

Rural COOPERATIVES

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November/December 2005



Stepping up
biofuels
production

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Energizing Rural America: How the energy bill helps us all

Editor's note: Guest commentary is by William A. Steel, president of the National Grange. The opinions expressed are his own, and do not necessarily reflect those of USDA or its employees.

When Congress passes a bill, a lot can be lost in the numbers. Dollar signs and pages sometime overwhelm the actual text of a bill, causing the people who are directly affected to lose sight of why legislation was actually passed in the first place. The mammoth Energy Policy Act of 2005, recently passed by Congress, fits comfortably into this description. Within the 1,700-page document, issues ranging from daylight savings time to tax breaks are thrown together and eventually lost in the magnitude of the text.

The greatest criticism of this legislation is that it does little to immediately address the short-term problem of rapidly escalating prices for gasoline, diesel fuel, home heating oil, propane and natural gas. However, what should not be lost are the positive, long-term effects it will have on farmers and those living in rural communities.

Many of the provisions — directly or indirectly — benefit rural areas, a part of the country that is sometimes overlooked when it is time to set constructive federal policies. One of the most significant benefits is the new Renewable Fuels Standard established in the new energy bill. By federal mandate, renewable fuels use will increase to 7.5 billion gallons by the year 2012. This mandate will increase the demand for corn (ethanol) and soybeans (biodiesel), driving up the price of these commodities and creating a bet-

ter market for farmers.

Both large and small producers will benefit from this mandate, with a biodiesel tax credit of up to 10 cents per gallon, with up to 15 million gallons of production given to small producers to help balance competition. Many of America's families, especially those on fixed incomes, struggle to pay their natural gas and electricity bills. High natural gas prices also translate into huge costs for the typical farmer.

The domestic exploration and production of natural gas is another provision designed to help farmers. For the first time in decades, the federal government will be authorized to do a comprehensive survey of natural gas deposits that lie off our nation's coasts.

Current government estimates predict that there is a 15-year supply of natural gas beneath our coastal waters, but no one knows for sure. In addition, special tax provisions will help pay for development of new supplies of natural gas derived from abundant deposits of coal, as well as for new facilities to store liquefied natural gas.

Input prices for fertilizer and other [crop inputs] are directly linked to the price of natural gas. This expansion of domestic supplies of natural gas will drive down costs for things like fertilizer, saving farmers money while better using an already proven natural resource.

Rural communities will benefit from the \$800 million earmarked in the recently passed energy bill for an inno-



Cornfields flank a Midwest ethanol plant. USDA photo by Stephen Thompson

vative new bond authority created to help in the financing of renewable electricity projects by rural electric cooperatives, municipal governments, and tribal investments.

This provision allows consumer-owned electric companies to issue bonds with zero percent interest. The "interest" paid on the bond comes, instead, in the form of federal tax credits to the investor. This new, creative source of financing will increase investment in consumer-owned electric companies and will directly benefit the rural areas where these companies are predominantly found.

Although some publications have erroneously reported that the energy bill provides few rewards for farmers, the National Grange strongly supports the passage of the Energy Policy Act of 2005 and its solid investment in the future of rural America. It helps to solidify renewable fuels as a staple of America's energy use, while also reducing costs of natural gas and making investments in consumer-owned electric companies more appealing. All of these provisions directly benefit farmers and rural communities, and they will continue to steer rural America toward a positive and prosperous future. ■

— William A. "Bill" Steel,
President
National Grange

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Stairways spiral up and around fuel tanks at the SoyMor biodiesel plant, near Albert Lea, Minn., which is also home to an ethanol plant. The biofuels industry continues to expand throughout the nation's corn- and soybean-belt. See pages 10, 15 and 20 of this issue. USDA photo by Stephen Thompson



Fire and water: days after Hurricane Katrina pounded the Gulf Coast, a home in Biloxi, Miss., burns. Remaining community resources were stretched thin. USDA photo by Bob Nichols

Below: Line repair crews make their way through countryside littered with lives and livelihoods blown away by Katrina. Photo by Bret Curry, courtesy Arkansas Electric Cooperatives Inc.



Picking up the Pieces

Co-op aid helping other co-ops recover from ravages of Hurricane Katrina

By Donna Abernathy

Editor's note: Abernathy is a cooperative communications consultant based in Murfreesboro, Tenn.

At age 54, Ben Burkett has lived through four major hurricanes in his native Mississippi. He hunkered down with his family when 1969's Hurricane Camille cut a path of destruction and death through the state. But even that experience did not prepare the produce grower for the ravages of Katrina.

In mid-October, the Mississippi Association of Cooperatives leader was among the hundreds of thousands who were still picking up pieces of shattered lives and liveli-

hoods in the wake of what is called the worst natural disaster in U.S. history. With winds in excess of 150 miles per hour and tides of more than 20 feet, Hurricane Katrina

smashed into the Gulf Coast on Aug. 29, pummeling 90,000 square miles of Louisiana, Mississippi and Alabama.

While much of the nation's attention was focused on New Orleans in Katrina's aftermath, a compelling story with rural cooperative roots was unfolding across the storm-ravaged landscape. From Burkett's 38-member Indian Springs





Farmers Association to the nation's largest co-ops, CHS Inc. and Dairy Farmers of America, the storm wreaked havoc on the people and assets associated with member-owned businesses.

The homes of many co-op members and employees were destroyed. Farmer co-op members had barns, equipment and crops blown away. Electric cooperatives lost thousands of power poles that snapped like matchsticks in the storm.

As these coastal cooperatives struggled to recover, the sting of loss diminished as help and hope began arriving from co-ops across the country. An employee of hard-hit Coast Electric Power Association described it as a tale of "cooperative spirit at its best."

Direct hit

"It was catastrophic. There are no words to describe what I saw. We were at ground zero," said Coast Electric employee Melissa Bryant, struggling to explain what she witnessed in the hours after

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USDA hurricane-relief teams active on multiple fronts

Editor's note: Since press deadline for this magazine in mid-October, Hurricane Wilma caused severe damage in southern Florida. USDA's response to that disaster is not reflected in the following article.

From efforts to keep grain shipments rolling, to finding emergency housing for hurricane evacuees and rescuing people and abandoned pets and livestock, more than 4,000 USDA employees engaged in hurricane-relief efforts in the Gulf Coast region have been delivering vital services.

USDA Rural Development has led the federal effort to provide housing for hurricane evacuees, has granted extensions on payments to home borrowers and is assisting rural utilities in rebuilding electrical,



USDA Forest Service staff assist members of the St. Alphonsus Catholic Church in locating a site to set up a kitchen. USDA photo by Bob Nichols

telecommunications and water systems. As of mid-October, Rural Development had placed about 5,000 evacuees in more than 1,500 housing units in 19 states and provided nearly 23,000 families with temporary loan-forbearance agreements on mortgage payments.

Rural Development loan specialists have helped staff Federal Emergency Management Agency (FEMA) emergency response centers. To speed the process of helping victims, staff members were dispatched to the field with wireless, laptop-computers to access the Internet to assist victims with completing the FEMA benefits application process.

As with Hurricane Katrina, USDA Rural Development prepared a complete inventory of USDA-financed housing and other facilities impacted by Hurricane Rita. This includes properties financed through USDA's Community Facilities, Housing and Business & Cooperative programs. Additionally, USDA has worked with numerous partners — including electrical co-ops, telecommunications providers and rural water associations — to implement existing disaster-recovery plans (which USDA requires to be in place for its borrowers).

USDA has taken numerous steps to reduce stress on the grain transportation system caused by Hurricane Katrina. These actions include assisting with the movement of barges of damaged corn from New Orleans; providing incentives for alternative grain storage; encouraging alternative shipping patterns to relieve pressure on New Orleans, and allowing producers to store USDA-owned corn on the farm with the option to purchase it.

Following are some examples of how some other USDA agencies are responding to the most deadly and costly hurricane season in the nation's history:

- USDA Forest Service staff has been managing evacuation centers and

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USDA hurricane-relief teams active on multiple fronts *continued from page 5*

base camps, providing logistical support, clearing roadways, operating mobilization centers and trailer staging areas. Forest Service Incident Management Teams have helped provide more than 600,000 people with commodities; 2.7 million meals, 4 million gallons of water and 40 million pounds of ice have been shipped.

- USDA's Animal and Plant Health Inspection Service (APHIS) sent nearly 50 veterinarians, wildlife specialists and quarantine experts to assist with recovery efforts. From rescuing people stranded by flood waters, to rescuing and recovering pets, livestock and zoo animals, APHIS has played a critical role in the aftermath of the storm. More than 300 people were transported to safety in New Orleans by APHIS employees and close to 10,000 animals have been rescued and sheltered as a direct result of federal, state and private efforts. Many of these animals have been treated by USDA/APHIS veterinarians, who provided medical care while the pets await the return of their owners at local shelters. APHIS veterinarians assisted with efforts to rescue eight dolphins from the waters surrounding Biloxi, Miss. The animals had been swept out of their pools into the Gulf of Mexico. USDA/APHIS employees have ensured that any surviving livestock in Mississippi and Louisiana have fresh water and dry ground for grazing or new bales of hay. APHIS staff even helped rescue laboratory mice at Tulane University, which are vital to cancer research and the culmination of years of work by scientists.
- USDA Natural Resources Conservation Service (NRCS) maps have been used by first responders to assess ground conditions during the search and rescue for survivors.

Current satellite and airborne imagery was used to locate possible dangers, such as fires, and the safest route to rescue survivors. Through the use of NRCS soil survey data, USDA located the best areas for animal debris disposal and burial while protecting water sources. "Before and after" satellite images of the hurricane-affected areas will help USDA and other federal agencies measure damages and assess new coastlines. NRCS soils and imagery data are available to the public at <http://datagateway.nrcs.usda.gov>. NRCS continues working with other agencies to assist with post-disaster cleanup and restoration projects. It has provided approximately \$17.4 million in Emergency Watershed Protection Program funds for hurricane relief efforts. FEMA provided authority and \$10 million to NRCS for the disposal of hundreds of animal carcasses. In Mississippi, more than six million birds have been buried with assistance from NRCS.

- USDA's Farm Service Agency (FSA) has made \$170 million in emergency assistance available to agricultural producers. Of this amount, \$150 million is available through the Emergency Loan Program for assistance if there is a 30-percent reduction in crop production or physical losses to buildings or livestock. Another \$20 million is available through the Emergency Conservation Program for repairing land damage and cost-share assistance for up to 75 percent of the cost.

Additional information and updates about USDA's hurricane-relief efforts are posted daily on the Web at: <http://www.usda.gov>. ■



With limited barge traffic on the Mississippi River in New Orleans following the hurricane, seaworthy barges were moved to grain elevators along the river to have their cargo transferred to ships. USDA Photo by Bob Nichols



Katrina. The co-op's three-county service area is the southwest Mississippi region that received the brunt of Katrina's fury.

Coast Electric serves approximately 60,000 members on more than 5,900 miles of power line. Following the storm, some 30,000 poles and 10,000 transformers had to be replaced. Co-op management initially estimated it would take at least six weeks of work to restore power to most members.

Just three weeks later, 29,000 poles had been replaced and power was restored to 99 percent of members who were able to receive electric service. This "miracle" was performed by a crew of 3,200 co-op employees who represent 19 states and 125 electric co-op companies.

The feat was even greater considering that nearly 60 Coast Electric employees lost their own homes and belongings in the storm. Thirty had all of their personal vehicles destroyed, leaving them with no way to get to work. "We had linemen reporting for work who had literally nothing left but the shirts on their backs," said a still-emotional Bryant, a communications specialist.

Clockwise from upper right: USDA personnel review weather data at the Incident Command Post in Gautier, Miss. USDA Rural Development staff discuss the housing loan application process with Undersecretary for Rural Development Thomas Dorr at a FEMA Center in Baton Rouge. USDA photos by Bob Nichols; An expression of gratitude for the efforts of Coast Electric Power Co-op. Relief crews were housed in a giant "circus" tent dubbed "Hotel Katrina" at Coast Electric's Gulfport, Miss., office. Photo by Bret Curry, courtesy Arkansas Electric Co-ops Inc.



"This horrible situation and the great success we achieved in rebuilding our system in just three weeks gave me an opportunity to tell the world about the power of co-ops," Bryant said as she reeled off a long list of donations and human support sister cooperatives had provided. "This is cooperative principle number six in action:

cooperatives helping cooperatives."

The cooperative spirit that accomplished work so quickly in the Coast Electric service area is now the subject of a Touchstone Energy Cooperative television commercial that is running nationwide.

A sobering thought remains, however. Nearly 10,000 Coast Electric members were still without power at press deadline for this publication (Oct. 17) because homes and

buildings were either completely destroyed or too damaged to accept electricity. The co-op is building new lines to areas with the most severe damage. The cost to rebuild is staggering. The co-op spent \$3 million a day for personnel and materials to restore power. The total cost for system restoration is projected at \$100 million.

Down, but not out

Petal, Miss., is some 70 miles from the Gulf Coast. That's normally a safe distance from the worst a Gulf Coast hurricane can dish out. But not this time. Several weeks after the storm, Petal-based Indian Springs Farmers Association's only produce packing-house remained heavily damaged and without electricity to operate cold storage equipment. Members of this small fruit and vegetable marketing cooperative lost freshly picked inventory stored in the packing facility as well as crops in the field.

Nearly half of the co-op members are "completely wiped out," said member Ben Burkett. "Fifty acres of watermelons are gone. Eggplants and jalapenos are stripped — all of it gone." Worse than the damage to the building, Katrina blew away 65 percent of Indian Springs' direct and commercial markets. New Orleans outlets and casinos in the Biloxi, Miss., area were primary customers.

Two weeks after the storm, members were left struggling to find ways to plant their next crop, essential to assuring the survival of their individual livelihoods as well as their member-owned business. "This is the optimum time to plant our squash, bell peppers and cucumbers, but we can't get the inputs," Burkett explained.

When word spread about of the desperate need for fuel, some Iowa co-op members came to the aid of Indian Springs members and other Mississippi growers. West Central Cooperative donated 15,000 gallons of soy biodiesel fuel to help their fellow farmers plant fall crops on time. Until its cold storage is again operational, Indian Springs members were trucking their remaining produce to a farmers' market in Memphis, where another farmer co-op is sharing its space.

Farmer cooperatives



USDA/APHIS staff rescued thousands of stranded pets and helped establish an intensive-care unit at the Louisiana State University Veterinary School, where faculty and students operated on injured pets. Rhonda Bonds (above, right) retrieved her cat, Mittens, 21 days after being forced to flee her apartment. Despite being malnourished, the cat was otherwise fine. USDA photos by Bob Nichols

from across the nation have stepped up to provide relief to those in hurricane-blasted areas. They have donated food, livestock feed, generators, fuel supplies and transportation. Farmer cooperatives, their employees and farmer members have directly contributed more than \$1.2 million in hurricane relief, the National Council for Farmer Cooperatives reports.

Dairy devastation

More than 300 Dairy Farmers of America (DFA) members with about 25,000 cows in Louisiana's "Florida parishes" (east of Baton Rouge, along Interstate 12) were severely crippled following Katrina's landfall. Power outages, feed deficiencies, blocked

roadways, structural destruction and inadequate milk storage amounted to an estimated \$40 million in damages in the dairying area north of Lake Pontchartrain, according to DFA officials. The dairy co-op markets raw milk for an estimated 90 percent of the producers in the area.

Fellow DFA members and personnel came to the rescue of these dairy farmers. A cooperative-owned plant in Franklinton, La., became a crisis center, where members could turn for relief supplies. DFA members outside the hurricane-affected region sprang into action, securing cattle feed, delivering generators and arranging transportation for supplies.

Milk haulers carried chain saws, cutting their way through blocked roads. In the first two weeks following the disaster, DFA delivered approximately 100 industrial generators capable of powering members' milking parlors and coolers.

The co-op also coordinated and delivered six loads of fuel to keep those generators running. Four weeks after the storm, 10 percent of the affected

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Bioenergy, dairy producers among recipients of \$14.6 million in VAPGs



griculture Secretary Mike Johanns has announced the selection of 171 applications from 42 states to receive over \$14.6 million

under USDA Rural Development's Value Added Producer Grant (VAPG) program. "These grants will create jobs and improve financial returns for growers and farm families across rural America," said Johanns. "These funds assist agricultural producers in marketing their products and enhance opportunities for the development of alternative fuels from renewable energy sources, part of President Bush's comprehensive national energy policy."

Since 2001, the Bush Administration has committed over \$115 million to support value-added agricultural investments, including more than 110 energy related projects. Value-Added Producer Grants may be used for planning activities, such as feasibility studies or business plans, or to provide working capital for marketing value-added agricultural products and for farm-based renewable energy projects.

Eligible applicants are independent producers, farmer and rancher cooperatives, agricultural producer groups, and majority-controlled producer-based business ventures. Value-added products are created when a producer takes an agricultural commodity, like milk or vegetables, and processes or prepares it in a way that increases value to consumers. For example, in Nebraska, an on-farm dairy processing plant that manufactures a Hispanic line of cheeses will receive funding to prepare a marketing plan and design promotional materials and bi-lin-

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Co-op recipients of 2005 VAPGs

For complete list, visit "newsroom" at: www.rurdev.usda.gov

STATE	NAME	AMOUNT
California	Calcot, Ltd.	\$149,500
California	Olive Growers Council of California	\$100,000
California	Pacific Coast Producers	\$100,000
California	Sun-Maid Growers of California	\$75,000
California	Sunsweet Growers, Inc.	\$150,000
Colorado	Mountain View Harvest Cooperative	\$73,500
Florida	North-South Institute of Southwest Broward Vegetable Growers Association	\$95,000
Florida	SunFresh of Florida Marketing Cooperative	\$100,000
Iowa	America's Premium Pork DBA Allied Producers Cooperative	\$105,275
Iowa	Farmers Cooperative	\$100,000
Iowa	Heartland Fish Cooperative	\$86,325
Iowa	Swiss Family Farms, Co.	\$75,000
Kansas	Frontier Equity Exchange	\$41,500
Massachusetts	National Grape Cooperative Association, Inc.	\$100,000
Michigan	Michigan Turkey Producers Cooperative, Inc.	\$150,000
Minnesota	Bongards Creameries Cooperatives	\$150,000
Minnesota	Central Minnesota Soybean Processors	\$40,000
Minnesota	Stickney Hill Dairy Inc.	\$150,000
Mississippi	Mississippi Fruit and Vegetable Association	\$150,000
Mississippi	Miss-Lou Blueberry Growers Association Cooperative	\$150,000
Missouri	Alma's Farm Fresh Meats	\$150,000
Missouri	MFA Incorporated	\$100,000
Missouri	Missouri Masa, Inc.	\$150,000
Missouri	Sho-Me Livestock Cooperative, Inc.	\$147,112
Missouri	Soy Labs, LLC	\$150,000
Montana	Western Montana Growers Cooperative	\$59,998
Nebraska	Farmers Cooperative Elevator Company	\$29,000
Nebraska	Nebraska Turkey Growers Cooperative	\$64,840
North Carolina	Old North State Winegrowers Cooperative Association, Inc.	\$150,000
North Dakota	Fessenden Cooperative Association	\$150,000
Ohio	Mercer Landmark, Inc.	\$31,250
Oregon	Oregon Trail Beef Cooperative	\$150,000
Oregon	Oregon Woodland and Sales Cooperative	\$86,000
Oregon	Siskiyou Sustainable Cooperative	\$23,210
Pennsylvania	Northern Tier Sustainable Meats Co-op, Inc.	\$40,748
Texas	Rio Grande Valley Sugar Growers, Inc	\$100,000
TOTAL		\$3,723,258



The SoyMor biodiesel plant, above, is the result of a cooperative effort that involved local co-ops and businesses, nonprofits, individuals and state, national and local government. USDA photos by Stephen Thompson

Prairie Prosperity

From biofuels to buffalo bullion & zamboni repair, Minnesota town cooperates to boost rural business

By Stephen Thompson,
Assistant Editor

A community in southeastern Minnesota illustrates the principles of cooperation to promote economic growth and prosperity in the face of local economic setbacks. Community members of the town of Albert Lea have found that working together, pooling resources and exploiting every opportunity are the keys to encouraging new growth. Since losing 500 jobs in 2001 when a processing plant operated by Farmland Foods burned down, Albert Lea and the surrounding Freeborn County (with a population of about 33,000) have found new sources of income and expect to add 500 new jobs in the next 18 months.

The local electric distribution co-op, Freeborn-Mower Cooperative Services, is part of this community

effort, and uses its resources to bring new business to the area.

“Our membership isn’t growing in numbers very much,” says Tim Thompson, president and CEO of the co-op. “Our growth strategy is working for economic development and improving the overall quality of life here.” As well as providing businesses with competitive rate packages and help in minimizing power usage, the co-op offers financing using two funding sources: USDA Rural Development Rural Economic Development grants and loans; and a program of DairyLand Power Cooperative (DairyLand), a power-generation co-op that provides electricity to Freeborn-Mower.

Ethanol, biodiesel plants boost rural community

Just outside the city stands one of the showpieces of Albert Lea’s economic growth effort. The profitable

Exol corn ethanol plant is 100-percent farmer-owned through a new-generation cooperative, Agra Resources. It shares a site with a new soy biodiesel plant run by SoyMor, another cooperative that shares many of its members with the ethanol co-op. By sharing the site, both businesses save on infrastructure costs, including utility hook-ups.

Exol began operation in 1999 with a 13-million-gallon-per-year nominal capacity. An expansion in 2002 tripled capacity to 36 million gallons. The plant is run and its products marketed through a contract with Broin Companies, an investor-owned consortium that offers design and construction of ethanol plants as well as marketing and management services. Broin currently works with 15 Midwestern ethanol plants, and markets Dakota Gold distillers grains — the byproduct of ethanol production used as animal feed — as a premium product.

The facility is now being upgraded once again, this time to install Broin's new proprietary "fractionating" technology that removes part of the corn kernel before fermentation. The result, claims Exol general manager Rick Mummert, is higher-quality distillers grains.

Freeborn-Mower and Dairyland Power played a major role in getting the Exol project going. Dairyland saw an opportunity to add a substantial, steady load to its system, thus improving efficiency in off-peak hours and lowering costs, says its chief financial officer, Robert Mueller. But even more important, the operation had the potential to benefit the entire area.

"What sold it to us was that it was all farmer-owned," says Mueller. "This wasn't an outside group of investors that would take their profits away. It was members of the rural community — and the community would reap the rewards of the risk they took."

Freeborn County provided crucial financial and technical support for the development of the infrastructure required for the biofuels plants. This support included a \$4 million, low-interest loan "that helped get the ball rolling," said Susan Miller, county engineer. It also provided a \$75,000, low-interest loan to develop a railroad spur to serve the plants.

Another \$2 million in county and state funds were used to build access

roads from the plants to Interstate 35 and U.S. 65 that can support 10 tons of weight from corn and soybean trucks. The county provided a \$200,000, low-interest loan and did the design and construction on sanitary sewer lines that carry waste from the plants to Albert Lea's water treatment plant.



Albert Lea, Minn., is benefiting not only from two new biofuels co-ops, but a number of other new businesses started by a local business incubator. USDA photos by Stephen Thompson

Electric co-ops kick start stalled project

When the electric cooperatives first got involved, the Exol project was at a standstill. An overly ambitious business plan had scared away potential sources of financing. Dairyland and Freeborn Mower kick started the project by paying for a study by a reputable consulting firm.

The study found that starting operations with a smaller plant with the capability to upgrade later offered a better solution. It also recommended Broin over the original plan's engineer-

ing and construction contractor. Dairyland donated the use of its own airplane to fly ethanol co-op board members to inspect Broin's plants, and even provided a 3-year repayment guarantee to the small local bank issuing the construction loan.

Freeborn Mower took some risks as well. The site chosen for the ethanol plant was originally part of the local investor-owned electric company's service area. The electricity distribution co-op offered to swap accounts, handing over the contract for Albert Lea's sewage treatment plant — an established, blue-chip customer — in exchange for the right to provide service for a start-up operation. In addition, the co-op had to build a new power substation just to serve the new plant, the cost of which it would have to write off if the ethanol plant failed.

Dairyland helped out by agreeing to shoulder half of the loss if the substation had to be abandoned, and by giving Freeborn Mower a 10-year guaranteed rate plan for the power the ethanol plant would consume. Under the plan, the distribution co-op pays the same discounted rate for 5 years, after which the rate increases by 2 percent each year for another 5 years. The power co-op also agreed to pick up two-thirds of any of the distribution co-op's unpaid accounts receivable for the ethanol plant.



USDA funds biofuel plants

Freeborn Mower made its own contribution to the plant's construction to the tune of a \$400,000 no-interest, 10-year loan. The loan was made possible by a Rural Economic Development Grant (REDG) from USDA Rural Development. REDGs are given to rural electric and telephone utilities to promote economic development and job creation in their service areas.

Another organization that helped the ethanol co-op get on its feet was the Albert Lea Chamber of Commerce, which donated free office space and facilities for meetings while the cooperative was being put together. "We don't have that many resources," says Susie Petersen, the chamber's executive director, "But we use what we have to help new enterprises, including promoting local support and providing publicity."

Exol is now a member of the Chamber, as is SoyMor, the cooperative running the biodiesel plant on the same site.

Like Exol, the SoyMor facility is fully farmer-owned, with 500 members — half of whom live in nearby Iowa — and a total investment of \$110 million. Also like Exol, its operations and marketing are managed by a contractor — in this case West Central Soy, another co-op. The plant — currently the largest in North America — began full production at an annual rate of 30 million gallons earlier this year. Like the Exol plant, SoyMor received a \$400,000 REDG loan through Freeborn Mower. Tim Thompson points out that earlier loans made from the REDG fund are now being paid back, allowing the electric co-op to loan the money again to promising business ventures.

Many rural Minnesota towns are striving to use all available resources to maintain growth and prosperity.

Steve Wenzel (right, rear), state director for USDA Rural Development in Minnesota, discusses efforts to build a venture-capital fund with Albert Lea civic leaders at the Freeborn-Mower Cooperative Services headquarters.



Biodiesel potential could loom larger than ethanol

SoyMor's first venture was a plant completed last year that manufactures lecithin, a valuable soy extract used in foods, cosmetics, pharmaceuticals and other products. Lecithin production for pharmaceutical use promises good returns, says board member Gary Pectorious, a founding member of both the Exol and

With the two operations next to each other, and with similar capacities, the contrast between the two is striking. The ethanol facility dwarfs the biodiesel plant. This is, in part, because the ethanol plant has large storage bins for the corn used as raw material, while the soy operation currently has its beans crushed elsewhere and the oil delivered. However, even leaving out the bins, ethanol production requires a much more massive structure, and the facility is far more complicated.

SoyMor co-ops. The operation uses advanced technology to produce the highest quality product, he says, without unwanted chemicals such as hexane that contaminate lower grades of lecithin. This enables the co-op to sell its product at a premium. Nevertheless, he thinks biodiesel is already beginning to come into its own, especially with petroleum prices climbing.

"I now believe that there is more demand than supply," he says. "People want this fuel. They want it bad." Pectorious thinks biodiesel production

could be profitable even without government incentives, and that demand for the fuel will eventually outstrip that for ethanol. The reasons include not only rising petroleum prices, but also SoyMor biodiesel's high quality, which results in better mileage and less engine maintenance. "Our product is the best there is," he declares.

Pestorius illustrates his point with an anecdote. One company bought 200,000 gallons of SoyMor's biodiesel the first year, he says, and came back asking for 3 million gallons the next. "That's how it's going to go." He's similarly optimistic about ethanol, and believes that its production could eventually use 15 percent of the nation's annual corn crop.

Sharing the site with the Exol plant brings many advantages, including cost-sharing for a rail loop facility that will be able to handle 280 railroad cars when finished. Another is a ready supply of a vital production factor. Biodiesel is produced from natural oils and fats using a chemical reaction involving alcohol.

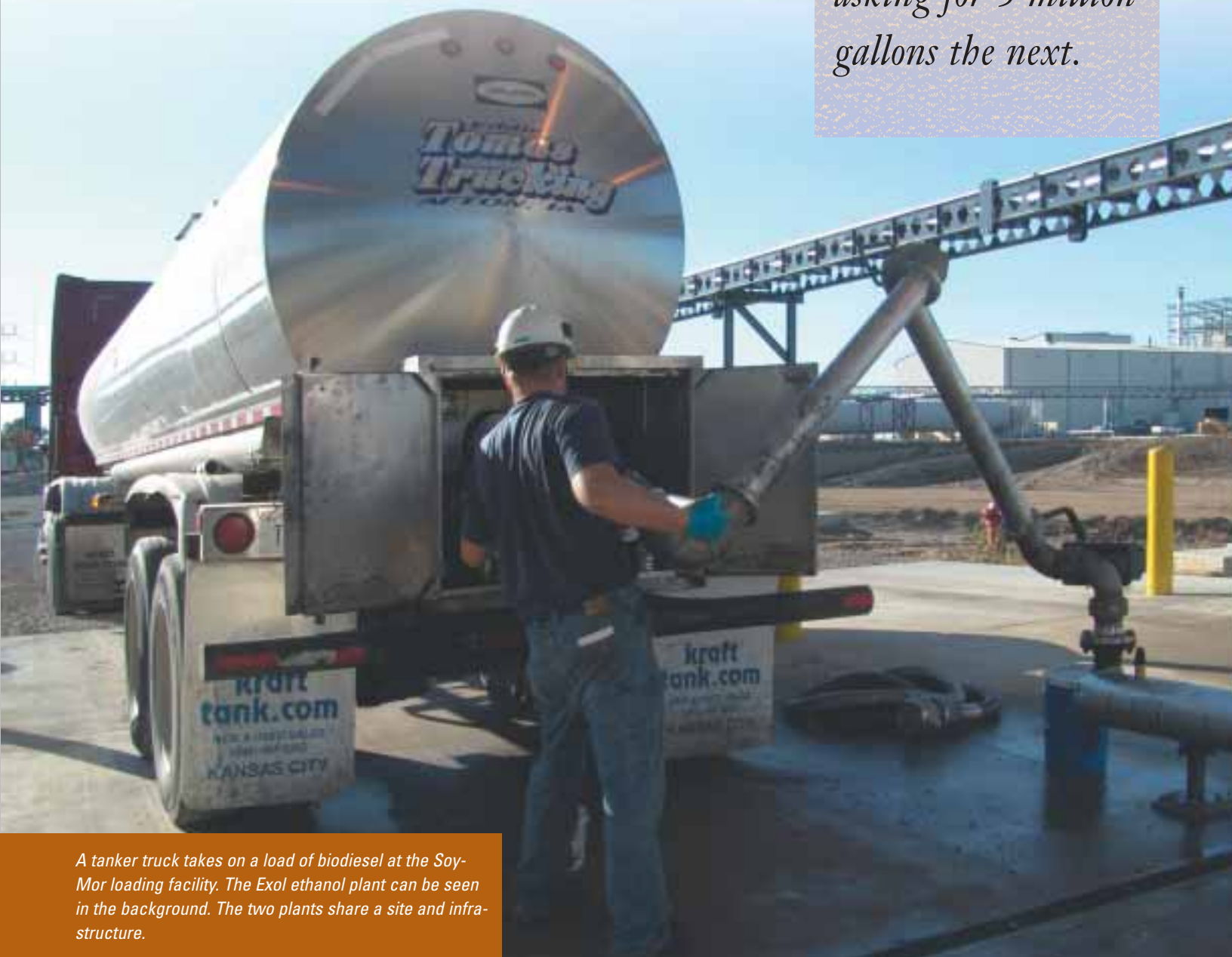
Most manufacturers use methanol, also known as wood alcohol, for this purpose. But the SoyMor plant uses ethanol supplied by its sister co-op.

Business incubator aids start-ups

Meanwhile, across town a business incubator is helping some much smaller ventures get started. The Albert Lea Business Development Center is run

by the Albert Lea Economic Development Agency. Built with the help of another REDG loan from Freeborn Mower, it offers support to start-up businesses that would other-

One company bought 200,000 gallons of SoyMor's biodiesel the first year, and came back asking for 3 million gallons the next.



A tanker truck takes on a load of biodiesel at the SoyMor loading facility. The Exol ethanol plant can be seen in the background. The two plants share a site and infrastructure.

wise have trouble getting off the ground. The Center provides space in a modern business building suitable for warehouses, small manufacturing operations, food preparation and storage, and offices. Reception and other business services are included, as well as legal, accounting, marketing, and business planning assistance.

To qualify to use the incubator, businesses must submit a valid business plan and other information supporting the viability of the proposed enterprise. There is an informal time limit of 5 years for use of the facility, says Ryan Noland, the agency's business development director, but the length can sometimes be extended, depending on the circumstance. He points out that, while the businesses nurtured by the incubator are small, it is small businesses as a group that provide the biggest single and fastest-growing source of jobs in the United States.

The Center currently houses six budding enterprises. One is Daisy Blue Naturals, a manufacturer of all-natural lotions, soaps, shampoos and other cosmetic products. The business began in chemist Jena Thompson's home, when her young son was found to be allergic to the ingredients of commonly available baby oils and soaps. Thompson tried to find natural-based products, she said, but "according to federal government guidelines, only a portion of a product needs to be natural in order for it to be labeled as such. And everything truly natural was outrageously expensive." So, she formulated her own soap and baby oil.

Soon, Thompson's neighbors were buying her formulations, and her business grew using direct sales through house parties. In July 2002, the business moved into a space in the incubator facility, and has expanded into larger spaces there three times since. All of Daisy Blue's products are manufactured on the site, using only natural

ingredients.

The company now employs 13 people, including Galen Spinler, its chief chemist. Spinler used to work in the defense industry, but far prefers his current job, saying, "It's a great bunch of people to work with."



One of the tenants of Albert Lea's business incubator is George Kessel's Engineered Ice Systems, which services and repairs ice-resurfacing machines for skating rinks. Photo courtesy Albert Lea Economic Development Agency

From wheelchair cushions to dried buffalo bullion

The business incubator also houses six other enterprises, including a firm that makes wheelchair cushions, a company that manufactures a dried bouillon mix made from buffalo instead of beef, an electrical wholesaler, a caterer and a company that services ice resurfacing machines used on skating rinks.

Nancy Jensen runs one of the smaller operations, Day Lily Enterprise Inc., a shop that makes custom-printed day planners. Jensen ran her business out of her home for five years, until she was given the opportunity to rent the

incubator space.

"I quit my job and stepped out on faith," she says. With only one employee, the business is still small, but growing, says Jensen, who is grateful for the chance to get her dream off the ground. She says the Development Center gives her enterprise an ideal venue for getting started. "I love it here," she says.

The agency offers help to other businesses as well, including aid in locating financing and suitable properties, and a revolving loan fund that offers up to \$50,000 to small businesses for acquisition of equipment. It also operates the Albert Lea Small Business Development Center, a joint effort by the Minnesota state government, a local technical college, and the Small Business Administration that offers help in evaluating profitability, marketing, planning, loan application packaging, and related services.

The economic development community in Albert Lea isn't looking back. Currently on the agenda is setting up a venture capital fund to bring potentially high-income new ventures to the area. Representatives of the Chamber of Commerce, the Albert Lea Development Agency, Freeborn Mower and other organizations are currently exploring ways to find funding for such an initiative.

On Sept. 27, they met in a conference room at the Freeborn Mower offices with USDA Rural Development State Director Steve Wenzel to discuss the venture capital fund and other development issues. Wenzel says he's encouraged by the initiative shown by the group. "I think cooperation and coalition among government and non-government entities is the key to job development in rural areas," says Wenzel. "USDA takes a very active role, but it's the inventiveness and resourcefulness of members of the community that's going to make the difference." ■

IT having major impact on farmer-owned ethanol plants

**By Anthony Crooks and John Dunn,
Ag Economists
USDA Rural Development**

Editor's note: This is the second of two articles focusing on the impact that evolving information technology is having on the ethanol industry. The first article appeared in the September/October 2005 issue, which is on-line at: www.rurdev.usda.gov/rbs/pub/openmag.htm. These articles are based on a forthcoming report: "The Impact of Information Technology on Farmer-owned Ethanol Plants," RR 209. Call (202) 720-6483 to order, or download at www.rurdev.usda.gov. Available in January 2006.

Information technology (IT) is having a profound impact on the ethanol industry, especially in the financing, construction and operations of ethanol plants. It helps to strip costs out of ethanol plant systems, promotes standardization and mitigates production risks.

In addition, IT:

- Gets plants up and running as much as 6 to 12 months sooner than otherwise;
- Keeps plants running to increase production efficiency. This new technology reduces operational downtime and increases the annual days of operation from 340 to as many as 361.
- Facilitates the inflow of capital into the industry by helping to quantify the risks associated with plant investment/operations to prospective investors.
- Alters the nature of a firm by digitizing and decomposing on-site activities (breaking down large jobs into several small jobs) that can be outsourced, off-shored and otherwise moved around. This changes the economics of plant location by impacting where various assets are deployed.
- Changes labor mobility by moving jobs to labor as well as labor to jobs.
- Alters the skill sets needed for plant management and labor.
- Further separates ownership from management and allows firms to transform themselves faster.
- Alters a firm's relationships to business and

industry because it supports a contract-based industry structure that creates significant linkages/collaboration and enables coordination across enterprises, companies and specialties.

- Gives rise to the ethanol franchise and uses the standardization of that model to reduce uncertainty.

Outside investors increasing stake

A better understanding of risks associated with ethanol plants allows the financial community to reduce lenders' equity participation requirements, to reduce interest rates and the overall cost of capital and invite participation among outside investors. IT has altered our view of the traditional market structure. Economic power now lies in aggregating information assets, not in the physical assets of plant and equipment associated with production.

USDA photos by Stephen Thompson



Grain from Minnesota corn bins such as these is fueling the expansion of the ethanol industry. Farmer-owners of ethanol plants have averaged significant gains per bushel of corn.

With regard to IT and the future dynamics of the industry, as IT applications within the ethanol industry continue to evolve, competitive forces will spur efficiencies and dynamic growth. Work activities will increasingly be dispersed across geography, institutions and dimensions as managers and decision makers ask: “What else can be digitized, decomposed and outsourced?”

The balance of economic power within the industry shifts daily from the traditional aggregation of physical asset ownership to the aggregation and integration of information services. However, competitive advantage held today is more easily eroded and replaced. This understanding raises the question: “Will the emerging price-discovery mechanisms (futures market and market transparencies) change the comparative advantage of the information aggregators?”

The dynamic, intellectual-property nature of IT continues to shape the competitive structure of the industry. Where will the talent to continue operations in this environment come from?

Information technology has eroded and distributed the market power once held exclusively by global giants. Enhanced access to inputs and product markets among mid-sized fuel ethanol firms arising from the adoption of information technologies may inspire similar developmental opportunities in rural America.

The notion that firms may achieve competitive advantage from an efficient, internal information system — in lieu of the high levels of vertical and horizontal coordination typically garnered solely from a large size operation — provides both an encouragement for the relative success of mid-sized firms and a developmental template for similar enterprises in rural areas.

Innovation related to new IT is leading to the development of new ethanol products innovation and commercialization.

DDG product development

Land-grant universities and private corporations have worked together to significantly enhance the product value of distillers grains. Researchers, such as Vern Kelly and Jerry Shurson at the University of Minnesota, have served to not only expand existing markets for distillers grains as cattle feed, but have also developed new opportunities in feeding hogs. So, instead of being an afterthought or even a waste product, as distillers grains were once considered, DDG is now a significant component of a plant's revenue stream.

Early on, some plants were fortunate to have Farmland Industries as one of their investors. Farmland's feed division helped to market DDG. Farmland also sponsored and conducted research on how best to use distillers grains. Farmland's feed division has since been absorbed by Land O' Lakes, which markets DDG and is

continuing to do research at its own facilities and in collaboration with universities. Such research is needed, because the ethanol industry redirects about 10 percent of the nation's corn crop away from the livestock-feeding industry. Every opportunity for distillers grains to be included in animal rations — in substitution for either energy or protein — relieves some of the upward pressure on corn prices as it increases the value of distillers grains. Inclusion rates for DDG in feed have increased for cattle (up to 25 percent), swine (10 percent) and poultry (5 percent), but there is still an excess supply and the price is tracking downward again.

Feed researchers and development groups continue to educate the industry and develop its customer base. However, the product remains a bargain relative to corn, which in turn encourages feeders to pursue substitution opportunities.

Initially, almost 100 percent of the distillers grains that were sold went toward dairy rations. Plant managers soon discovered that drying the wet grains would not only increase the product's shelf life, but would also improve consistency and quality. Local feeders pressured plants to sell quickly and at a discount. Sometimes the best offer most plants received from feeders early on was paying the freight to haul it off. But now — after years of research, some technological developments and a lot of education — feeders know precisely the value of DDG.

Bio-refineries promise range of products

The bio-refineries concept is similar to the petroleum refinery concept. Feedstock (biomass, in the case of a bio-refinery) is converted into a wide range of products, based on market consideration and contractual arrangements. The biomass feedstock is typically fractionated into its various components. Those components are then processed into intermediate and final products.

Surviving in a low-price cycle

What does a medium-sized ethanol plant need to survive a two-year period of low prices? With record-high fuel prices, that is obviously not a problem at present. But the market is cyclical, and some day the worm will turn again. Experience shows that the biggest key to surviving a low-price cycle is a strong CEO or, lacking that, a strong board of directors — and preferably both.

The board must be able to draw on its managers to obtain the needed information to run the plant. They need a business plan that is updated each year. They need to have a professional marketer for ethanol and feed. The marketer must understand the customers' needs (particularly for DDG) so that they can help develop the market.

The board needs a risk-management plan that helps hedge the co-op's corn and natural gas. It needs to contract the sale of its ethanol and DDG with a built-in "crush margin." The people developing the risk-management plan should be working to provide a program that will estimate the volatile factors that the plant faces and indicate whether the expected return is enough to validate the risk.

Perfect hedges are not available, but risk-management plans can make use of the new ethanol contract and hedge DDG based on corn and the natural gas contract prices (although a number of plants are pursuing renewable and other energy alternatives to natural gas).

Long-term ethanol purchase contracts are becoming more common. One example is a three-year contract with the first-year basis being the cost of unleaded gasoline, while the basis for the next two years is

crude oil price. However, anyone using these contracts would need to be prepared to meet substantial margin calls and have access to adequate capital.

Plants need programs for both preventive and predictive maintenance and to carefully manage their spare parts inventory. An unplanned plant shutdown soon creates cash-flow problems. Maintenance of plants built 5 and 10 years ago is quickly becoming a first priority. Furthermore, facilities looking to cut costs soon realize that maintenance/repair is a significant portion of plant operating expenses.

Many plants now employ IT solutions to take a more proactive stance on their maintenance program. A predictive maintenance program is based on a plant's history of operating requirements and is derived from a statistically-based estimate of life span (or failure rate) and priority ranking (importance to operations) for each piece of equipment and machinery in the plant. The software dictates the priority of all maintenance work, schedules any required materials/equipment for just-in-time delivery, and documents the entire process.

What factors will expand the market for ethanol? Taking out the mandatory uses, an estimated 30 to 40 percent of current use is discretionary blending. Some market analysts forecast an over-supply and lower prices for the next two to three years. However, if Atlanta were to ban MTBE and if California were to mandate a 5-percent Reformulated Fuel Standard (RFS), mandatory demand would increase in each of these areas by 250 million and 950 million gallons, respectively. An adoption of a 10-percent, mandatory RFS in California could increase demand by as much as 1.9 billion gallons per year. ■

Intermediate products may be combined to produce additional products. The basic concept incorporates multiple products and possibly multiple feedstocks. Flexibility to meet market demands is an important element of the bio-refinery concept.

Bio-refinery feedstocks may include agricultural crops and agricultural residues, trees, grasses, animal wastes and municipal solid waste, organic materials that capture and store solar energy. They may also use various combinations of processing technologies including mechanical, thermal, chemical and biological processes. The

products produced are nearly limitless. They include fuels, electric power and heat energy, food and feed, and a host of chemicals including plastics, solvents, adhesives, fatty acids, organic acids, paints, dyes, inks, detergents and more.

The extended view of this concept is to develop bio-refinery complexes or "bio-refinery parks" that produce a wide range of products and which use products produced by others in the park. This concept would aid in the economic efficiencies of collection, storage and handling of feed stocks, production of energy, as well as help

support the required transportation and distribution infrastructure.

Further improvements in technology may play an important role in increasing efficiency of ethanol plants. New "up front" technologies that fractionate the grain into starch, pericarp, germ and protein may enable ethanol plants to produce a wider set of byproducts and to increase the market value of the byproducts. This change is expected to increase the energy efficiency of the ethanol plant and reduce other processing costs per gallon of ethanol.

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Fuel ethanol industry structure, past & present

While today's ethanol industry is fragmented, not long ago it was much more concentrated. In 1990, three major players dominated fuel ethanol production. ADM held 60 percent of the market, Pekin Energy (now Aventine, by way of Williams Bio Energy) and New Energy Co. of Indiana, each held 10 percent.

The entire industry was then comprised of about 20 firms that produced about 1 billion gallons annually. At that time, construction costs were around \$2.50 per gallon, conversion efficiency was closer to two gallons per bushel of corn and the average-sized plant required a workforce of about 50.

Structurally, today's situation is almost a mirror image of the past. The top three firms produce only about 31 percent of the nation's ethanol and 44 of the remaining 68 firms are farmer-owned. Over 4 billion gallons of fuel ethanol will be produced this year. Construction costs are about 98 cents per gallon. Fuel conversion efficiency is now 2.85 gallons per bushel of corn. A plant requires only 35 full-time staff and is operational for 360 days per year.

The transition from a highly concentrated to a fragmented industry was brought about by several key drivers, including: federal and state policies; natural progression of the industry; classic "production-push" agriculture; farmer ownership; crude oil price spike; low-priced corn; development of venture capital interests; and the formation of trade associations. Each of these factors is examined below.

Federal and state policies

Federal and state policies contribute substantially to the viability of the fuel ethanol industry. As one industry representative commented, "state and federal incentives cover a lot of mistakes. They provide a safety-net."

Ethanol's exemption/credit against the federal excise tax on motor fuels is a long-standing industry cornerstone. Programs created under the Clean Air Act Amendments of 1990 enhanced demand for ethanol. These included the Oxygenated Fuels Program, implemented in 1992 to reduce emissions of carbon monoxide, and the Reformulated Gasoline (RFG) Program, which took effect in 1995 to reduce ground-level ozone (i.e., smog). The federal Bioenergy Program (CCC-850), established by executive order in 1999 under the Clinton administration, is a key incentive for new facilities because it offsets part of the feedstock costs incurred to start up or expand biofuels production.

The long-term extension of the excise tax credit in the JOBS Act of 2004, together with the Clean Air Act programs, reduced the "policy risk" associated with establishing and operating an ethanol facility. State policies also have had major impacts on the industry. However, state production incentives tend to be capped at a certain capacity level,

which contributes to a fragmented industry structure.

The fuel ethanol industry's rapid growth is due in large part to the finding that methyl tertiary butyl ether (MTBE) is carcinogenic. This eased political fighting between the oil/energy sectors and agriculture. The MTBE phase-out put both parties on the same side of the issue. The Minnesota requirement that gasoline be blended with 10 percent ethanol is regarded as a model state policy. State bans of MTBE, a competing additive used to boost oxygen content in gasoline, expanded ethanol use in recent years. Presently, 20 states have implemented or announced bans of MTBE. Bans in California and New York took effect at the beginning of 2004.

Last August, after more than 5 years of heated congressional negotiations, the Energy Policy Act of 2005 set a renewable fuels standard (RFS) of 7.5 billion gallons by the year 2012. While the implication of the Act will involve an extensive change to fuel regulations, petroleum-refining and fuel marketing, the full economic and environmental effects will only be revealed in time.

Natural progression of industry

To some extent, fuel ethanol is experiencing the "natural progression" of an industry. It has stalled and re-started several times over the years. Several times it was on the verge of death, only to be reborn. The fundamental difference now is the world's increasing demand for energy.

Those involved in this business for 25 years still have the same dream as the preceding generation that launched the industry. The scope of the uphill battle fought in the industry's early days probably wasn't clearly understood. Nevertheless, they witnessed the emergence of a real bio-fuels industry.

More than a fuel

Ethanol is being viewed as more than a commodity in many rural areas of the nation, where there is emotional zeal about the potential of biofuel to strengthen the rural economy. There is even a sense of patriotism about the part biofuel may play in helping to reduce the nation's dependence on foreign oil. These strong beliefs may have helped the industry survive difficult straights, when it continued to expand production with only a small clue as to how it would be sold.

The consensus was, "It's a good idea." But few had any real vision of the industry's future. In no small way, ethanol is classic "production-push" agriculture, in which farmers plant seeds without knowing their ultimate yield and pay. Their philosophy has been: "If we build it, they will come."

Realistically, the industry is not going away. But what will

it look like? The consensus is that there will be a substantial, long-term positive growth phase. The only real distinction among ethanol plants in the past 5 years has been between those that made a “nice” return on investment vs. those that made a “fantastic” return.

Farmer ownership

The emergence of “new-generation” cooperatives and farmer-owned ethanol plants in the early 1990s played a critical role in the development of the industry. The cooperative structure provides farmers with the opportunity to collectively raise money to build facilities. Cooperatives also distribute the investment risk over the entire group of investors, thereby reducing the risk to any individual investor.

In addition, because cooperative membership is tied to a right and an obligation to deliver corn to the cooperative, the corn delivery agreements may have helped the cooperative survive market fluctuations better than a privately owned plant faced with purchasing corn in a volatile, open market.

However, it is harder to put together a co-op today because most farmer groups within a 40- to 60-mile grain-hauling radius of a plant (the distance considered economical for procuring feedstock for ethanol) lack sufficient capital to invest the needed equity. Within a 60-mile radius, a co-op can typically raise about \$12 million to \$18 million through local equity drives for a plant that will cost \$45 million to \$60 million. Nevertheless, some farmer groups are getting more sophisticated in raising capital; one recent success story involves a co-op that raised \$28 million.

Generally, farmers exhaust their ability to raise equity for a new plant, then look to plant builders, ethanol marketers or other outside investors as necessary partners to raise the rest of the needed capital. Recently, a few Wall Street investors have entered the picture to finish the equity drive in some form of partnership arrangement, or to subordinate the debt. In recent cases, farmer-investor groups have assumed more of a minority ownership position in the company.

Crude oil price spike

The most recent boost to the industry has been crude oil costing more than \$60 a barrel. Still, there has been a perception that the viability of the industry is based on subsidies. About three years ago, it was difficult to get New York investors to even discuss ethanol. Morgan Stanley was one exception. It was forward-looking enough to pursue some ethanol investments, but virtually all other major investment firms declined to do so.

The only real change since then has been the spike in crude oil price. Now the institutional investors and money-center banks seem to believe in the long-term viability of ethanol as an energy source.

Low-priced corn

Most producers pursued ethanol plants to boost local corn prices. Many ethanol plants were financed on that basis, not the economics of the grain margin going forward. The driving motivation is simply that a \$20,000 investment in a local ethanol plant can improve a producer’s corn basis — it becomes a de facto annuity that returns an additional 6 to 12.5 cents per bushel, in perpetuity. This idea drove the financing and building of the 20- to 40-million-gallon plants.

Development of venture capital interests

Farmers recognized the economic incentives and experienced what was called the “backyard syndrome.” What community doesn’t want 5 or 10 cents per bushel more for its corn? Most weren’t sophisticated enough at that time to understand the risk-management issues involved or the operating margins.

Nor was the possibility considered that there might be a better place to locate a plant other than in their hometown, or that perhaps it should be built by somebody other than a general contractor. Basically, the sole consideration was the desire to increase the corn-price basis. The industry production standard grew from 15-20 million gallon plants to 45-50 million gallons, then 55-60 million gallons and now 100 million gallons.

The success of those plants fueled the enthusiasm to build. Most of the plants now being built in Iowa are not farmer investments. Moreover, most investment plans today include intentions to build two or three additional facilities. The flow of investment money from outside agriculture is substantial and increased significantly after the price of oil exceeded \$50 a barrel.

Formation of trade associations

The information explosion was also a driving force behind the formation of ethanol trade associations. As more producers became interested in ethanol production during the late ‘90s, they started organizing into groups.

The trade associations recognized benefits of bringing the groups together to provide them with the necessary information. This included production technology, different legal structures, sources and availability of financing, etc.

The trade associations met monthly with several producer groups and watched each evolve through the developmental stages of fund raising, groundbreaking, etc., to full production.

The ability to share information was a prerequisite to a distributed and fragmented model. In order to have multiple facilities and many companies forming, each had to have an understanding about what to do, how to, and when. ■

— **By Anthony Crooks and John Dunn**

Do bigger ethanol plants mean fewer farmer benefits?

By David Morris

Editor's note: Morris is an economist with the Institute for Local Self Reliance. The views expressed are the author's own and do not necessarily reflect those of USDA.

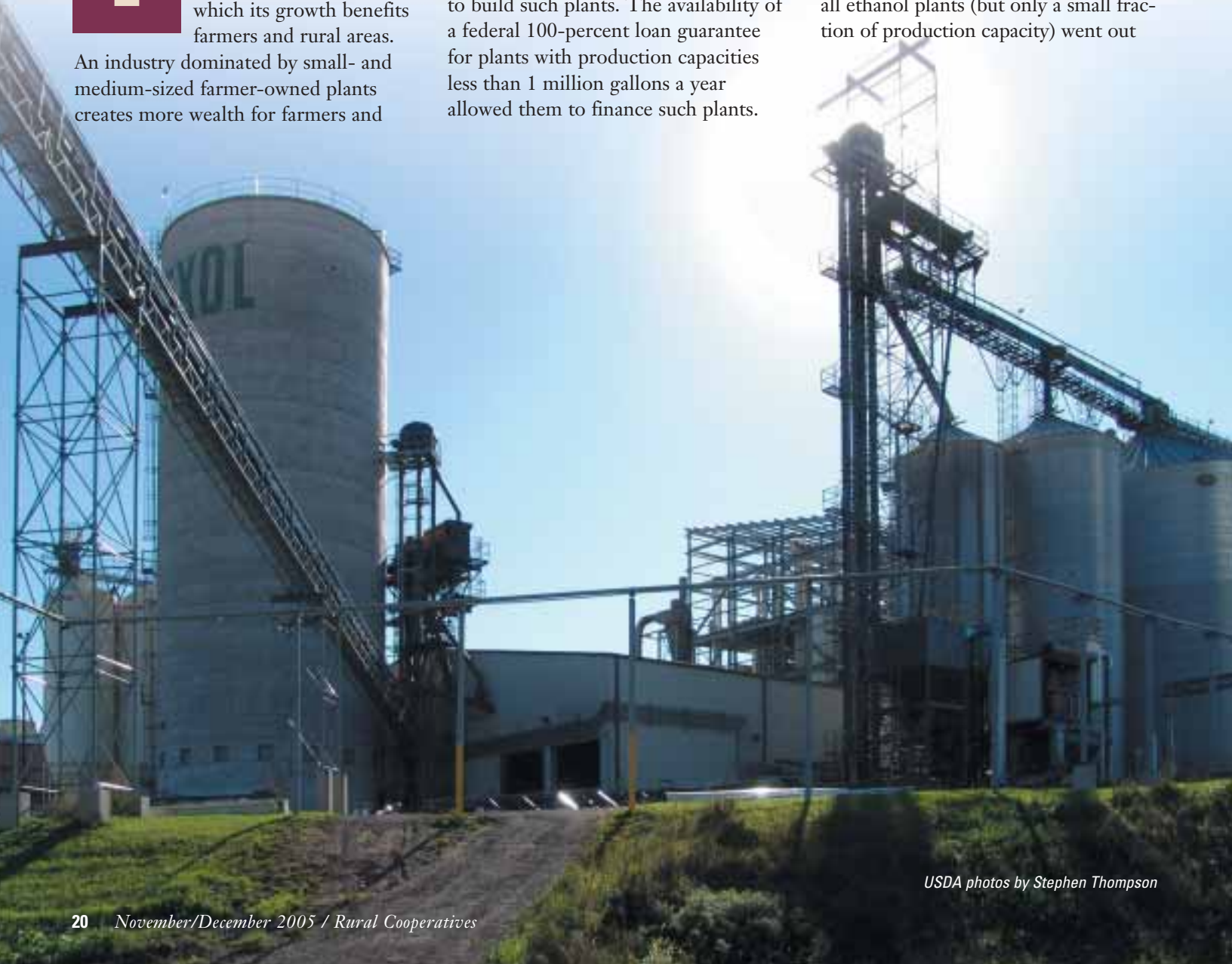
The structure of the ethanol industry influences the degree to which its growth benefits farmers and rural areas. An industry dominated by small- and medium-sized farmer-owned plants creates more wealth for farmers and

their communities than does one characterized by a smaller number of large facilities owned by national and international investment groups.

Between 1979 and 2005, the ethanol industry has experienced four major structural upheavals. In the beginning, it consisted of a vast number of tiny production units. The doubling of oil prices in 1979–1980 inspired farmers to build such plants. The availability of a federal 100-percent loan guarantee for plants with production capacities less than 1 million gallons a year allowed them to finance such plants.

This “stills-on-a-hill” era peaked in 1984, with 163 very small ethanol plants in operation (some sources estimate as many as 176). The industry then violently contracted, a result of crude oil prices falling to \$8 a barrel and a successful, concerted negative publicity effort by major oil companies.

In a single year, 1985, almost half of all ethanol plants (but only a small fraction of production capacity) went out



USDA photos by Stephen Thompson

of business. By 1990, only 56 plants remained. More than half produced less than 5 million gallons a year.

In the late 1980s and early 1990s, the ethanol industry was dominated by 100-140-million-gallon-a-year wet mills. These were built primarily to serve the expanding high fructose corn sweetener market. Archer Daniel Midland (ADM) dominated the HCFS market. As a result, ADM dominated the ethanol market, accounting for about 75 percent of the ethanol industry's output in 1990. Indeed, in the early 1990s, the words ethanol and ADM became virtually synonymous.

Rise of farmer-owned plants

The 1990s witnessed the next structural shift in the industry: the rise of farmer-owned plants. By the late 1990s, the vast majority of new ethanol plants were farmer-owned. By 2002, these were producing, collectively, more ethanol than ADM. Some 25,000 farmers nationwide had become shareholders in ethanol facilities.

The average size of new plants grew from 15 million gallons a year in the mid-1990s to 30 million gallons a year by 2002. States such as Wyoming and Minnesota redesigned their cooperative laws to enable more outside investment while retaining farmer control. Many farmers chose the limited liability corporate (LLC) form as a way to access the capital required.

In 2004, a new era dawned on the ethanol industry when the nation's first 100-million-gallon dry mill opened in South Dakota. Within a year, at least 15 more 100-million-gallon dry mills were under construction or planned. A doubling of oil prices, an extension of ethanol's generous federal financial incentives and the passage by Congress of a mandated doubling of the ethanol market by 2012 all combined to make ethanol an attractive investment. It is likely that in the next 3 years, 75 percent of new ethanol production will come from large, non-farmer-owned plants.

Some farmers view absentee-owned plants as an inevitable — and even a

welcome — development. South Dakotan Dan Endres, who had owned shares in two farmer-owned ethanol plants and became a principal owner of a company building several 100-million-gallon plants, comments: "VeraSun's experience indicates that the farm-ownership model may need

Large absentee-owned plants . . . restrict the possibility of widespread farmer ownership and control.

to adapt as the ethanol industry gravitates to large plants. Such operations are increasingly financed by six to eight principal investors, without the need to deal with hundreds of small-scale farm-investors."

In mid-2005, several leading firms in plant construction, engineering and marketing formed a new entity, US Bioenergy, a holding company that will purchase and provide services to a number of ethanol plants. The minimum investment for shares in the holding company is \$5 million. Investors anticipate making a significant profit in 2 to 3 years when the company goes public.

Industry evolution poses challenges

The evolution of the ethanol industry into one dominated by large plants where investors profit not from the sale of ethanol, but from receiving the appreciated value of the plants when they are sold, challenges policy makers who are trying to address agricultural, as well as energy, objectives.

Expanded ethanol production, of course, benefits farmers and rural areas in the same as will any new crop-processing facility. Supporters argue that a more concentrated structure is necessary to raise the billions of dollars required to significantly expand

ethanol production. Larger plants can produce and transport ethanol more cheaply. And larger increments in capacity allow the industry to expand more quickly.

These are valid points. But there is another side to the rise of large absentee-owned plants that concerns many. They significantly restrict the possibility of widespread farmer ownership and control. That begins to sever the link between ethanol production as an energy strategy and ethanol production as an agricultural strategy.

Bigger plants do indeed lower unit production costs. But while the savings are considerable when the size of the facility increases from 10 to 30 million gallons a year, the additional reductions from increasing the size of the facility from 30 to 100 million gallons are modest. Capital savings may be on the order of 2-3 cents per gallon; labor savings are about the same. Reduced transportation costs from using unit trains might be about a nickel a gallon.

Large plants do not, of course, guarantee lower costs. There are diseconomies of scale. A large plant can strain local suppliers. Reporter Peter Rohde of *Inside Fuels and Vehicles* reports that a new 100-million-gallon ethanol plant in South Dakota raised the basis price of local corn by 30 cents per bushel. This increased feedstock cost wiped out any savings generated from reduced capital, labor and transport costs.

But let's say that making ethanol in a 100-million-gallon facility does reduce the cost by 10 cents a gallon less than that of a 40-million-gallon facility. We know from experience that this savings will not show up at the pump. The consumer will not benefit. The question is, will the farmer or the rural area benefit? Or, to pose the question more pertinently, will they benefit as much as if there were three smaller facilities rather than one large facility?

Advantages of smaller plants

As noted above, farmers and rural areas benefit when more manufactur-

ing and processing facilities move in or when the demand for a specific crop increases. Farmers who do not own a share in an ethanol plant benefit from the increased selling price of their crop. Studies indicate that increased local ethanol production raises the price of corn by about 10 cents per bushel. Farmer-owners of ethanol plants, on the other hand, have received as a dividend, over the years, 30-40 cents per bushel.

For farmer-owners, the ethanol plant becomes a hedge. When corn prices decline, the production costs of ethanol decline. Thus, at least a portion of the income lost to the farmer on the sale of the raw material is made up from the increased profits in the sale of the processed material.

A 100-million-gallon, absentee-owned ethanol plant will return to the farmers in the area around the plant about \$13 million less than three farmer-owned plants each producing 33 million gallons per year.

According to Iowa State University (ISU), the 5-year average after-tax return for a typical ethanol dry mill is 23 percent. In comparison, ISU estimates that 70 percent of Iowa's counties averaged returns on farmland of 2.5 percent or less (in 2002). In fact, one community banker in Minnesota told a National Corn Growers Association task force he considers financing stock purchases by farmers in processing plants a far less risky and potentially much more profitable investment than lending money to farmers to buy land.

With regard to the impact on the non-farm community, large plants, especially when they are part of a chain owned by one corporation, spend a smaller portion of their money locally on purchasing and management, on

accounting and legal services and on advertising.

Possible alternatives

What should be done? To date, public policy, at least at the federal level, has rarely taken into account the size or ownership structure of ethanol plants. I am aware of two exceptions. A program that gave free surplus grain to ethanol producers who were expanding or beginning production, rewarded small producers more than larger producers. And since the early 1990s, there has

crete step would be for the government to convert the federal excise tax exemption into a direct producer payment. This was done at the state level by Minnesota in the late 1980s. That payment could be limited to plants under a certain size and a higher incentive would be given to farmer-owned facilities.

To date, the issues of scale and ownership — at least at the federal level — have not been addressed. One reason may be that, until recently, farmer-owned, modestly scaled biofuels



Iowa State University estimates that the 5-year average, after-tax returns for a typical dry-mill ethanol plant is 23 percent. Here, trucks load with biodiesel.

been an additional 10-cent-per-gallon small producers credit that has been limited to facilities with capacities of less than 30 million gallons per year.

The 2005 energy bill, however, increased the definition of "small" to 60 million gallons, a ceiling that qualifies about 90 percent of all ethanol facilities.

The federal biofuels incentive, of course, has no ceiling. Moreover, it targets the consumer and the intermediary supplier, not the ethanol producer.

So what should be done? One con-

refineries seemed to have become the norm. That is no longer true.

The remarkably rapid growth of large scale, non-farmer and distantly owned plants should lead policy makers to engage the question and make a conscious decision. The question before them is how to design a strategy that not only maximizes the use of biofuels but also maximizes the benefit of that expanded use to the cultivator and the community in which the cultivation and harvesting occurs. ■



Appalachian Spring Cooperative

Treadway, Tennessee

Type of Business:

Appalachian Spring Cooperative is a 100 percent, producer-owned cooperative that markets value-added fruit and vegetable products. It offers more than 48 different jellies, sauces, relishes, herbal salves and other farm and food products.

Business objective:

To help members start and strengthen value-added farm and food product businesses by providing an array of collaborative marketing and other services.

Annual revenue:

Appalachian Spring Cooperative is a very young cooperative, and the process of developing and finding markets for a value-added farm or food product is lengthy. So far, 24 members have developed a product for commercial sale, most quite recently. Other members are still in the farm/food-product development process.

Annual revenue to the cooperative in 2004 — derived from a

percentage of member sales and grants — was \$148,485.

Number of members & employees:

Appalachian Spring Cooperative has 80 members currently residing in 14 counties of east Tennessee. Of these, 34 produce honey through a project that is re-introducing honeybees into the region; another 24 members produce a value-added product for commercial sale while others are still in the product-development stage. The cooperative has two full-time employees and one part-time worker.

Description of business activity:

Locally grown fruits and vegetables are processed in a nonprofit, shared-use commercial kitchen into a variety of value-added products. These include: tomato sauce, pasta sauce, salsa (5 brands), barbecue sauce (3 brands), hot sauce (2 brands), habanero pepper extract, strawberry jelly, raspberry jelly (2 brands), blackberry jelly, grape jelly, pumpkin butter, sweet potato butter, honey, creamed honey, habanero-flavored honey and flavored marinades. Also: flavored mustards, cucumber relish, corn relish, zucchini relish, pepper relish, chow-chow, bread-and-butter pickles, vegetable



Appalachian Spring Co-op (ASC) members process locally grown fruits and vegetables into a wide variety of value-added food products using the Clinch Powell Community Kitchen. Photos courtesy ASC

soup starter, beer cheese, herbal skin salves, herbal lip balms, and more. Members' products are marketed through a variety of channels, including wholesale to area food stores, retail from the cooperative website (www.apspringcoop.com), retail gift baskets promoted to corporations, churches and civic groups, and retail from the cooperative store.

“The combination of Jubilee’s processing kitchen and our marketing cooperative offer an alternative enabling local farmers to increase farm income...”

—Dianne Levy

How co-op was developed/financed:

Realizing that new producers of value-added farm and food products needed help in marketing, Jubilee Project — a nonprofit community development organization — helped local farmers organize the Appalachian Spring Cooperative, which held its founding annual meeting in 2002 as a marketing cooperative for value-added food products. It quickly added the Honeybee Project, using a grant from Heifer Project International to introduce honeybees on 34 farms in the east Tennessee area. In addition to the Heifer Project grant, the cooperative has received federal, foundation and church grants directly and through Jubilee Project, which operates the shared-use kitchen used by cooperative

members (Clinch Powell Community Kitchens, www.clinchkitchens.org). The Honeybee Project was set up so as to pass 10 percent of the honey produced back to the cooperative; members selling value-added products through the cooperative also pay 10-20 percent to the cooperative.

How USDA helped:

Appalachian Spring Cooperative has benefited from several USDA funding programs, including: an initial USDA Community Food Project Grant of \$182,000 over three years, a Value-Added Producer Grant of \$39,800 for one year and a SARE Sustainable Community Initiative Grant of \$6,436. In addition, the cooperative received a SARE Producer grant of \$10,000 in its second year. Jubilee Project has helped the cooperative find matching funds for all these grants.

Leader’s comment:

“At a time when farmers in the east Tennessee area are looking for new sources of income, the combination of Jubilee’s processing kitchen and our marketing cooperative offer an alternative enabling local farmers, and local entrepreneurs buying from them, to increase farm income by producing high-quality value-added food and body-care products.”
— Dianne Levy, general manager, Appalachian Spring Cooperative.

The results:

Today, 24 cooperative members are producing more than 48 products for commercial sale, with growing sales through the Internet and plans for increased gift basket sales and establishment of a local retail store.

Market outlook:

The demand for specialty foods, including gourmet,

natural and organic food products, has continued to grow at a faster pace than overall food sales. At the same time, more than 70 percent of the public express a preference for buying local food. Appalachian Spring Cooperative expects to grow member sales by capitalizing on both of these promising trends.

Major challenge/opportunity facing co-op:

A major challenge for the cooperative is that members starting food product businesses are producing at a small enough scale that they cannot keep their per unit costs low enough to afford producing for many wholesale markets in the area. A major opportunity is that local and state officials are willing to help open retail outlets for locally produced food.

Contacts:

Phone: (423) 733-2095; e-mail: manager@apspringcoop.com; website: www.apspringcoop.com.



A gift selection from Pure Mountain Herbs, a member of Appalachian Spring Co-op. Members also produce a variety of jellies, tomato sauces, five brands of salsa, two brands of hot sauce and cheese, among many others.

Expanded database vital for future co-op research

By Dan Campbell, Editor

Editor's Note: The complete text of testimony presented at USDA's public hearing on co-op research is posted on the Internet at: <http://www.rurdev.usda.gov/rbs/pub/ResearchPublicMeetingTranscript.doc>. The Web site includes comments from co-op organizations that were not present to testify (and are not reflected below). Anyone needing a printed text of the testimony should e-mail: john.dunn@wdc.usda.gov.



ou can't tell where you should be going if you don't know where you are (or where you've been).

That, in essence, was a major message delivered by a broad array of national co-op leaders when USDA Rural Development held a public hearing in October to gather ideas on where to focus its co-op research efforts. A new database is critical to the future of the nation's cooperatives and for showing their impact on the rural and national economy. Such a database will become the foundation for future co-op research, they said.

A number of speakers stressed that this co-op database should cover the entire cooperative sector, not just agricultural co-ops. Others, however, countered that USDA's Cooperative Programs office has its hands full just trying to maintain an up-to-date, accurate database on farmer cooperatives, and stressed that more resources would be needed if its mandate is broadened to include all types of co-ops.

Other common themes heard dur-



NCFC President Jean-Mari Peltier addresses USDA Rural Development officials during a hearing on the research needs of the nation's cooperatives. USDA photo by Pete Manzelli

ing the day-and-a half of testimony at USDA headquarters in Washington, D.C., included calls for more research into how co-op members can access their co-op equity, ways to finance new or expanded co-ops, demutualization (or co-op conversion) trends and ways to promote more collaborative research between USDA, universities, co-op trade organizations and co-op foundations.

Many speakers cited the need for more case studies that document real-life lessons regarding what business and member strategies are, and aren't, working for co-ops. Still others stressed the need to devote more resources to cooperative development and the study of international cooperatives.

Seize the opportunity

In his opening remarks, Under Secretary for Rural Development Thomas Dorr stressed that the partnership between cooperatives and USDA remains strong, but that the government's co-op research program must better reflect the needs of the co-ops it serves.

"Cooperatives and USDA have truly grown up together," Dorr said. "This partnership has been one of the foundations of the rural economy for generations, and it's evident to me that if rural America is going to continue to be involved in a strong economic revival — and I would submit to you that in many areas, there is a strong economic revival going on in rural America — it is important that we

understand the modern basis for these relationships.”

Dorr said research should be focused “where there will be real-world payoffs for rural America.” With so much change occurring, he continued, “the challenge is going to be how to anticipate, prepare for and profit from change.”

Cooperatives need to understand how to “best leverage their member equity, their traditions and their mistakes into new, strong and viable business models,” Dorr continued. Co-op research should help co-ops “create new markets with value-added or branded products, and exploit emerging technologies in bio-agriculture and alternative fuels, or leverage broadband technology to level the playing field for rural businesses.

“We want to build a research program that helps cooperatives uncover and take advantage of these opportunities, and we are looking for ways to build businesses and increase profits while simultaneously serving the other social needs that cooperatives can clearly help fulfill,” Dorr said, adding that USDA also has “a very special interest in using cooperatives to address the problems faced by small farmers in historically disadvantaged groups.”

Following are excerpts from the testimony:

**Paul Hazen, President,
National Cooperative Business
Association (NCBA)**

“This country needs national data on the impact of cooperatives on the U.S. economy...This data needs to include: (1) the number of jobs created by cooperatives, both directly and indirectly; (2) the level of economic activity created by cooperatives; (3) the tax revenue generated by the level of economic activity; (4) a definitive census on the number of cooperatives and the types of goods and services that are being offered; (5) the amount of patronage refunds that are returned to the members from their cooperatives, and (6) the extent of the social welfare

benefit where cooperatives are meeting the needs of communities that would not adequately be met by other types of businesses.

“A competent, government-sanctioned, cross-sector, multi-discipline economic-impact study led by a respected academic institution will provide enormous benefits for all cooperatives. The database that this study will create will allow and encourage continuing research. This will increase awareness of the cooperative form of business, which, in turn, will generate new business which will allow cooperatives to attract new members and investors.

“This is a phenomenal opportunity to reinvigorate [USDA’s Cooperative Programs] and continue a tradition of a public/private partnership that will truly provide lasting benefits for all cooperative members.”

**Jean-Mari Peltier, President,
National Council of Farmer
Cooperatives (NCFC)**

Peltier said NCFC is undertaking a comprehensive review of the existing business structures of farmer cooperatives to help identify structural challenges confronting the farmer cooperative business model. The goal is to “provide a new menu of strategic options to give farmers and farmer-owned businesses the flexibility needed to organize and finance a business that can effectively compete in the global marketplace.

“All of this work is generating literally a mountain of data — a mountain of data that’s going to be able to be analyzed by both geography” and type of cooperative. “We’ll be able to analyze the changing demographics of their membership and the impact...” Another key issue is lack of access to sufficient capital for farmers to fund their organizations, Peltier said. “The question is not so much access to capital, as it is access to equity capital, rather than taking on long-term debt.” Farmer cooperatives are also “struggling with being able to provide a vehicle for their

members to access the value of the cooperative without selling off the value of that enterprise.

“Obviously, it’s going to take a lot of work to review all of this data...we definitely will be looking for partnerships to help us sift through this data and analyze what its long-term impacts will be.”

Peltier noted that USDA’s legislative mandate is to operate a co-op program that focuses on farmer cooperatives. “We hate to see that diluted,” she said.

**Deb Conley, Executive Director
Indiana Co-op Development Center**

Conley urged that more research be conducted into international co-ops — how they are structured and function. “Are they more or less effective in enhancing quality of life and economic developments than in the U.S.?” Other key research topics, she said, should include: “How much do cooperatives impact our states’ economies? How many cooperatives are there? Where do co-ops access capital? In what areas are co-ops more successful, and in what areas are they proving not to be?”

“Expanded research should include co-ops in all sectors; identify the sectors in rural areas which show the most potential for growth for cooperative businesses; compare the sustainability of cooperative businesses to other forms of business; measure the economic impact of cooperatives in each state; develop a measure for non-economic benefits of cooperatives, community cohesiveness, citizen participation, growth in other sectors and community improvement.”

Other priorities should be the effect of gentrification in co-ops and to identify the resources leveraged per dollar invested in co-ops and the rate of growth or decline in each co-op sector. “Identify how co-ops access capital. And how do we compare internationally?” Research should examine what types of co-ops are incorporating under new state statutes, similar to Minnesota’s, she continued.

Bill Patrie, Rural Development Director, North Dakota Association of Rural Electric Cooperatives

Patrie stressed the need for more case studies, including co-op conversions to non-co-op business structures. He cited Dakota Growers Pasta Cooperative and the Saskatchewan Wheat Pool as two prime examples. Both conversions were, and remain, controversial, he said. “What have been the consequences? What were the motives of those conversions? What were the mechanics of those conversions? What is the aftermath? Is the stock more liquid now? What about access to equity investments from others? Has that improved or gotten worse or about the same?”

Another case study could look at conversions that went the other way, from corporations to co-ops. “American Crystal Sugar has been studied, but it would be interesting to see what has been the long-term effect of those sugarbeet growers buying ACS and what they went through. What is the performance history?”

Likewise, the conversion of U.S. West telephone into a cooperative would make a fascinating case study, he said. “We can learn a lot, because we have operating history before and after. What happened to the cost of service? Did they in fact reduce the cost of service to the subscribers? Is the technology better or worse than when U.S. West operated those companies?” Two other case studies involve major co-op failures: Spring Wheat Bakers Cooperative and the North American Bison Cooperative (although the later recently emerged from bankruptcy).

“A seventh study that would be very useful is to understand the psychology of human cooperation,” he said.

Paul Darby, Co-op Development Director, Southern States Cooperative Foundation

Darby said a top research topic should be how producers can “truly access the equity in their farms for value-added business development without selling out. That is an issue

that we bump up against every single day. Equity capital is absolutely a significant issue. It’s not capital, it’s equity capital. For a group of producers in a start-up enterprise, it’s even more difficult, even though each of these individuals very likely is successful in their

“I envision this research as the foundation of a new and expanded cooperative development agenda. Research is the yeast that makes the bread rise.”

—Liz Bailey

farming operations. Many of them are small, but many of them have developed a niche market and are very successful. They may have millions and millions of dollars in assets on that farm, and yet — because they either have a loan with a commercial bank or Farm Credit, and those assets are part of the collateral — they’re not able to touch those.

“A second issue is: why are cooperatives converting to stock corps. and LLCs.” He too said the pasta co-op conversion in North Dakota “would be a phenomenal case study. A third one: why are new value-added enterprises being developed outside the co-op model.” A good example, he said, would be Atlantic Bioenergy, a biodiesel project in North Carolina that his foundation has spent years working with. “The leadership of that

project, from day one, wanted it to be a cooperative. But there was roadblock after roadblock that prevented it from being a cooperative... There were agribusiness investors in North Carolina that wanted to be a part of that ownership structure. They couldn’t be involved... so that group had to go to an LLC structure.”

The new Virginia Poultry Growers Co-op would be another good case study, Darby said, including the impact of the co-op having three non-members — a banker, an educator and a representative from a value-added product partner — on its board. That value-added foods company “made a multi-million-dollar equity investment in that cooperative. They couldn’t be a Class-A member. They had to buy preferred stock, but because of a provision in state law, they could be a part of the governance structure. And that really is the key for a lot of companies and individuals that want to invest.

“We think there is certainly value in USDA not simply going to a university [for research], but bringing in people with boots on the ground from the centers to collaborate on a bigger project, working with the trade groups that represent cooperatives; really make this a fairly broad-focused effort.”

Mike Boland, Professor, Kansas State University (representing NCERA-194)

Boland said NCERA-194 (an organization of land grant university faculty members doing research on co-ops) members believe that more study is needed on existing equity management programs used by cooperatives. “As Mr. Dorr has spoken at length over the last several years, there’s a lot of untapped equity in rural America that we just don’t have access to.”

Information is needed on co-op finance, governance and strategic thinking, he said. To improve the response rates on its surveys of cooperatives, Boland said USDA could build a broad coalition with others — such as the Dept. of Commerce. “We need

some baseline information on how many cooperatives access outside equity, the changes in governance and organizational structure, and how this capital is being used.”

He said NCERA-194 members feel strongly that co-op research funds should be awarded on a competitive basis. “There are a lot of new faculty...and they’re eager to do research on cooperatives.”

Boland said a revolving internship or fellowship program that would bring university research economists to USDA for a 6- to 12-month assignment would prove popular. “Most people like going to D.C. for six months to a year.”

**Randall Torgerson,
former deputy administrator,
USDA Cooperative Programs**

Torgerson said commodity-specific studies are needed to understand the structural adjustments and economics of new, value-added initiatives and their impact on commodity marketing. As an example, he cited the burgeoning alternative fuels industry, which he said has “greatly altered the patterns of traditional commodity markets and attendant infrastructure needs. How are cooperatives adjusting to these changes, and what strategies are needed for remaining viable businesses serving farmer members?”

Red-meat processing co-ops also need study, he said. “Some, like Oregon Natural Beef Cooperative and the pork cooperative at Rantoul, Ill., have become successful,” while others have failed. “What have been the keys to success or the mistakes made that have led to these different outcomes for livestock producers?”

“What has been the experience of cooperatives generally in supply control? Does the CWT (dairy market balancing program) provide any guidance for potential success in this endeavor? Bargaining cooperatives represent grower members and contract negotiations with processors ...Are national legislative remedies required to augment the bargaining

process?”

Organic and natural foods producer co-ops also merit further study. “What have been the ingredients for their success? What relationships exist or can be developed between niche marketing groups and established cooperatives? The structure of the dairy industry continues to change with more commodity and ingredient production concentrated in western states and production of finished products in the Midwest and East. How can they best link? How can they coordinate? What are the alternatives to going public when dealing with equity redemption and other restructuring issues?”

**Audrey Malan, Executive Director,
Cooperation Works!**

Malan recommended that USDA engage in research that facilitates strategic, sector-based systematic approaches to co-op development. “For example, municipal co-ops are a proven strategy for county and state governments to reduce costs without reducing services...But we lack the research required to build an effective implementation strategy.

“The key is a commitment to developing new cooperative businesses, and to do it in a strategic way. We’ve been at this now for a long time. We know what works in co-op development. We know what new businesses need to succeed, and we know that we can be more strategic with our resources...”

“The home healthcare model of cooperative care in Wisconsin...is dramatically improving people’s lives. It’s improving seniors’ lives because they get consistent care rather than new people coming in their house every day, and of course it’s improved working conditions for the women who are taking care of our elderly people, but we need research.”

**Liz Bailey, Executive Director,
Cooperative Development Foundation**

“First, focus on research and education. We all know there’s a basic lack of understanding about cooperatives at all levels of government, in the busi-

ness community, in the academic world, in my philanthropic world and among the general public...We don’t have access to the kind of aggregated economic data that is routinely used by economic and business analysts to map U.S. economic activity and interpret the data for those who make or influence public policy. Rather, I envision this research as the foundation of a new and expanded cooperative development agenda.” Research, Bailey said, is the “yeast that makes the bread rise.”

Bailey said there may be “opportunities for collaborative funding proposals with foundations outside the cooperative world that focus on workforce issues, on healthcare issues or senior issues.

“How do we capture the interests of these new potential players?...We need to be able to provide them with objective data that they can use to validate the economic impact of cooperatives.”

**Ann Hoyt, Professor, University
of Wisconsin-Madison
& Chairperson, NCBA**

“One of the major challenges facing co-ops is demutualization. Another is member relations and how to maintain strong member identification and support when the cooperative needs to grow significantly to achieve economies of scale. A third challenge is capitalization...and changes in taxation and accounting policies. There is also the challenge of low public awareness of the value and contributions of cooperative businesses, particularly their contributions to local economies.”

She too stressed the need to address the “absence of reliable, comparable data on the U.S. cooperative movement, both rural and urban...We have reliable information on cooperatives in specific industries — credit unions and rural electric cooperatives, for example — but limited information on purchasing cooperatives, worker-owned co-ops and the many types of cooperatives that are owned by consumers.

NCBA usually cites the figures of 47,000 U.S. co-ops with 120 million

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Co-op Heritage Day declared to mark TFC's 60th anniversary

T

ennessee Governor Phil Bredesen

was one of the dignitaries on hand to salute Tennessee Farmers Cooperative (TFC) and its predecessors in an eventful 60th anniversary celebration in LaVergne Sept. 27, which he declared as "Co-op Heritage Day." The day also honored state organizations that were instrumental in helping organize TFC, namely the Tennessee Farm Bureau Federation and University of Tennessee Extension.

Gov. Bredesen described the federated farm supply co-op as a "major force in Tennessee's agricultural economy," pointing to the competitive edge it gives farmers by providing quality products and services and the fact that TFC is now one of the strongest federated cooperative systems in the nation. "Because of the foresight of its founders, TFC has helped Tennessee's farm production grow and develop into the \$2.5 billion industry that it is today," said Bredesen. "Tennessee is a state of long agricultural tradition, and we owe a debt of gratitude to the men and women of the Tennessee Farmers Cooperative for helping to shape the Tennessee we know and enjoy today."

As evidence of the vital roles co-ops play in their communities, Bredesen acknowledged the recent efforts of TFC and its member co-ops in gathering donations for hurricane victims



CEO Vernon Glover serves up a piece of TFC's 60th birthday cake for longtime co-op truck driver Bud Eldridge. Photo courtesy TFC

and serving as sources for school systems to obtain diesel for school buses during the fuel shortage caused by hurricane damage along the Gulf Coast.

"Not only is the co-op important to our economy, over the years it has become an integral part of Tennessee's rural landscape as a gathering place for farmers and a well-known landmark for the community it serves," Bredesen said. "No matter where you are in Tennessee, everyone knows where their local co-op is."

TFC CEO Vernon Glover said the co-op's formation in 1945 began "a whole new era in Tennessee agriculture. TFC redefined the farm-supply business in this state by giving farmers cooperative control over a reliable and identifiable source of the products they need."

"The fact that this mill behind us is

the tallest building in LaVergne is a symbol of our standing in the community," Glover continued. "The same is true for communities all across the state. Our member co-ops stand tall in their towns and are vital to the area's economy and the operations of the producers they serve."

Tennessee Agriculture Commissioner Ken Givens and Rep. Stratton Bone, vice chair of the House Agriculture Committee, joined Bredesen and other state officials in honoring TFC as it reached this milestone. "We couldn't do what we do without the support of the people here today," said

Givens, describing the audience as the "who's who" of Tennessee agriculture. "It's going to take all of us working together to keep our competitive edge in the changing global marketplace. Part of that challenge goes back to providing farm supplies and service in a timely and economical manner, which is exactly what the co-op does."

Givens also referred to his membership in Hawkins Farmers Cooperative in Rogersville. The commissioner, a beef cattle and hay farmer, is among the 70,000 farmer-members who own and control each independent TFC member co-op. TFC provides products and services to 63 member co-ops across the state, which, in turn, serve more than half a million customers through nearly 150 retail outlets located in 84 of Tennessee's 95 counties, as well as several locations in neighboring states. ■

Sales and net income climb for local farm co-ops in 2004

By Beverly L. Rotan, Economist
 USDA Rural Development
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Editor's note: Cooperatives in this study were classified by size: small, medium, large and super (table 1). The cooperatives were further classified into four types based on the percentage of their farm supply sales (see table 1 for the precise criteria).

Local farm supply cooperatives reaped higher sales and income during 2004, according to a USDA survey of the financial statements of 263 co-ops. Average sales per local co-op were just under \$18.07 million in 2004, an increase of 3.2 percent from \$15.96 million in 2003.

Farm supply sales (including feed, seed, fertilizer, chemicals and petroleum) by co-ops increased 14.7 percent (table 2). Feed sales registered the strongest gain, increasing about 20 percent. Fertilizer sales shot up 18.3 percent and petroleum sales climbed by almost 17 percent.

Grain sales — including corn, soybeans, sorghum, oats and wheat (winter, durum, spring, and rye) were strong in 2004, increasing 11 percent. Grain production was down (with the exception of sorghum, spring wheat and soybeans). Prices per bushel climbed for corn and most types of wheat. Prices for sorghum and soybeans decreased during the two-year period.

Income jumps in 2004

The average operating income (from commodity marketing, farm supplies and service) rose almost 13 percent in 2004. Grains represent almost 98 percent of total marketing sales by the local co-ops studied.

Table 2 — Average farm supplies sold and products marketed and change from 2003 to 2004

	2003	2004	Change 2003 to 2004
	Million dollars		Percent
<i>Farm supplies sold:</i>			
Feed	16.5	1.9	19.96
Seed	3.7	4.3	14.80
Fertilizer	1.6	1.9	18.28
Crop protectants	1.3	1.4	6.00
Petroleum products	3.2	3.7	16.81
Other	1.3	1.3	6.70
Total	9.3	10.7	14.68
<i>Products marketed:</i>			
Grains and oilseeds	6.5	7.2	10.78
Other	1.3	.2	26.52
Total	6.6	7.4	11.8
Discounts	3.1	3.0	
Net sales	12.8	15.1	13.2

Average net income per local co-op was \$296,810. This was a 45-percent increase from \$204,864 in 2003.

Total revenue was up 13 percent, although service income decreased 3 percent. A sizable decrease in patronage refunds was attributed to write-off of equity, due to the demise of some regional cooperatives in 2003. This phenomenon continued into 2004.

Patronage refunds were an important source of revenue and affected the net income of some of the local co-ops (both positively and negatively).

A unique situation occurred in 2003 that also affected the net income of some locals in 2004. Patronage refunds were up 140 percent in 2004 because of negative patronage refunds in 2003. In past years, patronage refunds created an opportunity for cooperatives with losses to have a net gain.

Table 1 — Size and type definitions used for respondent cooperatives, 2004

Cooperative size definition	Number	
Small	up to \$5 million in total sales	67
Medium	over \$5 million to \$10 million	61
Large	over \$10 million to \$20 million	65
Super	over \$20 million	70
Cooperative type		
Farm supply	total net sales from farm supplies	133
Mixed farm supply	from 50 to 99 percent	61
Mixed marketing	from 25 to 49 percent	49
Marketing	less than 25 percent	20

Patronage refunds saved 30 of 58 cooperatives from having local losses. Seven percent of local cooperatives that originally had positive net incomes ended up with losses because of negative patronage refunds. The remaining 41 percent of cooperatives ended up with net losses.

Cost of goods sold was up about 14 percent. Cost of goods sold averaged about 89 percent of total sales in 2004.

Co-op assets show gains

Both current assets and total assets were up slightly, 6 and 5 percent, respectively. All aspects of current assets increased during the period of 2003–2004. Farm inventory had the greatest increase, at 14 percent.

Current liabilities jumped nearly 6 percent, while revolving equity redeemed had the largest increase, 58 percent. This was followed by dividends on equity (23 percent). Current

term-debt and short-term (seasonal) debt decreased.

Total expenses were also up about 6 percent, paced by a 5-percent increase in wages, which represent almost 50 percent of total expenses. Wage expense included payroll/salaries, employee benefits (including retirement) and payroll taxes.

Co-ops in the study had an average of 39 employees (part- and full-time) in 2003 and 38 employees in 2004.

At the same time, salaries increased 5 percent. Employees earned an average annual salary of \$26,187 in 2004.

Directors' fees and expenses were a small part of total expenses. However, director compensation is an important

Table 3 — Financial analysis ratios for all co-ops, 2003–2004

Ratio	2003	2004
Current	1.36	1.36
Quick	0.66	0.67
Debt	0.45	0.45
Debt-to-total equity	0.82	0.83
Times-interest-earned	3.49	4.26
Total-asset turnover	2.14	2.31
Fixed-asset turnover	8.07	8.81
Gross profit margin	11.49	11.10
Return-on-total assets before interest & taxes	4.37	5.51
Return-on-total equity	7.03	9.99

factor that helps many cooperatives convince producers to devote time each month to help guide their cooperative. Co-op boards averaged 7 members, who were paid an average of \$905 per year. Directors' fees were up 7 percent.

Monitoring performance

Some performance factors are within the control of cooperative management, but others are not. One way to monitor the performance of your cooperative is through financial statements and ratios. Ratios for the surveyed cooperatives remained relatively unchanged from 2003 to 2004 (table 3).

Financial ratios that help assess your cooperative's performance include:

- **Liquidity ratios** — focus on a company's ability to pay bills when due. If liquidity ratios remain relatively high for a prolonged period, too much capital may be invested in liquid assets, such as cash, short-term investments, accounts receivable and inventory, while too little capital is devoted to increasing member equity. These ratios should equal one or more. On average, surveyed cooperatives had quick and current ratios of slightly more than one.
- **Leverage ratios** — reveal a company's use of borrowed funds (rather than members' equity for investment) to expand its business. The goal is to borrow funds at a low interest rate and invest in business activity that produces a high rate of return, exceeding the target rate of return for investment. Debt-to-equity ratio measures the long-term solvency of a company by comparing debt to net worth. A company with a high

debt-to-equity ratio could have trouble meeting fixed interest/debt payments if business falters or does not grow as planned. Most lenders would prefer this ratio to be 3 or lower

- **Activity ratio turnover** — also called "efficiency ratios," measure activity or changes in certain assets. The inventory turnover ratio measures how quickly inventory is sold and replaced each year. An inventory turnover of 12 means inventory is turned over once each month. The times-interest-earned ratio measures a company's ability to make interest payments on debt. If the ratio does not exceed the interest rate on current debt, the business may not be making enough to pay interest expenses.
- **Profitability ratios** — vary from industry to industry and should be compared to a company's ratios for prior years/periods. The return-on-total assets measure how well a company is using its assets to generate net profits. The return-on-total equity ratio measures a company's return on members' money. Marketing cooperatives' gross margin was lower than cooperatives in the surveyed group. This may be an indication of lower demand for their products or higher production of marketed products (crops).

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



Ocean Spray kicked off a new marketing campaign by turning the fountains at Rockefeller Square in New York City into a cranberry bog. Photo courtesy Ocean Spray

Ocean Spray marks 75th with integrated marketing campaign

Ocean Spray is marking its 75th anniversary by re-introducing the cranberry to America through an integrated marketing campaign called “straight from the cranberry bog.” Ocean Spray kicked off the effort by giving New York City its first-ever cranberry harvest in Rockefeller Center, bringing together cranberry researchers from around the world for a special cranberry health summit, and launching a new advertising campaign Oct. 17.

Ocean Spray flooded Rockefeller Center Channel Gardens with its bright crimson berries for the Big Apple Bog Oct. 4–7, bringing the breathtaking beauty of a cranberry harvest to consumers. Most consumers are not aware of how cranberries are grown and harvested, the rich history of the fruit, or the health benefits the little berry offers every family

member. At the same time, Ocean Spray is continuing its focus on health by bringing together research scientists to share the latest in cranberry health research and make public findings on how the nutrients in cranberries (called PACs) may play a role in total body health. Ocean Spray partnered with the Cranberry Institute for the Cranberry Health Symposium at New York Academy of Sciences on Oct. 5.

Ocean Spray is going back to its roots with the “Straight from the Bog” ad campaign that celebrates its rich heritage as an agricultural cooperative. Created by Arnold Worldwide, the campaign features “cranberry growers” who tell the cranberry story as only growers can. The series of ads feature two growers humorously touting the many taste and health attributes of Ocean Spray products, while hip-deep harvesting cranberries.

Ocean Spray is owned by more than 650 cranberry growers in Massachusetts, Wisconsin, New Jersey, and Oregon, Washington, British Columbia and other parts of Canada as well as more than 100 Florida grapefruit growers.

Sales, member payments up sharply for Dairylea

Dairylea, Syracuse, N.Y., and its subsidiaries reported sales of \$1.12 billion in 2005, a 16.8 percent increase from 2004, members were told at the co-op’s annual meeting in Liverpool, N.Y. Dairylea General Manager Greg Wickham reported that the co-op also returned more to members in 2005, \$955.8 million, up 12.9 percent from the previous year. “There is only opportunity,” was the theme for Dairylea’s 98th annual meeting, which attracted more than 800 members, as well as employees and industry guests.

Dairylea President Clyde Rutherford stressed that the co-op is working in many ways to help improve the profitability of its dairy farmers, and discussed Dairylea’s participating in Dairy Marketing Services (DMS), along with Dairy Farmers of America, St. Albans and Land O’Lakes. In addition, Rutherford recognized the many customer relationships that the cooperative has established and continues to cultivate in the Northeast and beyond.

The co-op has more than 2,500 members throughout the Northeast. Dairylea provides them with resources such as insurance coverage, loan programs, milk price risk-management services, business planning, livestock marketing and investment and retirement planning through its holding company, Agri-Services LLC.

Cabot on leading edge of cottage cheese technology

Cabot Creamery Cooperative (owned and operated by Agri-Mark Inc.) is collaborating with CPS Scherping, Winsted, Minn., to develop prototype cottage cheese-making technology using CPS' horizontal cottage cheese vat (HCCV). The HCCV replaces traditional open-vat cheese-making with an enclosed system that automates every step of the process. Lloyd Metzger of the University of Minnesota helped develop and test the closed-vat system in a pilot program sponsored by Dairy Management Inc. (which is funded by dairy farmers).

By automating the entire process within an enclosed system, the HCCV technology minimizes operator intervention, fluctuations in temperature, and exposures to the surrounding atmosphere. The result is an extremely

consistent and high-quality product every time. The HCCV also automates the cleaning process between batches. The technology also allows greater capacity and could add to the popularity of a traditional dairy product and make it easier to meet demand. The cooperative installed two HCCV machines in a new room dedicated to cottage cheese production in 2004.

Tree Top grower returns soar

Tree Top Inc. returned \$13.62 per ton profit to its grower-owners for the 2004 crop of processing fruit, a 78-percent increase over the \$7.65 returned for the 2003 crop. The co-op set a processing volume record for the 2004 crop. The Selah, Wash.-based cooperative marked its 13th consecutive profitable year in 2004.

"This was a challenging year for us in a number of ways," Tom Stokes,



Tree Top's 2004 returns to growers increased 78 percent from 2003. Photo courtesy Tree Top

Tree Top CEO said. "We processed an enormous volume of fruit, while making process and equipment changes in a number of our facilities. At the same time, employees continued to develop and implement cost-saving and opera-

Picking up the pieces *continued from page 8*

farms were still dependent on generators for power.

Back in business

For the most part, cooperative-owned facilities in the disaster-stricken areas were spared heavy damage. The nation's largest nitrogen production facility — CF Industries' (which was recently sold by its co-op owners) complex in Donaldsonville, La.— had resumed normal operations at 80 percent of its plants two weeks after the storm. In the same time frame, Land O'Lakes Purina Feed plants had power restored and mills were operating around the clock. CHS' grain terminal in heavily flooded Myrtle Grove, La., also escaped serious damage, but was shut down for about four weeks while awaiting the return of power and employees.

Cooperative facilities operating at or near the Port of New Orleans have been slower to fully recover from the one-two punch of hurricanes Katrina and Rita. Every year, about 50 percent of the corn and one-third of the soy-

beans exported by the United States float down the Mississippi River and its tributaries on barges, where it is off-loaded onto oceangoing ships. Progress in returning the port to full operations has been gradual, but continual. The Port of New Orleans announced the intent to be fully operational by Nov. 1.

Though damage to cooperative plants was not excessive, employee welfare continues to be a major concern for co-ops. A number of workers in both Louisiana and Mississippi lost their homes and possessions. Many are separated from families forced to evacuate from the storm-ravaged area. Despite this, co-ops have reported story after story of employees who have put aside their personal losses and worked day and night to help members recover.

Some co-ops are taking a direct approach to relief for these dedicated individuals. CHS Inc., which has more than 100 employees working in the affected area, has established a relief fund that is being equally disbursed

among employees who need to rebuild homes and replace personal belongings. Through its DFA Cares program, DFA provided generators for employees' homes as well as food and supplies.

As the horrors of Katrina ease with the passing days, cooperative members and employees are now shifting their focus from survival mode to rebuilding. Member-owned businesses will play a significant role in the recovery of this region where cooperative roots run deep. For Indian Springs members and others like them who are struggling to get on with their lives and livelihoods, a message on the Cooperative Development Foundation Web site says:

"Cooperatives are an important building block in the social and economic recovery. They provide infrastructure, access to credit and access to markets, all of which will be critical as the rural economies of these three states move from their dependence on the initial relief efforts in the aftermath of this disaster to long-term sustainable recovery." ■

tional efficiency measures into their daily work. Finally, the rising cost of fuel had a significant impact on this year's bottom line."

Large crops in 2004 allowed the co-op to run plants at or near capacity, resulting in operating efficiencies company-wide, Tree Top said. The co-op posted sales of \$258.1 million for the fiscal year, with net proceeds of \$29.9 million on a record-high volume of 535,000 tons of apples and pears. Tree Top has 1,460 members in Washington, Oregon and Idaho, more than 1,140 employees and a payroll of \$42 million. The co-op owns and operates five production plants in Washington, one in Milton-Freewater, Ore., and one in Rialto, Calif.

ACE honors outstanding cooperators

Six individuals and organizations received awards from the Association of Cooperative Educators (ACE) for outstanding contributions to cooperative education at ACE's Annual Institute, held in Alexandria, Va., in August. The "Outstanding Contribution to Cooperative Education and Training" award went to Bill Patrie, rural development director for the North Dakota Association of Electric Cooperatives, Mandan, N.D. He was honored for influence on cooperative development throughout the United States and Canada.

Dixie Watts Reaves, associate professor, Virginia Polytechnic and State University, received the "Professional



Bill Patrie addresses the ACE conference in Alexandria, Va.



Students at Paul Norton Elementary in Bettendorf, Iowa, enjoy single-serve milk bottles from Swiss Valley. Kids and school food-service staff love the plastic bottles. Photo by Nancy Feeney, courtesy Swiss Valley

Contribution by an ACE Member" award for her work with cooperative education for youth. The "William Hlushko Award for Young Cooperative Educators" was awarded to Leslie Schuler, communications specialist, CHS Foundation and CHS-Land O'Lakes Member Services.

The "Education Program Award" went to the Ontario Co-operative Association for its Cooperative Internship Program for cooperative employees. The "Outstanding Contribution to ACE by an Organization Award" was presented to the Ralph K. Morris Foundation for its financial support that has helped numerous students and cooperators attend the

ACE Institute. Louis Doering, vice president of human resources and training/staff development, Twin City Co-ops Federal Credit Union, received the "Reginald J. Cressman Award" for his outstanding commitment to staff development.

The ACE Institute attracted more than 80 educators from the United States, Canada and the Caribbean. It included a pre-conference workshop, which was entitled "updating the cooperative educator's toolbox." The theme was: "Cooperative Education: Understanding Cooperation as a Strategic Business Asset." Speakers included a diverse contingent of professional cooperative educators. Conference presentations can be found on the ACE Website: <http://www.wisc.edu/uwcc/ace/05/pd.html>. The 2006 ACE Institute will be held in San Juan, Puerto Rico, August 2-5.

Duran to lead new global soybean exporting program

Almost every other row of U.S. soybeans is exported, so the newly created U.S. Soybean Export Council (USSEC) will play a key role in expanding international markets for U.S. farmers. Leading the charge for USSEC will be Dan Duran, the newly hired chief executive officer. "Dan brings to the table a unique combination of proven excellence in building export markets with a commitment to de-commoditizing commodities," said Mark Pietz, USSEC interim co-chairman and a soybean farmer from Lakefield, Minn. "Considering how unbelievably competitive the global market is, building brand preference for U.S. soybeans and soybean prod-

Bioenergy, dairy producers among Recipients of \$14.6 million in VAPGs *continued from page 9*

gual labels.

A Mississippi cooperative will receive a grant to process and market frozen, processed blueberries. The Wisconsin Soybean Marketing Board will receive a grant to determine the viability of marketing biodiesel made

by a producer-owned soybean processing plant. Businesses and producers in California, Delaware, Illinois, Indiana, Iowa, Kansas, Mississippi, Missouri, Nebraska, Ohio, Oregon, Washington and Wisconsin will receive grants to assess the feasibility

of marketing ethanol and biodiesel, or other types of renewable energy. A total of 32 energy-related grants were awarded this year. A complete list of the grants is available on the USDA Web site at: <http://www.rurdev.usda.gov/>. ■

ucts is the only way we are going to remain number one.”

Duran joins USSEC from Galahad International, a sales and marketing company based in Baton Rouge, La., that specializes in building global dairy markets. Prior to Galahad, Duran spent 16 years with Wells Dairy, the largest family owned and operated dairy processor in the United States. During his tenure with Wells, he initiated the first sales to Mexico, eventually growing the dairy’s international customer base to more than 30 countries, the majority in developing markets.

USSEC was jointly created by the United Soybean Board (USB) and American Soybean Association (ASA)

earlier this year to implement international marketing and competitiveness activities on behalf of the soybean checkoff and USDA-FAS. In addition to farmer-leaders from ASA and USB, USSEC will be governed by a board of exporters and allied industry partners.

USSEC will focus on a three-pronged approach to international marketing of U.S. soybeans: building preference for U.S. soybeans, building demand by targeting specific markets and addressing market-access issues. Duran will lead a team of professionals based in St. Louis and throughout the world, all representing U.S. soybean farmers.

USDA provides \$9 million for broadband grants

USDA Rural Development is providing \$9 million in broadband community connect grants to 19 communities in 14 states and Puerto Rico. The funds will connect essential community facilities in rural towns and communities where no broadband services currently exist.

One grant for \$325,400 will be awarded to the community of Glendora, Miss., for installation of wireless technology to connect a library, clinic and public safety facilities. The village of Hughes, Alaska, will receive \$278,871 to cover the entire community with overlapping wireless “hot spots.” A Web site will be designed to enable community businesses to sell items over the Internet. Local residents will also earn income by providing data processing services and will use video-conferencing to deliver educational classes to homes and the community center. Timber Lake, S.D., will receive a \$393,300 grant to create a community center that provides public access points, free broadband, distance learning and an e-commerce incubator for small businesses and residents of the community.

USDA received 111 community connect grant applications. Of the 19 communities selected for funding, 16 will employ wireless technologies and the other three will provide service over fiber optic cable. Communities



Illustration courtesy United Soybean Board

IT having major impact on farmer-owned ethanol plants *continued from page 17*

A major concern, however, when developing a new product is the necessity of simultaneously developing a new market. The balance between sufficient production to supply the market — but not so much as to ruin its profitability — is a delicate one. Information technology will be used increasingly to coordinate these activities among the marketing firms and their represented plants.

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selected do not have access to broadband technology for such essential services as police protection, fire service, hospitals, libraries and schools.

Since its inception four years ago, the Community Connect Broadband Grant program has provided 109 grants and invested over \$39 million to provide service to local communities. Each community is required to make at least 10 computers available to members of the public. The Community Connect program supplements USDA Rural Development's standard, high-speed telecommunications loan program. A complete list of the grants is available on the USDA Web site: <http://www.rurdev.usda.gov>.

CDF grants reflect needs of rural seniors

Reflecting a new focus on cooperative development initiatives that will enhance the quality of life of seniors living in rural America, the Mutual Service Cooperative (MSC) Fund of the Cooperative Development Foundation has awarded \$92,000 in grants for initiatives to improve seniors' access to affordable housing, home care and health care services in rural communities. "The new focus for the fund is based on an assessment that the needs of the elderly will be one of the greatest challenges facing rural communities over the next several decades," said Gap Kovach, chairman of the MSC Fund trustees.

The five technical assistance projects include an innovative rural cooperative housing initiative, expansion of several existing educational programs for seniors in rural cooperative housing, a training program for a rural home care cooperative, and an innovative cooperative approach to meeting the health care needs in a small rural community. Recipients include: Foundation for Rural Housing Inc., Madison, Wis. (\$20,000); Minnesota Association of Cooperatives Education Foundation, St. Paul, Minn. (\$14,205); Senior Cooperative Foundation, St. Paul, Minn. (\$4,600); Cooperative Care, Wautoma, Wis. (\$11,977); Peace

United Methodist Church, Pipestone, Minn. (\$20,000).

The MSC Fund has awarded more than \$1 million in grants to the cooperative community over the past three decades. The Cooperative Development Foundation is a 501(c)(3) non-profit organization promoting community, economic and social development through cooperative enterprises.

CWT program includes 75 percent of milk supply

Cooperatives Working Together (CWT), the dairy industry's self-funded market balancing program, has now enrolled cooperatives and producers representing 75 percent of the nation's milk supply. Under the industry self-help program, now in its third year, producers pay assessments used to compensate other producers to reduce their herd sizes. Nearly 50 dairy cooperatives of all sizes and more than 300 independent farmers are paying five cents per hundredweight of their milk production to fund the program, according to Jerry Kozak, president and CEO of the National Milk Producers Federation, which administers the CWT program.

The goal this year is to remove up to 70,000 cows, more than double the number retired in 2003, and 20,000 higher than last year's program. Kozak said he hopes the remaining co-ops and independent producers will join CWT to make it even more effective. The program has been credited with playing a major role in helping to solidify producer milk prices the past two years. Deadline for submitting bids was Sept. 16.

Breeding co-op marks passing of greatest sire

Accelerated Genetics and perhaps even his own highly extended family,

are marking the passing of the co-op's greatest sire: Barbee-M Juror ITO, at the age of 10 years and 2 months. ITO's impact on the next generation of dairy cattle around the world will be felt for many years to come through his daughters and sons, the co-op said in a press release. The Baraboo, Wisc.-based cooperative says ITO's daughters are known for their beautiful udders, quiet disposition, fast milk-out and calving ease. ITO's influence will also



Accelerated Genetics' top sire, ITO, is gone, but his legacy lives on. Photo courtesy Accelerated Genetics

live on through his sons, which are currently enrolled in the co-op's young sire program and other A.I. programs.

ITO is currently the all-time leading sire of semen produced and sold from Accelerated Genetics. And while he may be gone, ITO left a little something behind: his semen will be available from the co-op as long as remaining supplies last. Accelerated Genetics will forever remember ITO with a special marker that is being placed at the co-op's production facility in Westby, Wisc.

Hazen elected to international co-op association board

Paul Hazen, president and CEO of the National Cooperative Business Association, was elected to the board of the International Co-operative Alliance Sept. 23 at a meeting of the

NCFC testifies on hurricane recovery goals

Jean-Mari Peltier, president and CEO of the National Council of Farmer Cooperatives (NCFC), told the Senate Finance committee in October that “farmer cooperatives, their employees, and their nearly 2 million farmer members are committed to working with Congress and the Bush Administration to provide needed hurricane recovery assistance and to encourage redevelopment of affected areas.” The hearing was called to get agriculture’s perspective on the community rebuilding needs after Hurricane Katrina, and on the effectiveness of past proposals. The hearing examined how tax relief and incentives can be used to promote the recovery effort, and the effectiveness of similar efforts made after past natural disasters.

As part of a nationwide campaign, NCFC has urged its members to join together as part of a cooperative effort to help provide relief to those impacted by the hurricanes. At the time of the hearing, farmer cooperatives, their employees and farmer members had already directly contributed over \$1.2 million in hurricane relief. In addition, many farmer cooperatives have donated food, livestock feed, generators, fuel supplies, transportation and other items.

“Given the scale of devastation,” Peltier said, “we believe what is needed is a combination of assistance that provides tax relief and other incentives to encourage rebuilding efforts, which would be in addition to traditional disaster assistance for agriculture through USDA.”

NCFC outlined several recom-

mendations, including:

- Ensuring that any new tax relief provisions apply to agriculture, including farmers and their cooperatives;
- Creation of new enterprise zones, with provisions allowing farmer cooperatives to pass benefits through to farmer members;
- Extension of the greater deductions under Section 179 and accelerated depreciation;
- Clarification to allow cooperatives to fully qualify for deductions for charitable contributions and food donations;
- Allowing deductions for donations made to individual farmers and others in the disaster region;
- Extension of the general net operating loss (NOL) carry-back period to five years (from two years currently).

organization’s general assembly in Cartagena, Colombia. Hazen will be the only U.S. representative on the 15-member ICA board.

The International Co-operative Alliance represents cooperatives and cooperative organizations worldwide. Headquartered in Geneva, it has more than 225 members from at least 90 countries. Together, these organizations represent more than 800 million people. U.S. members, in addition to NCBA, are the National Cooperative Bank, Credit Union National Association, CUNA Mutual, National Rural Electric Cooperative Association, Nationwide Insurance, ACDI/VOCA and Land O’Lakes, Inc.

Eighty-seven countries were represented at the meeting, attended by approximately 1,000 delegates.

“We know that cooperatives can change peoples’ lives and that, by working together in co-ops, families can achieve their dreams,” Hazen said. “Food, shelter, healthcare and education through cooperatives will do more to fight terrorism and promote peace than any war we will ever fight.”

Bonnie Raitt hits the road on cleaner-burning biodiesel

Blues singer/guitarist Bonnie Raitt’s current tour is being fueled by biodiesel, which her road crew is using in her two diesel-powered buses and two semi trucks. Raitt’s year-long tour kicked off Oct. 5 in Tulsa, Okla.



Blues guitarist/singer Bonnie Raitt is fueling her current national tour on biodiesel and promoting its use at concerts and other events.

Raitt has endorsed cleaner burning, environmentally friendly biodiesel (B20). “I believe we should do everything we can to minimize our impact on the planet, and using biodiesel is a simple step that goes a long way,” says Raitt. “By using B20 on my Souls Alike Tour, we are reducing pollution and putting a dent in imported petroleum. Biodiesel has come so far in the last few years. It’s wonderful to see it gaining momentum — we can all benefit from more biodiesel use.”

By using biodiesel fuel and promoting its benefits during her tours, Raitt has helped to increase the visibility of biodiesel, said Joe Jobe, chief executive officer of the National Biodiesel Board (NBB). “Today, more than 500 major fleets use biodiesel commercially, and 600 retail filling stations make it available to the public.” Raitt said she also supports biodiesel because it contributes to the family farm. Soybean farmers, through the soybean checkoff, have led the way in developing the U.S. biodiesel industry for more than 15 years. ■

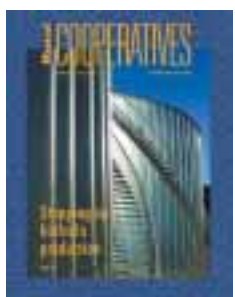
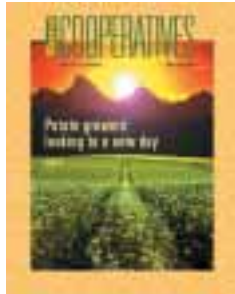
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AMPI butter plant hit by fire	
CHS 2004 earnings a record \$221 million	
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CWT Round II removing nearly 1-billion pounds of milk	March/April 33
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USDA providing \$7 million for rural co-op development



USDA Rural Development has awarded nearly \$7.3 million in grants to cooperative development centers in 22 states.

The funds will be used to increase economic opportunities in rural areas by assisting farmers and rural businesses in developing cooperative ventures. “Cooperatives allow individuals and small businesses to pool their resources, achieve economies of scale, and develop more sophisticated technical and management skills,” Agriculture Secretary Mike Johanns said in announcing the grants. “These investments will help farmers, ranchers and rural small businesses obtain the technical support they need to expand their businesses.”

The Rural Cooperative Development Grant Program awards funds on a competitive basis to nonprofit cooperative development centers, many associated with institutions of higher education. These centers provide rural residents with education and technical assistance in areas of cooperative start ups, marketing and management, as well as other self-help tools.

In Mississippi, for example, the Mississippi Association of Cooperatives will receive funds to help 15-20 cooperatives develop and strengthen services to aid limited-resource producers and aid other rural residents in developing successful cooperatives. The services provided will include early-stage technical assistance, director training, new product evaluation and identification of alternative funding sources.

Another recipient, the New

Hampshire Community Loan Fund, has provided technical assistance and access to capital to the owners of manufactured housing and created a

statewide system that enhances cooperative ownership as a solution to the problems of owning a home on rented land. ■

Rural Cooperative Development Grant Recipient List

State	Recipient	Funding
AR	Arkansas Land and Farm Development Corporation	\$118,071
AR	Community Resources Group	\$150,000
AZ	Arizona State University	\$271,642
CO	Rocky Mountain Farmers Union Educational & Charitable Found.	\$300,000
GA	Golden Triangle RC&D	\$294,897
IA	Iowa Agriculture Innovation Center	\$300,000
IL	Western Illinois University	\$287,780
IN	Indiana Rural Development Council	\$182,550
MI	Michigan State University	\$300,000
MN	Northcountry Co-op Foundation	\$300,000
MO	Missouri Enterprise Business Assistance Center	\$300,000
MO	Missouri Farmers Union Farm Opportunity Center	\$300,000
MS	Miss. Association of Co-ops	\$275,000
MT	Montana Co-op Develop. Center	\$300,000
NH	New Hampshire Community Loan Fund	\$300,000
ND	North Dakota Association of Rural Electrical Cooperatives	\$300,000
NJ	Rutgers, State Univ. of N.J.	\$300,000
OH	Ohio Farmers Union Family Farm Center, Inc.	\$298,000
OH	Ohio State University Research Foundation	\$293,334
PA	Keystone Development Center Inc.	\$300,000
SD	Value-Added Agricultural Development Center	\$200,000
TX	Texas Cooperative Extension	\$298,416
TX	University of Texas-Pan American	\$228,536
VA	Southern States Co-op Foundation	\$266,783
VA	Virginia Foundation for Agriculture, Innovation and Rural Sustainability	\$217,860
WA	Northwest Co-op Develop. Center	\$300,000
WI	Co-op Development Services Fund	\$300,000

members, she said, based on work from 1984. “[USDA] could make a vital contribution to the cooperative community and an important contribution to the country by focusing its research efforts on establishing an ongoing method to collect reliable data that measures the economic impact of cooperatives on rural communities...I hope that you will consider establishing a research effort that includes all of the country’s cooperatives, both rural and urban. It’s been nearly 50 years since the federal government devoted resources to collecting basic data on all types of American cooperatives.”

**Chuck Snyder, President
National Cooperative Bank (NCB)**

Snyder said that co-op leaders often tout the many ways their co-ops benefit their communities. “But it’s very frustrating because we don’t have the research to back up some of those stories.” To help address this need, NCB annually produces the Co-op 100, a listing of the 100 largest cooperatives by revenue and assets.

When a cooperative fails, “the media will often call me and say ‘gee, does that mean that cooperatives no longer work?’ And that’s farthest from the truth. Like most corporations,

cooperatives have life cycles...If you look at the *Fortune 500* list today, compare it with that of 40 years ago, you’ll see the list is dramatically different; there’s nothing wrong with change.

“We need some basic research which shows the vibrancy of the co-op sector, as well as some of the needs for improvements. We need to understand the role cooperatives play as direct employers....We need to understand the role of cooperatives in developing and sustaining their immediate communities, with a special focus on the differential effect in retaining earnings within those communities.” ■

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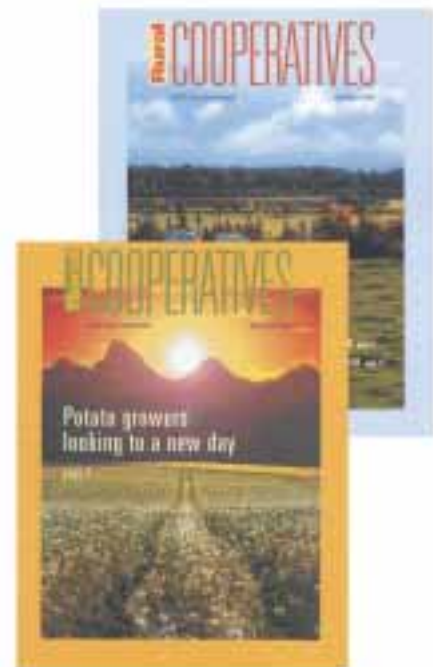
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Turning forest waste into energy

**By Peter Thomas, Administrator
Business and Co-op Programs
USDA Rural Development**

In the last issue of *Rural Cooperatives*, I discussed some of the new energy programs available at USDA Rural Development. One of these programs, the Renewable Energy Systems and Energy Efficiency Improvements Program (also known as the Section 9006 Program), was established by the 2002 Farm Bill. This program is part of the larger initiative by the Bush Administration to focus on the country's energy needs with a new emphasis on renewable energy.

We have all witnessed the devastation as a result of Hurricanes Katrina and Rita and the effect the aftermath has had on energy costs. This recent tragedy highlights the need for a new energy policy.

Although the Section 9006 Program has been making grants for the past two years, this year a guaranteed loan program has been added. Before the end of the fiscal year, two projects qualified and received loans. One of these is a 20 megawatt, wood-fired biomass plant purchased, refurbished and relocated to a site leased by Abitibi Consolidated. The new plant, 17 miles west of Snowflake, Ariz., will be adjacent to an existing paper mill and will be fueled by a combination of paper fiber from the paper mill's recycling operation and wood waste obtained through contracts with the USDA Forest Service and other local milling operations.

The partnership with the Forest Service is part of the Healthy Forest Initiative. The power output from the

facility will be sold to Salt River Project and Arizona Public Service, two of Arizona's utility companies. The parties have entered into two, 10-year power purchase agreements and will purchase 10 megawatts at 7.5 cents per kilowatt hour.

For this \$23 million project, a local bank submitted an application for \$16 million to USDA Rural Development. The Section 9006 program is only authorized to fund up to 50 per-

cent of the eligible project costs. To make the project a reality, a \$10-million loan was guaranteed through the Section 9006 program while a \$6-million loan was guaranteed through USDA's Business & Industry (B&I) Guaranteed Loan program. The balance was provided by the borrower.

grown forests will be burned by the plant. Overgrown forests are the result of a forest having too many small diameter trees per acre. The extended drought in the region has created a similar environment to the one they faced before the forest fires in 2002. This new plant will provide a use for the unused trees and the timber from the overgrown forests, thus alleviating a potential fire hazard.

Finally, the project will save existing



A biomass powerplant is being built adjacent to this papermill in Arizona. The biomass plant will produce 20 megawatts of electricity from mill and forest wastes.

In addition to producing renewable energy, there is another benefit to the community. About 460,000 acres of ponderosa pine trees from the 2002 Rodeo-Chediski Fire in northern Arizona and timber from local over-

grown forests will be burned by the plant. Overgrown forests are the result of a forest having too many small diameter trees per acre. The extended drought in the region has created a similar environment to the one they faced before the forest fires in 2002. This new plant will provide a use for the unused trees and the timber from the overgrown forests, thus alleviating a potential fire hazard.

Finally, the project will save existing jobs and create new ones in the local community. The positive impacts are endless.

USDA Rural Development will continue to look for ways to provide funding for projects which have a positive financial impact on rural America and provide new sources of energy. Now, more than ever, we all need to find ways to both conserve and use new sources of energy. This is President Bush's charge, and I am proud of the work Rural Development is doing to answer the call. ■



"The rural communities I know are holding on to their values, but they're also embracing the future."

Secretary of Agriculture Mike Johanns

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