and help lengthen the lending terms for borrowers.

Project leaders will also be working to set up a Regional Equity Fund to attract outside seed and venture capital

continued on page 36

## Co-op Development Action

AREC strives to help struggling poultry producers

By Sarah M. Pike Common Enterprise **Development Corporation** 



he Arkansas Rural Enterprise Center (AREC) has

been working with local and regional poultry producers for the past five years, offering training and technical assistance that is helping put money back into farmers' pockets. While costs have been lowered — most significantly through biomass innovations - AREC is now tackling the latest hurdle for the poultry producers: a loss of poultry-production facilities in the area.

## **Cutting costs with** innovation

A combination of rising feed costs, slowing demand and over-production is buffeting poultry processors and growers nationally. Prices for corn and soybeans, the primary sources of chicken



feed, have reached record highs. Processors and growers are also paying more for fuel and electricity.

Consumers are also dining out less often, especially at casual sit-down restaurants, where chicken is a menu staple. Sales to supermarkets and other retailers have not grown enough to offset the lost restaurant business, experts say. That has led to an oversupply of chicken, keeping prices low and preventing processors from raising prices to cover their added costs.

To combat the poultry producers' hurdles, AREC has assisted Poultry Partners Inc., a 400-member association and cooperative network of Arkansas, Missouri and Oklahoma poultry producers. AREC is helping members take an innovative look at how to create more efficient production methods.

One major initiative is examining heating costs and identifying lower-cost alternatives. AREC has put together a series of training sessions for Poultry Partners Inc. members on the economics of converting poultry houses from using fossil fuels to using biomass as a fuel source.

"Given the different resources available to each farmer, AREC did not focus on one source of biomass but on several, from corn to wood pellets and everything in between," explains Donna Uptagrafft, program officer with AREC.

The results of their findings can be found in the publication: "A Review of Biomass Furnaces for Heating Poultry Houses." A link to the publication on AREC's website is www.winrock programs.org/Arkansas-agriculturaldevelopment/.

Al and Bev Saunders are poultry producers who benefited from AREC technical assistance. The Saunders' chicken farm near the Arkansas-Oklahoma border takes advantage of new technology as it becomes available. The couple is currently testing woodburning stoves to determine their effect on energy savings for their houses.

AREC was able to assist Poultry Partners Inc. through previous funding Al and Beverly Saunders' granddaughters say hello to some recent arrivals at their grandparents' poultry farm. The Saunders are experimenting with wood-burning stoves for heat. Right: The Ozark Poultry Growers Symposium was held last April in Fayetteville, Ark.





## "AREC did not focus on one source of biomass. but on several, from corn to wood pellets and everything in between."

received from USDA Rural Development's Rural Cooperative Development Grant (RCDG) Program. The annual RCDG Program provides critical funding to co-op and rural developers throughout the country.

Although AREC did not receive RCDG funding for 2010, the cooperative development center continues its work with the poultry producers and other rural development projects as much as possible, including responding to a recent request from poultry farmers in south Arkansas who have experienced an even greater challenge.

### Next hurdle

In 2009, Pilgrim's Pride, the largest chicken producer in the United States, idled three facilities, two in Arkansas and one in Louisiana, stopping production indefinitely.

One of the three facilities Pilgrim's Pride shut down was located in El Dorado, Ark. The result was that more than 120 Arkansas poultry farmers lost their primary buyer. Most producers did not get contracts with other poultry companies. As a result, millions of dollars in farm loans remain with no income to service the debt.

AREC was invited to assist Arkansas

poultry producers in rebuilding their businesses. With the El Dorado poultry processing plant still dormant, AREC is working with 40 poultry producers and local entities to examine the feasibility of creating a processing co-op. The feasibility study is in the preliminary stages and will also examine the role of a cooperative in purchasing inputs.

The poultry producer projects are just one area of AREC's work that establishes economic sustainability in rural America. AREC is part of Winrock International, a nonprofit that works to empower the disadvantaged, increase economic opportunity and sustain natural resources.

AREC is also a member of CooperationWorks! (CW), a service cooperative consisting of about 50 cooperative developers from across the United States. These members represent 17 cooperative development centers, along with several other organizations and individuals.

For more information about AREC and its projects, contact Donna Uptagrafft at 501-280-3078 or duptagrafft@winrock.org. For more information on CW, call 800-600-7682 or e-mail info@ cooperationworks.coop.

## Newsline

## Co-op developments, coast to coast

Send co-op news items to: dan.campbell@wdc.USDA.gov

## **Charles Ling named USDA Economist of the Year**

Agriculture Secretary Tom Vilsack recently announced that USDA Rural Development agricultural economist Charles Ling has received the USDA Economist Group's "Economist of the Year" award, which recognizes his outstanding work to foster greater understanding and use of dairy cooperatives.

"Dr. Ling exemplifies the ways in which USDA employees work tirelessly to help businesses and improve the lives of rural residents," Vilsack said. "The technical assistance he has provided to cooperatives has helped them improve their economic well-being and service to their members."

Ling received the award at a ceremony at USDA headquarters in Washington D.C. Ling provides the only source of comprehensive information on the marketing operations of the nation's dairy cooperatives, information which has proven useful in policy and research analysis. Especially noteworthy is Ling's work to calculate the cost of manufacturing cheese, butter and milk powder in cooperatively owned plants.

The award citation notes that Ling "is an unsung hero who has fostered understanding and use of dairy cooperatives. His wide-ranging research and technical assistance has provided exceptional information to U.S. dairy cooperatives to better serve their member-farmers. Producers, cooperatives, government agencies and policymakers often seek his advice."

A database Ling created on dairy cooperatives, which is updated every five years, is frequently cited by the dairy industry. Ling has authored more than 22 research reports and 30 other research-related reports and conducted at least 64 technical assistance projects for farmer cooperatives during his more than 30-year tenure with USDA.

"I am just lucky to have the opportunity of working with the nicest people — dairy farmers, the staff of their cooperative organizations and colleagues in and outside of USDA," Ling said.



Dr. Charles Ling "has provided exceptional information to farmer cooperatives - such as production costs in cooperatively owned dairy plants and his comprehensive data base of U.S. dairy cooperatives," according to the citation he received as USDA Economist of the Year, USDA photo by Dan Campbell

The Economist of the Year award honors a current U.S. Department of Agriculture economist for excellence in economic research and analysis that contributes to the USDA mission regarding food, agriculture, natural resources and related issues. By

highlighting the contributions of economic analysis to program and policy development and implementation, the USDA Economists Group encourages continued integration of economic analysis throughout USDA. Membership in the group is not limited to USDA economists.

## LO'L reports record net earnings

Land O'Lakes Inc. reported record net earnings in 2009, achieved in what company officials termed a difficult and volatile economic environment and marketplace. Financial 2009 highlights for the co-op include:

- Record net earnings of \$209 million, up 31 percent from 2008;
- Record-high cash returned to members of \$108 million;
- Net sales of \$10.4 billion, the company's second-highest revenue year, but down 14 percent from 2008's record \$12 billion. The decline was largely due to lower commodity prices across nearly all businesses and the impact of the recessionary economy on consumer and customer purchasing.

"Despite a weak economy, Land O'Lakes delivered solid financial results — including record-high net earnings — because we met the needs of a changing marketplace," President and CEO Chris Policinski said. "The strength of our brands, aggressive and targeted marketing and adjusting our product mix to meet customer and consumer preferences all contributed to our outstanding results."

Earnings benefited from \$37 million

## United Nations declares 2012 International Year of Cooperatives

The United Nations General Assembly has declared 2012 as the International Year of Cooperatives, highlighting the contribution of cooperatives to socio-



The United Nations General Assembly (in session here) sees co-ops as having a huge potential to promote economic development worldwide.

economic development. In adopting the resolution in December, the General Assembly noted that cooperatives have a beneficial impact on poverty reduction, employment generation and social integration.

In a press release announcing the declaration, the United Nations notes: "A cooperative is an

autonomous voluntary association of people who unite to meet common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. In general, they contribute to socioeconomic development.

"As self-help organizations that meet the needs of their members, cooperatives assist in generating employment and incomes throughout local communities. Cooperatives provide opportunities for social inclusion. In the informal economy, workers have formed shared-service cooperatives and associations to assist in their self-employment. In rural areas, savings and credit cooperatives provide access to banking services that are lacking in many communities and finance the formation of small and micro businesses.

"The cooperative sector worldwide has about 800 million members in over 100 countries and is estimated to account for more than 100 million jobs around the world. The strength and reach of cooperatives are illustrated in the following examples:

- Under the umbrella of the World Council of Credit Unions, 49,000 credit unions serve 177 million members in 96 countries, and 4,200 banks under the European Association of Cooperative Banks serve 149 million clients;
- Agricultural cooperatives account for: 80 to 99 percent of milk production in Norway, New Zealand and the United States; 71 percent of fishery production in the Republic of Korea; and 40 percent of agriculture in Brazil;
- Electric cooperatives play a key role in rural areas. In Bangladesh, rural electric cooperatives serve 28 million people. In the United States, 900 rural electric cooperatives serve 37 million people and own almost half of the electric distribution lines in the country.

"International Years are declared by the United Nations to draw attention to major issues and encourage action. To commemorate the Year, regional conferences will raise awareness of cooperatives and seek ways to leverage their contribution to socio-economic development and foster regulatory frameworks. A research agenda will be proposed and Member States are to form national committees that will serve as focal points for the Year's activities."

For more information, contact the Department of Economic and Social Affairs focal point on cooperatives, Felice Llamas, llamas@un.org, or call 1 (212) 9630-2924.

of unrealized hedging gains at the end of the year, which compares to \$52 million in unrealized hedging losses at the end of 2008. Company officials noted that unrealized hedging is more an indicator of market conditions at a given time than of performance. If the impact of hedging were factored out, 2009's net earnings would be second only to 2008. Policinski also cited:

- A 2-percent volume increase in the company's flagship branded butter business;
- An 11-percent increase in foodservice (restaurants, schools, institutions) volume, even though that segment, for the overall industry, was down for the
- A 4-percent volume increase in the company's industry-leading animal milk replacer product line, despite financial stress across the dairy industry;
- A 2-percent increase in lifestyle feed volume, led by strong gains and record-high volumes in the companion animal segment; and
- A 5-percent increase in overall shellegg volume, with a 7-percent volume increase in the premium-priced branded/specialty egg segment.

## LAND O'LAKES, INC.

"What's particularly good to see is that 9 percent of our 2009 dairy foods valueadded volume was generated by the new products category — which are products introduced over the past three years," Policinski said. "We maintained or improved key financial measures, and total debt was down by \$250 million, as compared with year end 2008. We also achieved nearly \$70 million in cost savings, and we refinanced our publicly held debt at attractive interest rates."

## CooperationWorks! slates spring training

The Cooperative Business **Development Training Program** conducted by CooperationWorks! is a rigorous course to help professionals

develop skills in assisting groups to start new cooperative enterprises. The program has been designed to deliver to new practitioners the best of what has been learned in the field of cooperative business development.

The program consists of two intensive five-day training sessions, and a third (online) session focusing on coop finance. Session 2 (the courses can be taken in any order) will be held May 17-21 at the University of Wisconsin (UW) in Madison. Session leaders will include Bill Patrie of the Common Enterprise Development Corporation, Margaret Bau of USDA Rural Development and Anne Reynolds of the UW Center for Co-ops, among others. This session will examine the unique aspects of cooperatives and how to build effective group capacity for the long-term success of an enterprise. Break-out case studies will track four existing cooperative businesses. The course will also cover: co-op legal structures and taxation; co-op finance, equity and capitalization; co-op management and oversight, among other topics.

Participation in the program is limited; registrations will be accepted on a first-come, first-served basis. For more information, contact Audrey Malan at 307-655-9162 or cw@vcn.com.

## USDA helping Dakota co-op expand broadband service

In rural Burleigh County, N.D., the BEK Communications Cooperative has been selected to receive a \$2 million grant and \$2 million loan from USDA. Along with an additional \$2 million in leveraged funds, the money will enable the co-op to expand its broadband system to serve more than 540 homes and anchor institutions that are currently under-served.

This is just one example of how USDA is using American Recovery and Reinvestment Act funds Congress allocated to it to extend broadband services to un-served and under-served parts of rural America. To date, \$895.6 million has been provided to support 55 broadband projects in 29 states or territories.

The BEK co-op's existing system provides service to 53 percent of the population in its service area. Among the current users, 22 percent derive household income from the Internet.



New broadband lines are being installed by the BEK Communications Cooperative in Burleigh County, N.D. The \$6 million project is being supported with loan and grant money from USDA. Photo courtesy **BEK Communications** 

This expansion is expected to stimulate economic growth by bringing on new users.

BEK, founded in 1952 and headquartered in Steele, N.D., provides voice and data services to about 6,000 customers throughout six counties in south-central North Dakota. In addition to local and long distance telephone service, the co-op provides high-speed Internet access, digital TV, advanced intelligent network features, dedicated data circuits and more.

For a complete list of USDA broadband fund recipients, visit: www.rurdev.usda.gov/rd/newsroom/new s.htm.

## CoBank reports record earnings, issues \$269 million in patronage

CoBank, a leading cooperative bank serving agribusinesses and rural utilities throughout the United States, set new records for net interest income and net earnings for 2009. These gains were achieved despite lower average loan volume during the year.

Net income for fiscal 2009 was a record \$565.4 million, up 6 percent from \$533.4 million in 2008. Net interest income for the bank rose 10 percent, to \$946 million, up from \$862.6 million in 2008. Total assets were \$58.2 billion, compared with \$61.2 billion in 2008.

Although loan quality declined as a result of impacts from the global recession on the bank's customer base, CoBank reports that its overall levels of capital and liquidity remained strong. In March, the bank was slated to pay \$268.9 million in total patronage, including \$183.8 million in cash and \$85.1 million in common stock. For most customers, that represents 100 basis points of average loan volume, lowering their overall net cost of debt capital from CoBank.

"The strong patronage payout authorized by our board for 2009 underscores the strength of the cooperative model and the compelling value proposition that CoBank offers its customer-owners," said Robert B.



Engel, president and chief executive officer.

Total provisions for loan losses for 2009 and 2008 were \$80 million and \$55 million, respectively. "During a year that proved enormously difficult for many of the nation's financial institutions, CoBank was successful in generating record levels of net income to fund patronage, build capital and

cushion the bank from the negative impacts of the recession and credit crisis. Most importantly, we were able to stand by our customers and meet their needs for debt capital as their financial partner," said Engel.

Average loan volume during 2009 was \$44.5 billion, down 2 percent from the prior year, primarily due to lower seasonal financing requirements from agribusiness customers. Seasonal agribusiness lending was reduced due to the bank holding about \$12.7 billion in cash and investments at year end.

## USDA, Navy sign renewable energy agreement

USDA and the U.S. Navy in January signed a memorandum of understanding that encourages their cooperation in the development and use of advanced biofuels and other renewable energy systems. "USDA looks forward to working with the Navy



Sailors wait at a refueling station for fuel from a replenishment oiler. USDA and the U.S. Navy are working together to advance the development and use of biofuels by the Navy. U.S. Navy photo by Greg Johnson

the substantial drop in prices for grains and farm inputs from 2008's exceptionally high levels. Offsetting that decline was growth in other areas of the business, including U.S. governmentguaranteed loans that support American agricultural exports, loans to energy customers and loans to (and participation with) affiliated associations and other partners across the Farm Credit System, the bank reported.

At year-end, 95.8 percent of the bank's loan and lease portfolio was classified in the highest regulatory category used to grade creditworthiness. Capital and liquidity levels remain well in excess of regulatory minimums, with

and other public and private partners to advance the production of renewable energy by sharing technical, program management and financial expertise," Agriculture Secretary Tom Vilsack said. "In order to secure the strategic energy future of the United States, create a more nimble and effective fighting force, and protect our planet from destabilizing climate changes, I have committed the Navy and Marine Corps to meet aggressive energy targets that go far beyond previous measures," Navy Secretary Ray Mabus said. The objective is to reduce reliance on fossil fuels from volatile areas of the world.

Mabus announced five energy targets

for the Navy and Marine Corps, with biofuels being a major component. These goals include:

- When awarding contracts, consider energy efficiency and the energy footprint as additional factors in acquisition decisions.
- By 2012, demonstrate a Green Strike Group composed of nuclear vessels and ships powered by biofuel. By 2016, sail the Strike Group as a Great Green Fleet composed of nuclear ships, surface combatants equipped with hybrid electric alternative power systems running on biofuel, and aircraft running on biofuel.
- By 2015, cut in half petroleum use in the non-tactical commercial fleet by phasing in hybrid, flex-fuel and electric vehicles.
- By 2020, produce at least half of shore-based installations' energy requirements from alternative sources. Also, 50 percent of all shore installations will be net zero energy consumers.
- By 2020, half of the Navy's total energy consumption for ships, aircraft, tanks, vehicles and shore installations will come from alternative sources.

The agreement complements existing renewable energy programs and efforts of USDA, the Navy and Marine Corps. USDA has a variety of programs and services that support renewable energy development. To learn more about them, visit: www.rurdev.usda.gov.

## Michigan Milk leader Jack Barnes dies

Jack Barnes, who led Michigan Milk Producers Assoc. (MMPA) for 26 years, has died at 89. Barnes was remembered as "the man who helped shape modern Michigan milk marketing." Barnes, who was employed by MMPA for 39 years, served the dairy farmers of his state during a time of great transition and modernization. He was instrumental in establishing premiums paid to farmers for their milk and streamlined the milkmarketing system by consolidating small cooperatives into the statewide association.

Barnes guided farmers from a time of milk cans to bulk tanks on their dairy farms. He was remembered as a man who took pride in leading the cooperative through difficult times with a positive, results-oriented managerial style.

"His career was molded by his firm belief in the concepts of farmer cooperatives and family farms. He continued his commitment to dairy farmers his entire life," MMPA General Manager John Dilland said. "He had a very strong interest in Michigan State University (MSU) and its educational foundations, and was one of its most active recruiters. His involvement, his enthusiasm and his positive outlook will be missed."

Barnes' leadership in the cooperative led to involvement in other agricultural organizations, including the Dairy Council of Michigan, the Michigan 4-H Foundation and the Michigan Dairy Memorial and Scholarship Foundation. He received numerous awards and honors, including: MSU's Distinguished Service to Agriculture and Distinguished Alumnus awards; Michigan 4-H Distinguished Service and Emerald Clover Society; Future Farmers of America's Honorary State Farmer award; and Michigan Farm Bureau's Distinguished Service to Agriculture award.

In other MMPA news, the co-op recently announced that more than \$1.7 million in cash patronage refunds are being sent to dairy farmer-members. This cash allocation represents about 29 percent of the \$6 million allocated net earnings generated by the cooperative in fiscal year 2009. The cash patronage returned includes 100 percent of the farm supply earnings and 25 percent of the milk marketing earnings.

MMPA — with nearly 2,200 dairy farmers in Michigan, Indiana, Ohio and Wisconsin – also made cash payments in April 2009 to members of more than \$4.6 million through retirement of the cooperative's 2000 equities. In October 2009, MMPA members received \$1.5 million in cash payments in the form of a "13th milk check." With the current

payment of \$1.7 million, cash payments in the last 10 months exceed \$7.8 million.

## **Blue Diamond CEO** to retire at end of '10

After serving 10 years as president and CEO of Blue Diamond Growers, Doug Youngdahl will retire at the end of the cooperative's centennial year in 2010. In a letter to more than half of California's almond growers who own the cooperative, Youngdahl said: "I'm proud of the results achieved by your Blue Diamond team during the past decade. It is a privilege to have had stewardship over a team that has demonstrated an ever-increasing talent and desire to succeed in support of our growers."



Youngdahl is credited for his market leadership that brought confidence and optimism to an almond industry that was undervaluing the crop as its size continued to more than double over the last decade. His mantra became: "As almond supply becomes available, global consumption will readily follow."

The co-op's net sales and other revenue nearly doubled from 2001 to 2009, when sales topped \$709 million; payments and allocations to growers more than doubled from 2001.

He attributes the co-op's industry-

leading returns, in part, to a streamlined operation with cost reductions and improved efficiencies throughout. Last fiscal year, company equity reached a record high of \$126 million, and retained grower earnings used to finance the cooperative stood at 3.5 percent, compared to 6 percent in the prior decade. Payments to growers have also been accelerated.

According to Board Chairman Clinton Shick, a grower from McFarland, Calif., "While Blue Diamond has excellent internal candidates, the board will fulfill its fiduciary responsibility to conduct an extensive executive search for a new CEO. An announcement will be made once the board completes its thorough search before the November annual meeting."

## Simmons to lead Oregon bargaining association

Mark Simmons, former Oregon Speaker of the House and state director in Oregon for USDA Rural Development, has been named executive director of the Oregon Grass Seed Bargaining Association. Simmons succeeds Ralph Fisher, who is retiring from the position after five years leading the association.

Simmons, who also has worked as a lobbyist for the Oregon Association of Nurseries, started his new position Feb. 1. "Mark brings to the bargaining association a wealth of knowledge of association management and the issues that affect Oregon farmers," says association President Ron Quiring. "We look forward to working with him as we continue to build, strengthen and see the bargaining process mature.

Simmons said his immediate goal is to make sure that as the economy recovers and prices improve, the growers' contribution is appropriately recognized.

## **Morris Foundation receives** \$10,000 rural leadership grant

The Ralph K. Morris Foundation has received a \$10,000 grant from The Farm Credit System Foundation's

Douglas D. Sims Fund for Rural Leadership. This fund, created in honor of former CoBank CEO Douglas D. Sims, supports programs that focus on rural leadership development, with a special emphasis on those committed to making their communities better places to live.

The grant will be used to provide opportunities to men and women who wish to develop and strengthen their cooperative leadership and development skills by attending cooperative educational programs. In 2009, the Morris Foundation awarded 93 Cooperative Leadership Fund scholarships totaling more than \$25,000. In addition, the Foundation awarded a \$2,500 scholarship from the Elroy Webster Cooperative Studies Fund to a Kansas State University master's degree student whose primary focus is agricultural studies.

## NCFC: Workshops focus should include how co-ops level playing field for producers

Because farmer-owned co-ops play a vital role in promoting competition in agriculture, a prime focus of a series of workshops on agriculture competition and regulatory issues should be on the benefits that co-ops provide to farmers, rural communities and consumers, according to the National Council of Farmer Cooperatives (NCFC), which issued a statement prior to the first of five workshops in Ankeny, Iowa, March 12.

Future workshops will be held: May 21 in Normal, Ala.; June 7 in Madison, Wis.; Aug. 26 in Fort Collins, Colo., and December 8 in Washington, D.C. (For specifics on meeting locations and other information, visit: www.usdoi.gov/atr/events.) The workshops are being jointly sponsored by the U.S. Department of Justice and USDA.

"For more than 100 years, America's farmer-owned co-ops have worked hand in hand with their members to ensure that individual producers can compete on a more even playing field with the large, globally integrated companies



## **Bob Dylan grants** co-op song use

Bob Dylan has granted permission to a Canadian co-op to use his song "Blowin' in the Wind" for one of its TV ads. The ad, for the Cooperative Group of Ontario, uses the theme: "The co-op: it's good for everyone," according to a report in "On Co-op," the newspaper of Ontario's provincial co-op association. "Bob Dylan is one of the most respected poets and influential figures of the 20th century, both musically and culturally," the co-op declares on its website. Mike Smith, managing director of Columbia Records in the United Kingdom, said Dylan was swayed to allow use of his song by the co-op's ethical approach to business.

that dominate the agricultural sector," NCFC President and CEO Chuck Conner said.

"Farmer co-ops allow individual producers — whether they grow 40 acres of peaches in California or 4,000 acres of wheat in Kansas — to have a combined market power much, much greater than any single farmer or rancher would have on his own,"

Conner continued. "By doing this, coops help to preserve family farms and foster competition in the marketplace, which ensures the fairest price possible for consumers."

NCFC staff and several members were slated to attend the Ankeny workshop (which was held after the deadline for this magazine) to monitor developments and provide information on the benefits of farmer co-ops. NCFC has also launched a "Farmer Co-ops: Providing for America" campaign to tell the story of how farmer co-ops benefit producers, rural communities and consumers to policy makers and other opinion leaders.

## NMPF: USDA decision on bottlers levels playing field for dairy farmers

USDA's decision to limit the pricing exemption used by large, verticallyintegrated farmer-owned bottling plants will close a loophole that had been employed by some of the largest producer-handler milk bottlers, according to statement issued by the National Milk Producers Federation (NMPF), which has long lobbied on the

Under the rule changes, "producerhandler" definitions in all federal milkmarketing orders will be amended so that only farms with bottled milk sales of 3 million pounds or less per month remain exempt from the pooling provisions. Producer-handlers with sales of more than that will be treated the same as other bottling operations that don't own farms, and they will have to pay Class I differentials into the sharedproducer revenue pool in their respective federal-order regions.

The new decision also tightens the requirements in the Arizona and Pacific Northwest Federal Order markets. which had allowed producer-handlers up to 3 million pounds of sales in separate marketing orders; the new rules allow up to 3 million pounds in total marketings.

## **Regional Network Boosts Competitiveness**

continued from page 27

to southern Minnesota. To achieve this, the group is interviewing multiple equity fund investors and will develop the new regional equity fund in a way that potentially "shadows" and leverages other venture capital funds — made up of community funds and investors.

Further plans include development of a Southern Minnesota Business Accelerator. Entrepreneurs and researchers are currently developing business models which capture synergy between key sectors of opportunity. The accelerator will benefit small, rural business owners by offering expertise in areas they may lack, such as new business development and certain management perspectives. The accelerator will connect and develop regional business capacity — leveraging the region's best business consultants.

"The farmer-members who own AgStar understand the interdependence of agriculture and rural communities,"

says Monson. "The right regional strategy based on solid analytics, regional leadership and sustainable economic investment in emerging markets allows them to be globally competitive."

For more information on the Southern Minnesota Regional Competitiveness Project, visit the project Website at: www.mnsu.edu/ ruralmn/regcomp.html. Information about the AgStar Rural Capital Network mission is at: http://rural capitalnetwork.agstar.com/. ■

## The Little Co-op that Could continued from page 15

felt we could do better."

So City Market launched the Food for All Member Program, which offers a 10-percent discount to any member who uses food stamps, is enrolled in the Supplemental Nutrition Program for Women, Infants and Children (WIC), or who has a disability. As a result, food stamps sales have risen from about

\$290,000 in 2005 to about \$570,000 in 2009 and the co-op has gained over 1,000 new members.

The co-op also makes donations to a local food pantry to help feed those in need.

To better serve seniors, the co-op offers a 5-percent discount to anyone over the age of 60, and also serves 900 free lunches each month — or 4,000 free meals since 2005 —at the four senior centers in Burlington.

Nilan says these programs have

helped change seniors from being major critics of the co-op to being some of its biggest supporters.

Just how much progress the co-op has made in changing the attitudes of seniors since the "red meat vs. granola fear" days was apparent on a recent trip to one of Burlington's senior centers. A sign had been posted in the lobby listing what the residents liked best about living in Burlington. No.1 on the list: "Lunch with City Market!" ■

### Commentary

continued from page 2

only to provide funds, but also to deliver their products to the cooperative.

Farmers invested in the plant because they are getting their feed and fuel from the cooperative. All of the corn that is processed is used in some capacity, whether it's liquid, wet or dry feed for livestock, or alcohol for fuel. There is no waste.

Whichever way you look at it, the key is to spread the investments widely, with lots of opportunities to limit risks.

About one-third of the funding for

next generation biofuel will likely need to come from producers and wellcapitalized investors, with two-thirds of the funds coming from lenders.

At USDA, we are keenly aware of today's business environment and how sensitive lenders are to risk mitigation. We are dedicated to addressing these issues in order to get capital flowing again. We've been meeting with lenders, establishing new relationships and building on old ones.

As we continue to invest in, and develop, advanced biofuels technologies, many projects will become eligible for more conventional forms of financing.

We must continue to develop new

technologies and demonstrate to lenders the importance of transitioning to advanced biofuels. There will always be uncertainties. There will always be surprises. Neither markets nor technologies are static.

But Congress clearly defined our mission in the 2008 Farm Bill, and we at USDA Rural Development are fully committed to reaching our goal. Our job is to implement legislation. Our responsibility is to support the entrepreneurs who have the initiative and the drive to go out there and compete in the marketplace to build a new energy future.



A Guide for the Development of Purchasing Cooperatives: CIR 64 – Rural communities can often greatly benefit from the institution of purchasing co-ops. This publication offers information on organizing and operating a sustainable purchasing cooperative.

Cooperative Approaches for Implementation of Dairy Manure Digesters: RR-217 – High costs and low returns often discourage dairy farmers from using anaerobic digesters. A cooperative approach may offer lower costs and better profitability while letting each farmer concentrate on milk production.

Selecting a Cooperative Membership Structure for the Agriculture-of-the-Middle Initiative: RR-216 – Many medium-sized farms are suffering a squeeze because they are not big enough for economies of scale and not able to take advantage of niche markets. This report explores cooperative approaches to survivability for farms of the "disappearing middle."

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# Page from the Past

## From the archives of Rural Cooperatives



From the March 1960 issue of News for Farmer Cooperatives

## Pendleton Grain: Co-op in Motion

Integrated and diversified services have built this Oregon co-op into one of the largest local associations serving a single rural community

A new Skyscraper of the Sagebrush - a pushbutton feed mill eight stories high — began running full blast out eastern Oregon way early last March. This new feed mill of Pendleton (Oregon) Grain Growers Inc., stands alone and 220 feet tall, about two miles out in the sagebrush country from Hermiston.

It looks out over the long vistas and varied views of Umatilla County – a county where progressive ranchers have built a cooperative with the variety and scope to match their land, and one that's grown into one of the largest local operations in the country, with dollar volume last year of \$16 million.

Pendleton Grain Growers (PGG) is a cooperative in motion. It has taken on the frontiersman spirit still present in our last great frontier, the Pacific Northwest. Its management has had the verve and the vision to hew out some new and interesting activities and, at the same time, keep to the fundamentals of their co-op's business.

Grain is the farming core for this community, thus the coop is built on a grain marketing foundation. But the association keeps fluid, and things are made to happen. We'll take two recent activities to illustrate this: using more local grain in the big new feed mill and setting up a demonstration ranch to encourage the restoration of a livestock and poultry industry once important here.

The new mill has a completely automatic mixing system for 160 tons of finished and pelleted feed for each 8-hour shift. Its eight doors have bins and modern equipment and facilities to turn out a complete line of feeds. The mill has a \$30,000 corn dryer and molasses mixing equipment. Outside, it has storage space and sheds to handle large quantities of hay and forage. In a separate building is the hay wafer machine.

The second example of this co-op's ability to "think big" is the aim to reverse the market-outlet structure for the region. As part of a larger educational program, the co-op has set up an irrigated livestock ranch as a subsidiary corporation. The aim of this demonstration project is to be a catalytic agent to help build back the feeding and livestock industry of the region — one that's gone consistently downhill in the last two decades.

The ranch has eight full-time employees, with collegetrained men supervising. It uses PGG feeds in its various livestock and poultry enterprises.

Charles F. Baker, general manager of the Pacific Supply Cooperative, says of PGG, "Its keynote for success has been good management. And it shows what can be done with foresight and vision, and the courage to move into new and right directions."



From the March 1980 issue of Farmer Cooperatives

## **U.S., Dutch Co-ops Enter World Trade Markets**

"They shake hands today," said George van den Berg, "the farm in Indiana, and the farm in Holland," As head of the Cebeco-Handelsraad of Rotterdam, a Dutch agricultural cooperative, he spoke recently to Indiana co-op members about a joint venture which brings together European and North American partners. Participating co-op sales' volume totals \$17 billion.

Van den Berg spoke to the Indiana Farm Bureau Inc., and the Indiana Farm Bureau Cooperative Association Inc., during their annual meetings in Indianapolis.

Seven North American cooperatives joined with four

European cooperatives last year to purchase a controlling interest in Alfred C. Toepfer Export Inc., a major international commodities trading firm headquartered in Hamburg, West Germany.

The deal puts the two groups of cooperatives directly into the international commodities trading markets - markets now dominated by five privately held multinational firms.

#### **Concentration in world markets**

Awareness by European and American cooperative leaders about the concentration of commodities trading on the international markets has been a key factor. This awareness, on both sides of the Atlantic, brought on a series of meetings that led to the acquisition.

A prior feasibility study had concluded: "In order to fortify and maintain the position of the cooperatives in the domestic market, it is necessary to have a foothold in the exportimport market."

The study envisioned an organization that could originate and distribute products on both ends of the line, and be multinational with offices in the most important countries involved in origination and consumption.

Toepfer Export, which is involved in grain and feedstuffs trading, filled the bill perfectly, said van den Berg. It has a turnover of 16 to 20 million tons annually — about 10 percent of world trade — and has subsidiaries in 18 countries around the world.

He said that United States and European cooperatives do not differ basically, although in Europe they are more widespread, probably because they originated there. They also market many different commodities, and their influence is accordingly strong.

Van den Berg's own Dutch co-op is one of the four involved in the new venture. Two others are German and one is French. Sales volume of the four totals about \$10 billion.

The North American co-ops, in addition to the Indiana Farm Bureau Cooperative, are: Gold Kist Inc.; Land O'Lakes; Citrus World Inc.; Landmark Inc.; Agway Inc.; and United Cooperatives of Ontario. The seven have total sales of about \$7 billion.

YEARS AGO

From the March/April 2000 issue of Rural Cooperatives

### **Fingers and Needles**

Alaskan co-op turns cashmere-soft musk ox wool into hard cash

Soft yet sturdy. Thin but warm. That's how Sigrun Robertson describes the garments marketed by the Oomingmak Musk Ox Producers' Cooperative.

"Qiviut is similar to fine cashmere," explains Robertson. She has been with the cooperative since it began in 1969 and now serves as its executive director. "And our members love working with this beautiful fiber to make beautiful products. They're artisans," she adds.

Mention musk oxen to most people in the lower 48 states, and their questioning eyebrows belie the fact they know little about this cousin to sheep and goats. But in the open tundra and well-vegetated terrain of Alaska, Canada and Greenland, this short-legged, massively built animal with broad, downcurving horns and an ankle-length outer coat is well known. Alaskan agriculture has helped the musk ox industry evolve into a sustainable enterprise.

The domestication of the musk ox and the start-up of the Oomingmak cooperative are tightly interwoven. By 1969, enough qiviut had been converted to yarn to put it into production. The first 25 knitters were all from Mekoryuk, Alaska, located on Nunivak Island. They were encouraged to try the fiber and they enlisted as the cooperative's founding



members. Research had shown qiviut was better suited to knitting than weaving, and knitting was a skill Eskimos had learned from missionaries.

The fine needles required for the delicate patterns also

meant less equipment and little financial investment, Robertson says.

The patterns were adopted from traditional village life and Eskimo culture — from 1,200-year-old artifacts to beadwork designs. The patterns were converted into graphic instructions easily understood by the older women, most of whom were not familiar with the complex written English instructions used in typical knitting patterns. Workshops were held so members could learn how to read the patterns and complete the lace-like stitches. More importantly, members learned how to handle qiviut.

"It's spun much finer than what you're used to with other yarns," Robertson explains.

Today, more than 200 knitter-members, ranging in age from pre-teens to octogenarians, own Oomingmak. Many are related or are close friends who helped each other get started knitting and into the cooperative. All are women, though men have been members in the past, and nearly all the members are Alaskan Eskimos, who work from home in villages ranging from 150 to 300 people.

"I'm not sure what tomorrow's challenges will be," she adds. "But I do know they will center around fingers and needles," she adds. ■

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