



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Rural COOPERATIVES

USDA / Rural Development

March/April 2004

Got milk, will travel

Cass-Clay Creamery ships
value-added cargo from Fargo



Hard acts to follow

Sometimes dairy farmers can get away with skipping a minor chore – like maybe doing some maintenance in the milk barn or changing their tractor's oil on schedule. But one thing the industry can't afford to skip is recruiting the next generation of dairy farmers.

If the sons and daughters of today's dairy farmers decide they would rather work in a bank or a computer shop than on the farm, it won't matter how much we improve herd genetics and feeding strategies, or how many innovative new dairy products co-ops develop. The industry will move somewhere else. As you can read on page 7 of this issue, it's not that farm kids today are afraid of hard work; it's more the unrelenting time demands of dairy farming — and the uncertainty of being able to earn a decent living from the farm.

Just how incredibly time-demanding dairy life can be was hammered home for me in Central California in the mid-1980s. I had gone to Los Banos in western Merced County to interview a dairy farmer who was to be honored for a lifetime of volunteer work with the FFA. The man, then in his 70s, was born and raised on the family farm. After the interview, as I snapped a few photos, I observed that it must be nice living only about 70 minutes from Monterey, one of the most beautiful places on earth. "You know, Dan," he said matter of factly, "I've never been there." Seems there just was never time in 70 years.

When I recently related this conversation to North Dakota dairy farmer Alan Qual, he didn't bat an eyelash. "I don't doubt it at all," Qual said, recalling how growing up on a

family dairy, all of his activities revolved around the unrelenting demands of milking.

But unlike many, Qual and his brothers have children who are intent on carrying on the family dairying tradition. Part of the secret: making sure everyone gets every other weekend off. It makes a huge difference, he says. So while dairy life will never be a 40-hour-per week job, there are ways to provide for a good quality of life.

In the next issue of *Rural Cooperatives*, we will continue to focus on this crucial subject when we take a look at a new co-op in Vermont that was created, with the help of USDA, to supply temporary laborers for dairy farmers when they fall ill or want to take some time off. While this is a specialized labor co-op, existing co-ops can, and sometimes do, serve as sources of information on how to deal with labor issues.

One more strategy for dairy parents who want to encourage their children to take over the farm: make sure they periodically read the Dilbert comic strip before giving up the country for life in an office cubicle!

Farewell, Mr. Duffey

Speaking of hard acts to follow, Patrick Duffey recently ended his 47-year career as a journalist and farm editor, including 35 years spent writing about cooperatives and 23 years at USDA. Cooperatives today are better informed and stronger thanks to Pat's efforts.

He began his career at a Waupaca, Wis., weekly newspaper, then moved on to the job of farm editor at the Appleton Post-Crescent, a Wisconsin daily. There he wrote about federal

milk market orders, dairy cooperatives and all the other agricultural activities of the region. After five years, he went to work as publicity director for GROWMARK in Bloomington, Ill., where he was soon immersed in the operations of a major Midwest farm supply co-op. He had his hands full becoming familiar with all the FS facilities, new faces and geography, annual meetings, director training and business-update conferences and quickie lessons in the nuts and bolts of agriculture.

He must have been enjoying himself, because 12 years whizzed by pretty fast.

In the fall of 1980, he moved to USDA and began editing this magazine, then called "Farmer Cooperatives." He spent 12 years as its editor, and another 11 years as the chief technical editor of all USDA co-op information and research reports. Untold thousands of people across the United States and internationally have a better understanding of what can be achieved through cooperatives as a result of Pat's efforts. For that, we all owe him our thanks.

As I finish this commentary, a box of recent USDA co-op reports and magazines has been delivered to my office, which Pat has asked that I drop off at his house on my way home tonight. He is going to distribute them at the annual meeting of the Virginia Council of Cooperatives – proving that "retirement" is a relative term for those who believe in co-ops as strongly as Pat.

By Dan Campbell
Editor

Rural COOPERATIVES

March/April 2004

Volume 71 Number 2

Rural COOPERATIVES (1088-8845) is published bimonthly by Rural Business-Cooperative Service, U.S. Department of Agriculture, 1400 Independence Ave. SW, Stop 0705, Washington, DC. 20250-0705. The Secretary of Agriculture has determined that publication of this periodical is necessary in the transaction of public business required by law of the Department. Periodicals postage paid at Washington, DC. and additional mailing offices. Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, DC, 20402, at \$23 per year. Postmaster: send address change to: Rural Cooperatives, USDA/RBS, Stop 3255, Wash., DC 20250-3255.

Mention in Rural COOPERATIVES of company and brand names does not signify endorsement over other companies' products and services.

Unless otherwise stated, contents of this publication are not copyrighted and may be reprinted freely. For noncopyrighted articles, mention of source will be appreciated but is not required.

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410, or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

Ann Veneman, Secretary of Agriculture

Gilbert Gonzalez, Acting Under Secretary, USDA Rural Development

John Rosso, Administrator, Rural Business-Cooperative Service

Pandor Hadji, Acting Deputy Administrator, USDA Rural Business-Cooperative Service

Dan Campbell, Editor

Vision Integrated Marketing/KOTA, Design

Have a cooperative-related question?
Call (202) 720-6483, or
Fax (202) 720-4641, Information Director,

This publication was printed with vegetable oil-based ink.



United States Department of Agriculture

FEATURES



p. 4

4 *Making good things*

Cass-Clay Creamery expanding product line and marketing horizons

By Dan Campbell

10 *Making bay, the right way*

Oregon producers organize to market certified weed-free, premium hay

By Dan Schofer, Dan Sherwin, Penelope Deibel



p. 10

14 *Dairy co-ops continue dominant role in marketing nation's milk*

By Charles Ling

16 *Greener pastures for bio-tech co-ops?*

New, bio-based products may only be scratching the surface of potential

By Steve Thompson



p. 14

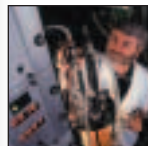
20 *Missouri-based co-op brewery unveils Pony Express line of beer*

21 *Exploring a greater role for ag co-ops in sustaining rural living*

By Thomas W. Gray

24 *Net income, sales decline for local farm co-ops*

By Beverly L. Rotan



p. 16

26 *Weighing in*

Study gauges impact of local ag co-ops on rural economies of Great Plains, eastern Cornbelt

By Kevin McNamara, Joan Fulton, Susan Hine

DEPARTMENTS

2 COMMENTARY

9 VALUE ADDED CORNER

29 NEWSLINE

35 NEW USDA CO-OP PUBLICATIONS

On the Cover:

Fargo-based Cass-Clay Creamery is seeking to expand its marketing area for its fluid milk, ice creams and a variety of processed dairy products. The co-op's operations include a fleet of 40 trucks. Photo courtesy Cass-Clay Creamery



Making good things

*Cass-Clay Creamery expands product line;
Marketing horizon moves eastward*



By Dan Campbell, editor



rowing up on a North Dakota grain and dairy farm, Keith Pagel was not a big fan of farmer cooperatives. He recalls

the many times he would pull into his local co-op elevator to have his grain milled into feed, where – more often than not – none of the co-op staff seemed to care how long he had to wait for service, or even if he did business there or not.

“It seemed like you just had to stand there and wait and wait and wait. If you had a lot of grinding to do at one co-op, you usually just wound up doing it yourself,” says Pagel, admitting that patience has never been one of his strong suits. But lack of patience can sometimes be an asset in the business world.

Today, as the president and general manager of Cass-Clay Creamery in Fargo, N.D., those early experiences have contributed to Pagel’s passion for delivering superior service to co-op members and customers. “When I came on board, I struggled with it at first — knowing this was a co-op and remembering those early experiences I had. So it has always been my goal to provide excellent service to members and customers.” For field staff, that can mean being on call 24 hours a day if there’s a milk-quality issue to be resolved on a member’s dairy.

“When something needs to be done, we won’t tolerate people who stand around and procrastinate, or who always pass the job off to someone else.” The co-op’s management philosophy can be summarized as: “Let’s get it done.”

Cass-Clay, which was founded in 1934, stands today as a prime example of a traditional co-op that has regenerated itself through a combination of excellent management, strong member-service orientation and aggressive product-development and marketing programs. A big part of its success is due to the involvement of a young, savvy board of directors that has a strong working relationship with management. Cass-Clay’s sales in recent years have totaled just under \$100 million, and patronage payments have been as high as 40 percent of record income in 2002.

Carving niche markets with “vanity” ice creams, dips

Cass-Clay is one of only a few co-ops in the nation that has been suc-

cessful as a fluid milk bottler and distributor. Class I sales account for about 45 percent of its total volume and have actually been increasing at a time when most Class I distributors have seen declines. The co-op markets a variety of milks, including chocolate and high-calcium skim milk. In 2002, Cass-Clay introduced easy-grip, three-quart plastic bottles into its beverage product line, which have proven quite popular.

“They are easier for kids to grip and pour milk on their cereal; older people find them easier to use, too,” Pagel says. And because they turn over quicker than gallons, people enjoy a fresher milk product.

Despite its success in fluid milk, the co-op has been very active in expanding its line of other dairy products.



These include cottage cheeses, chip dips, yogurt, butter and sour cream. Cass-Clay markets about two-thirds of its output under the Cass-Clay brand, but it also makes dairy products for the private label market.

There's been a major push in recent years to expand the market for the co-op's premium ice creams. Two years ago, it was named the official dairy of the Minnesota Vikings, and it now markets four ice cream flavors with the Viking logo, including Viking Touchdown Toffee and First Down Fudge.

Cass-Clay also packages a number of other ice creams and chip dips that

are aimed at alumni and backers of the region's universities. Hence, rolling out of the Cass-Clay plant in Fargo you will find products such as North Dakota State University Bison Crunch or University of Dickinson Buster Blue Hawk ice creams. There's also North Dakota University Fighting Sioux Champion Chip ice cream and University of Minnesota Golden Gopher ice cream, among others.

Alan Qual, who served three years as board chairman and farms near Lisbon, N.D., says the niche marketing of premium ice cream and dips has proven to be a successful strategy. "We're focus-

ing on creating new products in areas where we have experience, such as the production of premium ice creams," says Qual, who – along with the families of his two brothers — operates a 525-cow dairy and farms about 5,000 acres of grain crops.

Diversification pays dividends

Having a diversified product line is a major key to success for the co-op, Pagel says. "When the Class III market skyrocketed (late last summer), cheese prices went from \$1.15 to \$1.60, he says. "We have the ability to then focus more on those products. Diversification

means we can move products into the highest value markets.”

“Many of the large-scale processors are focused on making large volumes of specific products, but we’re small enough that we can cater to the special needs of many niche markets,” Qual adds. “We’ve made great ice cream for many years, but now we’ve improved it and expanded our flavor offerings. And we’ve got good people working to get these products sold in more markets.”

Greg Hansen, vice president for marketing, oversees a staff of 11 sales reps stationed throughout the co-op’s four-state trade territory. This includes all of North and South Dakota, eastern Montana and western and northern Minnesota. In the last several years, Cass-Clay has also begun to push into the Minneapolis-St. Paul metro area.

The ice cream business has been growing at such a clip that, two years ago, the co-op invested \$2.5 million for a new freeze tunnel and tripled the size of its cooler room at Fargo. Before the new tunnel was built, it took 24 to 36 hours to freeze ice cream. “Now we can do it in an hour and produce a better quality ice cream,” Pagel says as he watches cartons of ice cream scoot by on the manufacturing line.

Young board bullish on plant investments, promotion

Not too many years ago, the average age of a director on Cass-Clay’s nine-member board of directors was close to 60 — which is fairly typical for the industry. But then there was a rash

of retirements, and a number of bright young candidates stepped forward. As a result, the average age for directors is now about 40.

“These are businessmen — not just farmers who milk cows,” Pagel notes. “It’s been a huge change. They are very supportive, but also very demanding — they want good answers and solid plans.”

“With a younger board, there seems to be a tendency to want to invest more in the plants, with an eye toward long-term profitability,” says David Glawe, a nine-year board veteran with a dairy farm near Detroit Lakes, Minn.

In addition to the new ice cream freeze tunnel and cooler, the co-op recently invested \$2.4 million in high-speed bottling lines and material handling equipment for Fargo. Nor has the board and management turned its back on the co-op’s other two plants. A new cooler and load-out dock has been installed in Mandan, N.D., where the co-op bottles gallons, half gallons and institutional-size containers of milk. New boilers have been installed in Cass-Clay’s cheese plant in Holven, S.D., where it manufactures specialty cheeses — including Romano and Parmesan — for the food ingredients industry.

In total, Cass Clay has invested more than \$5 million in plant improvements in just a little more than two years. And it plans to continue to invest about \$1 million per year to keep the plants well equipped and efficient.

“The board reviews these types of expenditures very carefully — after all,



Keith Pagel, president and general manager of Cass-Clay Creamery, says the co-op has been increasing its fluid milk sales. Here he checks as half-gallon cartons are filled at the co-op’s Fargo plant. Preceding pages: the co-op’s Fargo plant at sunrise. USDA photos by Dan Campbell

we’re there to look after the members’ equity,” Qual says.

Adds Glawe: “We want to see realistic projections of what the returns will be on an investment before we approve it.”

Adjusting to changing wholesale dairy market

Some changes at the plants are being made in response to changes in the wholesale food industry. In the past, most products were shipped out of Cass-Clay on tandem or single-axle trucks. But increasingly, larger food retailers dispatch huge semi trucks that load at the co-op’s docks and deliver to grocery stores.

“We do a lot more dock loading now because of the demand for large volume shipments,” says Qual. “These truck drivers are working under contract, and they are in a hurry to get in and out. I don’t blame them. They make money by being on the road, not standing in a line waiting to load.” So Cass-Clay is striving to speed the rate at which they can load.



A sampling of the Cass-Clay line of dairy products. The co-op also produces for the private-label market. Photo courtesy Cass-Clay Creamery

Qual joined the board about five years ago, “because I wanted to give something back to the co-op, and I felt that I could contribute to it. If Cass-Clay isn’t successful, neither are

we.” He spent three years as board chairman, then rotated off, in accordance with the bylaw that limits directors to three consecutive years in any office, after which they must sit out at

least one year. “That way, everybody gets experience,” he notes.

Glawe says it is the board’s job to “ask hard questions and closely monitor the co-op operations. We’re not

Attracting the Upper Midwest’s next generation of dairy farmers

Alan Qual doesn’t have to look very far to see signs of the way dairy farming is evolving in the Upper Midwest. He grew up on the family farm, which his father started after World War II near Lisbon, N.D. To save money on hauling their milk, the Quals were one of 28 dairy farms in the Lisbon area that formed their own milk hauling co-op to deliver to Cass-Clay in Fargo (about 75 miles away). Today, the hauling co-op is still going, but it’s now down to two members.

What happened? A couple of those farmers moved their operations to other states. A couple of others switched to another co-op, Qual recalls. But most of the rest have either quit farming or they switched away from dairy to grain-only or grain and beef farming.

In the cases where the dairies closed shop or switched away from dairy farming, it is usually because the children lacked interest in coming back to run the dairy. They saw the lifestyle as too demanding, Qual says. Add to that they often saw the need to greatly expand the size of the farm to keep it competitive in the years ahead, and many said “no thanks” to dairy life.

It says volumes about just how time-demanding dairy life is when you consider that beef cattle and grain crop production — not exactly the best career for a slacker — are viewed as far less demanding than dairying. Hence the decision of many one-time dairy operators to switch to crops and beef.

Lack of new producers entering the business is a “huge concern,” says Keith Pagel, president and general manager of Cass-Clay Creamery in Fargo. “When we did a survey eight years ago, the average age of a producer was 57, and it’s getting older,” Pagel notes. “Kids very often look at dairying and see their parents working seven days a week, 15 hours a day and no vacations. It’s a lot of struggle. Then they see their friends working in downtown Fargo, 40 hours a week and earning more. Some young people do still like dairy life, but very often they feel they can’t get to the size needed to financially have a good quality life.”

But there are ways to structure a dairy so that you don’t have to be chained to the farm. The Quals have done it by creating a farm where three brothers (Alan, Danny and Rodney) and their families all live and work, as well as several employ-

ees. They expanded from about 200 cows in the 1970s to 525 today. But Qual says he still doesn’t consider himself or his brothers really big dairy farmers. You have to divide that 525 by three families, he says, which comes out to about 175 cows per family.

The Quals have structured their duties so that they get every other weekend off — a real luxury compared to the

round-the-clock duty many dairy farmers live with. When he was growing up on the then much smaller dairy farm, Alan says he could never go anywhere unless he could be back by 4 p.m. to milk.

“We’re large enough that we have employees, so we can get away at times,” Alan says. “And that is crucial to making this life attractive enough to get kids who want to come back and farm.” His eldest son, John, has been back on the farm for three years now following school, and plans to buy into the incorporated family business as a stockholder in just a few months. Some of this brothers’ children also appear quite interested in being dairy farmers. “We haven’t pushed them to come back — just made it available to them if their interest was here.”

There are also some new dairy farmers moving into the area, including some “transplanted” from Europe.

Pagel notes that to attract more, the area has to do a better PR job of advertising the assets of the region and its quality of life. “There is a general misconception about the harshness of our climate and available leisure activity here.” Pagel says there’s a great quality of life to be had around Fargo.

“A lot of people feel North Dakota is in the middle of nowhere and that there’s nothing to do here. There’s lots to do — lots of places you can go in an hour. And our outdoors activity can’t be beat: fishing, hunting, camping, boating, cross country skiing, snowmobiling, ice fishing — you name it. And we’ve got good schools.”

Interviews with some dairy farmers who moved their operations to other states indicate some wish they hadn’t left, he says. ■

— By Dan Campbell



Cass-Clay board member Alan Qual goes over records with his son, John, who has decided to make the family dairy his career. Photo by Tom Kludt, courtesy Cass-Clay Creamery

afraid to try new things to improve returns for our fellow producers, which means taking some risk.”

Glawe has been a strong advocate for expanding the co-op’s marketing territory and of more aggressive advertising and promotional efforts. The co-op now spends about \$1 million annually to advertise, and has been tailoring its ads to play up the fact that Cass-Clay is farmer-owned.

Marketing studies showed that Cass-Clay didn’t have a strong identity with consumers, most of whom did not

realize the business was farmer-owned. So TV commercials have been filmed on members’ farms, and print and billboard advertising also stresses the farmer-owned nature of the business.

The co-op’s own fleet of 40 delivery trucks has been re-designed to convey a more attractive, quality look, Pagel says. A city bus in Fargo has even been decorated to resemble a carton of Cass-Clay milk. “It’s been a total face lift for the co-op, and the public and the members really seem to like it,” Pagel says.

Cass-Clay, which was founded in

1934, got its name from what were initially the two main counties of its production area: Cass County, N.D., and Clay County, Minn. When Pagel joined the co-op in 1985, at first as quality control manager, Cass-Clay had about 1,400 members in three states: North and South Dakota and Minnesota. Due to ongoing farm consolidation, the co-op now has 400 members in the same three states but handles even more milk: about 420 million pounds annually.

continued on page 34

Finding labor can be a struggle

In the Detroit Lakes area of Minnesota, dairy producer Dave Glawe says securing farm labor is a major challenge for dairy farmers. Glawe has to compete for labor with both manufacturing and tourism.

“A kid can go to work in a manufacturing plant for \$9 per hour plus benefits,” says Glawe, who currently runs the farm with his brother and one employee. “We did have another worker, but when milk prices dipped, it was hard to justify keeping him on. So you just do more yourself.”

“Every farmer I talk to, labor is their biggest challenge right now,” says Lisbon, N.D., dairy farmer Alan Qual. North Dakota is one of the most sparsely populated areas of the nation.

“I have two openings right now, and have advertised for two weeks. But I only got one applicant, and he decided to pass. We’re willing to train someone, but they will have to relocate.” Like Glawe, Qual says he has to contend with

competition from manufacturing, most notably a plant that builds Bobcat loaders. “If I had to pay my labor what they pay, I might as well close the doors right now; it wouldn’t pencil out even if we were milking 2,000 cows. Even with an operation of our size, the margins are very thin when milk prices dip as low as they have.”

Milk prices have been on a roller coaster the past couple of years, ranging from a low of about \$10 to a high of \$16 per hundredweight. The price dips have hastened the number of producers leaving the business.

“When prices drop to \$10, you better not have any debt, because that’s about the break-even point for most farmers around here,” Glawe says. “This is a real serious challenge for the nation: to find ways to make small farms more viable. If we keep losing farmers at this rate, we’re going to keep losing rural towns.”

Loss of farms sends ripples throughout rural America, he notes. To cite one of the more dramatic and obvious examples, Glawe notes one need look no further than the local farm implement trade. These days, when one goes to replace a tractor or harvester, the equipment dealers are no longer interested in taking old gear in trade. “There just isn’t a secondary market for used equipment any more around here — the smaller operations are no longer around.”

Despite such challenges and the fact that production trends show the dairy industry is still moving ever westward, dairy farmers in the Fargo area say they can compete with anyone. Qual notes that the corn supply is a major advantage for the Upper Midwest. “We have abundant corn and lower land values. They (the West Coast) have an advantage with alfalfa, because they get more cuttings in a season than us. They also seem to have a more ready source of labor.” ■



Dave Glawe unloads corn last fall on his dairy and grain farm near Detroit Lakes, Minn., where farmers are finding it increasingly difficult to find labor. USDA photo by Dan Campbell



Biodiesel project looks promising for Iowa co-op

By Jeff Jobe, Co-op Specialist
USDA Rural Development, Iowa

Cooperatives everywhere are looking for new opportunities to add value and expand markets for their members. Farmers Co-op Elevator Co. (FCEC) at Ruthven, Iowa, is accomplishing this by processing its members' soybeans into an array of soy oil and meal products and biodiesel fuel.

FCEC, founded in 1902, is a full-service cooperative providing grain handling and marketing, agronomy services and feed and petroleum products to 1,176 members in northwest Iowa. Annual sales for the cooperative have exceeded \$50 million.

In 1999, the cooperative management and board of directors created a new company called Soy Solutions to explore and expand marketing opportunities for the 3.5 million bushels of soybeans produced by co-op members. After exhaustively analyzing the soy-processing industry, Soy Solutions created Iowa Lakes Processing (ILP) to use the Insta-Pro extruder and expeller's process to transform locally grown soybeans into soybean meal and oil.

ILP produces a high-quality, natural soybean meal that can be used in a variety of products for human consumption and livestock feed. This was

a natural fit for the co-op's feed division, as it allowed FCEC to source a high-quality protein through its own operations. The same process also yields soybean oil, which ILP has initially been selling on the open market.

Soy Solutions looked at the opportunities available for further processing and enhancing the value of the soy oil. With the assistance of Cenex Harvest States, Iowa Soybean Promotion Board, National Biodiesel Board and Iowa State University's Institute for Physical Research and Technologies, Soy Solutions created Power Plus Technologies to develop and operate a soy methyl ester manufacturing plant.

Soy methyl ester is commonly known as biodiesel, an alternative fuel that can be used as a blend in petroleum diesel. Its physical and chemical properties (as it relates to operation of diesel engines) are similar to petroleum-based diesel fuel. More than 10 years of testing and 60 million road miles have proven that biodiesel is comparable to conventional diesel in performance, fuel efficiency, power and torque.



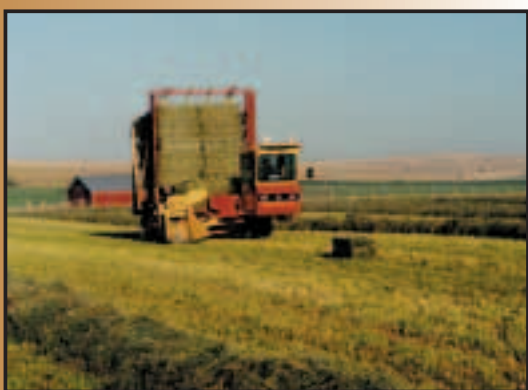
Farmers Co-op Elevator Co. in Ruthven, Iowa, has created a new subsidiary to process soybeans into meal and oil. USDA Photo by Jeff Jobe

Fuel distributors across the United States are beginning to offer biodiesel in blends of 2 percent (B2), 5 percent (B5) or 20 percent (B20) soyoil mixed with conventional diesel fuel. Diesel engines can run on 100 percent biodiesel with little or no modification.

"If all Iowa farmers used a B2 biodiesel blend, they would use the oil from 3 million bushels of soybeans, and if all on-road trucks used B2 biodiesel, they would use the oil from 473 million bushels of soybeans," says Karen Andersen-Schank of the Iowa Soybean Promotion Board. "That's basically Iowa's entire crop."

In developing these opportunities, Farmers Cooperative Elevator Company has made a sizable investment in this project. There was overwhelming support in Iowa for the pro-

continued on page 30



When organizing growers for group action, "a successful outcome depends on having the right producers in the room. We have had that at every step," says Extension agent John Williams. From top: A producers' planning meeting in Enterprise, Ore.; hay is irrigated, cut and baled. USDA photos by Dan Schofer

Making hay, the right way

Oregon farmers organize to market certified weed-free, premium hay

By Dan Schofer, Co-op Development Specialist, USDA Rural Development
e-mail: Dan.schofer@usda.gov

Dan Sherwin, Weed/Vegetation Manager, Deschutes County, Oregon

Penelope Diebel, Associate Professor, Oregon State University

Grower cooperatives and quasi-cooperative producer associations have a long tradition of using group action to establish or improve quality standards and to promote product uniformity for their crops and livestock. These efforts have often been key to creating new domestic and international markets. Such endeavors often include working closely with state and federal government agencies.

A recent example of this can be seen in northeast Oregon, where hay growers formed the Wallowa County Hay Growers Association in 2003 to tap into an expanding market for weed-free and premium forage products. In addition to improving market opportunities for its members, the hay association may also yield environmental benefits by helping to reduce the spread of noxious weeds on public and private lands.

Steering committee assesses opportunity

The organizing process began in February 2002, when a steering committee of five local growers began assessing different organizational possibilities. The committee held occasional discussions during the spring calving season and summer cutting season. In October 2002, the pace was ratcheted up, as the committee began meeting weekly to explore options in greater depth.

Growers wanted to maintain control of their own hay and to make their own sale decisions. Ultimately, it was decided to organize as a producers' association. The primary purpose of the hay association is to promote the quality



and availability of weed-free and premium forage products produced by local farmers. The association provides customers — including brokers, exporters, ranchers, horse owners and back-country enthusiasts — with a single point of contact.

“We work through the association to find buyers and bring them to the growers for both weed-free and premium hay,” says Jim Petty, a local grower and association board member. The association has developed a website: (<http://www.certifiedwallowacountyhay.com>) containing product descriptions and contact information. Those without Internet access may contact association President Mark Butterfield at (541) 432-3735.

Growers' goals defined

At a recent growers' meeting, Butterfield described the group's three main goals for the coming year:

- Establish and promote Wallowa County as a premier hay-growing region;
- Find and establish new markets, and
- Determine market needs (bale size, quality, weed-free, transportation, etc.).

“Customer service, in addition to quality, is important to keep a good reputation. The growers need to back up any sales with a quality product,” Petty says.

There are currently 18 participating growers in the association who produce a variety of products, including alfalfa, alfalfa mixes, timothy mixes and wheat straw. These will be available as premium-quality products, judged by nutrient content, stage of maturity at harvest, harvest conditions, lack of weather damage, proper storage and customer preference.

Growers have adopted the standards set by the North American Weed Management Association (NAWMA). NAWMA is composed of weed managers in local, state and federal land agencies, including the U.S. Forest Service, National Biological Survey and Bureau of Land Management. To meet NAWMA standards, forage products have to be found to be free of 54 noxious and invasive weed species.

Wallowa County has taken certification one step further. For the 2003 season, the association had a “NAWMA Plus” line of hay which is free of the 54 weed species targeted by NAWMA, as well as of 18 other more common weeds. Wallowa County growers feel that this will ensure customer satisfaction. More information on NAWMA and its standards can be found at www.nawma.org.

Field inspections ensure quality

To maintain high-quality forage, field inspections and a stringent certification process are crucial. The Wallowa County government provides a third party inspection process through its vegetation manager (or a contractor). Cost for field inspections is \$3 per acre, and requires 7–10 days' notice.

The inspector walks through the fields before harvest and lists all weeds found. Weed sites are tracked using a Global Positioning System (GPS) unit. Special areas of interest are field perimeters, drainage swells and power-line rights of way. A report lists any weeds present and indicates whether the field passed or failed. Fields can be reinspected, if the grower chooses.

It is not unusual for sections of fields to be accepted as “weed-free,” excluding swaths around the perimeter. Weed-free forage is stored separately from other hay and straw.

The county, through its Wallowa County Weed-Free Forage Inspection Program, provides the farmer with a certificate of inspection and a separate



From top: Hay bales are loaded onto flatbed trucks or stored under tarps, then trucked to destinations, such as a livery stable from where trail rides begin into the scenic mountains of northeastern Oregon. Opposite page: a sign at the Wallowa County hay station urges a concerted effort to help prevent the spread of noxious weeds.

transit certificate, if needed. This documentation is important to customers purchasing weed-free hay as well as local and state governments monitoring hay transportation.

John Williams, agriculture extension agent in Wallowa County, maintains the inspection records and serves as the storefront for the association. Growers apply for field certification at the local Oregon State Extension office.

"I have been amazed at the dedication, professionalism and the follow-through that the growers have displayed in the process of creating a weed-free forage program and the development of the association," Williams says. "As an extension agent, I know that a successful outcome depends on having the right producers in the room. We have had that at every step."

Government aids market research

Preliminary market research was conducted by Wallowa County government, Eastern Oregon University (EOU) and USDA's Agricultural Marketing Service. A questionnaire was designed to identify the type and numbers of animals customers owned and their preferences when buying hay.

Wallowa County mailed questionnaires to a wide range of hay buyers, including 4-H clubs, local FFA chapters, ranchers, guides, rodeo participants and backcountry horse riders. EOU students handed out questionnaires at local feed stores. The students tabulated and analyzed the information, which was then presented to the growers.

Discussions have been held with hay brokers in Ellensburg, Wash., who market hay to many regions of

the country and to foreign markets. One broker alone moves as much as 400,000 tons of hay per year. The brokers have expressed interest in shipping the association's hay to the Pacific Rim. Hay shipped from Ellensburg is compressed, shrink-wrapped and loaded into 40-foot shipping containers.

Wallowa Resources, a grassroots, nonprofit corporation in Enterprise, Ore., has also been working with the growers. It provided funds for the design and startup of the association's website.

"Hopefully, local growers will get a better price for their weed-free hay," says Mark Porter, rangeland stewardship coordinator for Wallowa Resources and chairman of the County Weed Board. "That is important, because economics are pretty tight these days."

Growers' hay project may go statewide

The applicability of the Wallowa County Hay Growers Association project goes well beyond Wallowa County. Tim Butler, supervisor of the Oregon Department of Agriculture (ODA) Noxious Weed Program, has been supportive of the association and sees statewide implications for it.

"ODA is taking a look at establishing a statewide, weed-free hay program and hopes to build on the successes and learning experiences of Wallowa County, especially in the areas of establishing quality standards, developing inspection procedures and creating additional income opportunities for Oregon family farmers. By expanding the pilot project in Wallowa County, Oregon hopes to create a win-win situation in the future for farmers and from a noxious weed-control perspective."

Wallowa County is famous for its natural beauty and wildlife. Visitors and residents depend on and enjoy the outdoor resource values of this area. About 65-70 percent of the land within the county is owned and managed by the U.S. Forest Service or the Bureau of Land Management. So the support of the staff of the Wallowa-Whitman National Forest has been important for the project's success.

"We want to help our visitors to enjoy themselves and do the right thing," says Kendall Clark, area ranger for the Eagle Cap District in Wallowa County and the nearby Hells Canyon Recreational Area. "Having local growers be able to provide weed-free hay to our users makes our job a lot

easier. A website providing contacts for local certified weed-free hay will be a tremendous tool to help visitors."

The Forest Service is both a potential customer for certified, weed-free straw and a regulator of weed-free hay used by recreational and hunting enthusiasts on public lands. Certified weed-free straw is used to control erosion in wildfire rehabilitation and construction projects, thereby reducing the damage to soils, watersheds and burned-over landscapes. Priorities for stabilization activities include protecting human life and property, stabilizing municipal watersheds, stabilizing steep slopes and unstable terrain, protecting archeological resources, replacing culverts and protecting public health and safety. The large number of acres affected by recent fires (and the likelihood of future forest and range fires) represents a potentially large and expanding market for certified weed-free straw.

In 1988, the Eagle Cap Ranger District of the Wallowa-Whitman National Forest adopted a regulation that prohibits possessing, storing or transporting any supplemental livestock feed that is not free of all noxious weed seeds. A similar plan is now being developed for the entire Wallowa-Whitman National Forest, the Hells Canyon Recreation Area and, eventually, will be in effect for all National Forest public lands in the Oregon and Washington region. ■

Hay is often culprit in spreading weeds

"Weed-free hay also reduces the spread of weeds across the county and the region," Porter says, adding that weedy hay is often responsible for weed infestations of Oregon forests and rangelands.

Association customers "will not be bringing weeds onto their farms and properties. That will save them money and a few headaches in the long run."

Although this effort has become a collaborative one, it is important to

remember that hay growers of Wallowa County are responsible for the initial concept, the direction and the implementation of the project. The responsibility and credit primarily go to these growers, working to better their own farm businesses and quality of life in a rural western community.

"Starting this association has been an effort to help our neighbors and all people in the county," says association member Jay McFetridge. "That's just what you do when you live in a community at the end of the road." ■



The Old Chief Joseph gravesite is a national historic landmark in Wallowa County, Ore., and is sacred to the Nez Perce people. His son, also named Chief Joseph, is famous for his "I will go no further" speech, which has come to symbolize the plight of American Indians during the 19th century.



Hay harvested in northeastern Oregon may be sold locally, or could wind up being compressed, shrink-wrapped, loaded into 40-foot containers and shipped to customers around the Pacific Rim.

Dairy co-ops continue dominant role in marketing nation's milk

By K. Charles Ling, *Ag Economist
USDA Rural Development/ RBS*
e-mail: charles.ling@usda.gov

Editor's note: for a more detailed examination of topics in this article, see *Research Report 201, "Dairy Cooperative Operations, 2000"* available on our website, www.rurdev.usda.gov/rbs/pub/newpub.htm. For a hard copy, call (202) 720-8381, or e-mail: dan.campbell@usda.gov.

Dairy co-ops continue to be the nation's primary source for milk and dairy products. Data analyzed by USDA Rural

Development shows that dairy products represented 33 percent of the value of all products marketed by agricultural cooperatives during 2002.

Dairy cooperatives received, or bargained for, 86 percent of all milk sold by farmers (or 83 percent when non-member milk is subtracted).

The number of dairy cooperatives decreased 13 percent, from 226 to 196, from 1997 to 2002. The number of cooperatives that process milk and manufacture dairy products dropped from 63 to 46 during that same five-year period.

More than 61,390 members marketed their milk through the nation's 194 direct-member dairy cooperatives. Three regions – the East North Central, West North Central and North Atlantic – together accounted for 84 percent of all member-producers and 52 percent of cooperative milk volume.

Sixty-two percent of total cooperative milk volume was sold as raw milk

in 2002, compared to 61 percent in 1997. The other 38 percent was manufactured at plants owned and operated by cooperatives. The number of cooperatives selling raw milk fell from 204 to 174 during this period.



A Maryland-Virginia Milk Producers' tanker rolls through the farm country of Maryland. The co-op is one of 196 dairy co-ops in the nation, down from 226 in 1997. USDA photo by Ken Hammond

Types of co-op milk plants

Dairy cooperatives operated 209 milk plants in 2002. Of these:

- 35 plants only receive and ship milk;
- 49 plants manufacture American cheese;
- 21 plants process Italian cheese;
- 30 plants package fluid milk products;

- 43 plants manufacture dry-milk products;
- 27 plants churn butter.

Dairy cooperatives also held investments in 75 dairy plants that they did not directly operate. Of these, 52 plants package fluid milk products, 18 process other dairy products and 7 make ice cream. (The production of these plants is not counted as cooperative volume.)

Cooperative marketing of butter, dry-milk products and cheese increased from 1997 to 2002. Cooperatives' share of butter increased from 61 to 71 percent during the half decade. Their share of dry-milk products (nonfat dry milk, dry-whole milk and dry buttermilk) climbed from 76 to 85 percent. Cooperatives continued to have an overwhelming share of nonfat dry milk, which was 86 percent in 2002, a 5-point increase.

Co-op cheese volume jumps

Cooperatives marketed 17 percent more cheese in 2002 than in 1997, their volume increasing from 2,907 million to 3,402 million pounds. Nationally, overall cheese production also increased 17 percent. Cooperatives' share of the natural cheese market was unchanged at 40 percent.

Sales of packaged fluid milk products by cooperatives decreased both in volume and in market share. The 3,810 million pounds marketed by co-ops equaled 7 percent of the nation's production, down from 14 percent in 1997. Cooperatives sold 9 percent of the nation's cottage cheese in 2002, down from 10 percent, while their share of ice cream decreased from 6

percent to 3 percent. In 2002, cooperatives marketed 6 percent of the nation's ice cream mix, 2 percent of yogurt, 53 percent of bulk-condensed milk, 52 percent of dry-whey products, 13 percent of sour cream and 34 percent of condensed buttermilk.

Co-ops mostly small, but growing

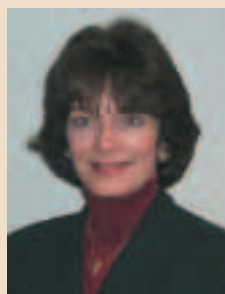
Most dairy cooperatives continue to be relatively small business organizations. But through consolidation and growth, an increasing amount of dairy products are being sold by larger cooperatives.

Members of the nation's eight largest cooperatives marketed 52 percent of the total U.S. volume of milk sold to plants and dealers, up from 42 percent in 1997. Their volume represented 63 percent of member milk marketed through all cooperatives, up from 52 percent. However, their share of dairy products was less significant. The eight largest dairy cooperatives sold only 6 percent of the nation's packaged fluid milk, 36 percent of cheese and 47 percent of dry whey and dry whey products. They dominated only in marketing

butter (with a 67 percent share) and nonfat dry milk (80 percent market share).

Member milk of the four largest cooperatives accounted for 41 percent of U.S. milk sold to plants and dealers and 49 percent of member milk marketed through all cooperatives. Their shares of U.S. production of selected products were: packaged fluid milk products, 5 percent; cheese, 29 percent; dry whey and dry whey products, 34 percent; butter, 56 percent; and nonfat dry milk, 66 percent. ■

NCFC names California's Peltier president, CEO



Jean-Mari Peltier has been named president and chief executive officer of the National Council of Farmer Cooperatives (NCFC), a Washington, D.C.-based trade association representing the interests of U.S. agricultural cooperatives. Peltier brings more than 25 years of national and state governmental,

agricultural and trade association experience to her new position. Peltier most recently served in the Bush administration as counselor for agricultural policy for the administrator of the Environmental Protection Agency (EPA).

"We were extremely impressed with Ms. Peltier's career accomplishments, the depth and breadth of her governmental and industry experience, as well as her keen understanding of agricultural policy, trade issues and the business challenges facing U.S. agriculture in general and agricultural cooperatives in particular," noted Douglas D. Sims, chairman of NCFC's search committee and CEO of CoBank. "She is uniquely qualified to lead NCFC at a critical time when the needs of NCFC members are changing in a highly competitive and global business environment."

John E. Gherty, president and chief executive officer of Land O'Lakes Inc. and NCFC board chairman, added, "Ms. Peltier will bring a fresh perspective and dynamic leadership to NCFC. She has a passion for agriculture and a strong commitment to the future success of agricultural cooperatives."

"I'm enthused to devote my energy and experience to serving this country's farmer cooperatives," says Peltier, who began her NCFC duties Feb. 1. "This is not new ground for me. I have been associated with agricultural

cooperatives for most of my career. I am looking forward to working with my colleagues here in Washington and with the agricultural business leaders across the nation."

Prior to her appointment with EPA, Peltier held a number of executive-level positions in the California agricultural industry and state government, including president of the California Citrus Quality Council, executive director of the California Pear Advisory Board, president of the California Pear Growers (a farmer-owned bargaining cooperative), and director of public and government relations for the California Grape and Tree Fruit League.

In addition, Peltier served as chief deputy director of the Department of Pesticide Regulation for the California EPA, senior policy specialist for the California State World Trade Commission under Governor George Deukmejian, and as a legislative assistant for Congressman Tony Coelho.

A native Californian and graduate of Fresno State University, Peltier also has served as a director or board officer for a wide range of agricultural and trade organizations, including the Coalition for Urban/Rural Environmental Stewardship, Minor Crops Farmer Alliance, Future Farmers of America Foundation, Agricultural Technical Advisory Committee on Trade, Agricultural Council of California, and Capital Agri-Women.

There are nearly 3,000 farmer cooperatives across the United States, whose members include a majority of our nation's more than 2 million farmers, ranchers and growers. Farmer cooperatives also provide jobs for nearly 300,000 Americans, many in rural areas, with a combined payroll of over \$8 billion.

Additional information about NCFC can be found at www.ncfc.org. ■

Greener pastures for bio-tech co-ops?

New, bio-based products may only be scratching the surface of potential

By Steve Thompson, Writer-Editor, USDA Rural Development
StephenA.thompson@usda.gov



What do lubricating oils, diesel fuel, glues, plastics, paints, solvents, inks and packing peanuts have

in common?

If you immediately thought “petroleum,” you’re only partly right. Petroleum is usually used in the manufacturing of such products, but other raw materials can also be used, including those grown on farms. The manufacture of new “bio-based” products to replace or supplement those made with conventional, non-renewable materials may provide new opportunities for farmer cooperatives to add value to their members’ crops.

As the nation observes Earth Day in April, it is a particularly good time to take a close look at a new federal government requirement designed to spur development of bio-based products and what that can mean for the nation’s farmers.

Farm Law spurs purchases

The Farm Security and Rural Investment Act of 2002 requires federal agencies to buy officially designated, bio-based products whenever possible for purchases of \$10,000 or more. On Dec. 19, 2003, the U.S. Department of Agriculture published a proposed regulation for designating bio-based prod-

ucts, to help pave the way for promulgating the new federal procurement guidelines.

The 2002 act gives three main objectives for the new requirement. The first is to improve the demand for bio-based products — good news for producers of commodities that can serve as raw materials. The second is to encourage the development of ag-based, value-added processing and manufacturing in rural communities. The third objective is encouraging the substitution of fossil fuels with more environmentally friendly substances (see sidebar).

The range of a new generation of bio-based products already available is surprising. The best known are the fuel additives ethanol and biodiesel. Ethanol is made by distilling ethyl alcohol produced by fermenting grain with yeast — basically the same process used for hundreds of years to make distilled liquor. Because the ethanol molecule contains atoms of oxygen, its addition to gasoline can make engines run marginally cleaner. The Environmental Protection Agency requires that many urban areas use oxygenated fuel, especially during winter, when air pollution is worst. Until recently, methyl tertiary butyl ether (MTBE) has been the oxygenator of choice. But revelations that MTBE has



contaminated groundwater in some areas, along with its unhealthy effects when breathed as fumes, have caused many states to ban it. That leaves environmentally friendly ethanol as the best alternative. Farmer-owned ethanol plants — both traditional cooperatives and hybrid co-op/limited-liability corporations — are springing up like mushrooms across the Midwest.



USDA's Agricultural Research Service (ARS) is exploring a number of bio-based technologies. Microbiologist Rodney Bothast works on developing feasible methods for processing vegetable oils into acrylic plastics. USDA/ERS photo

Biodiesel is produced by modifying soy oil or other naturally produced oils. Even the waste fat from fast-food deep fryers can be used, and the conversion process is simple enough that some enthusiasts make it in their own kitchens. When biodiesel is used by itself as diesel fuel, it reduces both soot and greenhouse gases as compared to conventional diesel. It also has better lubricating qualities, which can enhance engine life. The major diesel engine and fuel injection system producers have endorsed its use.

Biodiesel's most common use promises to be as an additive, in a 1-to-4 mixture with the petroleum fuel known as B-20. In addition to lower carbon emissions, its improved lubricity allows refiners to lower the amount of sulfur in their fuel, which reduces emissions that contribute to acid rain. Blue Sun Producers is a Colorado farmer co-op that sells B-20 blended

biodiesel through retail outlets. The co-op has set a goal of having 100 biodiesel pumps throughout the state by the end of the year, and is soliciting participation by local producers (see sidebar 2).



The manufacture of biodiesel is only one of a number of bio-based product initiatives being pursued by Iowa's West Central Cooperative. Photo courtesy West Central Co-op

Bio-based cleaning products use technology that dissolves grease and dirt without harsh solvents. One bio-based cleaner is advertised as being "powerful enough to clean battleships, yet mild enough for baby kittens," while offering better worker and environmental safety compared to comparable conventional cleaners. Soy-based paint-remover doesn't give off harsh fumes or burn the skin, unlike many conventional solvents.

Iowa co-op producing soy-based lubricants

West Central Cooperative, a farmer co-op in Iowa, markets a number of soy-based industrial and agricultural lubricants, including hydraulic fluid and penetrating oil, as well as specialized cleaners such as graffiti remover. The co-op says these products reduce environmental impact and pollution. Modified castor oil is now used in the

Eligible bio-products defined

For the purposes of the new initiative, a bio-based product is broadly defined as "a product determined by the Secretary as a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials."

Because part of the goal is to encourage development of new markets, the new requirements will not include items that USDA has determined have "mature markets." Thus, for instance, "silk, cotton and wool garments, household items and industrial or commercial products are excluded, unless made with a substantial amount of a bio-based plastic product."

Products are divided into 11 categories: adhesives; construction materials and composites; fibers, paper and packaging; fuel additives; landscaping materials, compost and fertilizer; lubricants and functional fluids; plastics; paints and coatings; solvents and cleaners; sorbents (materials that soak up liquids); plant and vegetable inks.

To qualify, a product must contain a certain percentage of bio-based materials, which varies by product. For example, 80 percent of a liquid fuel additive must be bio-based ingredients, while automotive lubricating grease is only required to contain 25 percent total bio-based materials.

For co-ops already producing bio-based items, the federal government is not yet ready to start procurement under the 2002 act. Each bio-based product will be designated as suitable for preferred procurement only after consideration of such factors as feasibility, availability, relative price, long-term costs, performance and health and environmental benefits. Each designation will take the form of a regulation published in the *Federal Register*, first with publication of a draft rule allowing for a 30-day comment period, followed by the final rule.

USDA is charged with developing the pilot procurement program, including procurement guidelines and employee training, in cooperation with the White House's Office of Federal Procurement Policy. Producers can help the approval process along by providing information about the items they wish to sell. On its Bio-based Preferred Procurement Program website, USDA offers a draft Product Information Sheet manufacturers can use as a template for submitting product information:

<http://www.biobased.oce.usda.gov/public/prodSub.cfm>.

The information posted by manufacturers and vendors will be used by Federal agencies to help identify products that fit their needs. ■

— Steve Thompson

production of urethane plastics, inks, rubber and other synthetic products. Polymerized soy oil is used in paints and caulking and glazing compounds. There's even a new kind of paper that qualifies as bio-based: it's made from kenaf, a fast-growing field crop related to cotton and okra.

Despite the growing number of bio-based products and the benefits they offer, their total share of the market is still tiny. "It's a chicken or egg problem," says Dan Manternach, president of the Bio-based Manufacturers Association. "To really take off, the market needs to attract big buyers: the McDonalds, the Walmarts and so on. The trouble is, the big buyers tell producers they'll consider buying their products only if they can promise large quantities of them. But the producers can't expand to make large quantities until they have big buyers."

Manternach is excited about the possibilities the new federal initiative opens up for value-added activities. "This is extremely promising for providing the seed the market needs," he says. He thinks the federal government's role in the bio-based products market will be similar to that of an "anchor store" in a shopping mall, attracting other customers and giving manufacturers and potential manufacturers the confidence they need to start up and expand. As a bonus, the media attention will, hopefully, provide the bio-based movement with a much-needed publicity boost.

Proponents of bio-based technologies say that current products only scratch the surface of possibilities. Kim Kristoff is the CEO of Gemtek, a company that makes bio-based cleaners, lubricants and other products. "Bio-based technologies offer tremendous value-added opportunities for farmers," he says. "There are so many things they could be doing to enhance their income, but they're not looking for them." For example, Kristoff sees current use of the grain byproducts from distillation and brewing — known as brewers' and distillers' grains — as hugely wasteful.

"They're using them as animal feed," says Kristoff, "But there are all kinds of useful substances that can be extracted from them." He names lignins, xanthan gums and complex sugars and proteins as examples, as well as enzymes for use in manufacturing plastics.

European co-ops have head start

Kristoff says that European farmer co-ops, especially in Belgium, Germany, Switzerland and France, have a big head start in exploiting bio-based technologies. Manternach points out that European farmers are allowed to plant canola farmland as participants

in set-aside programs similar to the U.S. Conservation Reserve Program, an option that isn't on the horizon for U.S. farmers.

Recent research has investigated the extraction of nutritional supple-



West Central Co-op-marketed soy-based cleaning products are promoted as less toxic and less harmful to the environment than are conventional cleaners. Photo courtesy West Central Co-op

ments and pharmaceuticals from distillers' grains. And oilseed byproducts, known as soapstocks, are also rich in exploitable chemicals, says Kristoff. USDA's Agricultural Research Service (ARS) has been exploring other uses, and has found that cottonseed, safflower, soybean, and even rice bran soapstocks can be processed into a safe, food-grade coating that keeps vegetables such as cucumbers fresh longer. Other scientists are looking into a hair gel made from the substance, which could be produced at a lower cost than similar products made from synthetic polymers. Even watermelon rinds may be useful: ARS is

USDA grant helping Colorado cooperative produce biodiesel

Blue Sun Producers co-op was founded in June 2003 to provide biodiesel production opportunities for farmers in Colorado and neighboring High Plains states. Members will grow a new kind of crop based on mustard seed, which, the co-op says, is cheaper to produce and can be made into a higher quality fuel than can soybeans.

Mustard seed also requires less rain, crucial in the arid High Plains. The growing cycle of the new oilseeds allows them to be planted after harvest on land used for winter wheat, making two crops a year from the same acreage.

The co-op will provide feedstock to Blue Sun Biodiesel, a corporation founded in 2001, which opened its first biodiesel pump Feb. 3 at a feed and hardware store in Fort Morgan, Colo. On the same day, the co-op received a \$450,000 grant from USDA Rural Development for development of this new renewable energy source.

Blue Sun is now recruiting farmers in Colorado, Nebraska, Wyoming and Kansas to grow the new crop. Further information is available on the web at <<http://www.goblue-sun.com>> or by telephone, 970-221-0500. ■

researching the extraction of a key amino acid from them for use in treating sickle-cell anemia.

Production of industrial lubricants is a field that may offer attractive opportunities to co-ops. A research program of the University of Northern Iowa, called Agriculture-Based



A small, relatively inexpensive crushing press and grease kettle can be set up on farms to produce bio-based greases for use at the site or for sale. Photo courtesy ABIL

Industrial Lubricants (ABIL), is exploring the manufacture of lubricants derived from such sources as cottonseed, soybeans, canola and other field crops. Lou Honary, an associate professor and the head of the program, says that producing greases and other lubricants from plant sources isn't that feasible for our farmers.

"We had farmers who set up soybean crushing and grease manufacturing on their farms," Honary says. "Under a USDA grant, three farm sites were set up to crush soybeans using mechanical presses, feed the meal to livestock and make fifth-wheel grease for trucks."

ABIL has developed some 30 different lubricants, including lubricants for machining metal, several different hydraulic fluids and bearing and fifth-wheel greases. Their most successful product, at 2.5 million pounds sold so far, is rail curve grease for railroads. This grease is applied to the rail curves or train wheels to reduce noise and wear on wheel flanges. According to Honary, two of the five largest Class I U.S. railroads use ABIL rail curve

grease and other Class I railroads have approved it or are in the process of approving it. "This is a 'lost-in-use' product," he says, "and the bio-based grease doesn't present the kind of environmental contamination problems petroleum grease does."

Honary says that cotton farmers and co-ops could take advantage of the cottonseeds they harvest to economically provide a necessary "lost-in-use" lubricant to themselves. "Their cotton-picking machines each use gallons of grease every day to lubricate their spindles," he says. Pressing oil from the seeds and making spindle grease from it would be easy and require only a small investment. "They could make it and use it themselves, and save money," says Honary. And, since most of the grease lost goes on the field or into

the cotton, using cottonseed-based grease would be more environmentally friendly and save cleaning costs.

Marketing expertise needed

ABIL-invented products are marketed through West Central Co-op in Iowa and Illinois-based GROWMARK. "They market them through their own outlets," he says. But Honary thinks a major problem with that approach is that most co-ops don't have the expertise or resources necessary to successfully market industrial lubricants. He believes that the answer is to enter into relationships with established petroleum distributors.

"I don't think the people who sell oils and greases really mind what the source is," he says. "They just want to sell a product that solves the problem and which they can make money on."

One issue that American farmers must take into consideration when looking at value-added activities is opportunity cost: the cost of losing one opportunity to pursue another. The opportunity cost of using oilseeds as feedstock is currently high. Oilseed — especially soybean — prices are now at record high levels, and some analysts say that, because of rising incomes in China and India, the market may stay strong for quite some time.

Despite the new federal bio-based procurement requirements, high prices at present serve as a disincentive to soybean producers from making the investment needed to add value to their crops. But among the advantages of selling value-added and finished products is the vital one of more stable mar-



West Central Co-op's biodiesel production facilities. The manufacture of most bio-based products relies on relatively accessible technology. Photo courtesy West Central Co-op

kets. Foregoing development of new value-added products in favor of taking advantage of current high commodity markets may well impose on producers its own long-term opportunity cost. ■

Missouri-based co-op brewery unveils Pony Express line of beer

TransCon AG, a Missouri-based new-generation grower cooperative, is positioning itself to become the central business hub for a variety of value-added agricultural products. With a solid business plan and a global marketing strategy, the cooperative has launched a line of specialty beers as its first products. The beers include: Pony Express Gold, Pony Express Rattlesnake Pale Ale and Pony Express Original Wheat. The beers are now selling in Missouri and Kansas, and should be available soon in California and Arizona. Later in 2004, the co-op plans to expand distribution to the majority of the Midwest.

The grower cooperative is pursuing international distribution through office presence in Taiwan, China, Japan and Mexico, according to Joe Effertz, president of TransCon AG and



chairman of the board for the co-op's brewing operations. The co-op is already shipping beer to China.

"China is a big market for soy-based products, like Pony Express Gold – a soybean-based beer," says Mark Vogel, executive vice president for brand

management at Osborn & Barr in St. Louis, the co-op's strategic partner for marketing. "Marketing research shows that soy products are perceived as healthy, so product perception of Pony Express Gold is immediately high."

Market demand could outpace production capacity, currently limited to 15,000 barrels, although new equipment is being purchased to double capacity by the first quarter of next year.

The TransCon AG cooperative was formed by Missouri producers who banded together to establish a value-added organization to improve the profitability of their farm operations. The co-op's strategy may eventually be centered around taking advantage of the Kansas City SmartPort, located at the old Richards-Gebauer airbase. The KC SmartPort is designed to be the major distribution hub of trade between Mexico, Canada and the

continued on page 31

Minnesota ethanol co-op producing premium Vodka

Another farmers' co-op has entered the "adult beverage" industry with a premium vodka that has met with early success. A farmer-owned ethanol plant in Benson, Minn., is using a small portion of its distilling capacity to produce Shakers Original American Vodka, which was unveiled last year. So far it's been a huge hit – at least on its home territory. That success has the co-op and the beverage company that markets the vodka looking at much broader distribution.

Vodka is a sideline for Chippewa Valley Ethanol, which produces the beverage through a subsidiary for Infinite Spirits of Napa Valley, Calif. Just one month after its introduction, sales of 500 cases in Minnesota exceeded first-year projections.

The potential market for premium vodka – currently dominated by European companies — is a large. Last year, consumers in the United States spent about \$9.5 billion on vodka, including about \$950 million for premium brands.

Although sales have been focused in Minnesota, Shakers vodka is now being introduced in 14 states, including California. The goal is nationwide distribution this year. Shakers is being promoted as the only ultra-premium vodka made in the United States by the farmers who grow the grain.

The municipal liquor store in Benson, a town of 4,000, saw gross sales jump by \$100,000 this year, which the manager credits to sales of Shakers vodka. ■

Exploring a greater role for agricultural cooperatives in sustaining rural living

By Thomas W. Gray,
Ph.D., Rural Sociologist,
USDA Rural Development/ RBS
thomas.gray@usda.gov



gricultural cooperatives have a long history of helping farmers achieve their goals. For generations, they have enabled

U.S. farmers to address recurring concerns: low crop and livestock prices, the high cost of farm production supplies and the need to expand markets to absorb surplus production. Historically, individual farmers have had to contend with these dynamics while competing in a marketplace with much larger — sometimes global — firms.

While cooperatives have served as vehicles for collective action to develop markets and to improve the economic viability of farmers, the strategies used to achieve gains have tended to follow, and/or deepen, paths leading to an industrialized system of agriculture.

The predominant development trajectory of U.S. agricultural production, historically, has involved an increasing use of biological, chemical and mechanical technologies. While this development path has resulted in a massive expansion in production, it has also created conditions that made it

impossible for many thousands of farm families to stay in business.

Willard Cochrane of the University of Minnesota characterizes this dynamic as akin to being on a treadmill. As individual farmers have increased scale to increase farm revenues, total quantities of product released to the market have increased and prices — while fluctuating — have on average

petition have made the economic services of many cooperatives redundant. Many have succumbed to bankruptcy, including some of the nation's largest co-ops in the past few years.

Some co-ops have responded by diversifying into other product-revenue centers, expanding geographically (including globally) as well as pursuing horizontal and vertical integration.

These survival strategies — frequently adopted in a crisis-management mode — have resulted in many cooperatives taking on a new shape as large, complex organizations that are far removed from the individual farmer.

As farm numbers decline, so do rural communities

The result of these strategies has been larger farms, fewer farmers and fewer, but larger, cooperatives. As farms and cooperatives go out of business, local communities struggle for

continued vitality with fewer people, fewer families and fewer businesses. Tax bases erode, services decline. With these declines, the ability of communities to sustain themselves through time comes into question, as do the culturally enriching, and diversifying, experiences of rural living.

Thu and Durrenberger of the University of Iowa suggest that as rural communities decline, so also goes the “social and human character benefits



The health of rural communities and cooperatives are often closely bound. Both are threatened by the decline in numbers of family farms. USDA photo by Ken Hammond

remained stable or declined. Many farm families, unable to meet increasing costs of production and lower farm prices, have thus had to leave farming.

Agricultural cooperatives have had to contend with these as well as other socio-economic pressures. Fewer farmers means fewer co-op members. Large-scale production has allowed some farmers to go direct to terminals and bypass local cooperatives. Fewer, larger farms, low prices and keen com-

of learning honesty, hard work, ingenuity, flexibility and fairness as part of being reared in a farm [and rural] environment.” Yet the cultural importance of rural living remains evident in various, not so subtle, advertising images. Hence we see product names such as Nature’s Pride, Country Time and Florida Natural. These symbols of a rural lifestyle sell products on a massive scale.

Hundreds of thousands, if not millions, of people closely identify with these images and invest their consumer dollars in them. Paradoxically, while there is a felt longing within the culture for the values of this rural lifestyle, there is a simultaneous decline in numbers of farmers and farms, and in opportunities for rural living.

Individual and collective benefits

Cooperatives offer individual and collective benefits. A farmer who receives a higher price for his or her individual products when marketed through a cooperative is receiving an individual benefit due to joint marketing with other farmers. The fact that he or she can raise a particular product for a market that an individual farmer could not reach is a mutual collective benefit (Parnell).

Historically, agricultural cooperatives have tended to emphasize individual collective benefits (though not exclusively). Most have moved with much of the rest of agriculture down a trajectory dependent on large, capital-intensive production units and technology, with heavy reliance on external sources of energy and credit. The unintended consequences — as mentioned — have been to fragment family farming functions and to displace family farmers and rural communities.

While there are many trade-offs, some cooperatives made a historic choice that emphasized individual collective benefits to farmers at the expense of mutual benefits, such as maintaining a dispersed ownership agriculture and retaining overall family farm numbers. While large numbers of individual farmers have been able to

survive, the mass of farmers as a group, particularly family farmers, have not.

Rethinking directions

Some of the major names in agricultural cooperatives have recently gone bankrupt — most notably Farmland, Agway and Tri-Valley Growers — while many others have merged and acquired other organizations to survive. Mid-sized farmers continue to go out of business and rural communities struggle to sustain themselves. We may have reached an exhaustion point in our current ways of doing things and thinking, relative to the inter-connections of agricultural cooperatives, farmers and rural communities.

Farmers, managers, employees and rural residents may need to begin asking themselves what they enjoy about living in a rural environment and how it can be sustained. Agricultural cooperatives are at the economic (and, in some ways, sociological) center of many rural communities. What agendas might be developed that explicitly capture the mutual stake-holding and interests of rural residents generally? What roles might cooperatives play that concretely embrace their central importance in rural communities, while developing the mutual interests of rural residents?

Alternatives to consider

Several rural sociologists — Chiappe and Flora at Iowa State, Beus and Dunlap at Washington State, Gillespie and Hilchey at Cornell, Stofferahn at the University of North Dakota, Wright at Northern Iowa — suggest there are a series of values and commitments that could deepen rural community sustainability. As mentioned above, most agricultural cooperatives have moved with much of the rest of agriculture down a trajectory dependent on large capital-intensive production units and technology, with heavy reliance on external sources of energy and credit.

The unintended consequences have been to fragment family farming func-

tions and to displace family farmers and rural communities. The above authors suggest there are various tradeoffs and choices. Some of these choices are presented here, not as mutually exclusive alternatives, but as possible shifts in emphases. They include:

- Deepening links between agriculture and small rural communities, including acknowledgment of mutual interests as rural residents, rather than passive acceptance of loosely connected, but dispensable, relationships between agriculture and rural communities.
- Understanding that farming is a business and a way of life (and part of rural life) vs. viewing farming solely as a business.
- Planning to place greater emphasis on both short-term benefits and long-term quality and permanence vs. predominant emphasis given to short-term benefits.
- Placing greater value on local knowledge, skills and wisdom and lessening dependence on external specialists and experts.
- Giving greater consideration to restrained consumption and conservation to preserve rural lifestyles, rather than automatically relying upon high consumption as a driver of economic vitality.
- Broadening focus to, and encouragement of, local/regional production, processing and marketing, and dilution of dependence upon, and searching for, national/international production, processing and marketings.
- More closely considering and encouraging smaller, lower capital production units and technology, and lessened reliance upon larger capital-intensive production units and technology as strategies for sustaining farming (and rural living).
- Planning that gives greater consideration to dispersed control of land, resources and capital, rather than passively accepting greater concentration in the control of land, resources and capital.

- Pursuing greater cooperation and planning to develop the mutual interests of rural residents, rather than limiting cooperation around self-interest.
- Explicit valuing of traditions of a rural and farming lifestyle, rather than passively devaluing of rural

and farming traditions and rural culture as not mattering and dispensable.

These, of course, are only outlines of choices for thinking about more concrete alternatives. Such thinking may not seem practical when decisions have already been made, capital is sunk

and strategic plans set. However to ignore these choices, and to continue along traditional agricultural trajectories, portends continued losses in a lifestyle that many mourn losing and seek to re-attach to.

continued on page 33

Land O'Lakes reports nearly \$84 million in earnings

Land O'Lakes Inc. had net earnings of \$83.5 million for 2003, compared to \$98.9 million for 2002. Co-op officials indicated that 2002 earnings were bolstered by vitamin litigation settlements. When those and other one-time gains and losses were factored out, earnings from operations were substantially improved over 2002. LO'L officials credit generally improved markets, effective cost-reduction efforts and strong sales volumes — particularly in branded and proprietary value-added product lines — for bolstering the co-op's performance in 2003.

The co-op reported \$6.3 billion in total 2003 sales, an 8-percent increase over \$5.8 billion in 2002. The sales increase was due in part to the consolidation of MoArk (Land O'Lakes' egg industry joint venture) into the company balance sheet. Without that accounting change, sales were up 3 percent for the year.

The company recently completed a debt-restructuring initiative that included the sale of \$175 million in bonds to pay down senior bank debt and a three-year extension of its revolving line of credit. LO'L paid down long-term debt by \$131 million (excluding the debt restructuring initiative) in 2003. It reported finishing the year with strong liquidity, with \$383 million in cash-on-hand and unused borrowing authority, and remained in compliance with all its financing covenants.

Co-op leaders say the new bond sale did not increase debt levels, but rather enabled the company to improve its capital structure by taking advantage of declining long-term interest rates, securing its sources of traditional seasonal and short-term borrowing, spreading term debt payments over a longer period and maintaining strong liquidity. Major assets sold in 2003 included the co-op's powdered cocoa business and its ownership position in QC, Inc. (a testing company).

New products in 2003 included two new Land O' Lakes brand dairy products: a spreadable butter with canola oil and a soft baking butter with canola oil. Sales are running ahead of forecasts. Strong sales were also realized in such areas as LO'L branded deli and foodservice products; CROPLAN GENETICS

Seed; and AgriSolutions crop protection products. Land O' Lakes- and Purina Mills-branded products also continued to provide the foundation for the co-op feed division.

• LO'L divisions reported the following 2003 fiscal results:

• **Dairy Foods** — \$5.6 million in earnings, as compared to a loss of \$32.1 million for 2002. Sales totaled \$3 billion, compared to \$2.9 billion in 2002.

• **Feed** — \$46.4 million in earnings, compared to \$156.5 million in 2002. Factoring out litigation settlements and other one-time gains and losses from 2002, feed earnings were down modestly from 2002. Feed sales of \$2.5 billion, compared to \$2.4 billion for 2002.

• **Seed** — Seed sales generated pretax earnings of \$11.6 million vs. \$8.3 million for 2002. Sales reached \$479.3 million, up from \$406.9 million in 2002.

• **Layers/Eggs** — Significant market improvement, volume growth and the success of branded eggs contributed to the company's performance in the layers/eggs industry (conducted through its MoArk joint venture), where year-end earnings totaled \$33.4 million, compared to a loss of \$9.5 million in 2002. Consolidated sales for the year were \$317.8 million. Because consolidation began in July, only half-a-year of MoArk's sales are included. Full-year sales for MoArk were \$552 million; 100 percent of MoArk's earnings are included in Land O'Lakes income.

• **Swine** — While the company reported a pretax loss of \$9.8 million for the year, swine performance was improved over 2002, when losses totaled \$23.2 million. Contributing to this improvement were better average hog prices, production efficiencies and progress in reducing capital use and exposure to market risk. Swine sales were \$91.2 million, compared to \$83.2 million in 2002.

• **Agronomy** — Land O'Lakes conducts its agronomy business through the Agrilience joint venture, in which it holds 50-percent interest. The company reported \$13.2 million in pretax earnings, compared to a loss of \$1.8 million in 2002. ■



Net income, sales decline for local farm cooperatives

By Beverly L. Rotan, Economist
USDA Rural Development/RBS
Beverly.rotan@usda.gov

Local U.S. farm supply cooperatives (many of which also market grain) had slight declines in both sales and net

income in 2002, but patronage refunds from regional cooperatives helped many show a profit for the year. The year was a dynamic one, with cooperatives facing many challenges.

Average sales per local co-op were \$15,288,026 in 2002, a 0.14-decrease from \$15,309,299 in 2001. The average net income per local co-op was \$228,500 in 2002, a 0.13-percent

decline from \$265,622 in 2001.

Of 263 local co-op financial statements analyzed for this article, 85 (or 32.3 percent) had losses in 2002. However, patronage refunds paid by regional cooperatives were up 40.1 percent. When patronage is included, only 20.1 percent of the local co-ops showed a loss.

Farm supply sales by co-ops declined 2.44 percent in 2002. Fertilizer sales were down 3.6 percent and petroleum sales fell almost 11 percent.

Farm supply sectors showing gains were: feed, up 4.4 percent; seed, up 13.1 percent; and crop protectants, up 3.1 percent.

Grain sales were stronger for local cooperatives — which is particularly

impressive in the face of declines in national production in some major grains (corn production was down 1 percent, spring wheat production was off 17 percent, durum wheat declined 23 percent and winter wheat was down 5 percent). Soybean production, however, was up 1 percent.

The 263 local cooperatives studied were classified by size: small, medium, large and super (table 2). The cooperatives were further classified into four types based on what percentage of their sales come from farm supplies (see table 2 for the precise criteria).

Stronger local co-op assets

Both current assets and total assets were up slightly, 9 and almost 6 per-

Table 1—Average farm supplies sold and products marketed; change from 2001 to 2002

Change:	2001	2002	2001 to 2002
	Dollars		Percent
Farm supplies sold:			
Feed	1,552,247	1,620,295	4.38
Seed	301,070	340,479	13.09
Fertilizer	1,782,396	1,718,493	-3.59
Crop protectants	1,338,688	1,380,241	3.10
Petroleum products	3,274,949	2,916,409	-10.95
Other	1,226,632	1,269,071	3.46
Total	9,475,892	9,244,988	-2.44
Products marketed:			
Grains and oilseeds	5,761,800	5,994,056	4.03
Other	71,507	48,982	-31.51
Total	5,833,407	6,043,038	3.60
TOTAL SALES	\$15,309,299	\$15,288,026	-0.14

cent, respectively. All aspects of current assets, except cash, increased during the two-year study period. Cash was down almost 7 percent.

Current liabilities for local co-ops jumped nearly 10 percent during the study period, with allocated equity (cash), current term debt and short-term (seasonal) debt having double-digit increases. Dividend on equity had the largest decrease (58 percent), with revolving equity redeemed (53 percent) showing the second largest decline.

Possible causes for declines in revolving equity include losses allocated from previous years, merger and/or the cooperative was fully capitalized.

Although total revenue was up 0.8 percent, total sales were down 0.14 percent. The rise of revenue was attributed to a slight increase in service income, marketing products and a sizable increase in patronage refunds from regional co-ops.

The average operating income (from commodity marketing, farm supplies and service income) rose slightly. Marketing farm commodities (crops and livestock) and grain sales both rose almost 4 percent. Service income increased 8 percent. Cost of goods sold was down 0.11 percent. In 2002, cost of goods sold averaged about 88 percent of net sales.

Total expenses was also up about 3 percent). Total wages were up for the two-year period by nearly 5 percent and represented 8 percent of total expenses. Wage expense includes payroll/salaries, employee benefits including retirement and payroll taxes.

Co-ops in the study had an average of 41 employees (part- and full-time), who earned an average salary of \$24,681. Although there was an increase in employees, salaries were about the same as in 2001.

Directors' fees and expenses were a small part of total expenses. However, director compensation is an important factor that helps many cooperatives convince producers to divert time each month to help guide their cooperative. Co-op boards averaged seven members, who were paid an average of \$942 per year. Director's fees were up 3 percent.

Monitoring performance

Some performance factors are within the control of cooperative management, but others are not. One way to monitor the performance of your cooperative is through financial statements and ratios. Ratios for the surveyed cooperatives remained relatively unchanged from 2001 to 2002 (table 3). Ratios that help assess your cooperative's performance include:

- **Liquidity ratios** – focus on a company's ability to pay bills when due. If liquidity ratios remain relatively high for a prolonged period, too much capital may be invested in liquid assets (for example, cash, short-term investments, accounts receivable and inventory) and too little is devoted to increasing member equity. These ratios should equal one or more. On average, surveyed cooperatives had quick and current ratios of slightly more than 1.0. Small cooperatives did a better job, with a current ratio of 2.09 and a quick ratio of 1.09.

- **Leverage ratios** – reveal a company's use of borrowed funds (rather than members' equity for investments) to expand its business. The goal is to borrow funds at a low interest rate and invest in business activity that produces a high rate of return, exceeding the target rate of return for investment. Debt-to-equity ratio measures the long-term solvency of a company by comparing debt to net worth. A company with a high debt-to-equity ratio could have trouble meeting fixed interest/debt payments if business

continued on page 29

Table 2—Size and type definitions used for respondent cooperatives

Cooperative size	Definition	Number
Small	up to \$5 million in total sales	90
Medium	over \$5 million to \$10 million	55
Large	over \$10 million to \$20 million	56
Super	over \$20 million	62
Cooperative type	Definition	Number
Farm supply	total net sales from farm supplies	137
Mixed farm supply	from 50 to 99 percent	57
Mixed marketing	from 25 to 49 percent	53
Marketing	less than 25 percent	16

Table 3—Financial analysis ratios for all cooperatives, 2001 and 2002

Ratio	2001	2002
Current	1.35	1.34
Quick	0.68	0.65
Debt	0.44	0.45
Debt-to-total equity	0.81	0.81
Times-interest-earned	2.81	2.90
Total-asset turnover	1.93	1.97
Fixed-asset turnover	6.61	7.11
Gross profit margin	12.70	12.74
Return-on-total assets		
before interest & taxes	5.54	5.78
Return-on-total equity	7.91	8.70

Weighing in

Study gauges impact of local ag co-ops on rural economies of Great Plains, eastern Cornbelt



**By Kevin T. McNamara
Joan Fulton
Susan Hine**

Editor's note: *Kevin T. McNamara and Joan Fulton are professor and associate professor, respectively, in the Department of Agricultural Economics, Purdue University. Susan Hine is an associate professor in the Department of Agricultural and Resource Economics, Colorado State University*

Rural economic development — always a topic of great importance to community and government leaders — has taken on even greater importance today, given recent changes in the rural and agricultural marketplace.

Increased consolidation of American agriculture is resulting in fewer farms, which, in turn, places pressure on rural economies, since there are fewer farm families to generate spending and economic activity.

In addition, recent low commodity prices are placing pressure on the spending ability of producers and farm families, which puts further pressure on rural economies. Locally owned agricultural cooperatives — businesses, which have typically centered on farm supply and grain marketing — have historically been an integral component of the local economy.

The objectives of this article are to: (1) calculate the direct and total employment and income impacts of locally owned farm supply and grain marketing cooperatives in Colorado and Indiana; (2) evaluate the loss of

employment and income that would occur in Colorado and Indiana if the locally owned agricultural cooperatives were to cease business; and (3) compare the local economic impact of these agricultural cooperatives in the Great Plains (Colorado) and the Eastern Cornbelt (Indiana).

Data for the analysis in the article was obtained from 70 locally owned cooperatives in Colorado and Indiana (35 cooperatives in each state). In-person interviews with the managers were conducted in the spring of 2000 and data was collected on level of sales, number of employees and the volume of business that would be lost to the local economy if the cooperative were not operating.

Ag's impact on state economies

The agricultural sector is a large industry in both Colorado and Indiana. The ag output of Colorado was valued at just over \$5 billion in 1999 (USDA Economic Research Service) and contributed more than \$3.67 billion in value added to the state economy (Bureau of Economic Analysis). That's about 2.47 percent of the total \$153.72 billion value added generated in Colorado in 1999. Cattle and calves accounted for about 53 percent of 1999 farm receipts in Colorado, which is home to 28,268 farms and ranches. Following cattle in importance were: corn (6 percent of ag receipts), dairy (6 percent), wheat (5 percent) and hogs (4 percent). The value of Colorado agricultural production, while spread across the state, is concentrated in the northeast region of the state. About 39 percent of

Colorado's ag receipts come from Weld and Yuma counties.

Total 1999 farm receipts in Indiana were \$4.89 billion (USDA Economic Research Service). Agriculture, forestry and fisheries, and farms contributed \$2.94 billion to Indiana's total \$182.2 billion of value added in 1999 (Bureau of Economic Analysis).

Corn (31 percent) soybeans (23 percent), hogs (12 percent), dairy (7 percent) and eggs (6 percent) accounted for the largest share of ag receipts in Indiana. Agricultural production is less concentrated in Indiana than in Colorado. Kosciusko and Dubois counties, Indiana's leading farm counties, accounted for less than 6 percent of total state agricultural receipts.

Measuring ag's impact using multipliers

Multiplier's used for estimating the contribution of agriculture to the economy have not always been valid. For instance, seven is a commonly quoted farm multiplier which can be traced back to Carl Wilken, an analyst for the Raw Materials National Council. In 1944, he published a report that used a multiplier of seven, based on the 7-to-1 ratio of nominal national income to farm marketings that year (Schluter). Applying Wilken's ratio today would yield a farm multiplier in the 20s.

The advent of the computer and better access to data have allowed a number of economists to construct input/output models that can be used to present a more exact estimate of the economic impacts of agriculture. Studies using these models were con-

ducted for a number of states in the 1990s.

The contribution of agriculture to an economy is generally evaluated by totaling the sums of output, employment and income for all industries in the food and fiber supply chain. These include input suppliers, farm-production units, processing, marketing and distribution. Sales, value-added and employment from these activities are added to the induced impacts associated with household spending of income earned in the food and fiber system to produce estimated total sales, value-added and employment impacts.

Using such methodology in an input-output framework, as calculated by Schluter and Edmondson (1986), shows that about 21 percent of the national civilian workforce was involved in the food and fiber system. Several economists have conducted similar studies to assess the importance of agriculture to state economies. Johnson and Wade (1994) estimated the impact of Virginia's agriculture system on the state's economy to be 12 percent of the state's total value added and 15 percent of employment in the state. Henry (1995) included the state's forestry sector, and estimated that the agriculture and natural resource industries accounted for a 23-25 percent share of the South Carolina economy.

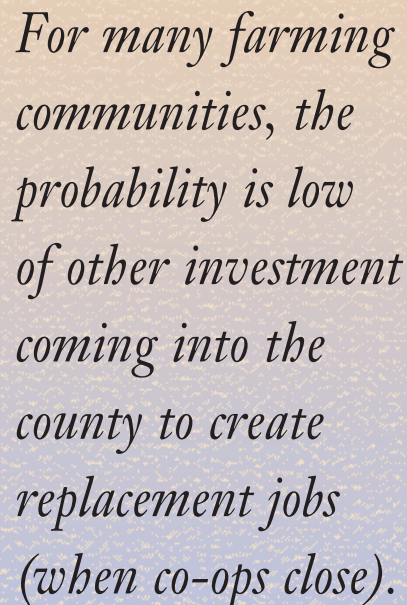
The food and fiber industry in Colorado and Indiana account for about 14 percent of employment in both states (USDA Economic Research Service). In Colorado, agricultural production accounts for 1.7 percent of employment, farm inputs 0.2 percent, processing and marketing 1.3 percent and wholesale and retail 10.6 percent.

In Indiana, farms account for 2.3 percent of employment, farm inputs 0.4 percent, processing and marketing 1.4 percent and wholesale and retail 10 percent.

Economic impact of ag cooperatives

Cooperatives provide a critical link in the food and fiber supply chain. By supplying production inputs, coopera-

tives meet producers' supply needs. The effectiveness of cooperatives influences producers input costs and, consequently, their profitability. Likewise, the marketing functions that cooperatives perform influence farmers' ability to market their commodities and directly affect the profitability of producers' operations. Cooperatives, like other input suppliers and service



For many farming communities, the probability is low of other investment coming into the county to create replacement jobs (when co-ops close).

providers, are a critical part of the food and fiber industry's supply chain.

Another aspect of cooperative operations, which is the focus of the following discussion, is as a source of local employment and income. It is also a source of goods and services to non-agricultural rural residents. In other words, cooperatives function as a critical element in sustaining a community's economic base.

Direct impacts of local cooperatives

Thirty-five cooperatives in both Colorado and Indiana provided information about the number of people they employed. The Colorado cooperatives employed 1,524 people, who earned a total of \$20.94 million. Using employment and income multipliers for the retail establishments of 1.74 and 2.25 respectively, estimated total

employment and income impacts associated with the Colorado cooperatives in the sample is 2,652 jobs and nearly \$47.13 million in total income. The Indiana cooperatives reported a total employment of 2,651 and income of \$36.43 million. These jobs stimulated a total employment impact of 4,613 jobs and nearly \$81.98 million of income.

What loss of co-ops would mean to jobs and business service

To estimate the impact of cooperatives as a source of local employment, in addition to the retail/service support they provide for agricultural producers, cooperative managers were asked what local employment and business impact would be felt by the local economy if the cooperative were to go out of operation. The managers were asked to estimate what share of their employees would have to move out of the county or be unable to find employment. They were also asked to estimate what share of their business, in terms of sales of products and services such as farm supplies, would be moved to business establishments outside of the local economy.

Managers of the Colorado cooperatives estimated that 429 (28 percent) of the 1,524 people who work for their cooperatives would have to move out of the county to find work. While these jobs would not be lost to the Colorado economy, they would be shifted from the rural areas to other communities. The result would be a decline in the employment base of the local economy.

For many farming communities, the probability is low of other investment coming into the county to create replacement jobs. Additionally, the cooperative managers indicated that about 32 percent of sales of products and services from all reporting cooperatives would have to move to suppliers in counties outside the economy where the cooperative currently operates.

The reporting cooperatives indicated that they had \$472 million in sales during 1999 and would lose \$163 million of sales to suppliers outside the

county if the cooperative were not in business. Twenty-four of the 33 cooperatives indicated that local business would be lost. On average, the cooperatives estimate that 37 percent of total business would be lost. The range was 15 to 100 percent.

Managers for the Indiana cooperatives estimated that 265 people (18 percent) working in the 2,651 co-op jobs would have to move out of the local economy to find work if the cooperative went out of business. Higher population densities and greater economic diversification in rural Indiana counties lessen the potential impact of employment losses, but the loss would be substantial for the most remote counties.

The Indiana co-op managers estimated that 27 percent of sales of products and services from all reporting cooperatives would move to another county if a cooperative went out of business. The cooperatives, which reported more than \$1.07 billion in 1999 sales, said the county would lose \$289 million in sales if the cooperative were not in business. Twenty-seven cooperatives said local sales in the range of 15-75 percent would be lost.

Comparing Colorado and Indiana economies

While the agricultural sector is an important part of the economies for both Colorado and Indiana, the states and the regions they represent are

quite different. Indiana is part of the established manufacturing region of the country. Manufacturing is the largest employment sector, accounting for about 22 percent of all jobs and 32 percent of gross product in Indiana (Bureau of Economic Analysis).

The service sector is the second largest sector in the Indiana economy, accounting for 17 percent of gross

The cooperative obviously represents an integral part of the county's economy. It provides local jobs and is a major supplier of goods and services.

state product. Indiana's population of just over 6 million has grown 11 percent during the past 20 years. And while Indiana boasts a strong, diversified agricultural sector, every Indiana resident is within 60 miles of a major city, so off-farm employment possibili-

ties exist for farm families. Just over 1.6 million people, 26 percent of the state's population, live in the Indianapolis metropolitan area.

Colorado, part of the Great Plains region, has an economy based on services and finance, real estate and insurance (FIRE). The service sector accounts for the largest share of the state's value-added activity, contributing 23 percent of gross state product. FIRE accounts for 17 percent (Bureau of Economic Analysis). Colorado's population of 4.3 million is 49 percent larger than in 1980. About 60 percent, or 2.85 million, of the state's total population live in the Denver metropolitan area. The manufacturing sector contributes 10 percent of gross state product. The state is known for some of the nation's best vacation and recreation sites, a fact that supports the importance of the service sector to the state economy.

The rural areas of Colorado and Indiana are different from each other in economic structure, farm structure and population density. According to a classification system developed by the USDA Economic Research Service, 30 rural Indiana counties (or 55 percent of the state's non-metropolitan counties) are classified as manufacturing dependent (table 1). This means that 30 percent or more of total personal income in each of these counties was earned from manufacturing wages and salaries. Only three Indiana counties

continued on page 32

Table 1—Selected characteristics of non-metropolitan counties

	Indiana		Colorado	
	Farm-dependent counties	Manufacturing-dependent counties	Farm-dependent counties	Manufacturing-dependent counties
Number of Counties	3	30	17	0
Population	25,000	1,093,000	86,000	-
Population/County	8,198	36,432	5,074	-
Persons/Square Mile	29.6	87.6	3.3	-
State Population	6,080,485		4,301,261	

Source: USDA Economic Research Service's 1989 Revised County Typology; Census

Send items to: dan.campbell@USDA.gov

Iowa Turkey Growers Co-op expands new processing plant

The Iowa Turkey Growers Cooperative (ITGC) is expanding its Mount Pleasant Foods slicing plant from 55,000 square feet with 12 slicing rooms by an additional 25,000 square feet and eight slicing rooms. The co-



Business is booming, so the ITGC slicing plant in Mount Pleasant is undergoing a major expansion. Photo courtesy ITGC

op's workforce at the plant will expand from 250 to 400. ITGC has also formed an alliance with Millard Refrigerated Services, of Omaha, Neb., to build a cold storage warehouse adjacent to the Mount Pleasant facility. The expansion of Mount Pleasant Food and construction of the Millard

warehouse are expected to be complete by late this summer.

When it opened in June 2003 to further process turkey, ham and beef products, ITGC leaders thought the Mount Pleasant facility would meet the co-op's needs for about three years. But customer demand has grown so

rapidly that the timetable had to be shortened, according to Ken Rutledge, co-op president.

ITGC operates two other processing plants, West Liberty Foods and Sigourney Foods, which ship fully cooked, ready-to-

eat meat products to Mount Pleasant for slicing. Slicing in a separate facility helps to ensure food safety. Mount Pleasant processes and sells deli and meat products for several national retailers, including 1 million pounds of turkey annually for Subway, sandwich "set-ups" for Wal-Mart and

sliced turkey and ham for Denny's restaurants.

Finished product will move from the Mount Pleasant plant by conveyor belt directly to the Millard facility next door for storage and distribution, says Ed Garrett, ITGC senior vice president and chief operating officer. Miller's 60,000-square-foot warehouse will have both refrigerated and frozen storage, with a capacity of 52 million pounds of meat products. It will employ 30 people. ITGC has annual sales of \$200 million and a workforce of 1,500.

Georgia oilseed co-op plan launched with USDA grant

Georgia's Farmers Oilseed Cooperative (FOC), after more than two years of planning, has hired its first CEO and launched a stock drive. Robert Carlson, a native of Minnesota and a veteran in the oilseed business, was hired in November and is now directing the day-to-day operations of the co-op. Carlson has extensive expe-

Net income, sales decline for local co-ops *continued from page 25*

falters or does not grow as planned. Most lenders would prefer this ratio to be 3 or lower. Farm supply cooperatives had a debt-to-equity ratio of 0.57, which is better than average.

- **Activity ratio turnover** — also called "efficiency ratios," measure activity or changes in certain assets. Poor turnover generally indicates resources are invested in non-income-producing assets. The inventory turnover ratio measures how

quickly inventory is sold and replaced each year. An inventory turnover of 12 means inventory is sold (turned over) once each month. The times-interest-earned ratio measures a company's ability to make interest payments on debt. If the ratio does not exceed the interest rate on current debt, the business may not be making enough to pay interest expenses.

- **Profitability ratios** — vary from industry to industry and should be

compared to a company's ratios for prior years/periods. The return-on-assets measures how well a company is using its assets to generate net profits. The return-on-member equity ratio measures a company's return on members' money. Marketing cooperatives' gross profit margin was lower than cooperatives in the surveyed group. This may be an indication of lower demand for their products or higher production of marketed products (crops). ■

rience running an oilseed processing plant and in marketing the finished product, both nationally and internationally.

One of Carlson's first actions was to launch a class-A stock sale. One share of the stock represents a 50-pound unit of commodity: canola, soybeans or other oilseeds. The co-op will need to sell over 10 million shares to fully utilize its planned crushing and refining facility. Promotional material is being sent out to all Georgia oilseed producers. The co-op's board anticipates that stock sales will continue for about 10 months.

FOC has been assisted in its planning efforts with a Value-Added Development Grant awarded in 2002 by USDA Rural Development. The USDA funds were used to complete a

business plan, finish securities work and pay for other organizational expenses. The co-op board has worked closely with the University of Georgia and the RBS Cooperative Development division of USDA Rural Development throughout the planning process, the goal of which is to increase on-farm income and to create a positive impact on Georgia's rural economy. Visit: www.farmersoilseed.com for more information.

Iowa Premium Pork selling stock for plant purchase

Iowa Premium Pork Co. (IPPC), a farmer-owned co-op, is attempting to raise \$6.5 million to buy a processing plant the Hartley, Iowa. The plant is owned by PM Beef Holdings LLC, of Richmond, Va., which closed it a year

ago after it expanded a similar plant in Minnesota. IPPC farmer members are being asked to invest \$10 to \$12 per share, up to 1.7 million shares, in a subsidiary called Majestic Food Group LLC. Majestic plans to acquire the processing plant and have hogs slaughtered at other plants. Plans call for 1,000 hogs to be processed daily, building to 2,000 daily within a month after operations begin this summer. Within three years, the co-op plans to process 6,000 hogs daily, or about 1.5 million per year. The plant will employ 130 people.

NMPF says CWT program having major price impact

The National Milk Producers Federation is projecting that dairy producers in Wisconsin and Minnesota

Biodiesel project looks promising for Iowa cooperative *continued from page 9*

ject. Funding for the project came from many sources, including the city of Milford, Dickinson County Economic Development Group, the Iowa Department of Economic Development, the Iowa Energy Center and CoBank.

"Our cooperative is a 101-year-old company operating as a traditional Chapter 499 (Iowa Code) cooperative," Kevin Hartkemeyer, general manager of the Farmers Co-op Elevator Co., says in an article in the Iowa Institute for Cooperatives newsletter. "One required provision of being a 499 cooperative is that a minimum of 20 percent of all profits must be returned to our member/owners each year. However, we return 40 percent of all our company's profits in cash. This makes it very difficult, if not impossible, for even a profitable company like ours to build large sums of venture capital needed for a project like this.

"Having extra capital in addition to the normal working capital it takes to run a corporation our size can be challenging, especially when trying to grow a company like ours. With that in mind, we knew it would be necessary to

tap nontraditional sources of funding for us to complete this project."

In June 2002, the co-op learned that it might be eligible for a USDA Value Added Development Grant after visiting with Dave Holm from the Iowa Institute of Cooperatives and with Jeff Jobe, director of cooperative services with USDA Rural Development.

"Since we were almost half done with the construction of our plant, we focused on the feasibility of obtaining a working capital grant," Hartkemeyer continued. It was a tough decision to decide whether it was worth the large effort it would take to obtain a grant.

"To help our decision-making process, I contacted Dick Drahota of the Storm Lake Rural Development Office. Dick came to my office and sat down with my project manager and myself, and very extensively reviewed the program and its intent. We went step by step through the evaluation criteria, and compared our scope and intent – it was critical that these complimented each other. Based on our review, we reached the conclusion that our project should be on target with most of the evaluation criteria.

"Dick then went carefully through each step of the application process. As an applicant, we had to evaluate if the detail of each step in the application process might be too involved and outweigh the possibility of potential reward. We reached the conclusion that while this would be a lengthy and very detailed process, it was pretty straight forward and there were obviously people in the USDA that were very willing to give advice and answer questions."

As a result of their work, Farmers Co-op Elevator Co. was awarded a \$500,000 grant for working capital to assist in the start-up and operation of a soy biodiesel plant.

Hartkemeyer says "that only because of this program was the cooperative able to commit resources to this project, without having to borrow additional funds for the development of this project. It also allows our entire membership to capture the benefits of this type project, without having to form a new, closed membership business where only a few of the cooperative members would participate." ■

will realize an additional \$200 million of income by September as a result of the Cooperatives Working Together (CWT) program. CWT is an industry-sponsored and funded self-help effort to boost prices to farmers by reducing surplus milk production. Participating farmers pay a 5-cent fee on every 100 pounds of milk they produce, which NMPF uses to pay other producers for reducing their production or selling their herds. The herd retirement part of the CWT program has removed 33,000 cows from the nation's milking herd of 9 million cows. Others have cut back production by changing feed programs or stopping use of growth hormones, etc.

Milk prices have risen from \$11 per hundredweight to about \$13.50 in much of the Upper Midwest since the program was launched. Even many critics are now calling the program a success, according to press reports. "With prices at record lows for 22

months, you had to do something," Waterloo, Wis., dairyman Todd Topel told the Associated Press. "It seemed to have some effect," he added, noting that he was not participating in the program.

California Co-op Center closes; services continue via Extension

Despite extensive support from the co-op community, the University of California Center for Cooperatives in Davis closed Jan. 5, a victim of budget cutbacks. However, rural cooperatives will continue to be supported by the university, which is moving the position of the center's director, Shermain Hardesty, to a specialist position in the Cooperative Extension of the university's Agricultural and Natural Resources Division. Hardesty says she expects to establish a new co-op center within the department.

This smaller co-op center would continue to support the development

of new rural cooperatives in California, as well as addressing issues related to established rural cooperatives. In addition to Hardesty, the center will be staffed by a half-time program assistant and graduate research assistants. The center's mission will be to continue to provide research, education, extension and outreach to the state's co-op community, and to administer USDA Rural Cooperative Development grants.

Wisconsin home-healthcare co-op named national finalist

Waushara County, Wis., and the Cooperative Care home-healthcare co-op are one of 50 finalists for the 2003 Innovations in American Government award – considered by many to be the "Oscars" of public service. The award is bestowed



Missouri-based co-op brewery unveils Pony Express line of beer *continued from page 20*

United States through its strategic location on the Kansas City Southern Railway.

TransCon is initially focusing on three areas of concentration: distribution, malting and brewing operations. TransCon has acquired the trademark of the former Pony Express Brewing Co. and is operating under the name "Great Plains Brewing Co."

The co-op has 153 members, 90 percent of whom are producers.

"The other 10 percent are involved in other businesses which add value in other ways that an everyday producer could not, i.e., marketing, finance, retail, distribution, etc.," Effertz says.

Stock sold at \$10,000 per unit, with the option to buy 1-3 units.

"We started our drive Jan. 1, 2003, and we were funded by May 15th," Effertz says, adding that the co-op may do an additional membership drive or spin off one of its three operations into a separate co-op.

TransCon is researching the opportunity to malt alternative grains from the fields of its producers. These grains include sorghum, soybeans, rice, corn, buckwheat and others. Having the ability to distribute these grains, whether in raw form or in any other stage of production, down to a final product, is the ultimate goal of the co-op, says Effertz.

Extensive research was conducted to determine the initial product offering, brand positioning and marketing strategies. Consumer research was conducted with key beer-market target segments across the country and with Chinese nationals. Research indicated brand positioning that could have high appeal with both young and more mature beer drinkers.

The brand attribute most valued by the target market is the brand's American persona. The distinction of a brewery solely owned by the agricultural producers of the ingredients is greatly valued by beer drinkers and

seen as an additional assurance of quality and freshness. The market research led to a campaign focused on American themes of patriotism and independence.

The label design and packaging feature eye-catching photographs of grain fields and patriotic imagery that position Pony Express as an all-American beer. In addition to glass bottles, polyethylene terephthalate (PET) bottles allow the beer to be sold at sports stadiums and golf courses. The Pony Express bottles use a multi-layer construction that incorporates a patented oxygen scavenger. In the past, beer in plastic bottles had a short shelf life, but the multi-layer technology keeps the beer fresher longer by minimizing light strike and oxygen ingress while protecting against CO₂ loss. The 16 oz. PET bottles were specifically designed to run through existing glass lines to minimize the cost impact of adding PET bottles to the packaging mix. ■

by the Kennedy School of Government at Harvard University.

Cooperative Care is an 89-member, worker-owned co-op of home health care providers who assist the elderly and disabled to live independently in their homes. The co-op development process began in September of 1999 and became operational on June 1, 2001. For more on the co-op, see the May-June 2003 issue of *Rural Cooperatives*, pages 9-12 (on-line at: www.rurdev.usda.gov/rbs/pub/open-mag.htm).

A competitive judging process will choose 15 finalists, to be announced in March. The National Selection

Committee on Innovations in American Government, chaired by David R. Gergen, editor-at-large of U.S. News & World Report and director of the Center for Public Leadership at Harvard University, will then choose five winning programs, which will be announced on July 28, in Washington. Winners receive \$100,000 grants to promote and replicate their innovative efforts.

Jim Quane of Harvard University visited Wautoma, Wis., February 25-27 to examine Cooperative Care's innovative approach and best practices. If the co-op's application makes it to the next round, a team from Wautoma

will be flown to Harvard to present the Cooperative Care story before a distinguished panel of judges.

Ralph Bunje, farm co-op bargaining leader, dies at 92

Ralph Bunje died Nov. 8 at the age of 92. A nationally recognized farm leader, orator and innovator, Bunje served as president of the California Canning Peach Association from 1950-1974. He was considered the dean of farm bargaining for over 50 years. He, along with Joseph Knapp, a former administrator of the USDA Farmer Cooperative Service, was instrumental in initiating the National Bargaining

Weighing in *continued from page 28*

are classified as farm dependent — counties in which 25 percent or more total personal income over the past five years was earned in the farm sector. In Colorado, by contrast, 17 of 53 non-metropolitan counties were classified as farm dependent. No Colorado counties were classified as manufacturing dependent.

The number of people impacted by agriculture in the respective states is noteworthy. About 25,000 people live in Indiana's three farm-dependent counties. There are 17 farm-dependent counties in Colorado. There are 3.3 persons per square mile in the farm-dependent counties of Colorado compared to 29.6 (nine times greater) persons per square mile in the farm-dependent counties in Indiana.

While it is useful to examine the impacts of local cooperatives on employment and income at the state level, those aggregate measures may not tell the complete story with respect to their importance to rural communities. To illustrate the impact from the perspective of rural communities, one locally owned agricultural cooperative's county level data was evaluated. In this one Colorado county, the local cooperative accounted for 20 of the 807 civilian jobs. In that

same county there were 47 private, non-farm establishments. The cooperative operated a convenience store, retail gasoline station, retail farm supply outlet, car-care operation, and grain-marketing facility, and it sold animal health and feed products as well as liquid propane, fertilizer and bulk petroleum.

The cooperative obviously represents an integral part of the county's economy. It provides local jobs. It also is a major supplier of goods and services to the local economy. If cooperatives in remote rural counties like this were to go out of business, jobs would be lost and consumers could lose access to critical retail markets.

Conclusions

Agricultural cooperatives are an important source of income and employment in Colorado and Indiana. Seventy reporting cooperatives account for 4,175 jobs and an estimated \$56 million in income in the two states. The combined total employment and income impacts associated with the operation of the cooperatives are: 7,265 jobs and \$129 million in personal income.

While the income and employment contribution of cooperatives is impor-

tant to the state economies, cooperatives can be a critical income and employment source to remote rural communities.

To the extent that a community can sustain a cooperative as a viable local enterprise, it is maintaining the associated income and employment in a community that would not be competitive in attracting other private business capital (manufacturing, retail, or service) because a business could not achieve the scale of operation to obtain a competitive return on investment.

Given the presence of cooperatives in rural communities, rural development programs should consider the importance of sustaining cooperatives as viable businesses for their income/employment contribution to the local economy. Policy might also consider strategies that use the management and other resources of local cooperatives as a building block for development activities that expand the availability of goods and services to rural residents.

References:

For references, contact Sue Hine at (970) 491-7370, or suehine@lamar.colostate.edu. ■

Conference in the early 1950s, which continues to meet annually.

Bunje was also instrumental in coalescing California and national bargaining groups in supporting passage of the Agricultural Fair Practices Act in 1967. At the behest of Randall Torgerson, then administrator of the USDA Agricultural Cooperative Service, Bunje authored the book "Cooperative Farm Bargaining and Price Negotiations," published by USDA in 1980 (as Cooperative Information Report 26). It is still in demand and was recently reprinted by USDA. It is a publication of enduring importance that is used by many farm groups today.

Bunje emphasized the importance of having a well-informed board of directors as a key to successful cooperative organizations. He also strongly believed in political action and member involvement.

Ron Long, A.I. innovator, retires from Select Sires

Ron Long, a respected innovator in the artificial insemination (A.I.) industry, has retired after 30 years with Select Sires. Long, who was vice president, dairy sire procurement, retired Dec. 31. Long began his career with Select Sires in 1973, working on a

dairy herd-consultation service. This program, Select Mating Service, has since evolved into the largest mating program in the world, conducting more than 3 million matings per year.

"Without a doubt, Ron Long is the most respected person in the A.I. business for his cow knowledge," says Lon



Ron Long is a leading genetics expert who travels around the globe to judge cattle shows. Photo courtesy Select Sires

Peters, manager of SMS, Select Sires. "He has traveled to all corners of the world to judge cattle shows, and to discuss genetics and the economic impact that good corrective-mating programs can have. Ron is a one-in-a-million individual who will be missed at Select Sires."

In addition to his accomplishments with Select Sires, Long has been an

industry leader, serving as president of National Dairy Shrine, on the Holstein Association USA Type Advisory Committee and Genetic Advisory Committee, on the National Association of Animal Breeders (NAAB) Standardization of Type Traits committee and on the Ohio State University Dairy Science Advisory committee. This national and international dairy judge was also elected into the Ohio State University Dairy Science Department Hall of Fame.

Based in Plain City, Ohio, Select Sires Inc. is a federation of 10 farmer-owned and -controlled cooperatives.

Community credit union to serve low-income co-ops

Northcountry Cooperative Federal Credit Union (NCFCU), a new community development credit union, is helping to make affordable home ownership available to more people across Minnesota and the Upper Midwest. The credit union will make loans to housing cooperatives and members of housing cooperatives to secure affordable home ownership through owner-occupied housing cooperatives. The credit union also offers socially motivated investors an opportunity to support the develop-

Exploring a greater role for agricultural cooperatives in sustaining rural living *continued from page 23*

Co-ops as bulwarks of rural living

The larger culture — in the symbols they embrace, and the massive consumption they pursue — seeks greater attachments reminiscent of rural family farms and communities. Agricultural cooperatives are at the center (economically and sociologically) of many of these images. While pursuing individual collective benefits of farmers has kept many in business, the mutual collective benefits of retaining family farmers in business as a group has not been emphasized. The lost benefits of rural living generally, are rarely considered.

Yet agricultural cooperatives have a

rich history of pursuing the interests of people seeking change in their lives. Embracing the desire to continue living out a rural identity, as rural residents — including managers, employees, farmers, families, husbands, wives and children — could provide a base to actively carry, if not protect, rural culture.

Re-shaping cooperative rural presence as an organization with the commitments of farmers — as being reared on a farm — in rural communities that value decentralized living, neighborliness and closeness to the seasons and food production, might serve to make explicit the mutual and collective interests of rural residents generally. The democratic aspects of cooperative

organization, service and voluntary collective action are quite congruent with the older democratic, republican values of rural people (Lauck).

Perhaps cooperatives, even if only in support of the activities of others, could help pursue alternatives that are more directed toward deepening rural traditions and culture, sustaining smaller rural communities, as well as the survivability of farmers. This broadening would require agricultural cooperatives to augment their older agendas of "getting a fair share," and greater power (the freedom to have) to one of "a freedom to be" — to continue to embrace, live out and express their identities as rural residents. ■

ment of affordable housing in their communities while enjoying the safety of federal deposit insurance.

"NCFCU's primary mission is to increase access to financing products for housing cooperatives and their members," says Margaret Lund, executive director of Northcountry Cooperative Development Fund (NCDF), sponsor organization for the credit union. "Housing cooperatives are one of the best entry-level home ownership opportunities that exist. Unfortunately, widespread use of this important tool is hindered by the fact that few conventional lenders know how to lend on these properties. The credit union will be a catalyst, providing communities across the upper Midwest access to this vital wealth building opportunity."

NCDF is a Community Development Financial Institution (CDFI) and has been making loans to cooperative enterprises across the regional Midwest since 1978. NCDF is structured as a cooperative, with over

100 member cooperatives, and acts as a catalyst for the development and growth of cooperative enterprises.

Co-ops gain North American option for .coop registration

Cooperatives now have a North American option for registering or renewing .coop Internet addressees. Pennsylvania-based Domain Bank Inc., 10th largest registrar in this country and among the 20 largest in the world, has begun registering .coop names in addition to other popular Internet domains such as .com, .net and .org.

"Domain Bank is highly regarded in the industry and a North American registrar is something we all have wanted for some time," said Paul Hazen, CEO of the National Cooperative Business Association, which won approval for the .coop top-level domain in November 2000. Hazen said a key advantage of using Domain Bank is its full range of services for those registering .coop names. For example, he said, Domain

Bank offers free and easy activation of Internet names as part of its registration fee. In addition, it offers forwarding services for email and website support services for a seamless transfer from a .com or .org address to .coop. ■

Penlight restores power in record time

Winter storm conditions in January tested the reliability of Peninsula Light Company's (Penlight) distribution system, but the 26,000-member electric cooperative reports that it passed with flying colors. CEO Rob Orton said that many

other utility customers in the Puget



Sound region were without power for days. "Our response time has significantly improved," said Orton, who credits the co-op's accomplishment to its power-reliability program, which "undergrounds" overhead lines, replaces old underground cable and trims "rogue tree branches."

Making good things *continued from page 8*

Competition for milk leads to volume premiums

The hottest membership issue for the past couple of years has been the volume premiums the co-op pays to large producers. Some members with smaller farms view them as unfair, but the Cass-Clay board feels it has to offer them to maintain the milk volume needed to keep its plants operating at maximum efficiency.

To understand why, one must consider the changing farm demographics of the area. In the mid-1980s, the co-op's largest farm had about 200 cows. Today, it has eight members which each milk 800 to 1,000 cows and account for nearly 25 percent of the co-op's milk volume. Still, the average farm in the co-op has about 50 cows.

Cass-Clay competes for milk with a number of other, larger co-ops, including DFA, Land 'O Lakes and AMPI, as

well as some private purveyors. However, co-ops in the area often work together. For example, Cass-Clay and DFA have a co-hauling arrangement that has saved both co-ops money.

"We need those large members, but then the smaller members feel they are not being treated fairly. It's a balancing act – how far do you go with premiums?" Pagel says.

The competition for milk has grown as the number of farmers quitting the business in the Upper Midwest has risen. The average age of a dairy producer in the region is about 57, and even though it's not unusual for a farmer to work into his or her 70s, there's a definite horizon issue. (See sidebar.)

"Personally, I don't like the volume premiums," Glawe says. "But if you're competing with others that initiated them, we have little choice. We can't

make our co-op a sacrificial lamb for the sake of principle. Right now, you have to do it to get the product you need to keep your plants operating efficiently. I'd say the general feeling of the board is that it's necessary, but we're not fond of it."

Given current trends, Pagel thinks volume premiums will soon pass away on their own, which he notes has already occurred on the West Coast.

Not too many years ago, quality premiums were the hot issue of the day, notes Pagel, whose nearly two decades with Cass-Clay, including 11 years as manager, have changed his attitude about co-ops.

"There is such strength in the membership and in their commitment to see this business succeed," says Pagel. "Their participation has been instrumental in shaping the direction and success of this co-op every step of the way." ■

MORE Stuff

You Need to Know

If you're a director or manager of a cooperative, or just a co-op member interested in keeping abreast of important issues that affect your interests, these publications offer you important information.



RBS Service Report 22

Directory of Farmer Cooperatives

Newly updated listings of 400 major cooperatives, covering all 50 states. Includes type of co-op, addresses, phone and fax numbers, e-mail addresses, and names of CEOs. (Free)

RBS Research Report 201

Marketing Operations of Dairy Cooperatives, 2002

America's dairy cooperatives marketed 83 percent of all the milk sold to plants and dealers in 2002. Although most are still relatively small, an increasing amount of milk is being sold by larger co-ops. Read all about it. (\$5.00)

RBS Research Report 198

Alternative Milk Price Series: Information for Cooperatives

Compares prices generated by the Chicago Mercantile Exchange spot and futures markets with Federal Milk Market Order Class I base, Class III, and Class IV prices. (\$5.00)

RBS Research Report 196

Measuring the Economic Impact of Cooperatives: Results from Wisconsin

Wisconsin cooperatives support nearly 30,000 full-time jobs and generate almost \$1 billion in total income, with agricultural co-ops contributing the lion's share. This report analyzes the financial data of almost 800 cooperatives, both agricultural and non-agricultural. (\$5.00)

Cooperative Information Report 62

Cooperative Directors: Asking Necessary Questions

Co-op directors with little business experience may not know what to ask managers, staff, auditors, members, and others about the status of their cooperative. This report guides directors in asking the necessary questions to get the information they need. (Free)

No cost to download from our website at
www.rurdev.usda.gov.

Or fill out the order form below and send or fax to:

USDA/Rural Business-Cooperative Service
1400 Independence Avenue, SW
STOP 0705
Washington, DC 20250-0705

Telephone: (202) 720-8381
FAX Number (202) 690-4083
E-mail: coopinfo@usda.gov

- ☐ Copies of SR 22: *Directory of Farmer Cooperatives* (Free)
- ☐ Copies of RR 201: *Marketing Operations of Dairy Co-ops* (\$5.00 each)
- ☐ Copies of RR 198: *Alternative Milk Price Series* (\$5.00 each)
- ☐ Copies of RR 196: *Economic Impact of Co-ops, Wisconsin* (\$5.00 each)
- ☐ Copies of CIR 62: *Cooperative Directors* (Free)

(Make checks payable to USDA)

Name _____
Address _____

Cooperative Education for **EVERYONE!**

ON YOUR MARK!

To show people why they might want to be part of a cooperative, give them a copy of this report explaining the benefits of being a co-op member: CIR 54



GO!!!

When a group decides there's a co-op in their future, they'll want to do it right. For step-by-step directions, turn to *How to Start a Cooperative*, CIR-7



GET SET!!

When somebody is ready to learn more about what makes a co-op special and how cooperatives work, they need *Co-ops 101*, CIR 55.



Download from our website at www.rurdev.usda.gov. Or, fill out the order form below and send or fax to:

USDA/Rural Development
1400 Independence Avenue, SW
STOP 0705
Washington, D.C. 20250-0705

Telephone: Area Code (202) 720-8381
FAX Number: Area Code (202) 690-4083
E-mail: coopinfo@usda.gov

Yes! Send me:

- _____ copies of Co-op Information Report 54:
Join a Cooperative.
- _____ copies of Co-op Information Report 55:
Co-ops 101
- _____ copies of Co-op Information Report 7:
How to Start a Cooperative.

Name _____
Address _____
City _____
State _____ Zip _____
Phone: _____

United States
Department of Agriculture
Washington, DC 20250

OFFICIAL BUSINESS

Penalty for private use, \$300

NOTICE:

- ☐ Check here to stop receiving this publication, and mail this sheet to the address below.
- ☐ NEW ADDRESS. Send mailing label on this page and changes to:

USDA/Rural Business-Cooperative Service
Stop 3255
Washington, D. C. 20250-3255

Periodicals Postage Paid
U.S. Department of Agriculture