The History and Role Of Dairy Cooperatives

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Introduction:

Dairy cooperatives were among the first type of agricultural cooperatives organized in the U.S. They have their beginning in the early 1800s. Dairy cooperatives have played a very significant role in the procurement, processing and marketing of milk and dairy products and in representing farmers politically at both the state and national level. Dairy farmers have relied more heavily upon dairy cooperatives to market their milk than have farmers of any other commodity. Presented here is an over view of the early history of dairy cooperatives, their developments over time, the roles dairy cooperatives play, and the current status of dairy cooperatives.

Early History:

Just when the first dairy cooperative was established in the U.S. is surely a matter of conjecture. Associations that might be called cooperatives were started shortly after the beginning of the nineteenth century. Although these organizations may not properly qualify as cooperatives under modern cooperative law, nevertheless the spirit and practical operation of the organizations made them distinctly cooperative in character. The physical characteristics of milk and the small production on individual farms encouraged collective action by farmers. It took more milk than what one farmer produced to make Swiss cheese of the wheel or drum style. To obtain standardized quality, uniformity of grade, and large quantities of dairy products required cooperative action. A feature of the cooperative movement among dairymen was the promotional effort that was made by manufacturers of creamery equipment to interest farmers in cooperative associations.

It is reported that the first U.S. cooperative was a creamery built at Goshen, Connecticut, in 1810[1]. In 1841 Wisconsin farmers around Rock Lake, Jefferson County, made their cheese collectively at the home of a Mr. Pickett. In 1851 the so-called "American system" of associated manufacturers of cheese was evolved at Rome, New York. In 1856 a butter factory was established at Campbell Hall, Orange County, New York. The early cheese rings in Massachusetts, dating back to 1835, were cooperative and quite typical of the cheese rings of the Jura Mountains of Europe, where the Swiss and French peasants made their well-known cheeses collectively.

Cheese, butter plants, and creameries proved popular and successful. Dairy farmers set examples in early cooperative activity and had established more than 400 cooperative dairy processing plants by 1867.[2] These were organized as local cooperatives. But in 1913 representatives of cheese factories in Sheboygan County, Wisconsin organized the first federation of cheese factories. The organization of county creamery associations (1917-1920) in northwestern Wisconsin and in Minnesota later federated into an

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[1] Bakken, H. H., and Schaars, M.A., The Economics of Cooperative Marketing, McGraw-Hill Book Company, Inc., NY, p 51.
[2] USDA, Economics, Statistics, and Cooperative Service, Understanding Your Cooperative, Cooperative Information Report 6, p 15.

interstate unit (1921). This federation preceded the Land O'Lakes Creameries , Inc., which was also initially organized as a federation in 1924.[3]

Among the producers of fluid milk for city consumption purposes were three main types of cooperative effort. 1) Cooperative retail distribution which started around 1822. This was primarily carried on by farmers adjacent to small cities who wished to sell their milk directly to consumers. Somewhat later, cooperative milk distributing companies with relatively limited membership were operating in large cities such as Cincinnati, Milwaukee, and Oklahoma City. 2) Cooperative wholesale distribution of milk which started about 1899. 3) Collective bargaining between farmers and private distributors which began in about 1909. The latter were of two types, those that merely bargained for a price and those that in addition to bargaining also operated processing plants where "surplus" milk (milk not required for beverage consumption) was converted into butter, cheese, evaporated milk, or other manufactured dairy products.

The first important attempt by dairy farmers at bargaining for higher milk prices was in the Chicago market. The Milk Shippers Central Union of the Northwest, 1887-1891, proposed to monopolize milk supplies.[4]The Chicago Milk Shippers Union, 1891 – 1895, was organized to accomplish the objectives of the proceeding organization, namely to insure payment by milk dealers, and to provide an adequate fund to reimburse producers selling outside the city at lower prices. Operations of this organization were terminated when the Illinois Supreme Court declared it illegal under the state's antitrust law.

The Milk Shippers Union, 1897- 1911, consisted primarily of dairy farmers who shipped milk in carload lots to small milk dealers in the Chicago market. Its objectives included protection of farmers in their dealings with railroads and milk dealers, advance understanding with milk dealers as to price, provisions of a market for any shipping farmer wanting to sell milk, and exchange of information among farmers. Each farmer sold milk at his own price, though usually this was the price suggested by the union. The Milk Producers Association, 1909-1926, was organized partly as a result of bitter opposition to a 1908 ordinance requiring milk sold as raw milk to be from cows that had passed the tuberculin test. Also farmers felt that the Milk Shippers Union had not been sufficiently aggressive in obtaining a higher price for milk. Objectives of the Milk Producers Association included improved conditions of production and marketing, improved product quality, and higher returns to farmers.

The principal purposes of the Milk Producers Cooperative Marketing Company, 1918-1925, was to stabilize fluid milk prices by marketing surplus milk independently of milk used in fluid markets. The organization purchased a condensery and a butter plant to manufacture surplus, but prices to its farmers were low because it was burdened with excessive amounts of surplus. The Midwest Dairymen's Company was formed in 1924 to improve the chaotic situation through carefully made business plans. This organization never attracted a large proportion of the Chicago milk producers, but it continued to

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[3] Bakken, H.H.,, and Schaars, M.A., p 52.

[4] Williams, S.W., Vose, D.A., French, E.F., Cook, H.L. and Manchester, A.C., Organization and Competition in the Midwest Dairy Industries, Iowa State University Press, Ames, Iowa, p 63.

operate as a bargaining association in the Rockford, Illinois market. The Pure Milk Association was formed in 1926 by farmers who stated that they wanted to produce good milk from cows free from tuberculosis. Its objectives included standardized and improvement of product quality, collective bargaining, control of surplus and supplying milk as the market demanded, checking weights and tests, and a number of other services to members.

One of the largest operating cooperatives organized during the 1920s was Dairymen's League Cooperative Association of New York.[5] It operated country plants and receiving stations, serving secondary as well as primary markets. The League had 273 country plants in 1930, but reduced this number to 117 plants by 1936.

In 1934-35, 110 dairy cooperatives were bottling and distributing milk. They had about 5 percent of the fluid milk sales by all commercial processors. There were 87 bargaining cooperatives with 172,000 members that represented about half of all fluid grade milk. Dairy cooperatives varied in number between 2,300 and 2,400 during the late 1920s and the 1930s[6]. In 1935, 2,270 dairy cooperatives represented 16 percent of dairy farmers, but 45 percent of all milk delivered to plants from farms.

The need for legal protection:

Most of the fluid milk marketing cooperatives organized in the 1800s were short lived. Uncertain legal status was a major factor retarding their development[7]. The Sherman Antitrust Act of 1890 did not exempt farmer cooperatives from its provisions. That Act and some state antitrust laws were cited in charging some early fluid milk marketing cooperatives with restraint of trade. By the second decade of the twentieth century this situation was changing. In 1914, in framing the Clayton Act, Congress expressly exempted nonstock cooperatives of agricultural products and cooperatives that were not for profit. At about that same time several state laws for incorporating cooperatives also provided a more favorable legislative foundation for cooperatives.

Dairy cooperatives saw the need to become more politically active. Dairy cooperatives across the U.S. organized the National Milk Producers Federation (NMPF) in 1916. NMPF established an office in Washington D.C. for the purpose of representing the political interests of dairy farmers and their dairy cooperatives, and has continued in operation right up to the present time.

The first substantial growth of producer bargaining associations occurred during world war I when dairy farmers became aroused because milk production costs were rising faster than prices farmers received for milk. After World War I the changing public attitude toward cooperatives was expressed in new legislation. Most drafts of the Standard Marketing Act, which was adopted by many states in the early 1920s,

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[5] Manchester, A.C., Dairy Economy: Why and How Governments Intervene in the Milk Business, Westview Press, Boulder, CO., p 30.
[6] Manchester, A.C., p 195.
[7] Williams, S.W., Vose, D.A., French, E.F., Cook, H.L. and Manchester, A.C., pp 30-31.

authorized formation of both stock and nonstock cooperatives. It further stated that it was public policy to foster cooperative marketing by farmers. The Capper Volstead Act of 1922, the most important law giving the right for farmers to bargain, process and market together, provided the necessary protection to farmers to organize marketing and bargaining cooperatives. Agricultural bargaining and marketing cooperatives were granted limited antitrust exemption provided that the organization conformed to: 1) was an association of producers to bargain, process or market, 2) conformed to one or both of the following a) one member one vote, and/or b) restricted returns on invested capital to 8 percent, and 3) did not engage in more business with nonmembers than with members. These privileges were granted as long as the organizations do not unduly enhance prices.

The Capper Volstead Act recognized that farmers needed the right to bargain collectively. The House report on the Act stated: "Instead of granting a class privilege, it aims to equalize existing privileges by changing the law applicable to the ordinary business corporations so farmers can take advantage of it."

Additional expressions of this favorable public policy toward cooperatives was found in subsequent legislation, such as the Cooperative Marketing Act of 1926 and the Agricultural Marketing Act of 1929[8]. The 1926 Act established a United States Department of Agriculture division to promote the knowledge of co-op principles and practices, and to work with educational and marketing agencies, cooperatives, and others in promoting such knowledge. The 1929 Act provided for: 1) the creation of the Federal Farm Board, 2) the appointment of commodity committees to advise the board, 3) revolving fund of $500 million from which loans could be made to cooperatives, 4) the establishment of stabilization corporations for handling surplus agricultural commodities, 5) price insurance to cooperatives and 6) the creation of producer-controlled clearinghouses. Some loans were made to dairy cooperatives to hold butter off of the market in order until prices improved. For example, on January 9, 1930, the Federal Farm Board made a loan to Land O'Lakes Creameries, Inc., to enable the cooperative to withhold temporarily some of its own butter and, if necessary, to purchase additional butter on the open market to stabilize prices.[9] The cooperative offered to buy butter at market quotations whenever prices of butter were 35 cents per pound or lower, but no butter was offered to it. By March 15, it had accumulated about 5 million pounds of butter from its own production, which was sold back to the trade by May, the start of the heavy production season, at a profit. Thus, ended the first price stabilization experiment in the marketing of manufactured dairy products, conducted under the authority of the 1929 Act.

Court cases suggest that it was not deemed to be illegal for a cooperative to have nearly all or all farmers as members provided they joined the cooperative voluntarily. However, neither the Clayton Act nor the Capper Volstead Act vested farmers' cooperatives with unrestricted power to restraint trade or to achieve a monopoly. In the case of *United States v. Borden Co. Et al.,* 308 U.S. 188, 1939, the Supreme Court made it clear that this

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[8] Roy, P.R.,<u>Cooperatives: Development, Principles and Management</u>, The Interstate Printers & publishers, Inc., 1976, p 108.
[9] Manchester, A.C., p 147.

legislation did not authorize cooperatives to combine or conspire with other persons (in that case with milk distributors, labor-union officers, municipal officials, and others) to restrain trade. Likewise cooperatives are not permitted to attain a monopoly by buying out competitors or coercing nonmembers to join. This distinction was stated by the Supreme Court in its decision in the case of *Maryland and Virginia Milk Producers Association, Inc. v. United States,* 362 U.S. 458, 1960. In the Court's opinion, the Maryland and Virginia Milk Producers Association contract to purchase Embassy Dairy (the only large processor in the market which did not purchase milk from the Association) "was not one made merely to advance the Association's own permissible processing and marketing business, but was entered into….because of its usefulness as a weapon to restrain and suppress competitors and competition in the Washington metropolitan area".

Trends in the 1940s through the 1960s:

The number of dairy cooperatives peaked prior to World War I and have been declining every since (Table 1). However, cooperative's share of milk marketed began a fairly steady climb after the war from 45 percent in 1936, to 51 percent by 1951, to 61 percent by 1961, to 73 percent by 1970. The number of dairy cooperatives fell from 2,072 in 1950 to 971 by 1970, but represented about 60 percent of all dairy farmers by 1970 compared to about 16 percent in 1950.

Dairy cooperatives greatly increased their participation in milk procurement and in disposal of surplus milk between 1955 and 1963.By this time nearly one-fourth of all dairy cooperatives either provided facilities to manufacture surplus milk or assumed responsibility for diverting surplus milk to manufacturing facilities operated by other marketing agencies. Cooperatives that assumed responsibility for surplus milk quite commonly used full-supply contracts with milk handlers.[10] In 1955, two-thirds of the cooperatives assuming responsibility for handling part or all of the surplus milk had full-supply contracts with all or part of the milk handlers. Under the full-supply contract the milk handler agrees to obtain his milk supplies through the cooperative. The cooperative usually supplies the handler with only the volume of milk needed in his regular operations. The cooperative is commonly responsible for obtaining supplementary milk if volume from regular farmers is insufficient to meet the handler's needs.

By 1960, dairy cooperatives had generally recognized the need for centralized management of milk supplies and disposition of surplus milk. Bargaining cooperatives struggled for years with ways of gaining control of their supplies to strengthen their marketing position. As markets grew larger and the number of buyers smaller, cooperatives increasingly found themselves in potentially toe-to-toe competition with other cooperatives, and increasingly vulnerable to undercutting on prices, services charges, delivery requirements, and other matters. While maintaining their separate identities, cooperatives in the central part of the country (which marketed about a fourth of U.S. milk) began forming federations in the early 1960s in an attempt to raise farmer incomes through higher milk prices, and to realize cost savings from better organized

[10] Williams, S.W., Vose, D.A., French, E.F., Cook, H.L. and Manchester, A.C., p 66.

movement of milk. The large federated organizations served member cooperatives as a marketing agency in common, improved price alignment among markets, presented a united position at Federal order hearings, operated a standby pool for reserve milk supplies, expanded promotion of dairy products, and more effectively presented their views to legislative and executive branches.

Table 1: Number of dairy cooperatives and market share, 1929-1970

Year	Number of Dairy Cooperatives	Farm level share of farm marketings (percent)
1929-30	2.458	30
1935-36	2,270	45
1940-41	2,374	48
1945-46	2,210	50
1950-51	2,072	53
1960-61	1,609	61
1969-70	971	73

Source: Agricultural Cooperative Service, USDA

By the mid-sixties, Federal milk marketing orders began to reflect the increased need for more stable price alignment among markets. The federated cooperative structure hampered bargaining efforts and could not deal adequately with problems of operational efficiency, equity among farmers, and greater market stability[11]. By 1970, many cooperatives of the major federated organizations had merged into four large regional cooperative centralized full-service cooperatives: Associated Milk Producers , Inc., Mid-America Dairymen, Inc., Associated Dairymen, Inc., and Milk Inc. (later named Milk Marketing, Inc.). In 1967, Associated Dairymen, Inc. had developed a highly significant standby pool. In 1968, payments of 2 cents per hundredweight were being made into this pool by 18 cooperatives, including several large regional organizations, which had relatively high Class I utilization. A group of 11 supply plans in Minnesota and Wisconsin drew an average of 29 cents per hundredweight from the pool, thereby receiving prices that netted them larger returns than they would have received by marketing the amounts committed to the standby pool in their nearest Federal order market. In return for these payments these plants contracted to give Associated Dairymen control of the disposal of specified quantities of Grade A milk when it was needed. This arrangement made available supplementary supplies of Grade A milk at reasonable prices to markets needing such supplies, while compensating the surplus area cooperatives for carrying reserve supplies in periods when they had to be manufactured.

Regional cooperatives formed in the late 1960s, consolidated manufacturing facilities, especially milk drying and cheese plants, to improve operational efficiency. In the West North Central Region, many small plants were closed and replaced by larger and more efficient plants. Cooperatives converted butter-powder plants to cheese and expanded some existing cheese plants in response to cheese price fluctuations. As a result, a relatively large portion of the larger manufacturing plants were regional cooperatives. By

[11] Manchester, A.C., p 197

1970, the four large regional dairy cooperatives represented about 33 percent of the farm level milk supply.

Some dairy cooperatives also continued to organize and operate marketing agencies in common to bargain with milk handlers for premiums above minimum federal order prices. For example, in 1968 leading cooperatives serving the Chicago market organized Central Milk Producers Cooperative. At this time Central Milk Producers Cooperative represented 90 to 95 percent of the milk on the Chicago market.

The 1970s to 2000:

The trend toward fewer and larger dairy farms, and regional shifts in milk production from traditional dairy regions of the Northeast and Upper Midwest to the Southwest and West, continued to forced structural changes of dairy cooperatives. Mergers and consolidations among dairy cooperatives slowed from the mid-1970s to mid-1980s, but accelerated in the 1990s. Not only were there more mergers and consolidations in the 1990s, but joint ventures and strategic alliances among dairy cooperatives (even among dairy cooperatives and investor firms) became common. The four large regional cooperatives no longer exist as they were initially structured. Associated Milk Producers Inc., was split three ways with two regions, the Upper Midwest region and the Southern Region becoming parts of other regional cooperatives, and the North Central Region remaining as an independent cooperative. In 1998, the Southern Region of Associated Milk Producers Inc., and three of the other four regionals, Mid-America Dairymen, Inc., Milk Marketing Inc., and Associated Dairymen, Inc., along with others consolidated into Dairy Farmers of America (DFA). DFA now has members in 47 of the 50 states and represents more than a fourth of the U.S. milk supply. Land O'Lakes, Inc. also expanded its geographic territory in the 1990s with mergers of Altantic Dairy in the Northeast and Dairyman's Cooperative Creamery Association in California.

Dairy cooperatives also formed major significant joint ventures with investor owned firms. Examples, include Michigan Milk Producers Inc. with Leprino Foods in cheese production, and Dairy Farmers of America with Suiza Foods Corporation in fluid milk sales.

In addition to accelerated structural changes at the farm level, the concentration in the food industry, and tight operating margins, contributed to these structural changes among dairy cooperatives. There is a need to cut cost out of the marketing system and be more efficient all the way from the farm to the final customers. Dairy cooperative found increased size of operation was also deemed necessary to obtain necessary market clout when dealing with large wholesale and retail food customers.

But not all dairy cooperatives are becoming larger as a means of competing in the market place. Dairy farmers continue to operate and organize new very successful smaller dairy cooperatives. These are mostly in "specially cheese" markets that carry a higher value than commodity cheeses. Others have successfully entered the niche market for organic dairy products. Coulee Region Organic Produce Producers (CROPP) at LaValle, Wisconsin, markets organic cheeses, butter, beverage milk products and other dairy products nationally. It contracts with existing milk plants to manufacture products according to their specifications. Sales reached about $25 million in 1999.

In 1997, there were only 226 dairy cooperatives compared to 971 cooperatives in 1970 (Table 2). But cooperatives' share of milk sold by farmers increased from 73 percent to 83 percent.

Table 2: Number of dairy cooperatives and market share 1970 to 1997

Year	Number of dairy cooperatives	Farm level share of cooperative marketings (percent)
1969-70	971	73
1974-75	631	75
1985-86	394	78
1990-91	264	82
1997	226	83

Source: RBS-Cooperative Service, USDA

The top 25 largest dairy cooperatives as of October 2000 are listed in table 3.

Table 3: 25 Largest dairy cooperatives, October 2000

Rank	Dairy cooperative	Member milk volume (bil. Lbs.)	Number of members
1	Dairy Farmers of America Kansas City, MO	34.896	24,248
2	California Dairies, Inc. Los Banos, CA	13,200	690
3	Land O'Lakes Inc. Arden Hills, CA California Dairies Artesia, CA	11.656	5,558
4	Northwest Dairy Assoc (WestFarm Foods), Seattle, WA	5.700	799
5	Dairylea Cooperative Inc. East Syracuse, NY	5.382	2,712
6	Foremost Farms USA Baraboo, WI	5.359	5,471
7	Associated Milk Producers Inc. New Ulm, MN	5.100	5,000
8	Family Dairies USA Madison, WI	5.059	6,189
9	Manitowoc Milk Producers Cooperative, Manitowoc, WI	3.660	2,914
10	***Continued next page*** Maryland and Virginia Milk	3.141	1,596

	Producers, Reston, VA		
11	Michigan Milk Producers, Novi, MI	3.000	2,025
12	Southeast Milk Inc. Tampa, FL	2.626	250
13	United Dairymen of Arizona Tempe, FL	2.566	100
14	Agri-Mark Lawerence, MA	2.400	1,517
15	Milwaukee Cooperative Milk Producers, Brookfield, WI	1.763	1,505
16	Allied Federated Cooperatives Canton, NY	1,740	1,888
17	Alto Dairy Cooperative Waupan, WI	1.702	1,250
18	Allied Federated Cooperatives Canton, NY	1.552	1,470
19	Swiss Valley Farms Company Davenport, IA	1.400	1,410
20	Security Milk Producers Association Ontario, CA	1.236	53
21	St. Albans Cooperative Creamery Inc., St Albans, VT.Upstate Farms Cooperative Inc. LeRoy, NY	1.085	560
22	Prairie Farms Dairy Inc. Carlinville, ILL.	1.081	808
23	Upstate Farms Cooperative, Inc LeRoy, NY	1.005	386
24	Woodstock Progressive Milk Producers Assn. Woodstock, ILL.	0958	521
25	First District Association Litchfield, MN	0.932	1,126

Source: Hoards Dairymen, July 2000

Specific Role of Cooperatives In Milk Marketing:

Dairy cooperatives have been involved in a number of activities from the procurement of milk to the marketing of consumer products. As previously indicated, dairy cooperatives in the early 1880s were making butter and cheese. Many in the early 1890s engaged primarily in bargaining activities. Initially they attempted to bargain with milk handlers for a flat price for all milk, regardless of use.[12]However, the pressure of reserve supplies, normal to the fluid milk industry in the spring, led to a breakdown of the flat price plan. Some handlers refused to take this excess milk from producers at the flat price because it had a lower value when converted to manufactured products. Handlers with excess milk tried to dispose of it by increasing consumer sales. Such handlers would offer fluid milk to all or some of their customers at prices lower than those of competitors. Then they would lower the flat price to dairy farmers. Members of cooperatives (rather than all dairy farmers in the market) were often affected the most by these adverse market conditions.

In an effort to promote stability in the markets, cooperatives next developed the "classified price system." This system was in effect in a number of larger markets in the country by 1920. Along with the classified price plans, various pooling arrangements were used. But the cooperative-sponsored price plans were not entirely successful. Success depended upon participation by all groups in the market. But there were advantages in remaining outside of the voluntary pricing arrangements. Handlers with a large proportion of fluid milk sales were in a position to offer dairy farmers a price above that which cooperatives could pay to their members. These handlers also benefited because their price for milk in fluid uses was less than it would have been under the cooperative's classified price plan. Further, these voluntary plans broke down under the price competition from non- cooperators when the economic depression of the 1930s struck. As a result, Congress authorized emergency programs. Under the Agricultural Adjustment Act of 1933, a program of licenses was developed to assist dairy farmers. All milk dealers in a given market were required to pay producers on a classified pricing basis, and to pool the returns to farmers either on a handler or marketwide basis. The Act of 1935 specifically set the terms and provisions which could be used under the program and called the instruments "marketing orders" instead of licenses. The Agricultural Marketing Agreement Act of 1937 provided a framework for long-run price and marketing stability.

Therefore, dairy cooperatives were the forerunners of the classified pricing and pooling later included in the federal milk marketing order pricing provisions. Federal orders greatly assisted dairy cooperatives to bargain with handlers, and to obtain over order premiums for their members. Federal orders interface closely with dairy cooperatives. Dairy cooperatives must qualify or be certified as legitimate organizations in order to gain some privileges from the order program. These privileges include[13]:

1) The cooperative is entitled to bloc vote for its members on most order provisions.
2) The cooperative is entitled to blend or pool its various proceeds from the sale of member milk. In contrast, an investor-owned dairy company is required to pay dairy producers or its suppliers of Grade A milk at least the minimum established class prices and blend prices under the order. Although the

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[12] USDA, AMS, The Federal Milk Marketing Order Program, Marketing Bulletin Number 27, pp 7-8
[13] Jacobson, R. and Cropp, R., Dairy Cooperatives and Their Role in The United States, Dairy markets and policy issues and options, Cornell University, pp 1-7.

cooperative must pay competitive prices to retain its membership, it is not bound by these minimum prices.

3) The cooperative may collect proceeds for its members from handlers from the sale of member milk.
4) Members of cooperatives which perform marketing services for members are exempt from market services charged non-members.
5) Cooperatives may move or direct milk in a manner not permitted proprietary handlers.

Qualifying cooperatives must basically meet the provisions set forth in the Capper Volstead Act. Qualifying cooperatives must meet the following five conditions:

1) They must be an association of agricultural producers.
2) They must be engaged in marketing milk.
3) They must be operated for the mutual benefit of its members.
4) The value of non-member businesses must be less than the value of its members business.

In summary, by 2001 some 220 dairy cooperatives were in operation. They vary widely in size , marketing functions pursued, and impact on the market served . As noted in table 3, these cooperatives vary widely in number of members, and milk volume handled. Some cooperatives are essentially bargaining associations that maintain an office and may offer members field services. Others have extensive facilities for handling and manufacturing reserve supplies of milk through processing and marketing operations. Similarly some cooperatives do not have enough control over the supply of milk to have any bargaining power. Others have substantial market power and are able to implement effective and coordinated marketing-bargaining power.

A recent study of U.S. dairy cooperatives by RBS-Cooperative Service gives the following update on dairy cooperative activity[14]. The 226 existing dairy cooperatives in 1997 handled 83 percent of the milk volume sold by farmers. Sixty-one percent of total cooperative volume was sold as raw whole milk. The other 39 percent was manufactured at plants operated by cooperatives. In 1997 dairy cooperatives owned 298 plants, 91 of which were shipping and receiving facilities only. The cooperatives operated 62 plants for manufacturing American cheese, 30 for Italian cheese, 54 for packaging fluid milk products, 43 for manufacturing dry milk products, and 35 for churning butter.

During a five period, 1992 to 1997, cooperatives' share of butter decreased from 65 percent to 61 percent. Dry milk products also decreased from 81 percent to 76 percent. Cheese marketed by cooperatives grew 3 percent, from 2.82 billion pounds to 2.907 billion pounds, while total cheese production increased 13 percent. Cooperatives' shares of natural cheese marketed declined from 43 percent to 40 percent. Sales of packaged fluid milk products by cooperatives decreased both in volume and share of market. The share dropped from 16 percent of the nation's production in 1992 to 14 percent in 1997. Cooperatives' share of cottage cheese declined slightly to 10 percent. Share of ice cream

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[14] RBS-Cooperative Service, USDA, Marketing Operations of Dairy Cooperatives, RBS Research Report No. 173.

decreased from 10 percent to 6 percent. In 1997, cooperatives marketed 11 percent of the nation's ice cream mix, 4 percent of yogurt, 65 percent of bulk condensed milk, and 48 percent of dry whey products.

While most dairy cooperatives continue to be relatively small businesses, an increasing amount of dairy products were sold by larger cooperatives. In 1997, the largest 20 cooperatives received 77 percent of all producer milk marketed through cooperatives, and 89 percent of cooperative milk processing and manufacturing was conducted by the 20 largest cooperatives with plant operations.

The basic reasons why dairy farmers choose to market through a dairy cooperative include:[15]

1) To be guaranteed a market outlet
2) To bargain for the best price terms possible in the marketplace, including over-order premiums in federal milk marketing orders.
3) To have milk marketed efficiently, i.e., balancing plant needs, diverting milk surpluses, and assembling producer milk.
4) To have the highest quality producer milk possible shipped in the market.
5) To be effectively represented in legislative, regulatory and public relations arenas.

Most of major dairy cooperatives are affiliated with the National Milk Producers Federation, which has its offices in Arlington, Virginia. The main purpose of National Milk Producers Federation is to advance the interests of dairy farmers and their cooperatives in the United States. Dairy cooperatives individually also attempt to provide input, and influence national legislation, through their own political action committees. Funds for these committees are obtained from voluntary contributions from dairy farmers. At the state level many states have trade associations that are supported by, and represent the interests of cooperatives, including dairy cooperatives, on state issues.

A major problem faced by cooperatives, including dairy cooperatives, are "non-excludable benefits". Dairy cooperatives, being a voluntary membership organizations, face the continuing problem of these non-excludable benefits. Non-excludable benefits are programs or benefits established by a cooperative for its members, and at a cost to the cooperative. However, these benefits cannot be excluded from producers who are not members of the cooperative. An example is the market-wide services provided by dairy cooperatives. These services include transporting milk and balancing market supplies by a handler in a ways that benefit the total market but with the costs borne solely by the organization providing the service.

Future of dairy cooperatives:

With the structure of dairy farms and the food system changing rapidly, dairy cooperatives will be challenged in meeting the needs of a more diverse farmer membership, and being competitive in serving the needs of customers in the marketplace.

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[15] Jacobson, R., and Cropp, R., p3

This environment no doubt will force dairy cooperatives to consider additional mergers and consolidations and various strategic alliances with other cooperatives and investor owned firms. A more market oriented federal dairy policy, with resulting market risks, provide major opportunities for dairy cooperatives to add value to dairy farmers, and also provide value to its customers. As a result, it is very possible that dairy farmers will develop closer contractual relationships with dairy cooperatives, and dairy cooperatives will develop closer coordinating relationships with its customers in the food system. Dairy cooperatives will continue to be a major player in the procurement, pricing, processing and marketing of milk and dairy products. Their market shares are anticipated to remain constant, if not increasing.