Co-ops keep farm-generated capital at home

With the ever-increasing size of farming operations, concentration of marketing and processing of agricultural commodities, and consolidation of the banking industry, the traditional economic ties of the farm sector and rural communities have been changed. Larger farms are less dependent on local implement dealers and farm suppliers. Because of their large size, these farms can sometimes negotiate better prices with larger, but more distant suppliers. They are also less dependent on local lending institutions.

As a result, less of the capital generated by agricultural production is remaining in rural communities. This trend has a negative impact on local businesses. Agricultural production still generates a significant portion of the income in rural economies and loss of that capital weakens the fabric of rural communities.

I believe, as do the authors of the articles in this issue of Rural Cooperatives, that cooperatives can play a key role in ensuring that more of the capital generated by agriculture remains in local areas and supports other businesses in rural communities.

Managing a farming operation will never be an easy task. However, participation in a cooperative can make it easier and more profitable. As I have noted before, cooperatives that process their commodities into value-added products earn higher profits for their members. For example, a cooperative-owned and operated soybean processing plant that recently began production in a Midwest state means an extra 40 cents per bushel to its members. In this particular case, this is 40 cents per bushel that was leaving the state because the processing was taking place in a neighboring state.

I predict that the number of value-added cooperatives will increase significantly in the near future, as will the number of cooperatives serving small producers of fruits, nuts and vegetables. These cooperatives will provide primary processing operations such as cleaning and bagging for local farmer's markets.

I also believe that we will see a similar increase in marketing cooperatives that have the potential to provide more equity in the distribution of economic power in the food chain. However, farmers must also make the decision to become more entrepreneurial through the use of marketing cooperatives. There are slightly more than 2 million farmers today selling to a handful of buyers. The result is that farmers are price takers.

Marketing cooperatives will be even more important in the future because the advances in technology and globalization, as one author notes, are becoming the defining pressures on agriculture. Individual producers may not have the where-with-all to adapt to rapid changes in global markets, whereas cooperatives could perform those functions for them.

Traditional federal farm policies have inadvertently discouraged “pooling” or marketing cooperatives because of subsidies directed to individual farmers. These policies need to be changed to give producers a more level playing field and an opportunity to earn more of the food dollar. In the same way health care purchasing cooperatives use the power of numbers to obtain better and less expensive health care, farmers who pool their commodities could enjoy a better position in the market and be less reliant on the government. And the additional income would help strengthen rural communities and rural economies.

Jill Long Thompson
Under Secretary, USDA Rural Development
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The sky is the limit — or is it? — as cooperatives enter a new century and a new millennium. What will the future hold? Five experts take a look at issues confronting the co-op movement as we enter a new era.
Story on page 7. Illustration by Mike Cressy
Co-ops’ share of farm marketings up slightly in ‘98

Charles A. Kraenzle,  
Director  
RBS Statistics Staff  
USDA Rural Development

Editor’s Note: Assistance in developing estimates of cooperatives’ shares of farm marketings and farm production expenditures was provided by staff members of the Rural Business-Cooperative Service of USDA’s Rural Development: David Chesnick, 100 largest cooperatives; Dave Cummins, grains and oilseeds; Eldon Eversull, farm supplies; Andy Jermolowicz, fruits and vegetables and tobacco; Charles Ling, milk; and Bruce Reynolds, cotton and cottonseed.

A recent U.S. Department of Agriculture analysis showed that farmer cooperatives’ share of total farm marketings — including crop, livestock and poultry — was 30 percent in 1998. That’s up from 29 percent in 1997, but below the 32 percent reported for 1996 (fig. 1). The 1998 market share was based on cooperatives’ net marketing business volume of $76.6 billion, down from $77.8 billion in 1997 and the record $79.4 billion in 1996.

The major factor in the overall increase in cooperatives’ share of farm marketings was the significant increase in cotton and cottonseed share to 43 percent in 1998 from 38 percent in 1997. Increased marketings of the 1997 cotton crop by cooperatives was the major factor.

Cooperatives’ share of major farm production items — feed, seed, fertilizer, crop protectants and petroleum — purchased by the nation’s farmers was 29 percent in 1998, the same as in 1997. The 1998 share of farm supplies purchased was based on cooperatives’ net sales of $24.6 billion, down from the record $25.2 billion in 1997.

Most milk sold through co-ops

Farmers market a large percentage of their milk through cooperatives. Cooperatives’ net sales of milk and milk products totaled $25.3 billion in 1998, up nearly $2 billion, or 8.4 percent, from 1997. U.S. farm cash receipts for milk was up nearly $3.4 billion, or 16.1 percent, in 1998, due to higher milk prices. As a result, co-ops’ share of total U.S. farm cash receipts for milk was down slightly in 1998, to 86 percent from 87 percent in 1997 (table 1).

Nationally, the quantity of milk sold to plants and dealers in 1998 was up nearly 1.0 percent from 1997. At the same time, the U.S. price per 100 pounds of milk was up an average of 15.3 percent. Co-ops’ share of milk sales at the first-handler level includes the value of milk for which cooperatives bargained with processors over price and terms of trade for members.

Co-ops’ share of grain and oilseed marketings at the farm-gate dropped from 43 percent in 1997 to 40 percent in 1998. During 1998, farmer cooperatives marketed $21.3 billion of grains and oilseeds, down from $24.6 billion in 1997. Since grain production was up and related prices were sharply lower in 1998, it appears co-ops’ loss in U.S. grain share was mainly due to a proportionately smaller increase in the quantity of grains marketed by co-ops at the farm-gate.

Co-ops’ share of cotton/cottonseed cash receipts was 43 percent in 1998, up from 38 percent in 1997. The net value of cotton and cottonseed purchased by farmer cooperatives was nearly $3 billion, down 1.4 percent from 1997. However, farm cash

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<tr>
<th>Year</th>
<th>Farm Marketings</th>
<th>Major Farm Production Supplies</th>
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<td>1998</td>
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1/ Based on U.S. farm cash receipts.  
2/ Based on U.S. cash expenditures for crop protectants, feed, fertilizer, petroleum and seed.
receipts for cotton and cottonseed were down 9.1 percent for the 1997 crop. Co-ops accounted for 19 percent of the nation’s fruit/vegetable sales in 1998, the same as in 1997 and 1996. Their sales of fruits and vegetables totaled nearly $9.4 billion in 1998, up 1.3 percent from a year earlier. Total U.S. average cash receipts for fruits/vegetables was up 2.3 percent in 1998. This change, however, was not large enough to change co-ops’ share of fruits and vegetables marketed off the farm.

Cooperatives’ share of livestock (including wool and mohair) marketings was 14 percent in 1998, up from 12 percent in 1997. Co-ops’ net sales of livestock was $7.4 billion in 1998, down $42 million, or 0.6 percent. However, total U.S. cash receipts for livestock/wool decreased 11.4 percent from 1997 to 1998, due to lower prices, especially for hogs and pigs.

Cooperatives’ share of “all other” marketings, such as poultry, dry edible beans and peas, tobacco, nuts, rice and sugar, was 12 percent, down from 13 percent reported for 1997. Co-ops’ “all other” marketings in 1998 totaled $10.2 billion, a 1.6-percent increase from the $10.1 billion marketed in 1997. In comparison, total U.S. cash receipts for “all other” marketings increased 5.8 percent. The biggest increase was in miscellaneous marketings, such as hay, grasses and other field crops.

Figure 2 shows the most recent 5-year market-share trends for selected farm commodities marketed by farmer cooperatives. Grain/oilseed and cotton/cottonseed shares varied. Milk, fruit/vegetable and livestock/wool shares were fairly level.

**Share of farm production expenditures holds steady**

Co-ops’ share of major farm production items—feed, seed, fertilizer, petroleum and crop protectants—was 29 percent in 1998, the same as in 1997. Co-ops increased their market share of only one major farm input, petroleum. Co-ops’ shares of fertilizer, crop protectants and seed remained the same, while feed’s share dropped slightly to 21 percent (table 2 and figure 3).

Total U.S. farm cash expenditures for the five major supply items decreased 2.7 percent from 1997 to 1998, while co-ops’ sales decreased 3.9 percent. Co-ops’ sales of feed was $5.4 billion, down from $6 billion, or 9.7 percent, in 1997. Total feed expenditures also declined, falling 4.9 percent.

Co-ops’ 50-percent share of petroleum expenditures set a record high. The previous record was 46 percent in 1991. Co-ops’ sales of petroleum totaled $6.6 billion in 1998, down from $6.8 billion, or 2.1 percent, from 1997. However, total U.S. farm expenditures for petroleum fuel and oils in 1998 was $5.6 billion, down from $6.2 billion, or 10.4 percent, due mainly to lower fuel prices.

<table>
<thead>
<tr>
<th>Table 1—Cooperatives’ share of U.S. farm marketings, by selected commodity group, 1998-96</th>
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<tr>
<td>Commodity group</td>
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<td>-----------------</td>
</tr>
<tr>
<td>Milk and products</td>
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<tr>
<td>Grains and oilseeds</td>
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<tr>
<td>Cotton and cottonseed</td>
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<tr>
<td>Fruits and vegetables</td>
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<tr>
<td>Livestock and wool</td>
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<tr>
<td>All other</td>
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<tr>
<td><strong>Total</strong></td>
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1/ Estimates are rounded to the nearest whole percent. Selected data items were revised for 1996 and 1997.
2/ Includes mohair.
3/ Includes poultry and eggs, dry edible beans and peas, nuts, rice, tobacco, sugarcane, sugar beets, honey and other miscellaneous marketings.
4/ All farm commodities weighted by value.

**FIGURE 2**

Co-op’s shares of U.S. farm products marketed, by commodity group, 1994-98

- Livestock and wool
- Fruits and vegetables
- Cotton and cottonseed
- Grains and oilseeds
- Milk
Calculating co-ops’ share of petroleum expenditures is more difficult than for the other farm supply items because a major proportion of co-ops’ petroleum sales is for nonfarm use. Based on previous research, farm use was estimated to be 43 percent. This percentage was applied to co-ops’ net sales in calculating market share. This can vary from year to year, depending on weather conditions and other factors.

Co-ops’ lowest share of the major farm supply items was seed, at 10 percent, unchanged from 1997 and 1996. Co-ops’ share of total U.S. cash expenditures for seed was a high of 19 percent in 1987.

Cooperatives’ sales of major farm supplies totaled $21.1 billion in 1998. Petroleum sales accounted for more than $6.6 billion, or 31.4 percent, of the total. Co-ops’ sales of seed and crop protectants were up, while all others were down. This was the same for corresponding total U.S. cash expenditures.

Feed accounted for the second largest proportion of co-ops’ farm supply sales (25.6 percent), followed by fertilizer (24.5 percent) and crop protectants (15 percent). Seed accounted for only 3.5 percent. Total U.S. feed expenditures accounted for 43.5 percent of the major farm supplies purchased, followed by fertilizer (18.5 percent), crop protectants (15.8 percent) and seed (12.5 percent).

### Methods used in developing co-op shares

Cooperative-share estimates for selected commodities and farm supplies are based on data from the following sources. The annual survey of farmer cooperatives conducted by USDA’s Rural Business-Cooperative Service, other Cooperative Services studies, cash receipts from farm marketings and farm production expenditures published by USDA’s Economic Research Service (ERS) and Cooperative Services’ commodity specialists.

Co-ops’ shares of farm marketings represent estimates of cooperative activity at the farm-gate or first-hander level. Share estimates for farm production items represent cooperative activity in sales of supplies to farmers. The share estimate for each commodity was based on dollar value and year-to-year changes in related data or on physical quantity (where available). In most cases, the share estimate was based on dollar value.

For those commodities for which physical quantity handled by cooperatives was not available, cooperatives’ shares of farm marketings were estimated by first subtracting gross margins from net cooperative business volume. These estimated “payments to farmers” were then related to their respective total U.S. cash receipts, adjusted for crop year, to calculate the percentage share figures.

Shares of the major farm supply items were estimated by first subtracting from co-ops’ net business volume the volume of business exported, sold to other firms and used for nonfarm purposes. These adjusted business volumes were then related to their respective total U.S. cash expenditures to calculate their percentage share estimates.
Structural change in the food and agricultural industries in the last quarter of the 20th century was phenomenal and appeared to be accelerating as we approached 2000. It even piqued the interest of Congress, where a bill was introduced to place a moratorium on mergers, acquisitions and consolidations — but the bill excluded cooperatives! Despite the bill’s defeat in November 1999, it clearly defined public concern over concentration and other structural changes in the food and agricultural industries.

Farmer interest in structural change revolves around: (1) the growing disparity in market power between farmers and their suppliers and buyers; (2) the inevitable loss of market access as concentration accelerates; (3) the market challenge of competing with low-cost imports produced under conditions of fewer environmental, food safety and labor controls than are faced by domestic producers; (4) the increasing use of production contract terms that alter the entrepreneurial role of producers; and (5) the growing use of genetically modified organisms and related production and marketing controls placed on them by property-right owners. These issues suggest that producers must assume more control of their industry by working together through the development of effective cooperatives and a coordinated cooperative system.

An important opportunity, if farm operators are to have more control over their industries, is to make better use of provisions of the Capper-Volstead Act of 1922. It allows them to organize and coordinate their marketing activity without fear of prosecution under the antitrust laws. This limited antitrust immunity not only enables producers to develop market power on their behalf to better deal with other competitors, but also helps them address supply chain issues from a well-coordinated position of strength.

A major element of marketing in the new millennium will focus on organization for pricing of products and services offered by producers and on linking local value-added strategies with coordination among these otherwise fragmented cooperatives.

More cooperative bargaining

Contracting is on the increase in many crop and livestock sectors. Much of this increase is associated with the trend toward identity-preserved marketing based on special characteristics that are genetically incorporated into crops or livestock. Both marketing and production contract producers can organize to represent their interests through cooperative bargaining associations. The primary role of these asso-
assures producers of a market and the consumer’s purchase price. The emphasis of many “new generation” cooperatives is on pooled marketing, using delivery rights as a basis for membership investment in processing and marketing activity.

Vertical integration of this type assures producers of a market and the preservation of their role — through collective action — as farm entrepreneurs. The economic rationale for this strategic approach is that deliveries are limited to the delivery rights owned by cooperative members. Therefore, supplies can be better tailored to meet demand. More delivery rights can be purchased by existing members, or new members can be added, as the market for the product grows.

A limitation to this approach is the potential for creation of many relatively small processing cooperatives at the very time major processors and retail buyers are procuring from fewer but larger suppliers on a managed delivery basis. This fragmented selling situation — as characterized by many ethanol-, egg- and pasta-producing cooperatives — can be overcome by following the model established by beet sugar manufacturing cooperatives, which organized a marketing agency-in-common called United Sugars to market their output nationally.

While markets for bulk commodities will still exist, the development of nutriceuticals and other bio-engineered crop varieties suggests that a more segmented marketing pattern could develop. It will involve marketing identity-preserved crops that incorporate some value-added characteristics and moving away from non-differentiated bulk commodities.

It can be noted that publicly traded companies generally have not done well in commodity marketing, while privately held businesses have dominated. Cooperatives can build on their strength in local origination of grains and other commodities by engaging in orderly commodity marketing on a pooled basis. This implies engaging in storage, regular release of grain to the market and pricing it according to different uses or characteristics. A clear trend at present toward use of direct-membership commodity marketing organizations will continue to grow in the new millennium.

Small producers will find local marketing opportunities in fresh markets by using cooperative packing and primary processing (shredding, dicing, bagging) operations for produce. In a number of instances, farmers’ markets can be organized on a cooperative basis to provide regular and attractive outlets for locally grown fruits, herbs and vegetables. Links with school districts, federal and state institutional facilities and other outlets can also be developed as market outlets.

**Cooperative policy role**

One important question about the future of cooperatives is whether favorable governmental policies will assist in their development — which, for the most part, has not been the case since the 1930s. Federal price-support programs, with the exception of cotton, have generally discouraged pooling through cooperatives and thereby diminished the price-stabilization role cooperatives play. The price floor was established by offering subsidies directly from the government to each individual farmer as either non-recourse loans or deficiency payments. A better alternative — clearly demonstrated and used by the cotton sector — gives farmers the option of receiving the government subsidy through a cooperative marketing pool. Forthcoming Congressional hearings addressing the adequacy of the Federal Agriculture Improvement and Reform Act, or lack thereof, will offer an opportunity to explore these and other pro-farmer features of farm policy.

The rapid structural change in agriculture that threatens the existence of individual farm operations will be turned to advantage by recognizing the strength derived from building cooperative systems. Farm operators will be able to preserve their entrepreneurial role through cooperative action and, thereby, maintain dispersed ownership in agriculture, a distinctive quality of American agriculture that will persevere in the new millennium.
Looking forward into the new millennium, the mantra for cooperatives selling farm supplies will be as it has always been: faster, better and cheaper. But there are many other issues on the horizon that farm supply cooperatives will have to face.

There will continue to be more mergers and consolidations. Twenty-five years ago, there were numerous regional farm supply cooperatives that had their operations based in one or two states. Mergers, acquisitions, and bankruptcies have decreased the number of regional farm supply cooperatives that operate in such limited geographic trade territories and increased the number with national and international operations.

This trend will continue in the new millennium, probably leaving two or three national/international farm supply cooperatives and one or two regional cooperatives with smaller, multiple-state operations.

As farmers have decreased in number and increased the size of their operations, local farm supply cooperatives have also followed suit. There were more than 2,700 local farm supply cooperatives in 1975. By 1999, there were fewer than 1,400. In another 25 years, there could be much less than half this amount. Many local cooperatives will have statewide or multiple-state operations. With two to three of these large farm supply locals per state, there will only be 100 to 200 farm supply locals with many branch outlets to serve their members.

There will be one area of new growth in the farm supply cooperative sector. They will be started and patronized by “hobby” farmers whose primary source of income will be from off-farm employment. These customers have grown accustomed to making Internet purchases and will start virtual cooperatives as buying clubs for their farm supply needs.

Global economy

Meanwhile, the vertical integration and globalization of agricultural markets are fast becoming the defining pressures on agriculture today. One need only look at the recent breakdown of the Seattle World Trade Organization meeting to see global pressure on the agricultural sector. While weather is still a determining factor for yearly prosperity, producers can no longer monitor weather and agricultural commodities only in surrounding production areas. They must also monitor weather and agricultural commodity output in other countries. Information, or the lack of it, has become a valuable asset in and of itself.

Industries are adapting to integra-
tion and globalization by designing products that have a common appeal and can be sold in just about any country. Business philosophies are also being adjusted. Reliance on bulk commodities for the masses usually means high volumes but low margins. Adaptation of new technology, market segmentation, customized production and market power as means to higher margins and a stronger market position seem to be the engines of future growth.

Technology has spurred consolidation in the seed industry, much of it occurring in the last decade as several crop protection manufacturers have purchased the leading row crop seed firms. There was much synergy in this consolidation. In addition, they were driven by the ability to genetically modify plant material to include desirable traits or resist damage caused by popular crop protectants.

Market segmentation has allowed firms to focus on the needs of larger, more prosperous farmers and offer goods and services that cater to their specific needs. In turn, organizations that adopt this segmentation can acquire farm accounts that produce higher sales volume. Market power is transforming the food industry as supermarket chains merge into fewer yet larger companies. By focusing on what their customers expect in the supermarket, these large chains then exercise considerable power over the whole food system. Ultimately, they can impact what and how farmers grow their fruits, vegetables, livestock or grains.

Can cooperatives adapt?

Many farm supply cooperatives will continue to operate with the same philosophy as today: faster, better, and cheaper, and will do well. Some will look to technology and improved market position to prosper. Others will fail, even though using one or both of these philosophies.

Cooperatives are owned by their users, so they reflect the desires of their farmer-owners. They also reflect what’s happening within the cooperative’s membership. Understanding membership’s business and their expectations for the cooperative is essential to its survival.

Currently producers are concerned about over production, low margins and income, government regulations and policy, changing markets and consumer opinions of genetically modified organisms (GMOs). A growing number of farmers are also asking about the future: can their cooperative develop more niche markets for specialty crops with desired traits?

More farmers are also concerned about finding markets for their livestock and dealing with environmental issues, such as animal waste. Some farmers are marketing their livestock directly to consumers and don’t have the knowledge or resources needed to deal with new environmental standards. Cooperatives will undoubtedly be asked to provide a bigger role than just providing feed. Their members will want more forward integration into livestock processing, marketing and waste handling.

Coopfarmsupplies.com

Technology is in the driver’s seat for information dissemination and sales in the near future. A recent National Agricultural Statistics Service farmer survey found that 40 percent owned computers and 29 percent had Internet access. Just two years ago, businesses saw the Internet mainly as an information and sales tool. Many people thought it would be a long, long time before consumers would pay for information or buy products from it.

The Internet will continue to expand and will become an increasingly important input to agriculture and cooperatives. Most of the products that farm supply cooperatives sell are bulky items (feed, seed, fertilizer, crop protectants and petroleum products) that are hard to transport to distant customers at a reasonable cost. Service, or advice, lends itself well to the Internet. Information about products that farm supply cooperatives sell would be an excellent service on the Internet. For example, in feed sales, a cooperative could provide: product information and prices for rations available based on livestock type; measured performance of the feed in trials; disease prevention, identification and treatment; and record keeping on feed purchases made by the farmer.

The Internet could also become a tool for dealing with the issue of waste management. There could be links from the cooperative’s feed site to university-sponsored research on new digestor technology, or technology that increases the oxygen levels in lagoons to promote faster decomposition of the waste. Perhaps feed cooperatives could link members with excess animal waste to members who need fertilizer. There is, of course, other information on the Internet that could help farmers make smart purchases of feed, seed, fertilizer, crop protectants, and petroleum products.

Farm supply cooperatives — on the horizon

The year 2025 is a long way off, but no longer than the time since 1975. Who would have guessed how ubiquitous the use of personal computers, genetically modified organisms, satellite technology, and the globalization of agriculture would have become in just 25 years? But what do these changes mean for farm supply sales?

There will be more sales coordination. For feed sales, computers will design rations, maintain records on weight gain and performance and coordinate delivery. There will be more stringent regulations on feed ingredients, and feed cooperatives will test and maintain records for each customer.
Grain and livestock buyers, in turn, will want to know exactly what went into each animal or crop. They will want farmers and their cooperatives to track every last input and output, just as the manufacturing or the computer industries already have to do.

With fewer farmers, global information systems and positioning satellites will be used to optimize delivery routes. Technology will have turned an animal waste product into a value-added product. Seed and crop protection sales will align closely as crop protection manufacturers integrate even more into the seed industry. Gradually, a majority of consumers will overcome their reluctance to accept GMOs and more seed modifications will be made.

All farmers will demand more information and services. Cooperatives will provide extensive scouting services and problem solutions. Crop protectants will focus on specific types of seed and they will be applied with sophisticated equipment using new technology.

Soil tests will be conducted for organic matter and crop protectants will be applied where needed, not broadcasted. The use of expensive equipment to apply crop protectants will further consolidate sales into farm supply cooperatives that can pool financial resources to buy the equipment and provide the information, service, and record keeping on use that will be necessary.

Fertilizer sales will be further regulated as the damage of their over-use and even terrorist and illegal drug manufacturer misuse grow. GPS-type technology will allow farm supply cooperatives to apply only the necessary nutrients to specific field areas. Again, as with crop protectant application equipment, this equipment will also be expensive and will require large volumes to be cost effective.

Record keeping of fertilizer use will be necessary. Pooling the resources required to provide this equipment and information is a farm supply cooperative’s specialty. Fertilizer cooperatives will also need to align with feed cooperatives to handle animal waste products. Pollution from animal waste misuse will mandate it while the loss of a valuable fertilizer resource will necessitate it.

Petroleum sales will also benefit from route coordination using a GPS (global positioning system) - type system. Computer-designed routes will aid bulk delivery of fuels. With fewer farmers and thus potential customers, more farm supply cooperatives will operate other businesses, such as convenience stores in predominately rural areas. The additional margins generated from non-farm customers will be needed to support agricultural operations in these cooperatives.

Farm supply cooperatives that sell propane for home heating will become more closely aligned with rural electric utilities (RECs). The consumer will soon receive one bill for electricity, home heating fuel, cell phone, and satellite television provided through an alliance of RECs and farm supply cooperatives that sell petroleum products.

What’s over the horizon?

In the first decade of the 1900s, a man was born in the Midwest and he started farming with a horse. He was happy to plow a couple of acres in a day. He had a son a half-century later who started farming with a 50 horse-power tractor that could plow about 10 times what his father could in a day. Another 50 years has passed and that son now writes articles on farm supply cooperatives. The land is rented. A plow has not touched any of the land in the past 15 years. What a difference a century has made.

Transportation of farm supplies from cooperatives to their members will undergo vast changes. Carriers may use air-transport to ship bulky items to farms. If the science fiction technology of Star Trek someday becomes reality, perhaps supplies will be “beamed” from co-op to farm. Livestock within breeds will be genetically similar and rations will be developed for each farm based on specific traits desired in the livestock grown. Each animal will be remotely monitored and the cooperative will adjust rations based on the animal’s health and production.

Seed, fertilizer and crop protectants will be sold as a unit and applied in one pass. Cooperatives will operate application equipment remotely and the equipment will hover over the ground to minimize soil compaction. Field sensors will monitor the crop’s growth and notify the cooperative when crop protectants are needed.

Petroleum will no longer be the energy source of choice. Fuel cells powered by hydrogen or some other environmentally friendly fuel will power farm equipment. Most equipment will be operated remotely, with farmers in their control center consulting cooperatives for advice when problems occur or service is needed.

These over-the-horizon ideas about farm supplies in the new millennium will likely be far short of changes that will actually occur. But, as long as there are mouths to feed, there will be farmers who will purchase inputs and services from farm supply cooperatives that they own. These farm supply cooperatives will heed their members’ needs, adapt to technology, deal with market pressures and opportunities, and continue to serve members in the new millennium.
By Glenn English,
CEO
National Rural Electric Cooperative Association

Conventional wisdom holds that deregulation of any industry creates winners and losers. Of course, the big winner is supposed to be consumers, who are always told they will get greater choice and lower prices because the invisible hand of the marketplace will replace the heavy hand of government regulation. In reality, the big losers will be those who cannot compete because of high costs or unacceptable service.

It came as no surprise to anyone that the electric utility industry was next in line to be “deregulated.” Twenty years of deregulating financial services, transportation, telecommunications and natural gas industries made it inevitable that we’d be the next up on the block.

But that’s old news. The pertinent question is: Will we be able to help consumers be winners in the new millennium?

First, we need to recognize that the playing field may change, but the game will still be played according to rules. Deregulation implies a wide-open marketplace without rules. That simply isn’t going to happen. Electricity is key to our way of life and no responsible legislature, state or federal, is going to let fast-buck artists play loose and fast with such a critical service. What we’re talking about is really re-regulation.

Whatever happens, the electric utility industry will continue to be regulated. It will just be regulated differently. Our challenge is to make certain that any new legislation treats electric cooperatives fairly and preserves for them their unique ability to serve their owners.

Fortunately, we are holding our own for the present. The recent bill reported out of the House of Representatives’ Commerce Subcommittee does no harm to the electric cooperative industry.

We will be on guard against amendments and new language that will certainly be introduced and which, if enacted, would do great damage to our owners. The highest priority we have is to protect their rights to control their own fate and our right to serve them.

But with the rights come responsibilities. If the experience of the last 20 years tells us anything, it tells us that a successful transition from a regulated to a deregulated industry requires that businesses be more financially flexible in order to survive in a much more competitive marketplace. Success is mea-
sured by how fast a business moves with the market, responds to the market and, most importantly, makes the market.

Specifically, those who prosper in a deregulated market learn to use marketing and pricing strategies based on market research that clearly segments customers into groups with similar needs. It really boils down to knowing who your customers are and what they want from you, and then producing it for the lowest possible price. The electric cooperative industry has a special relationship with its customers. As cooperatives, we are mandated to think first of our customers, not our bottom line. We can expect more and more Americans to wake up to the benefits of being served by cooperatives as it becomes clearer to them that the large investor-owned electric utilities must satisfy their investors first, not their customers, and that some classes of customers just aren’t attractive to them.

For the past three years, the electric cooperative industry has steadily differentiated itself from other segments of the electric utility market. The creation of a new brand, Touchstone Energy, is the most obvious part of that process. But the brand does more than renew our commitment to a long-standing practice of putting consumers first. It also provides a center around which our industry can unify because the Touchstone Energy brand takes our already established commitment to the community and extends it to the nation. It makes it clear that the focus of the electric cooperative industry is the customer, not the bottom line. Research verifies that our status as cooperatives has enormous appeal to all consumers because they understand they have a say in how the cooperative is managed and the services it performs. This assumes even greater importance in a time of great uncertainty that always accompanies deregulation.

Electric co-ops were created 60 years ago to bring electricity to rural America. Today, many parts of the country that were once rural are now suburban and even urban. Under deregulation, the benefits of being served by an electric cooperative will not be restrained by artificial boundaries, but will be open to all who have a common interest in protecting their access to reliable and affordable electricity. First Rochdale Electric Cooperative in New York City is only the forerunner of new electric cooperatives all over the nation.

We also understand that the cooperative’s value to the community is not based on the generation, transmission and distribution of electricity alone. Time after time, the owners of electric cooperatives have endorsed the common practice by cooperatives of providing them with propane and natural gas, telecommunications services, clean drinking water and wastewater management. It’s all part of fulfilling our obligation to our customers to make certain they have access to services that either would not be available to our customers or would be prohibitively expensive.

The creation of regional service cooperatives (Servcos) within our industry allows local co-ops to more effectively increase the number and variety of products and services that can be offered by combining service territories. This is a case where bigger is better for the right reasons. We can expect to see more Servcos because they provide a way for electric cooperatives to do even more to meet the needs of their members.

But, as with any effort to “re-regulate,” there are those who perceive they will be losers if anyone else gains. Among them will be those who do not welcome competition from the cooperatives and will go to any length to deny electric cooperative customers greater choice in selecting a provider for a specific service. This we have to expect. A competitive marketplace is not a tea party. Our industry will have to be prepared to fight for the rights of its owners to enhance their lives by having access to new services and products through the cooperative. If the marketplace truly works, then the costs of competing will determine whether the members of a single cooperative or a Servco composed of many distribution cooperatives wishes to add new products or services to its menu.

All this assumes, however, that we act like cooperatives, and that our entry into new markets with new products and services is motivated by a desire to serve our customers because they genuinely need whatever it is we’re selling. If we have done our homework, we will know whether our consumers are likely to respond favorably. We will have told the owners about the opportunities and the challenges. We will have a full appreciation of the likely reaction from the community as a whole and we will have met it head-on.

As we enter a new millennium and a new marketplace for electric power, we must ask ourselves if we’re ready. Being ready means we are:

• Price competitive
• Service oriented
• Knowledgeable about our members
• Proud to be cooperatives
• Involved in our community.

If, as an industry and as individual cooperatives, we can answer, “Yes,” then tremendous opportunities lie ahead. Answer “No” to any one of them, and we have our work cut out for us.

Editor’s note: Any opinions expressed in this article are those of the author, and do not necessarily reflect those of USDA Rural Development or its employees.
As we turn the corner and enter a new century, the U.S. economy is at an all-time high. As cooperative financial institutions, we too have been riding the wave of prosperity. Where do we go from here? Are we prepared to meet the challenges of the new century?

If the past decade is any indication of what we have to look forward to, it is going to be a bumpy ride. The recent trends — industry consolidation, technological advancements and a shifting legislative agenda — offered a dizzying pace of change.

Cooperative financial institutions will need to be able to turn these trends into opportunities in order to compete in the new millennium. We will need to continually adapt with customers to meet their needs.

Industry consolidation

Industry consolidation will continue, especially within the financial services arena. Recent legislation providing for banking modernization will allow banking, insurance and stock brokerage to be sold under one roof. Competition with large and well-capitalized companies will increase as firms merge to provide one-stop shopping.

With banks increasingly becoming more like fast-food outlets, there will be tremendous opportunity. Super banks will offer a cookie-cutter approach to business. They will tell customers to fit in their box. Cooperative financial institutions must react swiftly, listen to customer needs and offer creative solutions.

Technological advancement

The use of computers and the delivery of products and services via the World Wide Web will be paramount to our success. E-commerce allows like-minded people to cooperate with efficiency never before seen. Cooperatives, by their very nature, should be able to capture this value if they are able to manage change at “Internet speed.” Evaluating how members can use the Web, how we can partner to deliver “added value” through a virtual world is critical. While still relatively unknown, cooperative financial institutions are well aware that the Web will change the face of how we do business.

While still in its infancy, we know that over the next five years there will be strong customer demand for Web-based products. By devoting significant resources to Web solutions today, cooperative financial institutions can position themselves appropriately for the future. At the same time, customers continue to demand that we provide services via traditional but more efficient means. It will be a challenge for us to balance these demands.

Shifting legislative agenda

We have already seen how to harness the power of cooperation in order to impact legislation. The grassroots effort of the credit union campaign in the late 1990s is a prime example of how to focus and use our fundamental strengths as cooperatives. The onus will be on all of us to promote the dynamic world of cooperation to ensure that cooperatives benefit from future legislation.

We have our marching orders. To meet the new century’s challenges head on, cooperative financial institutions must stay focused. We must look to our strength — that of cooperation — and exploit it. Our cooperative foundation offers us a few things the competition does not have — a unique ability to collaborate effectively, and an uncommon affinity with our customers. While the shape of cooperatives may change, it is our core values that will facilitate our growth in the new millennium.
As we enter a new century, people across America are hopeful that the challenges and opportunities on the horizon will lead to better lives for themselves, their families and their communities. In their search for better times, they are also searching for values — values that some fear may have been lost during the 20th century. Yet, that is not the case, for the values they seek — self-help, self-responsibility, democracy, honesty, openness and caring for others — are alive and well within cooperatives around the world. That is why I predict a cooperative renewal in this new century.

This renewal, or renaissance, is already happening in communities throughout rural America. The heart of most rural communities is the businesses that occupy Main Street. Main Street businesses have long been icons of American life and are often the focus of economic, social and civic activity of rural communities. It is a well-known economic fact that $1 spent in a community will generate seven dollars in additional economic activity.

Unfortunately, Main Street businesses faced severe challenges during the latter half of the 20th century. The corner grocery stores, fast food franchises and local hardware stores found themselves competing with national chains and box stores. These huge corporations had tremendous capital resources and purchasing power. Seeking to increase returns for their stockholders, for-profit companies sought the least expensive production costs and closed local offices and factories. Today, there are many vacant storefronts on Main Streets across America because these locally owned small businesses were unable to compete.

When a multinational corporation takes profits out of a community, the only people who benefit are the investors outside of the community. Instead, people can participate in the cooperative sector of the economy to help build a community that benefits them and their neighbors. In many rural communities, cooperatives play an important role as the economic engine creating jobs and increasing rural incomes. As a result, rural communities prosper because the economic benefits that cooperatives generate stay in the local community. A locally owned, member-controlled cooperative doesn't move its operations overseas.

Independent business owners are discovering the power of cooperation across the United States. There is an explosion of purchasing and marketing cooperatives owned by small businesses. Main Street businesses are competing successfully in a global economy against huge competitors because they belong to a cooperative.

Currently, there are over 250 purchasing and marketing cooperatives serving 130,000 small businesses. Dry wall contractors, pharmacies, fast food franchises, electrical distributors, hotels and carpet stores are only a small sample of the types of businesses served by cooperatives. Volume buying, joint advertising, central billing, reservation services, employee training and benefits, financing and insurance are some of the services that purchasing cooperatives provide to their members. For example, a fast food franchise restaurant with $1 million in sales could cut 2 percent on food costs through a cooperative for an annual savings of $6,000. At the end of each year, it would receive a healthy patronage dividend from the cooperative.

Many people never saw independent small business owners as natural allies and participants in the cooperative sector of our economy. But, increasingly, these small business owners are facing the same economic and social issues that consumers and farmers have competed against for decades. Keeping small businesses prosperous and on Main Street through cooperatives builds community. In this new century, these organizations will be the fastest growing segment of the cooperative sector of the economy.

It is our cooperative values of self-help, self-responsibility, democracy, equality, equity and solidarity that appeal to the owners of small businesses. Survey after survey, these are the same values that Americans everywhere yearn for and these are the values that foster trust in cooperatives — trust that will also increase consumer use of cooperatives everywhere.
Co-op type: Founded in 1984, Hazelnut Growers of Oregon (HGO) is the largest U.S. processor and handler of hazelnuts.

Service provided: Markets nuts from 150 members, as well as nuts from non-members in two plants. In addition, the cooperative operates two retail store outlets. At peak processing time, 250 people are employed by the cooperative.

CEO/President: Leonard Spesert

Board chairman: A nine-member board of growers governs the co-op. Tom Peter serves as chairman.

Geographic area: Hazelnuts were first brought to Oregon in the 1800s, where 99 percent of U.S. hazelnuts grow in the rich soil of the Willamette Valley. Hazelnut trees thrive on the mild valley winters. Of the state’s 27,000 acres of hazelnuts, about 37 percent are processed and marketed through HGO and its Westnut subsidiary.

Product highlights: The hazelnut first became part of the Chinese diet about 5,000 years ago. Hazelnuts have a mild, sweet flavor and are used in baked goods, tortes, liqueurs and candies around the world. Oregon hazelnuts are also commonly called “filberts.” The name honors Saint Philibert, whose August 22 feast day corresponds with the beginning of hazelnut season in England, and for the appearance of the nut’s husk, noted for having a “full beard.” Hazelnuts are an excellent source of protein; high in fiber, iron and calcium; and are cholesterol-free, with over 90 percent of the fat content unsaturated. Oregon Orchard Hazelnuts are the co-op’s signature gourmet retail product, its first proprietary retail brand venture. The brand was introduced in 1998, targeted toward the expanding specialty foods industry. Candy-coated flavors include milk chocolate, yogurt, dark chocolate, butterscotch, strawberry cheesecake, cherry chocolate, espresso mocha, and mint chocolate. Five-ounce vacuum-packed-can flavors include salted, jalapeno, cajun red eye, hickory smoked, dry Roasted (unsalted) and French roasted (unsalted). All canned items have no oil added. New product flavors are sweet hazelnut creme and chocolate hazelnut spread, which can be poured into a coffee beverage or used as a desert topping.

Recent developments: Although Turkey supplies enough nuts to meet world demand, HGO has expanded its market share with a higher quality nut, aggressive marketing and new products. For only the second time in its 15-year history, HGO is admitting new members. Two capital improvement projects are also underway. First, the co-op has a new Ball Deck sizer, which quickly separates jumbo in-shell nuts from the smaller ones. Through better separation, employees can dry nuts and move them through the system quicker. Second, the co-op is the first to use an Elbiscan Laser Sorter on hazelnuts. This machine finds defective nuts and foreign material as they move along a conveyor, and then shoots jets of air to remove bad nuts, shell pieces and other unwanted materials.

For more information: Hazelnut Growers of Oregon, P.O. Box 626, Cornelius, OR 97113; (503) 648-4176; fax 648-9515; or http://www.hazelnut.com.
think that I shall never see a poem as lovely as a tree” opens Joyce Kilmer’s famous poem memorized for decades by millions of schoolchildren. Now the poem could very well serve as the rallying cry for a growing number of woodland owners who are sustainably — and cooperatively — managing and marketing their timber.

“We’re trying to identify and capture a growing area of interest,” explains Tom Thieding, president of the Sustainable Woods Cooperative in southwestern Wisconsin. “People are looking at green construction, energy efficiency, where their products are coming from and how those resources are managed. And this isn’t just happening with individuals. You’re seeing more municipalities talking about ‘green construction.’ We’re committed to managing our forest lands in a sustainable way, logging them with discretion and building efficiencies into how we prepare that lumber for the marketplace.”

Almost three years old, the Sustainable Woods Cooperative includes 85 members who own 10,000 acres of woodlands that stretch across some of the same landscape that Frank Lloyd Wright, John Muir and Aldo Leopold called home. Three hours away, a second sustainable forestry project is taking shape in the Mississippi River coulee region north of LaCrosse, Wis., and Winona, Minn.

Other woodland owners across the two states are also discussing sustainable forestry practices and the formation of cooperatives to process and dry the harvested wood. Credited with getting landowners to think sustainably about their forests and helping give birth to these new cooperatives is Jim Birkemeier.

Birkemeier’s Timbergreen Forestry is nestled against the Baraboo Bluffs, a national natural landmark designated by the U.S. Park Service because of its unique bio-diversity and geological treasures. On his 300-acre farm purchased by his family in 1973, Birkemeier has patiently brought his forest back to full vigor while reaping increased financial rewards.

“When I started talking about sustainable forestry, all I did was get people irritated,” Birkemeier recalls. “The industry was making big money off the forests and landowners didn’t think their timber was worth managing.”

What is sustainable forestry?

Economists rank the forest products industry as one of the world’s most important for both the global economy and the environment. It represents close to 3 percent of the world’s gross economic output. In the United States, an estimated 10 million non-industrial private forest (NIPF) owners (individuals, partnerships, trusts and clubs, for example) control nearly 60 percent of commercial forests.

East of the Mississippi River, NIPF ownership is estimated at over two-thirds of the region’s timberland. In the West, the majority of forests are in public ownership. The 261 million acres in NIPFs protect watersheds, provide wildlife habitat, offer scenic beauty and supply nearly 50 percent of the timber harvested in the United States, according to the USDA Forest Service. This supply is critical for many large wood products manufacturers. Weyerhaeuser Co., for instance, harvests nearly 60 percent of its timber supply from NIPFs nationally, and 90 percent of these lands are in the South.

Birkemeier maintains that landowners would act differently if they were educated about sustainable forestry.
Following what he learned in college forestry classes and from the sustainable forest management practices used by Wisconsin’s Menominee Tribe, old, dead and fallen trees were hauled out and processed into usable board feet.

“I built a sawmill with solar kilns and ended up developing a better income for this family farm than I could have done making hay or raising cattle,” Birkemeier explains.

He worked with a nearby Amish community and their horse-drawn equipment to carefully and efficiently harvest logs. The solar kilns added more efficiency into his system and proved that quality board feet could be produced. And Birkemeier found buyers willing to pay more for the lumber because of the extra measures he took.

The results? People looked at their own woodlots with renewed interest. Environmentally, Birkemeier proved that sustainable approaches revitalized the forest because landowners selectively removed the worst trees first.

Jim Beeman of Hiawatha Sustainable Woods Cooperative agrees. A former forest products buyer and self-employed mill operator, Beeman became disgusted over lumbering practices and helped start the Mississippi River coulee region cooperative. It has 53 members who own some 6,000 acres of woodland in western Wisconsin and southeastern Minnesota.

“I was doing what other foresters were doing,” Beeman says. “I advocated clear-cutting of large, old oaks because the younger ones needed the light and space to grow. Everyone is trying to get the most out of their piece of the pie. Landowners didn’t know any better than to take what they were offered by the buyer. Loggers knew they needed to do whatever it took to hold down costs and get the trees out so they could make money. And the corporations would make the money. It was an adversarial situation, up and down the line.”

The logger had heard about Birke-mei and read about the Sustainable Woods Cooperative. With experience as a member of a food and an electric cooperative, Beeman and his neighbors met to discuss other approaches.

“No one else in this industry ever said you should be honest, open, self-sufficient until we learned that the whole cooperative umbrella offered us a difference from what was happening in so much of the rest of the corporate world,” Beeman says. “Now, we’re not trying to buy trees from our members. Instead, we’re promoting the wise use and harvesting of them. That’s a whole different way of thinking.”

Violent windstorms over the past two summers downed an estimated 170,000 acres of timber in Hiawatha’s region of the two states. Rather than cutting live trees, members are busy salvaging downed timber from their own lands. The logs will be processed into value-added flooring, millwork and other products.

**Certified wood an option**

Salvaging downed timber is a pivotal approach to sustainable forestry. Through practices such as salvaging, landowners’ lumber can become certified. The Forest Product Buyers Group defines the ‘certified’ label on lumber or wood products as signifying that the wood comes from a well-managed forest. The label, issued by an independent auditing organization, guarantees or certifies that the wood in the product was harvested from a forest that is managed according to a comprehensive set of environmental and social principles and practices.

As the wood goes from forest to processor to wholesaler, it is tracked and monitored by the certifier to ensure that the end product is kept separate from uncertified wood. This “chain of custody” by the certifier guarantees that the buyer and the end consumer know what they are buying and actually get what they are paying for.

The wood certification is voluntary. The label tells customers that the forest, its ecosystem, and local forest economies have been protected in bringing the product to market.

“But when we originally talked to forest owners, explained the costs and explored the benefits, not a single for-
est owner could believe this would pay off,” Birkemeier notes. “The 10- to 15-percent projected increase in value for certified wood is dwarfed by a 13-percent projected increase in value for small woodlot owners are likely to benefit from selling certified logs from their forest.” However, that’s where he believes a cooperative makes sense.

“A value-added cooperative that would sell certified flooring, millwork, architectural lumber and other wood products is a much better proposition for forest owners,” Birkemeier says. “Producing high-quality wood prod-

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“Start with the rising sun”
Sustainable forest a tradition for Menominee Indian tribe

“When on planet Earth, we’re still at a very young age,” maintains Jim Beeman of Hiawatha Sustainable Woods Cooperative. “Too many of us are just beginning to talk about biodiversity. But people like the Menominee have been taking care of it for generations.”

View a photo of Wisconsin taken from outer space and one area stands out — Menominee County, home of the Menominee people and their forest. Casual observers assume the forest is pristine. The fact is, however, that it’s one of the most intensively managed forests in the Western Hemisphere. Over two billion board feet of lumber have been removed from the forest in the last 140 years, yet the volume of sawtimber is greater than when the reservation was established.

The Menominee have lived in northeastern Wisconsin and on Michigan’s Upper Peninsula for generations, where ancestral tribal lands once stretched for some 10 million acres. Following several treaties and land cessions, the Menominee established a 235,000-acre reservation in 1854 in northeastern Wisconsin. It’s covered with white pine, hemlock, sugar maple, red maple, red oak, basswood, and yellow birch.

The tribe has earned a reputation for pioneering sustainable forest management. The Menominee were the first Native American tribe to have forest lands independently certified as sustainably managed. The 220,000 acres of forest were the first in the United States and Canada to hold dual environmental certification from both the Forest Stewardship Council-approved SmartWood and Scientific Certification Systems.

The “secret” to the tribe’s forestry leadership and success lies in its management. According to oral history recorded by Spindler and Spindler in 1971, Menominee chiefs offered the following advice to the tribe on how to live on a smaller land base.

“Start with the rising sun, and work toward the setting sun, but take only the mature trees, the sick trees, and the trees that have fallen. When you reach the end of the reservation, turn and cut from the setting sun to the rising sun and the trees will last forever.”

According to the tribe, the concepts of sustainability in forest ecosystems and surrounding communities revolve around three components. First, the forest must be sustainable for future generations. Second, the forest must be cared for properly to provide for the many varying needs of people over time. Third, all the pieces of the forest must be maintained for diversity.

The allowable cut on the Menominee Forest is 29 million board feet per year, though the tribe often harvests only about half that amount. Only non-food forest products are sold to outsiders, including the timber and wood products of the community-controlled business known as the Menominee Tribal Enterprise (MTE).

The Menominee have a deep feeling for the forest, and that feeling guides their use. Financial gain is not the driving force. As one elder said, “Everything we have comes from Mother Earth — from the air we breathe to the food we eat — and we need to honor her for that. In treating the forest well, we honor Mother Earth.”

Sustained-yield forestry does have its marketing advantages and challenges. Successful marketing requires detailed planning because the harvested species are not always the ones in demand. Tribal marketers developed clientele, educated them about the Menominee harvesting system, and soon found they had loyal customers. Customers initiate the procurement process with enough lead-time for their particular needs. Sales are steady and the lumber commands a premium price because of its reputed quality.

Some 15 products, including lumber, sawlogs, veneer logs, and pulpwood, are sold. Most of the product (85 percent) goes to end-users. Lumber is marketed to local “small-dimension” plants and paper mills. Specialty woods are sold to local manufacturers for production of items such as windows and Venetian blinds. Wood chips are sold to paper mills for pulp, and shavings are sold to a company that processes them for animal bedding. When necessary, bark and chips are used as fuel for the MTE steam plant.

By tapping into “green” markets with its dual certification, the Menominee have received premium prices. MTE’s long-term plan aims to eliminate inefficiencies in the primary wood-processing facility, and to diversify and increase value-added processing. In the late 1990s, MTE was developing international markets such as hemlock studs in Japan and hard maple in the United Kingdom. ■
ucts is very easy to do on a small scale. A group of owners can mill, dry and manufacture retail products, and will learn a lot about forestry in the process. The cooperative virtually eliminates the chain of custody. Certification makes sense and gives a special niche to make marketing even easier. If any premium is possible for certified wood, it will go directly back to the forest owner who manages the land. Higher demand for certified wood will mean lower marketing costs, giving another ‘certified premium’ directly to the forest owner to encourage even better forest management for the future.”

Creating and targeting markets

Creating a market is key. According to Arnie Klaus, manager of Woodworkers Northwest, establishing sustainable forests requires a demand for sustainable forest products. “Today, the demand for certified wood products is still very low and the supply of these products is sparse; thus the investment of landowners, mill owners, and woodworkers is limited,” Klaus said in a recent letter to members.

Based in Bellingham, Wash., Woodworkers Northwest is a non-profit, educational organization whose members represent all phases of woodworking: forest landowners, lumber recyclers, mill owners, crafters, wholesalers and retailers. Members share a common interest in creating a value-added, sustainable resource enterprise in timber-depressed communities. Klaus says members recognize a potential opportunity to lead a regional certified wood movement and introduce a brand name that is synonymous with protecting and nurturing the forest ecosystems of the Pacific Northwest.

“But now there is an economic paradox, the chicken-and-egg paradox of risk and demand,” Klaus says. “These woodworkers are dedicated to creating a certified wood products movement but cannot risk the costs associated with certification until there is a market demand. Some of our members are certified, but most are not, and we do not have a complete chain of custody, or vertical integration, of certified woodworkers. They are waiting for the demand.”

“What we’re trying to do and can accomplish, I think, is connect the end user with the forest,” Wisconsin’s Thieding explains. “We just need to make sure we’re talking to the right people about our products because competitive pricing will be a challenge.”

His cooperative has targeted home construction designers, who exercise much control over the materials used. Thieding says board members are also working with the Wisconsin Green Building Alliance to better understand and target potential customers.

“But this is somewhat comparable to the organic foods market,” he says. “Price is an issue. It’s a barrier and we’ll have that to some extent. But, through processing, we’re hoping to capture some efficiencies so we’re a little more competitive on price.”

Like their Wisconsin counterparts, Natural Balance Forestry Cooperative in Everson, Wash., assists landowners with forest management planning and sustainable forestry certification. Yet the co-op targets local artisans as buyers of its wood and then markets high-quality, value-added wood products.

“As a leader in the sustainable forestry movement, Natural Balance harmonizes human economy with forest ecology,” explains Fenton Wilkinson of the co-op.

The Sustainable Woods Cooperative received $26,780 from the Wisconsin Department of Agriculture, Trade and Consumer Protection, under its Agricultural Development and Diversification program. These funds are enabling the co-op to research marketing and sales potential for certified sustainable wood products. This money was in addition to a $15,300 grant the co-op received in 1998 from Wisconsin’s Rural Economic Development program, administered by the state’s department of commerce. This grant was used to develop a long-term business plan, and leveraged an additional $15,300 in funding.

“People are interested in ‘green’ construction. In addition, there are governmental units such as the Madison (Wisconsin) School District that are looking at incorporating more ‘green’ materials into their buildings,” Thieding says. “We believe we can deliver a product that meets people’s functionality expectations, and was harvested and handled in a responsible way.”

Thieding adds that Sustainable Woods is also one of the first cooperatives to combine the forest management component with processing, mar-
keting and sales of the lumber. “Each of us could do it alone,” he says. “But the challenge is doing it as a cooperative because you’re trying to accomplish something on a little bigger scale and you’re trying to service the needs of a good number of landowners. We want to show that this can be accomplished using the cooperative model.”

**Basic co-op education needed**

As cooperative members, though, Thieding and Beeman see education as key to the success of their new organizations. Many of their landowner-members are urban or suburban dwellers who inherited the land, purchased it for hunting or picked it up as an investment. The co-ops spend time educating landowners about their forests, how to manage them sustainably and why those practices can increase the value of the lumber. But the members are also two or three generations removed from farm organizations like cooperatives.

“The only other [co-op] experiences our members may have had are credit unions,” Thieding says. “But even that was limited. So we went back to Co-op Education 101, and it’s been successful. We also gave them the by-laws to read and that really helps them understand that the control and ownership goes beyond just a membership certificate.”

“Actually, it’s pretty easy to start a cooperative for sustainable forestry because your potential members have heard so many bad stories about the logging industry,” adds Beeman. “Local word-of-mouth spread that this was a new option.”

Markets are looking up for woodlot owners who formed cooperatives and are educating themselves to their potential.

Poet and journalist Alfred Joyce Kilmer was born in New Brunswick, N.J., in December 1886. He was killed on a French battlefield near Seringes in 1918 while serving as a sergeant during World War I.

Kilmer’s most famous poem, “Trees” was published in 1914 and has been criticized for its sentimentality and confused simile. He is credited with writing war poems that were far better, such as “Rouge Bouquet,” which was published the same year Kilmer died.

As a tribute to the poet and “Trees,” soldiers in his WWI unit purchased and established the Joyce Kilmer Memorial Forest in North Carolina near Great Smoky Mountains National Park. It’s acclaimed as the East’s most stunning old-growth forest. The forest is a few thousand acres of mostly old-growth, yellow poplar and maples. These trees only exist because the logging company went bankrupt before they could be cut, reports Robert Hutchinson, director of Southeastern Forest Trust, Inc.

Walking through this forest of massive trees is described as similar to walking through the California redwoods — tree trunks measure over 25 feet in circumference, the crowns are a couple of hundred feet high, and the forest floor has exceptionally diverse flora in the humid, rain-forest-like conditions.

It’s a must on any old-growth forest list, and worth a special trip to see, Hutchinson adds.

I think that I shall never see
A poem as lovely as a tree.

A tree whose hungry mouth is pressed
Against the earth’s sweet flowing breast;

A tree that looks at God all day
And lifts her leafy arms to pray;

A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree.

— Alfred Joyce Kilmer

Joyce Kilmer Memorial Forest

Markets are looking up for woodlot owners who formed cooperatives and are educating themselves to their potential.
Larry D. Steward
President and CEO
Minn-Dak Farmers Cooperative

“ANAFTA, GATT, WTO, sugar finding a way into this country by circumventing trade barriers are all impacting the American sugar industry.”
- Larry D. Steward

Co-op description: 473 farmers own Minn-Dak Farmers Cooperative, founded in 1972, at Wahpeton, N.D. In 1999, they planted 102,900 acres of sugar beets, the result of a three-year expansion approved in 1994. That vote included $14 million in environmental projects over a five-year period along with a $63 million, three-year plant expansion.

Minn-Dak is a member-owner of United Sugars Corp., Minneapolis; and Midwest Agri-Commodities, San Francisco. The co-op’s interest in value-added processing led to the 1989 founding of Minn-Dak Yeast Co. As a stock company, Minn-Dak Yeast operates with Minn-Dak Farmers as its majority stockholder. Universal Foods (Red Star), Milwaukee, Wis., is the minority stockholder. Minn-Dak also holds an equity position in ProGold, the limited liability company that owns the Wahpeton corn wet-milling plant.

What concerns him? “Like all of agriculture, Minn-Dak must become more efficient, fine-tuning our whole system from the grower all the way through marketing,” Steward says. The issues that will plague the sugar beet industry and family farms in the 21st century include global environmental regulations, international trade agreements, technology and American consumerism.

“But my major concern right now is low commodity prices. Sugar prices are flat and there’s too much sugar. Our growers have been paid less the last two years, and that trend is not good because poor commodity prices are impacting this area’s entire rural economy,” he adds. Steward is concerned over how rural Minnesota, and especially North Dakota, are going to fund public infrastructure such as building and maintaining roads. “There aren’t enough dollars in these sparsely populated states to meet all our public service needs,” he says.

Other key issues? “A major challenge for agriculture and rural America is finding a way to make the urban consumer care about the status of agriculture. We need to make these consumers realize they have a vested interest in an economically-healthy agricultural system,” says Steward. “This nation’s consumers spend the lowest percentage of disposable income on food of any developed nation. That could change unless the current farm crisis is turned around. And we cannot turn it around without the support of that urban consumer base. This may be the greatest challenge in the first few years of the 21st century,” he adds.
New model, old ways
Farmers find new life serving burgeoning organic markets

Pamela J. Karg,
Field Editor

It began as the collective idea of seven farmers who were tired of seeing their fellow farmers “dropping like flies,” as one Wisconsin farm after another closed. They felt there had to be a better way they could pull together to increase their returns and keep producers in business.

Their answer was to form the Coulee Region Organic Produce Pool Cooperative (CROPP), which has more than fulfilled the fondest wishes of its founders. With a phenomenal growth rate of 60 to 70 percent in recent years, it has grown into the largest organic farmer cooperative in the United States. After 12 years of operations, CROPP has 200 members in 11 states and annual sales of $50 million to the ever-growing number of consumers who demand organic foods. But this success has also forced it to deal with growing pains.

Looking for alternatives

The number of dairy farms in Wisconsin has dropped by 39 percent since 1989, from 34,110 to 20,715. However, the number of cows has remained fairly stable, between 9.1 million and 9.6 million head. Still, rural communities take an economic hit every time a barn door closes.

“It was a difficult reality for these rural communities,” says Theresa Marquez, CROPP’s director of marketing. “The farmers realized that the trend (of farm closures) was almost irreversible, so they started asking themselves how they could do something different rather than go out of business themselves.”

Having lived through the agony of the 1980s farm crisis, farmers around LaFarge, Wis., were looking for an alternative to growing chewing-variety tobacco, a vital cash crop for many, but one which appeared to have an uncertain future. They ultimately decided to grow and market organic vegetables, forming a cooperative to market their produce. Some of the growers also had dairies and felt the time was right to develop the organic dairy products market.

Most farmers had lived through the awakening environmental movement of the 1960s and 70s and had not really changed the way they did business, says Karl Pulvermacher of Lone Rock, Wis. He gave up a career selling agricultural chemicals to farm in what he felt was a more sustainable way.

“I’m really concerned about what I see in some other types of agriculture, where toxic chemicals are placed on the soil, year after year after year, all in the name of profit and with absolutely no foresight as to what’s going to happen to the soil, what’s going to happen to the groundwater and what’s going to happen to the people who use this food,” Pulvermacher says. “I think we have to be concerned about that. That’s why they pay me a premium to produce organic milk. There are added costs, because I’m managing the problem, not just buying a solution.”

With financial backing and business guidance from the Wisconsin National Farmers Organization, the dairy division of CROPP was born, recalls Wayne Peters. He’s one of the founding farmers and is currently president of the board.

“That’s why they pay me a premium to produce organic milk. There are added costs, because I’m managing the problem, not just buying a solution.”

With financial backing and business guidance from the Wisconsin National Farmers Organization, the dairy division of CROPP was born, recalls Wayne Peters. He’s one of the founding farmers and is currently president of the board.

“Though dairy farms around us were dropping off like flies, our situation wasn’t desperate,” the Chaseburg,
Wis., dairy producer recalls. “We just really wanted to make things better for ourselves. At the time, we were all working toward being organic, in one way or another. Until we all got together, we didn’t know what to have for rules. There were no models, here or abroad, just a little bit in vegetables. There was no certified organic milk. We made the rules to fit our own situation. Now our standards are the basis for much of what’s happening in Europe.”

**Brand name developed**

CROPP produced and sold its first organic cheese as a private-label product by the early 1990s. With the encouragement of consumers who were concerned with food quality issues and who wished to purchase more natural, nutritious food grown without the use of pesticides or herbicides, CROPP developed its own brand name — Organic Valley — and expanded its line.

“At first, we had no sense of a larger future. A company wanted to buy organic cheese from us. They thought they could sell it, but they couldn’t. So we started looking for other markets. That got things rolling. We set up a farmgate price at $17.50 per hundredweight, an average of $4 to $6 per hundredweight over conventional milk prices. Holding a stable pay price has been our biggest challenge and accomplishment,” adds Peters.

The cooperative had to learn fast, says George Siemon. He’s also one of its founding dairy farmer members who now, uncomfortably, wears the titles of president and chief executive officer. The Wisconsin NFO opened doors to dairy plants for the new organization. In turn, CROPP talked to cheesemakers about manufacturing organic products for the cooperative market.

“We started as a cooperative with a fairly anti-cooperative viewpoint,” says Siemons. “I don’t mean to be hard on the other cooperatives, but our farmers didn’t feel good that the cooperatives had maintained their integrity. And we used to be a bunch of farmers who would pound our fists on the table and ask, ‘Why is $10 (per hundredweight) milk $3 (per pound) cheese?’ Well, now we understand and our farmers understand. We still probably think there’s something wrong somewhere, but farmers need to be informed.”

To this day, CROPP’s four divisions — dairy, eggs, meat and produce — hold monthly pool meetings that are open to all members. There the members debate what’s good for their farms and the organic production systems they follow vs. what’s best for their cooperative. The answers are never easy.

**Struggling with capitalization**

One issue they struggle with is capitalization. CROPP needs equity to expand. Since Organic Valley only owns one plant in Chaseburg, Wis., it works with a network of dairy plants and other organic farmer organizations across the United States to procure enough fruits, vegetables, meats, eggs and dairy products to fill its growing customer list. Three major dairy cooperatives that co-pack products under the Organic Valley Family of Farms consumer label are Land O’ Lakes, Inc., Arden Hills, Minn.; West Farm Foods, Seattle; and Farmers Co-op Creamery, McMinnville, Ore.

Another cooperative relationship Organic Valley has is with Organically Grown Cooperative in Oregon, which helps the Wisconsin-based cooperative procure and market potatoes, squash and bananas.

Even with these relationships, though, CROPP needs more money. The solution being developed is a preferred stock program that will allow consumers to help the farmers fund the capitalizations needed to meet growing demands.

Until taking ownership of its first dairy production facility last year, the cooperative’s staff worked exclusively with small, specialty cheese plants and other dairy manufacturers across the United States to produce organic dairy foods. (About 65 percent of production is marketed under the Organic Valley Family of Farms consumer label; the remaining sales are industrial ingredients processed for the organic foods market.) The solution to the capitaliza-
tional challenge is a preferred stock program being developed to allow consumers to help the farmers fund the capitalization needed to meet growing demands.

“The consumer wants to support the farmer,” Siemon says. “The consumer wants to be connected to the farm. Organics is especially that way, so we’re trying to bring together two interested forces and still remain 100-percent organic farmer owned.”

Recently, the cooperative also became the first nationwide marketer of organic meat products, thanks to an $18,800 grant from the Wisconsin Department of Agriculture, Trade and Consumer Protection, under its Agricultural Development and Diversification program. It allowed the cooperative to access professional and technical expertise in the meat industry in order to rapidly enter the marketplace, Siemon says. “Without this seed money, we could not have introduced the comprehensive product line that our farmers were capable of supporting,” he adds.

CROPP developed 22 organic meat products to add to its existing line of produce, dairy and egg products. The cooperative diversified its product offering to include organic pork and poultry products. In a previous project, the meat pool developed frozen-packaged beef hot dogs, ground beef patties and bulk ground beef.

The recent project brought together family farmers to produce organic pork on a standardized basis. CROPP developed value-added products at selected manufacturing plants, and it has begun distributing them nationally.

The annual revenue projections for the cooperative as a whole are about $50 million for fiscal 1999. “Organic meat has the potential to be as large or larger than our current business, which is dominated by our dairy sector,” Siemon says.

Growing membership poses challenges

Membership growth is another challenge. In 1999, it took on 51 new farms in its dairy division alone. For larger organizations, that would be just one month’s list of new members. But supply and demand are critical if producers are going to be guaranteed payment of several dollars a hundredweight more than the going local milk price.

“Size is the challenge we’ve had, and there’s a world of farmers out there who need someone to work for them,” Siemon says. “We’re going into the future boldly. Maybe, someday, we’ll look back and say we got too big. But I believe in systems and foundations, and we’ve laid ours out here at the cooperative.”
"I couldn’t have believed it would get this big this fast," adds Peters. “A 50- to 70-percent increase each year! The co-op does give many more farmers a chance to do organic. We’ve only lost two of our original seven farmer-members. A few more would have disappeared if the co-op hadn’t existed.”

Preserving farms, saving the environment and making a closer connection with the people who grow the food supply are the reasons behind consumers’ willingness to pay more for organic dairy products, says Marquez. But the No. 1 reason organic sales continue to climb is health. Organic dairy sales account for less than one-half percent of the 20 billion pounds of milk marketed annually in the United States.

Yet Marquez and market analysts project the organic dairy niche can be expanded to at least 4 percent of milk sales. Others predict it can grow 10-fold in the next few years. That’s

Organic: a philosophy & production system

Coulee Region Organic Produce Pool Cooperative defines “organic” as a philosophy and system of production that mirrors the natural laws of living organisms and emphasizes the interdependency of all life. From the soils, crops and livestock, to the manufacturing plant and packaged product, all are certified organic by an independent certification agency.

The core philosophy of organic certification includes resource stewardship, conservation ethics and promotion of a safer food supply. Healthy farming practices provide safe, nutritious food to consumers today and lead to clean air, water and living soil for future generations. In addition, every vat of cheese, batch of butter, load of eggs, and pallet of vegetables is tested or graded to exacting standards before it is sold.

“We view our pool of high-quality Grade ‘A’ organic milk, eggs and vegetables as precious commodities,” says CROPP’s Theresa Marquez. “Sharing our exceptional products with consumers is a driving force behind our marketing effort.”

In its egg and meat divisions, for example, strict organic standards require chickens never be given hormones or antibiotics. The hens eat certified organic feed grown without synthetic pesticides. In the summer they eat out-of-doors on chlorophyll-containing plants. In the winter, they eat alfalfa and kelp, all of which contributes to deep yellow yolks. Their diet includes oyster shells and natural minerals for strong eggshells. Inside each nutrient-dense egg is a complete organic package of essential vitamins, minerals and high-quality proteins.

In the dairy division, bovine hormones or antibiotics are never used in production. All Organic Valley milk is produced exclusively by the farmers in the cooperative on their small family operations. The pastures and feeds used are 100 percent certified organic, and their cows enjoy fresh air and exercise that gives them an average life span twice the U.S. industry average.

The 11th annual Upper Midwest Organic Farming Conference 2000, “Organic Agriculture at the Crossroad,” is scheduled for March 16-18 at the University of Wisconsin-LaCrosse and features 42 workshops, including seven five-hour seminars. It is a project of the Midwest Organic and Sustainable Education Services, a nonprofit organization working to educate farmers on organic agriculture. Over 35 organizations from across Minnesota, Iowa, Illinois and Wisconsin are sponsors. For more information or to register, contact Faye Jones, N7834 County B, Spring Valley, WI 54767; (715) 772-6819; or visit the conference Website at http://agile.net/UMOFC/.
because of the estimated 52 million Americans — or about 20 percent of the population — who are part of the “new green mainstream.”

“When one of these consumers looks at our product and sees that it costs 50 cents or a dollar more, they decide that they can spend a little bit more for their health and the environment,” says Marquez.

According to the “Natural Foods Merchandiser,” an industry trade publication, organic milk sales hit a record high in 1996, followed by a lull in 1997 and yet another record-breaking year in 1998. Although organic dairy sales seem to be soaring, it’s still a niche industry with plenty of room for growth.

**Giving consumers an option**

Between 1996 and 1997, organic ice cream sales grew 292 percent and organic cheese sales jumped 153 percent, according to the Organic Trade Association’s (OTA) first organic manufacturer market survey, released in 1998. Forty-six percent of sales in the organic dairy category came from sales in mainstream retail markets, and OTA reported that in the conventional supermarkets’ organics category, organic dairy product sales have been exceeded only by canned/jarred products. Clearly, new distribution channels for organic dairy products — although not necessarily increased sales at the local natural foods cooperative — are creating the impressive growth, says Siemon.

“We have a wide spread of consumers, from the mainstream to vegetarians,” he says. “Organic sales at the natural foods stores were doing well, so now huge chain stores are making room for our products and not charging all the huge slotting fees they normally would. But we’re not robbing from the natural foods stores. Rather, we’re expanding the customer base.”

Siemon sees it as giving consumers an option — whole milk, organic milk, milk in a re-sealable consumer package. And that remains, too, the mission of the cooperative: to give market support for sustainable agricultural practices that are beneficial to the environment.

“CROPP’s membership consists of small- and mid-sized family farmers developing creative and sustainable solutions to farming and financial challenges,” adds Marquez. “Many of our members have used organic methods for many years and are now in the forefront of organic farming education. They sponsor field days, speak at seminars, work with legislators and continue to experiment on their own farms with methods that work in cooperation with nature respecting the interdependency of all life.”

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**CROPP’s guiding principles**

CROPP operates by these seven primary goals:

- Cooperatively market certified organic products produced exclusively by Organic Valley members.
- Market nutritious, wholesome food as directly as possible to the consumer.
- Establish farmer-determined food prices to reflect fair return and to use these prices to guide the cooperative’s marketing.
- Encourage a farming future that emphasizes ecological diversity and economic sustainability.
- Enable a healthy human livelihood by providing quality employment, cooperation, organic education and community growth.
- Practice environmental awareness and cooperative principles in all aspects of production, handling, marketing and operations.
- Promote a respect for the dignity and interdependence of human, animal, plant, soil and global life.
Asset growth for largest co-ops shows resilience to declining revenues

David S. Chesnick,
Agricultural Economist
USDA Rural Development

Editor's note: This is the second of three articles providing an overview of the cumulative performance of the nation's 100 largest farmer-owned cooperatives in 1998. The first part appeared in the November-December issue.

While the balance sheet is not a perfect indicator, it does provide a good snapshot of the overall financial strength of a cooperative business. The asset side of the balance sheet lists all the resources the cooperative has invested for its operations. The equity and liability side shows how these resources are financed.

Despite the lower revenues in 1998, total asset value increased by 10 percent, hitting a record high of $27 billion. Table 1 shows the consolidated balance sheet of the Top 100 agricultural cooperatives for the years ending in 1997 and 1998. Dairy cooperatives were the driving force behind this increase. Dairy cooperatives' assets jumped 34 percent in 1998 followed by diversified, fruit/vegetable, sugar and cotton co-ops. Farm supply, poultry/livestock and rice cooperatives were the only commodity groups to show a contraction in their asset base. Grain cooperatives didn't show much of a change.

Current assets rebound

Current assets are an important part of a business' liquidity. After falling 8 percent in 1997, current assets for the Top 100 rebounded with a 5-percent increase in 1998. This increase was the result of higher amounts of accounts receivable and inventory levels. Cash balances, on the other hand, continued their declining trend.

Why are cash balances important? Cash is the most liquid current asset. The value is known and there is minimal risk associated with it. However, holding too much cash is not optimal. The opportunity cost of investing in productive assets could be forgone if too much cash is held. Cash levels for all 100 cooperatives continue to fall, reaching a five-year low. Cash balances at the end of 1998 stood at $759 million, a 9-percent decline.

There are several reasons for the decline in cash balances. One relates to

### Table 1—Combined Balance Sheet 1997-1998, Top 100 Agricultural Cooperatives

<table>
<thead>
<tr>
<th>Assets</th>
<th>1998</th>
<th>1997</th>
<th>Difference</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>759,386</td>
<td>834,032</td>
<td>(74,646)</td>
<td>(8.95%)</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>5,570,426</td>
<td>5,053,278</td>
<td>517,148</td>
<td>10.23%</td>
</tr>
<tr>
<td>Inventory</td>
<td>5,721,322</td>
<td>5,479,140</td>
<td>242,182</td>
<td>4.42%</td>
</tr>
<tr>
<td>Other Current Assets</td>
<td>1,134,936</td>
<td>1,148,951</td>
<td>(14,015)</td>
<td>(1.22%)</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>13,186,070</td>
<td>12,515,401</td>
<td>670,669</td>
<td>5.36%</td>
</tr>
<tr>
<td>Total Investments</td>
<td>3,507,187</td>
<td>2,894,563</td>
<td>612,624</td>
<td>21.16%</td>
</tr>
<tr>
<td>Net PP&amp;E</td>
<td>8,452,471</td>
<td>7,749,014</td>
<td>703,457</td>
<td>9.08%</td>
</tr>
<tr>
<td>Other Assets</td>
<td>1,827,747</td>
<td>1,407,537</td>
<td>420,210</td>
<td>29.85%</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>26,973,475</strong></td>
<td><strong>24,566,515</strong></td>
<td><strong>2,406,960</strong></td>
<td><strong>9.80%</strong></td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>16,629,349</strong></td>
<td><strong>15,200,442</strong></td>
<td><strong>1,428,907</strong></td>
<td><strong>9.40%</strong></td>
</tr>
<tr>
<td>Minority Interest</td>
<td>481,261</td>
<td>380,019</td>
<td>101,242</td>
<td>26.64%</td>
</tr>
<tr>
<td><strong>Total Liabilities And Equity</strong></td>
<td><strong>26,973,475</strong></td>
<td><strong>24,566,515</strong></td>
<td><strong>2,406,960</strong></td>
<td><strong>9.80%</strong></td>
</tr>
</tbody>
</table>

Current Liabilities

| Total Short-Term Debt | 2,903,766 | 3,349,553 | (445,787) | (13.31%) |
| Accounts Payable      | 3,422,342 | 3,059,852 | 362,490   | 11.85%   |
| Member Payables       | 636,405   | 534,467   | 101,938   | 19.07%   |
| Patron And Pool Liabilities | 1,321,883 | 1,107,841 | 214,052   | 19.32%   |
| Other Current Liabilities | 1,501,970 | 1,571,411 | (69,441)  | (4.42%)  |
| **Total Current Liabilities** | **9,786,376** | **9,623,124** | **163,252** | **1.70%** |

Other Liabilities And Deferred Credits

| Total Noncurrent Liabilities | 6,842,973 | 5,577,318 | 1,265,655 | 22.69% |

Unallocated Capital

| Total Equity          | 9,862,865 | 8,986,054 | 876,811   | 9.76%   |

Equity Certificates And Credits

| Total Liabilities And Equity | 26,973,475 | 24,566,515 | 2,406,960 | 9.80% |

Preferred Stock

| Common Stock          | 681,041   | 653,496   | 27,545    | 4.21%   |

Unallocated Capital

| Total Equity          | 9,862,865 | 8,986,054 | 876,811   | 9.76%   |

Equity Certificates And Credits

| Total Liabilities And Equity | 26,973,475 | 24,566,515 | 2,406,960 | 9.80% |

Unallocated Capital

| Total Equity          | 9,862,865 | 8,986,054 | 876,811   | 9.76%   |

Preferred Stock
Cash management practices leading to efficient use of cash by cooperatives, thus requiring lower cash balances. Another reason relates to better access to open lines of credit. Therefore, cooperatives do not need to hold excessive cash. On the negative side, some cooperatives are experiencing poor cash flows. Net cash flows for all cooperatives were down, mostly due to the poor cash flow from operations.

Only two commodity groups had an increase in their cash balances—dairy and grain. It’s not a coincidence that both of these groups of cooperatives had an increase in their net margins and positive cash flows from their operations.

Accounts receivable are comprised primarily of debts owed to cooperatives by their members, usually for product purchases. Accounts receivable jumped 10 percent in 1998, ending the year at $5.6 billion. An increase in this category bears watching. If this increase in accounts receivable is a natural extension of higher sales revenue, then there shouldn’t be much of a problem. However, if this increase is a result of tighter cash flows for members, the cooperative may be looking at a higher writeoff for bad debts in the future. Accounts receivable for all Top 100 cooperatives reached 8.1 percent of total operating revenues, up from 7.6 in 1997.

Farm supply, grain, poultry/livestock and sugar cooperatives had lower accounts receivable in 1998. As a percent of total revenues, only farm supply, grain and sugar cooperatives experienced declining values over the past five years. Poultry/livestock and rice cooperatives displayed an increasing trend of accounts receivable to total revenues. The other cooperatives fluctuated and did not show any trends.

Inventories often constitute a substantial portion of current assets. In 1998, inventories were 43 percent of total operating revenues, up from 7.6 in 1997. In 1998, inventories were 43 percent of total current assets. Inventories are considered to be the least liquid of all current assets. Inventory levels for the Top 100 cooperatives increased 4 percent in 1998, to $5.7 billion. Farm supply, grain and rice cooperatives carried fewer inventories in 1998 compared to 1997. Much of the decline for these cooperatives can be attributed to lower sales. Fruit/vegetable cooperatives had the largest dollar value increase in inventories, followed by cotton, dairy, diversified, and sugar cooperatives. Poultry/livestock cooperatives typically do not carry much inventory.

**Investments hit record highs**

Cooperatives invest in both non-cooperative and cooperative ventures. Non-cooperative investments usually indicate investments in joint ventures or other for-profit subsidiaries. Investments in other cooperatives generally represent business done with those cooperatives. Total investments in cooperatives and other businesses increased dramatically (21 percent) in 1998, reaching a record $3.5 billion (table 2). Most of this increase is due to two cooperatives. These two cooperatives accounted for 34 percent of the total amount invested by the Top 100 in 1998, up from 22 percent in 1997.

Investments in other cooperatives (excluding financial cooperatives) increased 13 percent to end the year at $1.7 billion. The majority of the investment here reflects non-cash patronage refunds. However, more recently these investments have been taking the form of joint ventures between two or more cooperatives. Diversified and farm supply cooperatives make up the majority of investments in other cooperatives.

Investment in other businesses reached $1.5 billion, a jump of 41 percent. Most of these investments are in “for profit” joint ventures with other cooperatives or businesses. The dairy cooperatives held more than 50 percent of total investment in non-cooperative businesses in 1998. These investments mostly involved processing facilities and other value-added activities.

Investment in cooperative banks remained steady despite the drop in funds borrowed from these financial

<table>
<thead>
<tr>
<th>Table 2—Cooperative Investment From 1994–1998, Top 100 Agricultural Cooperatives</th>
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<tbody>
<tr>
<td><strong>1994</strong></td>
</tr>
<tr>
<td><strong>Bank For Cooperatives</strong></td>
</tr>
<tr>
<td><strong>Other Cooperatives</strong></td>
</tr>
<tr>
<td><strong>20% or Less Ownership</strong></td>
</tr>
<tr>
<td><strong>Greater Than 20% Ownership</strong></td>
</tr>
<tr>
<td><strong>Other Businesses</strong></td>
</tr>
<tr>
<td><strong>20% or Less Ownership</strong></td>
</tr>
<tr>
<td><strong>Greater Than 20% Ownership</strong></td>
</tr>
<tr>
<td><strong>Total Investment</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3—Sources Of Short-Term Debt 1994–1998, Top 100 Agricultural Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1994</strong></td>
</tr>
<tr>
<td><strong>Current Portion Long-Term Debt</strong></td>
</tr>
<tr>
<td><strong>Banks For Cooperatives</strong></td>
</tr>
<tr>
<td><strong>Commercial Banks</strong></td>
</tr>
<tr>
<td><strong>Notes Issued By Cooperatives</strong></td>
</tr>
<tr>
<td><strong>Other Nonfinancial Entities</strong></td>
</tr>
<tr>
<td><strong>Commercial Paper</strong></td>
</tr>
<tr>
<td><strong>Government Sources</strong></td>
</tr>
<tr>
<td><strong>Total Short Term Debt</strong></td>
</tr>
</tbody>
</table>
Investment in fixed assets continues to expand

Cooperatives need to invest in fixed assets in order to be competitive. These include investing in such things as state-of-the-art processing facilities or equipment that makes their operations run more efficiently.

Investment in fixed assets by the Top 100 has steadily increased since 1994. Fixed assets increased 9 percent, to $8.5 billion in 1998. Driving this expansion were dairy, diversified and farm supply cooperatives. These three commodity groups accounted for 78 percent of the total increase. Two commodity groups, rice and poultry/livestock, had a net decline in fixed assets.

Other assets jumped 30 percent, ending the year at $1.8 billion. These assets include such things as goodwill, patent rights and long-term receivables. Diversified cooperatives held nearly 60 percent of the total amount of other assets.

Current liabilities inch upward

After peaking in 1996, short-term debt has fallen each of the last two years. Table 3 compares the amount of various short-term debts over the past five years. Short-term debt fell 13 percent, to $2.9 billion in 1998.

Leading the decline were grain and farm supply cooperatives. Some grain cooperatives appear to have refinanced some of their long-term debt, causing a $399 million drop in the current portion of long-term debt, a decline of 93 percent. Farm supply cooperatives required less operating loans in 1998. Total short-term loans outstanding fell 45 percent, to $268 million.

However, just four cooperatives were the driving force behind the decline in short-term loans for farm supply cooperatives. These cooperatives appeared to transfer their operating loans with cooperative banks to long-term bonds issued by the cooperative.

Poultry/livestock and rice cooperatives also required fewer operating loans in 1998. All sources of short-term debt for these commodity groups were lower in 1998. The amount of operating loans for rice fell from $136 million to $133 million while those for poultry/livestock fell 2 percent to $92 million.

Cotton and sugar cooperatives increased their use of every type of short-term loan. Cotton cooperatives increased their amount of operating loans by 43 percent, to $167 million. Sugar cooperatives mirrored the increase of cotton, jumping 44 percent, to $65 million. The largest increase from both commodity groups was with the cooperative banks, which accounted for 62 percent (cotton co-ops) and 65 percent (sugar co-ops) of the increase.

Fruit/vegetable and dairy cooperatives both lowered the amount of long-term debt currently due, mostly through refinancing their term debt. However, the increase in operating loans from all sources pushed up the total amount of short-term debt. Both commodity groups increased the amount of operating loans from both cooperative and commercial banks. Fruit/vegetable cooperatives jumped 20 percent, to $475 million, while dairy increased 5 percent, to $183 million.

Diversified cooperatives increased the amount of long-term debt, thus also increasing their current portion of that debt. They also transferred their operating loans from notes and cooperative banks to commercial banks. The net result was an increase of 7 percent, to $1.2 billion of outstanding short-term debt.

Accounts payable for the Top 100 increased by 12 percent, to $3.4 billion. Most of this increase was due to the dairy and diversified commodity groups. Dairy had the largest increase, $219 million, a 51-percent increase. The diversified cooperatives increased the amount in their accounts payable by $197 million, ending the year at $1.2 billion.

Only farm supply and poultry/livestock cooperatives had lower accounts payable. Farm supply cooperatives had the largest decrease, $137 million, ending the year with $821 million.

Poultry/livestock cooperatives typically carry few accounts payable and 1998 was no exception as this sector had only $6.5 million worth of accounts payable, compared to $7.3 million in 1997.

Cotton, fruit/vegetable, grain and sugar cooperatives also had increases in their accounts payable. Yet, they were not in the magnitude of the dairy and diversified cooperatives. Rice cooperatives appear to have refinanced their accounts payable. Their primary creditors were cooperative banks, which stood at $356 million in 1998, down $1 million dollars from 1997.

Table 4—Sources Of Long-Term Debt 1994-1998, Top 100 Agricultural Cooperatives

<table>
<thead>
<tr>
<th>Year</th>
<th>Bank For Cooperatives</th>
<th>Bond Issued By Cooperative</th>
<th>Commercial Banks</th>
<th>Insurance Companies</th>
<th>Industrial Development Bonds</th>
<th>Capital Lease</th>
<th>Other Nonfinancial Entities</th>
<th>Government Source</th>
<th>Other Sources</th>
<th>Total Long-Term Debt</th>
<th>Long-term Debt Less Current Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>1,929,252</td>
<td>807,075</td>
<td>495,095</td>
<td>490,501</td>
<td>224,134</td>
<td>63,147</td>
<td>22,457</td>
<td>2,360</td>
<td>110,713</td>
<td>4,144,734</td>
<td>3,708,750</td>
</tr>
<tr>
<td>1995</td>
<td>2,256,784</td>
<td>1,076,743</td>
<td>378,430</td>
<td>398,279</td>
<td>212,834</td>
<td>54,477</td>
<td>8,079</td>
<td>1,224</td>
<td>128,557</td>
<td>4,515,407</td>
<td>4,125,591</td>
</tr>
<tr>
<td>1996</td>
<td>2,747,684</td>
<td>1,305,092</td>
<td>673,887</td>
<td>355,366</td>
<td>192,108</td>
<td>57,758</td>
<td>6,034</td>
<td>1,064</td>
<td>159,557</td>
<td>5,498,456</td>
<td>4,596,907</td>
</tr>
<tr>
<td>1997</td>
<td>2,831,301</td>
<td>1,225,200</td>
<td>900,694</td>
<td>512,670</td>
<td>181,011</td>
<td>63,668</td>
<td>19,096</td>
<td>1,044</td>
<td>159,463</td>
<td>5,840,483</td>
<td>5,498,456</td>
</tr>
<tr>
<td>1998</td>
<td>2,567,208</td>
<td>2,196,060</td>
<td>701,160</td>
<td>597,030</td>
<td>177,715</td>
<td>34,463</td>
<td>16,355</td>
<td>894</td>
<td>106,023</td>
<td>6,416,908</td>
<td>5,804,913</td>
</tr>
</tbody>
</table>

Table 5—Sources Of Member Equity 1994-1998, Top 100 Agricultural Cooperatives

<table>
<thead>
<tr>
<th>Year</th>
<th>Preferred Stock</th>
<th>Common Stock</th>
<th>Equity Certificates And Credits</th>
<th>Unallocated Capital</th>
<th>Total Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>1,413,779</td>
<td>538,958</td>
<td>4,392,034</td>
<td>1,254,377</td>
<td>7,599,148</td>
</tr>
<tr>
<td>1995</td>
<td>1,636,409</td>
<td>570,932</td>
<td>4,320,151</td>
<td>1,556,453</td>
<td>8,083,945</td>
</tr>
<tr>
<td>1996</td>
<td>1,762,257</td>
<td>602,265</td>
<td>4,311,467</td>
<td>1,656,132</td>
<td>8,932,121</td>
</tr>
<tr>
<td>1997</td>
<td>1,817,836</td>
<td>653,496</td>
<td>4,773,403</td>
<td>1,741,319</td>
<td>8,986,054</td>
</tr>
<tr>
<td>1998</td>
<td>1,427,613</td>
<td>681,041</td>
<td>5,986,067</td>
<td>1,768,144</td>
<td>9,862,865</td>
</tr>
</tbody>
</table>
funds by 23 percent while fruit/vegetable cooperatives increased their use, which compose 55 percent of this source. Diversified, lion, ending the year at $191 million. However, all commodity groups did not share this decline. Diversified, farm supply cooperatives, which make up 81 percent of the total patron and pool liabilities outstanding. Of these three, only the grain cooperatives experienced a decline.

Long-term debt jumps
Continuing a trend that started in 1997, the largest agricultural cooperatives appear to be transferring some of their short-term debt to long-term. As mentioned earlier in this report, short-term debt fell 13 percent. During this same period, long-term debt less current portion jumped 20 percent, to reach an all-time high of $5.8 billion. Table 4 illustrates the sources of long-term debt for all top 100 cooperatives.

Cooperative banks continue to provide the bulk of long-term debt. However, the use of these sources fell 9 percent, ending the year at $2.6 billion. Pushing this decline were farm supply, dairy and grain cooperatives. These three commodity groups represent 39 percent of total borrowed funds from this source. Grain cooperatives had the largest decline. Their use of cooperative banks fell 130 percent, to $237 million, which represented 70 percent of the total decline. The use of cooperative banks by farm supply cooperatives fell $94 million, ending the year at $564 million, while dairy dropped $15 million, ending the year at $191 million.

However, all commodity groups did not share this decline. Diversified, fruit/vegetable and sugar cooperatives, which compose 55 percent of this source’s total amount, increased their use of cooperative banks. Diversified cooperatives increased their use of these funds by 23 percent while fruit/vegetable and sugar both had a 3-percent increase.

Commercial banks held less cooperative debt in 1998 than in 1997. Cooperatives borrowed $200 million less from this source, down from a record high of $901 million in 1997. Only the diversified commodity group borrowed more from commercial banks, increasing their amount from $380 million to $438 million.

An interesting trend in the last few years is cooperatives financing their own debt by issuing bonds. Only poultry/livestock, rice and sugar did not issue their own debt. While diversified cooperatives held 43 percent of the total amount of debt issued by the largest cooperatives, it was the dairy, farm supply and grain cooperatives that contributed the largest increase. These three commodity groups accounted for 83 percent of the $971 million increase. It appears that cooperatives are transferring their debt from traditional sources to these self-financing instruments.

Other sources of debt include debt held by insurance companies, industrial development bonds, capital leases, and government and other non-traditional sources. The use of these other sources increased by 8 percent. Most of this increase is due to diversified and farm supply cooperatives, which make up 81 percent of the total other sources of debt.

Minority interest continues rapid expansion
When a cooperative holds more than a 50-percent interest in a subsidiary, the cooperative must consolidate the financial statements of the subsidiary with its own statements. If the cooperative does not own 100 percent of the subsidiary, there will be a minority interest that represents the claim of outside investors in the subsidiary that is consolidated into the parent cooperative.

The amount of minority interest held in cooperatives’ subsidiaries increased by 27 percent, to $481 million. However, almost all of that increase was a result of one cooperative, which acquired several subsidiaries and joint ventures during the year.

Member equity hits record high
Total member equity jumped 10 percent in 1998, to a record high $9.9 billion. Table 5 shows the breakdown of the various types of equity. Common stock is generally used to represent the voting rights in an incorporated cooperative and represents 7 percent of total equity outstanding. However, a few cooperatives use common stock as a form of equity allocation. These cooperatives accounted for most of the increase, with a majority of the increase (58 percent) coming from one diversified cooperative. Two fruit/vegetable and one grain cooperative accounted for another 41 percent of the increase. With the exception of these four cooperatives, there is usually little change in the amount of common stock outstanding.

Almost all cooperatives use equity certificates to allocate equity to members. Equity certificates increased to $6 billion up $1.2 billion from 1997. All commodity groups showed an increase. However, nearly 40 percent of the increase was from one cooperative transferring its allocated equities from preferred stock to equity certificates. Several other cooperatives transferred equity from their unallocated account to equity certificates. This is why the amount of equity certificates jumped despite lower net margins generated by these cooperatives.

Preferred stock may represent investments by employees and the general public as well as members. Several value-added activities by some cooperatives use preferred stock for investment in these activities. In other instances, retained patronage refunds and per-unit retains are classified as preferred stock. Whatever the reason, the combined value of preferred stock fell by 21 percent, to $1.4 billion in 1998. As mentioned earlier, much of the decline was due to reclassification of preferred stock to allocated certificates.

Unallocated equity is generally income from non-member business and other income on which the cooperative has paid taxes. It is typically used as a reserve to offset losses incurred. In 1998, dairy, farm supply and rice cooperatives were the only commodity groups to show an increase in their unallocated equity. The increase in these three commodity groups was more than enough to offset the drop in the other five groups. Total unallocated equity increased 2 percent to $1.8 billion.
Depressed ag sector puts squeeze on largest co-ops

David S. Chesnick, Agricultural Economist USDA Rural Development

Editor’s note: This is the final article in a three-part series providing an overview of the commutative fiscal performance of the nation’s 100 largest agricultural cooperatives in 1998. Part I appeared in the November-December issue; Part II begins on page 28 of this issue.

Agriculture continues to suffer through a period of depressed commodity prices, impacting not only farmers but the businesses that deal with them. Cooperatives are no exception. While some cooperatives are weathering this crisis well, most are not as fortunate.

The average performance measures for all 100 cooperatives show some deterioration during 1998. Tools developed to analyze cooperatives’ financial performance include four types of performance measurements. These measurements are standard ratios found in most financial textbooks. A list of these ratios and averages for all Top 100 cooperatives are presented in Table 1.

These major areas of measurement include:

- Liquidity, which shows the cooperative’s ability to meet short-run obligations;
- Leverage, which shows the risk associated with financing and the cooperative’s ability to meet its long-term and short-term obligations;
- Activity, which shows the efficiency of how well the cooperative uses its assets; and
- Profitability, which shows the net return on the cooperative’s operations.

Liquidity

The most common liquidity ratios used today are the current and quick ratios. Both evaluate a cooperative’s short-term liquidity by measuring the degree to which it can meet its short-term obligations. Liquidity implies the ability to convert assets into cash in the current period. Liquid assets include cash, marketable securities, accounts receivable, inventories and other debt that is to be paid to the cooperative within the current fiscal year. Figure 1 illustrates the average liquidity ratios for all Top 100 cooperatives.

The current ratio is calculated by dividing total current assets by total current liabilities. The higher the ratio, the more liquid the cooperative is. However, a note of caution is warranted. Interpreting these ratios — beyond the conclusion that they represent current resources over current obligations at a given point in time — requires a more in-depth look at the trends of the individual parts that make up the ratio. For example, during a period of business contraction, current liabilities may be paid off while there may be a concurrent, involuntary accumulation of inventories and uncollectible receivables causing the ratio to rise.

The average current ratio for all the largest 100 agricultural cooperatives declined from 1.38 to 1.35 in 1998 — the lowest value in the past five years. Even though combined current assets for the combined Top 100 cooperatives increased more than the combined current liabilities, as reported in an earlier article, most of these cooperatives found the opposite true. This illustrates the influence of some of the largest cooperatives on the combined balance sheets.

Fruit/vegetable, grain, and rice cooperatives, on average, had increasing current ratios. The other commodity groups had either no change or a lower

<table>
<thead>
<tr>
<th>Table 1—Ratios for all Top 100 cooperatives for 1994-1998</th>
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</thead>
<tbody>
<tr>
<td>Current ratio</td>
</tr>
<tr>
<td>Quick ratio</td>
</tr>
<tr>
<td>Debt-asset</td>
</tr>
<tr>
<td>L-t debt to equity</td>
</tr>
<tr>
<td>Times interest earned</td>
</tr>
<tr>
<td>Asset turnover</td>
</tr>
<tr>
<td>Fixed asset turnover</td>
</tr>
<tr>
<td>Gross profit margin</td>
</tr>
<tr>
<td>Net operating margin</td>
</tr>
<tr>
<td>Return on total assets</td>
</tr>
<tr>
<td>Return on member equity</td>
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</tbody>
</table>
average value for their current ratio. The fruit/vegetable cooperative group had a higher current ratio, due mostly to a build-up of inventory. For grain cooperatives, the ratio was generally higher, due mostly to lower current debt. It was also higher for rice cooperatives because of higher accounts receivable, which — along with lower debt — slowed the decline in current assets.

Lower cash balances and accounts receivable — combined with higher debt, accounts payable and pool liabilities — pushed down the current ratio for cotton cooperatives. The dairy cooperative sector's decline was attributed to higher accounts payable and liabilities due members in relation to current assets. Diversified co-ops had lower inventory levels, higher short-term debt and accounts payable while farm supply co-ops had lower amounts of receivables, which pulled down their current ratio. For poultry/livestock cooperatives, a combination of several factors caused the decline in the current ratio. Sugar remained unchanged from the prior year.

The quick ratio is calculated the same way as the current ratio, but inventories are excluded from current assets. The theory behind this suggests that inventories cannot be converted to cash as quickly as other current assets during liquidation. Also, if the inventory needs liquidation, the cash value would likely be much less than the book value. Therefore, it can be argued that the quick ratio is a better measure of liquidity.

The average quick ratio for all cooperatives followed that of the current ratio and fell from 0.79 to 0.77 in 1998. However, the decline in the
quick ratio was not as large as the drop in the current ratio. This would indicate that, on average, inventory levels are either not increasing as fast as other current assets, or that they are falling faster than other current assets.

Cotton, fruit/vegetable and farm supply co-ops had larger declines in their quick ratios than in their current ratios. These cooperatives had a relative build up of inventory over the past year. However, cotton co-ops maintained a strong liquid position, with an average quick ratio above 1.0. All other commodity groups averaged fewer inventories compared to other current assets.

**Leverage**

Leverage relates to the capital structure or sources of financing for a cooperative. There are several important perspectives on analyzing capital structure, including an examination of the difference between debt and equity.

Equity is the basic risk capital put up by co-op members. The risk inherent in member equity is the uncertainty or unspecified return. Sometimes there is no defined repayment schedule. There must be some equity within the capital structure to bear the risk associated with the cooperative’s business.

Debt, on the other hand, is the use of external funds and must be repaid at specified times regardless of the cooperative’s financial condition. Failure to pay the principal or interest typically results in members losing control of their cooperative.

Financial leverage is the use of debt to increase returns on member investments. Thus, if the fixed cost of the debt is lower than the returns those funds generate, the excess returns will accrue to members. However, if the revenues were less than the fixed cost of the debt, member equity would make up the difference. This is the concept of leverage.

The first leverage ratio, debt-to-asset, is calculated by dividing total liabilities by total assets (figure 2). This represents the claims of outside interests on the cooperative’s assets. The average debt-to-asset ratio for all cooperatives remained steady at 0.60. With the exception of poultry/livestock cooperatives, most commodity groups didn’t remain constant.

Cotton, dairy, diversified, and fruit/vegetable co-ops increased their relative use of debt. Cotton and fruit/vegetable cooperatives used higher amounts of working loans to finance an increase in their inventories and receivables. Both dairy and diversified co-ops increased overall assets. However, dairy relied on short-term debt and member payables to finance the expansion while the diversified co-op sector relied heavily on long-term debt.

The other co-op commodity groups showed a strengthening of their equity base. Farm supply cooperatives used members’ equity to pay off a substantial portion of their working loans. Grain cooperatives transferred current debt for long-term debt and paid off the rest with retained patronage.
refunds. Rice cooperatives apparently sold off inventory and used the proceeds to pay off working loans. Sugar cooperatives increased fixed assets through retained patronage refunds.

The second leverage ratio is long-term debt-to-equity (figure 3). Since both equity and long-term debt take a long-run view of financing, it should be a natural comparison between the two. Unlike the relatively unchanged debt-to-asset ratio discussed earlier, the long-term debt-to-equity ratio increased steadily over the past five years to end 1998 at 0.51. This would indicate that, on average, either cooperatives are transferring their debt from short-term to long-term or they are decreasing the amount of member equity in relation to long-term debt.

Diversified, fruit/vegetable, grain, poultry/livestock and rice cooperatives were leading the trend of shifting their capital structure to more long-term debt in relation to equity. Diversified and fruit/vegetable cooperatives accumulated more debt than equity, with a larger percentage of that debt being long-term. Meanwhile, most of the grain, poultry/livestock and rice cooperatives had a higher amount of equity financing, but are also moving their debt from short-term to long-term obligations.

Cotton and dairy are using more overall debt in their operations but are also using more equity for long-term financing. Sugar cooperatives are generally moving from debt to equity financing while farm supply cooperatives have maintained similar balance in their capital structure.

The last leverage ratio is the times interest earned (TIE). This mainly looks at how many times net revenue will cover interest expense. It is calculated by dividing earnings before interest and taxes by interest payments. A note of caution: this ratio looks at the minimum expenditures needed to cover debt payments. It does not include fixed payments such as principal and lease payments.

The average TIE ratio for the largest cooperatives dropped from 5.8 to 5.4 in 1998 (figure 4). This marks the first decline since 1995. Both higher interest expenses and lower net margins before interest and taxes pushed the average ratio lower for all.

Some cooperatives were able to improve their TIE ratio. Cotton co-ops had a larger increase in their income than interest expense. Thus, they had a higher interest cover ratio. Grain, rice and sugar cooperatives lowered interest rates while increasing their bottom line. Fruit/vegetable co-ops improved their average ratio, primarily as a result of one cooperative. Without that co-op to pull up the average, fruit/vegetable cooperatives would be at the same level as in 1997.

The situation was very similar for the dairy sector, where one cooperative pulled down the average. This cooperative, which typically carries a small amount of debt, had a substantial increase in debt while income fell. Diversified and poultry/livestock co-ops had higher debts and interest expenses while net margins before interest and taxes fell. Farm supply cooperatives generally had lower net margins pulling down their TIE.
Even though the average cooperative had five times the earnings to cover interest expense, diversified, poultry/livestock and sugar cooperatives had average TIE ratios between 1 and 2. This does not necessarily mean further stress in these sectors would be a cause for grave concern for these cooperatives. Many of these cooperatives operate on a pooling basis and, after all expenses, the final payment to members leaves little margin for distribution. Thus, these cooperatives generally have low TIE ratios. However, the diversified co-ops have been carrying a large amount of debt and the decline in their net margins is a concern.

**Activity**

Where the first two types of ratio examined the liquidity and capital structure, the next two look at the operating performances. Activity ratios reveal how much revenue is generated by each dollar invested in the cooperative’s assets. Higher ratios here generally mean higher efficiency within the cooperative.

The first activity ratio, local asset turnover, is calculated by taking the total revenues divided by local assets. Local assets are total assets less investments in other cooperatives. Investment in other cooperatives is generally not considered a revenue-producing asset. Therefore, it makes sense to leave it out of the calculation when looking at the local asset turnover ratio.

The average local asset turnover ratio took a dramatic turn, falling to the second lowest point in the past five years (figure 5). The average ratio fell from 3.8 to 3.5, primarily due to slower sales growth compared to the growth in local assets. All commodity groups experienced a decline in their local asset turnover ratio. More than two-thirds of the Top 100 co-ops had a declining ratio.

The commodity groups with the largest changes were dairy and poultry/livestock. The dairy cooperatives increased their average local assets at a higher rate than the increase in sales, causing the turnover ratio to fall. Poultry/livestock co-ops’ ratio was pushed down by lower sales. Cotton cooperatives would be in the same situation as poultry/livestock cooperatives, with the exception of one cooperative that cushioned the fall for all cotton cooperatives. Diversified, farm supply, grain and rice cooperatives also saw their ratio fall due to lower sales. Meanwhile, sugar co-op ratios fell because of a relatively higher increase in local assets compared to their sales. The local asset turnover ratio for fruit/vegetable cooperatives fell because of both higher local assets and lower sales.

The second activity ratio, fixed asset turnover, looks at how efficiently the cooperative uses its fixed assets to generate sales. This ratio is calculated by dividing total operating revenues by net fixed assets.

While a ratio value out of line with what would be considered “normal” may be a cause for alarm, further examination of the details will be needed to ascertain whether a problem exists. For example, a cooperative with fully depreciated assets could have a high ratio due to the low value of its fixed assets. On the other hand, a cooperative that is expanding its operations could have a temporarily depressed ratio because the new capacity is not fully used at this time. Therefore, other information — such as the average age left on the fixed assets and how much new equipment is purchased — will be needed to help interpret the fixed asset turnover ratio.

The average Top 100 agricultural cooperative purchased $17 million in fixed assets in 1998, down from $17.8 million in 1997. Total net fixed assets for all the Top 100 co-ops hit a record amount of $8.5 billion. The average age of fixed assets (estimated by dividing net fixed assets by depreciation expense) was down from 9.3 years in 1997 to 9.1 years in 1998. These figures would suggest that while cooperatives are expanding their fixed asset base, the industry as a whole didn’t build excess capacity. At the same time, though, a few cooperatives had substantial investments and appeared to have built excess capacity for future growth.

The average fixed asset turnover ratio fell from 18.6 to 15.1 in 1998 — the lowest in the five-year period. Most commodity groups had a lower average fixed asset turnover ratio caused by lower sales. However, dairy cooperatives actually had higher sales without a corresponding increase in assets. Yet, a few dairy cooperatives had substantial declines in their ratio that pulled down the average ratio for the group. While a couple of cotton cooperatives increased their capacity, most of the decline in their fixed asset turnover was caused by lower sales. Similarly, fruit/vegetable cooperatives increased their average capacity along with lower sales.

**Profitability**

Profitability ratios measure the power of the cooperative’s earnings. With poor earnings, the co-op may find it cannot meet its obligations and will be forced out of business. However, cooperatives can have other objectives than to accumulate high returns. The nature of a co-op is to fill a market need of its members. Therefore, co-ops’ profitability ratios can be and usually are, lower than those of investor-owned firms. However, comparisons of the same cooperative or group over time are very informative. The four profitability ratios used in this report include gross margin percent, net operating margins, return on total assets and return on member equity.

Gross margins are the excess of revenues above the cost of goods sold. All operating and non-operating expenses plus payment of patronage refunds,
dividends and income taxes must be covered by the gross margins. Gross margins also indicate the pricing policy of the cooperative. In other words, is the cooperative charging enough for the products sold or paying too much for member products to cover its expenses?

Figure 6 depicts the five-year trend for the average gross margin percentage and net operating margins for the Top 100 agricultural cooperatives. Following a gradual decline since 1994, gross profit margins increased to 14 percent of total sales in 1998, up from 13 percent in 1997. More than 70 of the Top 100 cooperatives registered an increase in their gross margins.

Dairy cooperatives were the only commodity group averaging a lower gross margin percentage. The situation facing most dairy co-ops was that the costs associated with their sales increased more than their revenues. Thus, gross margins were suppressed. No other commodity group averaged a lower gross margin percentage.

Net operating margin percentage looks at the amount of margins that is generated by operations expressed as a percent of total revenue. It is calculated by taking the gross margin less operating expenses and dividing that by total revenue. Indirect income/expense items (patronage refunds, interest income/expense, gains/losses on the sale of assets, and any other extraordinary revenues or expenses not directly related to operations) are not included in the calculation.

Net operating margins as a percent of total revenues continued a downward trend, reaching its lowest level at 1.9 percent. Only two commodity groups had an increase in net operating margins percentage: fruit/vegetable and grain co-ops. The fruit/vegetable cooperatives had both declining revenues and operating expenses. However, the decline in revenues was relatively greater than the decline in expenses. Grain cooperatives also showed declining revenues. Yet, they were able to control their operating expenses and actually increase their operating margins. All other commodity groups experienced lower net margin percentages. Diversified, cotton, farm supply, poultry/livestock rice and sugar all averaged higher gross margins but lower net margins. This would indicate these cooperatives lost some efficiency within their operations.

Return on total assets (ROTA) is calculated by taking net margins before taxes and interest divided by total assets. This ratio looks at the return on the total investment by all parties associated with the cooperative. After reaching a five-year high of 7.39 percent in 1997, return on total assets took a dip in 1998, ending the year at 7.25 percent (figure 7). Only fruit/vegetable and grain cooperatives averaged a higher ratio in 1998. Grain cooperatives saw improvement in their net margins, enabling them to post a higher average return on assets. Fruit/vegetable cooperatives, while averaging higher net margins, relied on slower growth of their asset base compared to their net margins to boost their return on assets.

Lower net margins were the cause for most declining ROTA values. However, some industries — such as the dairy and sugar commodity groups — showed a higher increase in their asset base compared to their net margins. A few cotton cooperatives also experienced a larger increase in their asset base. This will put downward pressure on their ROTA ratios. Some of these cooperatives appear to be building for the future. The other cooperatives generally had lower margins pulling down the ratio.

The last ratio compared in this report is the return on member equity (ROE). It is calculated by dividing the net margins after interest and taxes by total member equity. Indirect income/expense items (patronage refunds, interest income/expense, gains/losses on the sale of assets, and any other extraordinary revenues or expenses not directly related to operations) are not included in the calculation and taxes are excluded is because interest is a return to creditors and taxes are a return to government. Excluding these will provide a true return on member equity. What is interesting about this ratio is the fact that despite the wide fluctuations between the different years for each cooperative, the average return on member equity for all Top 100 cooperatives has remained steady between 11 percent and 12 percent.

Diversified, farm supply and poultry/livestock cooperatives had substantial declines in their average ROE ratios, pulling down the overall average. Much of this decline is attributed to declining margins. Sugar cooperatives again ended the year with a net loss, yet the loss was not as large as the prior year and their return on equity improved. Fruit/vegetable cooperatives boosted their ROE with the help of two cooperatives. Dairy, cotton, grain and rice cooperatives all had a larger percentage increase in their net margins compared to their increase in equity.

In summary, the downturn in the agriculture sector hurt farmers and their businesses. Liquidity indicators point toward a less liquid position for many larger cooperatives at the same time they accumulate more debt. At present, there doesn’t seem to be too much of a concern. However, if the lower activity and profitability of these cooperatives doesn’t improve, agriculture could see more consolidation and change in the cooperative community.
FCA Chairman Marsha Martin dies

Marsha Pyle Martin, chairman and chief executive officer of the Farm Credit Administration (FCA), died Jan. 9 in Austin, Texas. Martin, appointed to a six-year term by President Clinton in 1994, was the first woman to serve as chairman in the 65-year history of the FCA, an independent federal agency responsible for regulation and examination of the Farm Credit System — a network of farmer-owned cooperative financial institutions. Martin was also the first woman senior executive in the Farm Credit System, serving as vice-president of the Farm Credit Bank of Texas, and the first woman to serve as director of the Farm Credit System Insurance Corporation.

“We are surprised and saddened by the loss of our colleague, who was such a vibrant force,” said FCA board member Mike Reyna. “America’s farmers and ranchers and the entire Farm Credit System lost someone who has worked tirelessly for them, and for all of agriculture.”

A lifelong advocate for farmers, ranchers and rural America, Martin spent more than 30 years working in agriculture and agricultural finance. In her role as FCA chairman, Martin fostered efficient and competitive credit markets for borrowers. She is credited for inspiring the FCA board to develop a strategic vision to ensure the long-term viability of the system and keep pace with the rapidly changing financial services industry.

Among the honors awarded to Martin during her career was the Klinefelter Award in 1990 from the Cooperative Communicators Association, honoring her for her work to promote improved cooperative communications programs.

Martin is survived her husband, two children and two grandchildren.

DFA, Dairyworld discuss joint venture

Dairy Farmers of America, Kansas City, Mo., and British Columbia-based Dairyworld Foods at the end of November signed an agreement to develop the first-ever collaborative business effort between Canadian and U.S. dairy producers. The proposed agreement will lead to the joint marketing of specialty dairy ingredients from DFA’s limited liability company, Main Street Ingredients, LaCrosse, Wis., and Dairyworld’s joint venture partner, Pascobel Inc. of Quebec.

Dairyworld Foods has 1,750 Canadian farmer-members and processes fluid milk, cheese and other dairy products. DFA has 25,000 U.S. farmer-members and manufactures and markets a complete line of dairy products as well as supplying fluid milk to processors across the nation.

Land O’Lakes, Mitsui building largest cheese plant

Land O’Lakes (LOL), Arden Hills, Minn., and Mitsui, Japan’s largest trading company, have formed a joint venture to build a new cheese plant in Tulare, Calif. When fully operational, the plant will be capable of processing up to six million pounds of milk a day into bulk cheddar and mozzarella cheese. The initial structure of the joint venture will be a limited liability company with LOL holding a 70-percent share and Mitsui a 30-percent share. The two organizations anticipate additional partners will join in the venture. This will be LOL’s third California plant. Its two others include a multiproduct plant in Tulare and a cheese plant in Orland.

CoBank stockholders elect directors

Stockholders of CoBank, Denver, Colo., elected Wayne Seaman, Ralston, Iowa, and Ronald Schuler, Gold River, Calif. to the board of directors. Seaman is the former chief executive officer of West Central Cooperative and serves as a director with Home State Bank and the Iowa Ag Finance Board. Schuler is president and CEO of the California Canning Peach Association. He also serves on the board of the National Council of Farmer Cooperatives, Ag Network of California, the National Bargaining Committee and the California Agriculture Bargaining Advisory Committee.

Meanwhile, five people were re-elected to the board. They include Donald Benschneider, a Payne, Ohio, grain farmer; Stephen Caruso, CEO of Citrus World, Inc., Lake Wales, Fla.; John Stanley Dean Sr., president and CEO of Amicalola Electric Membership Corp., Jasper, Ga.; Gordon Lamb, an Oakfield, N.Y., dairy producer; and Otis Molz, a Deerfield, Kan., rancher.

CoBank, with $22 billion in assets on June 30, 1999, is part of the $84 billion Farm Credit System. It provides financial services to approximately 2,600 agricultural cooperatives, rural utility systems, Farm Credit associations and other businesses serving rural America.

UW-Madison honors Truman Torgerson

The University of Wisconsin-Madison’s Center for Cooperatives Library
Southern States discontinues member magazine

Southern States Cooperative, Richmond, Va., after more than 50 years, has discontinued publication of its “Cooperative Farming” member magazine. Instead, it has formed a partnership with “Progressive Farmer” magazine to publish special Southern States inserts within each issue. Southern States President and CEO Wayne Boutwell says the partnership will allow the cooperative to more quickly establish its identity with a vast audience of farmers and more active farmers in its 17-state territory.

Co-ops form Soybean Research Company

Land O’Lakes, FFR Cooperative and Limagrain Genetics formed SOYGENETICS, LLC, a new soybean research company dedicated to the development of elite soybean varieties. It is headquartered in Lebanon, Ind., with Stephen J. Baluch as chief executive officer. Research stations will operate at Lebanon; Chatham, Ontario; Fort Dodge, Iowa; Mount Vernon, Ill.; and Jackson, Tenn. Existing soybean research programs from each of the owners serve as the foundation for the new company, the third largest soybean research company in North America. New products will be available to each participant on an equal basis. Any opportunities to offer products into the seed trade are being evaluated and a strategy will be announced later, the organizers report.

Land O’Lakes, Arden Hills, Minn., a food and agricultural cooperative, has sales in all 50 states and more than 50 countries. FFR Cooperative, West Lafayette, Ind., is an inter-regional cooperative that includes Southern States Cooperative, Richmond, Va.; Tennessee Farmers Cooperative, LaVergne, Tenn.; Growmark, Inc., Bloomington, Ill.; and Land O’Lakes. Limagrain, Peoria, Ill., is the U.S.-based subsidiary of Groupe Limagrain, a global seed supplier based in Chappes, France, and owned by 600 French farmers. It is the leader of the European seed industry and ranks fourth in the world for seed sales.

Missouri dedicates power plant

Missouri electric cooperatives dedicated their new St. Francis Power Plant near Poplar Bluff this past fall. The plant is the result of a partnership between Associated Electric Cooperative and Duke Energy, a North Carolina-based company that sells electricity and natural gas. A third partner, Siemens-Westinghouse, built and operates the plant. The plant is needed because of a tight power supply situation for existing and potential customers, said Jim Jura of Associated, which has a sister plant to the St. Francis project under construction in Oklahoma. O.B. Clark, president of the Associated board, said the co-op is committed to meeting members’ future needs. “We are taking a huge step forward. We have $800 million committed to new projects,” Clark explained.

GEN-SYS, Engage sign agreement

GEN-SYS Energy and Engage Energy US, LP, signed a co-marketing agreement to coordinate efforts for the wholesale purchase and sale of energy and energy-related products in the Mid-Continent Area Power Pool and Wisconsin Upper Michigan System area of the Midwest. GEN-SYS is a Minnesota cooperative corporation founded by Dairyland Power Cooperative, LaCrosse, Wis., and includes Corn Belt Power Cooperative, Humboldt, Iowa. Engage is a joint venture company of the Coastal Corp, Houston, Texas, and Westcoast Energy, Vancouver, British Columbia. “Given the developing wholesale electricity marketplace in Wisconsin and surrounding states, this relationship allows GEN-SYS to optimize its generation resources, while managing its exposure to the volatility of wholesale energy markets,” said Chuck Sans Crainte, GEN-SYS president and chief executive officer.

GEN-SYS’ presence in the MAPP region, coupled with Engage’s risk and credit management practices and the application of its national experience in electricity and gas trading, will bring additional options to customers in the MAPP and WUMS areas, San Crainte added.
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