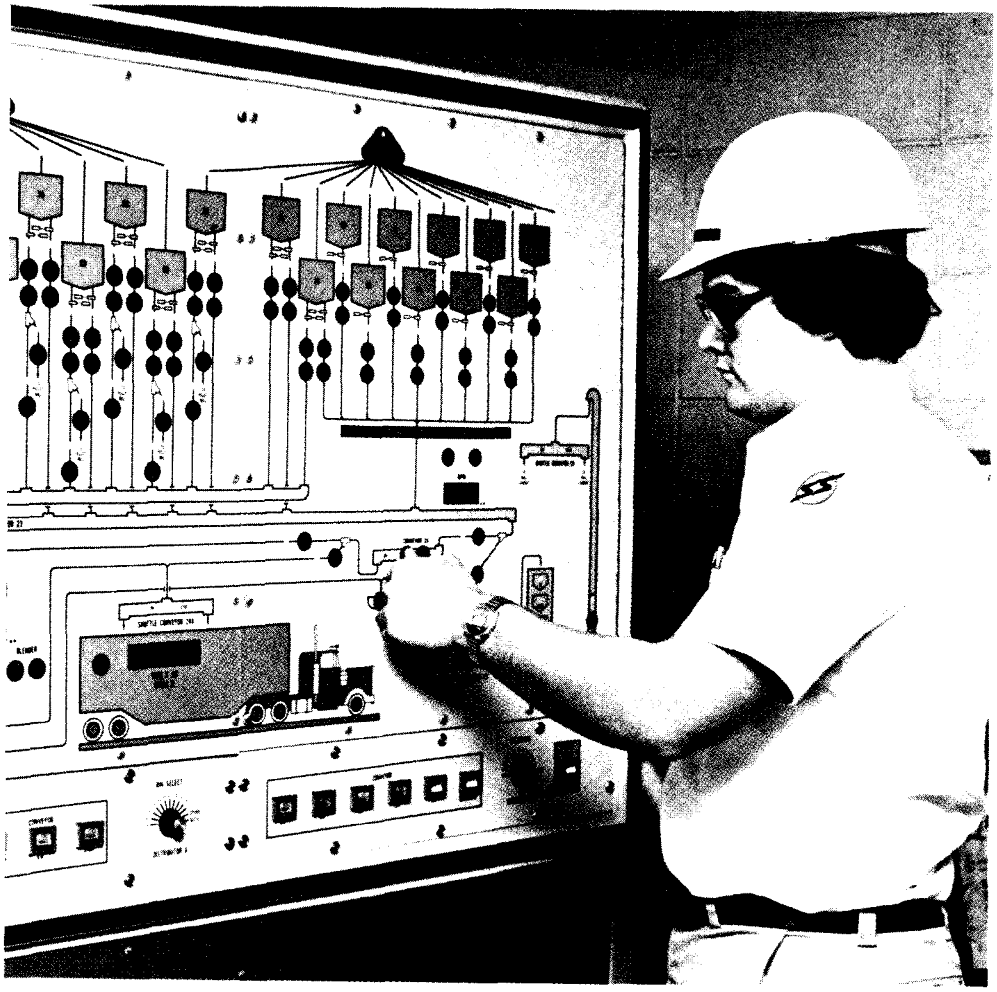
Cooperative Feed and Animal Health Operations

Farmer Cooperatives in the United States
Cooperative Information Report 1 Section 21

United States Department of Agriculture



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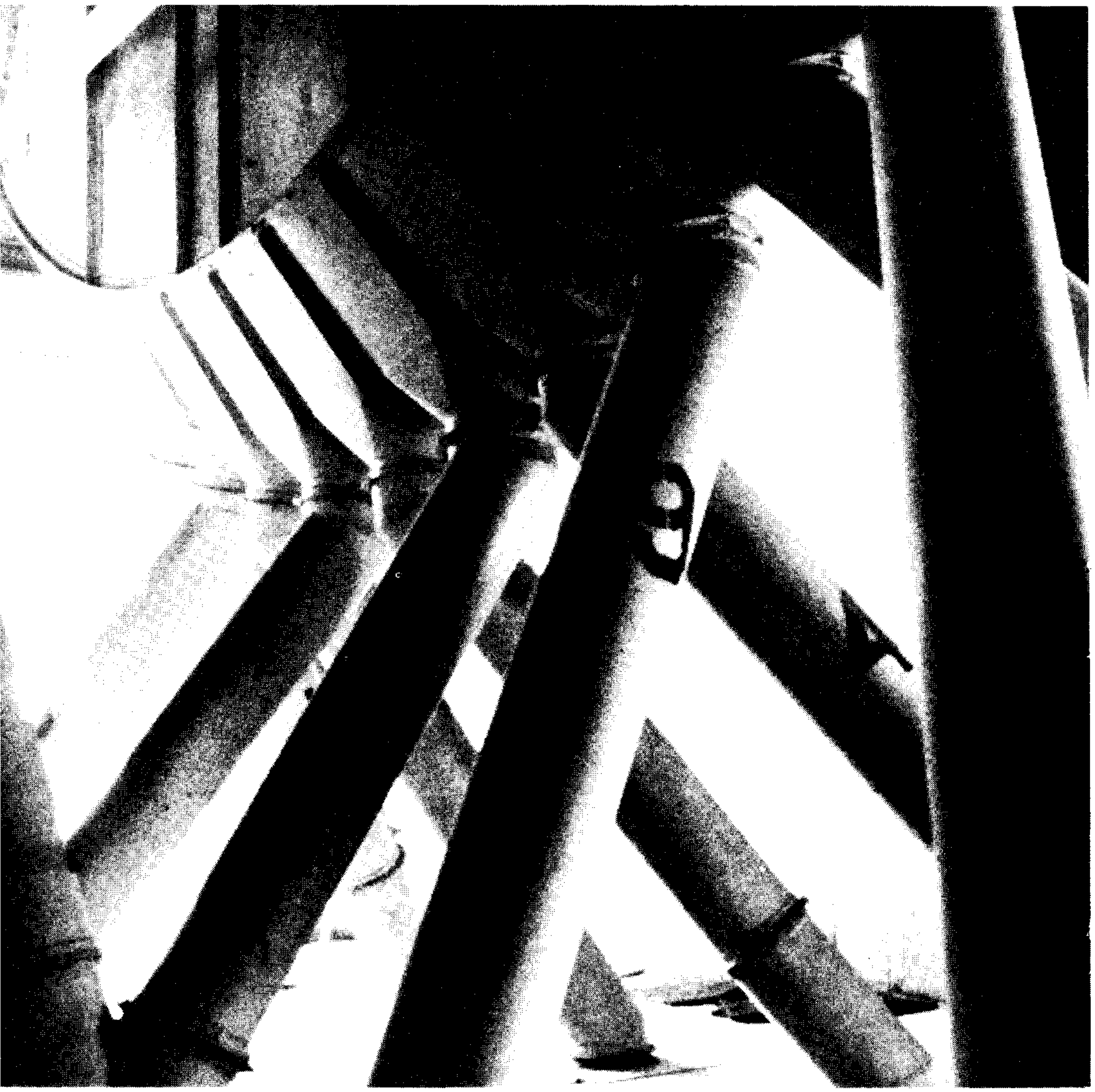
February 1991

Cover: A major change over the years in the livestock industry has been the switch from bagged to bulk custom-mix feed, with on-farm delivery to large operations. The intricate push-button control panel on the cover is part of a state-of-the-art feed mill owned by Southern States Cooperative, Richmond, VA.

A little imagination could produce a number of explanations for this picture, but what it really shows is the feed ingredient pipe system in a feed mill owned by Farmland Industries, Inc.



Cooperative Feed and Animal Health Operations

Livestock, poultry, and dairy farmers buy significant amounts of their feeds and animal health supplies through cooperatives. Farmers' ownership and control of cooperatives exists in two primary forms. One is the federated cooperative system. In a federation, farmers own local cooperatives that operate warehouses, feed stores, delivery trucks, and often feed mills. In turn, local cooperatives own regional organizations that provide wholesaling and manufacturing services. Beyond that, regional cooperatives may own interregional cooperatives engaged in purchasing, manufacturing, or research activities. The second form of ownership is the centralized cooperative. Under it, farmers are direct owners of the regional cooperatives that provide wholesaling and manufacturing services, much like the federated regionals. This form distinguishes itself by operating branch retail outlets that serve their owners.

Through these cooperative systems, farmers extended ownership and control of the farm supply system beyond the farm gate. In return, they receive products, services, and the net margins or profits that arise from their cooperatives' operations.

This report discusses the purchasing, distribution, and manufacturing of feed and animal health products. Similar information on feeding equipment and building supplies is contained in Section 20 of CIR Report 1 on *Farmer Cooperatives in the United States.*

FEEDS

Feeds were one of the earliest and high-volume supplies that farmers purchased through their cooperatives. They were still a major production cost for U.S. farmers, who bought $7.9 billion worth of commercial feeds in 1987. This outlay covered the purchases of mixed or formula feeds, supplements, and premixes. It accounted for 44 percent of the total expenditure for feeds that included grain, hay, concentrates, and minerals (table 1). The latter products are not emphasized in this report.

Commercial feeds accounted for 15 percent of all farm production expenses, the highest among manufactured inputs purchased by farmers and a condition that existed during the farm recession of the 1980's.

The $7.9 billion was spent on an estimated 111 million tons of commercial feeds, mostly on nearly 102 million tons of primary feeds.[1] This tonnage included about 1 million tons of liquid ruminant feeds and at least a part of 3 million tons of dry pet food purchased mostly by urban consumers.

Poultry and turkey feeds made up 44 percent of the primary feeds; beef feed, 18 percent; dairy cattle feed, 17 percent; hog feed, 14 percent; and other feeds, 7 percent.

In 1984, about 6,700 mills manufactured animal and poultry feeds in the United States.

Retailing

Development

Pooling orders for carlot purchases of sacked feed from noncooperative millers was the earliest cooperative feed activity. Many of these orders were supported by buying clubs that flourished in the Midwest during the 1850's. In the early 1900's, northeastern farmers formed buying clubs that used farmer-agents who bargained

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[1] Primary feeds are mixtures containing one or more individual ingredients, including premixes added to finished feeds at a rate of less than 100 pounds per ton. Secondary feeds are mixtures containing one or more ingredients and one or more formula feed supplements added to finished feeds at a rate of 300 pounds or more per ton.

for prices, then notified members to come to the rail sidings, load the feed into their wagons, and pay the agents. These purchasing agents came to be known as pooling agents or poolers. These activities came about 30 years after construction of the first U.S. feed mill in Waukegan, IL.

As a next step, farmers began to integrate backward into the feed business by setting up local retail supply purchasing cooperatives. Some continued to pool orders and purchase in carlots, while others set up warehouses with full-time managers. Cooperatives sponsored by the Grange in the 1875-85 period and by the Farmers Alliance between 1880 and 1890 may have been the first to distribute feed.

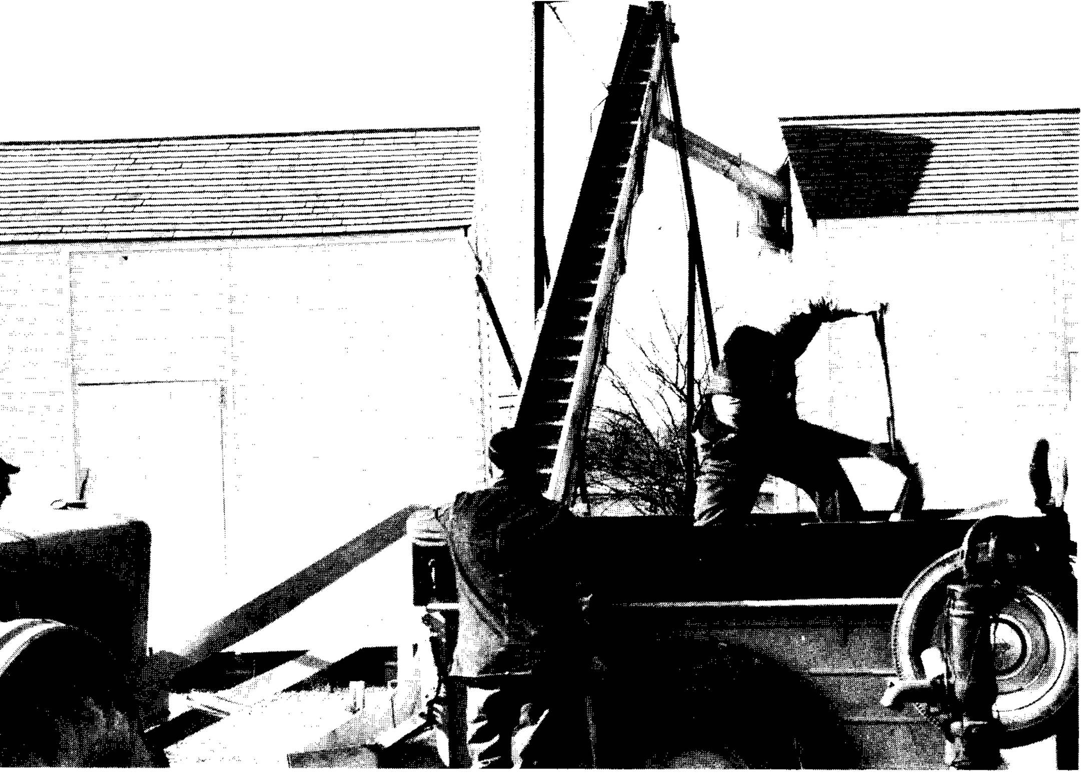
In the Far West, the Hayward Poultry Producers Association, Hayward, CA, began handling feed in 1912, while local grain marketing cooperatives in the Midwest and North Central States began adding feed and other supplies and services during the early 1900's. Notable was a wholesale buying department to serve local cooperatives organized by the Farmers Union State Exchange, Omaha, NE, in 1914.

Cooperative feed buying on a significant scale began in New England in 1915-20, and took three organizational forms: Grange cooperative stores, group purchasing clubs, and associations for obtaining trade discounts. Factors prompting this development were the expansion of milk production and the commercialization of the dairy industry a few years earlier. Some feed companies began compounding closed formula feeds in the form of balanced rations, but dairymen and land-grant colleges found it difficult to determine their digestibility and nutritional value. This led to a demand for "open formula" (feed ingredients listed on the bag) feeds.

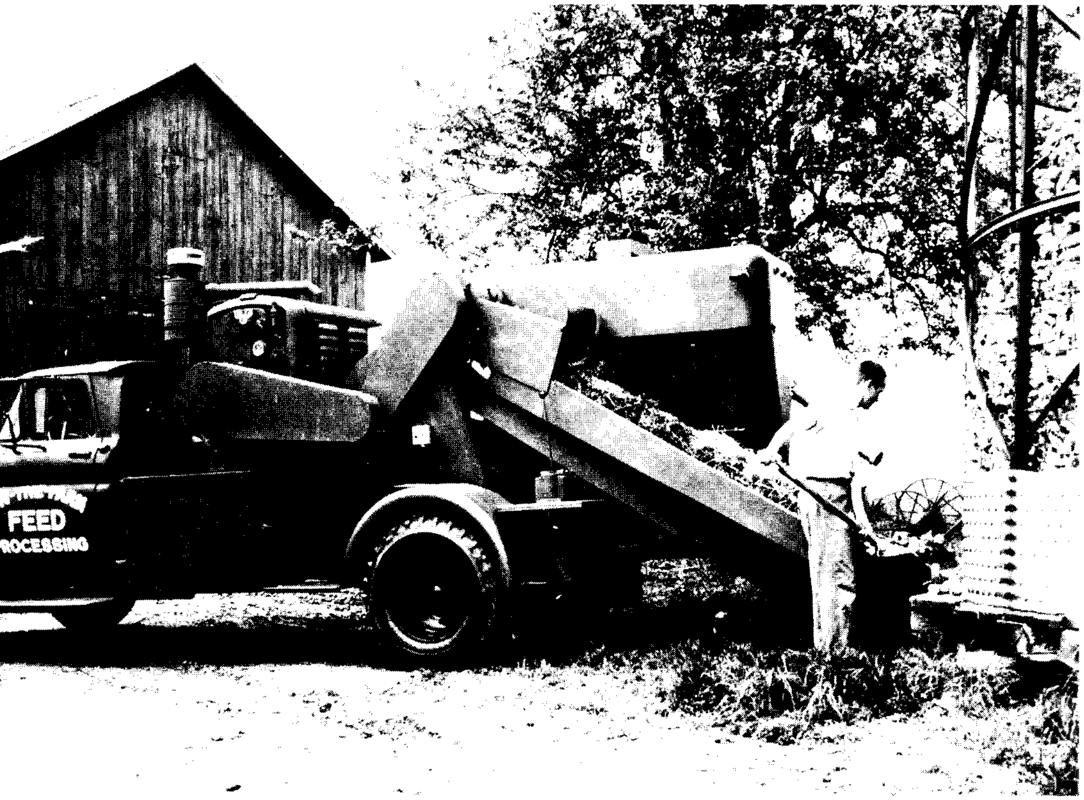
In 1913, Massachusetts Agricultural College employed a cooperative specialist to help farmers organize local cooperatives. Soon after, New York farmers asked their county extension agents to assist them in obtaining better feed, seed, and other supplies. These agents helped develop feed pooling plans through farmer representatives, farmer committees, and local cooperatives.

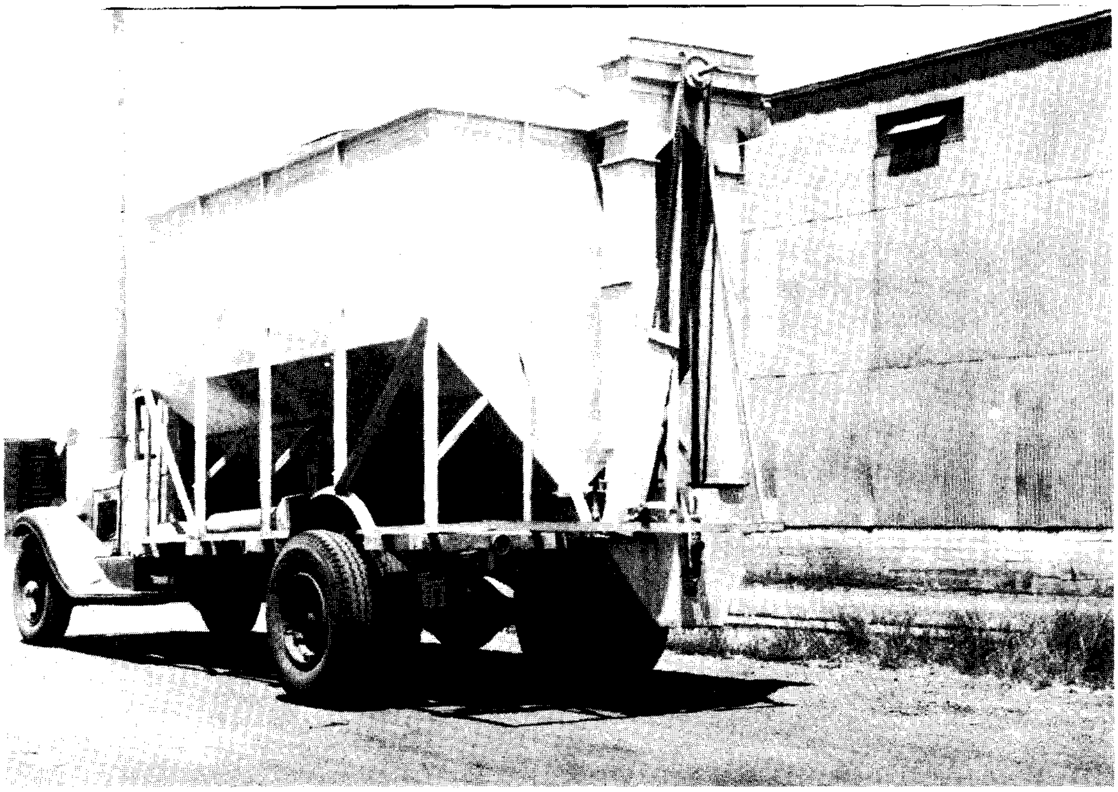
In the South, five cotton producers formed the Georgia Cooperative Cotton Association in 1933. Its name was changed to the Cotton Producers Association (CPA) in 1940 and to Gold Kist, Inc., Atlanta, GA, in 1970. This regional diversified into feed in 1943 as more farmers turned to poultry production. CPA sold only 1,067 tons the first year. In 1950, CPA financed its first poultry growers.

In the Central and Midwestern States where surplus grain



Early labor-intensive feed-handling methods improved through a combination of necessity and ingenuity, as illustrated by perhaps the first mechanical. . .





. . . bulk feed truck (top) developed by Poultry Producers of Central California, San Francisco, during World World II when bag supply was critically short.

existed, early cooperatives custom-ground farmers' grain and mixed it with supplements. And in areas of dairy and egg production, farm supply and grain marketing cooperatives began distributing mixed or formula feeds first manufactured by mills of other firms. Concurrently, some eastern cooperatives had begun to market horse feed and pet food by the late 1930's. After World War II, cooperative volume increased greatly in the central part of the country when many locals added small formula-feed mills and regionals built medium-size mills.

In the Far West, farmers had first integrated toward the con-

Table 1-Cooperatives handling feed, net sales, and market share in specified years, 1950-51 to 1989

Year [1]	Cooperatives selling feed	Cooperatives' feed sales (net) [2]	Farmer feed expenses [3]	Cooperative market share [4]
	Number	*Million dollars*		Percent
1950-51	4,409	695	3,714	18
1955-56	4.405	775	3,887	19
1960-61	4,412	891	4,658	18
1965-66	4.301	1,057	6,038	17
1970-71	4,078	1,321	8,039	17
1975-76	3,819	2,496	13,639	18
1981	3,603	3,531	20,855	18
1984	3,181	3,640	20,239	18
1986	3,000	2,883	17,875	18
1987	2,914	2,713	17,958	17
1988	2,829	3,807	20,620	18
1989	2,602	3,881	22,722	17

[1] **Business years within 12 months. July 1 following June 30, except in 1981-1989, when calendar years were used.**

[2] **Excludes business among cooperatives.**

[3] **Includes mixed formula feeds, feed grains, hay and pasture. Average of 2 calendar years for 1950-51 through 197576. Economic Research Service, USDA.**

[4] **Cooperative market share developed by Statistics and Technical Services Staff, ACS, USDA.**

sumer by organizing poultry and dairy marketing cooperatives. Next, some decided that providing feed for their members would be a worthwhile service. Their original purpose was to combine sufficient volume so they could ship eggs or poultry profitably to the eastern markets.

As the west coast population increased, the egg market changed from an export to an import basis. Under these conditions, several associations found that the dollar volume of feed sales exceeded their revenue from poultry and eggs. In the South, cooperative mixed feed volume became more important as livestock production increased after World War II.

In 1960-61, more than 4,400 farmer cooperatives retailed $891 million worth of feed (mixed feeds, concentrates, grain, and hay). Both the number of cooperatives and the volume of feed were up from the levels of 1950-51 (table 1). Sales about equaled the volume of the entire industry 30 years previously, with cooperatives selling a sizable amount of feed manufactured by noncooperatives. Two years previously the number of cooperative feed marketers had peaked at 4,581.

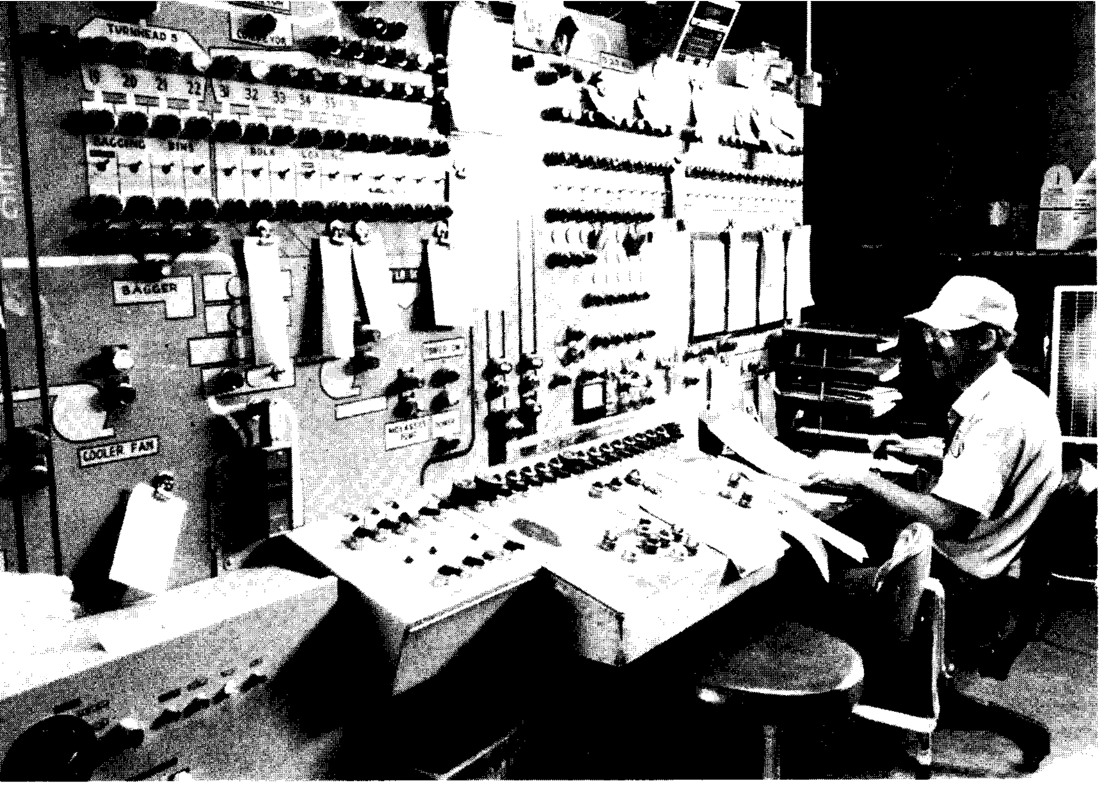
By 1970-71, cooperative feed marketers had declined by 8 percent from 1960-61, while sales had increased by 48 percent.

In 1989, cooperative feed sales reached at $3.9 billion, up another 194 percent since 1971. Cooperatives reached this level of sales with only about 2,600 feed marketers, down another 36 percent.

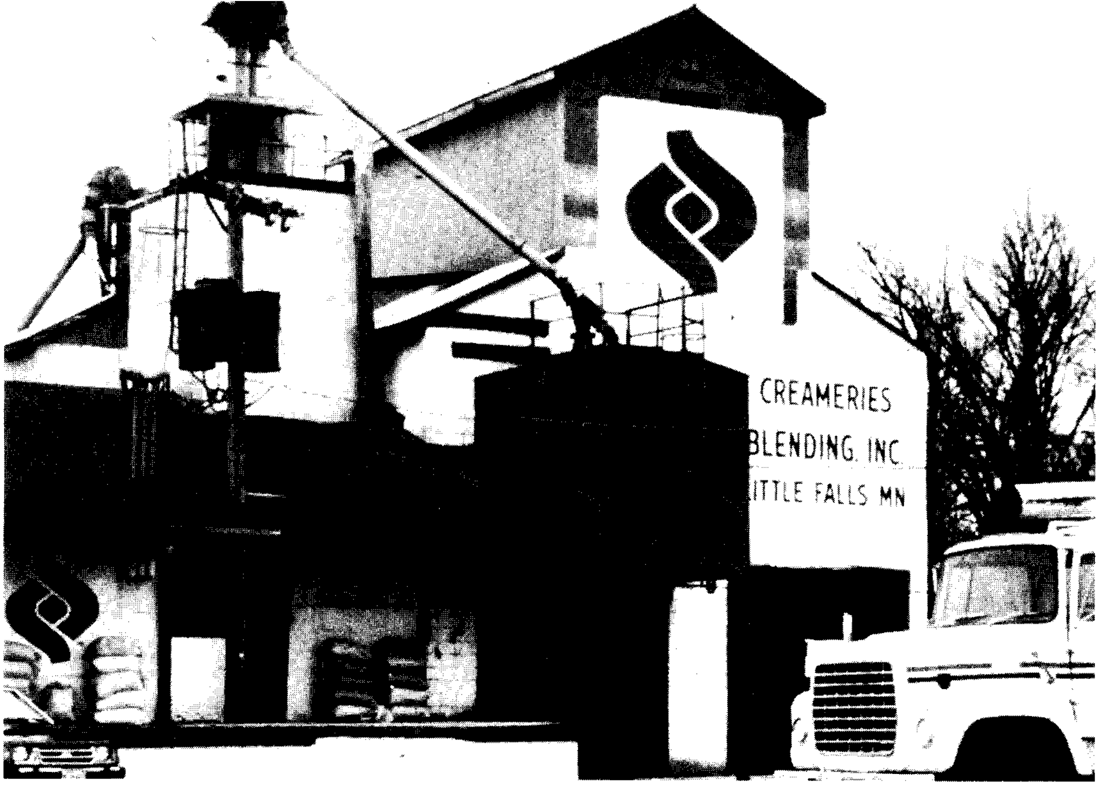
Current Position

In 1989, more than 2,600 cooperative feed marketers retailed $3.9 billion worth of feed. Since 1984, the number of such cooperatives had dropped 18 percent while feed sales had risen 7 percent. Farmer cooperatives' market share of all the feed purchased by farmers was about 17 percent.

Fifteen regional cooperatives, each retailing more than $4.5 million worth of feed, accounted for nearly 19 percent of total cooperative retail sales. These regionals specialized as follows: milk and milk products, 4; grain and oilseeds, 3; poultry and poultry products, 2; and farm supplies, 6. Agway, Cenex/LOL, and Southern States dominated the group's sales. Three within the group also each wholesaled over $200 million worth of feed.



Cooperative Grain & Supply, Hillsboro, KS, is typical of midwestern local-area cooperative feed operations, from push-button mixing to on-farm delivery ...



. . . northward is Creameries Blending, Inc., Little Fall, MN, and southward (below) is regional MFC Services (AAL), Madison, MS.

The eight leading States in cooperative net all-feed sales during 1989 and 27 years earlier were:

1989		1961-62	
State	Sales	State	Sales
	Million dollars		*Million dollars*
Iowa	534	New York	101
Minnesota	298	California	67
Wisconsin	233	Iowa	63
Illinois	182	Pennsylvania	53
New York	181	Missouri	49
Kansas	156	Minnesota	47
Missouri	152	Wisconsin	40
California	149	Illinois	40

The relative shift in cooperative sales from California and the Northeast to the Midwestern States reflects regional shifts in livestock feeding and successful feed marketing by the regional cooperatives. Among the Midwestern States listed, cooperatives had an average share of the feed market that ranged from 11 percent in Kansas to 26 percent in Iowa.[2]

Operating Practices

Over the years, locals added services such as custom grinding and mixing to those of distributing and merchandising feed. Except for a few of their larger patrons, however, cooperatives did not deliver much feed until bulk forms became important.

With farm operations becoming larger and more local mills coming into operation, bulk distribution developed rapidly after World War II. Cooperatives became leaders in developing the bulk feed business, encouraging farmers to construct bulk bins and experimenting with trucks and unloading equipment best suited to this business. By 1959, cooperatives were delivering about 46 percent of their feed in bulk. In the East and Far West, a few cooperatives delivered practically all their poultry feed in this manner. By 1969, bulk feed accounted for 74 percent of the total cooperative production,

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[2] Conclusions from these shares of market, though the best available, need to be qualified because feed is defined to include hay and feed grain. According to the 1987 U.S. Census of Agriculture, these items constituted 82, 57, and 41 percent of the totals in Kansas, Iowa, and the U.S., respectively.

than began to level off. In 1984, it stood at about 80 percent, about the same share as for the entire feed industry.

Local cooperatives generally price feed at going market prices, and most allow cash and quantity discounts on individual deliveries and volume discounts on annual purchases.

Extension of credit and collection of accounts receivable are continual problems for cooperatives. Most have attempted to operate on a 30-day basis, but the extension of credit has proven to be a very effective sales tool. When cooperatives are integrators and contract for the production of poultry or livestock, financing is necessary.

Cooperatives' merchandising methods are similar to those of other firms. They involve advertising, sales campaigns, and personal advice on feeding. Incentives go to employees or patrons, or both. A few cooperatives employ feed livestock specialists to work with farmers, and along a more innovative line, a few have experimented with "drive-through" feed stores that cater to the needs of urban customers.

The rate of patronage refunds among cooperatives depends upon their volume, efficiency, competition, and refund policy. Cooperatives pay patronage refunds on feed at yearend in a variety of ways. Some pay separate per-ton or per-dollar rates on mixed feeds, ingredients, and feed grains; others pay separate rates by type of feed-dairy, poultry, etc.; and still others apply a single percentage rate to patron sales of all farm supplies, including feed.

Wholesaling

Development

After local supply cooperatives had operated for a time, they saw the need for organizing wholesale cooperatives, and several were formed after World War I. By this time, farmers began to understand the advantage of integrating further into the feed business.

In 1915, farm leaders formed the Eastern States Agricultural and Industrial Exposition to stimulate dairy and livestock production in the Northeast. In 1918, these activities led to the formation of The Eastern States Farmers Exchange (Eastern States), West Springfield, MA, a regional wholesale purchasing cooperative.

In 1916, the New York State Grange Purchasing Agency began to market an open formula feed based on a formula provided by Cornell University. This was followed by the pooling activities of county Farm Bureau committees and the feed operations of the

Dairymen's League Association, and later the consolidation of the feed operations of these three organizations into the Cooperative Grange League Federation Exchange (GLF), Ithaca, NY.

GLF soon began a pooling plan through farmer representatives and local cooperatives or exchanges. It also organized local GLF retail store corporations but found they could not be developed fast enough to meet the needs of farmers; so it enlisted local supply dealers (called agent buyers) to handle GLF products on a franchise basis. This franchise required dealers to keep patronage records so that GLF could pay wholesale patronage refunds to its farmer patrons.

With Eastern States and GLF actively selling feed, the cooperative retailing and wholesaling of feed began a rapid growth. This growth was aided by Eastern States' pooled buying, which began in 1922. Farmers placed orders through local farmer representatives and exchanges, and feed was obtained from a commercial mill in Peoria, IL. An early objective was to test various feeds and standardize on a line of four to six brands. At the next annual meeting, management reported savings of $2 to $14 a ton, and that its price quotations were having a competitive effect on the market and saving money for all New England farmers. Total volume jumped to $4.6 million in 1923.

To the South, the Virginia Seed Service (VSS), now Southern States Cooperative (SSC) of Richmond, established a mixed feed wholesale purchasing service in 1925. It sought to reduce feed costs and improve quality. VSS adopted a policy of public specifications or open formulas where the tag on the bag told the type and quantity of ingredients used in the feed. The cooperative's initial savings were $3 a ton on dairy feed and $20 or more a ton on chick starting mashes.

By 1932, Eastern States was making feed shipments through numerous local representatives, and about that time it began adding area retail warehouses. Thus it became a retailing rather than a wholesaling cooperative. It had 127 warehouses in 1964 when it merged with GLF to become Agway.

In the Central States, regional cooperatives also began to wholesale feed. These included Indiana Farm Bureau Cooperative Association (IFBCA), Indianapolis; Farm Bureau Services, Lansing, MI now Countrymark, Delaware, OH; and Missouri Farmers Association (MFA), Columbia; Land O'Lakes Creameries (LOL) and Midland Cooperatives, both in Minneapolis, MN; and the Illinois, Iowa, and Wisconsin Farm Supply Companies, now GROWMARK, Bloomington, IL.

Then additional regionals in the Midwest, South, and Pacific Northwest added wholesale feed services. Among these were CPA; Consumers Cooperative Association (CCA, now Farmland Industries), Kansas City, MO.; Farmers Union Grain Terminal Association (GTA, now Harvest States), St. Paul, MN; FCX, Inc., Raleigh, NC; Mississippi Federated Cooperatives (now MFC Services), Madison, MS; Pacific Supply Cooperative, Inc., Portland, OR; Tennessee Farmers Cooperative, LaVergne, TN; and Western Farmers Assn., Seattle, WA.

At varying points along the way, cooperatives took an additional step of contracting for the mixing of feed to their specifications. Usually they employed a representative at the mills to check quality, prices, and shipments. Frequently contracts were with non-cooperative manufacturers, but exceptions occurred. VSS bought feed from GLF for a time after it opened its first plant, and statewide wholesale cooperatives in Arkansas and Mississippi bought feed from the MFA Milling Company in Springfield, MO, during the 1950's.

As farming contracted during the early 1980's, several regionals were absorbed by other cooperatives. By date of absorption, these regionals were Western Farmers and Midland (1982), Landmark, Ohio Farmers Grain and Supply Association and Agra Land, Inc., once Farm Bureau Services, Inc, (1985), and FCX (1986). Pacific Supply had been absorbed in 1977.

The size of geographic markets ranged from more than 1 million square miles for Farmland to about 40,000 square miles for Countrymark. The average market covered by regional salespeople, not necessarily Farmland and Countrymark, ranges from 5,000 square miles to three times as much.

Current Status

In 1989, regional cooperatives probably supplied well over half of the feed sold by cooperatives, up from 40 percent during the early 1950's. Twenty regionals did most of the wholesaling. Of these, the 10 largest wholesalers sold $1.8 billion, while the remaining 10 cited earlier among feed retailers wholesaled about $8 billion. The 10 regionals specialized as follows: milk and milk products, 1; grain and oilseeds, 3; and farm supplies, 6. This group was dominated by Agway and Cenex/LOL, a subsidiary of Ccnex and LOL entitled Cenex/Land O'Lakes Ag Services, and Farmland.

Most regional cooperatives also handle pet foods, and some sell liquid feeds. Agway began to handle liquid feeds in 1966, LOL a few years later, followed by GROWMARK and SSC in the early seventies.

Simultaneously, more regional cooperatives got into or began to re-emphasize the horse feed business. Harvest States began to market horse feeds in the early 1970's. Others reformulated their feeds, tailored them for specific types of horses, packaged them better, and generally gave horse feeds more attention.

Several regionals introduced programs designed to advise producers about the most economical ways to feed and raise livestock. For example, in 1981 GROWMARK began providing its locals with personal computer programs to help livestock producers make sound feeding decisions. GROWMARK claims it was the first farm supply company to do this in Illinois and Iowa. Other examples are Cenex's old Feed/Animal Care consulting program and Farmland's Total Animal Performance Projection System (TAPPS), which were put in place during the early 1980's.

Manufacturing

Manufacturing was the next step cooperatives took to improve feed procurement and quality, and enhance patron income. As noted earlier, cooperatives first contracted with noncooperative mills to mix feed to cooperative standards. Later, cooperatives began building their own mills, believing this would help them improve quality control.

Development

One of the first cooperatives to manufacture feed was the Hayward (CA) Poultry Producers Association, which acquired a mill in 1912. In the Northeast, Eastern States purchased a large mill in Buffalo, NY, for $300,000 in 1925. This was a strategic location for incoming ingredients and for shipping feed in bags under milling-in-transit privileges to all parts of the Northeast. In 1929, one writer noted that Eastern States' margin on feed was about half that of noncooperative manufacturer/distributor channels. By 1932, net savings on its operations had paid for the mill.

GLF decided in 1930 that it could no longer depend on an outside milling company for its feed requirements, which had reached 300,000 tons a year. In 193 1, it also constructed a large mill in Buffalo. SSC built its first mill jointly with GLF in 1933 at Baltimore, MD, and added two of its own in Virginia in 1934-35. MFA bought a mill in 1929, having gotten into the formula feed business in 1923 using scoop shovels to do the mixing.

Going into World War II, many cooperatives were still dependent on outside sources for feed. Later, they found quality deteriorating and contracts being canceled as the war progressed. Consequently, some cooperatives were forced to build their own mills sooner than they had planned. Many cooperative mills were built, however, and the net result was that cooperatives believed they were in a much better position to serve their patrons. One example was Farmland (then CCA), which acquired a 75-ton-a-day feed mill at Enid, OK, in 1943 and built another at Eagle Grove, IA, in 1948. By 1964, it had seven feed mills and an annual capacity of 238,000 tons.

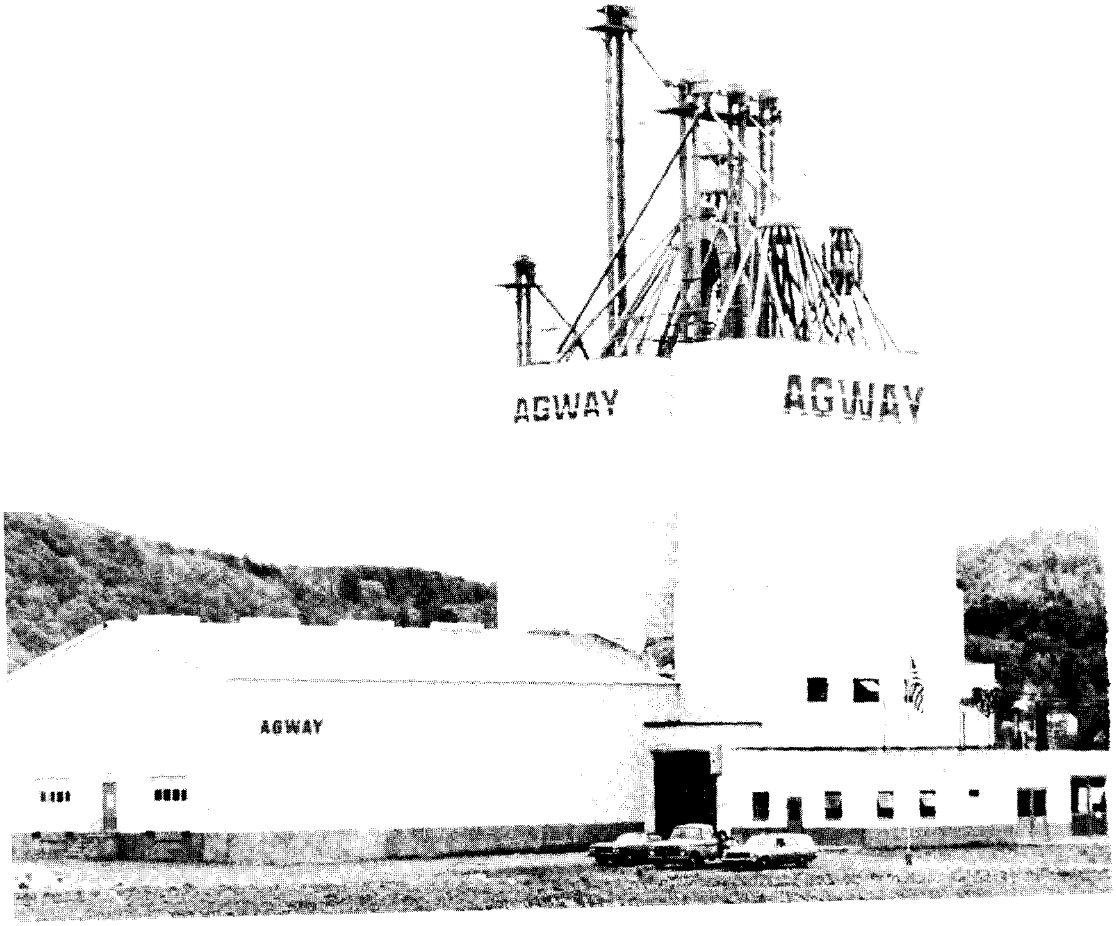
During World War II, many cooperatives had to relax feed specifications and use substitute ingredients. After the war, attention was given to this problem and the boards of directors with some regionals set up standing committees on quality control to review specifications for goods and services.

An early and continuing objective of cooperatives has been the handling of quality supplies. Feed manufacturing cooperatives soon obtained laboratories for testing incoming ingredients and finished feeds. Also, the passage of State regulatory laws requiring feed companies to meet the minimum specifications claimed for their feeds added further emphasis on quality control.

During the war, two groups of regionals manufactured feed jointly. In the East, Cooperative Mills, Inc., Baltimore, MD, a subsidiary of SSC, purchased ingredients and supplied management for three mills owned by FCX and CPA. It also operated five mills for SSC. By 1965, it was managing and providing research for 10 mills owned individually or jointly by 6 regional associations.

In the Midwest, the Farm Bureau Milling Company, Hammond, IN, produced feed for Farm Bureau cooperatives in Indiana, Ohio, Michigan, and Wisconsin. Both of these intercooperative operations ceased business when member cooperatives decided they were large enough to operate their own mills.

After World War II, two important developments occurred in the industry. One was the expansion of regional cooperatives in the South into integrated broiler and egg programs. Gold Kist (then CPA) built a feed mill in Georgia in 1957 and one in Alabama in 1958, while MFC acquired a mill that same year. The second development was the modernization and building of automated or “push-button” mills. Large regionals in the Northeast closed their “line mix” mills in transportation centers and built regional “batch mix”



This feed mill at Sangerfield, NY, is one of 20 Agway Inc. feed manufacturing plants serving six New England States. Below is a feed delivery truck displayed by Countrymark, Delaware, OH, at a farm science fair.

mills to serve designated trade areas. This action was consistent with industry trends.

During the 1950's and 1960's cooperatives in the grain deficit areas of the Northeast, Southeast, and Far West built relatively large mills (capacities of 50,000 tons or more a year) to manufacture feed for poultry and dairy cattle Cooperatives in the grain surplus areas of the Midwest and North Central States built smaller mills to make concentrates and premixes that were shipped to local cooperatives either for custom mixing with patrons' grains or for use in making complete feeds.

In 1959, some 821 cooperatives owned 1,054 mills that produced more than 1,000 tons of feed annually. They produced about 7 million tons of formula feed. During the next 10 years, cooperatives produced an increasing proportion of the feed they sold. Consequently, the number of mills climbed to 1,810, up 72 percent, and production soared to 20.8 million tons, up nearly 200 percent and to 21 percent of the U.S. total.

By the early 1980's, farmer-owned cooperatives had some of the most modern mills in the feed industry. SSC, for example, had built one of the first mills featuring computerized batching (1979), and FCX had built a similar one in 1981. In 1984, Farmland advanced its interest in premixes by beginning construction of a premix plant at Eagle Grove, IA.

Current Position

Compared with 1969, the number of cooperative feed mills that produced more than 1,000 tons of feed annually had changed little by 1984, numbering 1,834 in that year and equaling 29 percent of the industry total. These mills had become larger, however. They had a capacity to produce 33.9 million tons of feed, still only 21 percent of the entire industry. This tonnage reflects a cooperative move toward large mills. Consequently, 122, or 7 percent of them, accounted for 38 percent of cooperative capacity. These mills had annual capacities of more than 100,000 tons.

Cooperatives produced 23.8 million tons of formula feed, only 3 million tons more than in 1969. The total equaled 22 percent of U.S. output; thus, the cooperatives' increase in production had paralleled that of competition over the preceding 15 years. Thus, cooperatives manufacture practically all of the feed they sell.

Cooperatives produced 18.4 million tons of primary feed, 19 percent of the U.S. total, and 5.4 million tons of secondary feeds, 38 percent of total.

By 1984, four regionals had sufficient volume to operate their own pet food plants. Farmland, Harvest States, and MFC each operated one plant and Agway had two, its first having been built in 1953 and its second in 1979. Agway's newest plant at St. Marys, OH, was modem and unique in purpose and sponsorship. Agway owned and operated the plant and originally used long-term contracts to supply five other regionals with pet food: FCX, SSC, Landmark, IFBCA, and Farm Bureau Services. All six regionals marketed a principal brand and jointly advised on product and strategies. In 1985, TFC began marketing Agway feed, replacing FCX, which dissolved in 1984. In 1989, Southern Farmers Association (SFA), North Little Rock, AR, entered the pet food market with its own dog food.

Cooperatives' primary output in 1984 leaned heavily skewed toward dairy, hog, and beef and sheep feeds, with respective shares being 38, 18, and 12 percent of total cooperative output (table 2). Compared with noncooperatives, the thrust by cooperatives was mainly toward dairy and hog feeds and away from beef and broiler feeds.

Data suggest that feed specialization varied among regionals, with Gold Kist producing mostly poultry feed; at least one Corn Belt regional milling relatively more hog feed; and Agway manufacturing more pet food and dairy, horse, and liquid feeds. In 1982, Farmland still operated a half-dozen liquid blending plants capable of

Table 2-The importance of various formula feeds from primary manufacturing produced by U.S. cooperatives, 1984

Type of feed	Percent of cooperative production	Percent of industry production
Dairy	38	34
Hog	18	23
Beef and sheep	12	11
Starter-grower:		
layer-breeder	11	16
Broiler	10	11
Turkey	5	18
Horse	2	15
Other	4	20
All feeds	100	19

handling hot urea, but Agway and GROWMARK had begun to deemphasize liquid supplements. Between 1975 and 1984, the quantity of liquid feeds distributed by cooperatives dropped from 333,000 tons to 179,000 tons.

In 1989, Farmland operated 22 feed mills, while Cenex/LOL operated 21, and Agway operated 20 units. That same year, Gold Kist, SSC, and Harvest States operated 13, 11, and 9, respectively. Other cooperatives operating more than 3 feed mills in 1989 include: Countrymark, Intermountain Farmers Association (IFA), Salt Lake City, UT, MFA, MFC, TFC, and SFA.

Ingredient Plants

Feed cooperatives process relatively little of the ingredients they use, such as soybean meal, cottonseed meal, dehydrated alfalfa, and fish meals. Nevertheless, some regionals have taken another step in backward integration by moving into the production of ingredients. Four examples include: (1) Farmland (then CCA) built a soybean processing plant in 1944 at Coffeyville, KS; established one at Van Buren, AR, in 1968; and later ones at Sioux City and Sergeant Bluff, IA; (2) Gold Kist built a plant at Valdosta, GA, in 1968, followed by ones at Decatur, AL and Marks, MS; and bought 18 grain elevators in Tennessee to support its soybean plants; (3) LOL obtained a soybean mill at West Bend, IA, in 1970, and later mills at Dawson, MN, and Sheldon, IA; and (4) CCA built an alfalfa dehydration plant, in 1944, at Pond Creek, OK, which was later moved to Longmont, CO. Also, LOL owned five such plants in Nebraska for several years.

During much of the same period, Gold Kist also owned fishing boats and a 30,000-ton-a-year fishmeal plant in Peru. These operations were discontinued in 1973 through actions by the Peruvian Government.

In 1976, 14 regional cooperatives formed an inter-regional cooperative, CF Feeds, Long Grove, IL, to supply them with feed-grade dicalcium phosphate. It was managed by CF Industries, Inc., which mainly manufactures fertilizer for member regional cooperatives. Members contracted to purchase their dicalcium needs through CF Feeds, which procured the ingredients under toll arrangements with other manufacturers. By 1982, CF Feeds' activities had been absorbed by CF Industries.

In 1989, five cooperative feed manufacturers were engaged in soybean processing through Ag Processing, Inc., Omaha, NE. These cooperatives included Cenex, Farmland, Harvest States, LOL, and MFA. Farmland and LOL sold their plants to Ag Processing in 1983. The five regionals use large tonnages of Ag Processing's soybean meal. Only one feed manufacturing cooperative, Harvest States, continued to operate a soybean processing plant independently. Gold Kist sold its last plant in 1987.

In 1983, Agway discontinued manufacturing feed-grade urea, but Harvest States continued to use linseed meal and wheat byproducts from its mills.

Research and Farm Testing

For many years, farmer cooperatives relied on land-grant colleges for recommendations in developing feed formulas and feeding programs. As animal production intensified and the feed industry developed, some cooperatives envisioned their own feed research farms. Eastern States purchased a 172-acre farm for that purpose in 1929. Other cooperatives followed suit.

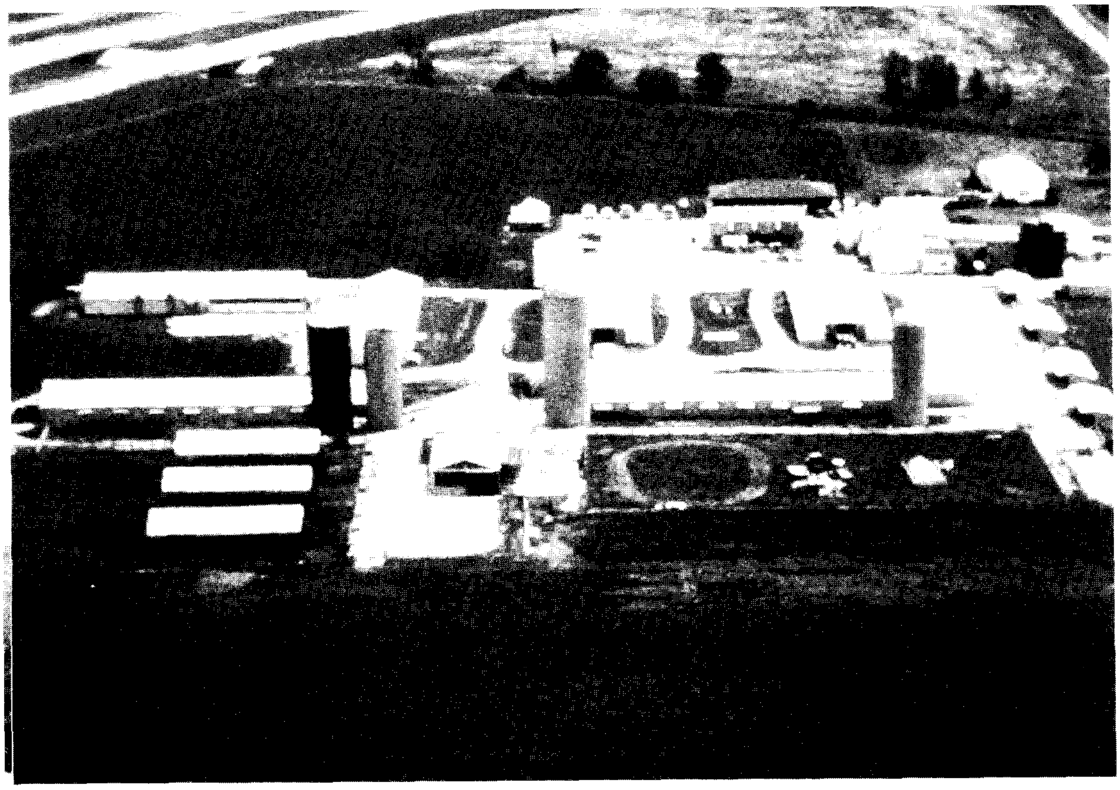
In 1954, Cooperative Mills brought several cooperatives together to form Cooperative Research Farms (CRF). Its mission was to help enhance its members' positions in the feed market and economically benefit member patrons. Original members included SSC, Gold Kist, and IFBCA, and the predecessors of Agway and Countrymark, all of which had done business with Cooperative Mills.

Early research was limited to poultry, primarily broilers. Later, as additional cooperatives were brought in, swine, beef, dairy, and rabbit research was added to the program. By 1961, membership extended into Canada, making CRF a North American association. Members make both financial and personnel commitments.

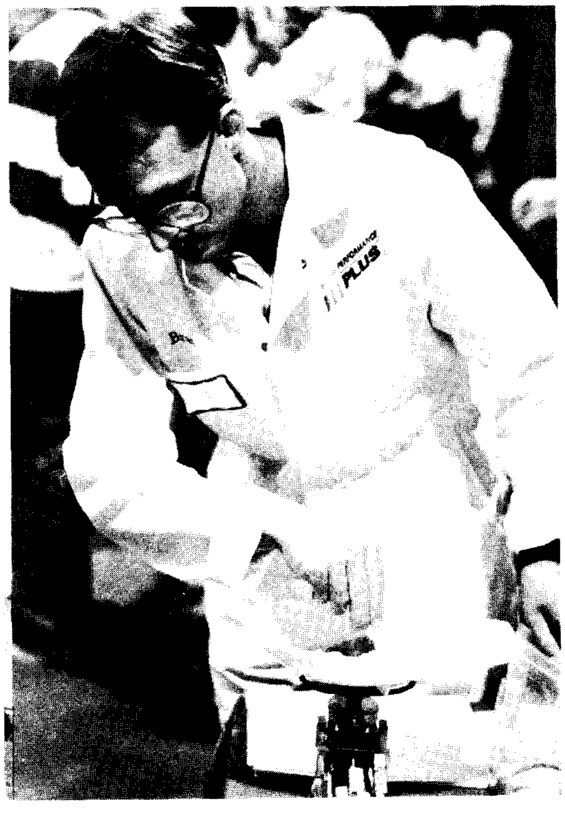
Until 1971, CRF operated through cooperative committees. In that year, it hired an administrative staff to manage its business affairs and to act as a clearinghouse for research activity.

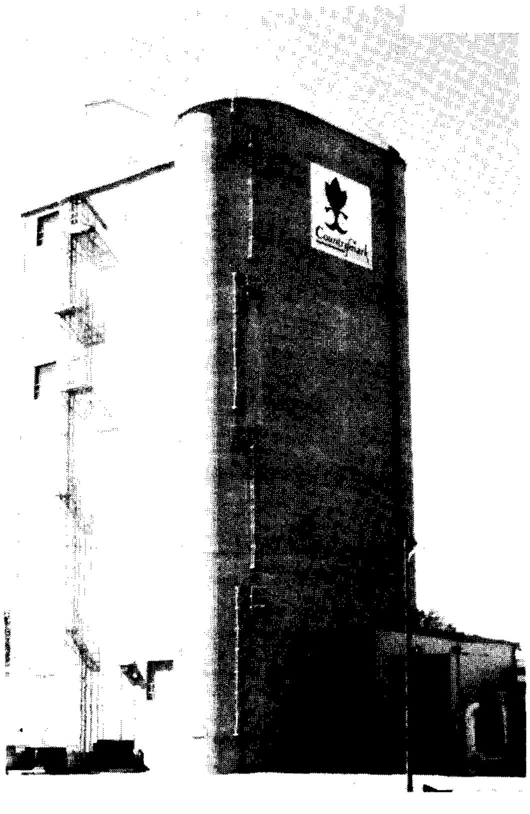
CRF enhanced its image by incorporating in 1979 and by holding its first International Cooperative Conference in 1982. At that time, according to CRF's general manager, it became evident that CRF was conducting the world's largest livestock and poultry nutrition research program.

Today CRF is owned by 13 regionals: Agway; Co-op Atlantic, New Brunswick, Canada; Cooperative Federee de Quebec, Montreal, Canada; Countrymark; Federated Co-operatives Limited, Saskatoon, Canada; Gold Kist; GROWMARK; IFBCA; LOL; SFA; SSC; TFC;



Beef feedlot and swine research takes place at this Cooperative Research Farm facility at Lexington, IL. Below, a lab technician at the Alpha (IL) FS feed mill weighs a test field sample. One of the newer cooperative feed mills was built by Countrymark at Lima, OH.





and United Co-operatives of Ontario, Mississauga Ontario Canada. These regionals share in research findings from a network of five farms. Dairy research is conducted at Tully, NY, layers at Providence Forge, VA; broilers at Talmo, GA; swine and beef at Lexington, IL; and turkeys at Fort Dodge, IA. These farms are owned and operated by resident regional cooperatives.

Each of CRF's member cooperatives nominates a person to the board of directors. In turn, it appoints cooperative nutritionists and researchers to the research council and five research committees. The research council is a 60-member "think tank" to provide general support for the five farms.

Each farm has a committee of about five members that oversees its research program. CRF's board also appoints a person to CRF's communications council. It helps CRF's cooperative members implement research recommendations.

CRF's research program completes 70 to 75 studies yearly and some lead to development of proprietary products. CRF's costs are recovered by an assessment of members. Assessments are based on each member's share of all feed manufactured for each species of livestock and poultry.

In the late 1980's, CRF entered into joint research with the Upjohn Company on bovine somatotropin (1987) and installed a state-of-the-art milking center to accommodate 240 cows milked three times daily (1988).

Farmland and Harvest States conduct independent research programs in animal feeding and nutrition, doing so for many of the same species as CRF. Farmland established its first research farm in 1959. It was closed in 1972 when Farmland transferred its feed and nutrition research program to a farm of 380 acres at Piper, KS. Farmland emphasizes programs for swine (110 sows), dairy (110 cows), and dogs. The cooperative's program cost $1.2 million in 1988, with about 20 percent going to universities for research on fish and cat feeding. Farmland was investing about 18 staff-years in in-house research, including contributions by six persons with graduate degrees. The cooperative annually completes some 45 feeding and nutrition projects. It also conducts production experiments in a scaled mill on the farm. Farmland built a new dairy research center that was completed in 1989 and plans to expand its kennel research facility and conduct aquaculture tests in a new unit.

Harvest States purchased 110 acres near Sioux Falls, SD in 1965, some 30 acres for a feed mill and 80 acres for facilities to conduct feeding and nutrition research. Harvest States completes almost as many projects as Farmland, with at least half of them devoted to swine and a couple to pheasants. None are for dairy animals, that type of research being contracted out to universities. Harvest States employs three research nutritionists and a part-time veterinarian.

Transporting and Distributing

Transportation, another form of integration, is important to cooperative feed operations. Some appreciation of this statement is evidenced by the fact that trucks owned by cooperative feed manufacturers delivered 60 percent of their feed in 1984, up from 49 percent in 1969. Cooperatives still lagged the industry, however, which recorded percentages of 65 and 58, respectively. Cooperatives trucks also handled 12 percent of the cooperative manufacturers' in-shipments of feed ingredients, versus 10 percent for the industry.

Cooperative manufacturers distributed their 24 million tons of formula feeds as follows:

Method	*Percent*	*Method*	*Percent*
Wholesaled	33	Fed to own livestock	13
Retailed	33	Custom feed for others	1
Custom-ground and mixed	20	Total	100

Cooperatives' shares of the feed distributed by the entire industry were: 49 percent custom-ground and mixed; 29 percent retailed; 25 percent wholesaled; 10 percent fed to mill-owned livestock; and 2 percent sold for custom feeding.

Custom Grinding and Mixing

After many cooperatives began handling feed, they were soon asked to custom-grind locally grown grains and mix them with other ingredients. Custom-ground mixes were made according to the feeders' specifications or formulas.

In 1969, some 1,518 cooperative mills, with capacities of more than 1,000 tons per year, custom-mixed nearly 8 million tons of feed, 35 percent of the industry total. In addition, several hundred smaller mills custom-mixed a substantial volume of feed. The 8 million tons accounted for 38 percent of all formula feeds produced by cooperatives that year. Seventy percent was in the Corn Belt and Lake States where surplus grain exists.

Between 1969 and 1984, cooperatives deemphasized custom grinding and mixing, but not as much as competition. The number of cooperative mills engaged in this activity declined to 1,139 in 1975 and to 1,035 in 1984. Meanwhile, output dropped from 6.8 million tons to 4.9 million tons. Cooperatives continued to emphasize the service aspects of grinding and mixing relative to the rest of the industry.

Contracting and Feeding

Some cooperatives have integrated toward the consuming public. They feel that patron control over the production and marketing of livestock products increases patron returns from livestock production. They also hope that this control enhances cooperative feed sales.

MFA became the first known regional feed cooperative to enter into this form of integration. It purchased a meatpacking plant in 1946, which it operated until the early 1970's. Other regional feed manufacturers that integrated into livestock or poultry productions include Agway, Farmland, FCX, IFA, IFBCA, LOL, MFC, and SSC.

During the late 1940's, Gold Kist began to offer production contracts to help its farmers continue in the broiler business, building its feed volume in the process. It opened its first hatchery in 1950. Later, processing plants and special feed mills were added.

By 1959, some 191 cooperatives, including affiliated locals of regional associations, had contracts covering $54 million worth of feed. They also supplied another $41 million worth of credit on a secured-term or notes-receivable basis. But difficult times for the producers of poultry products came periodically, so SSC began a 4-year phaseout of broiler contracting. Largely because of this action, its feed sales dropped from 901,000 tons in 1959 to 448,000 tons in 1963. MFC also abandoned poultry and egg processing by 1982.

In 1969, some 209 cooperative mills fed 1.1 million tons of feed to their own animals and livestock, mostly in the Southeast. This tonnage equaled 5 percent of the cooperatives' total volume and 10 percent of the industry tonnage that was fed to owned livestock. By 1984, the number of cooperative mills involved in this activity had declined to 115, down 45 percent. However, their tonnage had grown to 3.2 million tons, up 188 percent. This tonnage equaled 13 percent of the cooperative total, but still only 10 percent of the industry output.

In 1988, Gold Kist continued to contract for broiler production. It sold $748 million worth of processed poultry, eggs, and pork, and 170,000 head of finished hogs. Prior to that, its predecessor organization had experimented with meat processing during the late 1960's. In 1975, Gold Kist had inaugurated a grow-out program for hogs, and between 1982 and 1986, it had contracted with producers to grow veal calves.

In 1989, Farmland operated two hog slaughtering plants, having acquired its first in 1959 and closed one in 1987. Two pork processing plants were purchased in 1989. In the meantime, it had also acquired and closed a cattle slaughtering facility in 1980. In 1987, Farmland marketed about 250,000 herd of feeder pigs grown under contract with its patrons and considered hog finishing contracts.

In 1989, LOL and Agway provided still other examples of forward integration in the feed industry. LOL still handled swine breeding stock (since 1973), but had abandoned beef packing, an activity that involved three plants between 1978 and 1983 and sold its remaining turkey and red meats operations in 1988. Agway still held a majority interest in H. P. Hood, Inc., a major milk marketing company acquired in 1980. Agway also continued to experiment with contracts to finish out hogs. IFA had left the turkey processing and egg industries in the early 1960's but now focuses on cattle production in its own feed lot.

While farmer-owned cooperatives were integrating into the foregoing activities, farmer patrons urged their cooperatives to custom feed patron-owned livestock. However, only 44 cooperative mills provided this service in 1984, producing only 183,000 tons. This was only 15 percent of a comparable tonnage in 1969 when 462 cooperative mills custom-fed livestock.

Benefits

Farmer-owners have received many benefits from their feed supply cooperatives. Owner satisfaction with these benefits is evidenced by the thousands of feed handling facilities across the Nation and by their large annual volume. While most were built by preceding generations of farmers, the present generation continues to modernize and use these facilities.

Farmer-members have benefited economically in at least four ways. First, cooperatives have generally provided output-increasing feeds. In doing this, cooperatives originally worked with State agricultural experiment stations; eastern cooperatives, for example, pioneered in open formulas. More recently cooperatives have invested heavily in research facilities. Output from these facilities have brought higher feeding efficiencies, lower feeding costs, and relatively higher patron returns.

Second, cooperatives have been leaders in developing the bulk delivery of feeds and in providing information on feeds, feeding practices, and livestock management systems.

Third, cooperatives have refunded millions of dollars to patrons on their purchases of mixed feed and to a lesser extent on their purchases of feed grains and other ingredients. Historically, refunds have ranged from 3 to 10 percent on sales of mixed feeds and from 1 to 3 percent on grains and other feed ingredients.

Also, cooperatives have had a competitive or moderating effect on feed prices. Even though cooperative prices usually are comparable with the competition, leaders believe that cooperatives' presence reduces the market price. Moreover, cooperatives' emphasis on bulk deliveries and limited formulas have lowered feed costs. It is also a matter of record that cooperatives have made special price reductions during physical disasters such as droughts and during periods of economic hardship such as runaway feed prices.

Fourth, farmers have benefited from services or functions performed by local associations that receive, inventory, and deliver feeds. For example, they often provide some type of feed-mixing capability and can advise on feeding and management of poultry and livestock. They establish policies, develop facilities, and follow practices that best meet farmers' needs.

Either directly or through local associations, farmers have benefited from establishing regional cooperatives. They often have been the key to successful locals through the savings they refunded and the services they provided. These included: (1) buying feed ingredients economically, (2) building and operating mills and truck fleets optimally, (3) managing inventory and merchandising products efficiently, (4) researching new products and techniques effectively, (5) developing new and better farmer services, (6) counseling with locals on mill construction, railway abandonment, and other economic changes, (7) providing tax, legal, accounting, and management services for locals, and (8) assisting locals to operate efficiently.

Benefits have been noneconomic as well. Cooperatives' leadership in promoting labor saving methods of handling feed (bulk rather than in bags, for example) has enhanced farm life. Moreover, cooperatives have given many members a sense of confidence and security in obtaining feeds because their sources are farmer owned and controlled.

Challenges Ahead

During the 1990's, cooperatives in the mixed feed industry will be challenged as seldom before in their efforts to maintain and increase market share. This issue will be pervasive, no matter what direction the economy or governmental regulations take. A key reason for this concern is declining patron loyalty and a shrinking patron base.

Most patrons are at least a generation removed from those who founded cooperative feed operations and experienced their benefits. They are not motivated by past benefits and worry little about product, prices, and services in a feed industry without cooperatives. Rather, they buy from cooperatives because of current performance.

This attitude is especially prevalent among owners of large commercial farms. The importance of these farms will continue to increase. Consolidation and restructuring of agricultural/agribusiness complex is progressing rapidly, with many of these large farms integrating directly into the feed industry and bypassing cooperatives.

Some authorities believe that by the year 2000, as few as 50,000 farms will produce 75 percent of the Nation's agricultural output.

Moreover, these farmers will be well-educated, scientifically oriented, highly business-minded, and sophisticated decision-makers. Potential gains from increased sales to part-time farmers, horseowners, and urbanites cannot totally offset the potential loss of business from large farms.

Meanwhile, the consolidation of feed manufacturers continues, with a few large companies steadily acquiring smaller ones. This means that cooperatives will face more market power from fewer competitors. Even more significant to cooperatives, noncooperatives are advancing vertical integration rapidly within the feed industry. For example, some believe that by the mid-1990's, a half-dozen companies will control 60 percent of the Nation's broiler production and that a similar situation will occur in pork production shortly after the turn of the century. Unless cooperatives act promptly, they will lose a huge portion of the feed market.

Competition will be particularly keen in the non-integrated portion of the industry. Companies competing therein will be vying for business within an ever-shrinking segment of the feed industry. Some competitors may feature low prices, but most will compete by stressing quality feed and improved services and by using more advertising and intensified salesmanship. These marketing tools will be enhanced by technological breakthroughs in information handling and automation.

These same breakthroughs will enable feed companies to manage larger mills and business units and help farm operators handle bigger herds and flocks. In the meantime, results from these breakthroughs will be augmented by advances in biotechnology that will enhance control of production processes.

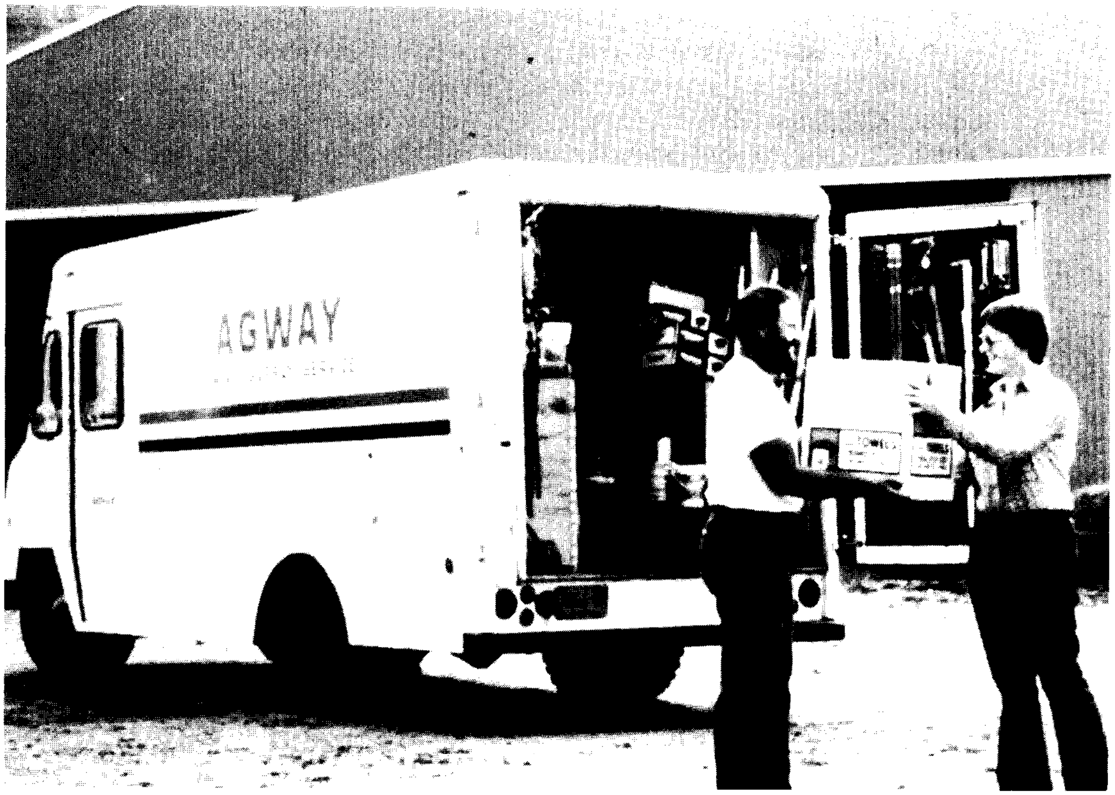
More vertical integration of livestock/poultry production, feed manufacturing, and marketing of livestock and poultry products is inevitable. Therefore, feed manufacturing cooperatives must strengthen their vertical coordination with livestock/poultry producers. Cooperatives will need to contract with members to grow livestock and poultry. More might build their own production facilities. Regardless of their course of action, they must take it in a manner that enables farmer-owners to retain control of their cooperatives. If feed manufacturing cooperatives cannot meet this challenge, their importance will decline in favor of noncooperative firms, including those that process meat and other food.

In general, cooperatives must continue to strive for greater efficiency in researching, milling, marketing, and selling feed. Superior feeds can be guaranteed by expanding and intensifying the cooperative research effort and by continuing to adopt new technology. It will require cooperatives to spend a higher portion of their sales dollars on research and to consolidate their research efforts into a larger and more integrated base. Superior distribution can be guaranteed by consolidating cooperative activities into a more streamlined system.

Finally, cooperatives must also sharpen their basic competitive tools and supplement them with action, such as producing more differentiated and value-added feeds. Marketing programs must focus on the most profitable market segments, develop more innovative services such as production advisories and one-stop shopping, and intensify selling efforts, especially toward large accounts and through the employment of more and better qualified on-farm field persons.

In summary, cooperatives must position themselves to meet future challenges in the marketplace. They must preserve their business with traditional farmers/patrons, while at the same time emphasizing the development of distribution channels, nontraditional products and customers, and competitive strategies and tactics required to do business in the 21st century.

Cooperatives' animal health activities range from research and demonstration farm operations, such as a swine unit at Farmland Industries, to Agway on-farm delivery services of AH products.



ANIMAL HEALTH PRODUCTS

The animal health products industry is highly dependent on the livestock, poultry, and formula feed industries. As these have grown, so has the animal health products (AHP) industry. In fact, it has stimulated the other industries through the control of animal death losses and increased production efficiencies. Because it started later than the feed industry, the AHP industry has had more opportunity for growth and has grown relatively rapidly.

Manufacturers' domestic sales reached an all-time high of $2.6 billion from AHP in 1989. This figure is attributed to increased animal and poultry numbers, rising prices, and perhaps some intensified usage on livestock and poultry. Dosage AHP, items for which cooperatives have relatively strong marketing programs, showed continued growth over feed additives. Dosage AHP, at 51 percent of all AHP sales, was up from 33 percent 12 years earlier.

AHP have three principal components (table 3). Biologicals constituted 10 percent of AHP sales and included vaccines, bacterins, and antitoxins to immunize animals and poultry from disease. Pharmaceuticals contributed 40 percent of the total and covered dosage quantities of antibacterials, injcctables, and external insecticides. Feed additives accounted for 49 percent and included nondosage antibacterials, anthelmintics, growth stimulants, vitamins, and minerals.

U.S. farmers purchased an estimated $3.1 billion of AHP in 1987. Biologicals and pharmaceuticals probably were relatively more important at the retail level than at the manufacturers' level, reflecting higher markups on over-the-counter (OTC) products than on feed additives.

Table 3-Domestic sales of animal health products by U.S. manufacturers, 1989

Principal types	Dollar volume [1] (million)	Percent
Biologicals	265.9	10.4
Pharmaceuticals	1,034.8	40.3
Feed additives	1,265.3	49.3
All products	2,566.0	100.0

[1] Source: Animal Health Institute.

Retailing

Development

Local cooperatives have been involved almost from their inception in handling AHP. One of the earliest may have been an association in Hancock County, IL, in 1915.

About the same year, in response to a need for high-grade cholera serum for hogs, a number of farmers around Thorntown, IN, organized the Swine Breeders Pure Serum Company (SBPSC) to supply themselves with serum directly. This was 8 years after USDA scientists first vaccinated hogs successfully in Iowa in 1907. SBPSC established a laboratory and built a plant at Thorntown.

By the early 1920's, a number of local cooperatives and county Farm Bureaus in Illinois, Iowa, Ohio, and Michigan were handling AHP. In 1928, Southern States organized a direct-to-farmer farm supply service, which began handling medicinals some time later. About the same time, other regional cooperatives in the Northeast and along the Atlantic seaboard began handling AHP for dairy cows and layer hens through their branch stores and warehouses. Likewise, egg marketing cooperatives in the West provided similar products for their members.

Current Position

In 1987, farmer cooperative retailers supplied an estimated 25 percent of the AHP purchased by farmers. At this level, farmer purchases from cooperatives were $780 million and amounted to 6 percent of the total expenditure on all farm supplies. Local cooperatives selling AHP compete with mail-order houses, milk marketing companies, veterinarians, and some wholesale distributors, as well as other retail outlets.

Cooperatives have about a 25-percent share of the market for feed additives, slightly higher for pharmaceuticals and slightly lower for biologicals. Cooperatives mix a large volume of AHP into feed at regional mills, but they also sell large volumes through grind-and-mix operations and directly to farmers as low-potency OTC products. Cooperatives are also strong marketers of pharmaceuticals, which probably offsets a loss for those not selling ethical drugs that are handled primarily by veterinarians.

About 2,600 local cooperatives-the number that handled feed in 1989—sell AHP. Thus, locals average more than one per county, although some serve markets of only a few hundred square miles while others serve markets several times that large. Regardless of market size, locals try to have the right selection of dependable and economical products immediately available for farmers. Types of AHP range from 50 to 600, with the number of AHP patrons varying from 50 to 1,500, or more. Quality service is especially important to OTC items, because they are often sold on an "as-needed" basis when illnesses occur. Many patrons appreciate a ready supply of AHP at the same location where they buy feed, thus sales of AHP and feed benefit each other.

Locals have succeeded by using a broad spectrum of approaches. Encouraged and subsidized by regional suppliers, more and more locals are reaching out to patrons through on-farm salespersons knowledgeable about AHP. This effort increases AHP sales, even though these persons tend to emphasize feed and other high-volume farm supplies more than AHP. A few locals even operate route trucks, with one known to operate three that make weekly calls on dairy farmers. These mobile showrooms represent the highest degree of service provided. On the other hand, a few locals achieve large volumes of business by relying on low prices and on little or no service outside their showrooms. Also, some local cooperatives conduct product shows for AHP exclusively, while others include AHP with other farm supplies.

Only a limited amount of information is available on the resources cooperatives allocate to AHP. Nevertheless, cooperatives, as well as other retailers, have enjoyed above-average volumes of AHP sales when they have been able to serve large livestock and poultry areas and when they have merchandised the products properly. In addition to employing on-farm salespersons and conducting product shows, proper merchandising includes treating AHP as a primary product line, as well as doing the standard things.

Even cooperatives with limited physical resources for AHP, like locals selling from the crowded offices of feed mills, have found AHP to be profitable. Profits follow when these locals have achieved such things as low purchase prices, reasonable margins, and high rate of inventory turnover. Among the larger locals, achieving low purchase prices includes gaining distributorships for some AHP Having gained distributorships, neighboring locals sometimes share the advantage through reciprocating arrangements.

Regardless of marketing strategies, techniques, and the overall volume of business, AHP contributes greatly to the savings generated by many local cooperatives. Savings are returned to patrons as patronage refunds.

Wholesaling

Development

As with feed and other farm supplies, local cooperatives did not handle AHP long until they saw the need to establish their own wholesale sources.

In 1924, the Illinois Agricultural Association organized the Illinois Farm Bureau Serum Association (IFBSA), Chicago, which began to supply locals with serum. By 1933, IFBSA was one of the larger distributors of hog cholera products in the United States. That year it sold nearly 40 million cc. of serums and viruses to at least 71 county Farm Bureau cooperatives. In 1936, the Indiana Farm Bureau, which had acquired SBPSC, began turning this operation over to the Indiana Farm Bureau Cooperative Association, completing this merger in 1948.

By this date, many wholesale farm supply cooperatives in Ohio, Michigan, and other States began handling serum. They provided the basis for saving both their locals and their locals' patrons a significant amount of money. IFBSA alone returned $2.4 million to its members in patronage refunds during its first 39 years of existence.

In the Northeast, Atlantic seaboard, and Southeast, regional associations probably began wholesaling AHP to their retail service stores and dealer-agents shortly after entering the mixed feed business in the early 1930's.

During the 1940's and 1950's, at least three regionals began to market AHP. Farmland initiated an animal health program in 1943 in conjunction with its new feed program. TFC did likewise by the mid-1940's, while IFBSA added biologicals and pharmaceuticals to its product line in 1948. During the early 1950's, cooperatives began to add growth aids and medications to their feed as a new era developed in feed formulating. In 1955, Gold Kist brought AHP into its product line.

During the next 35 years, regionals' involvement in AHP developed further. By 1970, FS Services, Inc., now GROWMARK, had established an AHP line and acquired the assets of the IFBSA, then the supplier of 15 to 20 local associations. Around 1974, Universal Cooperatives, Inc., Minneapolis, MN, added biologicals to its product line; then a line of premixes during the late 1970's. In 1982, Agway added biologicals while Farmers Union Central

Exchange (Cenex), St. Paul, MN, established a new animal care department. In 1987, Cenex and LOL began to market AHP jointly through Cenex/Land O'Lakes Ag Services.

In 1969, Agway put its first dairy route truck on the road and by 1982 had 36 trucks in operation. They handle a significant portion of Agway's retail AHP sales, make frequent regular stops at dairy farms, and carry a broad spectrum of supplies in addition to AHP. Farmland, in cooperation with its locals, began servicing feedlots with route trucks in 1978. In 1982, Intermountain Farmers Association, Salt Lake City, UT, began using an animal health route truck that mainly serviced dairy farmers.

While cooperative route trucks are not unique, the financing of them may be. Other AHP distributors bear all the cost of their route trucks, while regional and member locals sometimes share the cost of cooperative trucks.

Current Position

At least 30 regionals that sold feed in 1989 also handled AHP. Because of close ties with local cooperative members, regional wholesalers supply much of their AHP despite some competition from noncooperative distributors. Naturally, the regionals' proportion of AHP sales to independent locals is lower.

Farmland, which serves 20 States, is the largest regional cooperative wholesaler of OTC AHP. It reported sales of $33 million in 1987, which included some insecticides. It claimed to be "... the largest single distributor of AHP in the Midwest." Thus it qualified as one of the largest in the United States, especially if it is credited with the feed additives mixed and distributed through its 22 feed mills. Sales by smaller regionals range downward to less than $1 million annually.

Cooperative regionals perform all activities normally associated with wholesaling AHP. They employ product managers and sales personnel, purchase and inventory AHP, then price, advertise, promote, and sell these products.

These managers and their staff spend much time buying and pricing products. They buy as competitively as possible, relying heavily on volume discounts, supplier booking programs, and special sales. They try to price competitively, with one regional acknowledged as the price leader within its geographical market. They generally suggest retail prices to all locals and outlets, then frequently work with specific stores to meet the prices of local competition.

Regionals inventory AHP at one or more strategically located warehouses and arrange for deliveries. Since AHP are often inventoried in or near the regionals' general-purpose warehouses, the closer these facilities are to locals, the more they use their own trucks to pick up AHP. More regionals seem to be leasing warehouses and delivery services than in former years, especially route trucks for regular deliveries to retail outlets.

Programs to advertise and promote AHP vary widely among cooperative regionals. Some advertise heavily in their magazines and customer flyers, at the same time subsidizing advertising by locals. Other regionals do not, totally relying on their locals for retail advertising. Some regionals use product shows successfully.

On the other hand, all regionals direct advertising and promotions at their locals, using flyers, price lists, booking programs, special sales, and sales premiums and subsidies. Regionals commonly share the cost of local sales dinners, often with basic manufacturers. Some regionals employ telemarketers.

Territorial representatives spearhead the selling of AHP by most regionals. Usually supervised by sales managers within feed departments, representatives concentrate on feed and animal nutrition. Nevertheless, they provide a large share of the time regionals allocate to AHP. Their relatively large number offset the small number of specialists who devote all or most of their time to AHP.

Representatives call on locals and outlets to help with sales meetings, product demonstrations, farm calls, advertising, and order placement. AHP managers support the representatives by providing them with a basic understanding of animal health and AHP, training them to market AHP, keeping them abreast of new products, sales techniques, and market developments, providing sales aids, and generally supporting them. This includes answering questions on product use and performance, anticipating questions through frequently distributed flyers, and making themselves available to speak or arranging for other speakers at sales events sponsored by retail outlets.

The strength of foregoing activities varies according to the interest of product and sales managers. This variation is either enhanced or negated by the intensity of interest top management has in AHP. Overall, sales of AHP varies from about $25,000 to $1,500,000 per staff-year of input.

Despite these variations, all regionals have loyalty, a commonly shared strength. It stems from ownership, for either locals own regionals or regionals own outlets. It also comes from the support regionals give their locals and outlets. Support takes many forms, including recruiting and training store managers, and frequently subsidizing onfarm salespersons.

Regionals also supply general business and consulting services dealing with financial accounting and records, often through integrated information systems; real estate purchases and expansions; store layout and merchandising; operations controls; and risk management programs. AHP sales of most regionals also benefit from the marketing of feed by these regionals. Only a limited amount of AHP research is done through programs discussed under cooperative feed operations.

Principal cooperative wholesalers of AHP organized the Cooperative Animal Health Association (CAHA) in 1977. AHP product managers constitute its officers. CAHA's principal activity is an annual meeting of these managers. They hear presentations by AHP manufacturers and discuss all aspects of their marketing programs, except prices and pricing. Discussion of the latter subject is expressly forbidden.

Regionals do not manufacture basic AMP, but some formulate a considerable portion of their AHP sales. Most of the formulating involves diluting technical grades to OTC levels of potency, often at the regionals' feed mills. Some formulating involves a few animal insecticides and treatments that are marketed under the regionals' private labels. Universal also formulates a few insecticides. Co-labeling products with manufacturers is more popular than private labeling.

Universal is the only interregional association that wholesales AHP to regional cooperatives. It purchases for 29 member organizations throughout the United States and Canada. Its origin was from two similar interregionals that started in the 1930's and merged in 1972. While Universal's major products are crop chemicals, tires and other automotive supplies, steel products, and farmstead equipment, this cooperative has a growing interest in AHP and broadened its product line in the 1970's. In 1987, the volume of Universal's sales of AHP probably rivaled Farmland's.

Challenges Ahead

Cooperatives marketing AHP in the 1990's face most of the challenges that confront cooperatives marketing feed. However, they will have to contend with special problems.

First, the decline in the number of AHP manufacturers may not be as great as the decrease in feed manufacturers. At the same time, and unlike the feed industry, the number of distributors may continue to grow. This is especially true of competitors most troublesome to cooperatives-those operating discount stores and mail-order houses and those doing business directly with farmers. Further, cooperatives sell few of their own AHP; thus, most of their products are not distinguished by higher quality than their competitors. All marketers sell essentially the same products. This combination of factors means competition will remain keen as low prices and margins will continue, especially on commodity-type products that often are high-volume items.

AHP are manufactured and sold under broader governmental regulations than feed, even though many restrictions apply to the use of AHP in feed. Most regulations will continue to challenge cooperatives about the same as non-cooperatives. One exception may prove more bothersome to cooperatives, however. Regulators are tending to restrict more animal health products to veterinarian prescriptions.

As with feeds, cooperatives that sell AHP must select the best means of marketing their products. This means that more cooperative marketers of AHP, especially retailers, must treat AHP as a primary product line, which in turn will require more financially accountable and enthusiastic AHP managers. Such managers could fully develop synergisms between AHP and feed, other products, and services; develop, and even patent, new uses and combinations for existing products; use supplier services and programs more fully; employ more specialists; and price according to demand. Last, many cooperatives could increase sales and lower costs by securing large portions of their annual sales through booking programs and product shows.

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Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

ACS publishes research and educational materials and issues *Farmer Cooperatives* magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, marital status, handicap, or national origin.