Cooperative Organization and Structure

FARMER COOPERATIVES IN THE UNITED STATES
COOPERATIVE INFORMATION REPORT 1
SECTION 6

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL COOPERATIVE SERVICE

Agway Inc., Syracuse, N. Y., the largest agricultural cooperative in the United States, is also one of the more complex in organization, structure, and junctions. It is a conglomerate of products in farm supplies, marketing, and related services. Organization and structural arrangements encompass direct farmer members, local cooperative members, retail outlets, wholly owned subsidiaries, and joint ventures with cooperatives and other firms.

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Wheat harvesting in the shimmering heat below illustrates the structural span of farmers' ownership in cooperatives. The wheat farmer is a member of a local cooperative that holds membership in a regional cooperative that is a member of National Cooperative Refinery Associations, McPherson, KS, an interregional cooperative.

Cooperative Organization and Structure

From early in the development of commercial agriculture in the United States, farmers have used cooperatives to market their commodities and buy farm inputs. This report presents an overview of cooperatives performing these activities. More detailed reports are available on cooperatives handling each of the major farm products and farm supplies.

MARKETING COOPERATIVES

Marketing crops and livestock and their products is the principal activity of a large number of cooperatives. In others it is important but smaller in volume than the purchasing of supplies for members.

Basic Objectives

Farmers organize and operate marketing cooperatives to help their farming operations fare better economically. Major objectives are to:

1. Maximize income from the sale of members' products. This may be realized by handling large volumes so that per-unit marketing costs can be kept low; by providing a producer-controlled check on prices and operating practices and margins of other marketers; by adding value from processing operations; by moving some products in bulk from farms to plants; and by returning net savings or margins above operating costs to member-patrons each year.
2. Achieve quality improvements not available to individual producers through grading and marketing large volumes.
3. Assure farmers of dependable services on a year-round basis. This may include custom services on farms and at cooperative facilities.
4. Provide information to farmers that will help them produce products of the type and quality that consumers want, that will encourage efficient marketing practices, and that will help them to increase crop yields and livestock gains.

Early Activities in Cooperative Marketing

One of the early examples of producers using cooperative or group action to market their products was in 1794 when farmers in Virginia and the Carolinas joined in community drives of livestock to eastern coastal slaughter centers. The first marketing cooperative was formed in 18 10, and the development of cooperative marketing from then until 1933 may be divided into four periods.

Farmers Experiment With the Idea, 1810-70

Farmers began forming cooperatives during this period in the Northeast, Cotton Belt, Upper Mississippi Valley, and Far West. The earliest efforts at ' 'associated or cooperative' ' dairying were attempted at Goshen, CT, in 1810. Several cooperative cheese and butter factories were established in New York and other States after 1850. In 1836, cooperatives were organized to conduct public auction sales' of purebred cattle in Ohio. In 1840, producers in New York cooperated in' selling wool through depots.

In 1857, Wisconsin farmers formed the Dane County Farmers Protective Union and built a grain elevator at Madison. Two grain associations were organized in Illinois 10 years later. In 1860, the first association to market fruit was organized at Hammonton, NJ, and one to market hogs through an auction was formed in Brown County, IL. In 1865, Michigan passed the first law recognizing the cooperative method for buying and selling. By 1867, more than 400 dairy marketing cooperatives were in operation in the United States.

General Farm Organizations, 1870-90

The Grange sponsored cooperative marketing in some States and both marketing of products and purchasing of supplies in others. They concentrated on cotton in the South; on grain in the central part of the country, with 40 cooperatives formed in Iowa alone by 1871; and in Kentucky, they sponsored warehouses for receiving and handling tobacco. In the 1870's, California Granges sponsored cooperative marketing of grain, wool, and other products. The State Grange exported some wheat.

After the decline of the Grange, the Farmers Alliance developed in the late 1880's in the South and started a number of grain marketing efforts.

Farmers not affiliated with farm organizations also formed many cooperatives during this period. By 1890, some 1,000 cooperatives were active with 75 percent handling dairy products, 10 percent handling grain, and more than 10 percent marketing fruits and vegetables.

Many Cooperatives Organized, 18904 920

Local cooperatives were formed during this period in nearly all States. Livestock shipping associations developed to full stature. Cooperatives were organized to market cranberries in Massachusetts and New Jersey; grapes in New York, Michigan, and Iowa; and fruit and eggs in California.

Two new general farm organizations were formed in 1902—the Farmers Union in Texas and the American Society of Equity in southern Illinois. The Farmers Union placed emphasis on marketing cotton in the South and grain, livestock, and dairy products in the Midwest and North Central States. The Equity first sponsored cooperative warehousing and pooling of tobacco and controlling its production. Efforts then shifted to the North Central States where it sponsored cooperatives to market grain, livestock, potatoes, and general produce.

Many well-known regional or terminal marketing cooperatives were formed during this period to handle livestock, wool, tobacco, poultry and eggs, raisins, walnuts, grain, and dairy products. By 1920, the number of active marketing cooperatives-local, federated regional, and large centralized-had approached an all time peak of 12,000.

Large-Scale Commodity Marketing Cooperatives Established, 1920-33

In 1920, farmers accepted a new slogan, “orderly commodity marketing,'' to be attained by forming single-product regional associations to handle the entire crop in important producing areas. Under the leadership of Aaron Sapiro, a California lawyer, 16 State and regional associations were formed for marketing cotton, tobacco, wheat, broomcorn, white potatoes, peanuts, rice, sweet potatoes, olives, alfalfa, milk, melons, and poultry. Farmers signed “ironclad” contracts to deliver their crops to these cooperatives. By 1925, 74 associations with 880,000 members were in operation; but by the end of the Farm Board in 1929, the rapid development of national commodity cooperatives had almost ended. They could not live up to their high expectations, and they never controlled a sufficient amount of any product to exert a strong market influence.

Still another general farm organization-the Farm Bureau-became active during this period. In the 1920’s, it sponsored the organization of a few national cooperatives to market grain, fruits and vegetables, and livestock. Also, the Farmers Union continued to organize local and terminal grain cooperatives in the North Central region.

During the 1920-33 period, legal developments also occurred to strengthen cooperative marketing. Legislatures in most States adopted standard agricultural cooperative acts. The Capper-Volstead Act, passed in 1922, gave Federal sanction to farmer cooperatives that met certain requirements; and in 1926 Congress passed the Cooperative Marketing Act that provided for a division of cooperative marketing, now known as the Agricultural Cooperative Service, in the U.S. Department of Agriculture. In 1929 the Agricultural Marketing Act established the Federal Farm Board which assisted in the formation of a number of new large-scale associations to market livestock, wool, cotton, and sugar beets. Several were national in scope.

Current Position

Number and Volume

During the last three decades, the number, types, and functions of cooperatives marketing farm products have changed greatly. The number of predominantly marketing associations declined from 6,5 19 in 1950-51 to 3,441 in 1985 (table 1).

The total cooperatives engaged in marketing dropped from 7,283 in 1950-5 1 to 3,925 in 1985. The difference in the two figures for 1985 consists of farm supply purchasing cooperatives with marketing operations. Primarily marketing cooperatives handled about 90 percent of total cooperative marketing sales.

In 1985, the 3,925 cooperatives' total gross sales of products were $57 billion, of which about $10 billion was intercooperative business (mostly products marketed by regional federated associations for their member local associations). This left a net volume of $47.3 billion.

After deducting value added from processing and marketing margins, the cooperatives' net volume of $47.3 billion was about 28 percent of farmers' cash receipts at the farm level. This was almost double the cooperative market share in 1950-5 1 (table 1).

The five States with largest cooperative net volumes in 1985, the latest year such data are available, were: Iowa, $5.9 billion; California, $5.77 billion; Minnesota, $5.4 billion; Wisconsin, $4.2 billion; and Illinois, $3.97 billion.

From 1950 to 1975, about 40 percent of farmers' cash receipts from products marketed have come from crops and the other half from livestock and poultry products. Since then, through 1985, about one-half consisted of crops and the other half consisted of livestock and poultry receipts.

Farmers' cash receipts from all product marketings increased from $28.5 billion in 1950 to $142.1 billion in 1984 (table 2). Receipts from crops increased almost 6 times from 1950 to 1985 with the largest increase in oil-bearing crops and food grains.

In 1985, the largest crop sales were from food grains; those from oil-bearing crops, fruits and vegetables, and all other crops (except feed grains) were about the same. In that year, cooperatives marketed about 33 percent of the grain and soybeans, 17 percent of the fruits and vegetables, 18 percent of the dry beans and peas, and 33 percent of the cotton sold by farmers.

Receipts from livestock and products have increased about 4.3 times since. 1950, with the greatest increases occurring in cattle and calves and dairy products. In 1985, receipts from cattle and calves made up over 40 percent of the total. Those from dairy products were next with about 26 percent of the total. In that year, cooperatives marketed about 78 percent of the milk and dairy products, 8 percent of the livestock and wool, and 8 percent of the poultry and eggs that farmers sold.

Table l-Net sales of farm products by cooperatives and cooperative share of market at farm level, selected years, 1950-51 to 1985

Fiscal year [1]	Primarily marketing cooperatives: Number	Primarily marketing cooperatives: Memberships	Total co-ops marketing farm products	Net value of products marketed by co-ops[2]	co-ops' share of market at farm level[3]
		Million		*Million dollars*	*Percent*
1950-51	6,519	4.1	7,283	6,361.8	17.0
1955-56	6,284	4.2	7,024	7,495.2	21.9
1960-61	5,727	3.5	6,548	9,631.2	23.9
1965-66	5,194	3.6	5,842	12,197.7	25.7
1970-71	5,096	3.1	5,515	15,801.9	26.3
1975-76	4,658	2.8	4,840	29,783.1	29.6
1980	3,808	2.5	4,350	48,911.0	3114
1983	3,647	2.55	4,175	49,343.5	31.0
1984	3,514	2.3	4,173	54,556.0	31.0
1985	3,441	2.2	3,925	47,320.8	28.0

[1]Included co-ops' business years ending between July 1 and the following June 30. In 1980 and thereafter, co-ops' business years ending anytime in calendar years were used.
[2]After excluding business between cooperatives.
[3]After deducting co-ops marketing gross margins and value added from processing farm products.

Table 2-Farmers' cash receipts from the sale of major crops and livestock and products, selected years, 1950-85

Calendar year	Crops					
	Feed grains	Food grains	Oil bearing crops	Fruits, vegetables, & tree nuts	All other	Total
	Million dollars					
1950	1,941	2,143	935	2,624	3,713	12,356
1960	2,450	2,986	1,362	3,509	4,952	15,259
1970	2,542	5,109	3,590	4,884	4,851	20,976
1975	7,760	12,150	7,273	8,875	9,092	45,150
1980	10,531	16,794	14,540	13,289	13,872	69,026
1983	16,191	9,733	13,505	14,132	13,256	66,817
1984	16,451	9,739	13,666	15,176	14,064	69,096
1985	21,397	8,846	12,237	15,394	14,828	72,702
	Livestock and products					
	Cattle and calves	Hogs	Dairy products	Poultry and eggs	All other	Total
	Million dollars					
1950	5,680	3,214	3,719	2,839	653	16,105
1960	7,380	2,869	4,760	3,293	687	18,989
1970	13,633	4,508	6,525	4,250	647	29,563
1975	17,524	7,883	9,923	6,810	919	43,059
1980	31,173	8,920	16,598	9,137	1,577	67,405
1983	28,682	9,785	18,757	9,738	2,481	69,443
1984	30,601	9,691	17,927	11,896	2,624	72,739
1985	28,742	8,940	18,135	11,195	1,589	69,401

Source: Statistical Bulletin No. 674 and later issues, Economic Research Service, U.S. Dept. of Agr.

Principal Types

Product

Most cooperatives specialize in one type of product, but a few market two or more commodities.

Grain cooperatives were the principal type in number and equal to dairy cooperatives in volume in 1985 (table 3). Livestock and fruit and vegetable associations were next but much less in volume.

Of the 2,139 marketing grain, about 1,500 were primarily grain cooperatives, and the remaining were primarily supply purchasing cooperatives with grain as a minor business.

Trade Area

Local cooperatives serve a trade area around a town or city, and some have one or more branch facilities in outlying communities. A few serve two or more counties. They are most prevalent in the marketing of grain in the central part of the country. In total, 3 ,44 1 locals marketed farm products in 1985.

Three types of regional cooperatives exist. The first is a large-scale centralized association that serves farmers directly in an area comprising several counties, district, or region. Examples are dairy and fruit and vegetable associations. About 300 of these cooperatives operate nationwide. The second is a federated cooperative that markets products for member locals. These are most common in marketing grain. About 90 regional cooperatives are federated. Third, interregional cooperatives

Table 3-Major types of products marketed by cooperatives and net volumes of each in 1985 and 1950-51.

Major product	1985		1950-5 1	
	Number handling	Net volume	Number handling	Net volume
		Million		*Million*
Grain, soybeans and products	2,139	$15,673.8	2,741	1,361.5
Dairy products	394	15,959.9	2,074	1,933.7
Livestock and products	378	3,414.1	755	1,321.9
Wool and mohair	170	19.9	258	29.3
Cotton and products	459	1,660 4	550	320.0
Fruits and vegetables	370	5,068.3	956	552.6
Sugar products	44	1,505.4	65	149.8
Rice	58	825.7	44	90.7
Poultry and products	59	956.6	762	263.7
Nuts	33	919.4	81	113.5
Tobacco	33	302.1	24	125.8
Beans & peas (dry edible)	49	144.2	80	25.0
Other	96	871.1	405	74.2
Total	‘3,925	$47,320.9	‘7,283	6,361.8

‘Adjusted for duplication arising from multiple activities performed by many cooperatives.

serve their member regional associations. Most serve large areas, but none are truly national in scope. Only a few marketing cooperatives are of this type.

Organizational Structure

Centralized cooperatives directly serve their farmer member-owners. Control and volume flow from members to the cooperatives, and services and patronage refunds flow back to the members. All local cooperatives and those regional cooperatives with farmer membership are of this type, making a total of about 4,071.

Federated cooperatives serve member local and regional cooperatives. Both regional and interregional associations may be federated in structure. Service and patronage refunds flow from interregional to regional to local cooperatives and then to their farmer-members. Ninety-six cooperatives are either federations of locals or regionals.

Mixed cooperatives serve both member farmers and member cooperatives. They are a combination of centralized and federated structures. Only six are in operation, but these are quite large.

Functional

Marketing cooperatives may be classified according to their principal market functions such as bargaining, auctioning, buying and selling, pooling and selling, and processing and exporting. These are discussed in later sections.

Membership and Control

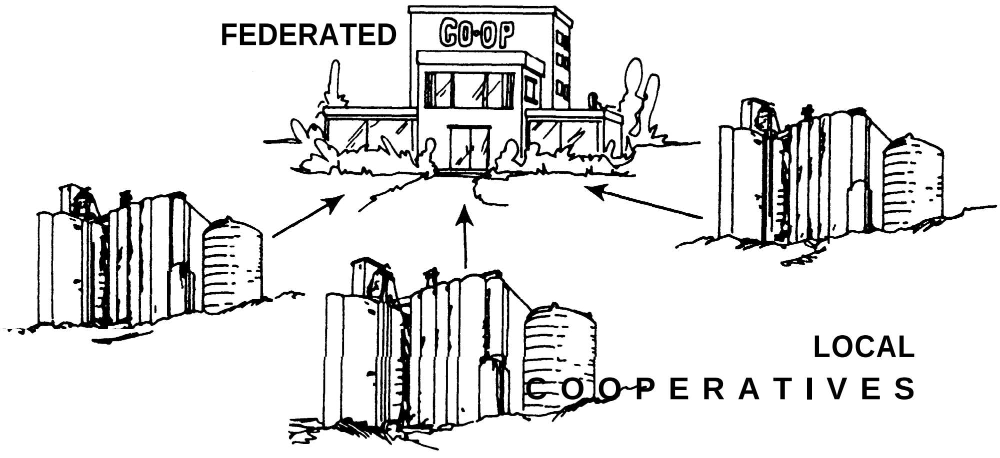
Marketing cooperatives are owned by members who are producers of farm products. They usually own a share of common stock or pay a one-time membership fee in the cooperative.

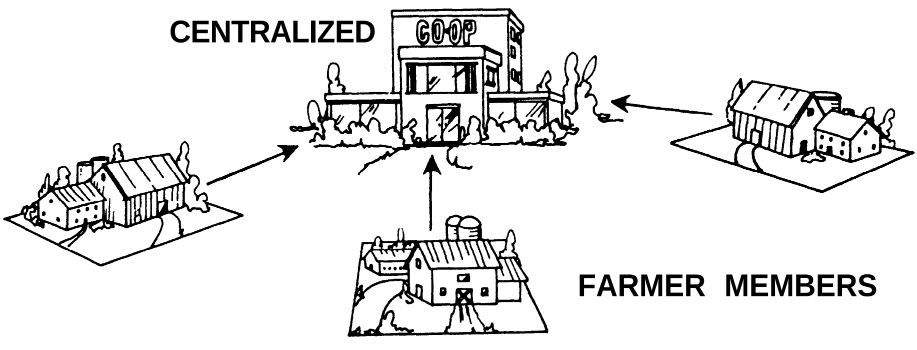
Federal and State laws and regulations usually specify that member business must exceed nonmember business in marketing cooperatives.

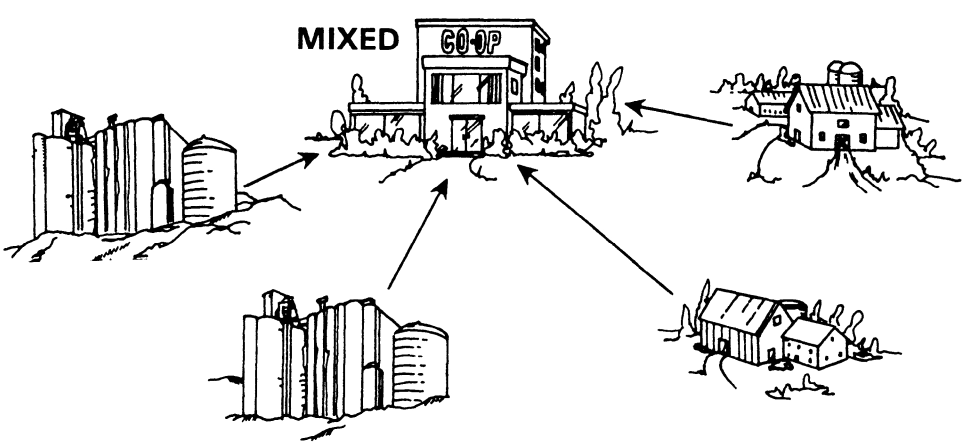
In 1985, the 3,441 predominantly marketing cooperatives reported about 2.2 million memberships, but this total included a considerable number of farmers with membership in two or more cooperatives.

In most marketing cooperatives, a member has only one vote. In some, particularly on the West Coast, members have additional votes based on the volume of business the member does with the cooperative.

Organizational Structure







Several, however, have a limit of 5 or 10 votes per member. A few in the Midwest sponsored by a farm organization permit one vote for each share of capital stock owned, and the farm organization owns a majority of such stock.

Members elect directors, usually seven or nine, to provide overall management for the cooperatives, and the boards employ general managers or chief executive officers to manage daily operations.

Marketing Practices

Facilities and operations of marketing cooperatives are in many ways similar to those of other firms. They must employ resources such as management, labor, and capital. They are subject to market and competitive factors and to all regulations regarding industries in which they operate, including those that affect handling, packing, processing, marketing and transporting products.

Marketing cooperatives, as well as other firms, must determine handling charges and margins, storage rates, and hauling practices and rates. They must find market outlets, investigate credit ratings of buyers, and manage accounts receivable. They must manage inventories so as to minimize market risks and product deterioration. They must provide benefits and incentives for employees and training for managers, employees, and directors.

Marketing cooperatives also have some business practices that are somewhat unique because of their member ownership and basic objectives.

Sales Methods

Sales on a Bargaining Basis-About 110 farmer-owned bargaining associations operated in 1985. Most bargained with processors for their members' products. Dairy, fruit and vegetable, and sugar associations account for nearly all bargaining cooperatives. Members pay a small per-unit charge called a check-off to cover the associations' operating expenses. Their managers bargain for sales prices, grade and quality differentials, and dates and methods of delivery. Also, they often bargain with processors for fertilizer, pesticides, and other production supplies.

Sales on a Commission Basis-Only 163 cooperatives sold products of members on a commission basis in 1976, the latest year such data were available. Their commissions or incomes totaled $74 million. One-third of these cooperatives marketed livestock. Those handling fruits and vegetables and dairy associations made up most of the remainder. The sales value or receipts that farmers received sometimes are channeled through the cooperatives, and in other cases they are paid directly to the farmers by the buying firms but sent to the cooperatives for distribution to their members.

In the 1960's, several regional livestock cooperatives began country commission selling operations. They operate as exclusive sales agents for a group of animals or for all animals marketed during a specified time period. They contact and negotiate with buyers, but producer-sellers approve each sale. The cooperative arranges transportation and delivery, returns sales proceeds less commission fees to sellers, and collects from buyers. As livestock marketing has decentralized, country commission selling has increased as producers sell more slaughter livestock direct to buyers. This activity is sometimes called feedlot sales, feedlot contracting, or direct telephone sales.

Sales Through Auctions—A number of local and several regional livestock cooperatives operate auctions. Producers deliver livestock to the auction where they are weighed and sorted. After the sales price is determined by auction, the proceeds less marketing charges are forwarded to producers. Many local associations' main activity is sponsoring special or graded feeder pig and feeder cattle auctions.

Sales on a Buy-and-Sell Basis-This is the most common practice of marketing cooperatives, especially those handling grain. Of 3,631 marketing and marketing/supply associations in 1976 (latest data available), 3,016 operated on this basis, and their receipts accounted for about 80 percent of total cooperative marketing receipts. Two-thirds of these cooperatives were marketing grain.

Advantages of buy-and-sell operations are that they (1) give the farmer full market value on the day the product is sold to the cooperative, and (2) that each farmer retains the decisionmaking prerogative on which day to sell products.

Sales on a Pooling Basis-Two hundred eighty-one cooperatives operated on this basis in 1976 with fruit and vegetable associations accounting for almost 60 percent of the number and 45 percent of total pooling receipts. Second in amount of pooling receipts were dairy cooperatives. Other types that operated pools were cotton, sugar, rice, grain, livestock, poultry, and seed.

Pooling means assembling and commingling products from many producers, combining sales returns and operating expenses, and prorating or distributing net returns among members in proportion to the volume each provides through the cooperative over a specified time. Pooling usually involves a series of payments to the producer. An initial or advance payment, at least sufficient to cover harvest costs, is frequently made when producers deliver their products to the cooperative. Successive payments may be made as products are sold, depending on the length of the pool. A final payment is made shortly after the pool is closed.

Pooling cooperatives have various policies regarding advance payments to growers. A few make no advances, but most make an initial advance sufficient to cover harvesting costs. The number of advances after that varies, depending on the length of the pool. It is important that boards of directors have conservative policies so the cooperative does not make over-advances (payments that exceed final sales receipts).

A cooperative may operate a single product pool or a multiple product pool. The length of the pool may be monthly, seasonal, or annually. Some cooperatives operate storage pools where advances are made to members who pay a stipulated amount per pound per month and other carrying costs.

In a pool operation, members bear the risks and gains of changes in market prices. Advantages of pooling usually are that (1) it spreads market risks although farmers must be satisfied with a good average price; (2) it permits management to merchandise products according to a program it deems most desirable and to one that can be planned with considerable precision in advance; (3) it permits management to use caution in placing and timing shipments to market demands and in developing new markets-i.e., orderly marketing; and (4) it helps finance the cooperative.

Use of Marketing Agreements or Contracts

An important problem of marketing cooperatives, particularly those operating on a pooling basis and handling highly perishable fresh produce, is the coordination of grower production and harvesting with marketing requirements and opportunities. Grower marketing agreements or contracts are increasingly used to achieve this coordination.

The basic purpose of such an agreement is to ensure the association of a definite volume of business. They usually require the entire crop of each member to be marketed through the association. In addition, such contracts may specify in detail certain other rights, duties, and obligations.

Orderly marketing requires a degree of control over the product by the selling agency. The sales or processing plant staff need advance information on quantities available for marketing or processing and authority to make firm sales commitments. Other coordination techniques may be adopting planting schedules, estimating quantities available for sale or processing, controlling delivery from field or storage by sales or process scheduling, maintaining quality of product, and sharing expenses and receipts among growers.

The marketing contract, as an integrating and coordinating device, transfers some decisionmaking from individual growers to the cooperatives. For such contracts to be successful, a full understanding and commitment by growers is necessary. They must be willing to compare their returns over a 3- to 5-year period with those received in nonpooling operations. They must believe that, on the average or over time, specialized management, backed with market analysts, in a pooling cooperative can do better than individual members in selecting the times to sell their products.

Contract Production and Marketing

Cooperatives marketing broilers, eggs, hogs, and canning crops have developed contract production programs in the past three decades. Poultry and livestock contract producers provide land, labor, and facilities, and the cooperatives provide breeding stock, feed, medicine, technical and managerial assistance, and processing and marketing services. Producers usually are paid a fee per unit of production with incentive payments for efficient production.

Cooperatives may contract with two or more groups of producers for specialized products. For example, one may contract with pullet flock growers, another with hatching egg flock producers, and yet another with finished&broiler producers. With hogs, one group contracts to produce pigs and another to feed them to finishing weight.

Canning cooperatives provide seed, fertilizer, pesticides, technical and management assistance, and processing and marketing services.

Operating Policies

Pricing Policies

Cooperatives operating on a buy-sell basis usually set their buying prices in line with those of other firms in the trade area. They do not attempt to always have the highest price, i.e., meet every competitor every day, but to realize a reasonable buying margin that will produce reasonable yearend net margins or savings and patronage refunds.

Pricing may involve differentials or discounts for various grades and hauling charges unless they are listed separately. These factors plus changes in the value of inventories affect the gross margins per dollar or unit realized over various time periods.

Pricing at prevailing market levels reduces the likelihood of extreme pricing practices by competitors. It increases the chances for the cooperative to realize net margins and accumulate operating reserves to cushion the effects of market price declines or unusual expenses.

Most cooperatives resist the desires of some members to price at "cost of doing business" every day because it is impossible to calculate and leaves no leeway for unforeseen expenses.

Patronage Refund Policies

Marketing cooperatives operating on a buy-and-sell basis distribute net margins or net savings at the end of each fiscal year. The general practice is to (1) pay a dividend, which cannot exceed 8 percent per year in most States; (2) transfer a specified percent to "retained earnings or unallocated reserves;" and (3) declare the remaining net margins on member business as patronage refunds. Under Federal tax laws, however, at least 20 percent of such refunds must be paid in cash. The remainder may be paid in noncash forms, such as capital stock, certificates of equity, or capital book credits. Some cooperatives place these noncash or deferred refunds in a revolving capital fund to be redeemed or paid later in order of their age.

Many marketing cooperatives declare patronage refunds to both members and nonmembers to comply with specified income tax laws or to increase volume and membership. In such cases, refunds to nonmembers usually are credited first toward the purchase of a share of common capital stock or to payment of a membership fee.

Most marketing cooperatives declare different rates of refunds on a per-unit basis on different products marketed, depending on variations in gross margins, handling costs, and net margins realized on them. Some declare one rate of refund on the total sales of products marketed.

Informing Members

Cooperatives are unique in that their member-owners are also their patrons. This poses the problem of attaining and maintaining an informed membership-one that will elect competent directors, demand sound financial and business policies, follow cooperative principles, and operate for the benefit of farmer-members.

Continuous information is needed to educate new members and to maintain the loyalty of old members. Sometimes this means members foregoing short-term gains to ensure the long-range stability and success of the cooperative.

Thus, cooperatives use various communication methods to keep members informed. They must budget for special and annual meetings and for newsletters or membership publications.

Obtaining New Members and Redeeming Member Equities

Cooperatives must develop ways of obtaining new members to replace those who move away, die, or otherwise cease to support the cooperatives. This requires knowledge and continuous effort on the part of cooperative managers, field personnel, and haulers of farm products. It requires development of annual recruitment programs and participation of boards of directors.

Many marketing cooperatives require a relatively small membership fee or share of common stock for membership. A majority credit patronage refunds to nonmember patrons with the initial amount credited toward the purchase of a membership. While some founding members may believe this method gives undue benefits to nonmembers, many believe the benefits of the additional volume and savings in income taxes outweigh the disadvantages.

Changes in membership are continuous, and cooperatives must adopt definite policies for obtaining capital from new members and redeeming that held by old members-especially those dying, retiring from farming, or moving out of the trade area. The revolving capital plan, which will be discussed later, provides an excellent method for accomplishing this. Cooperatives not using this plan must set aside reserves from net savings and use them-plus the capital acquired from new members each year-to redeem equities of inactive members on a regular or scheduled basis. Failure to do this can cause serious member and public relations problems.

Vertical Integrated Functions

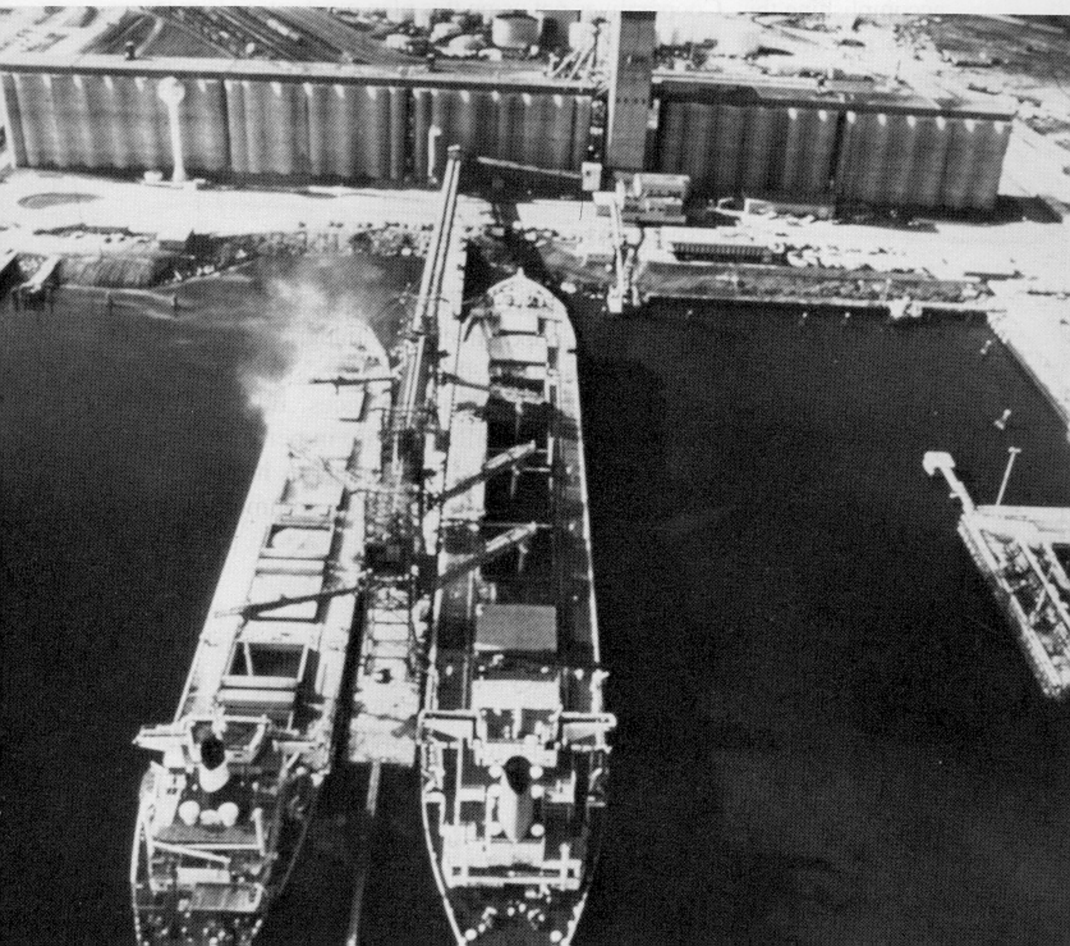
From the beginning, cooperative marketing operations have become more diversified and complex. Cooperatives have integrated horizontally by adding branch facilities to perform the same types of services and sometimes to handle additional products and services. But the greatest progress has been in integrating vertically; that is, in performing more functions and services in marketing the same product as it moved from the farmer to the consumer. Following are the more common functions in this vertical chain:

Bargaining

A number of cooperative associations were established as a bargaining agent for members. They bargained with buyers for prices, orderly delivery dates, and often for seed and other production supplies.

This activity required few facilities, personnel, and capital and

Some cooperatives depend heavily on international markets, such as Sunkist Growers, Inc., Van Nuys, CA, in citrus and Union Equity Exchange, Inc., Enid, OK, in grain.



Some 107 marketing cooperatives own more than 350 brands of food products, many of which are nationally known such as Welch's, owned by National Grape Cooperative Association, Inc., Westfield, NY, and Land O'Lakes, Inc., Minneapolis, MN.

often led to year-round marketing operations. It was most prevalent among fruit, vegetable, and dairy farmers. About 200 bargaining associations were in operation in the early 1980’s.

Auctioning

Some cooperatives operate auctions for marketing livestock, especially for feeder pigs and cattle. Cooperative egg auctions were common many years ago. Beginning in 1965, tele-auction marketing has increased among regional associations for feeder pigs, sheep, and lambs. In 1976, a photo-auction was first tried by a California cooperative. It uses a sales catalog and color slides with a large screen.

Assembling, Storing, and Selling

Most local cooperatives, especially those marketing grain, buy products from farmers and sell them to regional or terminal cooperatives and other grain firms, flour millers, processors, and the like. The cooperatives are the assemblers or first handlers. They grade, wash, and pack products such as fruits, vegetables, nuts, and eggs, and sometimes store members’ products before selling them. Many now custom store grain for farmers.

A few regional cooperatives operate as livestock dealers in country markets, buying hogs directly from producers. Several regionals also have programs wherein producers contract for future delivery of livestock or grain at a guaranteed market price. These cooperatives then hedge their contract purchases on the futures market.

As mentioned, a number of cooperatives market fruits, vegetables, wool, and rice on a pooling basis for their members.

Semi-Processing

After assembling farmers’ products, some cooperatives perform a semi-processing operation such as pasteurizing and homogenizing milk, washing and shelling walnuts, and ginning cotton. These activities require additional facilities, employees, and operating funds. Most are small and at the local level.

Processing

Another major step many marketing cooperatives have taken to enhance returns to members has been to process farm products, either at the local or regional level. Dairy cooperatives, for example, manufacture butter, cheese, dehydrated milk products, and ice cream. They now produce about 64 percent of all butter, 47 percent of cheese, and 87 percent of dry milk products in the United States. Cooperatives, especially those marketing fruits and vegetables, process products under their own brands or labels. Many also pack products for food chains under the chains' private brands or labels.

Fruit and vegetable cooperatives freeze, can, or dehydrate products. Some process natural strength and concentrated juices and beverage bases. Cooperatives process about 40 percent of all citrus used for processing and 40 percent of the total dried fruit pack, 33 percent of the canned deciduous fruits, and 10 percent of the canned vegetables in this country.

Other examples are milling rice; processing sugar cane and sugar beets; processing soybeans, cottonseed, turkeys, and broilers; dehydrating eggs; and slaughtering livestock. One cooperative manufactures denim cloth from lint cotton. Two operate durum flour mills.

Many grain marketing cooperatives mix or mill feed from some of the grain and soybeans they receive from members. If these same members buy the feed, they benefit from savings on both their marketing and purchasing transactions.

Further Processing

Some cooperatives have found it advantageous to process more products as they are moved toward food retailers and consumers. Poultry cooperatives further process by cutting, cooking, and freezing broiler parts, breaking eggs into whites and yolks for sale to bakers, and preparing turkey rolls. A few make meal for feed from poultry feathers and waste products.

Meatpacking cooperatives can hams, box beef, and make various types of sausage. Cottonseed oil mills refine cottonseed oil, and some use the oil to make mayonnaise. Several fruit and vegetable cooperatives make beverage bases, essential oils, pectins, and pharmaceuticals.

Central or Terminal Warehousing, Distribution, and Selling

Most local grain marketing cooperatives now are members of regional associations that sell their grain at terminal and subterminal markets. Buyers may be flour millers, feed manufacturers, and exporters. Savings at this level flow back to the locals and their farmer-members.

Turkey processing cooperatives own a central sales agency that sells most of their product to institutions. The larger dairy and fruit and vegetable cooperatives sell products direct to retail food chains and other large-volume buyers.

Seven fruit cooperatives in widely scattered areas own a cooperative with distribution centers in the East to serve buyers in high population areas.

Retailing

Few marketing cooperatives have attempted to market their products through their own retail food stores. Several cooperatives in the Northeast joined to operate a chain of supermarkets but discontinued operations after several years because they could supply only a small percent of the large number of items their stores were required to carry. One dairy cooperative in the East successfully operated for many years about 300 convenience food stores that sold many other products besides milk, butter, ice cream, and cheese. The operation was sold in the mid- 1980's. Another large-scale dairy cooperative operates several retail dairy stores featuring carry-out deli foods and other dairy products. Several fruit and vegetable cooperatives operate produce curb markets that sell directly to consumers.

Related Services

Most marketing cooperatives now provide related services for members. Examples include hauling, grading, weighing, drying and storage of grain; hauling milk from farm to plants; helping producers obtain high-quality breeding stock and feeder animals; and providing financing, seed cleaning, cotton ginning, offering future trading services, and disseminating market and production information.

Of about 110 specialized related service cooperatives, about 40 percent engage in trucking, drying, and similar services related to marketing farm products. Others provide services related to purchase of farm production supplies.

Financing and Taxation

Financing Methods

Many financing methods and practices of marketing cooperatives are similar to those of other firms. They differ, however, in the way they raise member capital and in their major source of borrowed capital.

In 1976, the latest year complete data were available, 3,631 marketing and marketing/supply cooperatives had total assets of $14.3

billion, of which $5 .5 billion or 39 percent was equity capital. Grain cooperatives had about 40 percent of these assets and 50 percent of the equities.

Equity capital consisted of the following:

Type	Percent of total amount	Percent of co-ops using each
Common stock	14.4	70.9
Preferred stock	12.8	37.5
Membership certificates	.5	.8
Certificates of equity and capital credits	58.2	89.4
Unallocated reserves or retained earnings	14.1	78.9
Total	100.0	---

These cooperatives realized **$1.3** billion of net savings or net margins in 1976, including intercooperative savings, which were distributed as follows: cash patronage refunds, 41.4 percent of the total; noncash refunds, about 42 .5 percent; retained earnings or unallocated reserves, 7.4 percent; dividends on equity capital, 2.5 percent; and income taxes, 6.2 percent.

Most of the common and preferred stock represented patronage refunds retained in the business. Some pay moderate rates of dividends; some pay none. Capital stock directly invested by members usually bears dividends up to 8 percent a year-the maximum permitted under most State agricultural cooperative laws.

The certificates of equities and capital or book credits also represented noncash or deferred patronage refunds. Many marketing cooperatives place these equities in a revolving capital fund. Under this plan, some or all of them, after paying 20 percent in cash as required by law, are retained in the business until the needed amount of equity capital is accumulated. These deferred refunds are revolved or redeemed in order of their age, often on a 5- to 7-year basis, at the discretion of the board of directors. Such equities may be evidenced by certificates of capital stock, equity or indebtedness; by allocated book credits or equity reserves; or by individual statements of deferred patronage refunds. They do not carry definite maturity or due dates; if they did they would be member debt capital rather than equity capital.

A revolving capital plan has definite advantages. It provides a convenient and regular method by which member patrons provide capital in proportion to the amount of business they do with the cooperative; and it keeps ownership and financing of the association largely in the hands of active members by redeeming the oldest outstanding equities on a regular basis.

A unique plan of financing used mainly by pooling cooperatives involves the use of per-unit capital retains. Members authorize their cooperative to retain a specified amount per case, carton, hundredweight or per dollar from sales or service proceeds. Equity capital is accumulated in a revolving fund to the level desired by the board of directors to adequately finance the cooperative, and then the oldest amounts are redeemed annually.

In 1976, a total of 301 marketing cooperatives used this method. Of that number, 17 1 were fruit and vegetable and 52 were dairy cooperatives. The 301 marketing cooperatives had about $796 million of outstanding capital retains at the time. They constituted about 72 percent of the allocated equity capital of fruit and vegetable cooperatives, 50 percent of the capital of rice cooperatives, and 27 percent of the capital of dairy cooperatives.

Marketing cooperatives borrow large amounts of capital. At the end of 1976, they had almost $5 billion outstanding. Their main source of borrowed funds was the 13 banks for cooperatives supervised by the Farm Credit Administration. About 64 percent of their outstanding borrowed capital was from the co-op banks and only 9 percent from commercial banks.

These banks for cooperatives are now entirely owned by farmer cooperatives, and they distribute much of their annual net income as patronage refunds based upon interest paid by the borrowing cooperatives. About 21 percent of cooperative borrowings represented debt securities such as debenture bonds and certificates of indebtedness issued by the cooperatives.

Income Taxation

Marketing cooperatives are subject to all types of taxes, including property, sales, and income.

Federal income tax laws provide for a single current tax at the farmer patron level on income produced through a farmer cooperative if the cooperative adheres to certain requirements as to the form in which it distributes patronage refunds and makes distributions within a prescribed time. In conforming with tax laws, a cooperative has two major alternatives:

1. It may shift its income tax liability to patrons, by meeting the strict requirements of Section 521 of the Internal Revenue Act of 1954. This act requires that after paying up to 8 percent dividends on member capital and setting aside reasonable capital reserves, the remaining net margins must be distributed to all patrons except government agencies as patronage refunds.

2. The cooperative may reduce its gross income for tax purposes by distributing patronage refunds to member patrons or to all patrons according to precise rules or procedures.

Under either alternative, cooperatives must conduct more than 50 percent of their marketing business with members who are agricultural producers. The law also says farmer cooperatives must pay at least 20 percent of their patronage refunds in cash. Choices are available for form and timing of patronage refunds, type of written notices of allocation used, and ways to get patrons' consent.

Of the 3,63 1 farmer marketing and marketing/supply cooperatives in 1976 (latest year available), 1,767 or 49 percent were operating under Section 52 1 of the Internal Revenue Code. More than 67 percent of the dairy, livestock, fruit and vegetable, cotton and rice associations were in this group, but only 31 percent of the grain and soybean cooperatives were under Section 521.

Benefits

The cooperative marketing of farm products has benefited farmers in numerous ways. These benefits have varied among products and regions of the country, and they have been both tangible or direct and intangible or indirect. Some cooperatives have achieved little or no success and discontinued operations; but most have benefited not only members but also nonmembers, rural communities, and consumers. Following are some benefits brought about by cooperatives:

1. *Farm income has been increased.* First, substantial net savings have been made most years, with most of them distributed to members as patronage refunds and dividends on member capital. Substantial amounts also have been retained in the cooperatives to finance facilities and operations.

Overall data on net margins from strictly marketing sales are not available because many cooperatives realize part of their net margins from farm supplies and from federated cooperatives of which they are members. Estimates based on a study in 1976, however, indicate net savings from marketings on a buy-and-sell and pooling basis were near 2.2 percent of sales. If 2 percent were applied to all cooperatives' net marketing volume, including the value of products bargained for and those sold on a commission basis, total net savings would have been almost $600 million that year. In 1980, they would have totaled almost $1 billion. Some of these savings have resulted from low per unit handling and processing costs due to assembling large volumes.

Many cooperatives operating on a pooling basis realize net proceeds that substantially exceed the average market prices in their trade area and the average for their State. For example, a rice marketing-processing cooperative has for the past three decades paid its members an average of 40 cents per hundredweight above the average price received by all rice growers in the United States. Also, its soybean growers have received 35 cents a bushel more than the average.

Second, daily market price levels have been increased in the trade areas cooperatives serve.

This is most evident when cooperatives first begin operating but is difficult to evaluate years after they have become established. Many farm leaders believe the daily "yardstick" or competitive effect of cooperatives exceeds their annual net savings and patronage refunds. Likewise, they believe that in pooling, bargaining, and commission selling, cooperatives acting on behalf of farmers favorably influence prices paid to them. The steady increase in cooperative volume and share of the market seems to support this belief.

2. *Dependable and improved services have been provided.* Cooperatives have provided year-round marketing or processing service in some communities when they otherwise would not be available. Cooperatives have provided or improved services, such as hauling products, to meet the needs of members even though these services made little or no net savings for the cooperatives.

Some cooperatives have developed new services such as electronic auctions to encourage more competitive pricing, bulk assembling and handling, and use of bulk farm tanks and trucks to move products to cooperative plants.

Managers and field staff in progressive cooperatives have provided valuable information to members about farm production and management practices and on farm markets and economic conditions affecting their industries.

Farmers own and control marketing enterprises that are service-oriented as contrasted with investor- or dividend-oriented businesses.

3. *Improved quality of products has been encouraged.* In marketing farm products, cooperatives' pricing practices have been based on differentials for quality. Also, employees have provided information on ways to produce quality products and to maintain that quality in the marketing processes. Cooperatives have encouraged production oriented to market requirements by developing producer payment plans based upon meeting grade, size, time, and other market specifications. Some of the major cooperatives have led in demanding industry grade standards and then using them in offering top quality products to buyers.

4. *Markets for farm products have been expanded.* Through pooling

products of specified grade and quality, many cooperatives have met the needs of large-scale buyers. A number of cooperatives have developed markets in other countries, thus providing outlets for more production than members otherwise could sell.

A number of cooperatives have expanded markets by processing members' commodities into different forms or foods, thus capturing a greater share of the value added to a product as it moved toward consumers.

5. *A training ground has been provided for the development of local farm leaders.* Also, cooperatives have helped members to become more self-reliant and informed citizens in their communities.

6. *Rural communities have benefited.* Cooperatives have provided payrolls that have helped other local businesses. Most of their net savings or additional returns to farmers have remained in the community. Also, the leaders and resources of cooperatives have often supported community projects.

7. *Consumers have benefited.* Many marketing cooperatives have helped consumers by encouraging farmers to produce quality products, providing consumer information, introducing new products and processes such as frozen applejuice concentrates, and helping establish Federal and State inspection and grading. Also, some of the benefits from lowered production and marketing or distribution costs of cooperatives have accrued to consumers.

Further, many U. S. cooperatives have helped develop cooperatives overseas or have provided information to foreign cooperative leaders on the operation and services of our marketing associations.

Challenges

Marketing cooperatives face many challenges in the years ahead—some common to most of them, some peculiar to the type of product they market. Many challenges are internal that involve structure, size, membership, financing, and operations. Others are external that pertain to agricultural, economic, and competitive pressures in the food marketing industry of which cooperatives are a part.

A list of "musts" for cooperatives:

1. Cooperatives must increase volume so as to lower unit costs and increase returns to producers. In some products, expanding sales to high volume private label buyers might be helpful. New facilities will require careful decisions regarding location, design, and capacity.

2. Cooperatives must omit continuous emphasis on cost control and marketing efficiency to help meet the effects of inflation and high

interest rates. A more active leadership role in shaping and influencing transportation policies and regulations should help.

3. Cooperatives must maintain reputations for being a dependable source of products of reliable and consistent quality.

4. Cooperatives must explore ways to improve the pricing arrangements for their products. These may include use of more forward contracting and electronic auctions to help increase buyer competition.

5. Cooperatives must look for opportunities to vertically integrate their operations by processing or further processing some of their product volume. This applies especially to cooperatives marketing grain, cotton, tobacco, livestock, and wool.

6. Cooperatives must increase the use of marketing agreements or contracts-in some cases tailoring them to specific variety, quality, and volume considerations.

7. Cooperatives must consider more use of pooling-a unique method followed by some successful cooperatives.

8. Cooperatives must expand exports.

9. Cooperatives must increase cooperation among cooperatives in processing, in both domestic and foreign selling, in use of common brands, in warehousing and distribution, in transportation, in researching of market requirements of buyers, and in plant breeding and testing of new varieties. Such efforts may involve joint ventures, regional federations of local cooperatives, and interregional associations.

10. Cooperatives must strengthen member equity capital bases. Possible ways include the sale of cooperative securities, such as preferred stock, and the use of per-unit capital retains. With a good member-understanding program, such retains might be used in cooperatives operating on a buy-and-sell basis as well as in those operating on a pooling basis. At the same time, cooperatives will need a plan for regularly redeeming equities of estates and members who move out of their trade areas.

11. Cooperatives must improve management effectiveness and operating efficiency. This involves, among others, evaluation, training, and long-range planning.

12. Cooperatives must develop an informed membership that understands and supports the operating policies, financing methods, and objectives of the cooperatives, and which will help obtain new members as the older ones become inactive. Also, cooperatives should strive to develop a better public understanding of their objectives and benefits to rural communities and consumers as well as farmer-members.

Basic Alternatives

Many believe marketing cooperatives have three basic alternative strategies or approaches for the future. These are to maintain open markets, offer cooperative contracts, and integrate into advanced markets.

In the future, most commercial farmers will be a part of a system—either a corporate one controlled by investors or a cooperative one controlled by producers. For the cooperative to be most effective, indications are that both input requirements (credit, supplies, and equipment) and product marketing (assembling, processing, and selling) will need to be coordinated in one cooperative. Such full-service integrated enterprises will be necessary for competing with the large industrialized corporations that are becoming increasingly important in agriculture.

Small and part-time farmers and migrant workers pose special challenges. Including production resources and management into the input purchasing and product marketing cooperative, which is being tried in the West, may prove to be of assistance to this group in the future.

PURCHASING COOPERATIVES

Farmers annually buy a substantial amount of production supplies. Some are produced on farms, such as feed grains, hay, pasture, seed, feeder pigs and cattle, and turkey poults; other supplies produced off farms include fertilizer, petroleum, farm chemicals, equipment, and broilers and layer chicks.

Basic Objectives

Farmers organize cooperatives to purchase supplies and improve farming profitability. These cooperatives have the following objectives :

1. To reduce costs of production supplies and equipment for members. This is realized by volume buying, manufacturing or processing, distributing some supplies in bulk directly from plants to farms, developing more efficient practices, and returning net margins above operating costs.

2. To ensure farmers of a dependable source of supplies. The objective is to purchase supplies needed by farmers throughout the year, even though this may result in greatly reduced net margins during unusual supply situations or in fewer sales opportunities elsewhere.

3. To provide supplies of a quality that will produce the greatest returns for farmer-members. Cooperatives act as purchasing agents to select supplies to produce maximum yields per acre and gains per pound. For example, they usually help provide the type and quality of feeds, seeds, and fertilizer recommended by State agricultural experiment stations.

4. To provide dependable services to help improve farm practices and reduce time and labor for farmer-members. Cooperatives provide many services related to the supplies they handle, such as bulk delivery of feed, custom spreading of fertilizer, and equipment rental. Cooperatives also provide specialists to advise on use of supplies and on-farm management practices.

Early Activities in Cooperative Purchasing

Cooperative purchasing of supplies by farmers began early in U.S. history. A few farmers in a neighborhood-often members of the same church, farm organization, or club-would pool their orders and buy a carload of seed, coal, salt, twine, flour, feed, or fertilizer.

Earliest efforts in organized cooperative purchasing occurred about

1850 in farmer clubs in Illinois and Wisconsin. One of the earlier farm supply associations was organized in 1863 at Riverhead, NY, to buy fertilizer at wholesale.

Buying Activities Sponsored by Three Farm Organizations, 1875-l 920

For about 10 years after the Civil War, a surge of cooperative buying developed through local and State Granges. Purchasing agents were established to assemble and place orders with dealers who shipped directly to farmer-members at special prices.

The most important contribution of the Grange to cooperative purchasing, however, was said to be its policy of recommending cooperatives be formed according to Rochdale principles. After 1875, numerous Grange supply and general warehouse stores were organized throughout the country, but many lasted only a few years.

Between 1880 and 1890, Farmers Alliance organized many business agencies and exchanges similar to those of the Grange. But despite all the interest, less than 100 farm supply purchasing cooperatives were operating by 1900.

The next nationwide stimulus to cooperative purchasing came from Farmers Union, organized in 1902. At first, business agents for local, county, and State Farmers Unions made purchases for members. Mail orders also were used. Farm supply purchasing cooperatives were then organized, and many Farmers Union grain-marketing cooperatives in the Wheat Belt and in Wisconsin, Minnesota, and Iowa also added supply services. The American Society of Equity, also formed in 1902, sponsored cooperative purchasing and marketing.

From 1901 to 1920, about 2,260 farm supply purchasing cooperatives were organized and 350 discontinued operation. More than half were formed in 19 16-20. The number of active purchasing cooperatives reached a peak of about 3,000 in 1922. However, only about 1,000 of these cooperatives reported to the U. S. Department of Agriculture and were listed in its records as operating in 1922.

Several Regional Purchasing Cooperatives Formed, 1907-l 918

Regional wholesale cooperatives formed during this time to supply member local cooperatives were Fruit Growers Supply Co., Los Angeles, CA, organized in 1907 to provide containers and packaging materials for citrus growers in California; Farmers Union State Exchange, Omaha, NE, 1914, to serve both farmers and local cooperatives; and Central

Cooperatives, Inc., Superior, WI, 19 17, to serve local cooperative stores.

Two regionals organized to mainly serve farmers direct included Eastern States Farmers Exchange, Inc., West Springfield, MA, 1918, operated branch warehouses and a car-door distribution system; and Cooperative Grange League Federation Exchange, Inc., Ithaca, NY, 1920, which employed private agents and local service cooperatives as distribution outlets.

A factor encouraging this rapid development of cooperative buying was the opportunity for savings from the wide gross margins taken by existing firms. World War I also stimulated food production and farmers' use of supplies and equipment.

Deflation in prices after World War I caused the failure of a number of supply purchasing cooperatives that had overexpanded. This trend was offset to some extent, however, by a number of marketing associations adding supply services. During the 1920's, adverse economic conditions facing farmers, along with a growing mechanized and commercialized agriculture, spurred new interest in purchasing cooperatives.

Many Farm Bureau and Independent Cooperatives Formed, 19204 935

The Farm Bureau provided stimulus to cooperative purchasing in the 1920's. County and State Farm Bureaus first used an agent to purchase carloads of supplies. Others bargained with local dealers for price concessions for members. Not long after, numerous countywide Farm Bureau cooperatives were organized that soon formed State wholesale supply associations, mostly in the Central and Southern States.

Mississippi Farm Bureau Federation began purchasing fertilizer for members in 1921, Indiana followed in 1922, and Ohio in 1923. Within a few years, all had organized separate State wholesale associations. Similar ones were formed in Illinois in 1927 and in Michigan in 1929. Petroleum products were among the newer items these cooperatives began to handle in quantity.

These statewide Farm Bureau cooperatives pioneered in forming interregional associations to purchase and manufacture supplies. One developed into what is now Universal Cooperatives, Inc., Minneapolis, MN.

Numerous purchasing cooperatives also were formed independently of general farm organizations in Minnesota, Wisconsin, and other Midwestern States during this period. In 1926, local cooperatives formed the first petroleum wholesale cooperative-now known as Midland Cooperatives, Inc. (which later merged with Land O'Lakes), in

Minneapolis. Consumers Cooperative Association, Kansas City, MO, (now Farmland Industries, Inc.) was organized 3 years later.

A few regional cooperatives resulted from mergers of two or more associations. Cooperative G. L. F. Exchange, Inc., Ithaca, NY -the largest for many years—resulted from merging its supply department with those of Dairymen's League Cooperative Association in New York City, and Farm Bureau Federation in New York State. It merged with other cooperatives in the 1960's to become Agway Inc., Syracuse, NY.

From 19 10 to 1930, Eastern farmers organized cooperatives mainly to purchase feed, seed, and fertilizer. Southern cooperatives specialized in fertilizer and seed. Midwestern farmers formed many separate petroleum cooperatives or added petroleum services to grain-marketing cooperatives. In the Far West, feed and poultry equipment, fertilizers, insecticides, containers, and other orchard and packing supplies were bought cooperatively.

USDA listed 1,588 predominantly supply purchasing cooperatives active in 1930-3 1. They had 392,000 members and a volume of about $2 15 million.

Supplies Added by Marketing Associations

Over the years, marketing cooperatives diversified their operations by handling supplies as a sideline. The most common items added were petroleum products, feed, seed, and fertilizer by grain-marketing associations; feed and equipment by dairy and poultry marketing cooperatives; and containers, fertilizer, seed, and insecticides by cotton, fruit, and vegetable marketing cooperatives. Regional marketing cooperatives also began manufacturing supplies members used in quantity such as fertilizer, feed, and shipping containers to attain additional savings or to improve quality of supplies, or both.

By 1950, about 75 percent of all associations marketing farm products as their major activity also handled farm supplies, but their net supply volume accounted for only 25 percent of total supplies handled by all cooperatives.

Current Position

Agricultural Cooperative Service first obtained annual data on number of cooperatives handling supplies and types of volume for fiscal years 1950-5 1.

Membership and Control

Purchasing cooperatives are owned by their members who are producers of farm products. They may be landowners, tenants, or both. Usually they must own a share of common stock or pay a one-time membership fee.

Federal and State laws usually specify that member business of purchasing cooperatives must exceed their nonmember business. If they wish to comply with Section 52 1 of the Internal Revenue Code, they must-among other requirements-limit their purchasing business with nonmembers who are nonproducers to not more than 15 percent of their total.

In 1984, the 2,136 predominantly purchasing cooperatives reported about 2.4 million memberships, but this total included a considerable number of farmers with membership in two or more cooperatives.

In almost all purchasing cooperatives, each member has one vote. Some of the federated wholesaling/manufacturing cooperatives permit one vote for each share of capital stock, but the amount of such stock is owned in proportion to the amount of business member local cooperatives have done with their federated cooperatives over a specified period of time.

Members elect directors, usually seven to nine, to provide overall management of the cooperatives, and the boards employ general managers or chief executive officers to manage the daily operations.

Number and Volume

In 1985, there were 2,036 predominantly farm supply purchasing cooperatives with 2.39 million memberships, including some duplication. Peak number of such cooperatives was 3,375 in 1955-56.

A total of 4,288 purchasing and marketing cooperatives reported handling farm supplies in 1984, a substantial decline from 1950-5 1, when the number was 7,4 14. During this period, however, the number handling fertilizer, pesticides, and building materials increased substantially. States with the largest number of cooperatives handling supplies in 1985 were Minnesota, Wisconsin, North Dakota, Iowa, and New York.

Farmer cooperatives had gross supply sales of $26.4 billion in 1985. After eliminating intercooperative business, such as wholesale to retail, net sales were $16.6 billion. Most of these were to individuals; a small amount was to other firms. These data compared with a gross volume of $3.7 billion and a net volume of $2.5 billion in 1960-61.

States with the largest net volume of cooperative supplies in 1985, the latest year such data were available, were Iowa, $1.5 billion; Minnesota, $1.1 million; Illinois, $1.06 billion; New York, $1.05 million; and Wisconsin, $893 million.

Primarily purchasing cooperatives accounted for about 75 percent of supplies sold by all cooperatives, with marketing cooperatives' supply departments handling the remaining fourth.

Petroleum was the largest dollar volume item, accounting for 34.9 percent of total supplies in 1985 (table 4). Feed and fertilizers were next, and with petroleum, they represented 74 percent of the total net supply business. Farm chemicals, building materials, farm machinery, farmstead equipment, containers, meats and groceries, and unclassified general farm supplies and equipment accounted for the remaining 26 percent.

In 1985, combined intercooperative supply business of regional and interregional cooperatives was about $9.8 billion-the difference between gross and net sales. Data indicate local cooperatives are now obtaining a larger proportion of farm supplies from regional wholesale cooperatives, and such regional associations are making greater use of interregional cooperatives as sources of supplies.

Factors bearing on patronage of wholesale cooperatives are that many local cooperatives operate feed mills, and some wholesale cooperatives do not carry all of the types of supplies that member locals sell.

Table 4-Major types of supplies and equipment sold by cooperatives and net volumes of each in 1985 and 1951-52

Major type	1985		1951-52	
	Number handling	Net volume	Number handling	Net volume
		Million		*Million*
Building materials	1,775	396.5	790	40.2
Containers	489	149.6	925	17.8
Farm chemicals	3,204	1,450.8	1,115	24.7
Farm machinery & equipment	1,590	356.1	1,794	76.5
Feed	3,099	3,120.7	4,252	810.9
Fertilizer	3,237	3,341.6	3,380	183.7
Meats and groceries	410	153.0	860	38.0
Petroleum products	2,579	5,800.5	2,657	421.5
Seeds	3,120	5 10.3	3,437	95.0
Other supplies & equipment	3,688	1,361.6	4,525	210.4
Total	'4,288	16640.7	'7,426	1,918.7

'Adjusted for duplication arising from multiple activities performed by many cooperatives.

Market Share

Farmers purchased about 26 percent of their production supplies and equipment through cooperatives in 1985. This compared with about 12 percent in 1950-5 1 (table 5). Their market share of petroleum products was 43 percent; for fertilizer, 44 percent; for farm chemicals, 29 percent; for feed, 16 percent; and seed, 15 percent.

The greatest increase in market share since 1950-5 1 occurred in the first three items. Feed remained steady, after increasing to 20 percent in 1959-60 but then declining after cooperatives in the East stopped contracting with broiler producers.

Principal Types

Many primarily marketing cooperatives of the same type also handle farm supplies. The primarily supply-purchasing cooperatives may also be classified into the following types:

Centralized-About 2,080 local and 10 regional purchasing cooperatives are called centralized cooperatives because farmers have direct membership in them and are served directly from the cooperatives'

Table 5—Number of cooperatives handling farm supplies and equipment, and number of memberships in farm supply cooperatives, in specified years, 1950-51 to 1985

Fiscal year[1]	Primarily farm supply purchasing cooperatives		Net value of supplies sold by all co-ops	Co-ops' share of market
	Total	Memberships		
		Million	*Million*	*Percent*
1950-5 1	3,283	2.87	$1,685.4	11.9
1955-56	3,375	3.43	2,046.0	13.5
1960-6 1	3,222	3.67	2,472.2	14.9
1965-66	2,949	3.15	3,085.3	15.4
1970-7 1	2,731	3.02	4,339.5	15.8
1975-76	2,731	3.05	9,411.6	18.3
1980	2,369	2.80	16,134.1	20.0
1983	2,208	2.40	15,942.9	[2]20.0
1984	2,136	2.39	16,968.9	[2]20.0
1985	2,036	2.39	16640.6	26.0

'Business years ending between July 1 and following June 30, except 1979 and 1980 which included business years ending between January 1 and December 31.

*Estimates.

facilities. Control and patronage flow from farmer-members to the cooperative, and services and patronage refunds flow back to members.

Federated-Local retail cooperatives form regional federated wholesale cooperatives to supply their needs. Regional cooperatives, in turn, form national federated purchasing associations or area manufacturing associations, often called interregionals, to provide various supplies. Patronage refunds flow down from interregional to regional to local cooperatives and finally to farmer-members. In 1985, there were about 30 primarily federated purchasing cooperatives.

Mixed—About 10 regionals serve local cooperatives on a wholesale basis and farmers on a retail basis. These mixed types are a combination of federated and centralized associations. They also market some farm products.

Trade Area

Local-Most purchasing cooperatives serve a trading area around one town. Some have one or more branches in outlying communities, and in some Central States, trade territories comprise a county or two. These local cooperatives retail supplies to farmers, and some of the larger ones manufacture the feed or bulk blend the fertilizer they sell. In 1984, about 2,080 primarily supply-purchasing associations were classified as locals.

Regional-On the West and East Coasts, supply purchasing cooperatives serve large trade areas through branch stations or service centers, local subsidiary cooperatives, and noncooperative private outlets. Most of these large-scale or regional cooperatives also wholesale, and some manufacture, supplies for member local cooperatives. Some of the large ones retail supplies to farmers, and a few perform both functions. Thus, regionals consist of both centralized and federated cooperatives.

Some regional associations also provide management, financing, auditing, insurance, member information, training, and field services for member local cooperatives.

An example of a regional federated association that wholesales or manufactures supplies for local cooperatives is Farmland Industries, Inc., Kansas City, MO. An example of a regional mixed or combination association that provides both retail and wholesale services is Southern States Cooperative, Inc., Richmond, VA.

Interregional-Regional cooperatives have found they can improve purchasing power and increase net margins by purchasing and manufacturing supplies on a joint or cooperative basis. As a result, they have formed nine national or area interregional purchasing associations. These associations are federations of regionals. They generally specialize in manufacturing one type of supply or in pooling the purchasing power of a group of regionals for several kinds of supplies, such as tires and steel products.

An example of an interregional cooperative is Universal Cooperatives, Inc., Minneapolis, MN, formed in 1974 through a merger of National Cooperatives, Albert Lea, MN, and United Cooperative, Alliance, OH. It has 36 member regional cooperatives in the United States, Canada, and Puerto Rico and handles a variety of farm supplies and farmstead equipment. Another example is CF Industries, Inc., Long Grove, IL, owned by 16 regionals in the United States and Canada. It manufactures anhydrous ammonia and other nitrogen and phosphate fertilizers and manages nitrogen plants for other regional cooperatives.

Lines of Supplies

Specialized—Petroleum cooperatives were formed in the Central and North Central States, and a number of Grange oil cooperatives and stores began in the Pacific Northwest. Many later merged with local grain marketing cooperatives that were handling feed, seed, fencing, roofing, and the like. Some petroleum cooperatives in the East still deliver fuels in larger areas than the general supply cooperatives serve.

In the West, feed is the main sideline of poultry and dairy marketing cooperatives, and containers and pesticides are sidelines of fruit marketing associations. Several interregional cooperatives specialize in either fertilizer, seed, or petroleum. One conducts research on livestock and poultry feeds, and another does plant breeding or seed research. Few local and regional purchasing cooperatives handle only one or two types of supplies.

Diversified-Most supply purchasing cooperatives now handle several types of supplies and equipment such as feed, fertilizer, building materials, hardware, farmstead equipment, automotive supplies, containers, and home supplies and equipment. Some distribute liquefied petroleum (LP) gas, home heating oils, liquid fertilizers, and animal health products. Some are called farm service centers.

Many diversified farm supply cooperatives serve other rural and suburban patrons by adding lawn and garden supplies and equipment, car care services, home heating fuels and appliances, and riding horse equipment and other recreational merchandise.

These types are described in more detail in a later section on vertical integrated functions. They consist of the following with many performing two or more functions:

Retailing-Local and regional centralized cooperatives that sell, and often deliver, supplies directly to farmers perform a retailing function.

Wholesaling-Regional federated cooperatives that warehouse, sell, and deliver supplies to local retail cooperatives perform a wholesaling function.

Manufacturing-These are local and regional centralized supply cooperatives that manufacture feed, blend fertilizer, or process seed; and regional federated cooperatives that manufacture feed and fertilizer and other supplies, formulate pesticides, fabricate containers and steel buildings, and refine crude oil. Very few only manufacture, but many are of the multifunction type.

Producing-A few cooperatives produce raw or basic materials such as drilling for crude oil and mining phosphate rock.

Multifunction—These are purchasing cooperatives that are combinations of all the foregoing types. For example, a local or a regional centralized cooperative may manufacture and retail feed. A regional federated cooperative may manufacture and wholesale feed, or produce and refine crude oil and wholesale the refined products to retail cooperatives.

Operating Practices

Purchasing Methods

Most local cooperatives obtain the greater part of their major supply items, such as feed, fertilizer, and petroleum products, from affiliated cooperative wholesale associations. Miscellaneous supplies not handled by cooperative wholesalers are purchased from noncooperative dealers.

Managers and boards of directors determine the types of supplies to purchase, with any proposed new lines usually discussed first at membership meetings.

Wholesale cooperatives encourage local managers to order fertilizer and seed well before the seasons when they will be needed and to take early delivery on fertilizer so more space will be available at mixing plants and storage facilities.

Regional cooperatives, either individually or cooperatively, manufacture most requirements of member locals. Such items, however, as steel products, tires, batteries, poultry and dairy equipment, and miscellaneous supplies generally are obtained through an area or national supply cooperative owned by regional associations. It, in turn, contracts with manufacturers for quantity purchases of supplies that meet its specifications. Some regionals also purchase part of their needs directly from manufacturers.

Inventory Management

Warehousing, materials handling, and stock control are important operations of farm supply purchasing associations. Inventories may be carried at their manufacturing plants, wholesale warehouses and terminals, and retail warehouses, stores, and bulk plants.

Some local cooperatives haul many supplies in their own trucks from regional warehouses. Others depend on regional cooperatives' transportation services.

With the rapid increase in bulk delivery of feed and bulk application of fertilizer, warehousing of sacked goods at wholesale and retail points has been reduced. And, as local cooperatives increase in size, more are taking carloads of fencing and roofing, individually or with a nearby association, directly from manufacturers.

The frequency of taking a physical count of inventories varies by commodity. Petroleum, for example, may be inventoried daily, weekly, or monthly; feed weekly; and general farm supplies monthly, quarterly, or semiannually. Some associations keep perpetual or daily running inventory records of farm machinery parts and hardware.

Computing the percent of shrink or loss and taking steps to keep it within acceptable standards, depending on the type of product, is an important part of inventory management.

Cooperatives usually compute rates of inventory turnover for each major type of supply. This is valuable in measuring efficiency in use of inventory capital.

Credit Policies and Practices

Most supply purchasing cooperatives operate on a limited or accommodation credit basis. Under this method, credit is allowed up to a specified amount or extended for a specified period-usually 30 to 60 days-after which no more credit is allowed until the account is paid. Some associations give a discount for cash; others add an interest charge for extended and delinquent accounts. Applications for credit usually are approved by the manager or an assistant but sometimes by an officer or board committee in small associations.

Credit for fertilizer, building supplies, farm machinery, and farm and home equipment may be granted on a deferred or installment basis with interest-bearing notes used. In recent years, large amounts of feed have been financed on a secured or term basis with some under contract production programs.

Cooperatives must follow businesslike policies in extending credit and collecting receivables to avoid bad-debt losses, collection costs, tying up working capital, management concerns, and dissatisfaction among members.

Pricing Practices

Cooperatives generally price supplies at prevailing market prices for items of comparable quality. This is considered good practice because it reduces friction with competitors and enables the cooperative to realize reasonable net margins and to distribute some of them annually to member-patrons as patronage refunds. It also enables them to retain some as reserves to cushion the effects of price declines, price wars, and possible operating losses.

Cooperatives generally follow industry practices in their areas in giving quantity or volume discounts and cash discounts. Some also give discounts for early booking of orders and for accepting early delivery of supplies.

Distribution Methods

Cooperatives distribute supplies in much the same way as other concerns in the same line of business. In some areas, cooperatives make a price allowance to compensate farmers for hauling their own supplies. In other cases, cooperatives may set a flat price for supplies at the warehouse, and if farmers desire delivery, they pay an extra charge to cover the cost. In other cooperatives, mileage zones are used in setting delivery charges. For petroleum products, delivery service to the farm is customary.

Many cooperatives now provide bulk delivery of feed to large users, and bulk delivery and spreading of fertilizer has become an important service. To do this, cooperatives have developed farm service centers in areas close to their patrons.

Wholesale cooperatives and those manufacturing supplies usually follow customary distribution practices for the various products they handle or manufacture. Some sell free on board (f.o.b.) their own plant or warehouse, while others sell on a delivered basis.

Many cooperatives use common merchandising methods, such as displays, advertising, and volume-building contests or campaigns, in distributing supplies. However, they generally do not spend as much on advertising and selling as other firms, because most patrons are members who own the cooperative.

Purchasing cooperatives devote considerable attention to educational activities-pointing out that they purchase supplies specified to fit farmers' needs, and that farmers will receive supplies at cost after final settlements or refunds. They also provide information on proper use of various supplies and on good farm management practices.

Operating Policies

Patronage Refund Policies

Most supply cooperatives distribute net margins at the end of each fiscal year. A few distribute them quarterly or semiannually.

The general practice is to (1) pay a rate of dividend-which cannot exceed 8 percent a year in most States-on outstanding capital stock or on other certificates of equity capital, especially if they represent direct investments by members; (2) transfer a specified percent of total net margins to an unallocated or allocated reserve account; and (3) declare the remainder of net margins as patronage refunds on purchases of each member-patron or patron. Under Federal tax laws, however, at least 20 percent of such refunds must be paid in cash. The remainder may be placed in a revolving fund or patrons' equity fund.

Many cooperatives declare patronage refunds only to members or stockholders, and some declare such refunds to all patrons. Others limit refunds to farmer-patrons. If refunds are declared to nonmember patrons and they are eligible for membership, often their refunds are credited first toward purchase of a share of common capital stock or to payment of a membership fee.

A number of supply purchasing cooperatives declare one rate of patronage refund on total supply sales. Different rates on sales of different supplies are declared, depending on the extent to which operations are departmentalized and on variations in gross and net margins on different supplies. Some cooperatives declare specified rates on quantities of supplies sold such as tons of feed or fertilizer and gallons of refined fuels.

Informing Members

Purchasing cooperatives are unique in that their member-owners are also their patrons. However, this can make it difficult to attain and maintain an informed membership that will elect competent directors, demand sound financial and business policies, follow cooperative principles, and insist that their cooperatives operate for the benefit of farmer-members rather than for the cooperative.

Most purchasing cooperatives have numerous small-volume members, with some being part-time farmers, and thus have a greater member relations problem than marketing cooperatives.

Continuous information is needed to educate new members and maintain the loyalty of old members. Sometimes this means members foregoing short-term gains to ensure the long-range stability and viability of the cooperative.

Cooperatives thus use various communication methods to keep members informed and to get feedback from them. They must budget for special and annual meetings and for newsletters or membership publications. Their directors, managers, and employees play an important part in communicating directly with current and prospective members.

Obtaining New Members and Member Capital and Redeeming Member Equities

Cooperatives must develop ways of gaining new members to replace those that leave or otherwise cease to support the cooperatives. Membership drives require well-developed recruitment programs and participation of existing members.

Many purchasing cooperatives require a small ($1 to $25) membership fee or share of common stock for membership. And as mentioned, a majority credit patronage refunds to all or regular nonmember patrons with the initial amount credited toward the purchase of a membership. Some members who organized the cooperative may believe this method gives undue benefits to nonmembers. Others believe the benefits of the additional volume and the tax savings outweigh the disadvantages.

Changes in membership are continual, so cooperatives need to adopt definite plans for obtaining capital from new members and from existing ones, especially when funds are needed for expanding or adding new supplies or services.

Cooperatives also need to adopt specific policies for redeeming capital or equities. The revolving capital plan, discussed later, provides an excellent method for accomplishing this. Cooperatives not using revolving capital need to set aside reserves from net savings and use them plus the capital acquired from new members each year to redeem equities of inactive members on a regular or scheduled basis, if possible. Failure to do this can cause serious member and public relations problems for the cooperative.

Vertical Integrated Functions

Cooperative purchasing of supplies over the past 100 years has evolved from simple to complex and diversified operations. Cooperatives have integrated horizontally by adding branch facilities and more products and services. They also have made progress in integrating vertically by performing more of the functions involved from the sources of raw materials to distributing supplies to farms.

Several cooperatives have made significant progress in vertically integrating their farm-production supply operations. An example of the centralized type is Agway Inc., Syracuse, NY; federated type, Farmland Industries, Inc., Kansas City, MO; and mixed type, Southern States Cooperative, Richmond, VA.

Bargaining

The earliest cooperative activity consisted of neighborhood pooling of orders for carlot purchases and bargaining for price concessions. A few groups of hog producers in Illinois still use this method. A few groups of egg producers in California also bargain with private feed mills to manufacture feed according to their specifications.

Retailing

The next step was organizing local supply cooperatives with warehouses and full-time managers and other employees. Local marketing associations added supplies as a sideline. As mentioned, cooperatives in several central States distribute supplies on a countywide basis. In other areas, some locals grew into large, centralized regional cooperatives serving farmers through branch stations.

Wholesaling

As local cooperatives saw advantages in pooling buying power, they set up regional wholesale cooperatives. These regionals at first confined activities to purchasing member locals' requirements on a brokerage or commission basis. Then they gradually began purchasing supplies on contract or on the open market, and warehousing and


MFC Quality
CLOVER BRAND FEED
MFC Quality
CLOVER BRAND FEED

Representative of major products and functions purchasing cooperatives provide members are: crude oil production by National Cooperative Refinery Association; feed formulation, mixing, and transportation from MFC Services (AAL); fertilizer blending and application through a local cooperative member and Land O'Lakes, Inc.; and a general farm supplies and automotive and farm vehicle maintenance services through Farmland Industries member local, Lyon County Co-op Oil Co.

distributing them to locals. A few regionals in the East now wholesale supplies to noncooperative dealers or agencies who maintain patronage records, so the regionals can pay wholesale refunds to farmer-members.

Wholesale cooperatives also provide other services for affiliated locals, such as insurance, bonds, credit, financing, auditing, facility layout or engineering, economic research, and various forms of organizational, informational, and training assistance.

Manufacturing

From time to time, wholesale cooperatives found it expedient to manufacture supplies. They saw opportunities to improve net margins and quality and to provide more dependable sources for their locals. Shortages of certain supplies during World War II and in 1973 greatly stimulated manufacturing by cooperatives.

Cooperatives manufacture large quantities of feed, fertilizer, and petroleum products. They process large amounts of seed. They manufacture some paint, batteries, and farmstead equipment; formulate some pesticides; blend lubricating oil; and manufacture or fabricate containers. Net margins from manufacturing often exceed those from wholesale distribution.

Most manufacturing, refining, processing, and blending is done by regionals that wholesale supplies to member locals or retail them directly to farmers. When individual regionals feel they do not have adequate volume or capital to undertake manufacturing alone, they form interregional associations.

Before 1933, cooperative manufacturing activities often were limited by lack of capital. In 1933, capital became available to eligible farmer cooperatives from the newly created Banks for Cooperatives supervised by the Farm Credit Administration. This source of funds helped many cooperatives acquire manufacturing as well as distribution facilities.

Producing

Regional cooperatives also produce some of their raw material requirements. Many call this becoming basic in their supply sources. Some contract with growers to produce seed stocks under specifications. A few own poultry-breeding farms, and others contract with growers to produce hatching eggs or other poultry products. Several regionals have gone into oil exploration to help supply crude oil for refineries and spread risks and opportunities for net margins.

Interregional cooperatives engaged in manufacturing also produce some raw materials, such as crude oil, natural gas, and potash. Several have acquired leases on phosphate deposits to help ensure future supplies. One interregional performs plant-breeding research to develop improved varieties of legume, corn, and soybean seed.

Transporting

Cooperatives have added transportation services for each integrated level of operation. Locals operate thousands of retail petroleum tank trucks and fertilizer-spreading trucks. Regionals have large dry-freight vans, liquid-fuel highway transports, and crude oil and product pipelines.

Research

A few regional cooperatives have research farms and arrangements with farmers to test their products. Several make grants to experiment stations of land-grant universities to assist with research on production of crops and livestock, control of disease and insects, purchasing of farm supplies, and marketing of farm products.

Two groups of regionals cooperate to conduct research. Cooperative Research Farms, Charlotteville, NY, owned by 2 1 regionals , operates six farms for research on livestock, dairy, poultry, and other feeds. FFR Cooperative, West Lafayette, IN, owned by 16 regionals, operates a plant breeding farm to develop new and improved varieties of legume, soybean, and other field seeds. A few regionals individually conduct plant breeding and field testing of seeds.

Related Services

Many cooperatives find it advisable to provide various services that complement the supplies they handle. Local associations often deliver feed in bulk, grind and mix feed, clean and treat seed, test soil, blend fertilizer in bulk, field spread fertilizer and lime, apply insecticides, spray paint, rent out equipment, drill water wells, and counsel farmers on proper use of production supplies. Some cooperatives also build fences, design and erect farm buildings, and provide repair services if they sell farm machinery. Cooperatives also operate car care centers in some areas.

Regional cooperatives now provide numerous services for local associations, including auditing, store and plant layout and engineering, commodity field service, trucking, assistance with organizational and financial problems, membership and financial campaigns, distribution of membership publications, and training of employees and directors Regionals also sell insurance and bonds.

Of the 148 specialized service cooperatives in the U. S. in 1985 more than half engage in trucking, pesticide management, artificial insemination, and other farm production services.

Marketing Operations

As farm supply purchasing cooperatives became successful, members requested their help in marketing farm products such as grain, seeds, poultry and eggs, and livestock.

For example, Southern States Cooperative, Inc., Richmond, VA, now markets and processes eggs and grain. Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, and Countrymark, Columbus, OH, market grain for county member associations and their farmer-members. Agway Inc., Syracuse, NY, markets eggs, beans, grains, hay, and fruits and vegetables in parts of its operating territory in the Northeast.

About 25 percent of all associations that handle production supplies as their major activity also market one or more farm products. The other 75 percent have higher marketing sales than supply sales.

Financing and Taxation

Financing Methods

Supply purchasing cooperatives use many of the same methods of financing employed by other firms. However, they differ in the way they raise member equity capital and in the major source of their borrowed funds.

Most of these cooperatives obtain some capital from members by sale of common and preferred stock. Others sell certificates of membership or equity, which usually bear a nominal rate of dividend or interest. Purchasing cooperatives acquire needed capital by retaining part of their annual net margins in the business. In such cases, part of the patronage refunds declared from current net margins may be distributed to members in the form of capital stock or other types of equity capital. Some net margins also may be placed in members' equity reserve or retained earnings accounts.

Associations also use the revolving capital plan of financing. Under this plan, some or all the patronage refunds remaining after paying at least the required 20 percent in cash are retained in the business until the necessary equity capital is accumulated. Then, these deferred refunds are revolved in order of retention, often on a 5- to 7-year basis, at the discretion of the board of directors. Equities under such a plan may be evidenced by certificates of capital stock or equity, or by allocated book credits, allocated equity reserves, or statements of deferred patronage refunds.

A revolving capital plan has these advantages: (1) It provides a convenient means by which each member patron provides capital in proportion to use of the association, and (2) it keeps the ownership and financing of the association largely in the hands of active members by redeeming the oldest outstanding equities.

Farm supply purchasing cooperatives obtain the major part of their borrowed funds from Banks for Cooperatives. They borrow the remainder from local banks and members or other individuals. They also obtain operating credit on merchandise purchased from suppliers, including their wholesaling/manufacturing cooperatives. A few regional cooperatives also sell debentures to, or borrow funds from, insurance companies.

Supply purchasing cooperatives have built assets substantially in recent years but have not increased member equity in the same proportion. As a result, they are relying more on borrowed funds.

Financial data on 2,507 predominantly farm supply purchasing cooperatives in 1979—the latest year data are available-show they had $10.5 billion of assets. Current and long-term liabilities equaled $6.4 billion and net worth or members' equity, $4.1 billion. Borrowings made up an estimated 60 percent of liabilities. Fifty-four percent of the cooperatives had assets of less than $1 million.

Equity capital of 2,164 farm supply purchasing cooperatives in 1976, the latest that data are available, consisted of the following:

Type	Percent of total amount	Percent of co-ops using each
Common stock	21.3	75.7
Preferred stock	31.7	44.9
Membership certificates	0.5	4.9
Certificates of equity and capital credits	29.0	89.2
Unallocated reserves or retained earnings	17.7	90.3
Total	100.0	---

The 1979 study showed the 2,507 farm supply purchasing cooperatives generated net margins of $745.7 million-equal to about 3.3 percent of gross sales. Distribution of these margins was as follows: About 2 percent was used to pay dividends and interest on equity capital; 35 percent was paid as cash patronage refunds; 51 percent went to deferred patronage refunds; 7 percent was retained as unallocated reserves or retained earnings; and 5 percent was used to pay income taxes.

Farm supply purchasing cooperatives are subject to various kinds of taxes, such as property, sales, and income.

Federal income tax laws provide for a single current tax at the farmer-patron level on income produced through a farmer cooperative if the cooperative adheres to certain requirements for the form in which it distributes patronage refunds and makes distributions within a prescribed time period. In conforming with tax laws, a cooperative has two major alternatives :

1. It may shift its income tax liability to patrons by meeting the strict requirements of Section 52 1 of the Internal Revenue Act of 1954. This act requires that after paying up to 8 percent in dividends on member capital and setting aside reasonable capital reserves, remaining net margins must be distributed to all patrons, except government agencies, as patronage refunds. The act further states that no more than 15 percent of supply business can be done with nonmember nonfarmers, and that more than 50 percent of such business must be done with members who are producers of farm products.

The 1979 study of farm supply cooperatives showed that about a third were operating under Section 52 1 of the Internal Revenue Code.

2. The cooperative may reduce its gross income for tax purposes by distributing patronage refunds to member patrons and nonmember patrons according to precise rules or procedures. Such cooperatives also must conduct more than 50 percent of their supply business with members who are agricultural producers.

The law states farmer cooperatives must pay at least 20 percent of their patronage refunds in cash. Choices are available for form and timing of patronage refunds, type of written notices of allocation used, and ways to get patrons' consent.

Benefits

Farmers derive many benefits from using cooperatives to purchase production supplies and equipment. The large number of producers obtaining an increasing volume of farm supplies through cooperatives over the years attests to this fact. It is difficult, however, to measure exactly these benefits because some are intangible or indirect resulting from cooperatives' effects on price levels or gross margins, services, quality, and business practices. Farmers generally believe indirect benefits greatly exceed tangible or direct benefits.

Cooperative benefits vary by years, areas, and types of supplies and equipment. Major benefits are as follows:

1. Cooperatives have lowered the cost of production supplies for farmers.

Net margins or savings have been substantial over the years. Most retail cooperatives in the early years of operation realized large operating net margins; for example, 10 to 12 cents on each dollar's worth of petroleum product handled from 1920 to 1940. In recent years, lower gross margins and higher expenses have reduced net margins to 3 to 6 percent of petroleum sales, and 2 to 4 percent of sales of feed, seed, fertilizer, and general farm supplies in many areas.

Net margins on wholesale operations of regional cooperatives have averaged much lower, but those from manufacturing or processing usually have been substantial. As noted earlier, net margins by predominantly supply purchasing cooperatives averaged 3.3 percent of sales in 1979.

Reports of 20 major regional supply-handling cooperatives show total net margins have averaged between 3 and 5 percent of sales, equal to 10 to 20 percent of members' equities, in recent years. These major regionals do a considerable amount of manufacturing, individually and with other regionals. Therefore, their net margins included dividends on capital stock and patronage refunds from interregional associations.

In addition, cooperatives have lowered daily market price levels in many trade areas. When local purchasing cooperatives were formed, many caused some reduction in the general level of retail prices and gross margins of competing firms, thus benefiting all farmers in the area. Regional cooperatives, in some cases, have prevented general price increases in fertilizer or feeds by not advancing billing prices; and some cooperatives have had a salutary or regulative effect on business or trade practices in their areas throughout the years. Supply purchasing cooperatives with efficient operations thus have improved the buying power of farmers and served as a "yardstick" on pricing and operating practices.

2. *High-quality supplies selected to give value-in-use have been provided for farmer-members.* Another important accomplishment of farm supply purchasing cooperatives has been the improvement of quality in feeds, seeds, and fertilizers. These cooperatives have selected supplies that best met farmers' needs in producing more yields per acre and gains per pound.

Cooperatives have pioneered the use of open formulas for mixed feeds and fertilizers and have led the field in supplying farmers with high-analysis fertilizers. Adding needed secondary and minor elements, laboratory control, and granulation are other ways they have provided members with outstanding values in purchased plant foods.

Because cooperatives now use many different ingredients in feeds that change as improvements are made, they make available the current formulas used rather than printing open formulas on tags as in earlier years. Cooperatives have made much use of college conference feed boards in developing formulas to give best results.

Cooperatives have been especially helpful in selecting seed of adapted variety, high in germination and viability, and free of disease and noxious weeds. They have worked closely with university experiment stations, contracted with growers to produce seed with known heredity, and built processing facilities to produce good-quality seed.

In procuring general farm supplies and equipment, many cooperatives have emphasized selective buying. Through use of laboratory tests, farmer advisory panels, market research surveys, and agricultural engineering departments of State experiment stations, cooperatives have determined specifications of supplies and equipment best suited to farmer needs.

3. *Services in obtaining and distributing supplies have been improved or added.* Many cooperatives have been alert in meeting requests of members for types of supplies and services they want and have tried to provide them equitably based on actual costs.

Cooperatives provide services that save time, labor, or money for farmers. Examples are bulk delivery of feed to farms, bulk blending and spreading of lime and fertilizer, mobile feed milling, tractor tire repairing, custom spraying and dusting, and pool car ordering.

They also offer services that may not have been readily available or convenient. Examples are feed grinding and mixing, equipment renting, or petroleum deliveries to all farmers regardless of size or distance from bulk plants. Development of routes covered at regular intervals has enabled petroleum cooperatives to serve efficiently small as well as large farmers in the East.

Other services include planning and contract construction of buildings and installation of automated milking and feeding systems.

Cooperatives are leaders in offering services that improve farm practices. These include soil testing; providing field specialists to advise on use of supplies and good farm management practices; and operating demonstration and testing farms. Many cooperatives have emphasized services to aid members rather than practices to maximize net margins for the business.

4. *Dependable sources of supplies have been provided-especially in emergencies.* During and after World War II, cooperatives' purchase or construction of refineries and fertilizer plants enabled many farmers to continue producing needed food and fiber for the Nation. A few

cooperatives also acquired lumber and shingle mills and timber holdings for supplying growers or fruit- and vegetable-packing associations. Cooperatives have made special efforts to keep hay and supplies going to members during snow storms, floods, and drought emergencies.

During shortages of petroleum and fertilizer in 1973, cooperatives took many actions to make supplies available to farmer-members. They expanded manufacturing capacity; added storage and transportation equipment; made special purchases, often at extra costs; and restricted available supplies of fuel to farmer-members, even though they could have realized greater net margins by selling fertilizer abroad.

5. ***Successful purchasing cooperatives have provided a training ground for the development of local farm leaders.*** And they have helped members become more self-reliant and informed citizens in their communities.

6. ***Cooperatives have benefited rural communities.*** They have provided payrolls, patronized local businesses, and often supported community projects. And most of their net savings have remained in the community.

In summary, many farm supply purchasing cooperatives have benefited all farmers within their- trading territories by becoming pacesetters in providing farmers with high-quality supplies at reasonable cost. Their farmer ownership and competitive influence have helped farmers—especially family-size operators-to do a better job of farming.

Challenges

Cooperatives handling production supplies will face many problems-some old, some new—in the years ahead. Their importance will vary among associations, areas, and supplies, but if cooperatives can strengthen their boards of directors, managers and other employees, and member relations they will be in a much better position to meet the challenges that lie ahead. Some of the more common challenges are:

1. ***Electing and training competent and progressive boards of directors.*** This includes improving methods of selecting directors who are sound businessmen and who will adhere to cooperative principles in setting policies; providing better training programs for directors, emphasizing legal and operating responsibilities, authority, and limitations ; and developing standards of performance and control for directors to use in measuring the efficiency and effectiveness of cooperatives and the performance of managers.

2. ***Employing and keeping skilled managers and other employees***

to operate larger and more complex cooperatives. This involves improving techniques for selecting managers and key personnel, improving training programs for all employees, and developing compensation plans to provide incentives for improving employee performance.

3. *Informing members and prospective patrons and developing better ways of improving member participation.* Cooperatives must obtain information from farmers on buying intentions, satisfaction, or problems in using specific supplies, and types of services they want; provide effective information to farmers on the cooperative's objectives, principles, products, services, capital requirements, problems, and accomplishments; study ways of motivating people to patronize cooperatives and assume responsibilities as members; and develop programs of interest and value to young farmer couples and rural youth.

4. *Adjusting to rapid changes in agriculture.* This likely will require meeting the needs of fewer and larger commercial farmers who are good businessmen; serving more mechanized, scientific, and commercialized farming; meeting greater demands from farmers for more services—especially those that save time and labor-and for information on proper use of new supplies and modern production practices; adjusting to the replacement of farms with suburban and industrial developments and still maintaining efficient services for the remaining farmers in the area; and adjusting to changes in farm programs and rural area development.

5. *Adjusting to changes in the economy and agribusiness.* These may be fluctuations in business and government policies; increases in labor and other operating costs; keen competition in merchandising supplies and providing services, especially during supply surpluses; and area standards for environmental protection, health, and safety.

6. *Conducting research and long-range planning.* This involves developing long-range objectives and plans for services, facilities, and finances; conducting economic and market research to determine market potential and needed services, increase volume, and improve operating efficiency; and conducting product research and development through joint efforts of several regional associations.

7. *Keeping policies and practices efficient and equitable.* These include pricing policies equitable for small, medium, and large patrons; cost-based quantity discounts for individual purchases or deliveries and volume discounts for annual purchases; equitable discounts for cash sales and charges for accommodation credit, production credit, and term financing; departmentalizing operations, accounting, and patronage refunds; and developing practical procedures and equitable charges for various custom services.

8. *Adjusting organization structures and distribution systems.* This

challenge may require consolidating some retail stores or branches, adding new branches or warehouses, and possibly using franchised private dealer-agents in some areas; supplying local cooperatives in carlots directly from factories; and providing management and financing services-for some local cooperatives.

9. *Merging and coordinating cooperative resources.* Leaders of some cooperatives will need to consider merging with other cooperatives, both local and regional, to benefit members; and performing more joint or cooperative activities with other cooperatives, especially in research and manufacturing.

10. *Obtaining capital to perform more diversified and integrated services.* This will require informing members of capital needs and benefits of investing in cooperatives; developing more effective capital-raising techniques, including feasibility of capital assessments added to supply invoices (adapting the practice of per-unit capital retains used in marketing farm products to supply operations); exploring possibilities of obtaining more equity and debt capital from nonproducers and other business firms; and at the same time developing systematic plans for redeeming member equities.

11. *Providing contract and integrated services on a sound and equitable basis.* This will challenge managers to determine the proportion of available resources to use in contract production, where feasible; evaluate how contract programs will affect other operations and extent they will be subsidized, if necessary; determine how much risk nonparticipating members should assume in a contract program that benefits only a limited number of contract members; and decide on the percentage of a regional cooperative's supply volume that can be manufactured, or produced as basic materials, on a relatively conservative and safe basis, considering capital requirements, interest costs, and alternative opportunities.

12. *Exploring new ways of successfully handling capital goods and equipment.* This entails studying ways of safely and beneficially handling and assembling farm machinery or providing leasing and custom farm machinery services; and successful ways to handle building supplies and provide related planning and construction services.

Authors/Donald L. Vogelsang, John M. Bailey (retired), Lloyd C. Biser, E. Eldon Eversull, and J. Warren Mather (deceased)/Agricultural Economists.