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Rural COOPERATIVES

USDA / Rural Development

March/April 2008



Cherry Co-op Still on Top

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All-time Highs Set by Top 100 Co-ops

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Renewable energy: common goals, different paths

Editor's note: This commentary is excerpted from USDA Under Secretary for Rural Development Thomas Dorr's address during the opening session of the Washington International Renewable Energy Conference (WIREC 2008), March 4. More conference highlights will be included in the May-June issue.

Renewable energy has come of age. But for all of our nations, renewable energy is both an urgent challenge and a historic opportunity.

First the challenge: Since the fall of the Berlin Wall, between 2 billion and 3 billion people have joined the world market system. The world is an immensely more productive, wealthier and a vastly more competitive place. Hundreds of millions of people have already moved into the global middle class, with energy footprints to match.

This is a good thing. But the surge in global energy demand, the revaluation of energy and other commodities in world markets and growing environmental concerns about carbon emissions require that we adapt.

In this new world order, renewable energy has profound national security and economic security implications. It is a high environmental priority. It is creating new markets for farmers, generating new jobs and increasing economic opportunity in rural areas around the world.

For all these reasons, the time to act is now. All of us recognize this imperative. That is why we are here. We may be on different paths, pursuing different strategies, but we seek the same goal.

The United States, by some measures, has come late to this effort. The United States is a continental nation with an abundance of resources and the luxury of many choices. Renewables, until relatively recently, suffered as a result.

But if that is the historical record, the reality today is very different. The United States, at the beginning of this decade, began a new chapter. Old perceptions sometimes die hard, but the old perception that the United States is a laggard on renewable energy needs to die here and now.

- The United States today is one of the world's leading producers of renewable energy, measured across all sectors.
- Since the beginning of this decade, installed wind capacity in the United States has increased sevenfold. We have led the world in new capacity-added for three years running.
- Texas alone, if it were a nation, would rank seventh in the



President George W. Bush (center left) and a group of other dignitaries, including USDA Under Secretary for Rural Development Thomas Dorr (far right), check out a plug-in hybrid car at the WIREC trade show. USDA photo by Ken Hammond

world in wind energy. Texas is today America's leading wind energy state because of a Renewable Portfolio Standard signed into law by then-Governor George Bush in 1999.

The President's commitment to this cause is longstanding, and continues today.

- The United States today ranks third in the world in solar photovoltaics, behind Germany and Japan. Annual domestic shipments of photovoltaic cells and modules have increased more than 10-fold, again since the beginning of this decade.
- The United States is also a leader in geothermal, in waste-to-energy and in solar-thermal power as well.
- Turning to biofuels, U.S. ethanol production has quadrupled since 2000. We are now the world leader in this sector and a leader in bringing cellulosic ethanol to market.
- At the beginning of the decade, U.S. production of biodiesel was virtually zero, just 2 million gallons. Last year, the U.S. produced 450 million gallons, placing us second in the world behind Germany.

The development of renewable energy is not a race against other nations; it is a race against our own capacity. But it is a race to which the United States is today fully committed.

While we may have come late to the game, we have in fact, achieved more in the past eight years than in the previous 30 years combined. So this is a new day.

We recognize that there are challenges ahead and that the responses of nations may differ. The potential of biofuels, for example, is already being multiplied by advances in genomics. But not all nations share the readiness of the United States to adopt these new techniques. That is their privilege.

On another front, sustainability is a universally desired goal. But sustainability means different things to different people. Thanks to ongoing advances in science and to

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Rural COOPERATIVES

March/April 2008

Volume 75 Number 2



Committed to the future of rural communities.

Rural Cooperatives (1088-8845) is published bimonthly by USDA Rural Development, 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.

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This publication was printed with vegetable oil-based ink.

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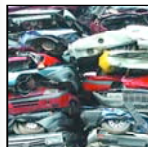
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On the Cover:

Mount Hood rises majestically above the orchards of the Oregon Cherry Growers cooperative, which is celebrating its 75th anniversary. See page 7. Photo Courtesy Oregon Cherry Growers





Largest 100 agricultural co-ops post record sales and margins

By David S. Chesnick and
E. Eldon Eversull
Agricultural Economists
USDA Rural Development

The 100 largest U.S. agricultural cooperatives had total sales of almost \$78 billion and net income of \$1.5 billion in 2006, both all-time highs (table 1). Total sales grew by more than 4 percent from 2005 while cost of goods sold grew 3 percent, helping net income grow by \$400 million.

The sales increase of \$4 billion in 2006 was due to stronger sales by diversified cooperatives (which accounted for \$2.2 billion of the gain), farm supply co-ops (\$1.3 billion) and livestock co-ops (\$1.1 billion). Much of the increase in diversified and farm supply cooperative sales was due to the increase in the price of fuels and other energy products that these cooperatives sell.

Grain prices increased greatly in 2006, but with co-ops using differing fiscal years, not all price increases for

Of the Top 100 agricultural cooperatives:

- The No. 1 ranked co-op had sales of \$14 billion.
- The 100th ranked co-op had \$108 million in sales.
- Seventeen co-ops had sales of more than \$1 billion
- Thirty co-ops had sales of \$108 million to \$200 million.
- Thirty-eight co-ops had sales of \$200 million to \$500 million.
- All Top 100 co-ops had at least \$20 million in total assets.
- The Top 100 co-ops accounted for 62 percent of the total ag cooperative sales of \$127 billion in 2006.



Table 1—Consolidated statement for the Top 100 cooperatives, 2006 and 2005

	2006	2005	Difference	Change
	—Billion \$—		—Percent—	
Revenue				
Marketing	52.88	53.96	-1.08	-2.0
Farm supply	25.08	19.81	5.27	26.6
Total sales	77.96	73.76	4.20	5.7
Cost of goods sold	69.74	66.82	2.92	4.4
Gross margin	8.22	6.94	1.28	18.4
Service and other income	1.13	1.59	-0.47	-29.4
Gross revenue	9.35	8.54	0.81	9.5
Expenses				
Wages	3.64	3.36	0.28	8.3
Depreciation	0.83	0.83	0.00	0.3
Interest	0.53	0.47	0.06	12.5
Other	3.10	2.78	0.31	11.3
Total expenses	8.10	7.45	0.66	8.8
Net operating margins	1.24	1.09	0.15	13.9
Patronage income	0.21	0.19	0.02	13.1
Non-operating income	0.18	na	na	na
Net income before taxes	1.63	1.28	0.35	27.3
Taxes	0.13	0.12	0.01	6.2
Net income	1.51	1.16	0.35	30.2

Na = This information was included in service and other income in 2005.



Table 2—Combined balance sheet for the Top 100 cooperatives, 2006 and 2005

	2006	2005	Difference	Change
	—Billion \$—		—Percent—	
Assets				
Current assets	14.93	14.07	0.86	6.1
Other assets	4.22	3.03	1.19	39.3
Investments	1.56	2.61	-1.06	-40.5
PP&E* (net)	7.45	6.86	0.59	8.5
Total assets	28.15	26.58	1.57	5.9
Liabilities and owner equities				
Current liabilities	11.05	10.44	0.62	5.9
Total liabilities	17.54	16.64	0.90	5.4
Allocated equity	8.16	7.94	0.22	2.7
Retained earnings	2.45	2.00	0.45	22.7
Total equity	10.61	9.94	0.67	6.7
Total equity and liabilities	28.15	26.58	1.57	5.9

* Property, plant & equipment



grain co-ops could be used for this analysis. Marketing revenue for grain cooperatives increased only 4 percent over 2005. Dairy prices were low in 2006 and total sales for these cooperatives fell \$1.4 billion (6 percent). Milk prices have increased sharply since 2006, so the dairy sales picture will look dramatically improved when the 2007 version of this report is compiled.

Marketing sales for diversified cooperatives (those that market grain and sell farm supplies) fell \$1.5 billion, or 12 percent, in 2006. This was primarily due to lower grain and dairy sales.

There have been a number of changes in the Top 100 in the past several years. Four cooperatives converted to investor-owned firms, two declared bankruptcies, leading to a sale of their assets, and one cooperative declared bankruptcy but reorganized and is back in the Top 100. But new co-ops that took their place on the Top 100, and higher sales by many of the other co-ops that remained on the list, more than made up for these “lost” members.

For comparative purposes and analysis, the same 100 cooperatives are in both the 2006 and 2005 data sets. There are 10 new cooperatives on the list, primarily grain and farm supply cooperatives that have grown through merger.

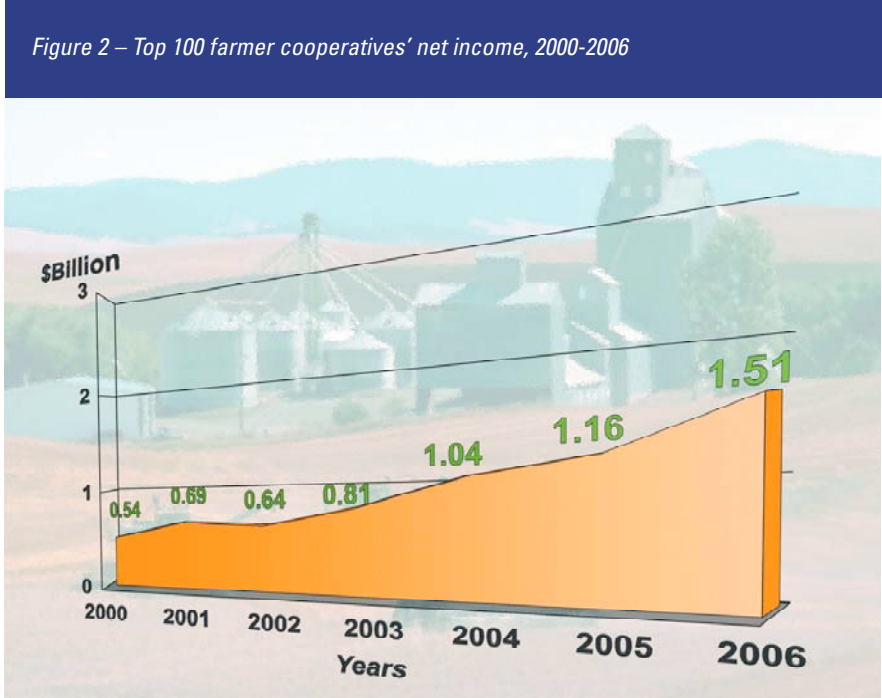
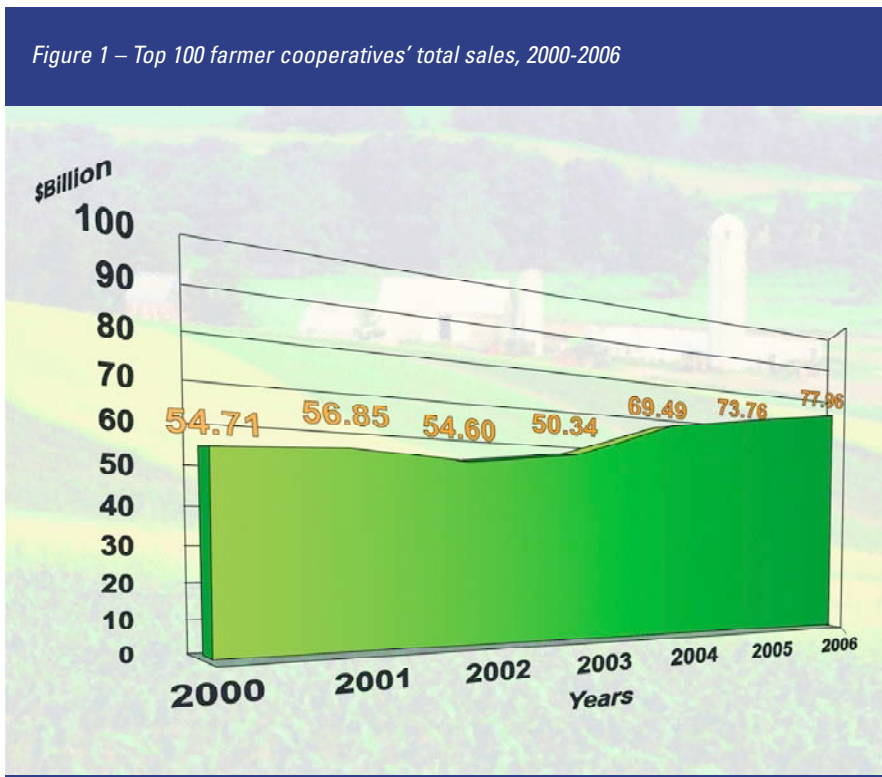
There has been a steady growth in sales in these cooperatives, with sales growing from \$55 billion in 2000 to \$78 billion in 2006 (figure 1). With the changes noted in the prior paragraph, sales in figure 1 are not strictly comparable, except for 2005 and 2006, as cooperatives were added to the Top 100 list and dropped when their status changed or they become larger or smaller.

Overall expenses were up about 1 percent, to \$8.1 billion. Wages are the largest expense item while “other” expenses is a catch-all category that covers expenses that are not wage, depreciation or interest related.

Patronage income increased \$20 million, to \$210 million, a 13-percent increase. Net income grew 30 percent, or \$350 million. Net income (after taxes) has grown from \$500 million in 2000 to \$1.5 billion in 2006 (figure 2).

The Top 100 balance sheet is presented in table 2. Total assets have grown from \$22 billion in 2000 to \$28 billion in 2006. Total assets grew \$1.6 billion, or 6 percent, from 2005 to 2006. Current assets comprise more than half of the Top 100 total assets. The large increase in other assets and decrease in investments is due to one cooperative changing how an asset was reported. Property, plant and equipment investment increased \$600 million, or more than 8 percent.

Current and total liabilities both grew more than 5 percent from 2005 to 2006. Total liabilities grew to \$17.5 billion, an increase of almost \$1 billion. Allocated equity comprises almost 80 percent of total equity. Equity levels remained low, with equity financing only 38 percent of assets in 2006 and 37 percent in 2005. ■





75 Years Strong

By Mitch Lies

Editor's note: This article is reprinted courtesy the Capital Press, www.capitalpress.com.

Salem, Ore. — As Oregon Cherry Growers recently closed the book on its first 75 years, it remains a giant in maraschino cherry production.

The co-op today is much more than that.

Oregon Cherry Growers today annually packs thousands of tons of fresh cherries and, in recent years, the co-op has branched into producing infused dried cherries and blueberries.

The result? The co-op today is as strong as ever.

“Cherry-growing is a pretty volatile business,” cherry grower and co-op member Ken Bailey says. “Having these other products has given the cooperative much needed stability.”

The transition from maraschino



The Bailey family is among the farmer-owners of Oregon Cherry Growers Inc., which is celebrating its 75th anniversary. Above, processing maraschino cherries in the early days of the co-op.

Oregon Cherry Co-op's diverse portfolio developed smoothly, but not easily

cherries to the diverse portfolio it carries today went smoothly, according to Ed Johnson, president and CEO of the co-op. But it wasn't easy.

Johnson said growers already had shifted acreage from processing varieties to fresh cherry varieties when he took the company reins in 2001. The shift created potential problems regarding company identity.

“We had to decide who we wanted to be,” he says. “Up to that point, we were a processed company that did some fresh fruit, but we were transitioning to where we are now. We are now a formidable fresh company, and we're still a formidable processed company.”

“We had to determine if those things were compatible,” he says.

Making the transition, Johnson says, was critical to the economic survival of the co-op.

“At the bottom of the change was opportunity,” he says. “The demand has increased for fresh because there is a portion of the population that wants to eat more fresh fruits and vegetables.”



Our growers see that as an opportunity.”

Johnson said the co-op reached a milestone early in the 2000s when, for the first time, it bought briner cherries from outside the company.

In years past, it was typical for co-op members to sell thousands of tons of briner cherries to other processors after meeting its own demand.

Another milestone occurred earlier this year when the co-op agreed to a joint venture with Sage Fruit of Yakima, Wash., to build a 78,000-square-foot, state-of-the-art packing facility in Wapato, Wash., for its fresh cherry production.

Cost-cutting changes

The company in recent years has made several smaller changes that have reduced production costs, including consolidating its pitting operation. All pitting now is done at its plant in The Dalles, instead of being split between Salem and The Dalles as it formerly was.

“We are in a continual cost-reduction journey,” Johnson said. “We look at every single link in our chain to determine how we can lower cost.”

One of the biggest obstacles in the future for the co-op is acquiring adequate labor.

Johnson said the industry closely follows immigration



legislation and regularly submits comments at the federal level.

“We are challenged,” Johnson said. “Labor is a significant issue and a significant concern both in the orchards and the packing lines. We have automated as much as we can.”

Oregon Cherry Growers started in 1932 when 53 Willamette Valley cherry growers founded Willamette Cherry Growers. Other cooperatives also formed in the region at around the same time, including The Dalles Cooperative Growers and Columbia Fruit Growers.

According to historical accounts, growers formed the co-ops to avoid being at the mercy of processors.

In 1966, The Dalles Cooperative and Columbia Fruit Growers merged under the name The Dalles Cooperative. In 1984, in an attempt to be more vertically integrated, The Dalles Cooperative and Willamette Cherry Growers merged, forming Oregon Cherry Growers.



Snow-capped Mount Hood rises above Oregon cherry orchards. Below, inside the co-op's processing plant. Photos courtesy Oregon Cherry Growers

Today the co-op has just under 100 grower-members split between the Willamette Valley and The Dalles/Hood River area.

The co-op sells product in domestic food service and retail markets and works at increasing export sales through market promotion programs in Pacific Rim countries.

The co-ops' members typically are on the cutting edge of production techniques, says the co-op's board chairman, cherry grower Greg Johnson of The Dalles. And many are certified under different sustainable certification programs.

Ed Johnson said growers opted to certify operations as sustainable largely because markets were demanding it.

The co-op also has increased efficiency in recent years through better utilization of sort-outs.

"Because of our diversification, we're able to utilize almost all of the fruit that we're buying," Johnson says. "We're flexible and we've diversified."

The company, he says, should be well-positioned to run for another 75 years.

"We changed our business model, but it was something that needed to happen if we were going to stay in business," Johnson says. "It's been a good change. Our balance sheet has been improving." ■



Whey to Ethanol

Is there a biofuel role for dairy cooperatives?

By K. Charles Ling
Agricultural Economist
USDA Rural Development

Editor's note: See page 46 to order the research report that this article is based on.

An estimated 90.5 billion pounds of whey was generated as a byproduct of U.S. cheese production in 2006. Besides the liquid carrier, the composition of whey is approximately 0.3 percent butterfat, 0.8 percent whey proteins, 4.9 percent lactose, and 0.5 percent minerals. So there was 4.4 billion pounds of lactose contained in the whey produced that year.

Whey may be made into many products with various processes and technologies. Condensed whey, dry whey, dry modified whey, whey protein concentrate and isolates, as well as lactose (crystallized and dried), are all whey products. There are many other secondary and tertiary products that can be derived from whey, but the volume

of whey used in these products is relatively small.

Whey products produced in 2006 were estimated to contain 1.9 billion pounds of lactose. That means there was about 2.5 billion pounds of surplus lactose not used for whey products. This vast amount of surplus lactose could be fermented to produce an estimated 203 million gallons of ethanol. This assumes complete consumption of lactose in fermentation and ethanol conversion efficiency at 100 percent of the theoretical yield.

Dairy cooperatives' share of the whey-ethanol potential could be 65 million gallons. There are two industrial-scale whey-ethanol plants in

the United States, at Corona, Calif. (although this plant is slated for closure), and Melrose, Minn. Both began operation in the 1980s and are currently owned and operated by dairy cooperatives. Together, they produce 8 million gallons of fuel ethanol a year.

The whey-to-ethanol plant commissioned in 1978 by Carbery Milk Products Ltd. of Ireland is believed to be the first modern commercial operation to produce potable (drinkable) alcohol. Starting in 1985, it has produced fuel ethanol as well. The Carbery process developed by the company has been adopted by plants in New Zealand and the United States. New Zealand started using fuel ethanol produced from whey in August 2007.

Conversion process

All ethanol production processes share some basic principles and steps. Whey permeate from protein ultra-filtration is concentrated by reverse osmosis to attain high lactose content. Lactose is fermented with some special strains of yeast. Once the fermentation has been completed, the liquid (beer) is separated and moved to the distillation process to extract ethanol.

This ethanol is then sent through the rectifier for dehydration and then denatured. The effluent (stillage and spent yeast) may be discharged to a treatment system, digested for methane gas, then sold as feed or further processed into food, feed or other products.

To be economically viable, a dehydration plant (and by inference, an ethanol plant) needs to have a minimum daily capacity of 60,000 liters of ethanol (about 15,850 gallons a day, or 5 million gallons a year), according to a 2005 New Zealand report. The estimated "at-gate" cost (operating and capital service costs) of producing ethanol from whey permeate at maximum technical potential, with a level of uncertainty of +/- 20 percent, was N.Z. \$0.6-\$0.7 per liter. Using a currency exchange rate of NZ \$1 = U.S. \$0.7, the estimated cost translated to U.S. \$1.60-1.85 per gallon.

This estimate is similar to the costs quoted by sources in the United States: about \$1 per gallon of operating cost and a capital service cost that is predicated on the capital cost of from \$1.50 to \$4 per annual gallon for a commercial operation, depending on the scale of the plant. The estimated operating cost assumes that whey permeate used in ethanol fermentation is a free (no cost) feedstock. Capital cost is the cost of the plant construction project.

There is an opportunity cost of lactose for ethanol fermentation only if there are competing uses of the same lactose, such as manufacturing dry whey, lactose or other whey products. If there is no such competition, then the whey permeate somehow has to be disposed of and the opportunity cost of lactose for ethanol fermentation is likely to be zero or even negative.

It would take 12.29 pounds of lactose to produce a gallon of ethanol, if the lactose is completely consumed in fermentation and ethanol conversion efficiency is 100 percent of the theoretical yield. For every \$0.01 net lactose value (price of lactose net of processor's cost), the feedstock cost for fermentation would be \$0.1229 per gallon of ethanol. If lactose consumption is less than complete in fermentation and ethanol conversion efficiency is less than 100 percent of the theoretical yield, then more than 12.29 pounds of lactose is required to produce a gallon of ethanol and the feedstock cost would be higher.

Economic feasibility

Whether it is economically feasible



This ethanol plant uses whey from the adjoining cheese plant in Corona, Calif., as its feedstock. However, Dairy Farmers of America (DFA) is closing the cheese plant. Photo courtesy DFA

to produce ethanol from whey permeate is determined by the balance of the production costs and the expected revenues. Net returns from the ethanol enterprise should be measured against the profitability of making other whey products or of other uses, to determine whether ethanol production is a more worthwhile undertaking. A further consideration should be deciding which of the whey enterprises fit better with a cooperative's overall business strategy.

The fact that the two whey-ethanol plants have been in operation for more than 20 years is an indication that: (1) fuel ethanol production from whey is technically feasible, (2) whey-to-fuel

ethanol production technologies and processes are mature and capable of being adopted for commercial operations and (3) producing fuel ethanol from whey is economically feasible.

In assessing the feasibility of a new whey-ethanol plant, the cost of whey permeate as feedstock needs to be carefully evaluated in this era of whey products price uncertainties. Other important factors to consider, beside feedstock cost, are: (1) appropriate plant scale that would minimize capital cost and the cost of assembling feedstock, (2) appropriate technology and process that would minimize operating cost, (3) best alternative for using and/or disposing of the effluent, (4) ethanol price and (5) various government production incentives.

Dairy cooperatives are certainly well-positioned to coordinate whey assembly for ethanol production. However, in view of the current high and unsettled dry whey

product prices, there are great uncertainties concerning the long-term development of the whey-ethanol production enterprise.

There was a very high attrition rate of fuel ethanol plants during the 1980s. Experiences of that period provide some lessons that may be relevant to future commercial whey-ethanol development. To be successful, a fuel ethanol plant should have proper technology selection, proper engineering design, adequate research support, credible feasibility study, adequate financing and personnel with technical and managerial expertise in the biochemical process. ■

Northwest Passage

Co-ops could be trail-blazers for emerging bioenergy industries in Pacific Northwest



Cow manure on the Dan DeRuyter dairy in eastern Washington is being converted into enough methane to generate electricity to light up more than 200 homes.

By Eric Bowman

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Editor's note: The Northwest Cooperative Development Center (NWCDC) received funding from the Bullitt Foundation and USDA Rural Development to explore the role of the cooperative business model in emerging bioenergy industries. The Center produced a study, Harvesting Northwest Bioenergy Cooperatives; Mapping the Route to a Cooperatively-Owned Future for Emerging Bioenergy Industries available on the web (www.nwcdc.coop/Resources/HarvestingNWBioECoops.pdf), upon which this article is based. It examines the past, present and future role of cooperatively owned businesses in the budding bioenergy industry. The conclusions are based on one year of research, including interviews with existing co-ops, surveys of groups seeking to form co-ops and a review of case studies and articles.

Bioenergy presents the Pacific Northwest with tremendous opportunities for cleaner energy and economic development. It's touted as being the answer to a variety of regional problems ranging from rural out-migration to diminishing natural resources.

The Northwest is a region born through resource extraction and now defined by a "post-industrial" economy. The traditional economy of resource-based industries and manufacturing are transitioning into a "new" economy of high-value-added sectors, such as software and biotech.

This economic transition has created new winners, but also new losers. For example, Microsoft has created many new millionaires while population and median incomes are rapidly decreasing in many rural towns.

The rise of a renewable energy industry has created hope and promise that a rural renaissance is on the horizon.

Renewable energy resources, such as wind and biomass, are distributed throughout rural regions and hold the potential for widely distributed economic benefits. Rural economies are realizing new potential from pre-existing assets. (The term “bioenergy” in this article refers to renewable energy made from biological sources, including liquid “biofuels” (primarily ethanol and biodiesel) and “biopower,” derived from numerous biomass sources, such as anaerobic digestion generation.)

The opportunity for economic development should not only be viewed within the context of jobs creation and commodity prices, but also the long-term future of potential ownership and equity. Different ownership models are ultimately designed to benefit their stakeholders, i.e., the owners. Local ownership substantially increases economic benefits compared to absentee, investor-owned businesses.

While the Midwest has offered a dynamic example for how to build locally owned biofuels plants, the situation in the Pacific Northwest is much different. Unlike the Midwest, the Northwest doesn't have as long of a cultural tradition of farmer co-ops. The Northwest has a more diverse ecology and geography and, subsequently, a broader range of crops. Whereas the agricultural infrastructure of the Midwest is based on a surplus of high-volume/low-value commodities, the Northwest is based on specialty crops (such as apples, wine, etc.) and geared for export. According to data from USDA Census of Agriculture, the produce value per acre in Idaho, Washington and Oregon are four times that of Iowa.

The specific industries perceived as holding the greatest potential for bioenergy development in the Pacific Northwest are:

- Biodiesel
- Ethanol
- Anaerobic digestion
- Combustion of woody biomass

Northwest's considerable potential

The Northwest holds near-term potential for a regionally based liquid biofuel/biodiesel industry. Oregon, Washington and Idaho have the potential to grow substantial oilseed crops, primarily rotational canola.

Multiple farmer-owned projects are now underway but a great deal of infrastructure capacity has yet to be developed. Currently, there are few regional crushers to separate the meal and the oil, and more hybrid research is needed to guarantee producers reliable crop yields. Just as with ethanol, oilseed producers (for example, the Pendleton Grain

Growers) can engage in a variety of capacities to capture greater value for their agricultural products.

The Midwest ethanol industry provides a timely case study of how a liquid biofuels industry can be developed from the farm up. Nationally, the ethanol industry is experiencing a rapid transformation toward larger, investor-owned facilities. Virtually all current ethanol industry development in the Pacific Northwest is investor-owned.

The Northwest's primary comparative advantages for ethanol production are low-cost commodities already flowing

Marketable advantages of the co-op business model

1. **Democratically controlled** by those it serves; surplus is distributed equitably.
2. **Ties to local community** mean co-ops are more likely to be socially conscientious, more accountable and more representative of the broader community.
3. No investors to feed, so **more income stays in the community**.
4. **Permanence:** co-ops live beyond their founders.
5. **Self-management**, as co-ops are a self-help tool for people to achieve together what they cannot achieve alone.
6. **Trusted business partners** — most people believe producers to be honest and reliable individuals.
7. **Co-ops focus on social, individual and community needs** in addition to the bottom line. Most investor-owned firms focus only on the bottom line.

through the region, via rail and barges, to Pacific Rim markets. It also has a large, pre-existing feed-mash market to supply the region's dairies.

While corn and wheat are grown in the Pacific Northwest, the most abundant biomass feedstocks are forestry and agricultural residues. That said, the future of cellulosic feedstocks for ethanol is still unclear. Research and development and the refining of technologies are needed to fully commercialize a cellulosic ethanol industry.

Assuming the production technology will be commercialized, the long-term potential for cellulosic ethanol is enormous and could play a major role in the liquid biofuels industry. Just as an investor-owned firm (such as Iogen with Goldman Sachs and Royal Dutch/Shell) can explore launching a cellulosic ethanol refinery, so could a group of agricultural producers explore cooperating to:

- Jointly market their agricultural residues to a biofuel plant (i.e., act as a bargaining and supply procurement cooperative);
- Join in a joint venture with an investor-owned or privately held company to operate a plant;
- Launch a producer-owned small- to medium-scale facility.



Forms are constructed to channel the flow of manure at the DeRuyter Dairy methane gas facility. Although this operation is not owned by a cooperative, this technology is well adapted for cooperatives to pursue.

AD power suited to co-ops

Anaerobic digestion (or “AD”) promises a niche solution to a distinct set of problems, from energy production to manure management. A well-recognized industry in other parts of the world, AD is quickly becoming more feasible in the Pacific Northwest because of technical advancements for its cooler climate. A group of farmers in a local area with large quantities of animal waste could realize economic opportunities by forming an AD bioenergy cooperative.

Cooperative ownership is well-suited to address specific project needs, such as the initial high capital costs of digester construction and the need for large quantities of manure. As an industry, AD offers promising opportunities to form synergies between multiple stakeholder groups, i.e., farmers who need improved manure management and communities that want clean waterways.

Woody biomass

The combustion of woody biomass for heat and power is

an established industry led by wood products manufacturers. Innovation promises that new technologies, such as integrated biorefineries, are likely just around the corner. Because bioenergy production uses large amounts of feedstock, a co-op of like-producing individuals (such as straw-producing seed growers) could efficiently support such a facility. Because of the sheer quantity of available resources, woody biomass promises to play an increasing role in the nation’s renewable energy portfolio.

America now has an opportunity to establish the future direction of the bioenergy industry and what it will accomplish for the nation. There will be costs and benefits, no matter the direction. If we seek a bioenergy economy that delivers on its promises to rural America, then we must incorporate rural economic development priorities.

While every state in the Pacific Northwest is seeking to accelerate the development of nascent bioenergy industries, there is still much development to occur in order to have the vibrant, regionally based industry people envision.

Recommendations for new and existing co-ops:

- Normal rules of business apply to co-ops: create a market-driven enterprise with a well-researched and thought-out business plan, have adequate reserve funds, etc.
- Build partnerships — co-ops represent a broader community than an average limited liability corporation (LLC) and, by definition, must appreciate and incorporate community interests. This is strength for co-ops.
- Identify what differentiates the group, be it feedstock production or marketing, and leverage these strengths to ensure economic success (see sidebar, page 13).

Co-ops must clearly identify and research their markets, resources and partners to determine if the project justifies the possible risks.

Key recommendations for local government, policymakers and the general public:

- Provide guaranteed markets through contracts, such as the business relationship the City of Portland is exploring with Pendleton Grain Growers and Madison Farms to potentially supply Oregon-grown biodiesel.
- Encourage and support accessible and sizable capitalization, including investment equity, grants and debt availability that provides “gap” financing and loan guarantees.
- Educate about, and advocate for, the benefits of local ownership.
- Realize the broader condition of industry development and seek to create what is wanted, be it decentralized, locally-owned or centralized, absentee-owned business.
- Create ownership-based incentives and/or tax benefits, such as Minnesota’s disincentives for selling off a farmer-owned facility.

Time to build equity is now

While we may still be at the dawn of the renewable energy industry, it is important for co-ops to build equity now. As private capital has rushed into renewable energy, the resources are becoming increasingly under contract with well-capitalized and entrenched firms.

As Under Secretary for Rural Development Thomas Dorr has pointed out, “This is probably the greatest new opportunity for wealth creation in rural America in our lifetimes...” It is no secret wealth is generated through the accumulation and leveraging of assets, not through passively providing inputs.

In the Pacific Northwest, a “gold-rush mentality” has led to a rapid acquisition of the “low hanging fruit” of renewable energy resources. For example, look at the wind industry, where much of the easily accessible wind rights have consolidated into the possession of just several firms. While there are still niche holes well-suited to communities, family farmers and co-ops, the major players are in place.

There would be enormous environmental benefits if all the manure in the Northwest flowed into investor-owned digesters of the design-build-own-operate model.

Industrial lifecycle stages

Usually caused by product innovation or deregulation, the following lifecycle stages are common in emerging industries:

1. *Dormant*: low numbers of competitors enjoy high monopoly profits.
2. *Takeoff*: soaring entry and virtually non-existent exit from the market.
3. *High Turnover*: many firms enter and leave the market.
4. *Shake-out*: mass exit via mergers, bankruptcies, etc.
5. *Stabilization*: a stable oligopoly emerges.

(Source: Michael Gort, Steven Klepper. *Time paths in the diffusion of product innovations*. Economic Journal, vol. 92, No. 367. September, 1982).



These units crush canola seed at Pendleton Grain Growers Co-op. The resulting oil and meal can be used for biodiesel. USDA Rural Development provided a \$300,000 Value-Added Producer Grant for the biodiesel project.

Unfortunately though in that scenario, the priority of local, rural economic benefit risks being decoupled from the other aims of the renewable energy projects.

Investors will play a powerful role in the rapid development of these industries, yet it is important for local players, co-ops and communities to develop and maintain equity early while opportunities are still available before these industries mature (see sidebar, above). These industries will undoubtedly expand and contract, as ethanol has demonstrated. Farmers, co-ops and communities will need to be strategic in their risk exposure. ■

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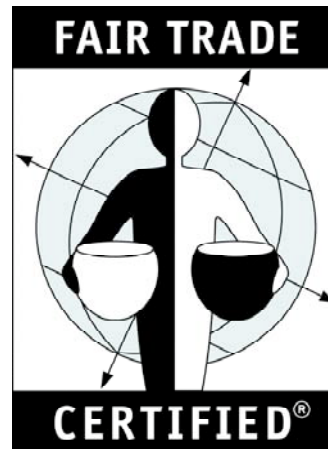
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Labels that differentiate farm products in the marketplace — such as pasture-raised poultry and organic produce or meats — can add significant value to a product.



By Kathleen Painter

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Editor's note: This article is based on the author's research report, An Analysis of Food-Chain Demand for Differentiated Farm Commodities: Implications for the Farm Sector, published under a cooperative research agreement with the Cooperative Programs of USDA Rural Development. To download the full report from the Web, or to order a free hard copy, please see page 46 of this magazine.

Around the country, a growing number of consumers are choosing fresh local produce, pasture-raised meats and artisan breads and cheeses. Like organic foods, the attributes of these products are not necessarily apparent — labels may be needed to differentiate them. Consumer demand for quality food appears to be experiencing a paradigm shift. Consumers want to know where their food comes from and how it is produced.

A survey mailed to more than 1,000 randomly selected consumers in five coastal California counties revealed that 59 percent wanted to know more about their food. Specifically, they wanted to know about food safety, nutritional content, how food animals are treated, environmental impacts, working conditions, wages and how far the food travels (Curlee, 2006).

Consumers are increasingly saying they choose foods for social, environmental and long-term health reasons. An

Consumer demand growing for differentiated farm products



underlying dissatisfaction with conventional fare may explain the strong growth rate of the organic sector over the past 15 years. Recent studies have shown a greater interest in locally produced foods than in organic products (Ostrom, 2006). In one study, consumers preferred food grown locally using some pesticides to foods grown organically (Pirog, 2004).

Responding to consumer demand, the Whole Foods grocery store chain announced in 2006 that it would greatly expand its local organic offerings. A *Time* magazine article suggests that “the new activist slogan on campus is ‘Eat Local’ (Roosevelt, 2005), and reported that 200 universities around the country were purchasing food from regional farmers, according to the Community Food Security Coalition.

Price still a barrier

Price remains the most prominent barrier to increased consumption of organic products (Hartman Group, 2004). For most consumers, the relative price differential between a conventional and an organic item determines their purchasing behavior (Yiridoe et al., 2006). For die-hard organic customers, price is relatively less important, as they will purchase organic products without much regard for price. However, as large discount retailers like Wal-Mart begin carrying inexpensive organic items, a new, larger group of organic consumers can be expected.

Industry leaders believe that expanding market preferences and concerns can support multiple certification options (Exo, 2006). If consumers are mainly looking for fresh produce grown without pesticides, a certification system could be developed for this attribute. If the overriding concern for milk consumers is hormone usage, another certification could

be developed to address this issue.

Pressure from consumers and other groups for bovine growth hormone-free milk has encouraged several large dairy cooperatives to ban the usage of this chemical and label their milk accordingly.

Can changing consumer preferences help family farmers?

Can demand for higher quality foods help family farmers stay in business? Since institutional food service operations can use fairly large quantities, supplying high-quality food to this channel holds some hope for mid-scale producers. Focused efforts to bring buyers and sellers together will be needed to coordinate these types of transactions.

Alternative certification programs such as Food Alliance certified or FamilyFarmed, both of which have Web-based background information and third-party certification, help guide businesses and consumers to producers who are catering to this market.

Demand exceeding supply

Demand for high-quality, differentiated farm products appears to be outpacing supply (Kirchenmann, 2006; Yee, 2006). While there is currently a window of opportunity, the timeframe may be limited. Large companies such as Wal-Mart, Costco and Whole Foods already contract directly with farmers, using their house brands to market these products. Farmers need their own branding and marketing systems if they want to maintain more control and profit for themselves, but they may need extensive marketing assistance plus processing and distribution facilities in order to do this.

Organic Valley provides an excellent example of a market-savvy grower cooperative, with sales of more than \$330 million and participation by more than 1,000 dairy, vegetable, poultry, beef, citrus and beef farms in 2006.

Dairy has been one of the most rapidly growing segments of the organic market. Purchases of organic dairy products comprised 13 percent of the organic food market in 2003 and is predicted to grow by over 15 percent per year through 2008. Substantial conversions to organic production are needed to supply this growing market. Clearly, there is consumer demand for hormone-free, antibiotic-free, pastured dairy products. But large organic dairy producers are now dominating the market for these types of products.

With a 78-percent growth rate, meat represented the fastest growing category of organic food in 2003 (NBJ, 2004). Demand for organic meat, fish and poultry are expected to grow at a rate of 43 percent through 2008. Currently, there is

a shortage of organic meat due to the recent rapid rise in demand, the time and cost of becoming organically certified and shortages of organic feed and a relatively long production cycle, particularly in the case of beef.

Demand for “natural” brands is also very strong in the meat and poultry categories. Restaurants and food service are using natural offerings, including several restaurant chains.

Organic and natural meats are perceived as safer and “cleaner” than conventionally raised meats that can use antibiotics, steroids or growth hormones, according to the results of a phone survey in 2001 of 500 randomly selected respondents from Nebraska, Iowa, Wisconsin and Missouri (Food Processing Center, 2001). Other important consumer concerns include the environment, animal safety, sourcing and traceability. Consumers also state that natural and organically raised meat tastes better (CDS, 2006).

Strong consumer demand is evident in the organic poultry and egg categories as well. Wholesale prices for organic poultry averaged more than 350 percent of conventional poultry for January 2006 through June 2006, while USDA says wholesale prices for organic eggs were more than four times higher than prices for conventional eggs for the same period.

From organic to otherwise differentiated

Will consumers who buy organic food be interested in buying farm products that are differentiated in other ways? If products can cater specifically to consumers’ main concerns—such as free of genetically modified organisms (GMO) or grown without broad-spectrum pesticides—then consumer demand should be higher. This is especially true if these characteristics can be provided at a lower cost than the organic product.

If farmers can provide fresh, locally grown, sustainably produced products, they should be able to interest the growing segment of consumers who are purchasing organic. About two-thirds of the consumers in a recent study purchased organic foods for health and nutrition reasons (Hartman, 2004). Other reasons included taste (38 percent), food safety (30 percent) and the environment (26 percent).

Consumers are willing to pay more for multiple attributes, such as organic grass-fed beef. Multiple attributes together may provide the necessary impetus to sell the product.

Consumers are increasing their consumption of fresh



"Farmers need their own branding and marketing systems if they want to maintain more control and profit for themselves, but they may need extensive marketing assistance..."

foods, which they believe provide better taste, health, and nutrition (Reynolds-Zayak, 2004). In a *Fresh Trends* 2004 report, consumer panelists reported on their current use of fresh produce compared to five years earlier (Barton, 2004). Overall, consumers reported purchasing an average of 18 percent more fresh produce compared to five years earlier. Increasingly, fresh fruit is consumed as a snack, in order to increase fresh produce intake.

If non-organic farmers can grow foods without the use of pesticides, then they may be addressing one of the consumers’ most serious concerns.

A successful example of this type of approach is the certified

pesticide-free tomatoes produced by Eurofresh, a U.S. corporation which operates the single largest glass greenhouse system in the world in Arizona. The company claims its varieties have more cancer-fighting lycopene than any others. Its products are certified by the Nutriclean program of Scientific Certification Systems, which performs random checks and requires stringent recordkeeping.

Another example is the pasture-raised poultry label Greener Pastures Poultry. This company successfully developed a devoted clientele for its premium, pasture-raised poultry. After weighing the costs and benefits of various certification schemes, it decided against the use of third-party certification. Sadly, it ceased operation after five years, due to the inability to develop a processing facility that would allow it to operate at a sustainable level.

Broad appeal of ‘locally grown’

Differentiated farm products may fill a specific niche without having to incur the costs of adhering to organic guidelines. A recent poll suggests that the appeal of “grown locally by family farmers” is very broad, as 75 percent of the consumers and 55 percent of food business respondents chose these terms as their first choice for produce or meat products (Pirog, 2003).

“Buying local” is one way for consumers to support local agriculture while eating fresher, less-processed foods and reducing energy spent on transporting food. A Roper poll conducted for Organic Valley, a growers’ cooperative headquartered in Wisconsin, revealed that the majority of Americans trust smaller scale farms to produce safe, nutritious food in ways that won’t harm the environment.

For a detailed list of the references used for this article, please send an e-mail to the author at: kpainter@wsu.edu. ■

North Wind



Alaska Village Electric named top wind co-op

is a 100 kW turbine with a 20-meter rotor specifically designed for deployment in cold, harsh climates. This turbine, designed and developed in conjunction with DOE, received a Research and Development 100 Award in 2000. AVEC wind turbines are producing up to 25 percent of the annual electricity needs of

Wind turbines are helping the Alaska Village Electric Co-op (AVEC) reduce dependence on diesel fuel to provide power to 53 small villages. Photo courtesy AVEC

Toksook Bay and Kasigluk.

“Alaska Village Electric Cooperative is very pleased that DOE and NRECA are recognizing our efforts to meet the challenges of developing wind power in remote Alaskan villages,” AVEC President and CEO Meera Kohler said. She also thanked Senator Ted Stevens and the Denali Commission for providing crucial help. “We see a drop of diesel not burned as a drop of diesel saved. AVEC will continue to pursue wind as aggressively as we can afford to.”

AVEC was one of six rural member-owned utilities nominated this year for the award, which was presented at the National Rural Electric Cooperative Association’s TechAdvantage 2008 Conference and Expo in Anaheim, Calif. Last Mile Electric Cooperative

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Alaska Village Electric Cooperative (AVEC) in Anchorage is the winner of the 2007 Wind Cooperative of the Year award, presented by the U.S. Department of Energy (DOE) and the National Rural Electric Cooperative Association (NRECA). This annual award, in its seventh year, recognizes AVEC for leadership, demonstrated success and innovation in its wind-power program.

AVEC provides electricity service to 53 small, native villages in rural Alaska and is using wind power to reduce its dependence on diesel power. In collaboration with the wind industry, DOE is striving to help develop advanced wind energy technologies to help meet the rapidly growing demand for energy.

“We applaud the Alaska Village Electric Cooperative for its commitment to wind power development, and for building upon President Bush’s commitment to dramatically increase the use of this clean and abundant source of energy,” DOE Assistant Secretary for Energy Efficiency and Renewable Energy Andy Karsner said. “With Department of Energy support, unprecedented growth rates in emissions-free, affordable wind production will increasingly help meet the nation’s rapidly growing demand for energy.”

AVEC currently has 990 kilowatts (kW) of installed wind-generating capacity in four of the communities it serves. Two of these communities, Toksook Bay and Kasigluk, represent the first field deployment of the Northwind 100/20 wind turbine. This

State of the Art



By Lindsay Atwood
USDA Rural Development



On a lively city street in Berkeley, Calif., well-dressed

shoppers peer into a modern-looking window display of paintings and jewelry, admiring the contemporary storefront and eclectic collection of art inside. Almost 2,000 miles away in a remote Alaskan village, Alaskan native women mail their exquisitely knitted hats and scarves to Anchorage for sale to visiting tourists, weathered fishermen and Web-surfing shoppers worldwide. These two businesses may sound very different, but they share a key, unifying trait: both are arts and crafts cooperatives.

Cooperatives are common in many business sectors, and the production and sale of fine arts and crafts are no exception. But arts and crafts co-ops face some unique challenges.

Liz Bailey, executive director of the Cooperative Development Foundation in Washington, D.C., is responsible for conducting an on-line arts and crafts co-op auction during Co-op Month

From Alaskan villages to trendy California shopping districts, arts & crafts co-ops help members tap markets

each October, and she has a wealth of knowledge about arts and crafts co-ops in general.

Help for new artists

Bailey says co-ops can help new or up-and-coming artists develop a reputation and get their feet on the ground. "I had a member of [a co-op] in California tell me that for new artists coming out and trying to get

themselves established, the co-op is the perfect model," she says. "It would be absolutely essential for a starting artist."

Rural craftspeople without an immediate market for their works can also benefit from belonging to a co-op. Co-ops provide them with access to the market and act as a magnet to draw in tourists for the greater good of the rural economy.

"It allows artists who want to live in rural areas for all the quality of life issues...a business link that makes it possible for them to live there and be part of the rural economy," Bailey says.

For any artist, though, whether new or established, rural or urban, a co-op essentially does for members what a commercial gallery would do: It gives talented artists a market for their work.

Tenacity helps gallery survive and thrive

The Arts and Crafts Cooperative Inc. (ACCI) Gallery in Berkeley holds the distinction of being the oldest arts and crafts co-op west of the Mississippi. The gallery has persevered through the



Facing page: Urban landscape painter Anthony Holdsworth begins a painting of the co-op gallery building. This page, clockwise from upper left: bronze sculpture on granite base by Robert Cantor; Pinzette glass by Michael Sosin; Ceramics by Glenda Jordan. All artists are co-op members. Photos courtesy ACCI

ups and downs of start-up and maintenance, and last year it celebrated its 50th anniversary.

Now an established, viable business, ACCI Gallery no longer has to borrow money from members to stay afloat.

“There have been plenty of times when we’ve been in the ‘save the co-op’ state,” says Lisah Horner, the gallery’s executive director. “We’re not operating in panic mode [any more]. The members can relax.”

What began as a group of people putting blankets on the sidewalk to sell their wares has evolved into a 130-member cooperative with paid staff and a fully paid for building on a busy Berkeley street.

“We were always on this street,” says Horner of the immensely popular ‘Gourmet Ghetto,’ as it is known in Berkeley. “We have so much attention from the restaurants around us. There is no way we could have done it without the street traffic and foot traffic.”

But location alone was not enough to keep the gallery in business. Horner describes the main contributing factor to the longevity of the co-op in one word: tenacity. “This would never happen without a large group of people who invested



Children of a member of the Oomingmak Musk Ox Producers’ Co-op (OMOPC) learn how their mother knits scarves, hats and other apparel from musk ox wool. Photos courtesy OMOPC

personally and financially into it and were just determined to make it happen,” she says.

Recognizing the importance of the business and day-to-day operations of the gallery, the member artists organized a board of directors.

“You need business-minded people involved,” says Horner, who served on the board prior to becoming the gallery’s director. “What I get to do is select people who I think would be ideal candidates — people who have owned businesses and have corporate backgrounds.”

In addition to their artwork, member artists contribute to the business side of the co-op with their \$250 annual dues, 20 hours per year of work for the co-op and 45 percent of their sales going to pay for the building, staff, advertising and other costs.

Co-op identity a plus

So successful has ACCI Gallery been in managing the business that unless it actively marketed the gallery’s cooperative status, it might be easy to mistake it for a commercial gallery. Co-op leaders are adamant, however, that the acronym in the name be spelled out and that people know

Early disputes can derail co-ops

Just as with any small business, arts and crafts co-ops often struggle through the start-up period and get mired down in management disputes and business problems. Liz Bailey believes that this is what will either make or break a co-op.

“They have to market their products, and management may be one of the few things they don’t do well,” says Bailey, executive director of the Cooperative Development Foundation. Arts and crafts co-ops can survive “if they can figure out how to manage the daily business and stay friends, be business colleagues and allow room for each to do their own artistic work, but then come together as a group to make that co-op thrive.”

One of the challenges that Bailey has noticed and that

she is working to combat is the fact that arts and crafts co-ops are hard to find unless they have the word “co-op” in their name. “The one thing that we have found is that they still don’t self-identify as a co-op community,” she says. “We have to find ways to bring them together.”

The arts and crafts focus of Co-op Month in October is one way that Bailey is working to overcome this disconnect within the arts and crafts co-op community. Many of the co-ops included in the auction have demonstrated incredible staying power. They have overcome management issues and day-to-day business stresses. They have established solid and respectable reputations within their communities and around the nation. They have benefited hundreds of artists over the years.

it is a co-op. After all, “it’s got a life of its own separate from a commercial gallery where you go drop your art and leave,” Horner says.

Customers appreciate the hands-on, personal approach to the co-op and have shown great interest in understanding the alternative business structure. “In fact, they ask my staff repeatedly,” Horner says. “They want to know how the whole operation works.”

Staff are eager to talk about the co-op model, as well as the artists, while they are selling. “It creates a dialogue, and you try to educate as well as sell art,” Horner says. This is a dimension less frequently found at commercial galleries but important to ACCI, and it has served them well. “We have a fabulous reputation,” Horner asserts. “It helps [the artists], and they sell.”

Aside from the business, the daily grind, the sales and the management pressures, ACCI Gallery has provided a haven to Bay Area artists. “This is an opportunity for people to...be a part of a community of artists,” Horner says.

There are members who have been with the co-op for 40 years. They stay because of what the co-op does for them. The co-op stays because of what the members do for it. It is a cycle that has worked for ACCI Gallery for 50 years and counting.

Co-op spins musk ox wool into high fashion

Half a continent and a cultural world away from Berkeley, the Oomingmak Musk Ox Producers’ Cooperative has a history as rich as the cultures and heritage of its members. Its story began when, more than half a century ago, Harvard-educated Dr. John Teal Jr. began his research on the Arctic Musk Ox, also known by its Eskimo name, Oomingmak. His goal was to determine whether the animal could be domesticated and used for its fine underwool, called Qiviut.

From his research, the Musk Ox Farm was born and is now located in Palmer, Alaska. In 1968, not long after the domestication of these animals began, the Oomingmak Musk Ox Producers’ Cooperative came into being. Twenty-five women in a small village on Nunivak Island off the west coast of Alaska took part in a knitting workshop. It was this group that comprised the original membership of the Oomingmak



The heavy coats that help musk oxen survive the Arctic winter also provide wool for co-op knitters.

Musk Ox Producers’ Cooperative. Today, 40 years later, its infant business has grown to include some 200 to 250 members in villages all across Alaska.

Almost from the very beginning, the co-op and the Musk Ox Farm in Palmer have

shared a special relationship. The cooperative buys all of the fiber from the Musk Ox Farm each year, as well as from people in Alaskan villages who hunt the musk ox as part of their subsistence lifestyles. “It is a very fine and very expensive fiber that is bought by the cooperative as a whole and yet trusted to each member without any cost to them,” says Sigrun Robertson, executive director of the cooperative.

Once they have procured the fiber, the co-op sends it to a cashmere mill to be spun into yarn. “From the time we send the fiber out until we get the yarn can take a year, maybe more,” Robertson says. “The fiber is very limited. We can’t just go out and buy more fiber. We have to make sure we procure enough.”

This incredibly warm, soft and lightweight yarn is then sent to any co-op member who asks for yarn to be knit into hats, scarves, stoles and the co-op’s signature item: the nachaq. Although the hat patterns are universal, each knitter has a specific pattern for the scarves and nachaqs that is unique to the village or area that he or she is from.

Tapping wholesale and retail markets

Back in the co-op headquarters in Anchorage, Sigrun Robertson handles the business side of the co-op. “The knitting comes in here. A check is cut the same day and mailed out the next day,” says Robertson.

Each of the items is evaluated in Anchorage for quality and workmanship. Then the items are all washed, blocked, packaged, labeled and sold, both wholesale and retail. “We produce 4,000 to 5,000 items per year at the most,” Robertson says. “They’re beautiful items.”

The Oomingmak Musk Ox Producers’ Cooperative goods are sold at its store in Anchorage, at David Morgan in Seattle, at the Musk Ox Farm in Palmer and online. “One would think it would be people from higher income levels and people who prefer to save and purchase nice things,” says

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Quilters co-op goes private



Quilting has long provided an important source of income for craftspeople in West Virginia. After many years as a co-op, Cabin Creek Quilters now operates as a privately owned business. The co-op's retail store has closed. USDA file photos



For more than three decades, Cabin Creek Quilters Cooperative served rural crafts people of West Virginia. It provided income for many coal mining families, promoted tourism in the area and preserved the region's traditions and heritage.

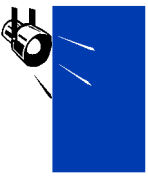
Ten years ago, the cooperative had 300 members and was strategically headquartered in an 1840-vintage house. Today, Cabin Creek Quilters still strives to preserve heritage and provide income, but as a privately owned company rather than as a cooperative.

President and owner Rebecca Stelling was once a member of the cooperative's board. "You've got to get someone involved that really understands marketing and the business aspects, and that's where I came into play," she says. "The women... came to me."

Stelling asserts that the cooperative model was very effective in the 1960s, 1970s and 1980s, but she feels it is no longer a viable way of doing things. "From a management perspective, it's really hard to manage it and maintain it with that kind of structure," she says. "Now it's a business that I operate, so I can really stay on top of things."

When Cabin Creek Quilters changed from a cooperative to a corporation in July 2007, there were only about 20 co-op members. Stelling still works with the former members of the co-op to produce quilts and she also uses new quilters. "I'm involving more women, which is truly a goal of something like this," she says.

Cabin Creek Quilters no longer has a retail location, and West Virginia State University now owns the historic house that once served as the co-op's headquarters. Stelling markets her product by doing special shows throughout the year, and she provides custom quilts for customers through her Web site: www.cabincreekquilts.com.



A Nice Guy Who Finished First

Roy Orton's track record at National Grape and CoBank earns top honors from NCFC

By Patricia Daugherty

Editor's note: Daugherty is a freelance agricultural writer based in western New York and is the daughter of Roy Orton.

Think of a bib overall-wearing farm boy who relishes playing practical jokes and shooting his BB gun more than cracking the books. Think of a persevering inventor who ignores sneers of "It can't be done," and finally proves that it can.

Think also of a business leader of a fruit beverage company who has the guts to do what is right — even if it costs him his position. Think of a cooperative director who, as the dark-suited chairman, helps set the course of a sophisticated, \$52 billion cooperative bank.

What four people come to mind? In this case, these descriptions all apply to one man: Roy Orton, who has led three major U.S. cooperatives during his career.

For his 53 years of involvement with cooperatives — including service as president of National Grape Cooperative, and chairman of Welch's and CoBank — Orton was chosen as the 2008 Director of the Year by the National Council of Farmer Cooperatives (NCFC). The honor goes to farmer cooperative directors who "take the lead to help their board of directors make decisions vital to their cooperative."

NCFC President Jean-Marie Peltier saluted Orton for his "outstanding leadership" and "dedication to the principles of farmer-ownership."

"Whoever raised Roy Orton knew what they were doing," says Ted Wolfe, former executive vice president of Welch's.

How did Orton go from farming to winning NCFC's prestigious award? The answer is rooted in purple grapes.

Invention revolutionized Concord grape industry

In 1938, in rural Ripley, N.Y., Joseph Roy Orton was born to Ross and Martha Orton, the middle of three children. Oblivious to the world's hardship during this era, little JR (as he was then called), along with siblings Lois and Donald,

romped with the chickens and played cowboys and Indians, straddling de-barked lengths of sumac that served for horses.

As he grew, JR worked alongside his dad in the chicken coops and orchards as the family farm grew into the largest poultry and cherry operation in the county.

Gathering eggs, hauling chicken feed and moving

10-foot ladders during cherry harvest filled the boy's weekends, nights and summers. Hard work and discipline were served fresh daily on the farm.

At age 20, Orton purchased his first farm — a Concord vineyard next door to his parents' farm. At that time, the juicy, thick-skinned grapes were hand-trimmed, hand-tied and hand-picked, then were trucked to Welch's for processing into juice and jelly.

As in any farming operation, hand-picking grapes is sluggish work, weather dependent and costly. Inspired to streamline vineyard operations, Orton and his Uncle Max brainstormed on a faster, cheaper way to harvest the indigo fruit. Exploring mechanization, the Ortons knew their contraption had to be substantially faster than hand-picking and would have to pick the vines clean.

Making the odds longer was the narrow window of opportunity in the autumn to test their ideas while still hand-harvesting the crop. They also had to contend with naysayers. Even Orton's alma mater, the esteemed agriculture school at Cornell University felt "...it was impractical to pick the [single curtain]...vines mechanically," according to the



Roy Orton has been honored for his leadership at National Grape Co-op/Welch's and CoBank. Photos courtesy National Grape Co-op

Finger Lakes Wine Museum newsletter.

Nevertheless, the men experimented with an over-the-row framework, with vibrating internal “fingers” that jiggled off the fruit. The framework was a cinch. The main challenge was in finding the right material and a shape for the fingers. Converting horizontal motion into vertical motion also proved critical to clean-pick the vines.

A resolve to succeed

At the time, Orton was (and remains) a member of National Grape Cooperative, the growers’ co-op that owns Welch’s. As word of Orton’s experiment spread, many responded with cynicism. But the doubters did not shake his resolve.

By age 26, Orton had built a slick prototype harvester and reached a deal with a licensee-buyer for his patent on his mechanical grape harvester. In 1967, Chisholm Ryder Co. built a model using Orton’s patented machine.

The new machines slashed harvest costs. Grower returns ballooned.

One farm worker would do well to harvest a ton of grapes per day, whereas the big blue, self-propelled machines that used the Ortons’ technology could harvest four or five tons per hour. This huge advance prompted more acres of grapes to be planted, because growers could now manage more vines.

“No new product of ours has ever had such immediate acceptance, and no other new product seems to have fewer mechanical problems,” Lee Towson, of Chisholm Ryder, said at the time. Sales of the harvesters shot up like a champagne cork and the naysayers quickly moved on, raining on someone else’s dream.

Reflecting on the innovation that revolutionized the grape industry, Orton, with characteristic humility, says “We didn’t know any better.”

Past CoBank Chairman Otis Molz remarks, “One of the very prominent characteristics of Roy is he isn’t afraid of change. He’s always willing to try something new if there is a chance of improvement.”

In 1970 he was elected to the National Grape board. In 1981 he became chairman of the two-board system of

National Grape and Welch’s, a position he held for 13 consecutive years.

Do what is right, not what is popular

Orton instinctively knew that the popular vote is often aligned with a short-term (often financial) gain. But the vote for what is right for a co-op is often based on the organization’s long-term health. Leadership favoring the former may flicker briefly, and such decisions may prove quite popular. By contrast, leadership that promotes the long-term good of the business will often face strong resistance.

Colleagues say Orton earned a reputation for leadership based on his integrity. He favored what was right for the membership, regardless of how it impacted his short-term popularity. Ironically, it was that philosophy that probably cost him re-election to his 14th term on the board in 1993.

One of the toughest challenges the dual, National Grape/Welch’s boards faced in the years before that election was the issue of declining quality and yields from Arkansas grower-members. The co-op maintained a facility in Arkansas to receive the crop, but over time the economics there grew worse. One year production in Arkansas dropped to less than 2,000 tons (about the production of one large grower in a high-production region). In addition to low yields, the Arkansas crop repeatedly did not meet the co-op’s rigorous quality standards, according to Everett Baldwin, former Welch’s CEO.

The directors and management resolved it was in the best interest for the co-op to pull out of Arkansas. But the popular opinion pushed for maintaining the status quo. Emotions ran high in Arkansas, and growers there filed a lawsuit, naming Orton and Baldwin as defendants.

Orton recalls this period being made even more difficult because “they were some of the most loyal members I ever met in my life.” The litigation lasted a year, the end result being that

the growers there were dropped by the co-op, although they were awarded a small settlement.

“Roy was never afraid to take on an unpopular cause if he felt it was in the best interest of Welch’s, and, by extension, in the best interests of the membership,” says Dan Dillon,



These bottles of Welch’s grape juice will soon be boxed and shipped to supermarkets.



Proving the naysayers wrong, Roy Orton (seen below with his original prototype in the 1960s) invented a grape-harvesting machine that revolutionized the industry. The basic technology he developed is still being used today (above).

former Welch's CEO. As upsetting as the lawsuit was, Orton "grew in stature, composure and [in his] ability to ask tough questions," says Welch's Ted Wolfe.

Service with CoBank

Orton's accomplishments with National Grape led to his election to the board of the Springfield Bank for Cooperatives (in Massachusetts) in 1992. Two years later the bank merged into CoBank, which was initially formed in 1989 when 10 of the 12 Banks for Cooperatives (part of the Farm Credit System) were reorganized and streamlined to cut administrative costs and better serve the financial needs of agricultural cooperatives.

In 2002, Orton was elected chair of CoBank, in part due to his proven ability to build consensus from a table of diverse thinkers.

Humility is unlikely to have its own chapter in a leadership textbook, but it is clearly one of Orton's secret weapons. Consistently downplaying his own contributions, he strove to shift the limelight toward others, enhancing his rapport with other directors, management and stakeholders.

Jack Cassidy, CoBank's secretary and senior vice president of board and government relations, notes that Orton is known for "lack of ego and uncommon humility." The values



he exhibits that come from being a farmer from a small town in rural New York are refreshing in the financial world, he adds.

Orton's "what-you-see-is-what-you-get" persona didn't always mesh with those who are less forthright. "You can get cynical in this business," Cassidy confides, pointing out that Orton found ways to work with people with different value sets and still get results.

"You know the saying that 'nice guys finish last?' Roy proved that statement wrong. He kept his values," Cassidy adds.

Striving for inclusiveness

While a dictatorial leader imposes his/her beliefs on others, the inclusive leader works with others to develop options and reach consensus. "Roy always gave every director a chance to voice his or her opinion," says Stan Dean, former CoBank director, adding that Orton earned a reputation for being fair to both sides of an issue.

"He doesn't keep information to himself as a way to control other people," says Cassidy. A case in point was the 1994 Springfield Bank merger into CoBank, and how he handled the resulting need to reduce the board size. After the

continued on page 43



Agricultural **Versus**

*Feedstock availability, consistency
are challenges to development
of waste-to-energy
projects*



Industrial Waste for Energy

By Jessica Ebert

Editor's note: This article is reprinted courtesy Biomass Magazine, www.biomassmagazine.com.

Any conversation about the challenges of converting waste into energy — regardless of whether the source of the feedstock is agricultural or industrial, and regardless of whether the end products are solid or liquid fuel or electricity — comes down to an issue of feedstock availability.

“I don’t care what technology you have. If you don’t have the feedstocks, you don’t have anything,” says Steve Flick, a

Missouri farmer and chairman of the Show Me Energy Cooperative board of directors. “We say it’s like having the prettiest girl ask you to the dance. If you can’t dance, then you might as well not embarrass yourself.”

The cooperative, which is made up of more than 400 farmers, is just now stepping out on the renewable energy dance floor with a flexible business model betting it will garner admiration, rather than embarrassment.

Show Me Energy has its origins in

west-central Missouri, where a group of farmers and producers with a vision of using cellulose for energy production began meeting monthly until 2004, when they officially organized under the state’s New Generation Cooperative law. At that time, the group sanctioned a feasibility study, which in turn determined that the model the group envisioned would be a good fit for producers in western Missouri and eastern Kansas.

“Missouri was a prime state because we have all these dichotomies of scale,” says Flick, a seed-company owner and farmer who will be planting six acres of miscanthus this spring. “We have corn farmers in the north, grass-seed farmers in the south, wheat farmers in the west and soybean farmers in the central part of the state. It’s a really good fit.”

In-house technology used

At the center of the cooperative’s model is technology developed in-house that converts agricultural residues into biomass fuel pellets. The farmers who invest in the cooperative sign a market agreement committing them to produce a certain amount of biomass each year.

In addition, co-op members must adhere to high standards of environmental stewardship, Flick says. For corn stover, producers must leave about 30 percent of the residue on their fields. For native grasses, farmers must harvest in the late fall after a killing frost and leave rows around waterways and tributaries.

“We are adamant about making this business model not only profitable, but realistically environmentally friendly,” he says.

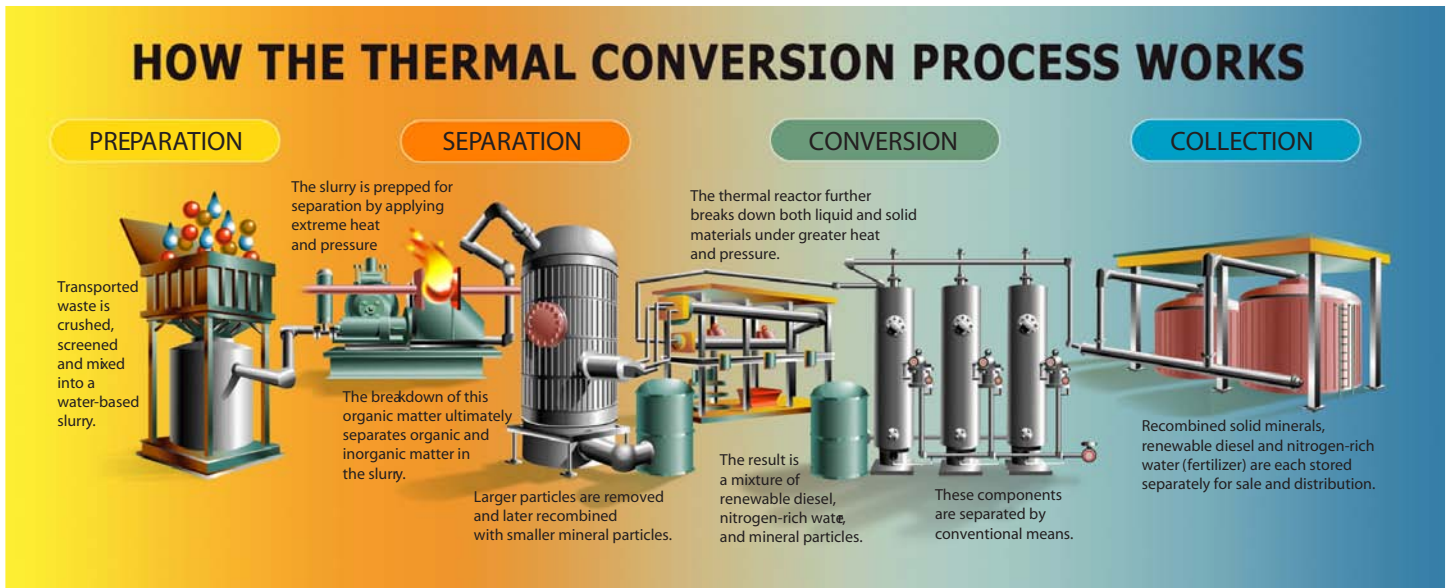
The farmers that abide by these rules collect and store the residue on their farms in round bales, which are eventually trucked to the cooperative's new pellet-production facility in Centerview, Mo. This is the main drawback to using agricultural residues as an energy feedstock: they are bulky and transporting them becomes economically disadvantageous after a certain distance.

Show Me Energy pays each farmer a certain amount per ton for residue and also pays for the hauling costs within a

before moving forward with the project.

Flick hopes other producer groups will embrace the basic tenets of the co-op: sustainability, flexibility and availability.

"We've always felt that our model is a very economically adaptable model because it's the farmers who work really hard to make it work," he says. "It's better than the 'contract-production' model that some people have been deciding to do, where they go out and have a technology and contract the feedstock. We feed the cow [the cooperative] with home-



100-mile radius of the plant. Farmers outside this area aren't discouraged from participating, but they must pay the transportation fee for any additional distance (anything over 100 miles).

100,000 tons of pellets

The pellet-production facility will produce 100,000 tons of biomass pellets each year. This fuel source will be co-fired at a local utility; five pounds of pellets will be co-fired with every 100 pounds of coal burned.

But that's just Phase One of the cooperative's vision. In Phase Two, Show Me Energy has teamed with Clean Energy Technologies LLC, a Black and Veatch Corp. company, to build a biomass-to-liquid fuel facility next door to the Centerview plant.

This second plant would demonstrate the gasification of biomass pellets for the production of liquid fuels such as ethanol, methanol, synthetic diesel, aviation or other fuels. The team hopes to win a U.S. Department of Energy grant



grown energy produced on local farms."

Feedstocks that fit

Another way to think about this is to use a feedstock that makes sense for your locale and process. For rural producers such as those of Show Me Energy, that means agricultural residues.

For those in urban settings, a more fitting feedstock is industrial waste, which could take the form of plastic, rubber, process heat, municipal solid waste or food processing debris.

These are the feedstocks targeted by Changing World Technologies Inc. (CWT), a New-York based technology developer that aims to identify and commercialize energy-efficient and eco-friendly emerging technologies. The company's thermal conversion process technology converts wastes ranging from mixed plastics to post-consumer tires, food processing waste and municipal solid waste, to solids, renewable diesel and specialty chemicals.

In terms of agricultural residues, the company has done work with manure and corn stover, as well as a combination of those types of wastes. The company hasn't finished any kind of demonstration plant design for that material because it's been focusing on food processing wastes.

However, it has generated lots of good data and it will be something they will build on in the future, says Brian Appel, chairman and CEO of CWT. The key will be finding a "champion" to shepherd the projects forward.

Appel points to the company's success in processing food wastes to define what he means by a champion. "When we developed the food processing technology, ConAgra Foods was one of the larger food slaughter houses in the world, and the company aggressively was trying to find an alternative to feeding animals back to animals," Appel explains. "ConAgra was the champion. Instead of taking this material and turning it back into animal feed, it was diverted away from the food chain so we would minimize any transmittable diseases like BSE (bovine spongiform encephalopathy)." BSE is more commonly known as mad cow disease.

When it comes to the agricultural side of things, those champions are a little harder to find, Appel says. "A lot of these are still individual family farmers, and it's much harder to get someone who wants to be the champion of just that area. It has to be someone who understands the big picture in agriculture and has the resources to go from pilot-plant to a commercial-demonstration facility."

Consistency big issue for industrial waste

In terms of industrial waste — which Appel classifies as a sub-set of municipal solid waste — the biggest challenge is not so much finding a champion as it is finding consistent feedstocks. "With municipal solid waste, you never know what you're going to get," he says. "It's always changing as consumer and manufacturing habits change and as efforts to recycle intensify."

To circumvent this inconsistency, CWT is working with large industrial shredder companies — also referred to as metal recyclers — to design a demonstration plant for the conversion of shredder residue to fuel.

"Shredder residue is a more consistent feedstock," Appel

Co-op Vision & Mission

Vision Statement:

Show Me Energy Cooperative has as its guiding vision a commitment to establish an innovative, profitable, leading model for production of biomass-based fuels which may be replicated across the country by small producer-owned cooperatives that will provide a positive economic impact on the regions where they are located.

Mission Statement:

Show Me Energy Cooperative is a nonprofit, producer-owned cooperative founded to support the development of renewable biomass energy sources in West Central Missouri through the following actions and efforts:

- A) Establishment of suitable conditions in the field of energy development which incorporate the efforts, products and goals of local agricultural biomass producers;
- B) Provide additional revenue streams for farmers and producers for their products by utilization in biomass energy production;
- C) Support and reinforce the local economy and community through employment and development of renewable, sustainable technologies;
- D) Keep member-owners informed about their co-op business, economic, political, charitable and social environments;
- E) Help to improve the quality of life, both now and in the foreseeable future, in the areas where Show Me Energy Cooperative has a business, purchasing or distributing presence.

To promote environmental stewardship, Show Me Energy Co-op members must leave 30-percent of crop residues on their fields.



explains. "If you take a refrigerator or a car and send it through a giant shredder, those companies collect the metal and the glass." The leftover material — plastic and rubber from the tires or the hoses under the hood, or the vinyl seats and the stuffing in the cushions — is what CWT is focusing on because it's more identifiable, he says.

In addition to identifying a consistent source of feedstock, another challenge to overcome is the hype, Appel says.

"Alternative fuels have been hyped worldwide. One of the biggest challenges that we've had is coming behind other additives and other alternative fuels," he says. Therefore, fixed-energy markets are the first target for CWT. "We've been a proponent of making fixed energy as the place to learn how to use these fuels because it's a logical progression to then go into transportation." ■



Ride Sharing

Equipment- and labor-sharing co-ops can help farmers save on rising costs

By Jane Livingston
Cooperation Works!

Editor's note: Livingston is a Maine-based writer, editor, marketing consultant and community organizer for cooperative development.

“We're talking about a new look at a very old idea,” says Frayne Olson of the Iowa Alliance for Cooperative Business Development at Iowa State University. “Sharing machinery and labor has been around a long time.”

Given the rising profitability of growing most commodity crops during the past couple of years, one might think Iowa farmers would have little interest in learning how to set up micro-cooperatives or partnerships for sharing and purchasing equipment and labor.

Think again.

While many farm sectors are currently doing quite well, that picture can change quickly, Olson notes. As such, smart farmers look for every possible way to sustain their success in good times and bad.

The equipment Olson is talking about isn't an old, saddle-seat tractor with a bunch of attachments. Farmers seeking to expand or upgrade operations today are often looking at combines, sprayers and row-crop planters. These are costly, big-ticket items. A new combine and headers, for example, can cost upward of \$250,000. If two, three or more farmers can share a piece of equipment such as this, they can save a lot of dollars.

Learning to work together

“Farming is not just a one-man show any more,” says Olson. “And farm labor, especially skilled labor, is hard to come by.” Justifying the purchase cost of a major piece of farm equipment also creates the need to coordinate supporting activities to make full use of a machine's time in the field. Sharing the workload among partners can result in significant gains in efficiency. One farmer may specialize in driving the combine while others may haul the crop to market or a storage facility.



Hammering out the actual agreements between partners can be a daunting task, however. That's why the Iowa Alliance created a workshop to introduce interested producers to the concept of shared-equipment and shared-labor co-ops, as well as other types of “sharing” partnerships.

The first thing workshop participants do is review a series of case studies the Alliance has compiled. These studies focus on groups of producers who have formed, or tried to form, similar associations. They give a perspective on what others have done and provide a good starting point for discussion.

“Farmers are really concerned about the nuts and bolts stuff,” Olson says. “So we hit them right away with the question: How do you divide the costs? We give them some spread sheets and other information, even offer some accounting procedures to help them make it more equitable.”

But that's only a start. Participants are then asked to describe their farm operations, their skill sets and work habits. They also identify their own personality traits and what they are looking for in an ideal partner.

Some farmers want a partner with similar skills and needs, figuring that will make for a smoother working relationship and easier communications. Others prefer to find someone with different skills that will complement and expand on their own. Both types of partnership/co-ops have value. Being able to arrange a mutually agreeable work schedule is, of course, also crucial.

Expanding the pie

At this point in the workshop, the topic of business structure is introduced. There are many ways to draft an operating agreement, each with potential advantages and disadvantages. Partners or co-op members may decide to share only one piece of equipment and agree only to share use and costs of that one machine. Others may want to share labor or share multiple pieces of equipment. Farmers can also form a co-op or partnership to purchase equipment and inputs — even to jointly market their crops (if they are not already members of a marketing cooperative).

Once prospective partners have gone through the process of identifying what they want from one another and what each has to offer, Olson says they should have a pretty good idea about whether they want to work together.

The important thing for people to take away from the workshop, Olson emphasizes, is the recognition that they can work together if they are willing to look at equipment- and labor-sharing realistically and remain somewhat flexible in planning day-to-day activities. They also need to clearly define what it is they can do together better than they can

New Orleans group attends co-op development training

Six community developers from New Orleans were among the 26 professionals enrolled in the fall session of “The Art and Science of Cooperative Business Development,” a five-day training program conducted by CooperationWorks! The New Orleans contingent was experienced in conventional business assistance but was unfamiliar with the co-op business model. In



Participants in a workshop for co-op development specialists tour the Willy St. Food Co-op in Madison, Wis.



Farmers hit the books at a workshop where they explored the pros and cons of farm equipment-sharing co-ops.

do individually.

“Our whole objective is to make the pie bigger,” Olson concludes.

To learn more about the Iowa Alliance, visit: www.extension.iastate.edu/coops. For more information on the workshops, visit: www.machinerysharing.info. ■

light of the enormous rebuilding needs that still exist in their home city, they were awarded scholarships by the Cooperative Development Foundation and CooperationWorks!

“By working together through cooperative ventures, residents of the Gulf region will have a much stronger voice in rebuilding their communities and their lives,” says Audrey Malan of CooperationWorks!

The Mississippi Center for Cooperative Development (part of the Mississippi Association of Cooperatives) is helping a New Orleans nursing home’s employees create a worker cooperative to offer laundry, cleaning, food preparation and other services to elderly residents of Saint Margaret’s Daughters’ Nursing Home, located in a former hospital in the city’s Lower Ninth Ward, and other local people in need of assistance.

To apply for the upcoming spring 2008 training, call 1-800-600-7682 or e-mail info@cooperationworks.coop.

Lowering the Peak

Tornado impact prompts Illinois co-op to expand demand-management program

By Anne Mayberry
USDA Rural Development
Utilities Programs

Demand management. What it's not: The latest corporate leadership trend. What it is: A way for your electric utility to better manage power use.

Generally reserved for commercial and industrial customers, Shelby Electric Cooperative in Illinois has taken the demand-management practice to a new level by including small businesses and residential customers in its distributed-generation program.

Shelby's small business- and residential-demand management program originated in April 2006, after a tornado caused power outages. The cooperative had difficulty restoring electricity to customers served by an investor-owned utility substation.

Applying principles of its distributed generation program — created for large commercial and industrial customers to smaller customers — Shelby delivered a unique program to meet rural needs.

Distributed generation is the practice of electric utilities working with customers interested in installing their own electric power generation units to generate their own power, when necessary. This additional power generation can then be tapped by the utility during outages or periods of peak use.



Installation of 100 of these generators at homes and small businesses will help the Shelby Electric Cooperative during peak-demand periods and during power outages.

Incentives established

Shelby's program includes incentives that encourage residential member-customers to purchase natural gas and propane-powered generators. If they allow the cooperative to interrupt their service during peak demand, they qualify for a 15-percent reduction in their electric bills.

This ability to interrupt customer service can help utilities better control electric load and increase reliable service during high-demand periods. Shelby uses technology that provides two-way communication to electric meters that provides load control and demand response, in addition to outage detection and automated billing. Generators begin providing power within 30 seconds after an outage. Once service is restored, they automatically turn off.

The advantages for customers are lower electric bills, peace of mind that

they will have electricity during power failures and knowledge that they are participating in a program that could reduce carbon dioxide emissions. Advantages for the cooperative include reductions in power costs, increased ability to meet customers' demands during peak periods of power use and greater system reliability.

As a result of the tornado-caused power outages, "we realized that offering generators to these customers made sense," says Kevin Bernson, Shelby's vice president of media and public relations. "We decided to help people with the financing, then created an interruptible-rate program for small businesses and residential customers. We reduce the electric bill by 15 percent for customers who participate in the demand management program."

The program had an additional advantage when the cooperative was asked to curb power use last summer when hot days increased demand for electric power.

Program pays during ice storm

An unforeseen benefit of the program was realized during an ice storm that hit the co-op's service area in December 2006.

"The ice storm really created a spike in requests for the generators," Bernson recalls. "More recently, the eight- to ten-inch snowstorms this winter also triggered calls. One of the biggest advantages of this program for our customers has been peace of mind."

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Alto members approve sale to Saputo Cheese USA

By Dan Campbell, editor



Alto Dairy Cooperative, operated as a farmer-owned cooperative in Wisconsin for 114 years, has announced that its members have approved the sale of its assets to Saputo Cheese USA Inc. in a deal worth \$160 million. The transaction, which was unanimously approved by Alto Dairy's board in January, was approved by 98 percent of the cooperative's members from across Wisconsin and the Upper Peninsula of Michigan. They voted during a special meeting in Fond du Lac, Wis., on Feb. 27.

"Although it is hard to see an end to the cooperative form of business at Alto, our board is pleased that we were able to provide an economic return to our members for their investment and loyalty to the cooperative," said Howard Zellmer, Alto's board chairman.

The \$160 million from Saputo is reportedly about 40 percent above the market value for the co-op's assets, and means members will get their full equity from the co-op. Saputo will be paying each former co-op member a premium for continuing to ship to its plants.

Robert Cropp, professor emeritus with the University of Wisconsin Center for Cooperatives, said the sale of the co-op comes "as a real disappointment" to proponents of farmer ownership of value-added facilities. He said he hopes the sale of Alto Dairy will "serve as a wake-up call" to the Upper Midwest dairy industry about the need to address some of the serious structural challenges facing it.

The overall challenge is: How can the Upper Midwest better compete with the growing dairy industry in the West and Southwest? Dairy industry growth in the West is being



After 114 years as a farmer-owned cooperative, Wisconsin's Alto Dairy will soon transfer to corporate ownership. Photo courtesy Alto Dairy

fueled by investments in new plants and the lower cost of procuring milk. Cropp blames "a rather irrational milk-pricing system, which requires payment of unjustified premiums" to producers in the Upper Midwest for further tilting the market in the direction of the West.

Another major challenge, Cropp says, is for the Upper Midwest dairy industry to invest more in facilities that produce value-added cheeses and that process dairy whey into high-protein food ingredients, as is occurring in the West. He thinks such an effort might best be pursued as a joint venture by the region's remaining dairy co-ops.

The roots of the sale go back to the fall of 2006, when the Alto board of directors and management began looking at ways to accelerate the co-op's strategic plan. "As part of this process, the offer from Saputo surfaced," Alto spokesperson Karen Endres said. "It was our obligation to bring this offer forward to our members."

"Alto Dairy's members overwhelmingly supported the sale of assets to Saputo Cheese USA Inc.," Rich Scheurman, Alto's president and chief executive officer, said in the co-op's announcement of the sale. In it, he called the sale a "historic day for the cooperative," adding that "the sale will strengthen the business by improving the long-term viability of our manufacturing facilities, providing job stability and a long-term purchaser of milk for dairy producers in Wisconsin."

Alto's cheese plant near Waupun, Wis., is the largest and newest cheese plant in the state. The co-op also owned a cheese plant at Black Creek, Wis.

Alto had annual sales of \$378 million in 2007, with a profit of \$5 million. However, Cropp said it lost money in four out of the past six years, and has had difficulty with timely redeeming of member equity for several years.

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The large vote in favor of the sale is probably an indication both of the co-op's stressed financial situation and the fact that Saputo "made a very sweet offer," Cropp said. Some earlier management decisions hurt the co-op, including a money-losing venture with a partner in Texas to produce ingredients for the pizza industry, as well as a very competitive operating environment, Cropp said.

New management was brought in about four years ago, and major cost-cutting steps were taken, including a 25-percent reduction in labor expenses and moves into higher value-added cheese products. But such steps apparently were not enough.

On the bright side, the deal does show that Saputo believes in the continued viability of the Wisconsin cheese market, Cropp noted. Saputo also recently bought a Land O' Lakes cheese plant in California.

All employees will be offered employment by Saputo, including all management, with the exception of the CEO, said Endres, adding that the co-op's field-service team and

The sale of Alto Dairy "should serve as a wake-up call to the Upper Midwest dairy industry."
—Robert Cropp

state-certified labs will also be maintained and acquired by Saputo.

"Our members were never required to sign contracts (they could leave on any day) and they won't be required going forward," said Endres. "Dairy producers in the state have many options of where to ship milk. These options include cooperatives and proprietary operations."

"All equity holders in the business, including current and past milk shippers, will receive 100 percent of their equity shortly after the transaction closes," she

said. "There are additional payments to active shipping members, based on their patronage to the cooperative."

Saputo is one of the top 20 dairy processors in the world, the largest dairy processor in Canada and is among the top five cheese producers in the United States.

Challenges facing the Upper Midwest dairy industry, including the sale of Alto, will be among the topics addressed April 2-3 during the Minnesota-Wisconsin Dairy Policy Conference and the Dairy Directors' Leadership Conference in La Crosse, Wis. ■

Ed Schafer takes reins at USDA

Ed Schafer was sworn in as the 29th Secretary of the U.S. Department of Agriculture (USDA) on January 28. Schafer



Secretary of Agriculture
Ed Schafer

brings a record as an innovative, two-term governor of North Dakota to USDA along with extensive private-sector experience as both an entrepreneur and a business executive.

Schafer served as North Dakota's governor from 1992 to 2000 and made diversifying and expanding North Dakota's economy, reducing the cost of government and advancing agriculture his top priorities in office. He worked to normalize trading relations with China and

develop that nation as an export market for North Dakota farm products. Schafer led efforts to upgrade North Dakota's communications infrastructure and make high-speed voice and data networks available to farmers, ranchers and rural businesses.

To expand the state's job base, he encouraged the growth of value-added agricultural industries such as pasta and corn-sweetener manufacturing. As chair of the Western Governors Association, Schafer led regional efforts to demonstrate how technology could improve the efficiency and lower the cost of delivering government services such as health benefits and food stamps. He also worked to make telemedicine more available and affordable in rural areas.

Schafer co-founded and co-chaired the Governors Biotechnology Partnership to increase public understanding and support for the benefits of agricultural biotechnology.

He has had a lifelong interest in conservation, helping to arrange the USDA Forest Service's purchase last year of the 5,200-acre Elkhorn Ranch in North Dakota — where Theodore Roosevelt had a home and operated a cattle ranch in the 1880s.

Born and raised in Bismarck, N.D., Schafer graduated from the University of North Dakota in 1969 with a bachelor's degree in Business Administration and earned an MBA from the University of Denver in 1970. Secretary Schafer's grandfather immigrated to North Dakota from Denmark and homesteaded land in Hettinger County that he turned into a wheat and livestock farm. Schafer spent summers there while growing up. He helped his uncles with chores, tinkered with engines and learned firsthand about agriculture.

Before entering public life, Schafer was an executive with the Gold Seal Co. in Bismarck, a consumer products marketer. ■



Send items to: dan.campbell@wdc.USDA.gov

Agri-Mark has record earnings

Agri-Mark dairy cooperative in 2007 had a record, after-tax profit of \$17.6 million, easily surpassing the previous record of \$11.4 million set in 2003. Co-op leaders say the earnings were welcome news for dairy farmers who have been struggling the past few years with low market prices and huge increases in production costs — especially for energy.

Agri-Mark's profit allocation will be 50 cents per hundredweight. This represents allocated earnings of roughly \$9,000 for the average Agri-Mark member milking 100 cows and producing 1.8 million pounds of milk per year.

The Methuen, Mass.-based co-op, owned by 1,300 dairy farmers, had sales of about \$836 million and marketed more than 300 million gallons of milk. Co-op officials say the continued strength of the cooperative's Cabot and McCadam branded businesses, strong demand for the whey proteins and powder produced by the co-op and cost reductions due to changes Agri-Mark made in its business during the past year, all worked to boost profits. In addition, Agri-Mark members also received several million dollars in monthly premiums for overall milk quality and other incentives that the co-op was able to return to its dairy farm families.

"Last year was finally a good one for farm prices, but milk production costs also climbed to record levels," says Board Chairman Neal Rea, a dairy farmer from Cambridge, N.Y. "That is why I am so pleased that Agri-Mark is able to generate these year-end profits and also earn money for the farm in the form of monthly premiums."



Record profits at Agri-Mark in 2007 will help dairy farmers hard hit by rising costs in recent years.

The co-op's whey protein plant in Middlebury, Vt., continues to generate strong revenues from processing whey into more value-added products. The co-op's whey proteins and powders are marketed both nationally and internationally and are used as ingredients in hundreds of products, including sports nutrition drinks and baby formulas.

"Our brands continued to grow and the commercial side of our business was strong as well," says Paul Percy, who milks 350 cows near Stowe, Vt., and has served on the Agri-Mark board since the co-op was formed in 1980. "I see the potential for many good years ahead."

Paul P. Johnston, Agri-Mark president and CEO, says he recognizes the challenges of sustaining such high-profit levels year to year, especially given the volatility of both national and international dairy markets and farm milk prices. Still, Johnston says Agri-Mark is stronger financially and better prepared today to face the future.

"Northeast dairy farmers need to market a larger percentage of their own high-quality dairy products directly to the consumer so they can capture a larger portion of the dollars they spend

on those products," says Johnston. "We will continue to work to expand our branded sales in 2008 and explore every opportunity to stabilize farm milk prices at levels above the cost of production for our farmer-members."

Snokist expanding processing; will exit fresh-produce sector

Snokist, Yakima, Wash., will exit the fresh-fruit packing business in early 2008 to fully concentrate efforts and direct its resources to the processed-, canned- and aseptic-fruit product lines. Snokist says it has a fruit-bowl line which produces fruit blends, high- and low-acid products and gelatins. Co-op officials say all of these products have tremendous growth opportunities for single-serve packaging and as value-added ingredients for the food industry.

Snokist has made a significant research and development investment and has set a goal to add four new products each year and distribute to customers.

Snokist President Jim Davis said the



Snokist will now be putting all of its energies into its processed fruit-products business.

co-op is committed to continuously taking steps to improve efficiencies and ensure that it remains competitive for the next 100 years. "The new direction and vision is very clear: to be a

profitable, grower-owned, packaged-fruit company,” he says. “Snokist will strengthen the ongoing commitment to the private-label programs of our customers with unique products, partnerships and personalized customer service.”

Exiting the fresh division requires changes to both the co-op’s business infrastructure and its properties. The latter includes selling the Mead Avenue location and the Grandview Port property. Both Grandview plant No. 1 and No. 2 will be leased, with an option to purchase. The Sawyer facility will be retained for future needs.

Snokist has been a prominent leader in the fruit industry since 1903 and a major worldwide producer and shipper of fresh cherries, pears and apples as well as one of the largest canners in the world.

Sioux Center ethanol plant to double fuel production

Siouxland Energy and Livestock Cooperative in Sioux Center, Iowa, has completed a major expansion of its ethanol plant, more than doubling annual production capacity from 25 million gallons to 60 million gallons. The plant can now process more than 20 million bushels of corn annually and will market about 400,000 tons of wet

distillers grains and 140,000 tons of condensed distillers solubles syrup.

The plant opened in 2001, making it Iowa’s oldest operating farmer-owned ethanol plant. Co-op Manager Bernie Punt said the plant “has a new perspective today in the extremely fast-changing ethanol industry. Our expansion project helps keep our plant competitive so that we can continue adding value to the farming operations in Northwest Iowa.”

New biodiesel facility opens in Colorado

A new biodiesel blending and storage facility has opened in Aurora, Colo., increasing the availability of the cleaner-burning fuel for the area. Pipeline company Magellan Midstream Partners L.P. owns the facility, which is located at an existing petroleum terminal. CHS Inc., a Minnesota-based energy and grain-based foods cooperative, will market and distribute the fuel.

“By combining a biodiesel blending and storage facility with Magellan’s existing infrastructure, we can get blended fuel to our customers faster and more efficiently,” says Drew Combs of CHS. “Rack blending as opposed to splash blending provides more accuracy and higher quality as well as one-stop

loading with a single bill-of-lading.”

Company officials say the move demonstrates biodiesel’s increased integration into the nation’s petroleum infrastructure. The recently passed federal Energy Bill includes an expanded Renewable Fuels Standard, which for the first time will require more renewable fuel to be incorporated into the U.S. diesel market. Biodiesel and other renewable fuels depend on petroleum infrastructure, such as the Magellan terminal, for easy distribution, they noted.

The new biodiesel-blending facility has an 84,000-gallon tank and will make biodiesel blends available to petroleum distributors. Those customers will likely include area truck and car fleets and could lead to more public pumps. Current Colorado biodiesel users include Jefferson County Public Schools, the City of Lakewood, New Belgium Brewery in Ft. Collins, Safeway and Aspen Ski Resort.

Oemichen tells Senate panel about rural healthcare co-ops

Testifying before the U.S. Senate Small Business and Entrepreneurship Committee, Bill Oemichen, president and CEO of the Minnesota Association of Cooperatives (MAC) and Wisconsin Federation of Cooperatives (WFC), described ways for small businesses to address healthcare needs. Specifically, Oemichen addressed support for federal reforms that would help small employers, including farmers, gain access to affordable, quality health insurance coverage.

“We believe the member-owned cooperative model that puts consumers in charge of their own health decisions is the perfect fit for health care,” said Oemichen.

With the support of its member cooperatives, MAC and WFC created a project called “Co-op Care” to allow small employers, including farmers, to join together to purchase health insurance as a large group. They successfully sought passage of enabling legislation in both Minnesota and Wisconsin to provide a Co-op Care



Production will more than double at Siouxland Energy’s ethanol plant (seen here prior to recent expansion).

model, and have since worked to establish healthcare purchasing cooperatives in both states aimed at farmers and small businesses.

“When compared to the large group market, small employers — especially farmers — buying health insurance face greater challenges: stricter underwriting, fewer choices, lower quality benefits and little or no data upon which to base informed decisions,” he testified. “Bringing small employers together under the cooperative umbrella allows the co-op...to negotiate directly with insurers or providers similar to a large employer. This, in turn, allows the cooperative to negotiate higher quality coverage, improve benefit choices, relax underwriting criteria — if it so chooses — and utilize cost and quality data to educate members about cost drivers and ensure that rate increases are in line with claims experience.”

MAC and WFC serve more than 800 member-cooperatives owned by more than 6.3 million Minnesota and Wisconsin residents.

ACE unveils new Web site

The Association of Cooperative Educators (ACE) has unveiled a new, improved Web site to help improve communication and connections among ACE members and the cooperative education community (www.ace.coop). ACE says it is striving to use its Web site and newsletter to “make links between ideas, people, programs and geographical regions.” The ACE newsletter, “Update,” is also posted to the Web site.

The importance of cooperative communications is stressed in “Communications — A Movable Feast,” an article in a recent ACE newsletter by Ian MacPherson of the British Columbia Institute for Co-operative Studies at the University of Victoria, Canada.

ACE is a membership organization that brings together educators, researchers, cooperative members, and cooperative developers from across cooperative sectors and national



Tennessee Farmers Cooperative CEO Bart Krisle tells members how the co-op set a new sales record in 2007.

Photo by Allison Morgan, courtesy TFC

borders. The resulting cross-pollination of ideas enhances cooperative development, strengthens cooperatives, promotes professionalism and improves public understanding of cooperatives.

ACE benefits cooperative education and the cooperative movement by:

- Promoting cooperative research;
- Developing linkages between universities, cooperatives and supporting organizations;
- Building capacity to support the development of innovation and acumen in cooperatives;
- Spreading the word by providing resources on cooperative education.

ACE holds an annual institute where members and guests gather to share cooperative education studies, ideas, endeavors and thought. The 2008 Institute will be held in Ottawa, Ontario, July 29-Aug. 1, where the theme will be: “The Sustainable Cooperative: Vision, Leadership, Education.” For more details, visit the ACE website: www.ace.coop.

Tennessee Farmers Co-op sets new sales record

Consolidated sales for Tennessee Farmers Cooperative (TFC) and its

subsidiaries reached an all-time high of \$584 million in 2007, an increase of \$63 million from 2006. In a year full of challenges — including a late-spring freeze, summer drought, short hay supplies and higher input costs — the sales record was welcome news for Tennessee farmers.

TFC’s subsidiaries include ADI, ADI Agronomy, Fort Loudoun Terminal, Co-op Vet Health, Risk Management and Stockdale’s.

Net income (before taxes and member programs) was \$15.8 million, compared to \$10.4 million in 2006. TFC alone had income of \$11 million, up from \$9 million in 2006. All operations departments were profitable in 2007, and both ADI and ADI Agronomy had their best year since TFC purchased them in 1992.

The cooperative returned \$8 million to member co-ops in patronage and allocated reserves in October. That money will eventually flow back as patronage payments to the farmers who own the local co-ops. CEO Bart Krisle said TFC has paid \$204 million in patronage and reserves to member co-ops during the past 25 years. In turn, local co-ops have distributed \$185

million of that amount in cash to their farmer-owners.

“These figures represent the cooperative system at its finest — a system that is a very relevant and effective form of business today,” said Krisle, who is completing his second year as CEO. “The co-op system keeps money in our state, in our agricultural community, in our local economies and in our farmers’ hands.”

While higher prices of inputs, such as fertilizer and fuel, played a major role in the sales figures, Krisle said sales volume was up in these areas as well. Systemwide fertilizer tonnage increased 22 percent from last year.

Manufacturing records were broken at TFC’s metal fabrication plant in LaVergne, Tenn., where co-op products such as feeders, hay rings and gates are made. TFC’s Jackson Feed Mill had its best production year, at 85,000 tons.

“Whether it was making fertilizer available when farmers needed it most, or providing livestock feeds formulated to help stretch low hay supplies, our system pulls together best when the chips are down,” said Board Chairman Ross Via, a Crockett County row-crop farmer. “It is the difficult times — not the ideal ones — that show us the true value of our cooperative system.”

Via’s seven-year service on the TFC board ended with the 2007 annual meeting, and Stephen Philpott of Shelbyville, Tenn., was elected by fellow board members as the new chairman. Bill Mayo of Tennessee Ridge was selected as vice chairman.

TFC, established in 1945 as a regional farm supply cooperative, provides products and services to 60 member co-ops, which serve some 70,000 farmer-owners and more than 500,000 other customers across Tennessee and in several neighboring states.

Co-ops to expand oilseed-crushing capability

Producers Cooperative Oil Mill (PCOM), a 63-year veteran in processing cottonseed in the Southern Great Plains, is expanding its operation

to include the processing of canola, sunflowers and other oil seeds for food and biofuels. PCOM has signed an agreement with the recently formed Plains Oilseed Products Cooperative (POP) to jointly promote and crush canola, sunflowers, cotton seed and other oilseeds.

“We want our cotton-growing clients in the Southern Plains and Mid-South to know we will continue to provide them with the same quality service we have given for more than a half century,” said Gary Conkling, oil mill president and CEO.

The unusual alliance of agricultural producers — including an oilseed crusher, state universities, a national seed supplier and American Farmers and Ranchers Mutual Insurance Co. (Oklahoma Farmers Union) — will provide agriculture producers in the Southern Great Plains with a new market for current and future oilseed crops.

PCOM will retrofit current cottonseed-crushing capacity to allow additional capacity and infrastructure for crushing winter canola and sunflowers for oil to be used in the food industry and for biofuel production. POP will continue to work with grain handlers across the Southern Great Plains to establish additional local delivery points for growers’ oilseed.

Oklahoma Farmers and Ranchers Energy Enterprise (OKFREE), formed by Oklahoma Farmers Union, was supported through a Value-Added Producer Grant from USDA Rural Development to study the feasibility of processing oilseed and to understand the market opportunities for oilseed in the food and biofuels industry.

Fonterra delays farmers’ sale vote

Fonterra Cooperative Group Ltd., the world’s largest dairy exporter, has said it needs more time to persuade the New Zealand farmers who own the cooperative that they should support a stock sale. It has delayed a vote on the proposal, according to a report carried

by Bloomberg News Service. “We’ve got a lot more work to do to win members’ support,” Fonterra Chairman Henry van der Heyden said. The postponement of the vote, initially set for May, was announced Feb. 15 in a letter to members.

The farmer-shareholders were to vote on a new structure for the company as the first stage of a sale of shares in 2010 that could have raised about \$2 billion, Bloomberg reported. Fonterra, based in Auckland, announced the plan in November, citing the need to access outside capital to fund expansion. “Farmers are conservative people and they’ve built up the company to what it is,” said Alan Moore of Milford Asset Management in Wellington, N.Z. “Maybe they think: ‘Why should we give that up?’”

NCBA’s Paul Hazen addresses U.N. on co-ops and job growth

Paul Hazen, president and CEO of the National Cooperative Business Association (NCBA), told a United Nations panel in New York City in February about the role of cooperatives



About 150,000 coffee growers in East Timor are being helped by a cooperative formed with assistance from the National Cooperative Business Association.

in reducing poverty through employment generation. Hazen addressed the 46th Session for the Commission on Social Development.

In East Timor, for example, NCBA has helped create employment for more than 150,000 farmers selling coffee through assisted entities. Cooperativa Café, which sells its coffee to Starbucks, has grown to be the largest private employer in the country since this project began in 1995. Hazen cited this as one of several examples for the Commission. "At NCBA, we have a consistent track record of showcasing why cooperatives are a better business model. One obvious benefit is the amount of jobs they create in local communities to allow people to improve the quality of their lives," said Hazen.

Hazen spoke on behalf of the International Cooperative Alliance (ICA), an independent, non-governmental association which represents socially responsible cooperatives worldwide. Hazen is a member of the organization's board. "By bringing the cooperative enterprise to more communities both in the United States and around the rest of the globe, we give some of the world's poorest people the keys to a better life," Hazen said.

EXTRA USDA renewable energy studies on Web

Four studies commissioned by USDA Rural Development to help focus attention on crucial strategic issues facing the nation's renewable energy industry have been posted to the Internet. The four studies, which were summarized in the January-February issue of this magazine, can be accessed by selecting "Spotlights" at: www.rurdev.usda.gov/rbs/coops/csdir.htm.

The studies focus on:

- Ways to better integrate wind and solar power into the nation's power grid;
- How new investment models could help reverse the decline in local ownership of biofuels plants;

- Business-ownership models most applicable for biofuels plants;
- A look at major obstacles limiting growth of the renewable energy industry, such as the need for improved transportation infrastructure.

The issue of USDA's *Rural Cooperatives* magazine with the study summaries can also be viewed online (as can the past 10 years of the magazine) at: www.rurdev.usda.gov/rbs/pub/openmag.htm.

EXTRA Bill Davisson named chairman of NCFC

Bill Davisson, chief executive officer of GROWMARK Inc., a farmer cooperative headquartered in Bloomington, Ill., was elected chairman



Bill Davisson

of the National Council of Farmer Cooperatives (NCFC) during the organization's recent annual meeting in Lake Buena Vista, Fla. Davisson takes over leadership of the association from John Johnson, CEO of CHS Inc., who completed his second one-year term as chairman in 2007.

Davisson has served as CEO of GROWMARK since 1998, having worked his way up through the

GROWMARK system over the course of his career.

NCFC also elected a new vice chairman at the meeting, Douglas Youngdahl, president and CEO of Blue Diamond Growers of Sacramento, Calif.

"I know that both Bill and Doug will work tirelessly to ensure that NCFC continues to represent the interests of farmer cooperatives and their members in a dynamic business and policy environment," says NCFC President Jean-Mari Peltier. "I, along with the entire staff at NCFC, look forward to working with them over the coming year."

EXTRA Tobacco lawsuit ends with \$100 million payment

Nearly 200,000 burley tobacco growers in four states will share an estimated \$100 million under a final judgment entered in December 2007 in their lawsuit against the Burley Tobacco Growers Cooperative Association, Lexington, Ky. Each farmer will likely get about \$430, according to a report in the *Lexington Herald-Leader*.

The plaintiffs asked the court to order the co-op to pay members from what they deemed to be excessive reserves, held since at least 1992. The co-op contended that it was required by the federal government to keep a large reserve to protect the federal Commodity Credit Corp. from losses on loans made by the co-op.

The co-op issued a statement saying it was pleased with the judgment because it would restore growers' confidence in its future, and because it avoided being dissolved, as requested by the plaintiffs.

With the end of the federal tobacco support program, a smaller volume of burley tobacco is being sold at co-op auctions and the number of growers has declined sharply. Many of those who are left grow under contract with cigarette makers, the *Herald-Leader* reported. "We have been working hard to attract foreign buyers for burley tobacco," says co-op President Roger Quarles. ■

Commentary

continued from page 2

improved farming techniques, American farmers have steadily increased yields while at the same time reducing erosion, reducing the need for irrigation and reducing fertilizer, herbicide and pesticide intensity while protecting habitat.

We have done all this without infringing on the private property rights of farmers as they seek new markets and to convert acreage to higher value-added crops. Producers will continue to apply these skills to the many issues that will arise as we build out the biofuels industry, provided that we do not place

artificial barriers in the way.

Sustainability can be dynamic, as well as static; we must not be paralyzed by a fear of change.

Nations differ also in their openness to markets. The United States is committed to the rapid build-out of renewable energy.

But we are committed as well to minimizing costs to consumers — to a strong, pro-growth economic policy and to moving renewable energy industries from subsidies to the market as rapidly as possible. Other nations may strike a different balance.

Let us respect our differences and learn from each other while not constraining the ability of the world

market to trade in these new energy resources.

After this conference, we will leave with a renewed appreciation of the global scope of this cause — hopefully with a deepened understanding of the choices we face and the diversity of the strategies open to us, and with new enthusiasm for the work ahead.

Nearly 30 years ago, the late Julian Simon argued that “the human imagination, coupled with the human spirit was, indeed, the ultimate resource.” I believe that this is true. Together, we can build a cleaner, more sustainable, and more productive energy future. That is the goal of WIREC 2008. Let's get to work. ■

State of the Art

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Robertson of the co-op's clientele. “But I have found that you don't know. There are young people. There are fishermen. It's such a variety. A good part of our purchases are, of course, made by summer tourists to Alaska, and



A sampling of the co-op's scarves, hats and nachaqs (a tubular garment worn as a hood or about the neck).

that's how the word gets spread.”

Despite its limited marketing, the word does continue to spread. Robertson credits two things for this high demand: the fine quality of the



Hundreds of miles of Arctic tundra may separate them, but Alaskan villagers market their knitted goods united in a co-op.

fiber, and the hands-on, personal approach and story behind the items. “I think the fact that this is truly meant to help the people in the villages...is a big drawing point,” Robertson says.

The Oomingmak Musk Ox Producers' Cooperative stands out, not only because it is structured differently than a typical business, but because it exists solely for the benefit of the people living in remote Alaskan villages. “These are villages you could not get to by car,” Robertson says. “It really is truly way out there. You don't go there on a whim,” she says, adding that there are very few jobs in such villages.

The beauty of the cooperative is that it provides a way for these people to make money but is flexible enough to allow them time to live their mostly subsistence lifestyles. “It's something that you fit in with the other parts in your world, like taking care of your children, preserving the things that you need to pick and preserve in the summer or drying fish,” Robertson says.

Robertson admits that the co-op has changed very little since its beginning, other than incorporating computers at headquarters, developing a Web site and increasing the number of members. Unlike other businesses and co-ops that work to stay on top of, and even ahead of, the next big thing, Robertson makes clear that Oomingmak Musk Ox Producers' Cooperative's goal is very different: “We're not a mover and a shaker type of business. We are steeped in tradition, and that's where we intend to be.” ■

North Wind

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and Wolverine Power Supply Cooperative were also honored for their innovation and contributions to wind technology.

Last Mile is developing the 300-Megawatt (MW) White Creek wind project in Washington state. When completed, it will be the largest publicly developed wind project in the United

States. Wolverine, located in Cadillac, Mich., has developed the state's first multi-megawatt wind project, Harvest Wind Farm in Huron County.

Previous awardees include Associated Electric Cooperative Inc., Illinois Rural Electric Cooperative, Western Farmers Electric Cooperative (Oklahoma), Holy Cross Energy (Colorado), Basin Electric Power Cooperative (North Dakota) and Great River Energy (Minnesota).

DOE's Wind Powering America program aims to help the nation achieve targeted regional economic development, enhance power generation options, protect the environment and help increase our energy security. In 2007, the United States installed 5,240 MW of new wind power, a 45-percent increase over 2007. The United States has the fastest growing wind-power capacity in the world. ■

A Nice Guy Who Finished First

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merger, the bank's board ballooned to 39 directors — far from the lean governance structure Orton and others deemed in the best interest of the membership.

According to Cassidy, downsizing “was in the best interest of the organization,” but it would have been much easier to delay such action. However, “Roy wanted to address it now.”

Although the board overwhelmingly agreed to reduce the number of directors, no one wanted to eliminate

his or her own seat, and tension ensued. Orton appointed a committee, with himself as chair, which ultimately recommended a plan to reduce the board in phases over three years. Each director was able to serve out his or her term, although the seat would not be filled after that.

“It took honesty, integrity and a lot of leadership to pull this off,” recalls Dean.

“His leadership in governance at CoBank has led to changes in board structure that puts CoBank at the leading edge,” says Everett Dobrinski, CoBank's new chairman. He praised Orton for leading by example, voluntarily giving up his own seat by

not seeking reelection.

“I didn't think it was right for me to promote downsizing, chair the committee and then stay on,” Orton recalls. The board has now been reduced to 12 elected and four appointed directors.

CoBank CEO Robert B. Engel commends Orton for his vision, saying his key contribution to the financial institution was his solid “understanding of good governance before it was vogue.”

Baldwin borrows from famed NFL coach Bill Parcell to describe Orton: “You are what your record says you are.” Orton's track record shows that he is bowing out at the top of his game. ■

Lowering the Peak

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Another advantage for the cooperative is the revenue for the cooperative's propane subsidiary, Shelby Energy, Bernson says. Shelby won a 2007 Expanding Excellence Award from CS Week, an electric utility customer service organization, and *Electric Light and Power* magazine. The award recognizes outstanding contributions, innovations and excellence in utility customer service.

For every 100 generators installed, the cooperative can increase peak-demand control by 1 megawatt (MW). Every MW of controlled demand can result in about \$50,000 in annual power

cost savings. These savings can be passed on to customers and increase system stability. During a 10-year period, the net benefits are expected to exceed initial project implementation costs, according to the cooperative.

\$500,000 annual savings

The cooperative's goal is to install enough generators to achieve 10 MW of interruptible capacity, which could save more than \$500,000 in annual power costs — nearly 5 percent of Shelby's total power supply costs. Installation of enough generators could reduce the need to turn on peaking units, used when electric power is in high demand.

Bernson noted that Shelby's farm and residential customer-members who are participating in the demand-

management program enjoy the benefits of knowing that during power outages, their generators will continue to supply electricity to meet their needs.

“One of our customers, a farmer, told us that now he doesn't need to worry about making sure he has somebody check his property if he's away when an outage occurs. He no longer has to mess with generator fuel and fuel storage, or manage generator-safety concerns, such as extension cords and proper ventilation. He doesn't need to deal with the elements to get his generator started during outages.

“It's a safer way to go,” Bernson notes. “Best of all, our members who participate can save money each month and we keep peak load costs down.” ■



From the archives of Rural Cooperatives

50 Years Ago...

From the March 1958 issue of News for Farmer Cooperatives

Burlington Consumers Cooperative exceeds goal in 20th year

In its 20th year, 1957, Burlington (Wis.) Consumers Cooperative handled sales of more than \$1.5 million, its highest volume in five years. During its 20 years, the co-op has refunded nearly \$567,000 to members, almost \$280,000 in cash as dividends and interest on stock and bonds, patronage refunds, and redeemed stock.

Other outstanding co-op records set include:

- An increase in assets to a new high during the past 10 years, without the aid of additional member capital.
- A favorable ratio of assets to liabilities, indicating a sound financial condition.
- Tremendous quantities in tonnage and gallons handled in the four departments: feed, farm, machinery, petroleum and hardware.

The year 1957 was outstanding, too, because the co-op reached and exceeded its sales goal projected five years ago; it stepped up its public relations work and it organized and developed a credit union, besides adding other new services and facilities.

30 Years Ago...

From the April 1958 issue of News for Farmer Cooperatives

Farmland disposal system meets 1985 pollution standards

The future is now for a waste disposal system just constructed at Farmland Foods' beef slaughtering plant in Garden City, Kan. The system meets government requirements set for 1985. "The 'land application system' designed specifically for the Garden City plant meets 1985 Zero Pollution Discharge requirements set by the Federal Water Pollution Control Act," John H. Westermhoff, Farmland Foods president, explained.

The new system complements the existing waste water treatment facility at the beef plant.

Nitrogen-rich effluent from the waste treatment plant is now transferred to two newly constructed 18-acre storage ponds. The two ponds have a total capacity of 130 million gallons of water. The effluent had formerly been discharged

into the Arkansas River. The huge quantities of water used daily at the Garden City plant are provided by Farmland Foods from its own wells.

Those unseen attributes

Roger Baccigaluppi, president of the California Almond Growers Exchange, Sacramento, touched upon the "margin of greatness" his cooperative has — a margin that is a key attribute to many of this country's cooperatives. "In the midst of buildings and machinery," he observes, "the typical visitor misses several all-important elements that allow the cooperative to produce Blue Diamond quality products and retain its leading position in the almond industry."

The unseen elements he cites include the growers' work, investment and planning to provide the harvest, the board of directors' and members' concerns over quality (his cooperative in 1976 had about half the insect damage of all other California handlers combined), the cooperative board and management teamwork on strategy, and the cooperative's employees' skills that prepare and see products through to market.

10 Years Ago...

From the March/April 1998 issue of Rural Cooperatives

Women's crab meat co-op helps revive Chesapeake Bay island economy

Five years ago, the hardy people of Tylerton, Md., were struggling to preserve a way of life that for generations has revolved around the harvesting of the sea. Crabbing and fishing — the only industries in this 75-person village on Smith Island in the Bay — had fallen on hard times. Sea catches had been falling, with many species disappearing from local waters. Tough new state crabbing regulations were making it even harder for Tylerton watermen to stay in business.

To save their crab-picking industry, island women formed a cooperative in 1993. After a 3-year struggle, Smith Island Crab Meat Cooperative Inc. secured funding for a new picking and packing facility, raising \$283,000.

Today, the co-op's facility is in its third operating season in a licensed, state-of-the-art building. In 1997, it sold 19,000 pounds of crab meat. The co-op has buyers for the meat even before it's picked. Co-op members are looking for other business possibilities as well. Says Janice Marshall, founder and president, "This small co-op of women is combining business basics and an excellent product into a success we never expected." ■

Co-op Board Members

Don't drop the ball!

Co-op boards of directors are under increasing pressure to perform and justify their decisions. Get the information you need to fulfil your responsibilities.

Farmer Cooperative Statistics, 2006 – Cooperative Service Report 67

A survey of 2,675 U.S. farmer-owned cooperatives ending their business year in 2006. Information on number of cooperatives of various kinds, their membership, business volume, net income, basic balance sheet items, and employees.

Measuring the Performance of Agricultural Cooperatives – Research Report 213

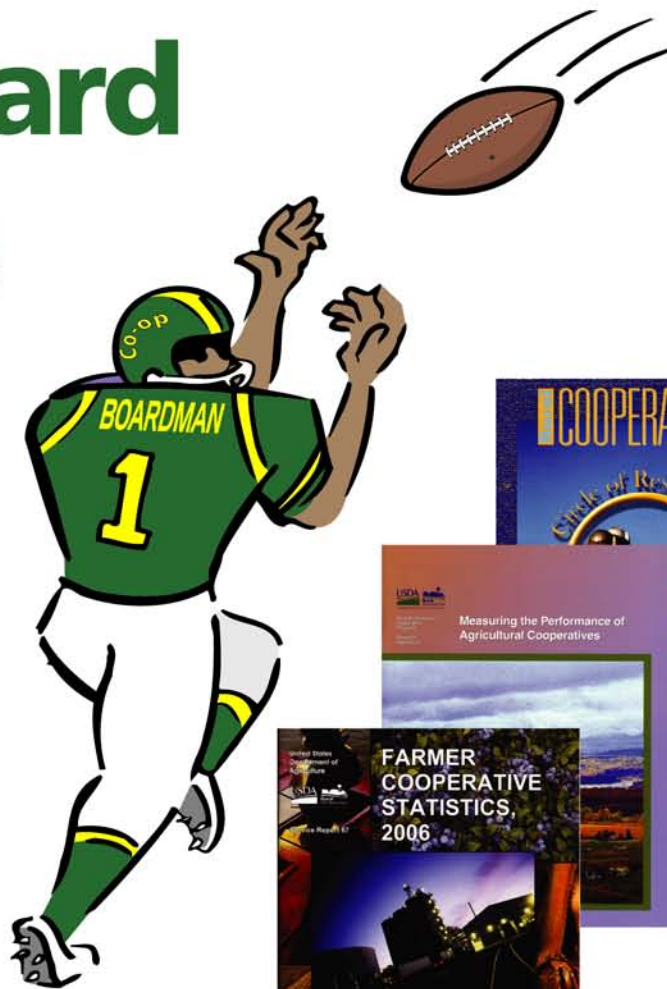
This report uses the extra-value approach to evaluating co-op performance – a method that offers a better picture than more conventional measures. Covers 65 of USDA's "Top 100" agricultural cooperatives, comparing years 1992-92 and 2000-04.

The Circle of Responsibilities for Co-op Members – Cooperative Information Report 61

A reprint of three articles in Rural Cooperatives Magazine by USDA economist James Baarda, explaining principles and offering valuable tips on how boards can improve their leadership.

Available online at www.rurdev.usda.gov/rd/pubs/#coop, or in hard copy (fill out the order blank below and FAX to: (202) 690-4083).

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An Analysis of Food Chain Demand for Differentiated Farm Commodities: Implications for the Farm Sector – Research Report 215

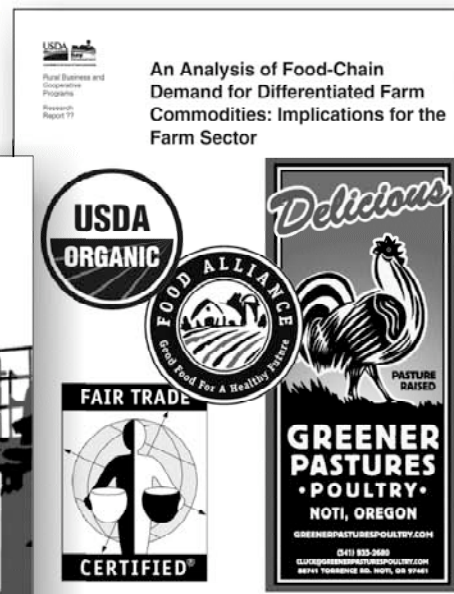
Consumers are increasingly willing to support differentiated farm products, including organic and locally produced food. But the food must meet their standards, and most buyers will pay only a limited amount more.

Whey to Ethanol: A Biofuel Role for Dairy Cooperatives? – Research Report 214

Whey-to-ethanol conversion is technically and economically feasible, and cooperatives could potentially have a share in the production of 65 million gallons of whey-produced ethanol annually. However, opportunity costs must be considered before going ahead.

Available online at www.rurdev.usda.gov/rd/pubs/#coop, or in hard copy (fill out the order blank below and FAX to: (202) 690-4083).

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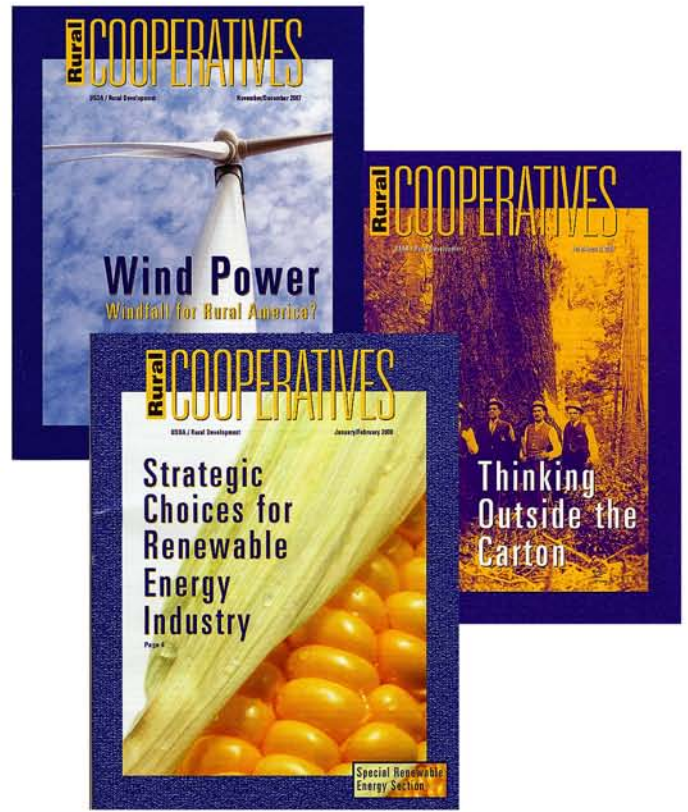
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