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Report 159

Marketing Coordination in Agricultural Cooperatives



Abstract

The use of marketing agreements adds elements of marketing coordination between members and their cooperatives. Marketing agreements used in this study included both marketing contracts signed with members and bylaw provisions that required members to market with their cooperative. Type of product marketed and related marketing services had a strong influence on the level of agreements. Except for dairy, cooperatives with marketing agreements had a greater proportionate investment in assets, especially fixed assets, than other cooperatives and were more likely to use long-term sales contracts with their customers. Dairy cooperatives had a range of bargaining and marketing relationships with their members that created a more complex asset investment relationship.

Marketing Coordination in Agricultural Cooperatives

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Highlights

Coordinated marketing between cooperatives and their members was influenced by factors operating at different levels in the marketing system. Understanding marketing relationships between members and cooperatives requires an approach that sequentially considers each step in the marketing process. Product characteristics with related marketing services, functions performed by cooperatives, and marketing coordination all have a role in this understanding.

This study focuses on the use of marketing agreements by cooperatives and their producer members. Marketing agreements include both marketing contracts and bylaw provisions that require members to market with their cooperative. A survey of marketing cooperatives with total sales of \$15 million or more provided the basic information.

Product characteristics and marketing services at the initial product exchange between members and their cooperatives were related to use of marketing agreements. Grain producers provide much of the storage and services needed at harvest. Therefore, grain producers are able to market grain with considerable independence throughout the year. Grain cooperatives tended not to use marketing agreements unless processing or production coordination functions were incorporated in a cooperative's activities. Only 6 percent of the grain cooperatives had marketing agreements.

Agricultural products leaving the farm are often bulky, perishable, and seasonal, thus increasing the need for marketing services. Fruit, vegetables, and milk are perishable products, and more than 75 percent of these cooperatives had marketing agreements with their members.

At the cooperative level, bargaining functions and marketing activities with higher resource requirements influenced member-cooperative marketing relationships. In three of the four classifications, cooperatives with coordinated arrangements had higher average sales, assets, equity, and fixed assets than other cooperatives. Functions performed by cooperatives with marketing agreements required relatively more facilities and equipment. Risks associated with larger investments over longer periods were offset by higher levels of coordinated marketing between members and cooperatives.

Dairy cooperatives had a different pattern of asset use. Those with marketing agreements did not have more asset-intensive operations. Bargaining activities, an important function in many dairy cooperatives, require only limited assets and help explain the different asset investment pattern.

Cooperatives' marketing contracts with their customers were also related to use of marketing agreements. These cooperatives tended to have more long-term contracts with the firms to which they supplied products. This was especially true of dairy cooperatives.

Marketing Coordination in Agricultural Cooperatives

Introduction

The U.S. agricultural production and marketing systems provide consumers a wide variety of products. Various channels guide products as they flow from farms and ranches through the marketing system to final users. Marketing transactions vary—from auction markets, where buyers and sellers interact only at the time of sale, to vertically integrated poultry or pork enterprises, where before the production process begins, agreements have been reached on the level and schedule of production. Between these extremes exist marketing arrangements with varying degrees of coordination. The general trend is toward greater coordination.¹

Agricultural cooperatives are active throughout the marketing system. Their involvement is strongest in dairy, moderate in fruits and vegetables and grain, and limited in livestock.² As in the overall agricultural marketing system, cooperatives and their members have differing marketing relationships. Bylaws describe members' responsibilities, and members and cooperatives may agree on other conditions and agreements.

This study describes the use of marketing agreements by cooperatives and examines possible reasons and characteristics associated with establishing them. This coordinating link established between members and their cooperatives is the key element in this analy-

sis. An understanding of when and why marketing agreements are used will help cooperatives and their members in structuring their marketing relationships.

Survey

A survey of marketing cooperatives with total sales of \$15 million or more provided the primary information for this study. Only those marketing cooperatives with agricultural producers as members were included. The survey covered cooperatives' 1992 fiscal year. Cooperatives with sales of less than \$15 million were not surveyed, so study results do not represent all cooperatives. However, the marketing cooperatives included in this study accounted for more than one-half of the total marketing sales of all U.S. agricultural cooperatives.

Cooperatives were questioned about members' requirement to market with their cooperative and in what form commitments were obtained. The survey also included cooperatives' financial information, use of contracts with firms supplied by cooperatives, and marketing activities performed. A study of dairy cooperatives covering the same time period, provided information on dairy marketing operations.³

This report focuses on cooperatives' and members' use of marketing agreements. With marketing agreements, members are required to market with their cooperative, which in turn, provides marketing services. The distinction between cooperatives with or without marketing agreements is an important classification throughout the report. Cooperatives and members with marketing agreements agree to coordinate operations according to the established conditions and

¹ Hoppe, Robert A., Robert Green, David Baker, Judith Z. Kalbacher, and Susan E. Bentley. Structural and Financial Characteristics of U.S. Farms, 1993: 18th Annual Family Farm Report to Congress. USDA, *Econ. Res. Serv.*, January 1996 p. 10.

² Kraenzle, Charles A. "Cooperatives' Share of Farm **Markete**ngs Hits **14-year** High," *Rural Cooperatives*. USDA, *Rural Bus.-Coop.* Ser., Jan./Feb. 1996 pp. 4-5.

³ Ling, K. Charles, and Carolyn Betts Liebrand, *Marketing Operations of Dairy Cooperatives*, USDA, Agricultural Cooperative Service, Research Report **133, 1994**.

time period. For the duration of the agreement, an important part of the operations of members and cooperatives are joined.

Cooperatives were also classified by four product classifications- (1) dairy, (2) fruits and vegetables, (3) grain, and (4) other products such as cotton, livestock, poultry, tobacco, rice, and sugar.

The largest number and lowest median sales were in grain cooperatives (table 1). The other three groups had fewer cooperatives but higher average sales. Fruit and vegetable cooperatives had the lowest average number of members while the "other products" group was the highest. The variety of products included in this group represents a range of marketing methods and a wide range in number of members. Livestock marketing organizations serve large areas with many producers. Some livestock cooperatives had more than 20,000 members, although their participation varies considerably from year to year. Cooperatives with fewer than 100 members were also in this classification.

Tobacco cooperatives were not included in the member tabulations. Tobacco production and marketing involve large numbers of holders of tobacco production allotments. Tobacco cooperatives with auctions have many more members than other cooperative types because of the widely dispersed production allotment system.⁴

Marketing Agreements

"Marketing agreement" as used in this report includes different forms of commitment between members and cooperatives. A binding agreement between member and cooperative was required to establish a marketing agreement. These arrangements were adopted either by provisions in a cooperative's

bylaws that contained a marketing requirement for members or by a separate contract that required members to market with their cooperative. In this report, marketing agreements independent of bylaw provisions will be called "marketing agreement contracts." Bylaw provisions apply when a producer becomes a member. The terms of marketing agreement contracts specify starting dates, length of agreement, and other terms and conditions.

These two forms of members' consent are not mutually exclusive. Some cooperatives had both bylaw provisions requiring member marketing and marketing agreement contracts. Including both in the same classification does not imply that they are identical. A marketing agreement contract is a more flexible form that can be changed whenever a new agreement is reached." Bylaws are harder to change and, therefore, would be more general. For cooperatives with both, marketing agreement contracts' provisions could supplement bylaw provisions. While members have less marketing freedom, they gain an assured market for their products. Cooperatives gain an assured supply of raw products but are committed to providing services.

Forty-four percent of the surveyed cooperatives had marketing agreements with their members. Of those, 32 percent used only bylaw provisions, 55 percent used only marketing agreement contracts, and 13 percent used both.

Few marketing agreements were used by grain cooperatives. Only six percent required members to market with their cooperative. In contrast, fruit and vegetable cooperatives had the highest proportion of marketing agreements, at 88 percent, followed by 76 percent of dairy cooperatives (table 1).

⁴ Hunley, Charles L. Role of Cooperatives in Tobacco Marketing, USDA, Agricultural Cooperative Service, Research Report 67, 1988.

⁵ See discussion of marketing agreements in Cooperative Marketing Agreements: Legal Aspects, USDA, Agricultural Cooperative Service, Research Report 106.

Table 1— Use of marketing agreements and cooperative characteristics by type¹

Cooperative type	Number of cooperatives	Proportion with marketing agreements			Median sales
		Number	Percent	Number	
Grain	306	6		1,380	26
Fruit and vegetable	56	88		490	56
Dairy	73	76		1,590	168
Other marketing	87	60		5,970 ²	56

¹ Included were cooperatives with \$15 million or more in sales and individual producers as members. Marketing agreements included contracts and bylaw provisions that require member marketing.

² Tobacco cooperatives were not included in average number of members.

Agricultural producers and marketing cooperatives have a variety of potential reasons for initiating marketing agreements — (1) conditions and requirements existing at the transfer of products between members and cooperatives, (2) activities performed by cooperatives, and (3) marketing commitments extending from cooperatives' operations toward the end users of agricultural products.

Studies of marketing operations describe the marketing environment within which each type of cooperative operates. Their experiences in establishing marketing agreements will be compared with characteristics of the market within which the cooperatives operate.

Transactions Between Members and Cooperatives

Producers' marketing decisions begin with obtaining the services needed to move their products past their farm gate and into the marketing system.

Physical characteristics and production patterns of various agricultural products require different services to enter marketing channels efficiently and in good condition. The seasonal nature of agricultural production also intensifies marketing concerns. At harvest, shortages of transportation, storage, or processing capacity can be costly.

Establishing prior agreements between producers and marketing organizations specifies conditions and needed services and offers the possibility of coordinated actions to solve marketing concerns. If product characteristics and accompanying marketing needs affect members' and cooperatives' decisions, use of marketing agreements will be related to products marketed. Product characteristics can create marketing concerns for both producers and marketing organizations.

Perishability is a marketing concern for many agricultural products. They must move quickly to processing, storage, or conditioning facilities or directly to consumers to preserve quality. Other physical characteristics also impose handling requirements at the transfer from farms and ranches to marketing channels. Bulk products such as sugar beets or field-harvested cotton require nearby processing or handling facilities to facilitate efficient harvesting and transportation. Matching these needs requires coordination between members and cooperatives.

Distinctive characteristics of specialty agricultural products create potential markets. Special characteristics require a marketing channel that will maintain product quality and identity. Products' identity is lost

if they enter the common marketing channel. Marketing agreements can assist in maintaining a separate marketing channel.

Production and marketing efficiency can be increased if coordination of these functions provides savings or allows new production methods. Functions may be integrated in a variety of organizational forms, including coordination between cooperatives and their members. Assurance of product markets or product supplies can be a concern of agricultural producers and marketing organizations. If many potential marketing outlets or product supply sources are available, producers or marketing organizations do not need to make special efforts to operate. However, when product supply or demand is in question, producers or marketing organizations may not be confident in establishing or continuing operations without firm assurance that the required market or product supply will be available. Table 2 lists characteristics of marketing transactions between producers and cooperatives by agricultural product.

Marketing coordination has both benefits and costs. Once a marketing agreement is established, both sides have less freedom of independent action. Future opportunities are limited in certain areas because of binding restrictions and forgone opportunities. Uncertainty has been reduced. Members gain confidence in their products reaching markets and cooperatives have fewer concerns about obtaining raw products. Both sides accept common goals. The growth and performance of one party becomes an element in the success of the other. For the period of the marketing agreement, the success of both sides of the agreement is to varying degrees joined.

Grain Marketing

Grain cooperatives typically provide grain storage and conditioning services in addition to a year-round market for grain available for members and other grain producers. Cash or short-term price contracts are the usual methods of payment. Grain cooperatives often include feed operations and other farm supply services as an important part of their operations. Grain flows from local cooperatives to federated cooperatives, processors, exporters, and other domestic users.⁶ Grain producers have significant amounts of grain drying, storage, and transportation equipment and facilities. Producers' on-farm storage capacity exceeds

⁶ Hunley, Charles L., and David E. Cummins, Marketing and Transportation of Grain by Local Cooperatives, USDA, Agricultural Cooperative Service, Research Report 115, 1993.

off-farm storage capacity.⁷ Producers with storage and transportation capabilities can market **when and where** they want and do not depend on local cooperatives or other grain marketers for services. This independence provides grain cooperatives and other marketers a large number of potential sources for grain.

Grain cooperatives had the lowest level of marketing agreements (table 1). The self-sufficiency of many grain farmers and the availability of year-round markets are important factors in explaining the low level of marketing agreements. For grain cooperatives, grain usually was not the product covered by the agreements with members. Cooperatives' integrated poultry and livestock operations used grain as a feed ingredient, and the products of the integrated operations were included in marketing agreements. In these cooperatives, most sales were in grain marketing without member commitments. The poultry or livestock operations were operated as separate divisions with member marketing commitments. Some cooperatives had marketing agreements for special-purpose grains.

⁷ Grain Stocks, USDA, National Agricultural Statistics Service, Jan. 1997 pp. 27-28.

Table 2— Characteristics of transactions between producers and marketing cooperatives, by product¹

Product	Characteristics
Grain	<ul style="list-style-type: none"> -Cash market, short-term contracts available all seasons -On-farm or grain elevator conditioning and storage available -Alternative marketing points available depending on area and producers' storage and transportation capabilities -Specialty use products may require separate marketing channel.
Fruits and vegetables	<ul style="list-style-type: none"> -Perishable products and seasonal harvest -Range of products requires various services -Location, product, and resources of producer determine limited marketing alternatives. -Availability of cash markets depends on product
Milk	<ul style="list-style-type: none"> -Very perishable product -On-farm pickup develops marketing relationship -Changes between marketing outlets possible, but require coordination
Other products	<ul style="list-style-type: none"> Cotton- Range of services needed, ginning required near production Livestock- Auctions and contracts used, changing industry structure Poultry- Integrated production Sugarcane or beet- Relationship with processing or bargaining group needed

¹ included were cooperatives with \$15 million or more in total sales and individual producers as members. Marketing agreements included contracts and bylaw provisions that require member marketing.

Fruit and Vegetable Marketing

The seasonal nature, product perishability, and range of crops combine to form a complex marketing system for fruits and vegetables (table 2). These cooperatives provide their members with a range of marketing and bargaining services. Fruit and vegetable bargaining cooperatives used differing forms of operation. Those studied pooled their members' products and negotiated prices, quantities, and other contact terms. The cooperatives made advances and final payments to growers. In other bargaining cooperatives, they negotiated overall terms with processors/buyers, but contracts and payments were arranged between growers and processors/buyers. Cooperatives that did not take title to products were not included in this survey. Therefore, a part of cooperatives' bargaining effort is not reflected in this study.*

Cooperatives were involved in both the fresh and processed marketing of fruits and vegetables.

Payments from cooperatives handing fresh products

⁸ Iskow, Julie, and Richard Sexton, **Bargaining** Associations in Grower-Processor Markets for Fruits and Vegetables, USDA, Agricultural Cooperative Service, Research Report Number 104, 1992.

were most commonly made to growers' accounts.⁹ Other fruit and vegetable cooperatives used pooling methods. Products are commingled and producers share in the receipts based on their participation. The combination of seasonal production and perishable products presents fruit and vegetable producers with a marketing challenge. On the other side of the transaction, fruit and vegetable cooperatives are similarly concerned about obtaining quality raw products.

Use of marketing agreements was highest among fruit and vegetable cooperatives. Table 1 shows 88 percent of fruit and vegetable cooperatives required members to market with them. Fruit and vegetable producers lack the marketing flexibility of grain growers. Fruits and vegetables are perishable and must be handled carefully. These cooperatives' need for an assured supply and members' need for a market for their raw products and for marketing services provided a strong incentive for establishing marketing relationships.

Dairy Marketing

The continuing flow of dairy products requires a marketing system capable of regularly receiving milk from dairy farms and providing a safe and secure supply for fluid milk distribution or processing (table 2). In milk marketing, the standard practice is regular milk pickup at a producer's farm by a bulk tank truck. Haulers performing this service are often independent contractors. Either cooperatives or individual producers may arrange for or provide the pickup service. Regardless, dairy farmers continually need a marketing outlet for their daily production. Similarly, dairy cooperatives need a constant milk supply to meet their product needs. This service creates an ongoing relationship between producers and their current marketing organizations. Unless producers or cooperatives initiate some action to change these relationships, they continue and become long-term.

Dairy cooperatives had the second highest level of marketing agreements, at 76 percent (table 1). The year-round production of milk does not concentrate marketing decisions into a limited time period. Because of the continuing marketing relationship and year-round production, the difference between producers with or without marketing agreements is less distinct in dairy marketing.

Marketing of Other Products

Cooperatives in this classification marketed a wide range of products. Table 2 lists characteristics of member-cooperative transfers of selected products. Examples of cooperative auctions with no marketing requirements existed in tobacco and livestock marketing. Members didn't use marketing services until selling decisions were made, then a cooperative or another marketing channel could be chosen. In contrast, all sugarcane and sugar beet associations had marketing requirements with members. Members needed an available market for their production, and conversely, cooperatives needed the growers' commitments to bargain with sugar manufacturers or to provide an adequate supply of raw products for processing cooperatives.

The range of products included in this group and the small number of cooperatives representing each product requires care in making generalizations. However, the relationship between product characteristics and marketing services and the use of marketing agreements found in the other cooperative types also existed. Sixty-eight percent of the cooperatives in this group had marketing agreements with their members (table 1), a level lower than for cooperatives marketing fruits and vegetables and dairy products but much higher than for grain cooperatives.

Summary

Use of marketing agreements was much lower among grain cooperatives than other types; six percent versus more than 60 percent for all of the other types. The differences in use of marketing agreements between grain cooperatives and others were strongly associated with the marketing services required at the initial marketing transaction between members and cooperatives.

Grain producers have more marketing options because they can provide or can obtain transportation, storage, and conditioning services. The other cooperative types served producers with generally greater needs for marketing services and, therefore, less marketing independence.

Cooperatives handling perishable products or products requiring special services tended to be organized with marketing agreements. Those handling products with less complex transfers between members and cooperatives tended to be organized without marketing commitments. Identifying the importance of products' physical characteristics and associated conditions with the use of marketing agreements is not

⁹ Biggs, Gilbert W. Cooperatives Position in the Fresh Vegetable Industry. USDA, Agricultural Cooperative Service, Research Report 82, 1989.

surprising. However, this basic relationship needs to be considered before other more complex factors that may influence marketing agreements are examined.

Cooperative Operations

Marketing cooperatives perform a range of activities—from limited functions of product assembly and bargaining to extensive processing and distribution operations. Activities performed determine the relative amounts and types of resources that need to be controlled. While bargaining cooperatives have little need for physical facilities, processing cooperatives invest heavily in facilities and equipment.

Investments in fixed assets designed for specialized purposes are committed for the life of the equipment or facility. As these investments increase, so does an organization's financial risks because increasing amounts of investments are committed for longer periods of time. Specialized investments in fixed assets have been identified in economic theory as having a role in determining organizational structure.¹⁰ This suggests that organizations with relatively greater specialized investment tend to organize in ways that vertically extend business operations to decrease their overall risk.

In cooperatives, members' equity provides a financial base for operations. Members' marketing commitments also are a form of member support. Agreements and bylaws requiring member participation are examples of devices that join members and cooperatives. If they use marketing commitments to support more capital-intensive operations, this will be shown in differences in resource use between cooperatives with and without marketing agreements.

In figures 1 to 4, financial totals are shown by cooperative type and use of marketing agreements. The horizontal bars represent number of cooperatives, total sales, total assets, total equity, and net fixed assets and are shown as percentages of the totals for each cooperative type.¹¹ Cooperative groups with and without marketing agreements can be compared, and within each group, individual values can be compared.

¹⁰ Williamson, Oliver E. *The Economics of Capitalism*, New York: Free Press 1985.

¹¹ Total sales are from all sources, not only marketing. Total assets and total equity are as reported in the cooperatives' financial statements. Net fixed assets are cost of all facilities and equipment less depreciation.

Grain Cooperatives

Grain cooperatives without marketing agreements have the bulk of cooperative numbers, sales, assets, equity, and fixed assets. Figure 1 shows the concentration of number of cooperatives and all financial totals of those cooperatives without marketing agreements.

For grain cooperatives with marketing agreements, the horizontal bars resemble stairsteps as sales are relatively higher than the number of cooperatives, assets relatively higher than sales, member equity higher than assets, and fixed assets the highest of all. The 6 percent with marketing agreements had 20 percent of grain cooperatives' fixed assets.

Grain cooperatives with marketing agreements had a range of activities. These cooperatives provided grain marketing services and also used grain in processing or as a feed ingredient. Examples of these activities included a feedlot, integrated turkey operations, and grain processing operations. The marketing agreements with members did not necessarily apply to members' grain production but to their participation in supplementary operations. In these cases, the majority of members using the grain marketing services did not have marketing agreements, but the minority participating in the supplementary operations did have agreements. The supplementary operations of cooperatives with marketing agreements required additional resources and accounted for the differences in financial totals.

Fruit and Vegetable Cooperatives

In contrast to grain cooperatives, a high proportion of fruit and vegetable cooperatives had marketing agreements, and the bulk of sales, assets, equity, and fixed assets were held by cooperatives with marketing agreements. As in grain, cooperatives with marketing agreements had higher average sales, assets, equity, and fixed assets than those without agreements (figure 2).

Fruit and vegetable cooperatives without agreements provide a range of marketing functions, including fresh and processed marketing operations. Figure 2 shows that the 12 percent of fruit and vegetable cooperatives without marketing agreements had only 5 percent of total assets and only 4 percent of fixed assets of fruit and vegetable cooperatives. The marketing functions they performed required substantially fewer facilities and equipment than the functions performed by the cooperatives with marketing agreements.

Dairy Cooperatives

Most dairy cooperatives had marketing agreements, and cooperatives with marketing agreements had the major portion of sales, assets, equity, and fixed

assets. In figure 3, dairy cooperatives with marketing agreements show a different pattern than the grain cooperatives and fruit and vegetable cooperatives. Dairy cooperatives with agreements did not have higher average sales or assets than cooperatives without agreements. The 76 percent with marketing agreements had only 68 percent of the fixed assets.

Dairy cooperatives perform a range of marketing functions which have an important influence on financial resource requirements. The dairy cooperatives analyzed were also included in a study of dairy marketing operations and were classified by marketing function performed.¹² The marketing operations were classified as follows:

1. Bargaining Cooperatives-Operate as bargaining associations and refrain from product processing/manufacturing.
2. Bargaining-Balancing Cooperatives-Bargain for milk with processors/buyers and manufacture surplus milk supply into commodity dairy products.
3. Processing/Manufacturing Cooperatives—Process fluid milk or manufacture dairy products.
4. Diversified Cooperatives-Perform a combination of the bargaining, processing/manufacturing, and supply balancing functions.

Table 3 lists characteristics of these marketing function classifications. The processing/manufacturing group, with its high investment in plant and equipment (fixed assets), had the highest ratio of assets to sales. In the other three functional groups, bargaining

was an important function. Its effectiveness depends on members' commitment and requires limited physical facilities. Therefore, cooperatives with only bargaining operations required less assets for facilities and equipment than processing cooperatives did. The bargaining-balancing and the diversified classifications have milk processing operations, but a large share of their milk volume is bargaining volume and not handled through their processing facilities.

Figure 5 shows the distribution of sales volume for dairy cooperatives with and without marketing agreements. Bargaining and bargaining/balancing cooperatives account for more than 40 percent of the sales volume of those cooperatives with marketing agreements. Dairy cooperatives performing diversified marketing functions account for more than 80 percent of the sales volume of cooperatives without marketing agreements. The dairy cooperatives with marketing agreements performed different functions than the cooperatives without agreements. The importance of the two bargaining groups and their relatively low asset requirements helps to explain the different financial relationships that existed in dairy cooperatives compared with grain and fruit and vegetable cooperatives.

By adding facilities for processing surplus milk, cooperatives in the bargaining/balancing group increased their ratio of fixed assets to sales to a higher level than for those cooperatives engaged only in bargaining. Ninety-two percent of bargaining/balancing cooperatives had marketing agreements as compared with 69 percent of bargaining cooperatives (table 3). In this simple comparison, the dairy cooperatives with highest level of marketing agreements required the most assets compared with sales.

¹² Ling, K. Charles, and Carolyn Betts Liebrand, "Vertical Integration Patterns of Dairy Co-ops Reflect Changing Markets," *Farmer Cooperatives, USDA, Rural Business-Cooperative Service*, Sept. 1995 pp. 18-22.

Table 3— Characteristics of dairy cooperatives' marketing functions¹

Marketing functions	Proportion with marketing agreement	Average sales per cooperative	Average assets per cooperative	Average number of members	Financial characteristics
					Percent
			\$Million		
Bargaining	69	140	11	770	High sales to assets, very low or no fixed assets
Bargaining/Balancing	92	256	38	1,035	High sales to assets, moderate fixed assets
Processing/Manufacturing	78	197	53	475	Highest per member equity investment
Diversified	76	672	140	3,900	Large cooperatives, range of functions

¹ Included were cooperatives with \$15 million or more in total sales and individual producers as members. Marketing agreements included contracts and bylaw provisions that require member marketing.

Figure 1— Grain Cooperatives: Use of Marketing Agreements Based on Cooperative Number, Sales, Assets, Equity, and Fixed Assets

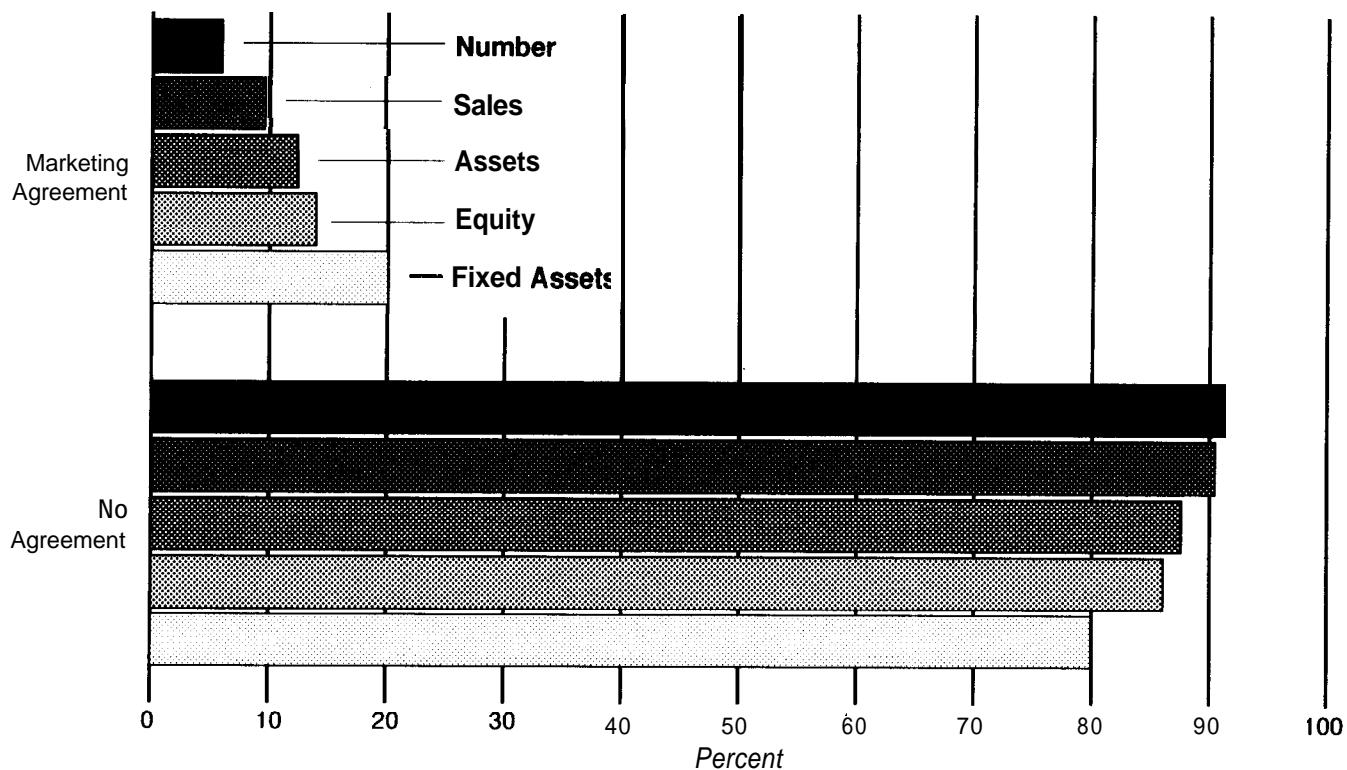


Figure 2— Fruit and Vegetable Cooperatives: Use of Marketing Agreements Based on Cooperative Number, Sales, Assets, Equity, and Fixed Assets

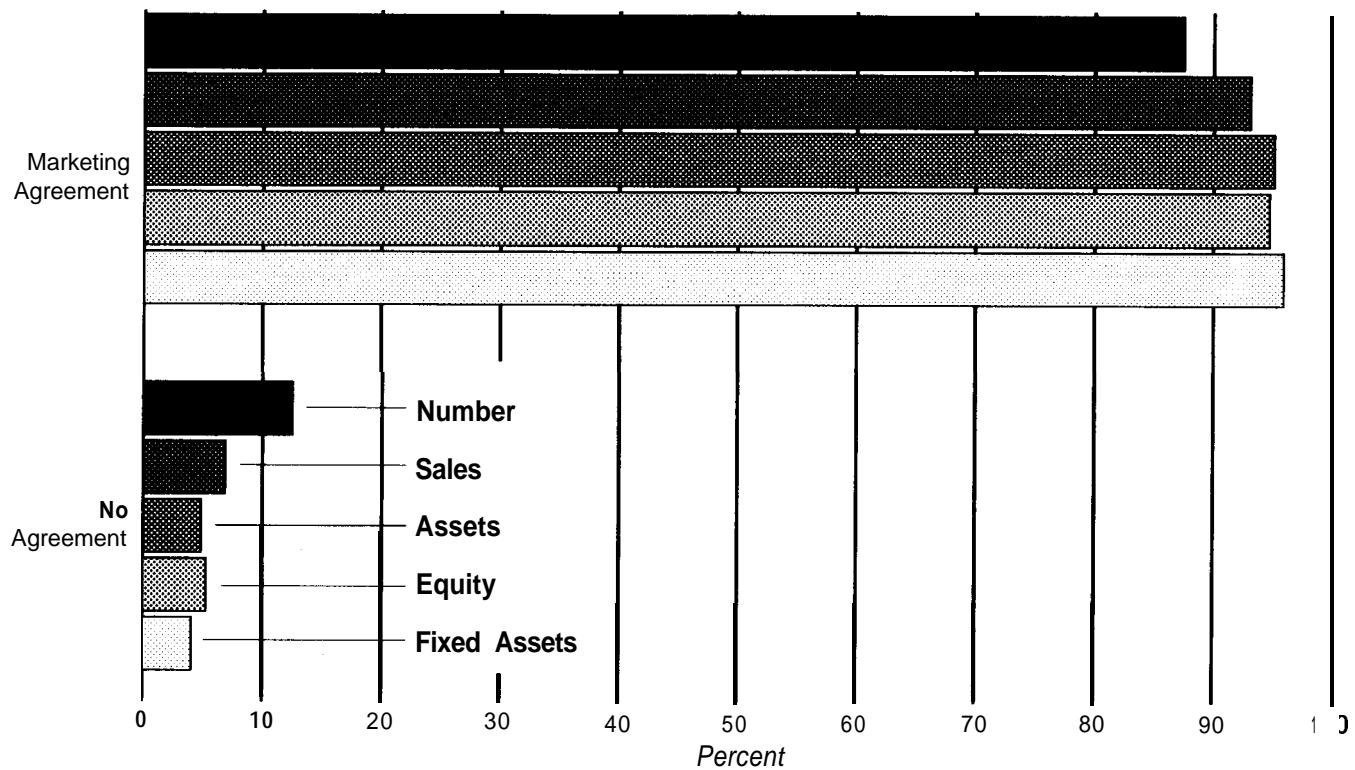


Figure 3— Dairy Cooperatives: Use of Marketing Agreements Based on Cooperative Number, Sales, Assets, Equity, and Fixed Assets

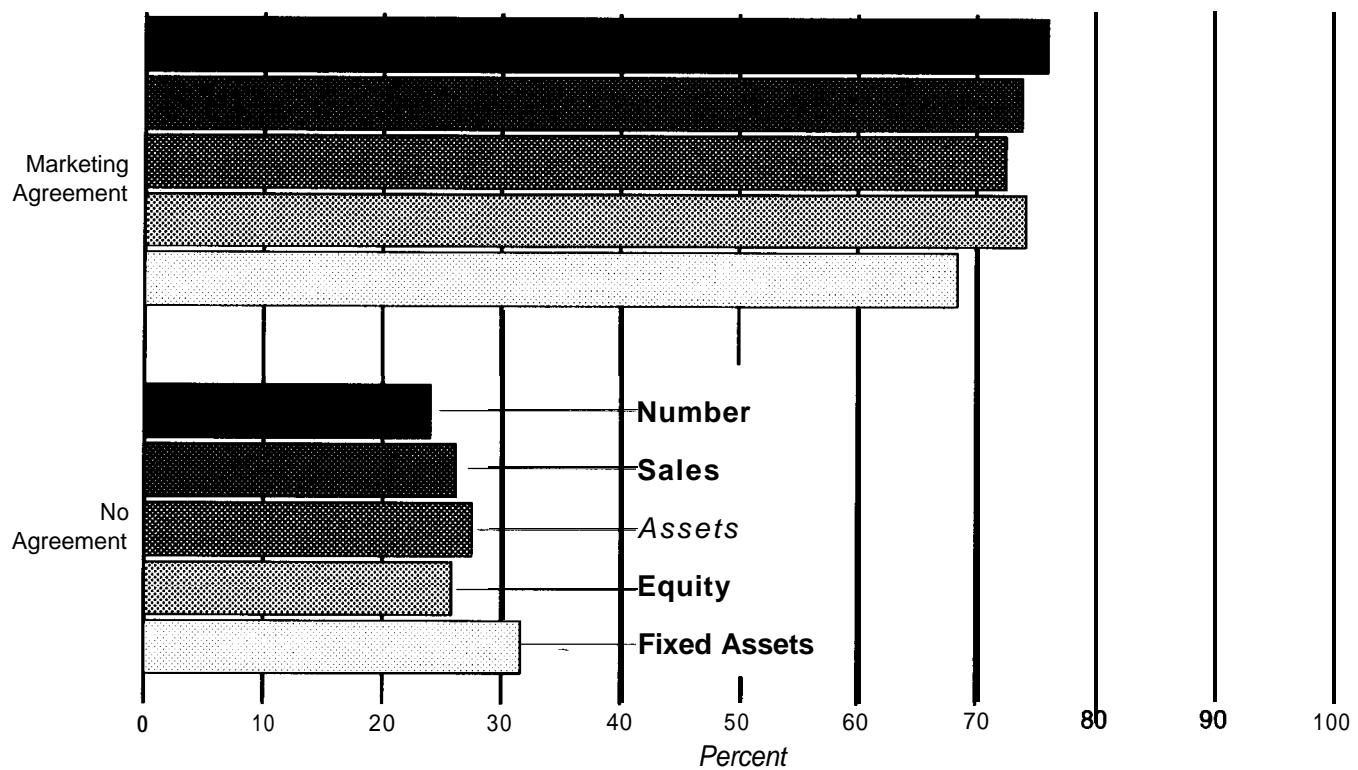
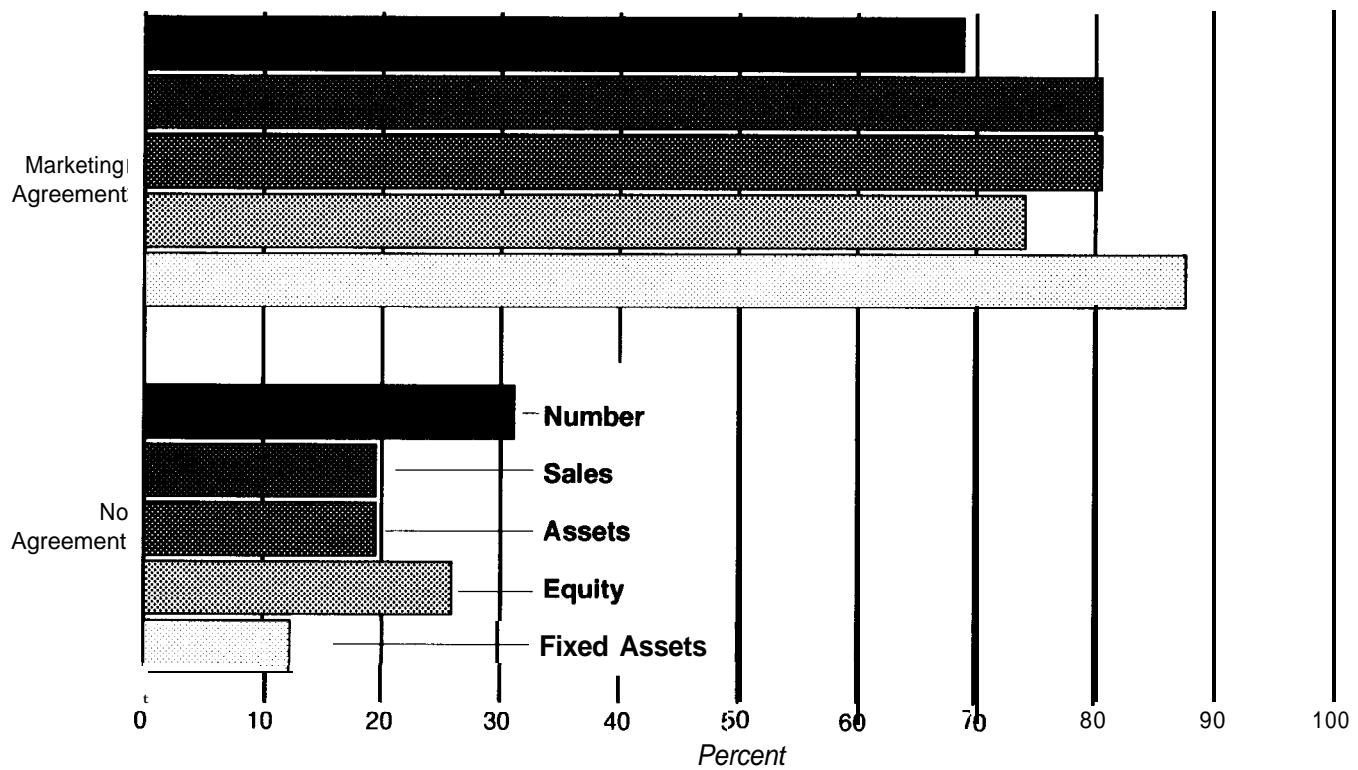


Figure 4— Other Marketing Cooperatives: Use of Marketing Agreements Based on Cooperative Number, Sales, Assets, Equity, and Fixed Assets



As mentioned earlier, the year-round production and on-farm pickup of milk creates a continuing marketing relationship between dairy cooperatives and members that doesn't exist in cooperatives that handle seasonal products. Even dairy cooperatives that did not require a marketing commitment had a continuing marketing relationship that yielded an expected supply of milk. More than 30 percent of the bargaining cooperatives operated without a formal agreement with members. The current members shipping milk were a strong enough base to support bargaining operations.

Diversified dairy cooperatives had the largest average number of members. As these numbers increase, cooperatives become less dependent on any individual producer. Formal commitments may become less important from the cooperatives' view. The importance of dairy bargaining and the continuing marketing relationship with members accounted for the different financial patterns of dairy cooperatives compared to other types of cooperatives.

Other Marketing Cooperatives

The range of products handled and functions performed by other marketing cooperative makes this classification more diverse than the others. Included

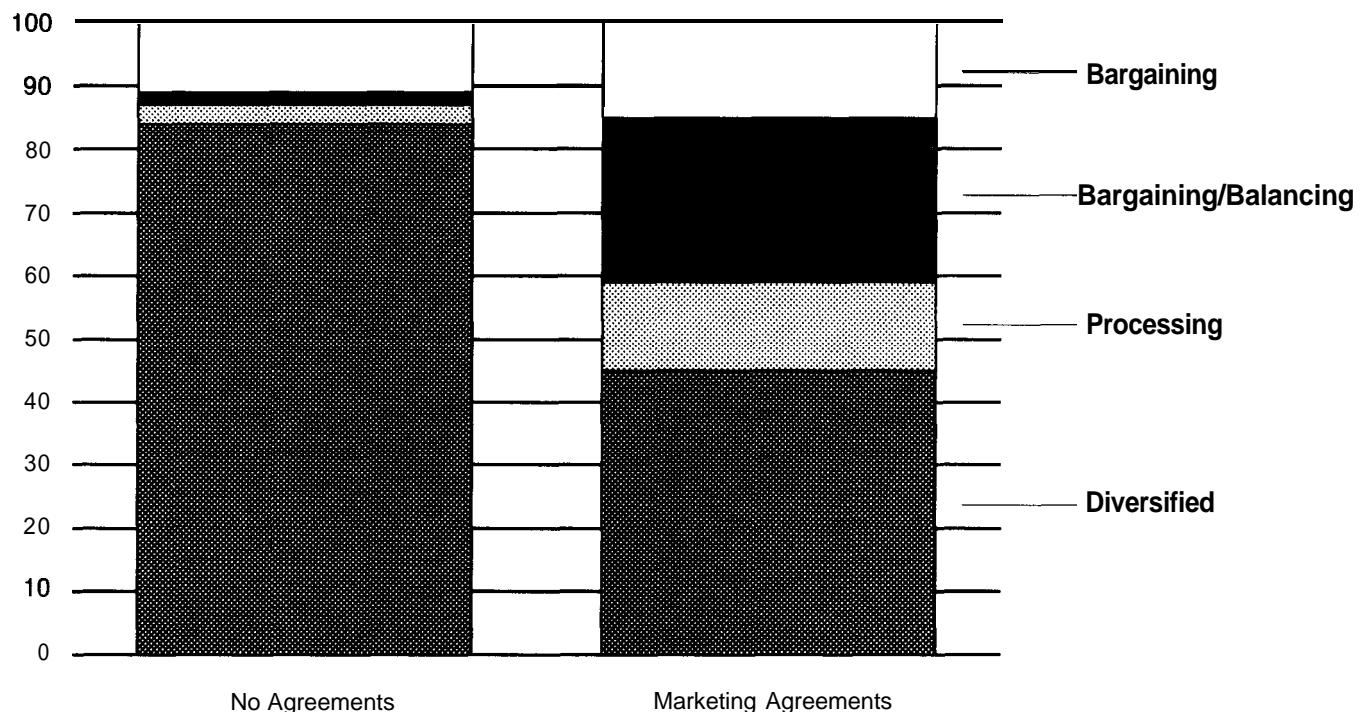
are auctions with low capital investments compared with sales and sugar beet processing cooperatives with high capital investments. The pattern shown in figure 4 is more irregular than shown in the other classifications. But an overall relationship of higher average sales, assets, equity, and fixed assets for cooperatives with marketing agreements nevertheless existed. Cooperatives without marketing agreements had relatively lower investment in fixed assets. The 31 percent of cooperatives without marketing agreements had only 12 percent of the fixed assets.

Summary

Overall, cooperatives with marketing agreements tended to have operations requiring relatively more assets, especially fixed assets, than cooperatives without marketing agreements. Within grain, fruit and vegetable, and "other products," organizations with marketing agreements averaged higher sales, total assets, equity and especially fixed assets than other cooperatives. Dairy cooperatives were different and more complex.

Grain cooperatives with marketing agreements usually added a supplementary operation, and the marketing agreements usually applied only to members involved in the supplementary operation. These

Figure 5—Percent of Dairy Cooperatives' Sales by Marketing Function and Use of Marketing Agreements



added operations using greater investments were directly linked to marketing agreements. Fruit and vegetable cooperatives with and without marketing agreements were not involved in substantially different functions, but those cooperatives with agreements were involved in more asset-intensive operations. With cooperatives marketing other products, marketing agreements were usually associated with cooperatives involved in product processing.

Dairy cooperatives as a group have joint objectives of product bargaining and use of processing/manufacturing activities to increase members' returns.

Bargaining operations introduced a different financial trend, and dairy cooperatives with marketing agreements did not require greater facilities. The difference in marketing functions performed by dairy cooperatives helped explain their different pattern of resource use. Characteristics of the ongoing patronage relationship of dairy cooperatives were also important. In dairy, year-round marketing, on-farm milk pickup, and large memberships bring different factors into the member-cooperative relationship.

Coordination Between Marketing Levels

Cooperatives reported on the proportions of sales sold by long-term contracts, short-term contracts, open market sales, and other methods. Long-term contracts are a year or more in length, short-term contracts are less than a year, and open market sales are made at

prices and terms available at the time of sale. Other methods included direct sales to consumers and sales through agents.

Considering all cooperative types, cooperatives with marketing agreements made, on average, 19 percent of their marketing sales with long-term contracts (table 4). Those without member arrangements averaged only 2 percent of sales with long-term contracts. Among those with marketing agreements, dairy cooperatives had the highest level of long-term contracts, an average of 29 percent of sales. Grain cooperatives had the lowest level of long-term contracts.

In the earlier discussion of member-to-cooperative transfers, physical characteristics of the agricultural product being marketed were related to use of marketing agreements. At the next marketing level of cooperative to customer, the physical form of many products changes. Processing changes raw products into a form less perishable and easier to transport. For these products, cooperative-customer exchanges have more freedom in designating time and place of delivery. However, perishable products, such as fluid milk and fresh fruits and vegetables, continue to require special services throughout the marketing system. For dairy cooperatives, the majority of total sales is in raw whole milk.¹ Cooperatives handling these products continue to face the same marketing concerns as existed at the member-cooperative exchange.

¹ Ling, K. Charles, and Carolyn Betts Liebrand, Marketing Operations of Dairy Cooperatives, p. 6.

Table 4—Proportion of cooperatives' sales from different arrangements, by type and marketing agreement status¹

Cooperative type	Marketing agreements	Long-term contracts	Short-term contracts	Open market sales	Other methods
Percent of marketing sales ²					
Grain	Required	0	53	39	8
	Not required	2	43	55	0
Fruit and vegetable	Required	14	13	69	4
	Not required	0	8	92	0
Dairy	Required	29	32	38	1
	Not required	1	53	41	5
Other marketing	Required	18	27	51	4
	Not required	5	13	75	7
Total	Required	19	28	50	3
	Not required	2	40	57	1

¹ Included were cooperatives with \$15 million or more in total sales and individual producers as members. Marketing agreements included contracts and bylaw provisions that require member marketing.

² Percent of marketing sales is calculated as an unweighted average of percentage distributions.

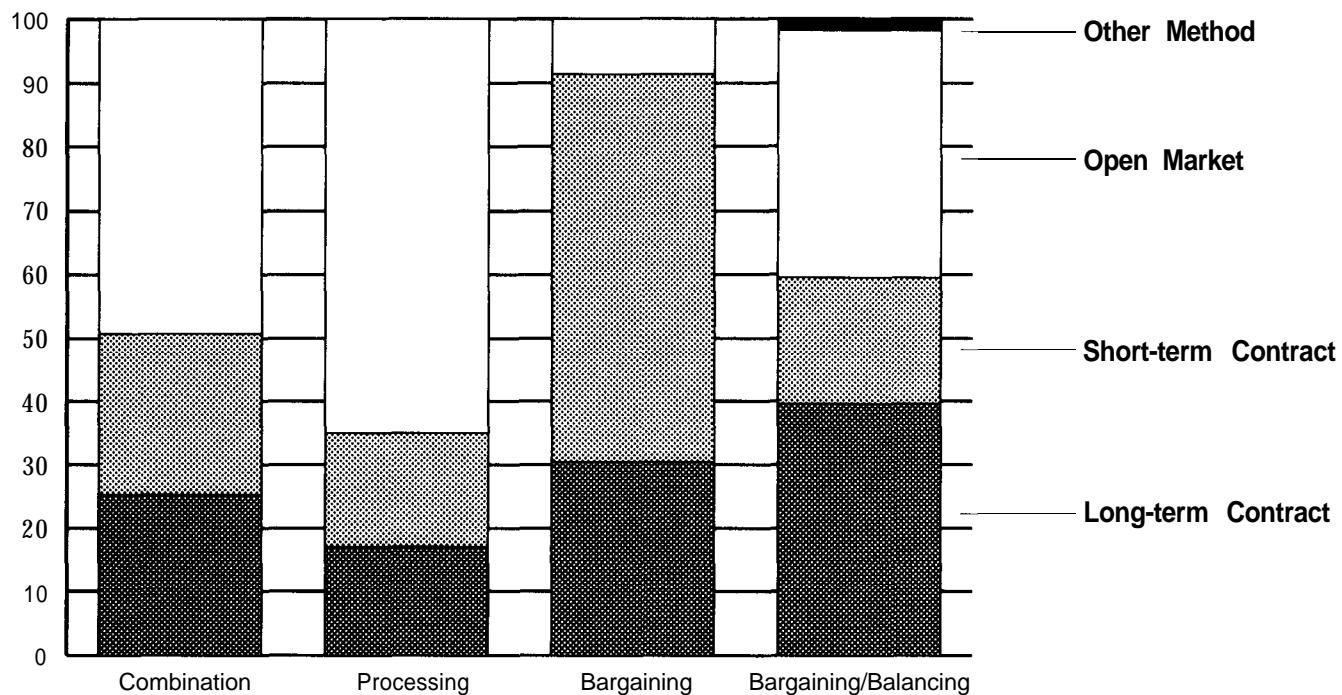
Dairy cooperatives with member agreements had the highest proportion of sales made with long-term contracts. For bargaining cooperatives that may not physically handle the producers' product, the transfer from cooperative to milk processor/buyer represents the members' production direct from the farm. Concerns related to product perishability and a continuing milk supply still apply.

Figure 6 shows the use of various sales methods by dairy cooperatives with marketing agreements by functions performed. Those without marketing agreements are not included because of the limited number of cooperatives and almost no use of long-term contracts. Long- and short-term contracts accounted for 90 percent of bargaining cooperatives' average sales. These cooperatives lack processing facilities and rely on contracts and minimal amounts of open market sales. In the bargaining/balancing classification, processing facilities allow these cooperatives to process excess fluid milk supplies into dry milk powder and other products. While raw whole milk is the principal product, processed products are also important. Processing classification includes cheese manufacturing, fluid milk processing, and manufacturing dry milk powder. In figure 6, the proportion of products sold under short-

term and long-term contracts drops sharply from bargaining to balancing and then to processing. This drop is explained by the shift in sales from raw whole milk to processed products from bargaining cooperatives to those involved in processing and manufacturing. The combination classification includes large dairy cooperatives performing a range of marketing functions, including processing and bargaining. Both processed and raw products are sold. The sales breakdown is similar to the bargaining/balancing cooperatives that also sell processed and raw products. In dairy cooperatives, the handling of perishable products contributes to the high level of contracting between cooperatives and their customers, as compared with the other types of marketing cooperatives.

Coordination at one marketing level creates a defined flow of products moving to the next marketing level. Further coordination at the next step would continue the smooth movement of products toward the final consumer. For the surveyed cooperatives, marketing agreements at the member-cooperative level were related to greater use of long-term contracts at the cooperative-customer level. Cooperatives without marketing agreements with their members were less likely to have long-term contracts with their customers.

Figure 6— Sales Conditions of Dairy Cooperatives with Marketing Agreements by Marketing Functions



Observations

This analysis used a survey over a range of cooperative types to identify factors associated with marketing agreements. The factors identified do not directly explain the decisions that members and cooperatives made jointly for coordinated marketing. However, the factors do give an understanding of the marketing setting in which cooperatives and members operate and indicate when their decisions will lead to coordination.

Marketing systems can differ from product to product. Factors such as products' physical characteristics influence the need for marketing services and the overall complexity of transactions between members and cooperatives. This complexity is reflected in higher costs. Negotiations, areas of uncertainty, and market requirements increase costs. Focusing on the "cost" of exchanges between members and cooperatives or at any other point in the marketing channel identifies points where changes are most likely to occur. Complex transactions (i.e., high-cost) should be viewed as points in the marketing chain where new ideas will be tried. Those participants in the marketing system who are driven to achieve lower costs will decide when and where changes will occur.

Increased coordination is an important marketing system change. This analysis used marketing commitments between members and cooperatives as a measure of coordinated marketing. Considering a wider range of relationships between members and cooperatives would be useful in future examinations. The cooperative-type organization is a flexible form. Simple organizations with open memberships and highly structured organizations with limited memberships are used. This study's survey approach does not capture all the conditions and details included in individual marketing agreements. A case study approach could be used to examine the decisions that led to joint marketing agreements.

Marketing coordination has been discussed as interactions between members and cooperatives, with no particular allowance made for the organizational form. Cooperatives are controlled by their members. How can members negotiate with themselves? The marketing coordination decision presented in this study centers on a member's tradeoff between marketing independence against reduced marketing uncertainty. The basic decision does not depend on the organizational form providing the coordination. The decision as to what form of coordination is the most appropriate is regarded as separate from the decision

to coordinate production operations more closely with marketing functions. Coordination arrangements extend from individual producers expanding into marketing functions through their individual efforts to programs of marketing organizations integrating into production functions.

Producers facing a common problem may find cooperatives are an appropriate organizational form. The member-controlled nature may offer members different paths in which to participate in overall decisions, but this participation does not change the agreement between the production entity and the marketing entity. The exchange of marketing independence for less overall market risk remains the basic decision in whatever form marketing coordination takes. A marketing agreement allows both sides to proceed with greater certainty. A new relationship develops between members and cooperative. Both may plan within a new framework by coordinating their operations. Both give up flexibility in their own operations, but producers gain a more assured market and the cooperatives gain a dependable source of product supply. Growth and success will, to varying degrees, be shared.

Both members and cooperatives enjoy the greatest freedom of operation without any form of marketing coordination. Entering into a marketing agreement reduces operating freedom but also reduces risk for the conditions included in the agreement. Members and cooperatives face each other across a marketing transaction and the conditions that concern both will form the basis for a new marketing arrangement.

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