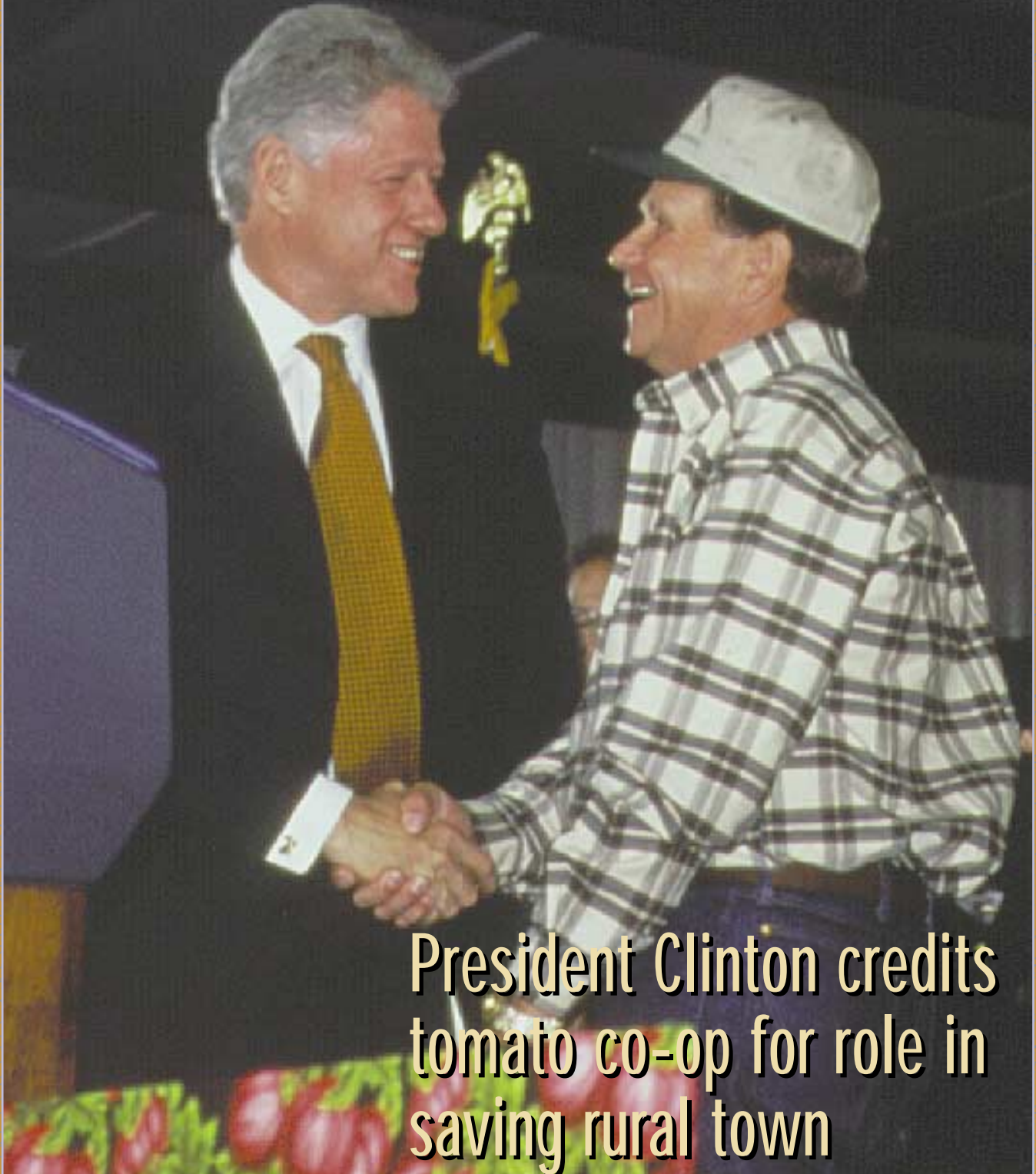


Rural

COOPERATIVES

USDA / Rural Development

November/December 1999



President Clinton credits
tomato co-op for role in
saving rural town

Next generation cooperatives

As a result of low commodity prices and costly emergency spending by the government, we are once again considering revising federal agriculture policy. I believe any new policy ought to include incentives for further development of farmer-owned cooperatives. More specifically, we should explore how cooperatives can change the economic structure of agriculture in a way that empowers farmers to counterbalance the effects of concentration, and that helps to stabilize prices in the food chain.

While there are many examples of successful farmer-owned cooperatives, farmers have barely scratched the surface in the development of marketing cooperatives. I believe the “next generation” of marketing cooperatives will provide real opportunity to effectively change the structure of agriculture to the benefit of producers and consumers.

Over the years, we have experienced considerable industrialization in the agriculture sector of our economy. Today, there are slightly less than two million farms, down from seven million in the 1930s. We have also experienced a considerable reduction in the number of agriculture processors. During this period of industrialization, the processing industry has become quite concentrated, but production has remained highly competitive. There are many farmers selling identical commodities to a very limited number of buyers — in some cases only a couple of buyers exist for a commodity and they dominate the marketplace. Except in times of severe shortage, every farmer needs

a processor, but the processor does not need every farmer. Thus, the producer is a price taker.

“Next generation,” member-owned marketing cooperatives, however, would allow the farmers to pool their commodity and contract as a single entity with a processor. Such an arrangement can dramatically change the structure of the agriculture economy to provide greater balance between the producer and processor. Additionally, by joining together and contracting future sales, producers can strategically decide to control production or store commodities to keep supply balanced with demand.

Such strategic production and marketing can lead to greater profitability for the farmer and greater price stability for the consumer. Marketing through a cooperative can also benefit the processor. For example, it is more efficient to enter into a single contract with one cooperative than many contracts with individual farmers. It would also be easier to control the quality of the commodity purchased and to plan for the longer term.

As we consider changes to federal agriculture policy, there are a number of proposals that could be put on the table for study and consideration. For example, we should explore the potential benefits of utilizing member-owned cooperatives to administer the federal crop insurance program. It may be beneficial to consider granting farmers a better loan rate if they market their commodities through cooperatives. Widespread use of cooperatives could



lessen today’s wide swings in commodity prices, reducing the need for loan-deficiency payments.

More stable market prices could also reduce the cost of federal nutrition programs.

There are other changes to be considered, as well. As we deliberate changes to federal agriculture policy, it is important to recognize not only the significant role cooperatives have played in the past and in the present, but also to recognize an even more significant role they can play in the future.

A handwritten signature in blue ink that reads "Jill Long Thompson".

Jill Long Thompson

Under Secretary, USDA Rural Development

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On the Cover:

President Clinton praised Hermitage Tomato Co-op Association President Randy Clanton and his fellow co-op members for helping to revive the fortunes of Hermitage, Arkansas. The president used the co-op's packing house for the latest stop on his "New Markets Initiative" tour, designed to show the importance of investing in depressed rural areas. Story on page 10. USDA photo by Anson Eaglin



President Clinton hails co-ops as engine for rural progress

Arkansas tomato co-op breathes new life into dying rural town

By Pamela J. King,
Field Editor

Tomato farms and the economy of Hermitage, Ark., were dying on the vine just a few years ago. The local agricultural industry was on a downhill slide. But the formation of a tomato growers' cooperative has helped farm families foster new economic vitality in their southern Arkansas community. The progress has been so impressive that President Clinton and Agriculture Secretary Dan Glickman visited the Hermitage Tomato Cooperative Association in early November during a trip touting the president's New Markets Initiative.

The trip illustrated how a partnership between tomato farmers, the United States Department of Agriculture, the Farmers' Bank of Hamburg and Burger King Corporation has created 118 sustainable jobs and brought economic prosperity to Hermitage.

The federal officials, along with local government leaders and community members, say the cooperative's success demonstrates how even a small, farmer-owned food processing facility can add value to a local crop and bring much-needed economic vitality and sustainable jobs to a struggling rural area. For their part, co-op leaders say USDA Rural Development's decision to back a \$3 million loan for the co-op through its Business and Industry Guaranteed Loan Program was a key to the economic revival of the farms and community.

"We came here today because of the success of this co-op and because we want every rural community in Ameri-

ca to know what you have done and to know that they can have a better future," Clinton told the crowd that filled the two main streets of Hermitage, located about 95 miles south of Little Rock.

Clinton continued: "In every little old rural community where people are about to give up and they think their kids are going to have to leave home to find work — I want them to see this on television tonight and say, 'if we get our act together, if we work together, if we have a partnership between the local community, the people who are producing food, the people who can buy it and the government and the bankers, we can make it.' We can turn our community around. We can create a new market."

Reversing rural decay

Hermitage's 644 people have long known that something needed to change if the town was to have any future. The town included one restaurant, a couple auto garages, a TV store, two banks and a real estate/car dealership office. Most of their high school graduates were leaving the community. Most residents commuted daily to larger communities for jobs.

In 1998, Bradley County's unemployment rate was 10.7 percent, but has now improved to 8.5 percent. Although this is a positive change, it is still much higher than the national average of 4 percent. The county's poverty rate in 1990 was 24.9 percent, but has dropped to 22.5 percent.

In 1996, USDA Rural Development helped 18 farmers organize the cooperative that started to turn life around for their family farms as well as Hermitage.

USDA then negotiated a Memorandum of Understanding with Burger King Corporation and Restaurant Services Incorporated through which the restaurant giant committed to buying locally produced commodities. Through this agreement, the Hermitage Tomato Cooperative Association, Burger King and Restaurant Services Inc. became business partners.

In 1998, the cooperative received a \$3 million Business and Industry Guaranteed Loan from USDA to purchase and to modernize a tomato cleaning and packaging facility in Hermitage. An additional \$1 million loan guarantee financed the cooperative's second processing facility.

A small local bank, the Farmers Bank of Hamburg, Ark., originated the loans. Loans of this size are difficult for small banks that do not have the deposit base to generate very many — or very large — loans. However, this



Co-ops will be a big part of farming and rural growth in the 21st century," Agriculture Secretary Dan Glickman said during his remarks in Hermitage, Ark..

USDA Photos by Anson Eaglin



President Clinton confers with Hermitage Mayor Mike Colvin (left) and Randy Clanton, leader of the Hermitage Tomato Growers Cooperative, during a special New Markets Initiative event staged inside the co-op's tomato packing warehouse.

bank is committed to helping local businesses utilize the loan guarantees available through USDA Rural Development's Rural Business-Cooperative Service, Glickman pointed out. The lender may sell much of the guaranteed portion of the loan to the secondary market and not have it count against the regulated loan-to-deposit ratios the bank must maintain.

Co-op sales soar

Sales for the co-op have soared from \$60,000 to nearly \$4 million annually. Shipments have increased from 3,400, 20-pound cases of tomatoes annually to 570,000 cases. In addition to Burger King, major customers include Kroger, SuperValu, Fleming Foods and Associated Wholesale Grocers. Each is a large customer that none of the individual farmers could have supplied on his or her own.

The co-op has a waiting list for new members. The processing facility now employs up to 120 people during the peak season. And during the early

November visit, Clinton and Glickman announced that the farmers will do even more to boost the value of their crop through diversification, as well as experiment with the production of greenhouse tomatoes so growers can expand business to a 9-month growing season. The expansion could also include an additional 100 jobs in the facility.

"If I may say so, it was a whopper of a deal...which allowed everyone to have it their way," Glickman said, alluding to the co-op's surging sales to Burger King — to the delight of the Hermitage audience.

"Now you can build that repackaging facility and farm supply store you've been talking about, and spend more of Bradley County dollars here," Clinton said. He added that cooperative efforts offer the best promise to turn around those areas of rural America that haven't kept pace with current economic prosperity enjoyed in more urbanized areas. Agriculture can't sustain the economy anymore under the old rules,

Clinton said. But the Hermitage tomato growers have proven that people can make a living in rural America and do something good.

Since the Hermitage cooperative started, a second cafe has opened on Main Street and a new elementary school is being built for the 550-student district. The U.S. Department of Transportation is assisting Arkansas officials in improving State Highway 15 and building a bypass in Hermitage, which will be known as "Co-op Road."

The new frontage road not only complements the expansion plans of the cooperative, but also has stimulated other development, including plans for a full-line, full-service farm supply store and a convenience store. The new road makes it easier for trucks to travel to and from Hermitage on tomato runs. And it has all helped to renew hope, said Randy Clanton, the president and chief executive officer of the cooperative, who shared the November podium with Clinton and Glickman.



President Clinton discusses his New Markets Initiative with a co-op member.

Creating “new markets”

The Arkansas co-op stop was the second New Markets Initiative trip by the Administration in four months. In both instances, the remarks of Clinton, Glickman and others highlighted the untapped potential in America’s underserved markets, especially in rural areas. This second trip put a special emphasis on how corporations and communities could leverage that potential through long-term, sustainable partnerships. Through the New Markets Initiative, Clinton wants to encourage the private sector to invest in rural communities so that all communities can share in the prosperity of current economic expansion.

The New Markets idea poses two questions. First, does America have a moral obligation to give people a chance to succeed who haven’t participated in the current economic recovery and who want desperately to work? Second, if we are enjoying the longest peacetime economic expansion in history, how do we continue to find new jobs and new opportunities with no inflation?

President Clinton says the answers are new markets. Hermitage is a perfect example of what that means, added Secretary Glickman. “Hermitage has shown how a few innovative folks — with some help from their government and a commitment from the private sector — can help turn a community around and create a brighter future for all of its people,” he said.

Glickman acknowledged that there’s

been a lot of pain and struggle for America’s small farmers and ranchers these last couple of years. On top of low prices and weak export markets, they’re trying to do business in a top-heavy farm economy, where so much is controlled by so few.

“To survive, they need to have some kind of ownership in the marketing, processing and distribution of their goods,” Glickman said. “That way, they get to keep a greater percentage of the consumer dollars spent on the food that they produce. Co-ops will be a big part of farming and rural growth in the 21st century. And USDA will continue to be there, with the resources and technical assistance necessary to support them.” ■

Bradley Pink Tomato —world’s best?

The Bradley County Pink is the world’s best-tasting tomato, local denizens claim. Tourists even schedule visits to the county in June to coincide with summer harvest and the Pink Tomato Festival, held up the road from Hermitage in the county seat of Warren.

But the county’s agricultural base is broader than tomatoes. Forestry, beef and poultry bolster tomatoes as the major industries in Bradley County. Of its nearly 419,000 acres, nearly 354,000 acres are forest land, primarily loblolly pine and hardwood timber. Commercial forests represents 88 percent of the land mass. Of that, 51 percent is owned by industry and the remaining 49 percent is state, federal and privately owned.

County farmers produce 5,500 to 6,000 head of beef cattle each year that are marketed through the Saline and Ouachita Valley Sale Barn in Warren, about 20 miles north of Hermitage. Some 20 million broilers and approximately 100,000 broiler hatchery hens also are produced annually in the county.

But the tomato is what has put Bradley County in the national spotlight. Over 600 acres of fresh-market tomatoes are produced annually. ■



President Clinton greets Co-op President Clanton as Secretary Glickman leads the ovation.

Farm supply cooperatives' income slides downward

By Beverly L. Rotan,
Ag Economist
USDA Rural Development



What happens on the farm impacts the cooperatives with which it does business.

That was especially true this past year for supply cooperatives and their member-farms. With farm income falling, the economic impact on local cooperatives handling farm supplies was negative.

Overall sales between 1997 and 1998 were down 4.7 percent. Individual farm supply products — petroleum products, feed, and fertilizer — were also down, with petroleum having the greatest decrease, 7.7 percent. Feed sales were down as a result of reduced ingredient costs and fertilizer sales were down due to the overproduction of nitrogen. Although total farm supply sales declined by two percent, seed sales increased by almost 20 percent (table 1). Agricultural chemicals and other farm supplies both increased, four percent and three percent, respectively. Grain sales continued to decline in the 1997-98 farm year, the decline was higher than the 1996-97 decrease. Insufficient grain exports were blamed for this downward slide. Cost of goods sold was down by almost six percent, and this decline was the reason gross margins grew by about four percent. Cost of goods averaged 89 percent of net sales.

There were 329 local cooperatives handling farm supplies that provided detailed financial information to the U.S. Department of Agriculture's Rural Business-Cooperative Service. Some of the cooperatives also marketed farm

Table 1—Farm supplies sold and grain marketed by cooperatives, 1997 and 1998

Name	'97 Total Average Dollars	'98 Total Average Dollars	Percent Change
Farm Supplies Sold			
Feed	\$1,337,301	\$1,269,206	-5.1
Seed	\$145,243	\$173,893	19.7
Fertilizer	\$1,514,616	\$1,486,492	-1.9
Agricultural Chemicals	1,184,354	1,236,412	4.4
Petroleum Products	\$2,371,398	2,188,902	-7.7
Other	883,012	910,544	3.1
Total	\$7,435,923	7,265,449	-2.3
Farm Products Marketed			
Grain and Other	\$6,807,973	6,315,869	-7.2
Total	6,807,973	6,315,869	-7.2
Total sales	\$14,243,896	13,581,318	-4.7

Table 2—Comparable abbreviated income statement, 1997 and 1998

Item	Total average 1997 Dollars	Total average 1998 Dollars	Percent Change Percent
Sales	14,243,896	13,581,375	-4.7
Cost of goods sold	<u>12,822,845</u>	<u>12,105,333</u>	-5.6
Gross margins	1,421,051	1,476,042	3.9
Service and other income	<u>513,805</u>	<u>554,966</u>	8.0
Gross revenue	1,934,856	2,031,008	5.0
Expenses			
Salaries and wages 1/	834,406	901,973	8.1
Administrative 2/	77,367	84,365	9.0
General 3/	484,678	513,351	5.9
Depreciation	226,496	251,734	11.1
Interest	108,690	105,251	-3.2
Bad debts	<u>17,581</u>	<u>20,005</u>	13.8
Total expenses	1,749,218	1,876,774	7.3
Local savings	185,638	154,234	-16.9
Patronage refunds received	<u>244,331</u>	<u>237,406</u>	-2.8
Savings before income tax	429,969	391,640	-8.9
Less income taxes	<u>31,532</u>	<u>28,921</u>	-8.3
Net savings	398,437	362,719	-9.0

1/ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

2/ Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expenses, and annual meetings.

3/ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

products — grain being the most prominent. Small cooperatives made up 37 percent of the respondents. Of

those, 55 percent sold principally farm supplies. Most of the larger cooperatives (22 percent) marketed grain.

Handling grain also generated storage and services revenues. Service and other income went up by eight percent in the two-year period. Services would include items such as grain handling and storage, trucking, drying, fertilizer and crop protection application, soil analysis, and feed blending.

Net savings before income taxes were down by nine percent. Local savings hit their highest levels in 1997 and fell 17 percent in 1998. The gap between local savings and net income continued to widen. As expected, with net savings losing some ground, income taxes were also down for the period. Expenses, as a whole, rose seven percent in 1998 with bad debt expenses rising the most (table 2). Administrative and salaries/wages also increased over the two-year period. Interest expenses went down 3.2 percent. Patronage refunds declined three percent. Local cooperatives rely heavily on patronage refunds from regional cooperatives as a source of income. These refunds averaged \$237,406 and comprised 61 percent of local net savings.

Total assets grew to almost seven percent. The increases were mainly due to the increase in "other current assets" (other receivables) and "other assets" (investments, goodwill, notes receivable). Property, plant, and equipment investments increased by 12 percent (table 3). The fall in grain inventories affected seasonal debt, which also fell four percent. Farm supply inventories increased while grains and oilseeds inventories decreased.

Total liabilities rose four percent from the previous year. Both long-term debt and owner equities increased. Owner equities financed 56 percent of total assets.

Several ratios measure the operational impact and performance levels of cooperative operations. Most ratios should be looked at in conjunction with one another, over a period of time, and with similar sales and functions of other companies/cooperatives in the geographical area to get a true picture. These ratios include: 1) liquidity, 2) leverage, 3) activity, and 4) profitability.

Table 3—Comparable abbreviated income statement, 1997 and 1998

Item	Total average 1997	Total average 1998	Percent Change
	Dollars		Percent
ASSETS			
Current Assets			
Cash and cash equivalents	424,748	399,187	-6.0
Accounts receivable	714,890	662,245	-7.4
Inventories—total	1,466,575	1,496,999	2.1
—grain	569,736	540,887	-5.1
—farm supplies	896,838	956,112	6.6
Prepaid expenses	63,796	57,599	-9.7
Other current assets 1/	<u>304,760</u>	<u>403,167</u>	32.3
Total current assets	2,974,768	3,019,197	1.5
Investments and other assets			
Investments	1,311,239	1,466,813	11.9
Other assets 2/	<u>99,299</u>	<u>113,567</u>	14.4
Total investments and other assets	1,410,538	1,580,379	12.0
Property, plant, and equipment			
At cost	3,950,876	4,419,016	11.8
Less: Accumulated depreciation	<u>2,368,020</u>	<u>2,643,176</u>	11.6
Net, property, plant, and equipment	1,582,856	1,775,840	6.8
Total assets	5,968,162	6,375,416	6.8
LIABILITIES AND OWNER EQUITIES			
Current liabilities			
Current portion of long-term debt	96,940	142,907	47.4
Notes payable-seasonal	505,870	483,866	-4.3
Accounts payable	388,485	427,927	10.2
Patrons credit balances and other liabilities	909,056	899,294	-1.1
Accrued taxes	34,595	34,623	0.1
Accrued expenses	101,178	105,141	3.9
Patronage refunds (cash)	<u>93,298</u>	<u>87,346</u>	-6.4
Total current liabilities	2,129,421	2,181,102	2.4
Long-term debt	509,792	573,077	12.4
Total liabilities	2,639,213	2,754,179	4.4
Owners' equities			
Allocated equity	2,474,728	2,672,075	8.0
Unallocated equity	<u>854,222</u>	<u>949,162</u>	11.1
Total owner equities	3,328,950	3,621,237	8.8
Total liabilities and owner equity	5,968,162	6,375,416	6.8

1/ "Other" current assets include prepaid expenses and other receivables.

2/ "Other" assets include investments, goodwill, notes receivables, etc.

"Current" and "quick" are liquidity ratios. From 1997 to 1998, these two ratios changed slightly. Elements of both ratios included current assets, current liabilities, and inventory. Current assets and liabilities were up slightly, while total inventories were down. Total inventories included farm supply, which was up at 6.6 percent and grain, which was down at 5.1 percent. The gain from current assets and liabilities and the loss from total inventories almost cancelled out each other. A further look at items making up current assets shows that four of the seven declined. For current liabilities, three of the seven declined. To improve these ratios, a cooperative could borrow additional long-term debt, dispose

of unproductive fixed assets, or retain greater portions of allocated savings.

Although the debt-to-total-equity rebounded from lows in 1995 and 1996, the upward movement from 1997 to 1998 was small. It went from 0.21 to 0.24. Long-term debt increased 12.4 percent, and short-term debt decreased 4.3 percent. Equity financing remained strong for local cooperatives, with equity growing nine percent between 1997 and 1998. Improvements in this ratio could be achieved by reducing long-term debt, disposing of unproductive assets, liquidating debt, increasing local equity, slowing equity retirement programs, or retaining

Story continued on page 34



A C L O S E R L O O K A T . . .

Highland Exchange Service Cooperative - HESCO

Waverly, Florida

Co-op service: Highland Exchange Service Cooperative is an operating supplies procurement cooperative conducting business in the southeastern United States. All operations are performed from the Florida office located outside Winter Haven and near Cypress Gardens.

Co-op's history and changes: Formed through the consolidation in 1972 between the Highland Crate Cooperative and the Exchange Supply and Service Cooperative, HESCO operated primarily as a corrugated container broker in Tampa for its member organizations. Since then, HESCO's product offering has diversified from fresh fruit and poultry packaging into an array of items, including mesh and poly bags, safety equipment, apparel, tires, batteries, fuel, lubricants, maintenance and repair parts, citrus chemicals, production and harvesting equipment, janitorial supplies, gift fruit cartons and supplies, and agricultural chemicals.

Services members expect: As a supply cooperative, it's the cooperative's job to identify members' critical operating supply requirements, negotiate favorable purchasing arrangements, and then order, receive, store and redistribute those supplies as needed.

The pricing of HESCO's products originates through negotiations with vendors for volume discounts and appropriate distributorships. These negotiations—generally with more than one vendor for like items—allow HESCO to establish competitive prices to its patrons on a year-round basis and also provide a patronage refund at the

close of each fiscal year.

The cooperative constantly investigates new products and services, which will generate greater savings for members. Strengths lie in the co-op's financial integrity, in member allegiance, and in staff expertise and enthusiasm.

How does the co-op operate? Most of HESCO's members are now serviced by 38 staff members from a 75,000-square-foot warehouse and a 6,000-square-foot office. Shipments from the warehouse represent about 20 percent of total sales, handled by a fleet of seven trucks on regular schedule to member sites in Florida. While the majority of HESCO's current members operate citrus packinghouses or processing plants, its membership also includes other agri-businesses in the southeastern United States.

Who are members? Membership is accomplished only through 1) application by the interested entity; 2) management screening to determine eligibility; and 3) review and approval by the board of directors. HESCO policy provides for a two-year provisional membership period. Either party may terminate the membership during this period, but HESCO's services and supplies are made available to the member with all privileges of membership, except the right to vote. Upon successful completion of the two years, and on presentation to and approval by the board, the member is accorded voting privileges. Qualified affiliates of the member (i.e., members of the member and majority-owned subsidiaries) are also entitled to HESCO's supplies and services, but



Hesco's fleet of trucks service members throughout Florida. Photo courtesy HESCO

without voting rights.

Members include Albritton Fruit Company, Blue Ribbon Citrus Packers, Davis Citrus Management, Dundee Citrus Growers, Florida Select Citrus, Gene's Citrus Ranch, Golden Harvest Packing Company, Gracewood Fruit Company, Gustafson's Dairy Farms, Hale Indian River Groves, Harvey's Groves, Heartland Citrus, Hilliard Groves, Holly Hill Fruit Products, Hunt Bros. Co-op, Indian River Exchange Packers, Lake Placid Citrus Growers, Lake Region Packing, Lake Wales Citrus Growers, Minton Sun, Mixon Fruit Farms, Ocean Spray Cranberries, Orange-co of Florida, Oslo Citrus Growers, Peace River Packing, Riverfront Groves, Sebring Packing, Silver Springs Citrus Co-op, Sun Brite Citrus, Texas Citrus Exchange, The Packers of Indian River, Tuxedo Fruit, Vero Beach Citrus Packers, Waverly Growers Co-op, Winter Garden Citrus Growers and Winter Haven Citrus Growers.

How does the business operate? Most of the administrative and policy-making functions are coordinated by HESCO management, with an executive committee comprised of nine directors elected by the full board for three-year rotating terms, and with the president presiding as an ex-officio member. Recommendations from the executive committee are presented to the full board for its consideration. ■

Bridging the gap

USDA spotlights DLT technology to mark 50th anniversary of telecommunications program

By Pamela J. Karg,
Field Editor

While most Americans have enjoyed a period of unrivaled economic expansion during the past decade, some rural communities are still struggling with double-digit unemployment and per-capita incomes that lag far below the national average. That's the case in many of the Appalachian Mountain communities of southwest Virginia, which is also home to some of the most medically underserved towns in the nation. Until the advent of distance learning and telemedicine (DLT) technology, rural communities such as Vansant, Va., were not good places to live for those needing the regular care of a medical specialist.

That was the situation facing Alexandra Bartley, who, at age 18 months, underwent surgery at the University of Virginia Medical Center in Charlottesville to repair a cleft palate and tumor on her face. Following the surgery, she needed regular post-operative checkups and treatment at the medical center, more than 200 miles away from her home. Fortunately, Alexandra and her parents were spared the travel ordeal thanks to the university-sponsored Southwest Alliance for Telemedicine, which established a fiber optic cable link between a health clinic in Vansant and the Medical Center in Charlottesville. The link enabled a pediatric plastic surgeon in Charlottesville to examine Alexandra with video equipment and to direct treatments as she recovered from surgery.

Alexandra's mother, Lisa Hubbard,



Fiber optic cable allows a baby in Hays, Kan., to be examined by medical specialists 250 miles

away at the University of Kansas Medical Center in Kansas City, Kan. The ability to per-

said each trip to Charlottesville not only would have required her to miss a day of work, but also cost her dearly for gas, food and lodging — not to mention how traumatic the long journey would have been for a little girl trying to recuperate from extensive surgery.

The result? Alexandra's beautiful little face beamed out at the crowd that gathered at U.S. Department of Agriculture headquarters in Washington, D.C. in October to celebrate the 50th anniversary of USDA's rural telecommunications program. Agriculture Secretary Dan Glickman said there could be no better anniversary present than this real-life testimony to the value of telecommunications technology in rural areas. On behalf of the university, Alexandra and her mother accepted a \$230,000 USDA grant which will be used to expand telemedicine service

to two additional rural communities in southwest Virginia, part of \$13 million in USDA grants awarded that day to projects in 34 states and Puerto Rico.

Saving lives on the High Plains

Further demonstrating the value of telemedicine, a live video-link was established between USDA headquarters and a rural health clinic in Haxtun, Colo., a small farming community about 120 miles northeast of Denver. There, Bryan Nation of the High Plains Rural Health Network (HPRHN) spoke about the tremendous impact telemedicine has had on public health service in rural communities of the High Plains.

The High Plains network began 10 years ago, and now provides vital services and economies of scale to 19 rural health-care facilities in western Kansas, eastern



form rapid diagnosis locally is sometimes proving to be a life-saving technology. Photo by Charlie Riedel

Colorado, western Nebraska and southern Wyoming. These healthcare facilities — in towns ranging in population from a few hundred people to as many as 10,000 — are connected via telecommunications to two urban hospitals.

In addition to providing direct healthcare services for patients, the network helps local clinics with recruitment and retention of physicians and nurses, insurance claims, collections and purchasing. Professional healthcare staff, local paramedics and others in the healthcare field routinely use the network for distance learning in required continuing education seminars.

Dr. Greg Holst, family practitioner in Haxtun, credited telemedicine for enabling him to keep abreast of advances in medical technology and for improving direct patient care in his community. He introduced Phyllis

Ash, who told how her husband, Dick, had nearly lost his leg to a staph infection. It was saved, thanks to an early diagnosis and treatment made possible through telemedicine. “In another 24 hours, he probably would have lost his leg,” she recalled.

DLT increasingly affordable

Telemedicine technology is becoming increasingly affordable. By one industry estimate, a typical telemedicine set-up cost nearly \$300,000 five years ago. With improvements in technology, innovations in data compression and reductions in computing costs, the expense of the equipment can be less than \$5,000 today. For remote patient monitoring, the cost of some monitors is now less than \$300 each.

The real costs today are not in purchasing hardware but for telecommunications transmission, training health professionals in its use and integrating telemedicine into existing healthcare systems. HPRHN’s Nation related how, during the first few years of the organization’s operations, irrigated corn in rural areas grew so high and gave off enough vapor that it would knock out local telephone service. When a telephone company finally laid fiber optic cable, a farmer accidentally severed the cables when he went out to plow. Gophers ate through other cables.

“We’re talking about very rural areas where there’s one telephone company that doesn’t necessarily install a

lot of new technology because of the low density,” Nation explained. That low density also creates high costs for rural distance learning and telemedicine projects.

Another challenge HPRHN has experienced results from users who want “easier technology.” Some rural hospitals may only use their system once a month. Even if one person is designated the “technology guru” in the healthcare office, it takes time to remember exactly how to operate the equipment. Distance learning and telemedicine practitioners also warn that programs need to be established with the end-user in mind.

“It’s one thing to think of a really great service you can finally provide to rural America over the Internet or via satellite,” said Nation. “It’s quite another thing to actually match your idea to what your target audience is willing to use.”



Telemedicine equipment links this small rural health clinic in Ransom, Kan., to larger clinics and hospitals located many hours away, saving this young patient the need for a long journey for medical diagnostic work. Photo by Charlie Riedel



Agriculture Secretary Dan Glickman issued "a call to action" to ensure that rural people are included in the digital telecommunications revolution.

Currently, a doctor must accompany a patient during a teleconsultation with another doctor. In some rural areas, though, physician's assistants, registered nurses or other certified health professionals staff clinics. On-site doctors are not always available, and some insurance companies do not want to pay any reimbursements for the telemedicine consultation without doctors at both ends of the fiber optic cable.

Saving rural schools

Delbert Wilson, manager of the Central Texas Telephone Cooperative Inc., in Goldthwaite said his co-op received one of USDA's first telephone loans back in 1951, when an average of 12 to 16 customers had to share every party line. In those days, farmers had to do double duty as linemen, maintaining the telephone lines that crossed their land.

Just two years earlier, in 1949, President Harry Truman had signed the amendment to the Rural Electrification Act that enabled USDA to begin loaning money to rural telephone cooperatives and companies. At that

time, only 39 percent of farms had any phone service. Twenty years later, that figure had risen to 83 percent, and today it is more than 95 percent.

Wilson's co-op is a perfect example of that progress. From humble beginnings, the co-op has leapt into the future, and now offers state-of-the-art digital telecommunications service to 6,500 customers scattered across 3,300 square miles in 14 central Texas counties. The co-op offers modern telecommunications service to rival that found in any urban area, from caller I.D. to being a local Internet service provider.

Wilson said distance learning technology may be the biggest boon yet that the co-op has offered its customers. This technology has helped many rural towns in the co-op's service area improve and save their schools — a life or death issue in many small towns.

"Rural schools are the heart and soul — as well as the largest employer — in most small rural towns," he noted. "When a community loses its school, we often lose the community as well."

Many rural communities in central Texas have been trying everything to save their schools. While some consolidations have been inevitable, many districts now offer courses taught in distant locations, vastly expanding edu-

cational opportunities and future career options. By boosting the quality of the curriculum, more families are willing to remain in — or move to — rural towns, without the fear that they are sacrificing the future of their children because of inferior education. Better schools also help attract new businesses.

This point was also underscored during a video link between USDA headquarters and the Towanda School district in a rural area of northeastern Pennsylvania. Dr. Dan Paul, project director for Partners in Distance Learning and the former Towanda school superintendent, said this distance learning project started with just six schools in 1993. "We saw the grant from USDA not only as a means to improve education in our rural schools in northeast Pennsylvania, but as a chance to demonstrate a better way for all rural schools to use technology to open opportunities for their students," he said.

This distance learning program has been so successful that it has now been expanded to 300 schools in seven states. Last year, 30,000 students and 5,000 teachers participated in distance learning classes. "We are not aware of any other approach to distance learning in our country that involves more students and more teachers on a daily



Improved rural telecommunications is becoming an essential tool for farmers to compete in a global economy. USDA Photo by Ken Hammond

basis," Dr. Paul added.

Students also participated in the event, relating what distance learning meant to them. One high school girl said the technology made it possible for her to take college preparatory math classes and German — classes her rural school doesn't offer. Other students told of taking virtual field trips via distance learning to places such as a NASA training center and the Philadelphia Museum of Art, all without leaving their desks.

"Indians finally victorious!"

Velasquez Sneezy, vice chairman of the San Carlos Apache Telecommunications Utility Inc., in San Carlos, Ariz., said telephone lines are truly the tribe's lifelines to the outside world. Before the tribal-owned telephone cooperative received a \$14.1 million USDA loan in 1997 to expand its system, only about a quarter of the homes had telephones across the 2,854-square-mile reservation. By comparison, 93.7 percent of all American households had telephone service; the rate was just 50 percent among rural Native Americans.

In San Carlos, population just under 3,000, there was only one pay telephone. "People would start lining up at 6 a.m. to use the phone, and the line didn't go away until after midnight," Sneezy said.

Thanks to financial and technical assistance from USDA Rural Development, "we now have the best telecommunication equipment to be found in the country," he said. Law enforcement has benefited greatly from improved telecommunications. Sneezy told of an incident when a tribe member, living in an isolated part of the reservation without phone service, was threatened by a gun-wielding assailant. The victim had no way to summon police. That type of terror is less likely now that most tribe members have telephones.

Healthcare has also improved on the reservation. Parents can now call a doctor when a child is sick to discuss symptoms and determine if a long trip into town for a checkup is really neces-

California RAIN project wins Smithsonian honors

The Regional Alliance for Information Networking (RAIN) was originally established to serve the California counties of San Luis Obispo, Santa Barbara and Ventura. The recipient of two USDA telecommunications grants, RAIN is a public Internet and telecomputer service that focuses on distance learning and telemedicine by linking students, their families and communities. It delivers innovative neighborhood-level, public library, classroom and medical clinic network development and training assistance.

In addition, it operates an on-line broadcasting service. In fact, RAIN is pioneering the field of public Internet broadcasting. Functioning in a similar fashion as traditional radio or TV, RAIN serves as a broadcast facility. Locally developed and produced programs air onto the Internet through RAIN's distance learning and telemedicine channels.

Part of the RAIN project includes Camp Internet, which makes it possible today for elementary students at schools across seven counties to explore the Internet in a protected, exciting environment, reports Susan Barkdoll, a teacher at North Verdemont School in San Bernardino.

Camp Internet was developed so students, teachers and parents could gain a balanced view of natural and human history by exploring thematic science and humanities subjects via online technology. Through Internet research, e-mail, chats with paleontologists and classroom activities, people can explore Southern California's back country and its Pacific Ocean Channel Islands.

North Verdemont students are working together on-site, and with classrooms on other campuses, to bridge previous barriers to learning. The camp brings all types of students — including at-risk, gifted, urban and

rural, grades 3-10, and at all levels of English literacy — together to study the history and science behind the area in which they live, Barkdoll says. "And, through the students' fascination with the subject matter, they are being drawn in to explore many other facets of Internet-based education," she explains.

Like the eight-year-old students in her class, Barkdoll is also a distance education user. She recently completed work on her doctorate degree at Curtin University in Perth, Australia, while living in Southern California and working full time. Barkdoll spent only a month in Australia, where she needed to complete residency requirements.

Last year, Steven Jobs of Apple Computer nominated North Verdemont Elementary School and Camp Internet for the Computerworld Smithsonian Award for education and academia. The award honors men and women whose visionary use of information technology produces positive social, economic and educational change. As a nominee, North Verdemont School's innovative project about the Channel Islands will be permanently recorded in history at the Smithsonian Institution's National Museum of American History.

Camp Internet is just one of four target areas found at the RAIN website (www.rain.org). Telemedicine is another service that links nine communities in a project aimed at expanding the range of available health services. Through interactive audio, visual and data communications, the telemedicine sites are enhancing healthcare delivery, diagnostic and consultative services, treatment, medical data transfer and professional education. The telemedicine network also facilitates the exchange of information and data for use in health promotion, disease prevention and other public health activities. ■



Some scenes from the not-so-good old days of rural telecommunications: (Left) a farmer uses an outdoor crank telephone to make a call; (Above) Even one small pole downed by a storm could knock out service to an entire rural area. (Right) Phone lines converge on an obviously over-loaded circuit.

sary, Sneezy said.

“Now, unlike in the movies, we can say that the Indians are finally victorious! I’ll probably be talking to you again sometime in the future over a TV screen to ask for another loan to improve the system,” he added.

Glickman issues call to action

Agriculture Secretary Glickman said the purpose of the celebration for the 50th anniversary on USDA’s telecommunications program was not only to recognize the accomplishments of USDA partnerships with rural telecommunications providers, “but to issue a call to action for the next 50 years!” Glickman noted that up to 60

percent of all new jobs created in the next century will be high-tech jobs.

“The Internet already accounts for 6.5 percent of America’s gross national product,” he noted, “and 10 years ago nobody had even heard of it!”

Development of the Information Superhighway means even more to rural America than to urban areas, Glickman said. An urban location is no longer necessary to start a new business with a regional, national or even international scope. “The talent and brainpower needed to fuel the nation’s high-tech industry in the 21st century can now be found, and remain, in rural communities,” Glickman said. “And telemedicine projects are bringing better healthcare

service to remote communities, saving time, money and even lives.”

John Podesta, President Clinton’s chief of staff, echoed those sentiments, saying USDA will continue to play a role to ensure that the rising tide of high technology does not leave rural America stranded. “We cannot allow information technology to drive a greater wedge between the haves and have-nots, between urban and rural, or between young and old,” he said. “Technology must be a force for both prosperity and social progress.”

USDA offers record amount for DLT

To help spread DLT technology to even more rural communities, USDA



will make a record \$220 million in loans and grants available to rural communities in fiscal year 2000. Applications for DLT loans and combination loan/grant applications will be accepted until Sept. 30, 2000.

Applications are processed on a first-come, first-serve basis. Applications for grants must be postmarked no later than March 17, 2000.

Jill Long Thompson, USDA under secretary for rural development, said the DLT program's success has helped garner support from President Clinton and Congress.

"The DLT program is giving us a clear view to a better future for rural education and healthcare service," she

said. "With \$81 million in USDA funds already invested in more than 304 projects since 1993, this program has improved the educational opportunities for thousands of students and provided better quality healthcare to rural citizens served by more than 800 hospitals and rural healthcare clinics."

Eyeing future DLT growth

Jon Linkous, executive director of the American Telemedicine Association, says the rapid growth of telemedicine is a worldwide phenomenon, but measuring it is tricky for several reasons. Telemedicine products and services are often part of a larger investment by healthcare

Patients win when rural hospitals unite

When Arkansas Rural Medlink (ARM) received a \$497,000 USDA grant in 1994, ARM officials reported 27 percent of the population within the 20 counties that comprise the Arkansas Delta region lived in poverty. Only 57 percent graduated from high school, contributing to the region's unemployment rate of 9.2 percent. The need to expand pediatric, cardiology, radiology and trauma services was critical to these rural residents.

By developing a consortium of five hospitals that serve some 311,000 residents, ARM could improve the quality of, and access to, medical services as well as provide healthcare education programs through the use of advanced telecommunications technologies. The USDA grant was used to purchase interactive digital video equipment to link the five rural hospitals with the University of Arkansas for Medical Sciences.

Telemedicine programs can also help patients overcome barriers such as language and need for confidentiality. In a New York telemedicine network, non-English-speaking Vietnamese patients can now talk to a Vietnamese-speaking mental health provider. Previously, a patient and his or her interpreter would go to the nearest mental health professional — who only spoke English — rather than drive to see the Vietnamese-speaking professional.

American Samoa has also used this technology to good effect. The seven South Pacific islands are more than 2,300 miles from Hawaii. Using USDA grant funds awarded in 1996, the American Samoa Power Authority created a satellite link between the LBJ Tropical Medical Center and the PEACE SAT Network, in Hawaii, that provides access to numerous telemedicine and medical information resources. Voice, data and video capabilities allow medical personnel to do consultations and diagnostics with Hawaiian and U.S. mainland hospitals. Distance learning classes are provided to healthcare professionals. ■

institutions. Telemedicine is not a separate specialty and is often integrated with the overall delivery of health. Second, telemedicine is a very new investment for many institutions and there is little history from which to draw projections.

“Finally, there is no commonly recognized definition or set of services and devices that constitute telemedicine. Different healthcare institutions and consulting firms define telemedicine in quite different ways,” Linkous adds.

Business Communications Co. (BCC), a Connecticut consulting firm, estimates that the current U.S. market for telemedicine is \$65 million and will reach \$3 billion by the year 2002. BCC also predicts a 42-percent increase in public sector investments and an 89-percent growth in telemedicine sites by 2002. The report predicts a 28-percent increase in prison telemedicine sites over five years and a doubling of military investment over seven years.

In its ninth annual survey of senior

healthcare executives, the Healthcare Information and Systems Society reports 34 percent of its 1,754 respondents currently use telemedicine. Another 10 percent plan on using it in 2000 and 28 percent are investigating its use in the future. And the Telemedicine and Telehealth Networks magazine recently completed a survey of selected telemedicine program managers. Ninety-three percent reported that they expect to expand their operations in the next five years.

Shaq, Microsoft donate technology centers

High-tech equipment will benefit Wisconsin Empowerment Zone

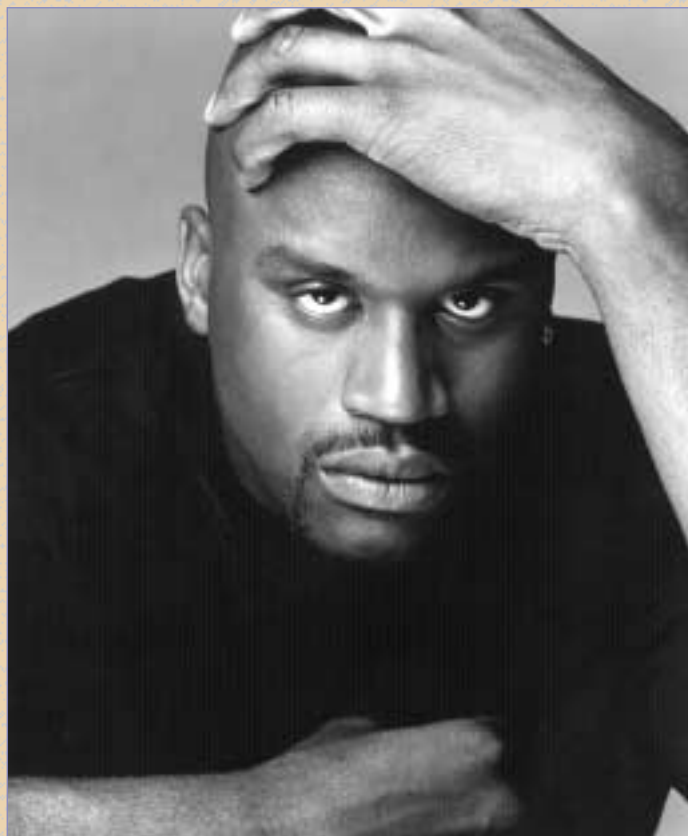
By Pamela J. Karg,
Field Editor

In every discussion about the Internet, distance learning and telemedicine, there comes a point when people need to face the financial hardware hurdle. Even after fiber optics are installed and T-3 lines are running, users need monitors, keyboards and cameras. In northern Wisconsin, hardware isn't an issue anymore because of a grant made possible by two private sector giants: NBA Superstar Shaquille “Shaq” O’Neal and Microsoft Corp. The donations were part of a string of positive events — including a zero-interest loan by a local electric cooperative — that are spurring positive changes on rural Wisconsin reservations.

Reaching an exciting milestone in youth development, the Boys and Girls Clubs of Lac Courte Oreilles received a \$50,000 grant to build a state-of-the-art technology center through funding provided by Microsoft and O’Neal. The computer software giant and O’Neal are funding

15 centers in Boys and Girls Clubs across the country.

The Boys and Girls Clubs of Lac Courte Oreilles was the only rural site, and the only site located on an Indian reservation. Lac Courte Oreilles is a USDA Enterprise Community located in the northern lakes and woodlands region of Wisconsin, approximately 150 miles northeast of Minneapolis and 80 miles southeast of Duluth, Minn. It’s home to the Lac Courte Oreilles Ojibwa Community College where the curriculum reflects Ojibwa culture and tribal self-determination, and provides students with opportunities for individual self-improvement in a rapidly changing technological world, while maintaining their cultural integrity. The new center will offer both the club and the



NBA superstar Shaquille O’Neal is scoring some points on behalf of underprivileged rural Wisconsin children through his support for new rural technology centers. Photo courtesy Shaquille O’Neal

college greater access.

Located in the club, the technology center provides the resources for young people to work collaboratively to discover, pursue and create projects related to science, math, literature, art, telecommunications, engineering, and a variety of other disciplines. In addi-

According to the 1998 Report on U.S. Telemedicine Activity produced by the Association of Telemedicine Service Providers, certain specialty areas continue to dominate use of telemedicine, such as mental health, cardiology, orthopedics, radiology and dermatology. Yet the types of facilities, programs, organizations, technologies and applications used to deliver these services have expanded and diversified in the last two years.

The ATSP survey found that

tion, the center includes laser printers, a high-resolution scanner, digital and video camera, high-speed Internet access, and educational software.

“The great thing about what we have now is our increased ability to open doors for learning. The kids can now be exposed to possibilities for developing education and careers in a very special way,” said Renfro Carley, director of technology and education at the Trepania Road Boys and Girls Club site.

Members of the New Post Club (an extension site across the reservation) can also take advantage of all the new resources. Carley said youth will be encouraged to create their own projects that expose them to special interests such as space exploration, aeronautics, scientific investigation, and careers in science, technology and computer programming. Supervised, high-speed Internet access will create a window to an encyclopedia of opportunity.

This collaborative effort between Microsoft Corp. and O’Neal provides at least one sector with the hardware solutions they need. Microsoft donated \$1.1 million in cash and \$400,000 in software (estimated retail value) to fund the centers. O’Neal also donated \$1 million.

“As someone who often struggled with getting excited about learning as a youngster, I think technology is crit-

California, New York, Texas and North Carolina are leading the way in the number of their programs and teleconsultations.

That rural America is sharing in the digital revolution is in large part the result of the partnerships USDA Rural Development has forged with rural telecommunications cooperatives and companies during the past half century, said Wally Beyer, who retired in October after six years as administrator for USDA’s Rural Utilities

ical to capturing the minds of today’s young people,” said O’Neal following news coverage of the center’s opening. “My personal interest in technology and belief in its importance to the success of our young people is why I decided to help build these centers instead of basketball courts.”

Other Boys and Girls Clubs to receive funding for technology centers are located in High Point, N.C.; Richmond, Va.; Denver, Colo.; Houston Texas; Los Angeles, Calif.; Sacramento, Calif.; Seattle, Wash.; Philadelphia, Pa. (two Clubs); Newark, N.J.; Taunton, Mass.; Cleveland, Ohio; Hayward, Wis.; Milwaukee, Wis.; and Laredo, Texas.

“This award means a giant leap forward because of the positive difference we can make in the lives of the young people in this community,” said Karen Harden, executive director for the Boys and Girls Clubs of Lac Courte Oreilles. “When writing this grant application, I felt we had a chance to get it, even though most believed it was a long shot. I am really elated that we can offer such a valuable program to our youth.”

Just days after the donation, USDA Rural Development and Jump River Electric Cooperative joined with Lac Courte Oreilles officials to complete financing for a business incubator on the reservation. Jump River received a

Service. “USDA has been building the foundation for the Information Superhighway in rural America for 50 years. It is the foundation that will keep our nation’s rural communities thriving during the next century.”

Editor’s note: For more information on USDA telecommunications and DLT programs, visit the USDA Rural Development website: www.rurdev.usda.gov. ■

\$166,000 zero-interest-rate loan, reported Bryce Luchterhand, USDA state director. The co-op is loaning the money to the tribe to finance a land purchase and construction of a 5,000-square-foot business incubator facility. Jump River is supplementing the loan with \$34,000 from its general account.

Tribe officials are buying a 2.5-acre parcel on which to build the facility which will provide Lac Courte Oreilles, Sawyer County and north-west Wisconsin with commercial and industrial space for start-up and emerging businesses. The tribe’s wholly owned, non-profit community development corporation will provide technical assistance to tenants. Six tenants have already been approved. Eighteen jobs will be created initially.

USDA’s Luchterhand said the Jump River loan is part of an ongoing effort by Rural Development to assist Wisconsin tribes with job creation, housing and infrastructure improvements.

“The demographics clearly show that some of Wisconsin’s poorest communities are located on Indian reservations,” Luchterhand said. “By providing economic assistance, we can help tribes help themselves. This is not only good for them, it is beneficial to surrounding communities and the state, in general, and everybody wins.” ■

Organizing for the future

Browntown: small co-op with big plans

By Bill Tarpenning,
Director of Photography
USDA



When the market doesn't come to the farmer, then it's time to bring the farmer to the market. At least that's how the members of Browntown Cooperative see it. And the strategy is in the process of paying off for its 40 small farmer-members.

Located in south central Alabama, Browntown Cooperative members banded together to share technology, improve productivity and augment their individual marketing activities. Unlike most small farmers in the rural South who supplement their farm incomes with full- or part-time jobs, members of Browntown Cooperative are mostly full-time farmers.

The community lies in the center of Autauga County, which is part of what is known as the Black Belt. The Black Belt is unique in terms of its soil type. The predominantly heavy prairie clay is particularly good for growing forage to supplement livestock operations, as well as for timber production.

However, in the Browntown area, the land is gently rolling and is characterized by sandy to loamy soils, ideal for the production of fruit, vegetable and greenhouse nursery products. The farmers of the area have produced and marketed a variety of fruit, vegetable and specialty crops for 30 years or longer.

Over the last 5 to 10 years, these farmers experienced problems with limited market outlets and declining profit margins. Finding ways to tackle



Odell Brown says his drip irrigation system not only is increasing his per-acre yields through more efficient use of water and fertilizer, it is also allowing him to double- and triple-crop each year. USDA Photos by Bill Tarpenning

these problems led to the organization of Browntown Cooperative in September 1997.

The membership potential of around 100 growers lives in the communities of Autauga, Perry, Dallas, Lowndes, Chilton, Montgomery, Elmore and Bibb. Eventually, 40 farm families in the Browntown area joined the cooperative after several organizational meetings were held over the course of three to four months. About 70 percent of the members are black, the rest are white. Members are unified behind the idea of developing greater returns on their farm investments by producing food just the way today's consumers want to buy it.

A survey of farmers who own and operate on their land showed they grew a variety of produce, including crops such as watermelons, peas (pink eye and crowders), butter beans, sweet corn, squash, snap beans, cucumbers, sweet potatoes, and leafy greens. These fruits and vegetables allowed for double-

and, occasionally, triple-cropping on the same acreage. With this type of information in hand, the cooperative focused on assisting its members with the production, marketing and processing of fruits and vegetables.

A packing and processing facility is being planned. It will contain all the equipment needed for members to grade, shell, clean, package, store, cool, perform limited processing, market, and ship produce. Longer-range planning calls for a state-of-the-art facility designed to further process the produce and specialty crops into quality, value-added packages.

Meanwhile, the cooperative will build on current contracts in the fresh market trade at both retail and wholesale levels, on a regional basis. Eventually, the cooperative plans to develop markets throughout the country so its members can produce large quantities of high-quality crops for year-round marketing.

Assistance has been provided by various federal, state and local agencies.

How Browntown Co-op benefits members

Jones/Smitherman family farm

Elijah Jones and his son-in-law, Bobby Smitherman, farm 135 acres near Clanton, Ala. Last year, they installed a well to provide irrigation for 25 acres of vegetables, many of which were triple-cropped with the aid of plastic mulch and drip irrigation. In addition to their vegetable crops, they maintain substantial peach and pecan orchards and a small beef cattle herd.

Most of their produce is sold at the family's booth at the Montgomery State Farmer's Market. The family looks forward to the day when they can market value-added products through the Browntown Cooperative while maintaining and expanding their business at the

farmer's market. The Jones/Smitherman family intends to expand its irrigated production and to purchase equipment for custom installation of plastic mulch and drip irrigation systems for other co-op members.

Odell Brown family farm

Odell Brown and his wife, Johnie Mae, farm 220 acres, 140 of which they rent near the Old Kingston Community outside Prattville, Ala. The Browns farm with the aid of an extended family and concentrate on watermelon and southern peas, with a variety of other produce crops.

Over the years, Odell has developed markets for his crops with the major retail grocery chains operating in the area.

Johnie Mae operates the family's retail booth at the Montgomery State Farmer's Market. The Jefferson County Truck Growers Association in Birmingham, Alabama, is also a wholesale outlet for the Browns' production.

Increased demand and changes in consumer buying habits have caused the Browns to install plastic mulch and drip irrigation as a means of increasing production on 10 acres of land. According to Odell, the new system can quadruple production on that land, and get his product into the market three weeks earlier. In dry, hot years the irrigated land will produce a crop when dry land produces only dust. ■

Members of the Browntown Cooperative acknowledge assistance from: the Alabama Department of Agriculture and Industries, Marketing and Economics Division; Mid-South Resource Conservation and Development Council of the Natural Resource Conservation Ser-

vice, USDA; the Alabama Cooperative Extension System; Alabama Agriculture Experiment Stations; Farm Service Agency, USDA. The Federation of Southern Cooperatives/Land Assis-

tance Fund provides coordination and liaison by assigning a staff person to work with and aid in the development of the cooperative. ■



Bobby Smitherman and Elijah Jones show their new drip irrigation/fertilization system.



Odell Brown (center) inspects a drip irrigation/fertilization line with George Paris of the Alabama Department of Agriculture and Industries and Bill Steele of the Federation of Southern Cooperatives/Land Assistance Fund.

Thumbs Up

Michigan soybean farmers keeping value at home with new-generation cooperative

By Laura Moser

Just as the U.S. political and economic climates were ripe for the development of cooperatives 80 years ago, so too is the time right now to take another look at cooperatives.

“New-wave” or “new-generation” cooperatives offer a new set of opportunities and advantages for their member-owners and the idea is catching on. With depressed commodity prices and changing government policies, farmers are looking for ways to take more control of their businesses. One of the latest states to embrace new-generation cooperatives is Michigan. What started as one county’s attempt to bolster its agricultural community has grown into a statewide effort.

Three years ago, Michigan State University extension agent Jim LeCureux received a grant from the W.K. Kellogg Foundation to study ways to enhance the rural community through sustainable agriculture. A steering committee was formed to explore different options.

“We were looking for ways to keep farmers farming,” LeCureux explains. “We looked closely at the various crops grown in this area and the opportunities they might present.”

LeCureux and the committee worked in three Michigan counties—Huron, Tuscola and Sanilac—located in the “Thumb” region of the state. They visited other states and Canada to see new, value-added processing facilities and new-generation cooperatives working. It was in Ontario where the

committee literally stumbled on the idea they would take home to Michigan: Soybean processing.

“Based on the comments by the owner in Canada, we saw a great opportunity for a soybean extruder in the Thumb,” LeCureux says. “Soybeans grown in the Thumb are hauled to northern Indiana, northern Ohio or western Michigan [to be processed]. Soybean meal is then brought back to feed to livestock.”

The three-county area produces over 8 million bushels of soybeans per year. Livestock in this tri-county area consume over 70,000 tons of soybean meal. Examining these figures, farmers saw a way to add value to their weakening commodity prices.

By late 1996, the committee was evaluating the feasibility of a soybean processing plant in the Thumb. A series of meetings held throughout the winter months helped educate area producers and determine their interest level.

“We needed a core group of people committed to the cooperative and the ideas to move the business forward,” LeCureux says.

Oilseed Co-op launched

In early 1997, feasibility and business plans outlined the goals and objectives of the new cooperative. The steering committee also selected a name: Thumb Oilseed Producers Cooperative (TOPC). The initial stock offering was held in the spring of 1998. Becoming a member required accepting new ideas about cooperatives. Members had to provide more than spirited loyalty. They needed to put up money and guarantee delivery of a set amount of product. Two



policies distinguish this and other new-generation cooperatives from traditional marketing cooperatives: shares and delivery rights.

“Shares in a new-generation cooperative do not simply assign membership, they allocate delivery rights,” explains Bob Cropp at the University of Wisconsin Center for Cooperatives. “Each share entitles a member to deliver one unit of product to the cooperative. This represents a ‘dual contract’ — the farmer must deliver a unit for each share purchased, and the cooperative must accept and compensate the farmer



Thumb Oilseed Producers Cooperative, a Michigan new-generation co-op, projects a 15-percent return on investments to farmers who bought shares to deliver soybeans to the new processing plant in Ubly. USDA photo

for each unit delivered.”

The original stock offering was \$1,250 a share. Each share gave a producer the right and obligation to deliver 500 bushels of soybeans to the plant. By the time the offering closed, 198 people from 10 Michigan counties had invested and joined the new cooperative.

The individuals investing in Thumb Oilseed Producers Cooperative are not typical cooperative members. While

the average age of farmers in Michigan is 57, the average member of this co-op is between 30 and 40. The youngest members were only 13 and 14 when they joined.

“Our membership profile highlights the key point of this entire effort: we can’t continue farming under the existing system. We have to have more direct control of our product. These younger members know that they won’t be doing business the way their fathers

and grandfathers did business,” LeCureux explains.

In exchange, the cooperative projects that it will add value worth 40 cents per bushel more for growers than they would otherwise earn. A portion of the added value is due to “basis,” or transportation, gain because soybeans will no longer be shipped out of the area. And soybean meal will not be shipped back as feed.

One of the biggest differences



The new plant — owned by soybean and canola farmers — is producing sustainable, non-toxic and biodegradable crankcase oil and lubricants. USDA Photo by Bobbie Morrison

between the new cooperative and traditional ones is that this is a closed cooperative. Until demand increases, the cooperative will not accept new members or additional raw product. Only those farmers who have purchased delivery shares will supply product to the plant.

“The market will dictate the need for more members and more product,” LeCureux explains. “The market will dictate where the cooperative goes from here.”

Commitment is key

The key to success, LeCureux believes, will be the growers’ commitment. “The farmers have to view the cooperative as an extension of their farm, like another 80 acres to take care of,” LeCureux says.

In return, the cooperative projects a return of 15 percent on investment to its members, and the co-op plans to return 80 to 100 percent of its earnings to members each year.

Like other cooperatives, TOPC is member driven and governed. The seven-person board of directors is President John Knoerr, Sandusky; Vice President Vern Reinbold, Caro; Secretary-Treasurer Scott Krohn, Bad Axe; Scott Bernia, Akron; Rob Gerstenberger, Sandusky; Don Schulkebie, Bridgeport; and Ron McCrea, Bad Axe. The plant

manager is Bruce Knudson, and LeCureux serves as consultant and part-time chief executive officer.

Cropp lists four advantages to the delivery-share policy:

- Adequate equity capital is raised at the outset of the business.
- The burden of capitalization is distributed equitably, in proportion to the future use each member will make of the cooperative.
- Because each member is substantially invested in the business, they all have an interest in seeing it succeed.
- By selling their membership shares, exiting members may redeem their invested equity immediately — at a value that reflects the performance of the cooperative.

When members deliver beans to the plant, they receive the market price. Likewise, when they buy back soybean meal for cattle, members pay the market price. The member advantage comes in the form of value-added checks received at the end of the year. As the success of the plant and cooperative grow, the member’s equity and membership should also gain in value.

The community benefit is great, too. The new plant will employ up to seven people and become a major customer for the area electric utility. The added income generated for the farmers will also return to the community.

“Money generated as a result of increased income for farmers and new employment will benefit the entire community and its residents,” LeCureux says.

Vertical integration

Adding value to commodities after they leave the farm makes thousands of dollars. Unfortunately, farmers rarely see the extra income. LeCureux’s study found that getting producers involved in processing their product is essential to increasing farm profitability.

“The trend in agriculture is vertical integration, to capture more of the money from the processing side of the business,” LeCureux says. “By moving up the vertical ladder, we even out some of the peaks and valleys of commodity prices.”

Having a market before processing is critical to new-generation cooperatives, and is the essence of being market driven rather than supply driven.

“When the producer also becomes the processor, he gains more of the control and more of the value of his product,” LeCureux states. “Vertical integration lets the farmer become more active in moving the product from the field to the plate.”

Depressed commodity prices and dwindling government support programs make cooperatives such as Thumb Oilseed Producers Cooperative appealing to farmers. If commodity prices were strong, enthusiasm would not be as great, some say.

“If we were seeing \$8 beans and \$3 corn, we would not have as many people interested in new co-ops. But with commodity prices the way they are, the farmers want a way to generate more money from their crops,” LeCureux says.

In the long run, farmers must do something to take back more control, LeCureux says. “Government support for agricultural commodities is declining, global markets are changing, the percentage of raw agricultural products being shipped abroad is dwindling — with more being shipped as processed



food — all of which are increasing risks to farmers.

“Against this picture, we’ve decided to do something that moves us higher up the food chain to capture more of the end-product dollar,” he says. “It will also give more income stability than we can derive from fluctuating markets and provides opportunity for increased equity.”

A declaration of independence

Through the exploratory process, the TOPC group connected with a Colorado-based company that was developing a new line of vegetable-based motor oils. Agro Management Group works to develop new products while enhancing rural communities. It connects local groups and government agencies to bring in new business to rural areas. Agro Management’s use of agricultural commodities also develops new uses for old crops.

The idea and enthusiasm for the Thumb processing plant grew. Soon several local and state agencies showed interest, including USDA Rural Development. In August 1998, a declaration of support and commitment to the “Michigan Rural Development and Community Enhancement Model” was signed by leaders of private, state and federal government agencies on the campus of Michigan State University.

With the signing of this declaration, Michigan became the first state to

Since startup, plant production has been concentrated on meal and oil. But other soy products, including a soy-based drink, are being considered for the future. USDA Photos by Bobbie Morrison

participate in a commercialization project to produce an initial core product of sustainable, non-toxic and biodegradable crankcase oil and lubricants being derived from Michigan-grown soybeans and canola.

“We have a very non-conventional product to introduce to a conventional market,” said Jim Lambert, partner of Agro Management Inc. “We were looking for a non-conventional approach that met our goals and objectives.”

Donald L. Hare, state director for USDA Rural Development programs in Michigan, said the project has broad ramifications for agriculture.

“What we are signing here today will be our own declaration of independence from the strong reliance on foreign petroleum products,” Hare said at a groundbreaking ceremony for the facility. “It is also our declaration of independence from non-environmentally friendly products and a declaration of financial independence for our Michigan soybean and canola producers and their local communities.

“The Michigan model speaks to the heart of USDA Rural Development’s belief that we must find ways to assist agricultural producers in developing value-added products,” Hare added.

LLC formed

Part of the Michigan model is the formation of a limited liability company with stockholders. TOPC and Agro are 50/50 shareholders in the motor oil project. Economic development corporations from Tuscola, Huron and Sanilac counties are also equity shareholders.

Bringing the economic development corporations into the LLC fit well with the rural communities’ goals to enhance the farm economy and to support rural development. Many of the rural economic development corporations were becoming discouraged with traditional programs of bringing outside firms into the area that would, in turn, offer low-wage incomes to the residents while returning profits to stockholders far removed from the community. The counties’ shares of the profits will go into a venture capital fund to help spur more agricultural business development.

Huron County EDC Director Carl Osentoski liked what LeCureux and the group of innovative farmers were doing, and he got involved.

“Recruiting business to invest in your area is OK,” Osentoski says, “but growing local business is better. It builds a local knowledge base and



Washington D.C. media covered the end of a cross-country trip by a car using AMG 2000 soy-based lubricant, which Michigan farmers have a stake in producing. Photo courtesy Agro Management

changes the local mindset, so further economic development happens.”

Osentoski works closely with James McLoskey from Tuscola County and Richard Lessner from Sanilac County. Together, they formed the Tri-County Coalition, an equity shareholder and a financial supporter of the Michigan

model.

Offering preferred shares in the new-generation cooperative allows the community to support the project. When the cooperative is successful, it captures jobs and wealth that are shared by the community, says Wisconsin's Cropp.

“At a bare minimum, each of the three communities can net \$34,000 annually to reinvest into the community,” says Jim Lambert of Agro Management. “Each member farmer could net \$1,850 annually.”

The numbers were based on the use of the new lubricant — AMG2000 — in only 1 percent of the registered vehicles in Michigan.

“The potential is huge,” Lambert stresses. “The bare minimum numbers don't include small engine applications of the oil or other projects.”

The Michigan coalition is revolutionary in terms of sustainable agricul-

ture and rural development. The vested financial resources by communities and individual farmers to produce a value-added product are a new approach to enhancing rural communities. Even President Clinton is aware of the potential generated by such a partnership. On August 12, he issued an executive order to states to find a way to use biomass engineering to empower farmers and their communities. The people in Michigan were already working in that direction.

The Michigan Model is doing just what the President is encouraging others to do: invest in communities and local farmers. The Agro Management and TOPC partnership also includes agreements to use the co-op to process any new products developed.

The U.S. Postal Service is using AMG2000 in its Michigan fleet to evaluate the product's effectiveness. The lubricant is also used in other state-owned vehicles at Michigan State University, the Michigan Department of Agriculture (MDA) and USDA. Lambert expects to go public with it in early 2000.

USDA's commitment to co-ops

USDA strengthened its commitment to new cooperatives and farmer-owned enterprises that help generate more income for farmers. The Rural Business-Cooperative Service of USDA worked closely with LeCureux and the farmers to establish the cooperative.

“We are working with several groups of producers in the state who are looking to start their own processing cooperative,” says Jason Church, cooperative development specialist for USDA in Lansing. “We offer financial and technical resources to producers who are looking for ways to become more involved in the processing of their commodities.”

TOPC received a grant from USDA to hold meetings and conduct feasibility studies. USDA also offers co-ops help in securing loans and educational training for members.

Alfalfa growers form cooperative

Since the successful TOPC startup, farmers in Michigan's Thumb have created another cooperative — Michigan Alfalfa Processors Cooperative. In June, 8,855 shares of stock were sold to 178 producers. They purchased shares giving them the rights and obligations to deliver product to a new alfalfa cubing business.

“Shares in the cooperative sold for \$150 per acre the first 30 days they were offered. The price increased \$10 after the first 30 days,” says Jim LeCureux, MSU value-added extension agent. “We sold 90 percent of the shares in the first 30 days.”

If there was one lesson LeCureux learned from the formation of TOPC, it's that stock prices should increase over time. By increasing after 30 days, producers have an incentive to buy stock sooner. When the stock offerings were open with the oilseed cooperative, the last half of the share sold in the last four days, creating a nervous situation for the steering committee.

The alfalfa processing plant, located

in Akron, Mich., is expected to begin operations in 2000. The business expects to employ 20 people with an annual payroll over \$550,000. In addition, discussions have started with individuals and businesses interested in doing the custom harvesting and trucking. Another 10 to 15 people will be employed in this phase of the project.

“While cubing is the first step, we are currently investigating additional technology which may allow us to move into other industrial, human and animal nutritional products that will add extra value to our product,” says Chris Grekowicz, chair of the alfalfa cooperative's steering committee.

Members are in the process of electing a board of directors and hiring a plant manager. Many of the members of the alfalfa cooperative are also members of the oilseed cooperative.

“The joke around here is that for about half the cost of a good pick-up you can get involved in a cooperative,” says LeCureux. “A lot of farmers think that's a good deal.” ■

“The 1996 Farm Bill began the phase-out of farm subsidies. The alternative solution to subsidies is helping producers to be self-sufficient and self-reliant — to rely on their own efforts rather than farm subsidies,” Church explains.

The MDA also committed to the new cooperative and the development of more value-added processing facilities by opening the Office of Agricultural Development.

“The soybean oil production facility represents the coming together of the ‘new wave,’ farmer-owned cooperatives and value-added agriculture in Michigan,” says Dan Wyant, Michigan agriculture director.

Up and running

After three-and-a-half-years of planning, study and research, the TOPC processing plant extruded its first batch of soybeans.

The 900,000-gallon-capacity plant is small in comparison to others, but will meet the needs of its 198 members. The \$2.2 million plant, located in Ubly, will provide a local market for about 20,000 acres of soybeans. The plant is expected to generate a high-quality food oil and a high-energy soybean meal in addition to the lubricant.

The facility is extruding beans through heat and pressure. The natural process creates opportunity to fill a niche market in European countries where non-genetically modified organisms generate a premium. This natural process does not use hexane to separate the meal and oil. Because the natural process does not extract all the oil from the meal, livestock producers who use the meal will have to adjust their animal feed rations for its higher energy and lower protein levels.

In its start-up phase, the facility is concentrating on making meal and oil. In addition to its efforts with Agro Management, though, TOPC is working with the MSU food science department to develop a flavored, soy-based drink. The cooperative is willing to take a look at other soy-based products.

In contrast to traditional cooperatives, TOPC will remain focused on processing soybeans. It has no interest in broadening out to other commodities or services.

That does not mean there is not an opportunity for other commodities to join the new cooperative movement. On the contrary, LeCureux is already working with some alfalfa growers who want to build an alfalfa-processing facility. Around the state, several other new-generation cooperatives are in their preliminary stages of development.

“This type of cooperative will work for any commodity. There may even be more than one fit for the commodity,” LeCureux states.

He has taken his new-generation cooperative mission throughout the state. The Innovative Farmers of Huron County has changed its name to the Innovative Farmers of Michigan. LeCureux’s position at MSU Extension was changed to reflect his new efforts. He is now the value-added agent for the state, working with groups around Michigan that want to start new cooperatives and value-added processing facilities.

LeCureux and Church have worked with other commodity groups, conducting feasibility studies and producer surveys. Some the groups exploring their options include turkey growers, who recently lost their processing facility when the company left the state; beef cattle producers; apple growers; blueberry growers; and maple syrup producers.

Editor’s note: Laura Moser is an agricultural writer based in Williamston, Michigan. ■

Factors for co-op success

George Sinner, former governor of North Dakota and a long-time organizer of new-generation cooperatives, offers the following recommendations for developing a successful new cooperative:

1. Farmers need to make significant investments in order to secure an appropriately sized plant and the proper equipment.
2. A dual contract must commit the farmer to specific deliveries and the co-op must accept those deliveries. This offers stability to both the members and the cooperative.
3. Professionalism is required on the part of farmer-members, directors and the hired management team.
4. The cooperative must be knowledgeable about its customers and about the marketplace in general. The value-added product chosen and the facilities needed to produce it must be based on accurate measurements of demand for that product, and the cooperative must be willing to adjust quickly to changes in the marketplace.
5. A new-generation cooperative must be large enough to meet the needs of its buyers and to match or beat the prices and the quality of its competitors’ products. In a small niche market, the cooperative may be on a small or moderate scale, as long as it’s large enough to compete effectively within that niche.
6. Most, if not all, of the profits from the cooperative must be returned to its members as cash at the end of each fiscal year. This is necessary to keep members interested in and committed to the cooperative. If capital is needed for expansion, the board and management must make the case for expansion and offer new shares to pay for it. ■



Bottom line continued to rise in '98 for large corn-soybean and wheat-barley co-ops

By David Cummins,
Agricultural Economist
USDA Rural Development

Net savings averaged higher in 1998 than a year earlier for large local grain co-ops in the Corn Belt and Pacific Northwest, despite substantially lower prices received and higher operating expenses.

Major income boosters included increased farm supply sales and margins, service revenue and non-operating income. The latter two income sources were particularly important in the Pacific Northwest (where wheat-barley co-ops predominate). Significantly larger grain volumes marketed by these large grain locals in 1998 more than offset 21-percent lower grain prices.

This was not the situation for large grain locals in the Corn Belt, where corn-soybean co-ops are most common. In the Corn Belt, grain dollar sales were slightly lower, even though marketings averaged 15 percent higher.

For medium-sized grain locals, the bottom line was about 8 percent lower in the Corn Belt, still respectable, but plummeted nearly 80 percent in the Pacific Northwest. Grain marketings were up in both areas, but not nearly enough to compensate for lower prices. This was particularly the case for the medium-sized wheat-barley co-ops, where grain sales and grain margins were off 8 percent and 13 percent, respectively.

Loss rates for the medium-sized co-ops in 1998 were about double 1997's rates, from 6 percent to 12 percent in



Net savings were generally higher for large corn-soybean co-ops in the Corn Belt in 1998. USDA photo

the Corn Belt and from 12 percent to 29 percent in the Pacific Northwest. In contrast, comparable loss rates for the large locals were 7 percent to 3 percent and 6 percent to zero, respectively.

Total assets and member equity averages were higher across the board. Except for the large wheat-barley co-ops, member equity was a larger percentage of total assets in 1998 than in 1997.

Benchmarking your co-op

Benchmarks are common in business management to measure how well your cooperative is performing. However, such figures don't reveal how your cooperative compares with others.

If your cooperative is primarily a first-handler of wheat and barley or of corn and soybeans, comparative data for 1998 are now available. Tables 1 and 2 contain average financial and structural data compiled from a survey of Pacific Northwest and Corn Belt cooperatives marketing wheat and barley and corn and soybeans, respectively.

Most cooperatives in the study were diversified, also handling farm supplies and providing related services. Fill in the blanks and see how yours measures up. ■

Table 1 - Compare your corn-soybean cooperative with averages for similar cooperative operations

Group/Item	Total sales group (million dollars)					Your Cooperative
	Unit	5-14.9 (1997 Data)	15 or more (1997 Data)	5-14.9 (1998 Data)	15 or more (1998 Data)	
Storage capacity	Million Bu.	1.121	4.690	1.288	5.471	_____
Grain marketed	Million Bu.	1.804	7.899	2.013	9.079	_____
Turnover rate	Times	1.61	1.68	1.56	1.66	_____
Proportion grain	Percent	74.8	73.3	75.9	71.0	_____
Total assets	Million \$	3.078	14.208	3.448	16.086	_____
Long-term debt 1/	Percent	6.2	11.3	6.7	12.5	_____
Member equity 1/	Percent	59.0	45.4	60.1	47.3	_____
Total sales	Million \$	10.186	43.774	9.712	44.633	_____
Margins on sales	Million \$	.565	2.784	.573	3.206	_____
Total expenses	Million \$	.812	3.702	.859	4.364	_____
Net savings (losses)	Million \$	.188	.807	.174	.909	_____
Labor of total expenses	Percent	45.5	44.9	44.7	46.2	_____
Net savings paid in cash 2/	Percent	34.2	32.4	34.5	33.7	_____
Current ratio	Number	1.51	1.21	1.48	1.24	_____
Debt/assets	Ratio	.14	.24	.15	.20	_____
Net savings(loss)/tot. sales	Percent	1.8	1.8	1.8	2.0	_____
Gross margins/total sales	Percent	5.5	6.4	5.9	7.2	_____

1/ Of total liabilities and member equity.

2/ Of total patronage allocation.

Table 2 - Compare your wheat-barley cooperative with averages for similar cooperative operations

Group/Item	Total sales group (million dollars)					Your Cooperative
	Unit	5-14.9 (1997 Data)	15 or more (1997 Data)	5-14.9 (1998 Data)	15 or more (1998 Data)	
Storage capacity	Million Bu.	3.322	7.776	4.344	8.932	_____
Grain marketed	Million Bu.	2.422	7.734	3.036	9.945	_____
Turnover rate	Times	.73	.99	.70	1.11	_____
Proportion grain	Percent	96.3	85.9	93.0	81.9	_____
Total assets	Million \$	2.496	9.150	2.702	12.732	_____
Long-term debt1/	Percent	5.7	6.5	1.1	6.2	_____
Member equity1/	Percent	77.5	63.8	89.6	58.7	_____
Total sales	Million \$	10.878	38.211	10.381	40.813	_____
Margins on sales	Million \$	.261	1.481	.226	1.972	_____
Total expenses	Million \$	.693	2.842	.784	3.994	_____
Net savings (losses)	Million \$	.108	.662	.022	.849	_____
Labor of total expenses	Percent	48.6	46.4	45.9	44.6	_____
Net savings paid in cash2/	Percent	50.5	29.5	---	40.3	_____
Current ratio	Number	2.29	1.69	4.46	1.42	_____
Debt/assets	Ratio	.16	.16	.04	.16	_____
Net savings(loss)/tot. sales	Percent	1.0	1.7	0.2	2.1	_____
Gross margins/total sales	Percent	2.4	3.9	2.2	4.8	_____

1/ Of total liabilities and member equity.

2/ Of total patronage allocation.



Plains co-ops experience ups and downs in 1998

By David Cummins,
Agricultural Economist
USDA Rural Development

Record-high sales levels set in 1997 slipped in 1998 for first-handlers of grain in the Northern Plains, where wheat-barley-oats co-ops are prevalent. Grain volumes were up, but prices continued their downward slide, resulting in lower grain revenue. Farm supply sales also were lower, particularly for large grain co-ops.

Once again, large grain co-ops in the Northern Plains fared better in 1998 than did medium-sized co-ops. Despite declines in net savings of 17 percent and 27 percent, respectively, net savings in 1998 averaged 91 percent of the most recent five-year average for the large co-ops compared with 51 percent for the medium-sized co-ops. For the large grain co-ops, gross income was about the same in both years, but total operating expenses averaged about 5 percent higher. Increases in grain margins and non-operating income essentially offset decreases in farm supply margins and service income.

For medium-sized co-ops, gross income averaged over 7 percent higher in 1998, but total operating expenses were up nearly 14 percent. Increases in grain margins (31 percent), service revenue (15 percent) and non-operating income (6 percent) more than offset the 23-percent-lower supply margins.

Eleven percent of the large grain

co-ops reported small losses for 1998, while 17 percent would have incurred a loss (averaging nearly \$60,000 per co-op) if it hadn't been for patronage income received from other co-ops. Nearly 23 percent of the medium-sized co-ops had losses, averaging over \$114,000 per co-op. Another 23 percent would have had losses (averaging about \$89,000 per co-op) if it hadn't been for patronage income.

Southern Plains co-ops

The Southern Plains wheat-sorghum co-ops set record-highs in 1998. Net savings for the large grain co-ops averaged \$842,467, nearly 28 percent higher than a year-earlier. Net savings for the medium-sized co-ops averaged \$262,269, over 37 percent higher than in 1997. Increases in service revenue and grain margins were key factors for both large-and medium-sized co-ops. Despite substantially lower grain prices in 1998, grain volumes marketed were up 11 to 12 percent. That resulted in grain sales averaging about three percent lower for large co-ops and about two percent higher for medium-sized co-ops.

The incidence of losses among wheat-sorghum co-ops was low (about 2 percent) compared with that in the Northern Plains (18 percent). No losses were reported by the large co-ops. Overall, fewer than 5 percent of the co-ops would have had losses if it had not been for patronage income received from other co-ops.

Adjustments by producers to weather conditions and changing relative prices in 1998 were reflected in the proportion of grains marketed by their co-ops. There was a general shift from grain sorghum to wheat by the medium-sized and large co-ops in the Southern Plains, and also to corn by the large co-ops. The major shift for the Northern Plains wheat-barley-oats co-ops was by the large ones, away from wheat and towards "other crops" (mainly oats, sunflowers and rye), a trend that began in the mid-1990s.

How does your co-op measure up?

Benchmarks are common in business management to measure how well your cooperative is performing. However, such figures don't reveal how your cooperative compares with others.

If your cooperative is primarily a first-handler of wheat and sorghum or of wheat, barley and oats as its major function, comparative data for 1998 are now available. Tables 3 and 4 contain average financial and structural data compiled from a survey of Southern Plains and Northern Plains cooperatives marketing wheat and grain sorghum and wheat, barley and oats, respectively. Most cooperatives in the study were diversified, also handling farm supplies and providing related services. Fill in the blanks for your cooperative and see how it measures up. ■

Table 3 - Compare your wheat-barley-oats cooperative with averages for similar cooperative operations

Group/Item	Total sales group (million dollars)				Your Cooperative	
	Unit	5-14.9 (1997 Data)	15 or more (1997 Data)	5-14.9 (1998 Data)		15 or more (1998 Data)
Storage capacity	Million Bu.	.613	1.772	.661	1.843	_____
Grain marketed	Million Bu.	1.814	6.423	1.888	6.768	_____
Turnover rate	Times	2.96	3.62	2.86	3.67	_____
Proportion grain	Percent	79.4	82.1	79.0	84.6	_____
Total assets	Million \$	2.776	11.941	3.068	12.611	_____
Long-term debt1/	Percent	4.4	6.5	7.5	6.9	_____
Member equity1/	Percent	49.1	40.4	46.5	41.6	_____
Total sales	Million \$	8.704	28.798	8.430	26.573	_____
Margins on sales	Million \$	.415	1.690	.436	1.740	_____
Total expenses	Million \$	.522	1.850	.593	1.940	_____
Net savings (losses)	Million \$	.097	.555	.070	.462	_____
Labor of total expenses	Percent	43.8	45.4	43.7	45.3	_____
Net savings paid in cash2/	Percent	34.5	28.3	36.9	29.0	_____
Current ratio	Number	1.35	1.18	1.33	1.17	_____
Debt/assets	Ratio	.09	.13	.11	.11	_____
Net savings(loss)/tot. sales	Percent	1.1	1.9	0.8	1.7	_____
Gross margins/total sales	Percent	4.8	5.9	5.2	6.5	_____

1/ Of total liabilities and member equity.

2/ Of total patronage allocation.

Table 4 - Compare your wheat-sorghum cooperative with averages for similar cooperative operations

Group/Item	Total sales group (million dollars)				Your Cooperative	
	Unit	5-14.9 (1997 Data)	15 or more (1997 Data)	5-14.9 (1998 Data)		15 or more (1998 Data)
Storage capacity	Million Bu.	1.691	4.019	1.782	4.478	_____
Grain marketed	Million Bu.	1.883	5.972	2.098	6.672	_____
Turnover rate	Times	1.11	1.49	1.18	1.49	_____
Proportion grain	Percent	67.9	68.8	67.6	67.3	_____
Total assets	Million \$	3.355	9.837	3.585	11.225	_____
Long-term debt 1/	Percent	6.3	6.2	6.6	8.0	_____
Member equity 1/	Percent	64.3	53.3	63.0	54.8	_____
Total sales	Million \$	9.207	30.199	9.385	30.018	_____
Margins on sales	Million \$	.763	2.306	.847	2.634	_____
Total expenses	Million \$	.994	3.064	1.151	3.401	_____
Net savings (losses)	Million \$	.191	.661	.262	.842	_____
Labor of total expenses	Percent	47.0	46.5	47.8	46.8	_____
Net savings paid in cash 2/	Percent	37.1	32.6	38.4	34.5	_____
Current ratio	Number	1.69	1.31	1.60	1.41	_____
Debt/assets	Ratio	.19	.24	.17	.24	_____
Net savings(loss)/tot. sales	Percent	2.1	2.2	2.8	2.8	_____
Gross margins/total sales	Percent	8.3	7.6	9.0	8.8	_____

1/ Of total liabilities and member equity.

2/ Of total patronage allocation.

Sales rebound for largest farmer co-ops, but net margins decline

By David S. Chesnick,
Agricultural Economist
USDA Rural Development

Mergers and consolidations continue to dominate the cooperative landscape. The reasons behind each are varied; however, cooperative leaders are continually searching for ways in which their organizations can serve a changing membership through cost-effective services. And while some of the mergers paid dividends this past year, others have not yet reached their potential. Let's review the statistics behind the performance of this changing cooperative landscape.

The largest cooperatives posted a 2.4-percent increase in sales. Sales revenue for the largest 100 agriculture cooperatives ranged from \$68 million to \$8.8 billion. The top five cooperatives contributed 48 percent of total sales in 1998, up from 46 percent in 1997. Combined sales for all 100 of the largest cooperatives totaled \$67.9 billion (table 1). However, not all cooperatives experienced higher sales in 1998. Only 45 out of the top 100 cooperatives had an increase in sales, and 58 percent of that increase was attributed to a single cooperative.

Higher sales show promise

Figure 1 illustrates the source for the combined revenues of the largest agricultural cooperatives. Marketing revenue jumped 8.6 percent to \$51.1 billion. Yet this increase should be taken with a grain of salt. Most of it was due to the push of one industry — dairy (table 2). After showing tremendous growth throughout the mid-1990s,

farm supply sales fell dramatically in 1998. Combined farm supply sales for all cooperatives fell \$2.4 billion to end the year at \$16.8 billion. Leading the decline was petroleum, which accounted for more than half of the total drop in sales of farm supplies. Declines in fertilizer and feed sales were other major contributors. Only seed sales showed increases.

Dairy cooperatives were heavily involved in consolidation activities these past few years. These consolidations proved beneficial, with total sales jumping 29 percent to \$18.1 billion in 1998. This was the only industry with significant gains in sales.

Grain cooperatives, on the other hand, experienced higher volumes of grain that put downward pressure on prices. Yet the increase in volume was not enough to offset the decline in prices, pushing sales down seven percent from 1997 to \$4.1 billion in 1998. Farm supply sales for grain cooperatives fell three percent to \$2.3 billion, dropping total sales to \$6.3 billion, a 6-percent decrease.

Poultry and livestock cooperatives also felt the pressure of lower prices. Sales of these commodities dropped by 19 percent to \$499 million. Rice cooperatives saw mixed results. Strong prices early for some varieties of rice showed promise. However, later in the year, rice cooperatives ended up with heavy stocks pushing down prices for other varieties. Over all, rice cooperatives ended the year with total marketing sales of \$1.2 billion, down four percent from 1997.

Sales for cotton, sugar and fruit & vegetable cooperatives held relatively steady during 1998. Cotton prices were

down slightly while quantity sold increased, leaving sales up 0.1 percent at \$2.6 billion. Fruit & vegetable sales were mixed with fruit prices up and vegetable prices down. The net result brought total sales for fruit & vegetable cooperatives down 0.4 percent, ending 1998 with \$6.4 billion in sales. Sugar sales were up one percent to \$1.1 billion.

Diversified cooperatives increased their marketing sales, but a decline in their farm supply sales pulled total sales revenue down one percent to \$17.2 billion. Total sales for the farm supply commodity group followed the overall trend of farm supply sales and dropped 11 percent to \$14.6 billion.

Other operating income for the largest agriculture cooperatives was down 3.7 percent to \$620 million. Other operating income usually consists of services associated with storage, hauling, and handling member's products, and spraying, spreading, and scouting members' fields. Most commodity groups had declining service revenue. The exceptions were farm supply and sugar cooperatives; these two groups had a combined increase in service revenues of \$25 million.

Cost of goods sold for the largest agriculture cooperatives was \$62.2 billion in 1998, an increase of 2.4 percent. The change in cost of goods sold closely followed the change in sales for each commodity group. Yet the net effect on gross margins was an increase of three percent. Cost of goods sold increased by \$1.4 billion compared to an increase of \$1.6 billion for total operating revenues. Gross margins for all of the largest cooperatives increased \$181 million to end 1998 at \$6.3 billion.

Gross margins for cotton, dairy, fruit

& vegetable, grain, and sugar cooperatives all increased. The surprising group was grain cooperatives. Despite lower sales revenue, gross margins were up 20 percent, reaching \$486 million — the highest gross margin in five years. Gross margins for sugar cooperatives also hit a five-year high, ending 1998 up five percent at \$262 million. Dairy cooperatives had the second highest percentage increase of 19 percent, ending the year at \$1.1 billion. The cotton and fruit & vegetable co-ops each increased, at 10 percent and 4 percent, respectively, to end the year with gross margins of \$183 million and \$1.7 billion.

Conversely, farm supply and diversified cooperatives hit their lowest gross margins in the five-year period. Farm supply cooperatives' gross margins dropped nine percent to \$909 million, while diversified cooperatives fell five percent to \$1.3 billion. The poultry and livestock and rice co-ops also had lower gross margins. Poultry and livestock margins fell 10 percent, to \$15 million, while rice margins dropped 1 percent, to \$328 million.

Expenses jump

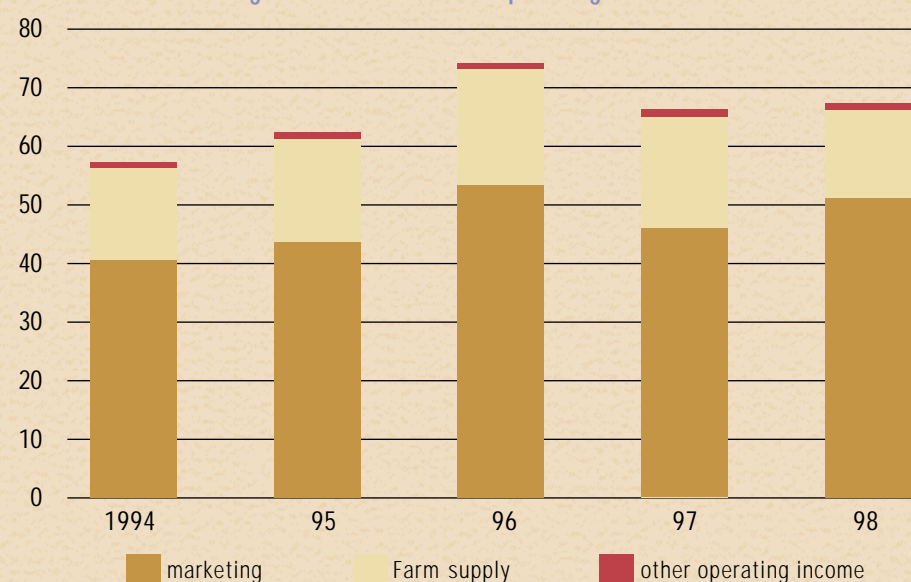
Operational efficiencies gained in 1997 did not carry over to 1998. Operating expenses for all the largest agricultural cooperatives jumped 7.2 percent to \$5.3 billion in 1998. The increase more than offset any gains made in gross margins, and the net effect pushed down net operating margins by \$176 million — a 15-percent drop. Wages were not the same driving factor in increased operating expenses as they were in 1997. In 1998, labor expenses increased only 3 percent.

All commodity groups experienced at least some increase in expenses relating to operations. However, some groups overcame the increases. Cotton, dairy, and grain cooperatives had enough gain in their gross margins to absorb increases in expenses. These cooperatives ended the year with higher net operating margins, reversing the

Table 1—Consolidated Statement of Operations, 1997-98, Top 100 Cooperatives

Operating Statement	1998	1997	Difference	% Change
	Thousand Dollars			
Change Revenues				
Marketing	51,135,466	47,077,126	4,058,340	8.62
Farm Supply	16,760,654	19,175,428	(2,414,774)	(12.59)
Total Sales	67,896,120	66,252,554	1,643,566	2.48
Other Operating Revenues	620,499	644,696	(24,197)	(3.75)
Total Operating Revenues	68,516,619	66,897,250	1,619,369	2.42
Cost of Goods Sold	62,232,480	60,794,107	1,438,373	2.37
Gross Margin	6,284,139	6,103,143	180,996	2.97
Expenses				
Operating Expenses	5,299,150	4,942,304	356,846	7.22
Net Operating Margins	984,989	1,160,839	(175,850)	(15.15)
Other Revenues (Expenses)				
Interest Expense	(594,458)	(527,142)	(67,316)	12.77
Interest Revenue	103,771	119,415	(15,644)	(13.10)
Other Income	342,517	181,499	161,018	88.72
Other Expenses	(68,555)	(35,218)	(33,337)	94.66
Patronage Revenue	96,057	282,511	(186,454)	(66.00)
Net Margins from Operations	864,321	1,181,904	(317,583)	(26.87)
Non-Operating Revenue (Expenses)	(12,066)	10,331	(22,397)	(216.79)
Net Margins	852,255	1,192,235	(339,980)	(28.52)
Distribution of Net Margins				
Cash Patronage Dividends	278,491	371,889	(93,398)	(25.11)
Retain Patronage Dividends	379,280	514,252	(134,972)	(26.25)
Nonqualified Noncash Patronage Dividends	20,115	31,083	(10,968)	(35.29)
Unallocated Equity	38,486	27,310	11,176	40.92
Income Tax	56,974	112,465	(55,491)	(49.34)
Total Distribution	78,909	135,236	(56,327)	(41.65)
Total Distribution	852,255	1,192,235	(339,980)	(28.52)

Figure 1—Sources of Operating Revenue



Prior years restated

decline witnessed in the past few years. Net operating margins for grain cooperatives increased a healthy 108 percent, \$90 million at the end of 1998. Cotton cooperatives net operating margins increased five percent to \$78 million, while dairy cooperatives jumped 28 percent to \$216 million during the same period.

Diversified, farm supply and rice cooperatives compounded their problems with both lower gross margins and higher operating expenses. The five-percent increase in operating expenses, along with a decrease in gross margins, produced a 46-percent decline in net operating margins for diversified cooperatives. These cooperatives ended the year with net operating margins of \$146 million, the lowest amount in five years. Farm supply cooperatives also ended the period with five-year lows in net operating margins. Higher labor expenses for farm supply cooperatives pushed operating expenses to their highest levels in the five-year period. As a result, net operating margins dropped 35 percent to \$230 million. Meanwhile, net operating margins for rice cooperatives fell 14 percent to \$32 million.

Poultry and livestock cooperatives were the only groups that lowered their operating expenses. These cooperatives lowered operating expenses 0.2 percent from their highest level in 1997. However, as a group, poultry and livestock cooperatives still had operating losses of nearly \$3 million.

Other income and expenses lower net margins

Income and expenses indirectly related to the day-to-day operations fall into the category of "other income and expenses." These include interest income and expense, gains/losses on the sale of equipment, patronage refunds from other cooperatives, and any other income/expense not related directly to operations. These other incomes and expenses often relate to financing and investing activities of the cooperative.

After abating in 1997, total debt levels jumped six percent in 1998. This increase in debt caused interest expenses to jump 13 percent to \$594 million, the highest level in five years. Most of the increases in interest expenses occurred in the dairy, diversified and farm supply cooperatives. Grain, poultry and livestock, and fruit & vegetable cooperatives also paid more for interest in 1998, but those expenses did not increase by the magnitude of the aforementioned cooperatives. On the other hand, cotton, rice and sugar cooperatives lowered their interest expenses.

Interest earned on member accounts and earnings from finance subsidiaries are generally accounted for as interest income. Interest income decreased 13 percent from 1997 to \$104 million. This decline was due mostly to a single cooperative, which substantially lowered its investment balances. The excess cash generated from the sale was used for capital expenditures. Excluding that one cooperative, the total balance of interest income remained fairly constant in all cooperative categories.

Other income/expenses represents earnings or losses associated with the operations of joint ventures or unconsolidated subsidiaries. This income is usually indirectly related to operations. Along with increased merger activities, joint ventures with other cooperatives and investor-oriented firms are more popular among the largest cooperatives. This is evident by increases in revenues in this area. Income from these other activities jumped 87 percent to end the year at \$274 million, up from \$146 million in 1997. Most of this increase, however, was the result of two cooperatives, which accounted for 81 percent of the overall change.

With net margins as a percent of total revenues running at 1.2 percent, patronage refunds from other cooperatives can play a crucial role in determining whether a cooperative shows a gain or a loss. Seven cooperatives would have had a loss without patronage refunds, up from six in 1997. Generally, cooperatives cannot influence the amount

of patronage they receive each year and they should rely on their own operations and not others to generate margins.

Patronage refunds from other cooperatives fell to their lowest level in the past five years. They dropped 66 percent to \$96 million. The diversified and farm supply cooperatives were the hardest hit and accounted for nearly 95 percent of the \$186 million decline. All the other commodity groups changed little from 1997. On a bright note, none of the diversified and farm supply cooperatives needed the patronage refund to salvage a loss on their operations.

The net result of all these changes lowered net margins from operations. Net margins from operations fell 27 percent to reach a five-year low of \$864 million. While nearly half of the top agriculture cooperatives showed a decline, most of the drop was attributed to a few cooperatives in the diversified and farm supply sectors.

Overall, the revenues generated from sales increased for the combined top 100 cooperatives. However, cost of goods sold and operating expenses more than offset any gains in sales revenues. Higher interest expenses coupled with lower patronage refunds eliminated the gains made from joint ventures and unconsolidated subsidiaries. The summation of all these operations, along with a drop of \$22 million in non-operating revenues, produced a \$340-million drop in net margins. The largest cooperatives ended the year with net margins totaling \$864 million. This is the lowest amount in the past five years.

Distribution of net margins

The top 100 cooperatives have long maintained a tradition of strong patronage refund practices. Despite lower net margins in 1998, the largest cooperatives allocated a higher percent of their earnings to members in the form of cash, qualified non-cash, and non-qualified non-cash patronage refunds. In 1998, cooperatives allocated 80 percent (\$678 million) of their net margins, compared to 77 percent (\$917

million) in 1997. Members received \$278 million in cash payments in 1998. This represented 42 percent of allocated equity, the same percentage as in 1997, which saw \$372 million paid out in cash. Non-qualified non-cash patronage refunds fell 35 percent to \$20 million in 1998. Only four cooperatives used non-qualified refunds in 1998, down from seven in 1997.

A small number of cooperatives also distributed cash dividends on stock issued to members. Cooperatives paid out a record amount of these dividends in 1998. The dividends amounted to \$38 million and represented five percent of total distributions in 1998. In 1997, \$27 million was paid out in these dividends, which represented two percent of total distributions.

Most cooperatives retain a portion of their net margins as unallocated

reserves. These reserves provide a source of growth capital for the cooperatives, a cushion for members' allocated equities in the event of a loss and a bonus to members from non-member business. The amount of unallocated equity fell 49 percent to \$57 million. Distributions to unallocated equity represented seven percent of net margins. This was the lowest amount in the last five years.

Interestingly, 11 cooperatives allocated more net margins to their members than they generated. These margins were taken out of the unallocated account.

The largest cooperatives paid \$79 million in federal, state, and local income taxes in 1998, down 42 percent. This was the lowest amount paid in the last five years. However, excluding the qualified allocated equity, cooperatives paid an average tax rate of 41 percent on their taxable income. This was down

from 44 percent in 1997.

Industry Summary

Cotton cooperatives had an 11-percent increase in their net margins (table 3). The increase was not fueled by any major change. Rather, it was the cumulative effect of small changes in revenues and expenses which produced a \$6 million increase in their bottom lines.

Dairy cooperatives were able to enjoy the fruits of their consolidations, which pushed up revenues tremendously while keeping costs in line with the added revenues. Yet, what really helped were the joint ventures and unconsolidated businesses. The \$91 million increase in these facets of the dairy business played a big part in the \$110 million increase in net margins.

Diversified cooperatives took a major hit to their bottom lines. The decline in revenues was greater than the decline in the cost of goods sold. Combining that with a jump in operating and interest expenses, provides the setting for an 84-percent drop in net margins. At \$44 million, net margins reached the lowest level in five years.

Fruit & vegetable cooperatives did not have any major changes to their operations. However, the cumulative effect of a small decrease in sales and slightly higher operating expenses pushed their net margins down 20 percent to \$77 million.

Farm supply cooperatives also took a major hit to their bottom lines. Declining sales, higher expenses, and lower patronage refunds received from other cooperatives pushed down net margins 51 percent to \$248 million. This is the lowest amount in five years.

Grain cooperatives lowered their cost of goods sold in order to cover rising expenses. Unconsolidated businesses and joint ventures also proved to be helpful in fortifying their bottom lines. Their combined operations pushed up net margins \$45 million, an increase of 104 percent from the five-year low in 1997.

Poultry and livestock cooperatives typically operate on low margins.

Table 2—Total Operating Revenue by Commodity Group, 1997-98, Top 100 Cooperatives

	Total Revenues		Percent Difference	Change
	1998	1997		
cotton	2,576,090	2,570,431	5,659	0.2
dairy	18,112,007	14,067,370	4,044,637	28.8
diversified	17,453,481	17,581,079	(127,598)	(0.7)
fruit & vegetable	6,459,822	6,500,802	(40,980)	(0.6)
farm supply	14,653,090	16,372,659	(1,719,569)	(10.5)
grain	6,466,435	6,859,572	(393,137)	(5.7)
poultry & livestock	504,064	619,533	(115,469)	(18.6)
rice	1,173,017	1,229,844	(56,827)	(4.6)
sugar	1,118,613	1,095,960	22,653	2.1
In \$1,000				

Table 3—Net Margins by Commodity Group, 1997-98, Top 100 Cooperatives

	Net Margins		Difference	Percent Change
	1998	1997		
cotton	63,380	57,105	6,275	11.0
dairy	318,309	207,889	110,420	53.1
diversified	43,981	273,665	(229,684)	(83.9)
fruit & vegetable	77,002	95,966	(18,964)	(19.8)
farm supply	248,420	505,690	(257,270)	(50.9)
grain	87,562	42,863	44,699	104.3
poultry & livestock	45	1,333	(1,288)	(96.6)
rice	21,042	19,422	1,620	8.3
sugar	(7,486)	(11,698)	4,212	(36.0)
In \$1,000				

However, 1998 margins proved to be even slimmer than usual. Operations lost nearly \$3 million. Interest income and patronage refunds were enough to overcome operating losses so this sector could end the year with \$45,000 in net margins. This was down 97 percent from the 1997 five-year high of \$1 million.

Farm Supply Cooperatives from page 8

more allocated savings.

The debt ratio has a slight downward turn, one-tenth of a percentage point. Total assets increased 6.8 percent and short-term debt decreased 4.3 percent. Reducing debt, increasing savings, or financing a greater portion of assets with working capital could improve this ratio.

Times interest earned rebounded in 1997 after a deep slide from 1993 to 1996. In 1993, this ratio reached an all-time high. In 1996, it was at an all-time low. The ratio went from 4.96 in 1997 to 4.72 in 1998. When this ratio is more than one, it indicates the ability of current earnings to pay current interest expenses. Lending institutions are more apt to lend money to cooperatives in such cases. Subsequently, a bank may lend funds for capital improvements more readily at lower interest rates. This ratio could be improved by collecting old receivables, improving inventory turnover, disposing of assets and using proceeds to reduce debt, or reducing debt with working capital.

Activity ratios are used to reflect a cooperative's condition. A high ratio usually indicates aging and nearly depreciated fixed assets, or the leasing of property and equipment. The fixed asset turnover was 9.01 in 1997 and 7.66 in 1998. Net investments in fixed assets and total sales are the two main factors in this ratio. Fixed assets investments were up by 12.2 percent and total sales were down by 4.7 percent.

The total asset turnover ratio also took a slight downturn in 1998. In 1997, the ratio was 2.39. In 1998, it slid

Rice cooperatives reached their highest net margins in five years. While sales and operating margins were lower in 1998, rice cooperatives lowered interest payments by decreasing debt levels. The result was an eight-percent increase in net margins to \$21 million.

Finally, the sugar cooperative sector

slightly to 2.13. This ratio is similar to the fixed asset turnover ratio. One element of this ratio increased (total assets) and the other decreased (total sales).


Gross profit margins is a profitability ratio. In 1998, the ratio was 10.12 percent, and in 1997, it was 10.99 percent. Both total sales (-4.7 percent) and cost of goods sold (-5.6 percent) were down for the two-year period. As a proportion, cost of goods represented 89 percent in 1998. This is only one percentage point away from 1997's ratio.

Another profitability ratio is return-on-total-asset, which measures cooperative performance and is not sensitive to the leverage position of the cooperative. This ratio includes net savings before interest and income tax and total assets. Return-on-total-asset took a sharp turn in 1998. Although total assets increased 6.8 percent, net savings were down 9.0 percent. In the previous two-year period, 1997 total assets were up 2.3 percent over 1996 levels. Net savings during this period were up 7.3 percent. Within the last 10 years, this ratio was highest in 1997.

Return-on-total-equity was also down to 10.02 in 1998. Elements of this ratio are net savings and total equity. As stated before, net savings were down nine percent while total equity was up 8.8 percent. This ratio measures profitability and is an important measure of the amount of debt capital. Return-on-total-equity and return-on-total-assets are best examined together because they could move positively as a decrease in financial leverage or negatively as a symptom of low-investment adequacy. ■

ended the year with a net loss. However, much of the loss was the result of non-member business. Interest expenses continued to eat up operating margins. Net losses for 1998 stood at \$7 million. ■

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Farmland/Cenex merger fails

Members of Farmland Industries, Kansas City, Mo., and Cenex Harvest States Cooperatives, Inver Grove Heights, Minn., voted November 23 on the unification of the two cooperatives into United Country Brands. Farmland members approved the consolidation, with 89 percent voting in favor. The Cenex Harvest States vote fell just short of the two-thirds needed, at 64 percent. Leaders of the cooperatives said the results do indicate, however, that the majority of members want the organizations to work more closely together. Cenex Harvest States CEO Noel Estenson said his organization would take time to analyze the concerns raised by members before determining how to proceed.

In a ruling right after the failed consolidation vote, Farmland Industries won its 16-year battle with the IRS when the U.S. Tax Court rejected the agency's claim that the cooperative owed approximately \$1 billion in back taxes. Some Cenex Harvest States members had reported concerns over the pending litigation at the time they were asked to vote on the consolidation. Since the failed vote and subsequent court ruling in favor of Farmland, both Estenson and Farmland CEO H.D. "Harry" Cleberg have reported to members and the media that a second consolidation vote was still being considered by both organizations' boards of directors.

Heartland Co-op returns 100 percent patronage refund

Heartland Cooperative, West Des Moines, Iowa, handed out 1,600 checks totaling \$950,000 in patronage refunds

this fall. The average check was about \$625. CEO Larry Petersen said the co-op's directors decided to return all patronage to members because of the poor farm economy. "We hope the extra cash can be used by our member-owners to ease the financial stress in farming today," he explained. The 100 percent cash payment is a one-year deal. Future decisions by the directors will depend on the agricultural economy. Heartland offers grain marketing, agronomy, feed, petroleum and precision farming products and services for farmers.

Agri-Mark invests in whey project

Agri-Mark Inc. directors approved an \$18.7 million whey processing addition to its Middlebury, Vt., Cheddar plant. The new process will allow the cooperative to manufacture by-products from its Middlebury and Cabot, Vt., plants into protein concentrates, whole whey, whey permeate and condensed whey. The new project will not interfere with a lactoferrin (iron-binding whey protein) system already in place at Middlebury.

Dairy leaders honored at Expo

Cooperative leaders were among the honorees at World Dairy Expo, the industry's premier event held in Madison, Wis. Dairy Woman of the Year was Deanna Stamp, Marlette, Mich., and a member of Michigan Milk Producers Association. Roger L. Ripley, CEO of Accelerated Genetics, Baraboo, Wis., was Industry Person of the Year. Other honorees included Niles and Elmo Wendorf Jr., Ixonia, Wis., Dairymen of the Year; and Holger Moritz Hansen, Pilegarden, Denmark, International Person of the Year. The

awards go to dedicated individuals in the global dairy industry, paying tribute to cattle marketers, breeders and leaders.

Co-op Month recognition

During the Congressional Cooperative Observance and Awards Ceremony at the U.S. Capitol in October, House and Senate members joined the cooperative community for the presentation of two awards. The first was the Statesman Award presented to Sen. Thad Cochran (R-Miss.) and Rep. David Obey (D-Wis.) for contributions in public policy leadership in support of cooperatives. The second award was the Economic Freedom Award presented to Carl Terry Frederickson, AgriBank, and Allen Thurgood, 1st Rochdale Cooperative, for political and social advocacy leadership. (In addition, Thurgood was recently appointed to the Consumer Federation of America's Utility Restructuring Committee.)

National Cooperative Month is organized, funded, and conducted by 17 organizations. David Graves, president, National Council of Farmer Cooperatives, chaired the 1999 planning committee. Others involved were ACDI/VOCA, Cooperative Housing Foundation, Cooperative Development Foundation, Credit Union National Association, Farm Credit Council, National Association of Federal Credit Unions, National Association of Housing Cooperatives, National Cooperative Bank, National Cooperative Business Association, National Council of Farmer Cooperatives, National Milk Producers Federation, National Rural Electric Cooperative Association, National Rural Telecommunications Cooperative, National Rural Utilities Cooperative Finance Corporation, National

Telephone Cooperative Association, Overseas Cooperative Development Council, USDA Rural Business Cooperative Services.

Five named to 2000 Co-op Hall of Fame

Five leaders will receive the cooperative sector's highest honor, induction into the Cooperative Hall of Fame in April 2000. The five include Dave and Erma Angevine, Edgar F. Callahan, Richard H. Magnuson and O. Glenn Webb. The awards ceremony is April 26 at the National Press Club in Washington, D.C. The Cooperative Hall of Fame was established in 1974 by the National Cooperative Business Association and today is administered by the Cooperative Development Foundation.

NICE YC, youth leaders selected

The National Council of Farmer Cooperatives named Tim and Lori Hughes, Woodburn, Ky., Young Cooperator Ambassadors for 1999-00 at the 71st National Institute on Cooperative Education in Snowbird, Utah. Chad Endsley, Coshocton, Ohio, and Alyssa Ford, Lebanon, Mo., were named Youth Ambassadors. The four travel across the country, speaking on behalf of agriculture and cooperatives. They also help plan next year's NICE in Nashville, Tenn.

Sponsored by Farmland Industries, the Hugheses farm 918 acres of corn, soybeans, wheat, and barley and raise 81 beef cattle. They are members of Hopkinsville Elevator Co-op. Endsley was sponsored by the Ohio Council of Cooperatives and he is a freshman at The Ohio State University. The Association of Missouri Electric Cooperatives sponsored Ford. She is a senior at Lebanon High School. More information can be found at www.ncfc.org.

DFA ventures include Dairylea, Suiza

Dairylea Cooperative, Syracuse, N.Y., and Dairy Farmers of America, Kansas City, Mo., have formed a joint venture. Dairy Marketing Services, based in Syracuse, began operations October 1 and will annually market about 10 billion pounds of milk. Both

Dairylea and DFA have milk trucks traveling the same roads and serve many of the same customers. The joint venture will coordinate milk movement and save farmers an estimated \$5 million annually in transportation costs. The two cooperatives already operate a limited liability company with a joint investment in Dietrich's Milk Products in Pennsylvania.

Meanwhile, DFA and Suiza Foods Corp. have a new joint venture that encompasses all the domestic fluid milk processing activities of Suiza Foods and Southern Foods Group LP, a Dallas dairy firm known for the Meadow Gold, Borden and Elsie brands. The new joint venture, which was expected to close by year's end, will initially be known as the Suiza Fluid Dairy Group. Pete Schenkel, a 41-year dairy industry veteran and president and chief executive officer of Southern Foods, will be president of the new operation. He will be vice chairman of Suiza's board of directors.

And this past fall, Valley of Virginia Cooperative Milk Producers Association, one the nation's few fluid milk processing cooperatives, was acquired by Suiza Foods. Valley of Virginia operated two fluid plants in Springfield and Mount Crawford, Va., that packaged products under the Shenandoah's Pride brand name. The deal was expected to be closed by year's end.

Dairyland returns \$3.6 million

Dairyland Power Cooperative, LaCrosse, Wis., returned nearly \$3.6 million in margins to members based on how much money each member-cooperative spent for purchased power in 1979, reported Bill Berg, president and CEO. Patronage capital is retained by Dairyland for 20 years to meet working capital needs and then returned to member-cooperatives. During the cooperative's series of district meetings with distribution cooperative directors and management staff in October, Berg focused on the key strategic activities and direction of Dairyland and its members, specifically highlighting their three areas of focus: generation, transmission and corporate services.

PCCA makes record cash distribution

The Plains Cotton Cooperative Association, Lubbock, Texas, finished fiscal 1999 with margins of \$33.2 million and, for the third time in the last four years, the board authorized record cash distribution to members. This year's distribution, including cash dividends, stock retirements and retirements of per unit capital retains, totals almost \$40.4 million. Van May, president and CEO, and Jackie Mull, PCCA chairman, reported to members that the cooperative also made its final debt payment on the \$82.5 million term loan made in 1987 when PCCA and American Cotton Growers combined. The PCCA divisions include ACG, Oklahoma Cooperative Association Compress; Telmark, Inc.; Rolling Plains Cooperative Compress; and Mission Valley Fabrics.

REAs blaze new trails with microturbines

Electric cooperatives are poised to enter the era of microturbine generation. A Cooperative Research Network project, initiated with the Electric Power Research Institute, is set to begin delivery of the industry's hottest new product: microturbines. They can run on a variety of fuels, including propane, fuel oil and natural gas.

CRN worked with EPRI to purchase, test and demonstrate the product for the cooperative sector. With the introduction of the first microturbines, literally just off the production line this fall, co-ops will be part of a trail-blazing transformation. Enthusiasts believe the microturbine — with its promise of low cost, low emissions and reliable dispersed generation — could change the energy industry the same way microprocessors re-shaped the computer industry.

The National Rural Utilities Cooperative Finance Corporation, Herndon, Va., is installing a 75kilowatt microturbine from Allied Signal.

Tri Valley Growers forms alliances

Tri Valley Growers, San Ramon, Calif., signed a strategic alliance with Bell-Carter Foods, Inc. Bell-Carter will

supply canned black ripe olives to TVG for distribution under its Oberti and S&W brands. Bell-Carter will use TVG's national network to distribute private label and foodservice olives. Founded in 1932, TVG is responsible for more than half the canned peaches, pears and apricots, and 10 percent of the canned tomato products sold in the United States. Its brands include S&W Fine Foods, Libby's and Libby's Lite, Tutturosso, Redpack, Sacramento Tomato Juice, Sun Vista, and Oberti Olives. TVG expected to record a loss of about \$65 million for the current fiscal year. The cooperative continues to take measures to restore profits by 2001.

Meanwhile, TVG's S&W rice business will transfer certain assets to Riviana Foods Inc., Houston, Texas. Riviana will license the S&W trademark for use on retail packaged rice products. Riviana is the number one or two rice marketer in 19 of the top 20 U.S. rice markets. Its principle brands include Mahatma, Carolina and Success. The company has additional food operations in Central America and Europe.

Short prune crop reduces grower profitability

Despite improved 1999 prices, California prune growers have seen their hopes for renewed profitability dashed by an unexpected crop shortfall and rising production costs. Even though the Prune Bargaining Association successfully negotiated a 1999 prune price aimed at returning profitability to orchard operations, an unusually heavy fruit drop resulted in a 15-percent crop loss, reported PBA General Manager Greg Thompson. Preliminary post-harvest figures showed that dried production will fall under 165,000 tons compared to the estimated 180,000 tons. On a statewide average, the PBA estimates that this reduction, in light of increasing costs, will leave growers \$171 per acre short of covering typical production and harvest costs.

California Tomato Growers announce MTA

California Tomato Growers Association, Stockton, announced a price offering to the industry that includes a multiple-year term agreement (MTA). The MTA is an integral part of the price proposal and is consistent with CTGA's goal to achieve an increasing degree of stability in the industry. CTGA members feel an MTA will address certain risks and build efficiencies through favorable financing, stable tonnage contracts and matched capitalization. Processors already use a large amount of term supply arrangements, and are likely to support contract tomatoes on a similar basis.

Sunsweet Growers increases international presence

Sunsweet Growers, Inc., a Yuba City, Calif., dried fruit marketing cooperative, has formed an alliance to strengthen its international presence. The cooperative signed an agreement with the Turkish company Sundora-K, wholly owned by Britain's Harrington Foods Group. Sundora-K will pack Turkish tree fruits exclusively for Sunsweet to distribute worldwide. In turn, Sunsweet will purchase all its Turkish fruit requirements from Sundora-K. The alliance will allow Sunsweet to increase its market leadership worldwide in the dried fruit and produce industry, and use its globally recognized Sunsweet brand to better organize and grow worldwide demand for dried apricots.

Agrilink sells canned vegetable business to Seneca Foods

Agrilink Foods, the Rochester, N.Y., subsidiary of Pro-Fac Cooperative, announced that Seneca Foods Corp., has agreed in principle to purchase its Midwest private label canned vegetable business. Included in the transaction are Agrilink's Cambria, Wis., and Arlington, Minn., facilities. Agrilink will retain its Fond du Lac and Hortonville, Wis., facilities. The transaction does not include Agrilink's branded Veg-All and Freshlike canned vegetables. In

addition, Seneca and Agrilink expect to enter into reciprocal co-packing agreements.

New Englanders launch co-op housing website

A number of New England organizations have developed a website with comprehensive information on co-ops and other types of resident-owned and -controlled housing. Located at www.weown.net, the site has information on ownership structures and a developer's guide. Organizations involved include Association for Resident Control of Housing, Institute for Community Economics, Community Builders, Chicago Mutual Housing Network and Burlington Community Land Trust.

USDA finds western computer use up

Agriculture has involved cutting-edge technology for generations, but according to a recent USDA National Agricultural Statistics report, the computer use continues to lead the way. The report found that 41 percent of farms in the 10-state western region have Internet access, up from just 19 percent in 1997. Nationally, however, only 29 percent of farms have Internet access. Each June, the USDA surveys 33,000 agricultural operations regarding acreage, crops planted and land values. In 1997 and 1999, questions regarding computer usage were added.

Federal Reserve to study rural America

The Federal Reserve Bank of Kansas City has opened a new Center for the Study of Rural America to look at all businesses affecting the rural economy, not just agriculture. One farm loan official pointed out that prices for farm commodities are the same as they were 20 to 30 years ago, but prices for everything else are not level. He said the change has led to vertical integration where farms produce for major food companies yet some people are concerned whether this is where America wants the rural economy to be.

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