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Service Report 62

Farmer Cooperative Statistics, 2002



Abstract

A survey of 3,140 U.S. farmer-owned cooperatives ending their business year during calendar year 2002 showed a net business volume of \$96.8 billion with a net income of \$1.2 billion. These cooperatives had assets totaling \$47 billion, about \$28 billion of liabilities, and almost \$20 billion in equity. Cooperatives continued to be a major employer in rural areas, with 166,000 full-time workers. Business volume by commodity is reported for all cooperatives. Number of cooperatives, cooperative memberships, and number of employees are classified according to whether the business is a marketing, farm supply, or service cooperative. Trends in cooperative numbers, memberships, employees, business size, sales volume, net income, assets, liabilities, and net worth are reported, along with data on selected activities of other cooperative service organizations.

Key words: cooperatives, statistics, business volume, employees, memberships, balance sheet, net income, financial ratios.

FARMER COOPERATIVE STATISTICS, 2002

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Service Report 62
June 2004

On the cover: This year's report features three photos that won awards in 2003 from the Cooperative Communicators Association(CCA), which sponsors an annual competition to encourage innovative cooperative communications. Clockwise from the upper left: Photo by Glen Liford, courtesy Tennessee Farmers Cooperative; Photo by David Lundquist, courtesy CHS/ Land O' Lakes; Photo by Sheryl Meshke, courtesy AMPI.

Preface

Farmer cooperative statistics are collected annually to provide information on the progress and trends among the Nation's farmer-owned cooperatives. These statistics are used for research, technical assistance, education, planning, and public policy. Acquiring, analyzing, and disseminating farmer cooperative statistics are authorized by the Cooperative Marketing Act of 1926.

This report provides aggregate information on the number, membership, business volume, net income, basic balance sheet items, and full-time and part-time and seasonal employees of farmer cooperatives for business years ending in calendar year 2002. Cooperatives are classified by principal product marketed and major function. Fishery and ethanol cooperatives are included as "other product marketing" cooperatives. Both gross (includes inter-cooperative business) and net (excludes inter-cooperative business) dollar volumes are reported.

Statistics for 2002 were compiled only on a national basis. State data are collected every other year (State data for 2001 can be found at this address at our Web site: www.rurdev.usda.gov/rbs/pub/sr61.pdf).

The information was collected from individual farmer and fishery cooperatives by a mail survey of all organizations identified by USDA's Rural Business-Cooperative Service (RBS) as a farmer or aquacultural cooperative. Information was requested for the cooperatives' 2002 business year.

RBS conducts an annual census to gain more accurate estimates for assistance purposes. Information obtained from individual cooperatives is combined with data from other cooperatives to maintain confidentiality.

Statistics for all cooperatives were derived by adding data estimated for non-respondents to respondent data. Data from respondents and other sources accounted for 87.6 percent of the total gross sales of farmer cooperatives in 2002.

RBS depends on the cooperative community's response to its annual survey to develop a detailed and comprehensive set of statistics on farmer cooperatives. The time and effort taken to provide information and the timeliness with which it is furnished are greatly appreciated.

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Highlights

There are 3,140 U.S. farmer-owned cooperatives according to the 2002 survey of marketing, farm supply, and related-service cooperatives by USDA's Rural Business-Cooperative Service (RBS). Cooperatives had a gross business volume of \$111.6 billion and a net business volume of \$96.8 billion. These cooperatives had a net income of \$1.2 billion, assets totaling \$47 billion, about \$28 billion of liabilities, and almost \$20 billion in equity. They continued to be a major employer in rural areas with 166,000 full-time workers and 54,000 part-time and seasonal workers.

- Total gross business volume (includes inter-cooperative business) handled by cooperatives was \$111.6 billion; net business (excludes inter-cooperative business) was \$96.8 billion.
- Total net income was \$1.21 billion, which includes inter-cooperative dividends and refunds of \$362.4 million.
- Grain and farm supply cooperatives operated an estimated 5,714 branches.
- Cooperative memberships were 2,793,550, down 7.9 percent from 3,033,907 in 2001.
- Cooperatives employed 166,087 full-time and 54,280 part-time and seasonal employees.
- Gross value of farm products marketed by cooperatives was \$76.6 billion, with a net value (after eliminating duplication from inter-cooperative business) of \$69.7 billion.
- Gross value of farm supplies handled by farmer cooperatives was \$31.5 billion, with a net value of \$23.7 billion.
- Receipts for services related to marketing farm products and handling farm supplies, plus other income totaled \$3.4 billion.
- Farmer cooperatives had \$47.5 billion in combined assets. Net assets, after eliminating inter-cooperative investments, was \$41.9 billion. This included investments in CoBank.
- Total liabilities totaled \$27.9 billion.
- Net worth, or member and patron equity, was \$19.6 billion. Member and patron equity financed 41.3 percent of total assets.

Highlights

2002 HIGHLIGHTS			
	<i>2002</i>	<i>2001</i>	<i>Change</i>
Number of cooperatives	3,140	3,229	-89
Memberships	2,793,550	3,033,907	-240,357
Gross business volume (million \$)	111,553	123,566	-12,013
Net business volume (million \$)	96,750	103,269	-6,519
Net income (million \$)	1,210	1,357	-147
Total assets (million \$)	47,486	48,465	-979
Net worth (million \$)	19,602	20,148	-546
Full-time employees	166,087	165,666	421
Part-time and seasonal employees	54,280	55,078	-798

FARMER COOPERATIVE STATISTICS, 2002

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Rural Business-Cooperative Service

I—DEFINITION OF A FARMER COOPERATIVE

The Rural Business-Cooperative Service (RBS)—part of USDA's Rural Development mission area—considers four major criteria in identifying an organization as a farmer-owned cooperative:

- (1) Membership is limited to persons producing agricultural and aquacultural products and to associations of such producers;
- (2) Cooperative members are limited to one vote regardless of the amount of stock or membership capital owned, or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year, or the legal rate in the State, whichever is higher;
- (3) Business conducted with nonmembers may not exceed the value of business conducted with members;
- (4) The cooperative operates for the mutual interest of members by providing member benefits on the basis of patronage.

These criteria may result in larger or smaller numbers of farmer cooperatives than found in lists or directories of State agencies or cooperative councils.

Year-to-year comparisons with specific commodity groups reflect any differences in lists and classifications in State and Federal data.

Classification of Cooperatives

RBS classifies each cooperative under one of the following major functions—marketing, farm supply, or related-service: fishery and ethanol cooperatives are classified as other product marketing cooperatives;

wool pools as marketing cooperatives; livestock shipping associations and rice drying cooperatives as service cooperatives.

Marketing cooperatives derive most of their total dollar volume from the sale of members' farm products. These cooperatives are further classified into one of 13 commodities or commodity groups, depending upon which accounts for most of its business volume. RBS may reclassify a cooperative into a different commodity category if its primary business volume changes significantly.

Farm supply cooperatives derive most of their business volume from the sale of farm production supplies, farm machinery and equipment, and building materials. Many also handle farm and home items, such as heating oil, lawn and garden supplies and equipment, and food.

Service cooperatives provide specialized services related to the agricultural business operations of farmers, ranchers, or cooperatives, such as cotton ginning, trucking, storing, drying, and artificial insemination. Livestock shipping associations and rice drying cooperatives are also classified as service.

Many cooperatives handle multiple commodities and provide both marketing and farm supply services, as well as the facilities and equipment used to perform these services. These associations are classified according to the predominant commodity or function, as indicated by their business volume.

Information on other service cooperatives, such as Farm Credit System banks, rural credit unions, rural electric cooperatives, and dairy herd improvement associations, is presented separately.

Organizational Membership Structures

Centralized

Of the 3,140 farmer cooperatives in 2002, 3,060 were centralized organizations, mostly locals with individual farmer-members. Centralized cooperatives usually serve a local area or community, county, or several counties. Most usually perform a limited number of initial marketing functions. Most farm supply sales are at the retail level. A few centralized cooperatives, principally regionals, operate over multi-state areas and provide more vertically integrated services, such as processing farm products or manufacturing feed and fertilizer.

Bargaining associations also have centralized organizational structures. They derive all or most of their business volume from negotiating with distributors, processors, and other buyers and sellers over price, quantity, grade, terms of sale, and other factors involved in marketing farm products. Only a few bargain to purchase farm supplies. While the primary function of such an association is to bring buyers and sellers together to contract for the sale of members' products, many bargaining associations now perform additional functions.

For example, dairy bargaining associations at one time only negotiated price. Now, many perform additional functions, such as physically handling part of the milk for spot sales. They, like other dairy marketing cooperatives, represent their members at Federal or State milk marketing order hearings.

Federated

The 53 federated cooperatives—two or more member associations organized to market farm products, purchase production supplies, or perform bargaining functions—often operate at points quite distant from their headquarters. Members are usually local cooperatives, although some are interregional associations with regional cooperative members.

Mixed

The 27 mixed cooperatives have both individual farmer-members and autonomous cooperative members, a combination of centralized and federated structures. They serve large geographic areas, with members in many States, and provide a variety of integrated services.

II—2002 STATISTICS

Cooperatives' total net business volume was \$96.8 billion in 2002 while net income was \$1.21 billion. There were 3,140 agricultural cooperatives in 2002, and they had 2,793,550 members. Together they had \$47 billion in assets with almost \$20 billion in equity. Cooperatives remained a major employer in rural areas, using 166,000 full-time workers.

Number of Cooperatives

The 2002 survey counted 3,140 marketing, farm supply, and related-service¹ cooperatives, compared with 3,229 in 2001. Of the 3,140 cooperatives, 1,559 primarily marketed farm products, 1,201 primarily handled farm production supplies, and 380 provided services related to marketing or purchasing activities (table 1, appendix figure 1). The proportion of marketing, farm supply, and service cooperatives to the total number of cooperatives remained virtually unchanged from 2001. Marketing cooperatives comprise about 50 percent of all cooperatives, farm supply, 38 percent, and service 12, percent of the total (figure 1 and appendix table 1).

There was a net decrease of 89 associations (2.8 percent) from 2001 to 2002, largely reflecting a continuing trend involving merger, acquisition, or dissolution. The largest decrease was in farm supply cooperatives (33), followed by grain and oilseed (grain), and service cooperatives, losing 20 and 9, respectively (figure 2).

Cooperative numbers by marketing, farm supply, and service functions by State are shown in table 2. Minnesota had the most marketing cooperatives (137), followed closely by North Dakota (130). Texas had the most farm supply and service cooperatives (174).

The 10 leading States in terms of number of cooperatives by function are shown in figure 3. Minnesota had about the same number each of marketing and farm supply cooperatives, while Texas had the most service cooperatives, mainly cotton gins. North Dakota had the second highest number of cooperatives, with about 30 more marketing cooperatives than farm supply.

¹ Services including trucking, cotton ginning, storage, crop drying, artificial insemination, livestock shipping, and similar services affecting the form, quality, or location of farm products and supplies. They do not include credit, electric, telephone, or other such services not directly related to marketing or purchasing activities.

Table 1— **Number of cooperatives and memberships, by major business activity, 2002**

Major business activity	Cooperatives	Memberships
	<i>Number</i>	
Beans and peas, dry edible	8	2,211
Cotton	14	43,453
Dairy	198	81,709
Fruits and vegetables	212	32,518
Grains and oilseeds ¹	769	542,470
Livestock	66	93,986
Nuts	18	35,831
Poultry ²	19	26,112
Rice	15	12,424
Sugar ³	48	13,910
Tobacco	22	127,807
Wool and mohair	78	11,143
Miscellaneous	92	25,517
Total marketing	1,559	1,049,091
Farm supply	1,201	1,637,061
Service	380	107,398
Total	3,140	2,793,550

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Grain and Farm Supply Branches

Many cooperatives operate branches to better serve their members. Most branches are owned, others are leased. A number of the branches are formerly independent cooperatives that served a local community. For economic or other reasons, many were acquired by or merged with other cooperatives and operated as branches from which to serve members and patrons at outlying locations.

Grain and oilseed and farm supply cooperatives operated an estimated 5,714 branches—2,122 and 3,592, respectively (table 3). Grain and oilseed cooperatives averaged 2.8 branches while farm supply cooperatives averaged 3 branches per cooperative. In 2001, grain and oilseed and farm supply cooperatives operated an estimated 5,583 branches.

In 1996, 2,469 grain and oilseed and farm supply cooperatives had an estimated 5,355 branches: 2,326 owned by grain and oilseed cooperatives and 3,029 by

farm supply cooperatives. In 2002, grain and oilseed and farm supply cooperative numbers had dropped to 1,970, but branches had increased by 359 (figure 4).

Figure 5 shows that several of the largest cooperatives (mainly regional) had more branches than all the smaller (local) cooperatives combined. The 76 largest grain and oilseed cooperatives—9.9 percent of all grain and oilseed cooperatives—accounted for 42.5 percent of the total number of branches operated by grain and oilseed cooperatives. The 106 largest farm supply cooperatives—8.8 percent of all farm supply cooperatives—had 1,884 branches, or 52.5 percent.

Memberships

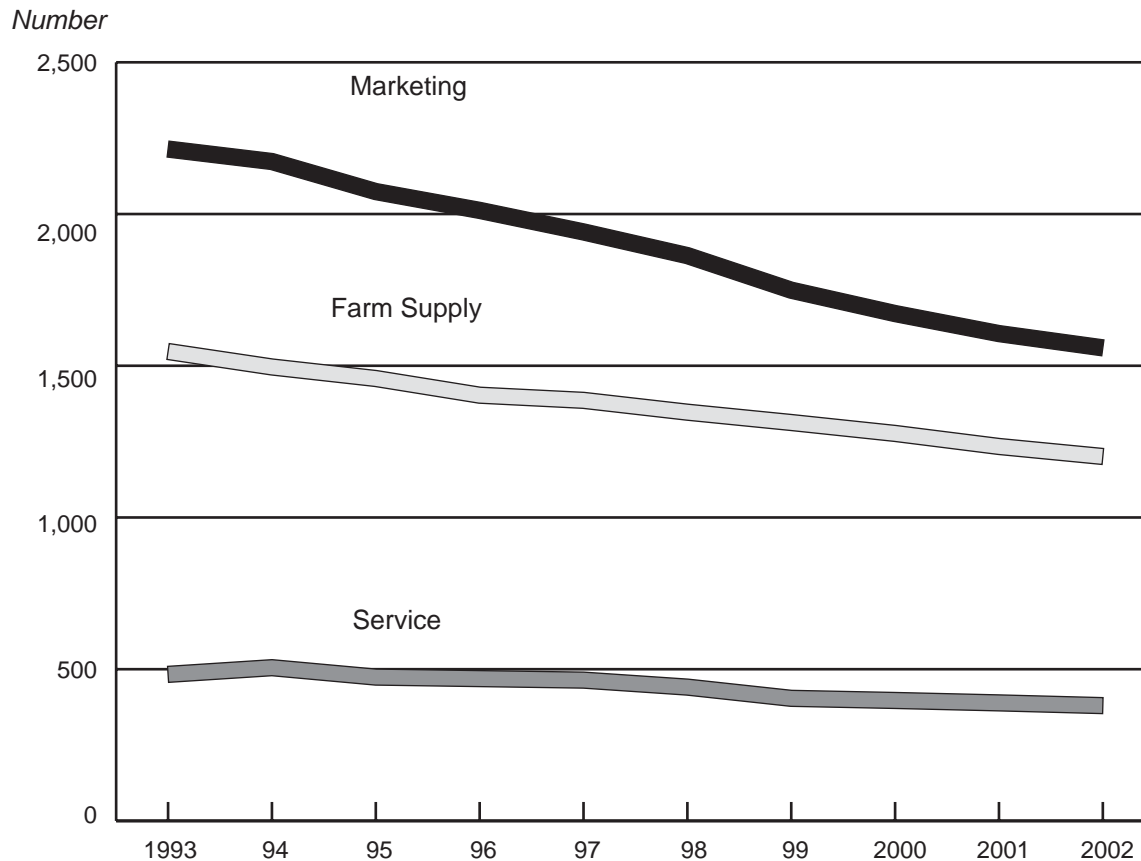
Memberships in marketing, farm supply, and related-service cooperatives totaled an estimated 2,793,550 in 2002, down 7.9 percent from 3,033,907 in 2001 (appendix table 2). By major business activity, 58.6 percent and 19.4 percent were memberships of farm supply and grain cooperatives, respectively (figure 6). Dairy cooperative memberships were only 2.9 percent of the total, but accounted for 23.8 percent, or \$23 billion, of cooperatives' net business volume in 2002.

Memberships in farmer cooperatives dropped from 4 million in 1993 to 2.8 million in 2002 (figure 7). The long-term decline largely reflects the decreasing number of farms, farmers, and ranchers in the United States (appendix figure 2). Many farmers are members of more than one cooperative and each membership is counted. Consequently, the number of memberships exceeds the number of farmers. Duplication in membership cannot be eliminated with current reporting methods.

Member classification depends on the type of cooperative used and may not be related to the member's product(s) marketed or supplies purchased. For example, a member may market only one of the farm products handled by the cooperative or use a cooperative classified in the marketing group to purchase one or more production items. A member's business with the cooperative, therefore, may not be in the group that represents the cooperative's major business volume (the criterion for classifying cooperatives in this report). The membership, however, will be included arbitrarily in that classification.

During the past decade, memberships in related-service and marketing cooperatives decreased at more than twice the rate of memberships in farm supply cooperatives. Memberships in marketing cooperatives dropped 780,909 (42.7 percent) and service coopera-

Figure 1—Farmer Cooperatives in the United States, 1993-2002



tives had a decline of 216,000 (50.3 percent), while memberships in farm supply cooperatives decreased 339,939 (17.2 percent).

The largest proportions of memberships in farm supply cooperatives were in the smallest and largest cooperatives (figure 8). Memberships in marketing cooperatives were the greatest proportion of total memberships among those cooperatives with gross business volumes of \$15 million to \$99.9 million.

Employees

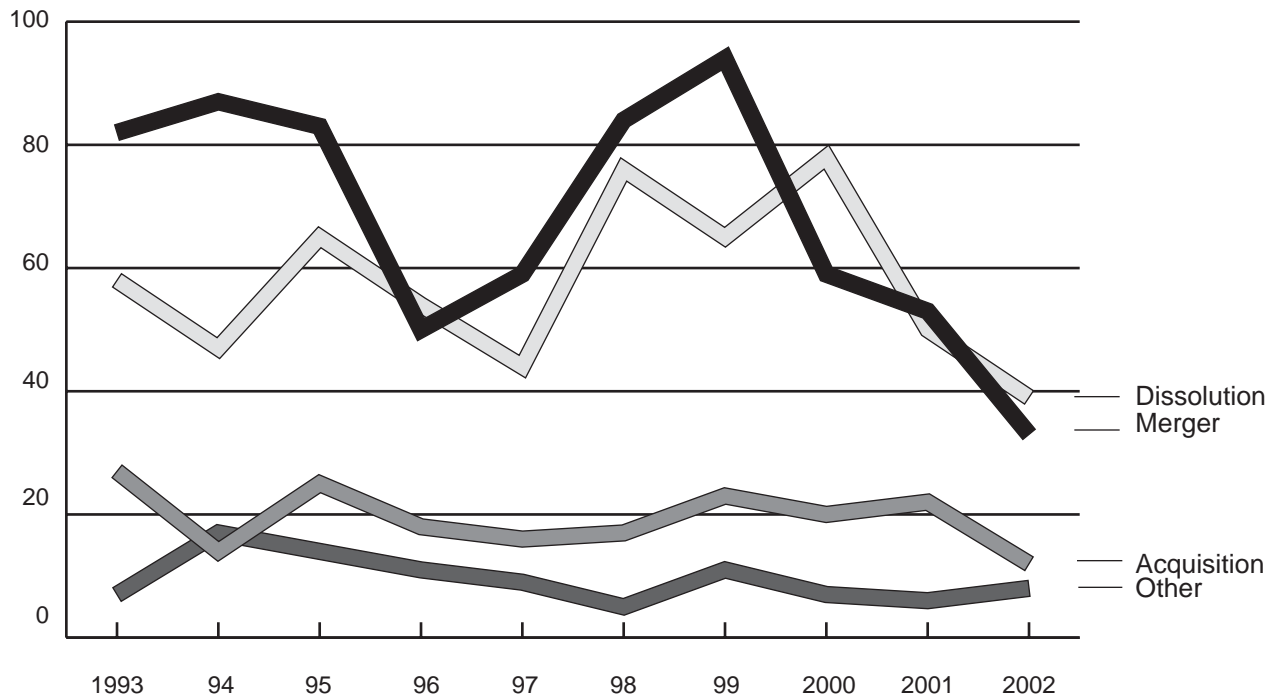
Farmer cooperatives had an estimated 166,087 full-time employees in 2002, up slightly from 165,666 in 2001 (table 4), but less than the peak of 176,665 in 2000. Farm supply cooperatives had an increase in full-time employees from 1997 when there was about 48,000 to over 50,000 in 2002. The number of full-time employees working in marketing cooperatives was around 120,000 from 1997 through 2000, but fell about 10,000 to 111,337 in 2002. Service cooperatives had a fairly steady decline between 1997-2002, from 5,850 to 4,004.

By type, marketing cooperatives had 145,639 employees (67 percent of total); farm supply cooperatives had 65,296 (30.6 percent); and related-service cooperatives had 9,432 (2.4 percent, appendix figure 4). The number per association, however, was nearly 52.9, up slightly from 51 in 2001, due to the decline in the number of cooperatives. The 1,559 marketing cooperatives employed 111,337 persons, about the same as 2001. Livestock and poultry cooperatives, with 34,372, had the most full-time employees, while dairy cooperatives ranked second (23,654). Together, they accounted for about 35 percent of all full-time cooperative employees.

The 1,201 farm supply cooperatives employed 50,746 full-time workers, about the same as the 1,234 farm supply cooperatives in 2001. Full-time employees of the 380 related-service cooperatives totaled 4,004 in 2002, down from 4,039 in 2001.

Larger cooperatives have more employees, but some types of cooperatives have many more assets per employee (appendix figure 3). Sugar cooperatives have the largest amount of assets per employee with

Figure 2—Cooperatives Removed From RBS' List, 1993-2002



Based on an RBS list of U.S. farmer cooperatives. Mergers also include consolidations. "Other" includes cooperatives dropped due to inactivity and unknown and miscellaneous reasons.

\$487,000 in assets per employee. Other cooperatives that process raw products such as livestock and poultry (\$106,000 per employee) and fruit and vegetable cooperatives (\$246,000) have more assets than sugar cooperatives, but they also use many more employees.

Farmer cooperatives employ full-time and, in most cases, part-time and seasonal employees to run their operations. Their number and type depends on a number of factors, such as size of operation, type of commodity handled, and involvement in value-added activities.

In 2002, farmer cooperatives employed an estimated 220,367 full-time and part-time and seasonal employees, about the same as in 2001 (table 5). Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (37,226), followed by livestock and poultry (35,574), then dairy (24,936), and grains and oilseeds (24,459).

Figure 9 shows the number of full-time and part-time and seasonal employees by type of cooperative for 2002. Farm supply, fruit and vegetable, and livestock and poultry cooperatives used the most employees, cotton cooperatives the fewest. Livestock and

poultry cooperatives had the smallest proportion of part-time and seasonal employees to total employees. Fruit and vegetable cooperatives, followed by cotton gins and sugar cooperatives, had the largest proportion of part-time and seasonal employees.

Cooperatives used 54,280 part-time and seasonal employees in 2002, down 798, or 1.5 percent, from 2001. The largest decrease was in fruit and vegetable cooperatives, down 4,055. Other products marketing cooperatives increased their use of part-time and seasonal employees by 2,078, while farm supply cooperatives increased theirs by 1,584.

In 2002, marketing cooperatives reported 34,302 part-time and seasonal employees, or 63.2 percent of the total. Marketing cooperatives averaged 22 part-time and seasonal employees per cooperative. Fruit and vegetable and grain cooperatives, with 24,175, accounted for about 45 percent of all part-time and seasonal employees used by cooperatives. Farm supply cooperatives had 14,550 part-time and seasonal employees, an average of 12 per cooperative.

Most types of marketing cooperatives operated with more employees than did farm supply coopera-

Table 2—Number of cooperatives,¹ by major function and State, 2002 ²

State	Major function		Total
	Marketing	Farm supply and service	
	<i>Number</i>		
Alabama	8	53	61
Arizona	5	4	9
Arkansas	11	41	52
California	98	66	164
Colorado	23	21	44
Florida	32	7	39
Georgia	9	8	17
Hawaii	13	7	20
Idaho	23	14	37
Illinois	114	55	169
Indiana	17	27	44
Iowa	103	54	157
Kansas	94	35	129
Kentucky	15	27	42
Louisiana	16	31	47
Maryland	4	13	17
Massachusetts	7	5	12
Michigan	34	28	62
Minnesota	137	150	287
Mississippi	12	58	70
Missouri	18	45	63
Montana	34	31	65
Nebraska	53	37	90
New Jersey	13	2	15
New Mexico	3	6	9
New York	77	12	89
North Carolina	15	5	20
North Dakota	130	102	232
Ohio	47	23	70
Oklahoma	36	44	80
Oregon	18	14	32
Pennsylvania	39	13	52
South Dakota	61	61	122
Tennessee	8	71	79
Texas	56	174	230
Utah	9	7	16
Virginia	18	39	57
Washington	44	33	77
West Virginia	13	13	26
Wisconsin	38	130	168
Wyoming	7	5	12
Other States ³	47	10	57
United States	1,559	1,581	3,140

¹ Centralized and federated cooperatives and those with mixed organizational structures.

² Data covering operations of cooperatives for fiscal years that ended in 2002.

³ Includes States with fewer than three cooperatives for any function. States with at least three cooperatives were: Alaska, 9; Connecticut, 5; Delaware, 3; Maine, 26; South Carolina, 5; and Vermont, 5.

tives. For example, livestock and poultry cooperatives averaged nearly 419 employees, rice, 197; fruit and vegetable, 176; while farm supply cooperatives averaged 54 (figure 10).

Labor Expenses

As with any other business, one of the largest expense items of cooperatives is wages and benefits. Hiring employees full-time or part-time and seasonally involves decisions on the number of employees and levels of salaries and wages. Other employee-related expenses include associated payroll taxes, health and life insurance, and other employee benefits.

One measure of labor productivity is the relationship between total sales and total labor expense. Table 6 shows total sales per dollar of total labor expense by type of cooperative, region, and in some cases, size of cooperative.

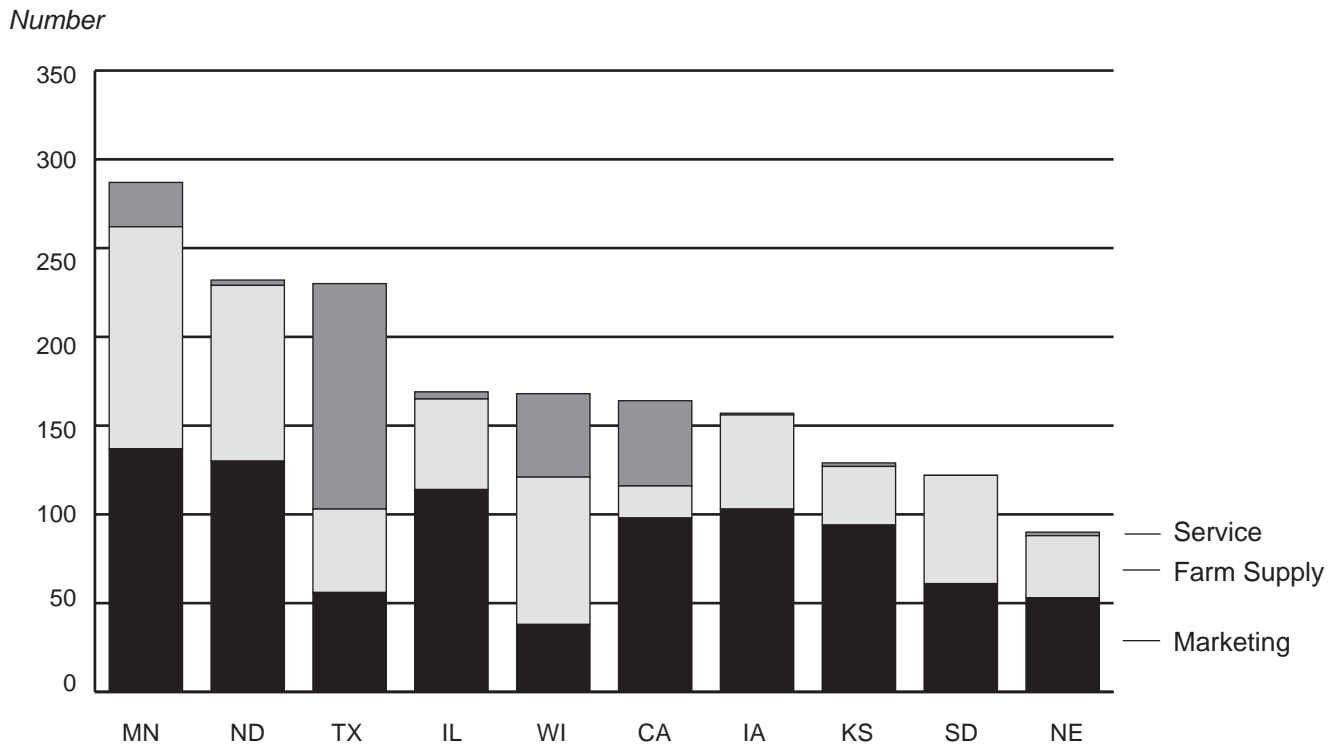
Total sales per dollar of total labor expense is relatively high for cooperatives involved in bargaining (dairy) or operating auctions (tobacco and livestock). In these situations, total labor requirements are low and sales are high. Livestock cooperatives accounted for the highest sales per dollar of labor expense, \$71.69 in 2002. Other service cooperatives had the lowest sales per dollar of labor expense, \$2.42.

Total sales per dollar of labor expense varies less as cooperative size increases for grain and oilseed and farm supply cooperatives than it does for dairy and fruit and vegetable cooperatives. Dairy cooperatives ranged from \$18.39 to \$29.81 in 2002; fruit and vegetable cooperatives from \$3.04 to \$15.85; grain and oilseed cooperatives from \$19.02 to \$23.36; and farm supply cooperatives from \$8.98 to \$11.22.

For grain and oilseed and farm supply cooperatives, total sales per dollar of total labor expense by region was slightly lower in 2002 (table 7). Grain and oilseed cooperatives have higher sales per dollar of labor expense than farm supply cooperatives. Among the regions, grain and oilseed cooperatives in the Pacific region had the highest sales per \$1 total labor expense both in 2002 and 2001. Farm supply cooperatives had sales between \$8 and \$11 per dollar of labor expense, the exceptions were the Northeast (\$6.92) and Appalachian (\$7.76) regions.

The average total labor expense per cooperative for those reporting in both 2002 and 2001 is shown in table 6 by type of cooperative, region, and, in some cases, by asset group. This information can be used for comparing the average total labor expense of individual cooperatives of similar type, region, and size.

Figure 3—Number of Cooperatives by Function, Leading States, 2002



The average total labor expense corresponds directly to cooperative size; therefore, bigger cooperatives generally have higher labor expenses. Most cooperatives had higher total labor expenses in 2002. Cooperatives that further process raw products, such as fruit and vegetable, poultry, and sugar cooperatives, all had higher labor expenses. Labor expenses by region for grain and oilseed and farm supply cooperatives were higher in the Corn Belt than other regions (table 7).

Business Size

Most farmer cooperatives, as measured by annual gross business volume, are relatively small and serve local areas. Some actively seek regional, national, and even international markets to increase business volume. Although few in number, larger cooperatives account for much of cooperatives' business volume. They have grown in size partly from mergers, consolidations, and acquisitions.

In 2002, about 75 percent of all farmer cooperatives reported a business volume of less than \$15 million. However, they accounted for only 9.1 percent of the total gross dollar volume (up from 8.5 percent in 2001, table 8 and figure 11). Only 2.2 percent of farmer

cooperatives reported a business volume of at least \$200 million, but they accounted for 63.4 percent of the total sales.

Business Volume

Total gross business volume of the 3,140 marketing, farm supply, and related-service cooperatives for 2002 was \$111.6 billion (table 9), down 9.7 percent from \$123.6 billion in 2001. Gross business volume grew from \$97.7 billion in 1993 to \$111.6 billion in 2002; however, that was down from a record \$128.1 billion in 1996 (appendix table 3, appendix figure 5). The volume increase of \$15.9 billion in 1996 was due mainly to higher prices for grains and oilseeds.

Gross dollar volume of farm products marketed by cooperatives decreased 8.7 percent, from \$84 billion in 2001 to \$76.6 billion in 2002. Gross volume of all farm supplies handled by cooperatives was \$31.5 billion, down 12.8 percent from \$36.1 billion in 2001.

Total net business volume of farmer cooperatives in 2002 was \$96.8 billion-- \$69.7 billion from farm products marketed, \$23.7 billion from farm supply sales, and \$3.4 billion from services performed and from other income sources. The total net figure, which excludes inter-cooperative business, was down 6.3 per-

Table 3—Estimated number of branches operated by grain and oilseed and farm supply cooperatives, 1996-2002

Year	Asset Group (Million \$)				Total
	Less than 5	5 - 9.9	10 - 24.9	25 or more	
Grain and Oilseed Cooperatives					
1996	618	229	176	43	1,066
1997	616	196	155	47	1,014
1998	550	216	150	48	964
1999	512	187	147	50	896
2000	435	183	149	59	826
2001	406	184	135	64	789
2002	379	173	141	76	769
Branches					
1996	387	505	743	691	2,326
1997	364	463	717	706	2,250
1998	292	517	774	716	2,299
1999	295	422	685	761	2,163
2000	280	428	690	517	1,915
2001	252	414	672	708	2,046
2002	244	340	637	901	2,122
Farm Supply Cooperatives					
1996	1,064	213	109	17	1,403
1997	1,022	232	109	23	1,386
1998	928	277	112	30	1,347
1999	933	223	121	36	1,313
2000	886	208	139	44	1,277
2001	780	205	146	103	1,234
2002	740	203	152	106	1,201
Branches					
1996	542	523	526	1,438	3,029
1997	481	579	576	1,576	3,183
1998	528	548	570	1,672	3,318
1999	423	547	534	1,663	3,167
2000	518	493	723	1,663	3,412
2001	482	494	705	1,856	3,537
2002	436	432	840	1,884	3,592

cent from \$103.3 billion in 2001. Cooperatives' net business volume reached a high of \$106.7 billion in 1997 (appendix table 4, appendix figure 6). Net cooperative business, unadjusted for price change, increased from \$82.9 billion in 1993 to \$96.8 billion in 2002. When adjusted², net business totaled \$76.5 billion in 2002 (figure 12). Consequently, the difference between actual and real net business volume in 2002 was nearly \$20 billion. The real net business volume was lower than the actual value in 2002 due to lower prices received for farm products and higher prices paid for farm pro-

duction inputs. The index for prices received for all farm commodities from 1993 to 2002 dropped 2 points, while the index for prices paid for farm production items increased 24 points, hence the large gap between

² Marketing sales was deflated by the index of producer prices received for "all farm products" (1991 = 100). Supply sales and service receipts and other income were deflated by the index of prices paid by farmers for "production items," excluding interest, taxes, and wages (1991 = 100).

Figure 4—Grain and Farm Supply Cooperatives and Branches, 1993-2002

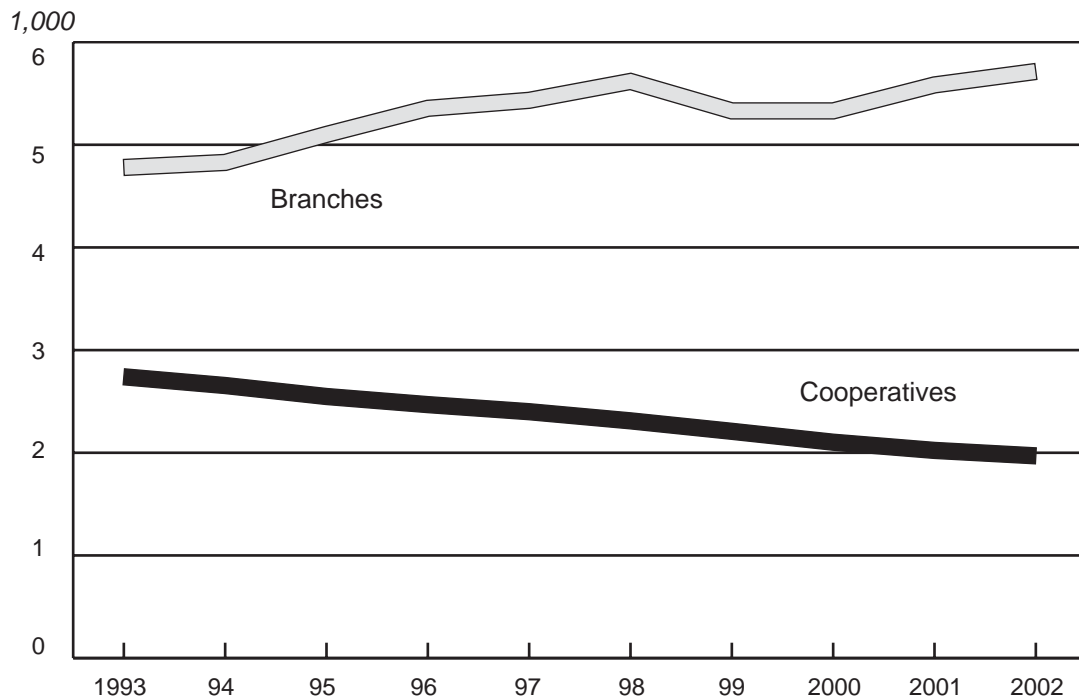


Figure 5—Branches of Grain and Farm Supply Cooperatives, by Size, 2002

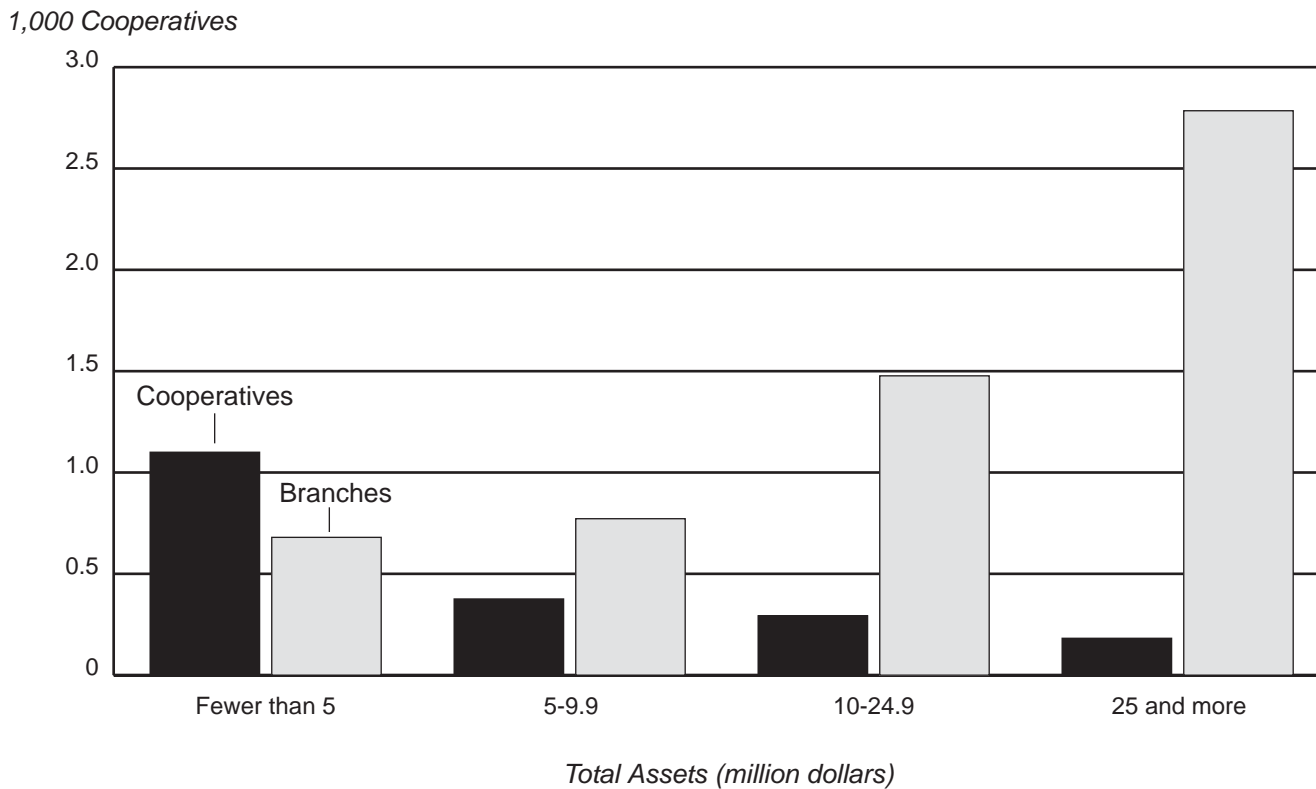
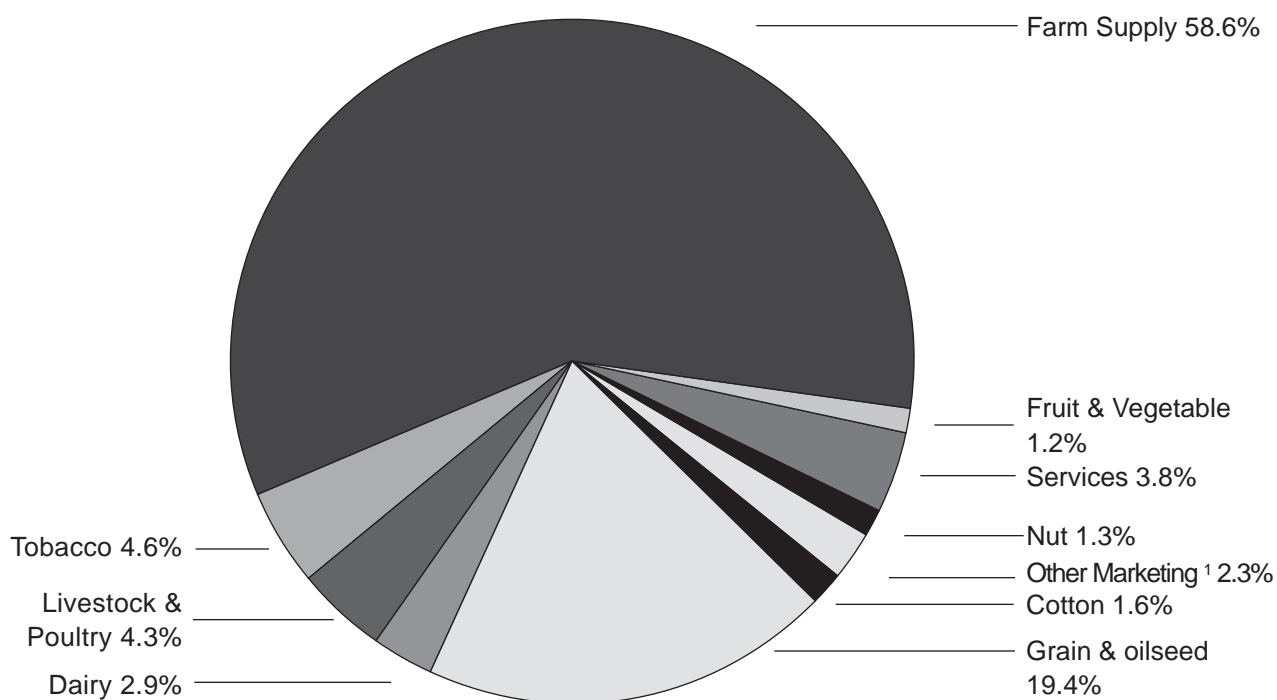


Figure 6—Distribution of Memberships, by Type of Cooperative, 2002



Percentages are based on 2,793,550 total memberships.

¹ Includes dry bean and pea, wool and mohair, rice, sugar, fishery, and other products marketing cooperatives.

actual and real cooperative net business volume when adjusted by prices paid and prices received for farm production.

Net volume of farm products marketed also declined from 2001, from \$75 billion to \$69.7 billion—a 7.2 percent decline. Net marketing business volume accounted for 72 percent of total cooperative sales in 2002, virtually unchanged from 2001.

Figure 13 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy (milk and milk products) led with 33.1 percent, followed by grains and oilseeds (excluding cottonseed) with 25.1 percent, and livestock with 14.2 percent. The proportions of grains and oilseeds and livestock were up compared with 2001, while milk and milk products dropped.

Net farm supply volume of \$23.7 billion, down 4.4 percent from \$24.8 billion, accounted for 24.5 percent of the total net business volume. The leading farm production supplies handled by cooperatives in terms of farm supply net business volume were petroleum, 30.2 percent; feed, 22.7; and fertilizer, 18.2 percent (fig-

ure 14). While feed and seed sales increased in 2002, sales of petroleum, fertilizer, "other supplies", and crop protectants decreased.

Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus other income, decreased 1.6 percent to \$3.4 billion. Service receipts and other income represented 3.5 percent of total net business volume.

Marketing sales of four major commodity groups—dairy; grains and oilseeds; fruits and vegetables; and livestock—were about the same proportion of marketing sales in both 1993 and 2002, about 83 percent (figure 15). In 1993 and a decade later, net volume (among commodity groups) was highest for dairy, with \$23 billion (\$20.5 billion in 1993), followed by grains and oilseeds with \$17.5 billion in 2002 and \$16.5 billion in 1993.

Milk and milk product sales showed the strongest dollar growth during 1993-2002. There was steady growth in cooperative sales of milk and milk products, with a slight decline in 2000 and 2002 due to lower prices.

Figure 7—Cooperative Memberships by Function, 1993-2002

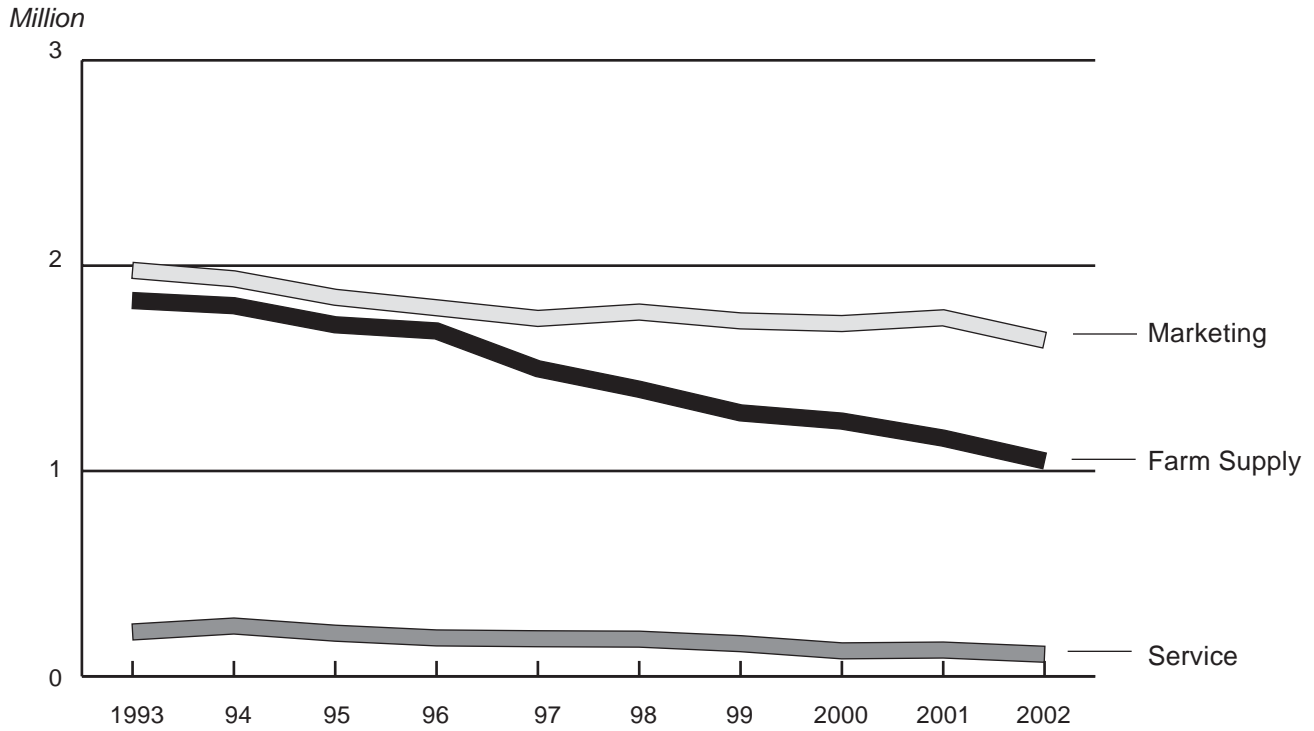


Figure 8—Cooperative Memberships Grouped by Function and Gross Business Volume, 2002

1,000 Memberships

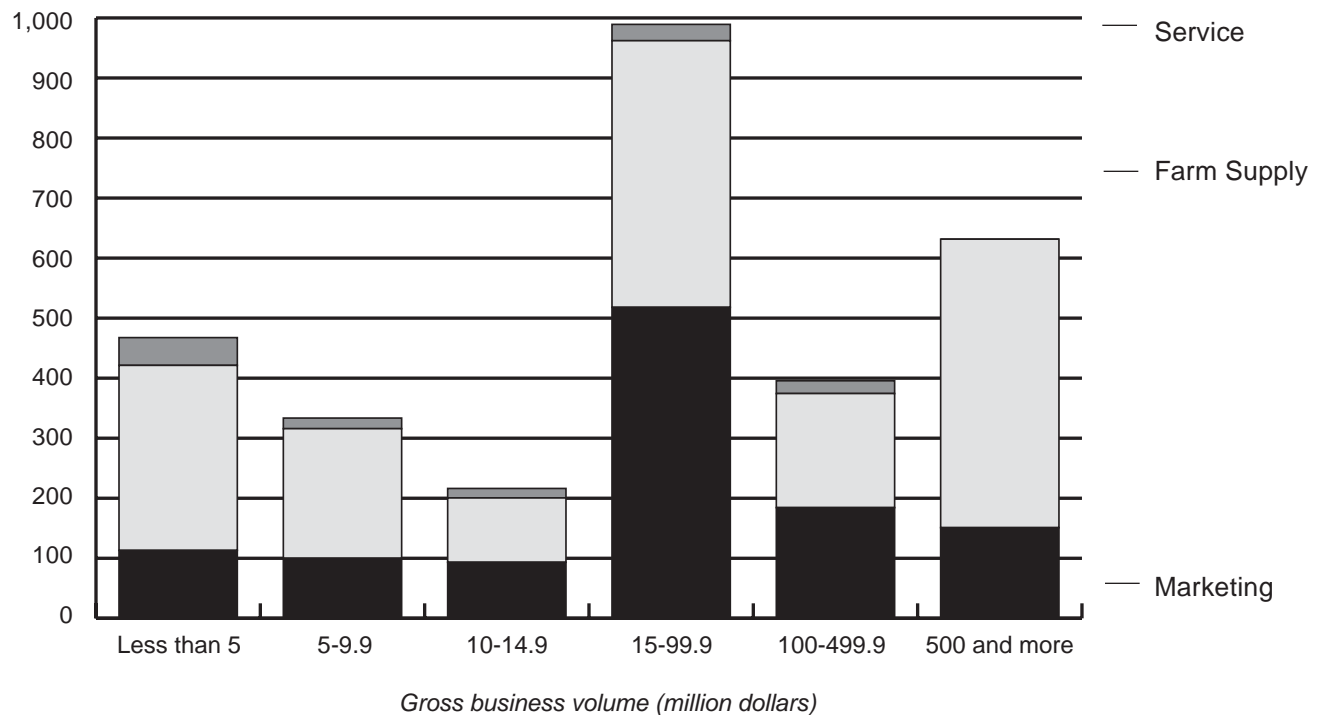
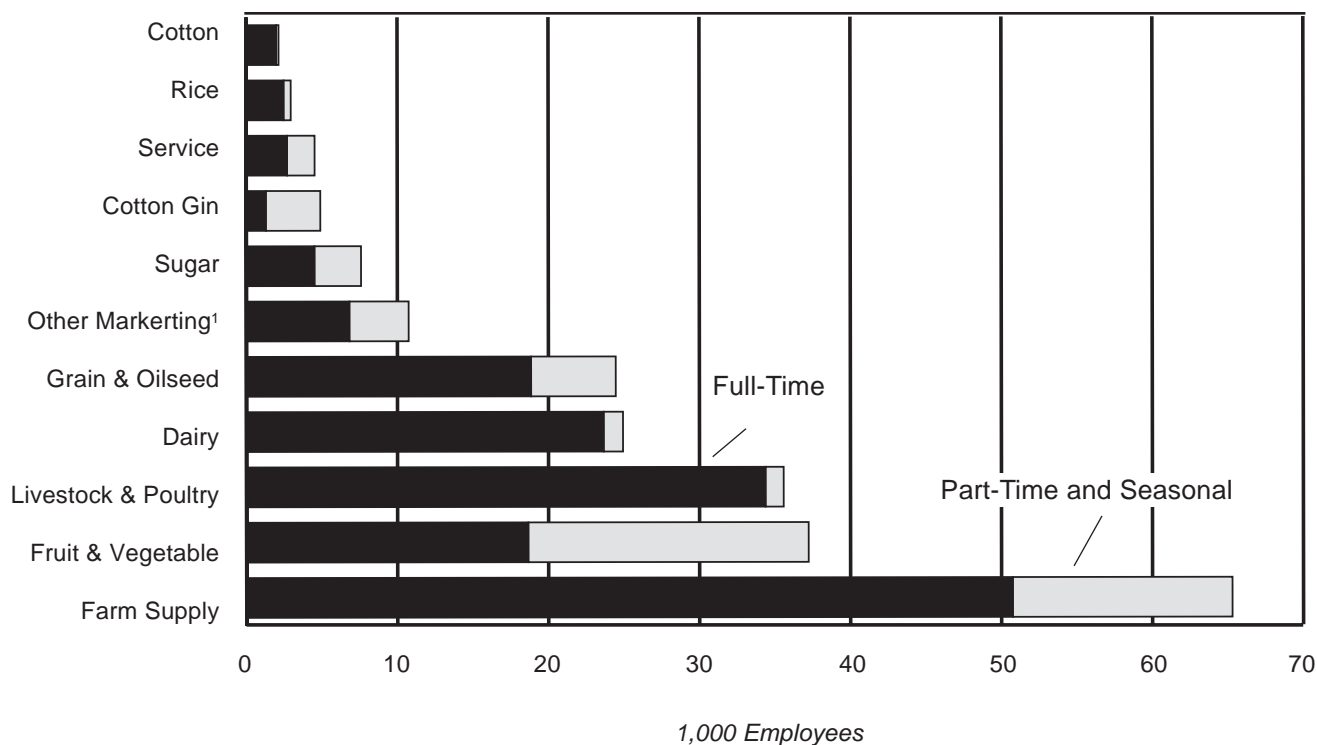


Table 4—Cooperatives' number of full-time employees, 2002-1997

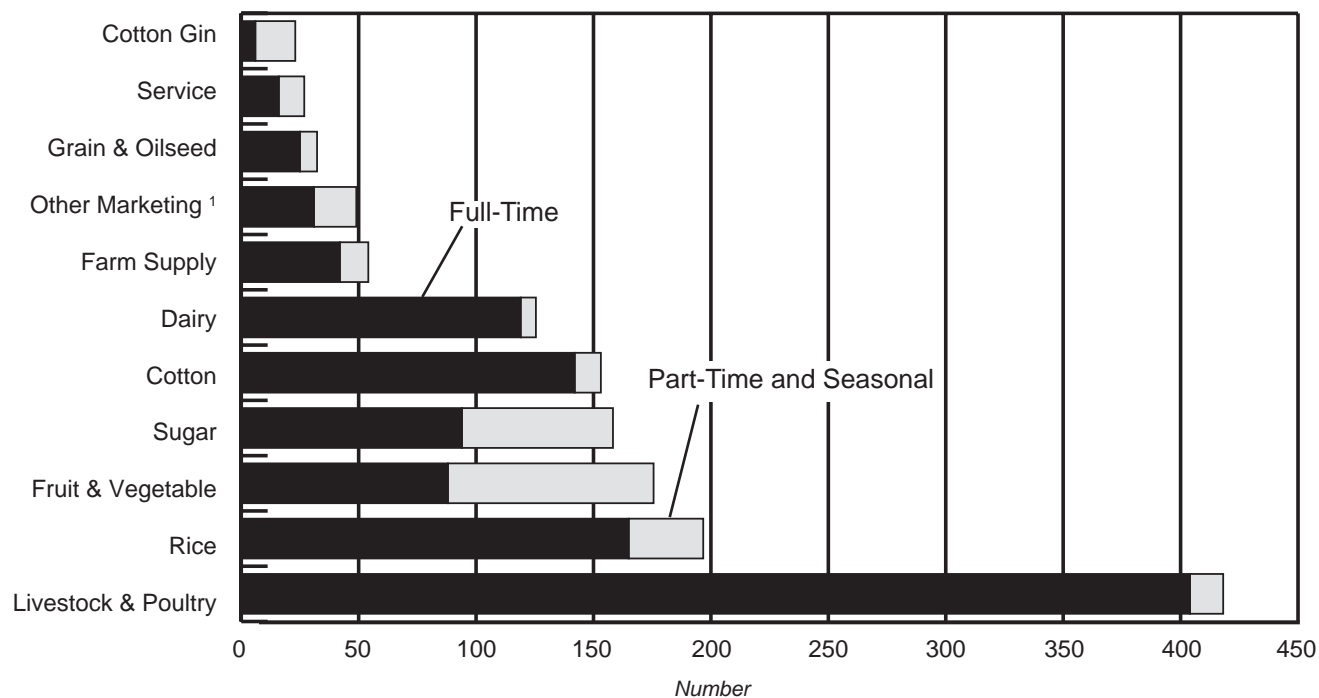
Commodity	Full-time employees					
	2002	2001	2000	1999	1998	1997
	<i>Number</i>					
Cotton	1,993	1,800	1,759	1,787	1,844	1,995
Dairy	23,654	20,714	23,408	24,598	27,056	28,323
Fruits and vegetables	18,657	19,909	25,108	23,329	23,734	22,847
Grains and oilseeds	18,853	19,629	20,309	20,998	23,873	23,538
Livestock and poultry	34,372	35,843	34,592	32,690	28,031	26,399
Rice	2,476	2,364	2,606	2,600	2,655	2,713
Sugar	4,511	4,392	4,523	4,459	4,402	3,473
Other products	6,821	6,335	8,831	8,525	8,474	9,191
Total marketing	111,337	110,986	121,136	118,986	120,069	118,479
Total farm supply	50,746	50,641	51,321	49,466	48,171	47,870
Service	4,004	4,039	4,208	4,499	5,551	5,850
Total	166,087	165,666	176,665	172,951	173,791	172,199

Figure 9—Full-Time and Part-Time and Seasonal Employees, by Cooperative Type , 2002



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

Figure 10— Average Number of Full-Time and Part-Time and Seasonal Employees, by Cooperative Type, 2002



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

Table 5— Full-time and part-time and seasonal employees of farmer cooperatives, by type of cooperative, 2002-2001

Principal product(s) marketed or major function	Total		Full-time employees		Part-time and seasonal ¹	
	2002	2001	2002	2001	2002	2001
<i>Number</i>						
Products marketed						
Cotton	2,149	2,526	1,993	1,800	156	726
Dairy	24,936	21,389	23,654	20,714	1,282	675
Fruit and vegetable	37,226	42,533	18,657	19,909	18,569	22,624
Grain and oilseed ²	24,459	25,066	18,853	19,629	5,606	5,437
Livestock and poultry	35,574	36,861	34,372	35,843	1,202	1,018
Rice	2,952	3,230	2,476	2,364	476	866
Sugar	7,597	8,024	4,511	4,392	3,086	3,632
Other products ³	10,746	8,182	6,821	6,335	3,925	1,847
Marketing	145,639	147,811	111,337	110,986	34,302	36,825
Farm supply	65,296	63,607	50,746	50,641	14,550	12,966
Service	9,432	9,326	4,004	4,039	5,428	5,287
Total	220,367	220,744	166,087	165,666	54,280	55,078

¹ Number of part-time and seasonal employees was estimated for all cooperatives based on the relationship of part-time and seasonal to full-time employees for the respondent cooperatives. Totals may not add due to rounding.

² Excludes cottonseed.

³ Includes dry edible bean and pea, nut, tobacco, wool, fishery, and other products marketing cooperatives.

Table 6—Total sales per dollar of total labor expense and average total labor expense for cooperatives reporting, by selected type and size, 2002-2001¹

Type of cooperative and by size of assets in million \$	Sales per \$1 labor expense			Average total labor expense		
	2002	2001	Change	2002	2001	Change
	<i>Dollars</i>		<i>Percent</i>	<i>\$1,000</i>		<i>Percent</i>
Cotton—all sizes	32.46	35.21	-7.8	3,220.6	2,575.9	25.0
Assets less than \$25.0	17.81	19.28	-7.6	1,804.1	1,688.0	6.9
\$25.0 - 499.99	40.35	46.25	-12.8	5,581.3	4,055.8	37.6
Cotton gin—all sizes	6.12	6.77	-9.5	744.6	733.0	1.6
Assets of 0.5 - \$0.99	5.07	5.91	-14.3	259.1	250.8	3.3
1.0 - 2.49	5.25	5.55	-5.3	397.4	396.1	0.3
2.5 - 99.99	6.46	7.18	-10.0	1,273.4	1,251.3	1.8
Dairy—all sizes	19.56	22.52	-13.1	8,044.0	7,557.4	6.4
Assets of 0.5 - \$2.49	25.93	33.85	-23.4	174.8	145.3	20.3
2.5 - 24.99	29.81	35.81	-16.8	1,939.5	1,825.2	6.3
25.0 - 499.99	18.39	21.02	-12.5	24,344.8	22,878.4	6.4
Dry bean and pea—all sizes	10.17	12.61	-19.3	2,111.3	2,761.9	-23.6
Fruit and vegetable—all sizes	6.98	7.65	-8.7	17,382.7	17,401.1	-0.1
Assets less than \$0.5	15.85	16.46	-3.7	148.7	168.5	-11.7
0.5 - 2.49	3.04	2.99	1.5	800.6	775.6	3.2
2.5 - 24.99	10.96	10.45	4.8	1,388.2	1,426.1	-2.7
25.0 - 99.99	7.40	7.58	-2.3	9,107.7	8,962.2	1.6
100.0 and more	6.84	7.60	-9.9	83,367.6	83,552.2	-0.2
Fruit and vegetable—all sizes	6.98	7.65	-8.7	17,382.7	17,401.1	-0.1
Fresh—all sizes	8.42	8.16	3.1	2,724.4	2,718.5	0.2
Processed—all sizes	5.48	5.94	-7.8	37,854.4	35,742.1	5.9
Fresh and processed—all sizes	8.24	9.16	-10.1	81,995.6	87,172.1	-5.9
Grain and oilseed—all sizes	19.62	19.98	-1.8	1,731.3	1,602.7	8.0
Assets of 0.5 - \$2.49	23.36	23.45	-0.4	220.1	210.3	4.7
2.5 - 24.99	19.29	19.79	-2.5	1,117.4	1,057.0	5.7
25.0 - 99.99	19.02	19.45	-2.2	4,810.5	4,488.4	7.2
100.0 - 499.99	21.93	21.80	0.6	17,111.0	14,280.7	19.8
Livestock—all sizes	71.69	77.12	-7.0	333.8	309.1	8.0
Poultry—all sizes	4.19	4.06	3.2	163,492.3	163,940.0	-0.3
Sugar—all sizes	7.07	7.58	-6.8	47,441.0	47,910.0	-1.0
Tobacco—all sizes	28.38	31.72	-10.5	49.7	48.1	3.2
Fishery—all sizes	9.94	10.15	-2.1	500.1	464.1	7.8
Other products—all sizes	7.46	8.47	-11.8	2,450.6	2,283.2	7.3
Other service—all sizes	2.42	2.53	-4.6	1,236.2	1,176.9	5.0

Continued

Table 6—Total sales per dollar of total labor expense and average total labor expense for cooperatives reporting, by selected type and size, 2002-2001¹, Continued

Type of cooperative and by size of assets in million \$	Sales per \$1 labor expense			Average total labor expense		
	2002	2001	Change	2002	2001	Change
	<i>Dollars</i>		<i>Percent</i>	<i>\$1,000</i>		<i>Percent</i>
Farm supply—all sizes	9.88	10.50	-5.9	1,568.0	1,508.9	3.9
Assets of less than \$0.5	11.22	12.15	-7.7	78.6	79.5	-1.1
0.5 - 0.99	8.98	9.56	-6.1	174.8	171.7	1.8
1.0 - 2.49	9.22	9.69	-4.9	373.7	374.4	-0.2
2.5 - 24.99	9.58	10.39	-7.8	1,572.1	1,511.7	4.0
25.0 - 99.99	10.56	10.85	-2.7	8,733.0	8,356.1	4.5

¹ Includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years. The average total labor expense is derived by dividing total wages and benefits by the number of cooperatives where the information was provided. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included.

In the farm supply group, petroleum, feed, and fertilizer sales were especially important (figure 16). They accounted for about 71 percent of cooperatives' total farm supply sales in both 1993 and 2002. Cooperatives' sales of petroleum, feed, fertilizer, and crop protectants grew steadily until 1998. In 2002, petroleum, fertilizer, and crop protectant sales all dropped due to a combination of lower prices and decreased usage. Feed sales rebounded strongly after sliding downward from 1997 through 2001. Seed sales remained fairly stable until increases in 2000 through 2002.

Net marketing of farm products totaled \$60.9 billion in 1993, and increased annually through 1996. Since 1997, the net marketing dollar volume declined, as prices paid for many farm commodities dropped. In 2001, prices rose slightly and net business volume increased to \$75 billion, but volume fell in 2002 to \$69.7 billion as prices fell. Farm supply sales increased every year, from \$19.2 billion in 1993 to \$25.2 billion in 1997, then dropped to \$23 or \$24 billion from 1998 through 2002. Service receipts (includes other income and revenue) increased from \$2.7 billion in 1993 to \$3.9 billion in 1999, the highest on record, then dropped to \$3.4 billion in 2002.

Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 2002 was \$1.21 billion, including inter-cooperative dividends and refunds (table 10). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 10.9 percent from the \$1.36 billion in 2001. Patronage refunds

received from other cooperatives, including CoBank, totaled \$362.4 million, up 14.7 percent from \$317.6 million in 2001 (appendix figure 7).

Net income was \$1.36 billion in 1993, then fluctuated annually while setting a record at \$2.36 billion in 1995, and falling to \$1.21 billion in 2002 (appendix table 5 and figure 17). Net income received from operations and from other cooperatives has varied over time. Both reflected better economic times in agriculture in the mid-1990s compared with conditions in the early 90s and more recent years. In 1993, refunds from other cooperatives totaled \$373 million, or 27.5 percent of total net income. In 2002, refunds had risen to 30 percent of total net income.

Marketing cooperatives' total net income of \$762.7 million was down 5.8 percent from the \$809.5 million generated in 2001. The drop in net income was in fruit and vegetable and dairy cooperatives. Grain and dairy cooperatives with the largest net incomes together accounted for almost half of all cooperative net income (44.8 percent, figure 18).

Total net income of farm supply cooperatives was \$337.8 million in 2002, down 21.3 percent from \$429 million in 2001. They accounted for 27.9 percent of cooperatives' total net income in 2002, compared with 31.6 percent in 2001 (appendix figure 8). Income from their own operations, excluding patronage refunds from other cooperatives and CoBank, was \$191.1 million, down 38.8 percent from \$312.1 million in 2001.

Farmer cooperatives' net income from their operations in 2002 totaled \$847.2 million, down 18.5 percent from \$1,039.3 million. Nearly 30 percent, or \$362.4 million, of total net income (\$1,209.6 million) was generated by other cooperatives and CoBank, up 14.1 per-

Table 7—Total sales per dollar of total labor expense and average total labor expense for grain and oilseed and farm supply cooperatives reporting, by region¹ and size, 2002-2001²

Type of cooperative and by region and size of assets in million \$	Sales per \$1 labor expense			Average total labor expense		
	2002	2001	Change	2002	2001	Change
	<i>Dollars</i>		<i>Percent</i>	<i>\$1,000</i>		<i>Percent</i>
Grain and Oilseed Cooperatives:						
Corn Belt—all sizes	19.88	20.56	-3.3	2,258.6	2,047.1	10.3
Assets of 0.5 - \$2.49	30.29	29.40	3.0	216.6	217.4	-0.4
2.5 - 24.99	19.49	20.32	-4.1	1,255.7	1,171.9	7.2
25.0 - 99.99	18.26	19.48	-6.3	5,108.4	4,722.7	8.2
100.0 - 499.99	22.82	22.57	1.1	20,601.5	16,970.2	21.4
Lake States—all sizes	19.86	19.80	0.3	1,570.3	1,528.5	2.7
Assets of 1.0 - \$24.99	20.47	20.21	1.3	840.0	815.5	3.0
25.0 - 499.99	19.36	19.47	-0.5	5,368.1	5,235.8	2.5
Northern Plains—all sizes	17.96	18.08	-0.7	1,392.3	1,303.1	6.8
Assets of 0.5 - \$2.49	20.66	20.29	1.8	215.3	198.6	8.4
2.5 - 24.99	18.49	18.53	-0.2	1,084.1	1,020.1	6.3
25.0 - 99.99	17.03	17.30	-1.6	5,205.3	4,839.6	7.6
Mountain—all sizes	14.79	16.18	-8.6	996.7	911.6	9.3
Southern Plains—all sizes	18.48	16.35	13.0	853.7	820.9	4.0
Assets of 1.0 - \$2.49	14.91	14.77	0.9	260.7	244.7	6.5
2.5 - 99.99	19.08	16.61	14.8	1,372.5	1,325.1	3.6
Pacific—all sizes	30.56	31.84	-4.0	797.6	852.6	-6.5
Assets of 0.5 - \$2.49	23.76	30.97	-23.3	172.3	156.6	10.0
2.5 - 24.99	31.38	31.93	-1.7	1,422.9	1,548.6	-8.1
Farm Supply Cooperatives:						
Northeast—all sizes	6.92	7.41	-6.6	854.0	816.9	4.5
Appalachian—all sizes	7.76	8.16	-4.9	1,076.1	1,027.0	4.8
Assets of 0.5 - \$2.49	8.30	8.38	-0.9	290.4	295.1	-1.6
2.5 - 24.99	7.71	8.14	-5.3	1,468.9	1,393.0	5.4
Southeast—all sizes	9.50	9.45	0.5	366.6	368.8	-0.6
Assets of 0.5 - \$2.49	9.90	9.27	6.7	208.4	214.6	-2.9
2.5 - 24.99	9.28	9.55	-2.9	630.4	626.0	0.7
Delta States—all sizes	10.49	10.89	-3.7	595.9	592.2	0.6
Assets of 0.5 - \$2.49	9.10	9.41	-3.3	451.9	469.5	-3.7
2.5 - 24.99	11.52	12.09	-4.7	783.0	751.7	4.2

Continued

Table 7—Total sales per dollar of total labor expense and average total labor expense for grain and oilseed and farm supply cooperatives reporting, by region¹ and size, 2002-2001², continued

Type of cooperative and by region and size of assets in million \$	Sales per \$1 labor expense			Average total labor expense		
	2002	2001	Change	2002	2001	Change
	<i>Dollars</i>		<i>Percent</i>	<i>\$1,000</i>		<i>Percent</i>
Corn Belt—all sizes	10.50	11.23	-6.5	3,185.4	2,967.5	7.3
Assets of 0.5 - \$0.99	8.42	8.96	-6.0	157.8	152.8	3.3
1.0 - 2.49	10.21	10.88	-6.1	369.1	368.2	0.3
2.5 - 24.99	9.98	10.92	-8.6	2,215.7	2,083.7	6.3
25.0 and more	10.93	11.50	-5.0	10,660.8	9,838.0	8.4
Lake States—all sizes	9.08	9.71	-6.5	1,506.0	1,487.5	1.2
Assets of less than \$0.5	11.84	12.42	-4.7	40.4	38.2	5.9
0.5 - 0.99	7.76	8.41	-7.7	140.2	136.6	2.7
1.0 - 2.49	9.07	9.97	-9.0	296.4	296.4	0.0
2.5 - 24.99	8.94	9.54	-6.2	1,514.0	1,498.4	1.0
25.0 - 99.99	9.56	10.30	-7.2	5,579.1	5,471.3	2.0
Northern Plains—all sizes	10.58	11.04	-4.2	885.7	857.6	3.3
Assets of less than \$0.5	13.46	14.75	-8.7	88.7	89.8	-1.2
0.5 - 0.99	8.94	9.71	-8.0	168.4	164.6	2.3
1.0 - 2.49	9.28	9.95	-6.6	304.8	295.8	3.0
2.5 - 24.99	10.86	11.59	-6.3	1,036.7	977.5	6.1
25.0 - 99.99	10.07	9.52	5.8	5,128.0	5,477.1	-6.4
Southern Plains—all sizes	9.94	10.04	-1.0	703.9	702.5	0.2
Assets of 0.5 - \$0.99	10.71	11.66	-8.1	203.6	193.2	5.4
1.0 - 2.49	9.93	10.17	-2.4	411.8	417.3	-1.3
2.5 - 24.99	9.86	9.85	0.2	1,272.2	1,270.3	0.1
Mountain—all sizes	9.83	10.27	-4.3	1,597.4	1,602.6	-0.3
Assets of 0.5 - \$0.99	11.03	11.93	-7.5	117.4	120.7	-2.8
1.0 - 2.49	10.39	11.38	-8.7	346.5	319.1	8.6
2.5 - 99.99	9.79	10.21	-4.1	2,191.1	2,203.8	-0.6
Pacific—all sizes	8.77	9.82	-10.7	1,638.4	1,615.5	1.4
Assets of 0.5 - \$2.49	7.75	8.45	-8.4	378.8	401.4	-5.6
2.5 - 24.99	8.87	9.97	-11.0	2,448.1	2,395.9	2.2

¹ The States included in each region are as follows.

Region	State
Northeast	ME, VT, NY, MA, RI, CT, PA, NH, DE, MD, and DC
Lake States	MI, WI, and MN
Corn Belt	OH, IN, IL, IA, and MO
Northern Plains	ND, SD, NE, and KS
Appalachian	VA, WV, KY, TN, and NC
Southeast	SC, GA, AL, and FL
Delta States	MS, LA, and AR
Southern Plains	OK and TX
Mountain	MT, ID, WY, CO, UT, NV, AZ, and NM
Pacific	WA, OR, CA, HI, and AK

² Labor expense includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included. The sales per dollar of labor expense was derived by dividing total sales by total labor expenses.

Table 8—Farmer cooperatives and memberships, by gross business volume, 2002¹

Volume group Million \$	Cooperatives		Dollar volume		Memberships ²	
	Number	Percent of total	Gross ³ (million \$)	Percent of total	Number (1,000)	Percent of total
Less than 5.0	1,503	47.9	2,735	2.5	479	17.1
5 - 9.9	586	18.7	4,129	3.7	573	20.5
10 - 14.9	262	8.3	3,275	2.9	183	6.5
15 - 24.9	278	8.9	5,439	4.9	223	8.0
25 - 49.9	259	8.2	9,134	8.2	305	10.9
50 - 99.9	131	4.2	9,051	8.1	186	6.6
100 - 199.9	52	1.7	7,096	6.4	77	2.8
200 - 499.9	33	1.1	10,146	9.1	132	4.7
500 - 999.9	22	0.7	16,459	14.8	192	6.9
1,000 and more	14	0.4	44,088	39.5	445	15.9
Total⁴	3,140	100.0	111,553	100.0	2,794	100.0

¹ Business volume includes revenues from marketing plus the value of products bargained for or handled on a commission basis, supply sales, service receipts, and other income.

² Includes number of farmers, ranchers, and fishermen eligible to vote for directors. Does not include memberships held by other cooperatives, such as local cooperative memberships in regional cooperatives.

³ Includes inter-cooperative business volume.

⁴ Total may not add due to rounding.

Figure 11—Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 2002

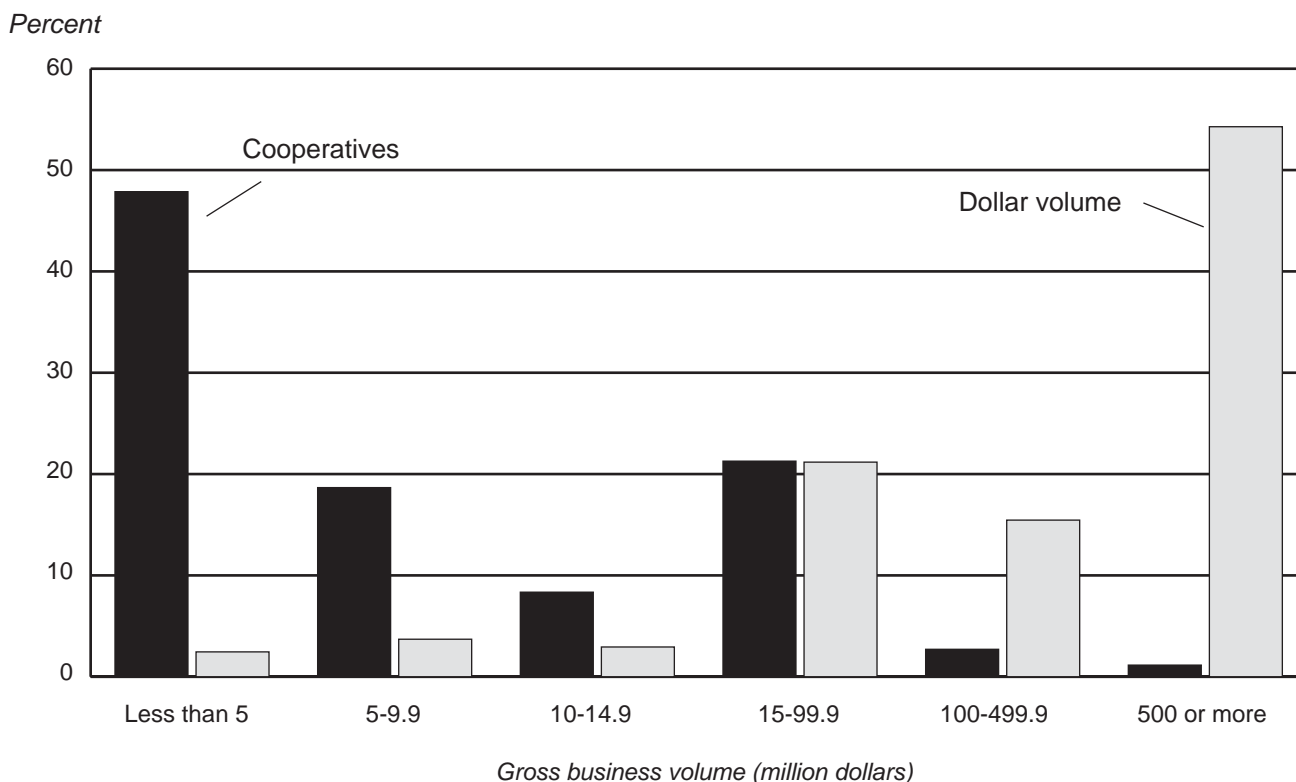


Table 9—Cooperatives' gross and net business volumes by commodity, 2002 ¹

Commodity	Gross volume		Net volume	
	Million \$	Percent	Million \$	Percent
Products marketed:				
Beans and peas (dry edible)	101.4	0.1	98.8	0.1
Cotton	2,526.9	2.3	2,461.3	2.5
Dairy	25,891.1	23.2	23,037.7	23.8
Fruits and vegetables	8,435.4	7.6	7,337.9	7.6
Grains and oilseeds ²	20,147.9	18.1	17,474.4	18.1
Livestock	9,901.1	8.9	9,901.1	10.2
Nuts	947.2	0.8	935.5	1.0
Poultry ³	2,467.2	2.2	2,402.8	2.5
Rice	750.9	0.7	748.4	0.8
Sugar	2,440.4	2.2	2,440.4	2.5
Tobacco	226.7	0.2	226.7	0.2
Wool and mohair	7.8	0.0 ⁴	7.8	0.0 ⁴
Other products ⁵	<u>2,773.7</u>	<u>2.5</u>	<u>2,583.1</u>	<u>2.7</u>
Total farm products	76,617.9	68.7	69,655.8	72.0
Supplies purchased:				
Crop protectants	3,116.9	2.8	2,712.8	2.8
Feed	6,685.8	6.0	5,373.4	5.6
Fertilizer	5,150.7	4.6	4,314.7	4.5
Petroleum	11,383.9	10.2	7,157.1	7.4
Seed	1,592.4	1.4	1,085.5	1.1
Other supplies ⁶	<u>3,589.2</u>	<u>3.2</u>	<u>3,035.3</u>	<u>3.1</u>
Total farm supplies	31,519.0	28.3	23,678.8	24.5
Services and other income:				
Trucking, cotton ginning, storage, grinding, locker plants, miscellaneous ⁷	<u>3,415.8</u>	<u>3.1</u>	<u>3,415.8</u>	<u>3.5</u>
Total business	111,552.6	100.0	96,750.4	100.0

¹ Gross includes and net excludes inter-cooperative business. Totals may not add due to rounding.

² Excludes cottonseed. Cottonseed oil is included in other marketings while cottonseed meal is included in feed.

³ Includes eggs, turkeys, ratite, squab, and related products.

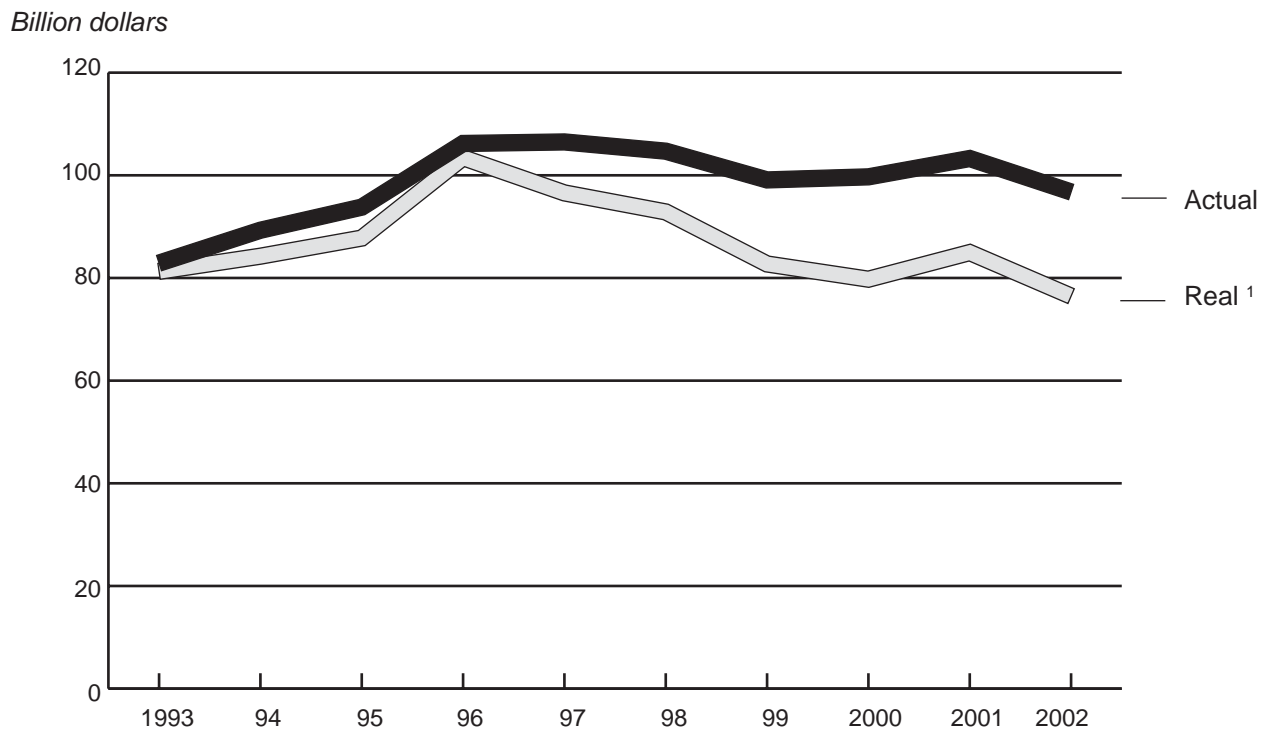
⁴ Less than 0.05 percent.

⁵ Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, ethanol, other farm products not separately classified, and sales of farm products not received directly from member-patrons. Also includes manufactured food products and resale items marketed by cooperatives.

⁶ Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.

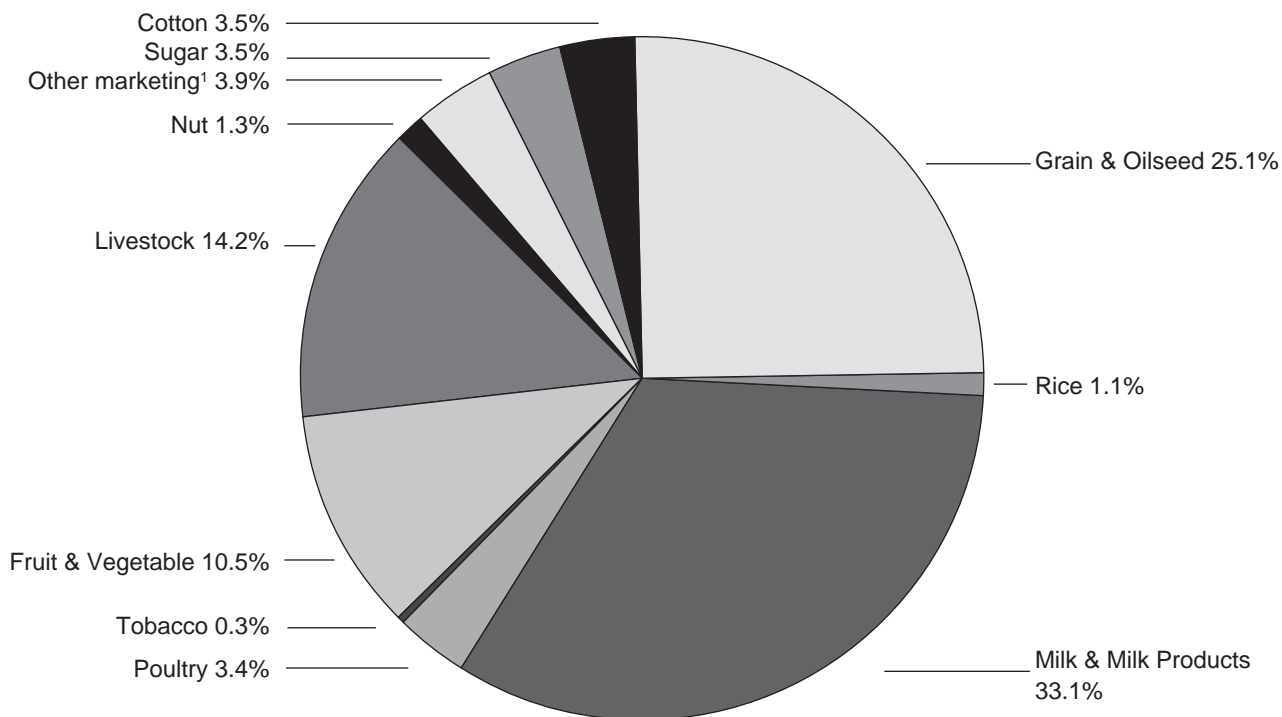
⁷ Charges for services related to marketing or purchasing, but not included in the volume reported for those activities, plus other income.

Figure 12—Cooperatives' Net Business Volume, 1993-2002



¹ Actual sales were adjusted for price change based on 1991 = 100.

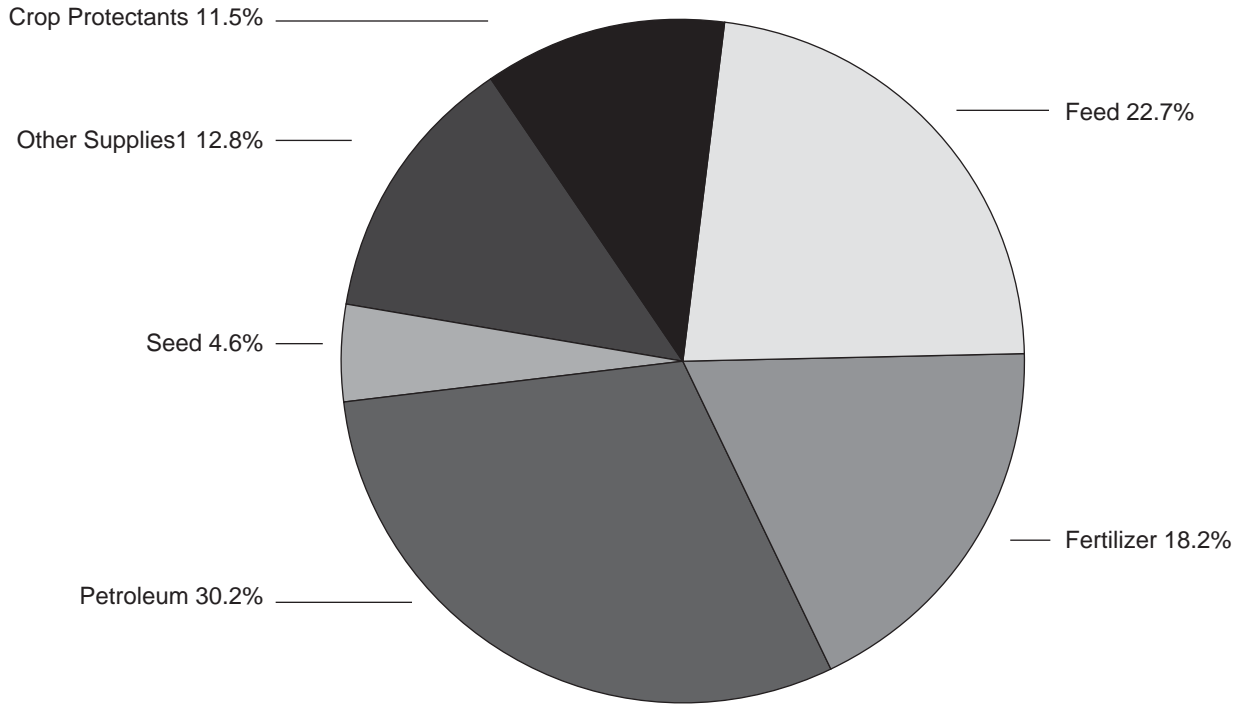
Figure 13—Relative Importance of Farm Products Marketed by Cooperatives, 2002



Percentage based on a total net marketing business volume of \$69.7 billion.

¹ Includes wool and mohair, dry beans and peas, fish, and other product marketings.

Figure 14— **Relative Importance of Farm Supplies Handled by Cooperatives, 2002**



Percentages are based on a total net farm supply business volume of \$23.7billion.

¹ Includes building materials, tires, batteries and accessories, equipment, animal health products, pet food, semen, hardware, food, clothing, and other.

Figure 15— **Cooperatives' Net Sales of Selected Commodities, 1993-2002**

Billion dollars

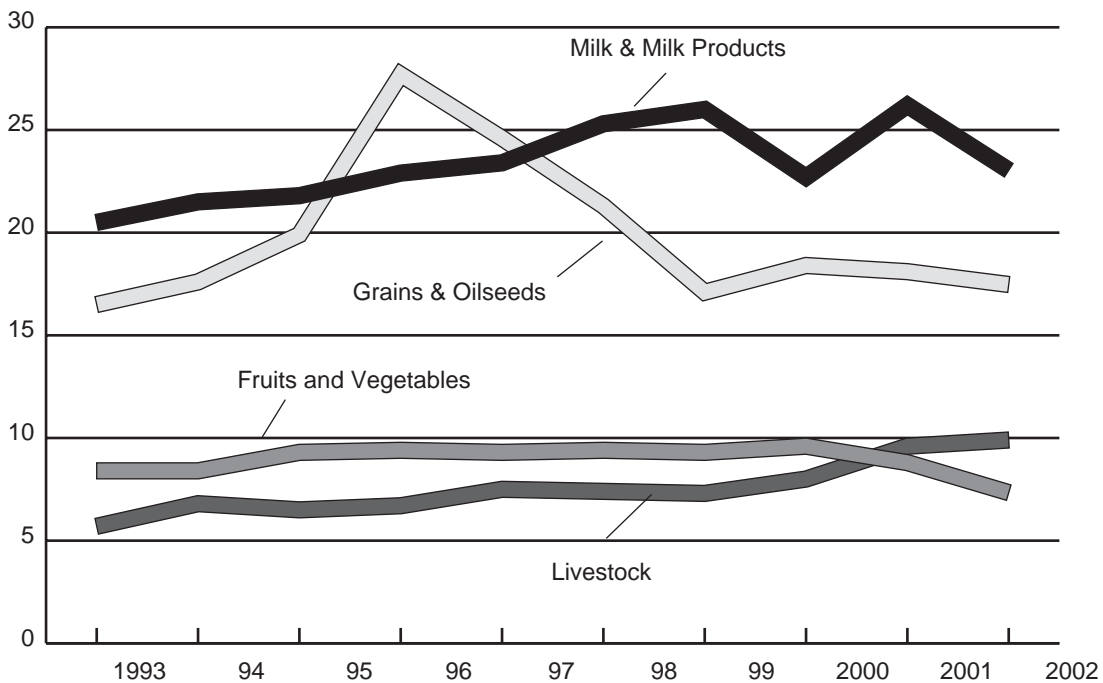


Figure 16— Cooperatives' Net Sales of Selected Farm Supplies, 1993-2002

Billion dollars

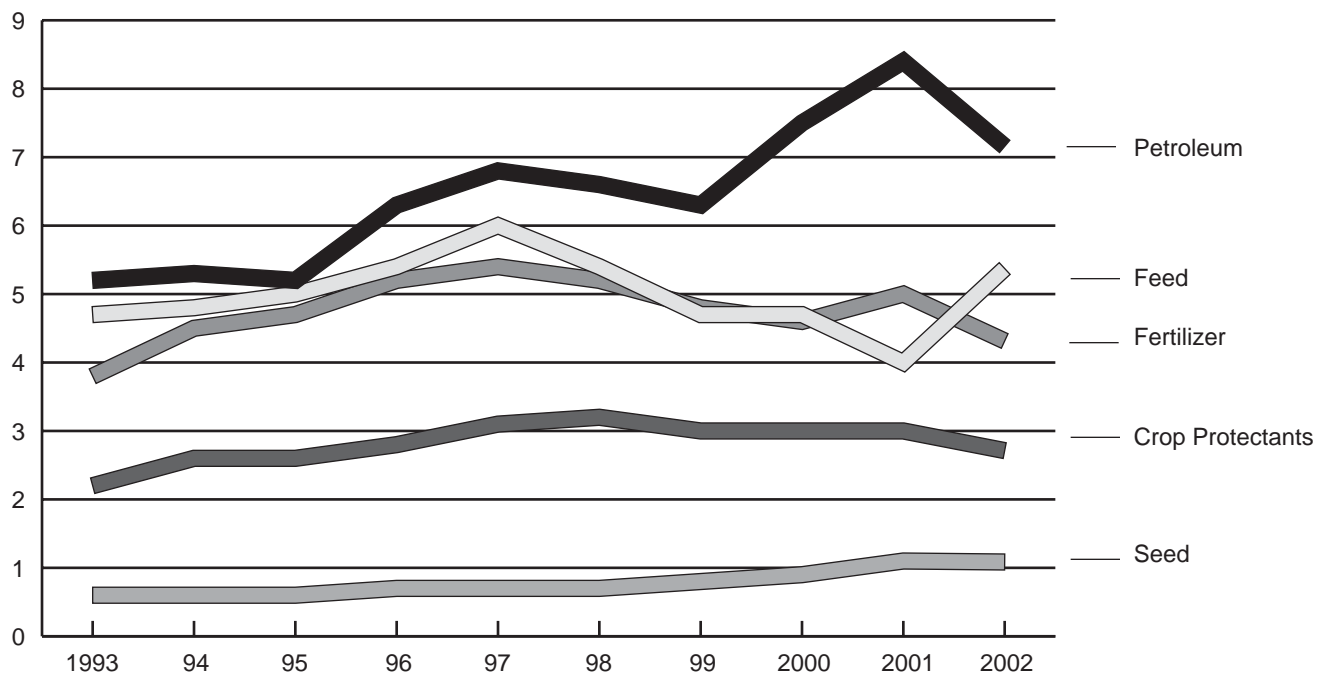


Table 10—Farmer cooperatives' net income, 2002 ¹

Principal product(s) marketed and major function	Cooperatives ²	Total net income	Income from own operations	Income from other cooperatives ³
	Number	-----Million \$-----		
Products marketed:				
Cotton	14	89.6	87.0	2.6
Dairy	198	283.6	225.4	58.2
Fruits and vegetables	212	-147.8	-165.8	18.0
Grains and oilseeds ⁴	769	258.7	182.1	76.6
Livestock and poultry	85	69.1	24.3	44.8
Rice	15	6.6	5.9	.7
Sugar	48	71.2	70.2	.9
Other products ⁵	218	131.8	125.8	6.0
Total marketing	1,559	762.7	554.8	207.9
Total farm supply	1,201	337.8	191.1	146.7
Service	380	109.1	101.3	7.8
Total	3,140	1,209.6	847.2	362.4

¹ Adjusted for losses and before taxes. Totals may not add due to rounding.

² Includes a number of cooperatives operating on a strictly pooling basis, but not their pool proceeds.

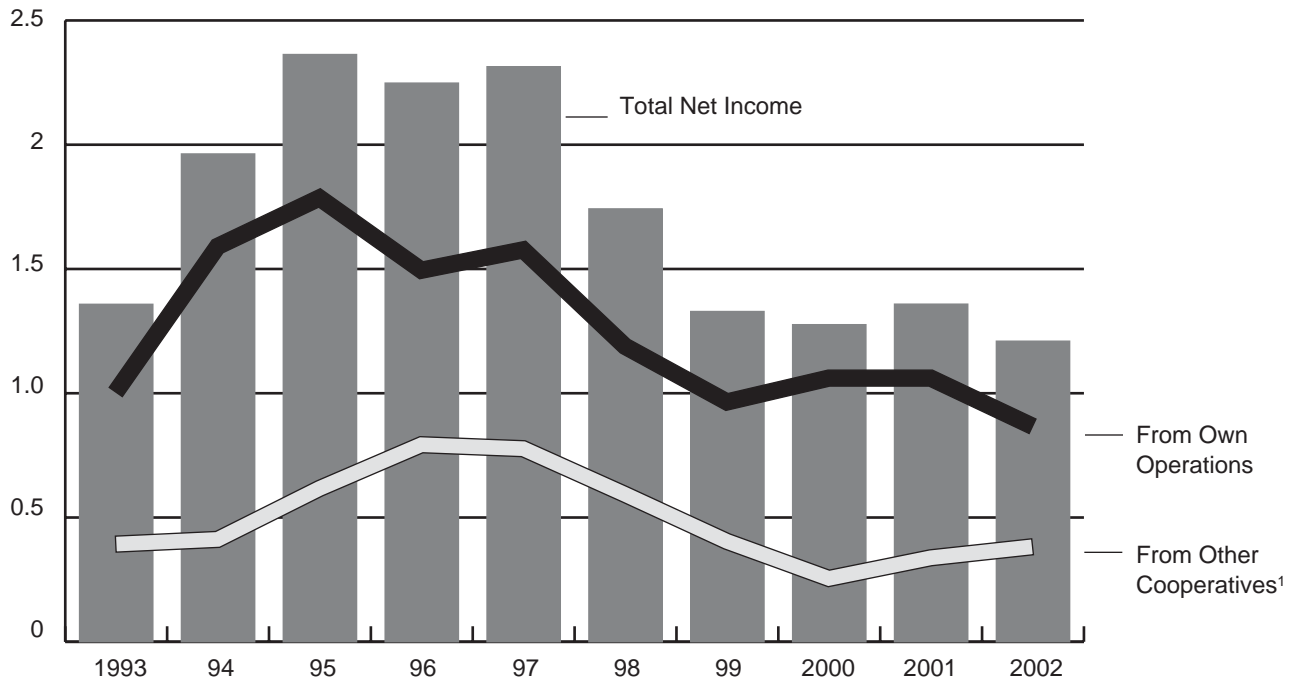
³ Includes patronage refunds from CoBank.

⁴ Excludes cottonseed. Cottonseed oil is included in other marketings while cottonseed meal is included in farm supplies (feed).

⁵ Includes dry edible beans and peas, fish, nuts, tobacco, wool, and other products.

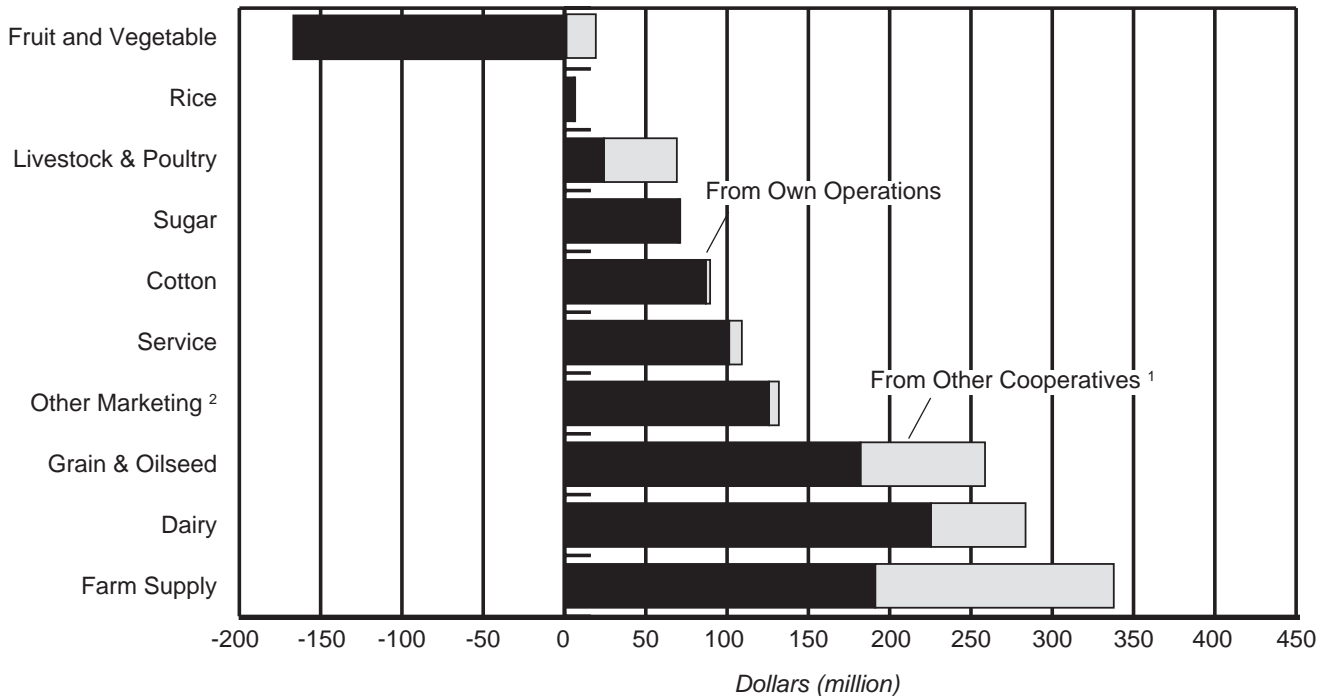
Figure 17— Cooperatives' Net Income, 1993-2002

Billion dollars



¹ Includes dividends and patronage refunds from other farmer cooperatives, CoBank, and Banks for Cooperatives.

Figure 18— Net Income or Loss, by Type of Cooperative, 2002



¹ Includes dividends and patronage refunds from other farmer cooperatives and CoBank.

² Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

Table 11—Combined assets for farmer cooperatives, 2002 ¹

Principal product(s) marketed and major function	Cooperatives ²	Assets of own operations	Investments in other cooperatives ³	Total assets	Investments in other co-ops as percent of total
	<i>Number</i>	<i>Million \$</i>			<i>Percent</i>
Products marketed:					
Cotton	14	870.2	31.2	901.4	3.5
Dairy	198	7,800.2	711.0	8,511.2	8.4
Fruits and vegetables	212	4,422.2	171.4	4,593.7	3.7
Grains and oilseeds ⁴	769	6,873.7	1,122.7	7,996.4	14.0
Livestock and poultry	85	3,231.6	412.4	3,643.9	11.3
Rice	15	481.6	16.4	498.0	3.3
Sugar	48	2,088.4	108.1	2,196.4	4.9
Other products ⁵	218	2,519.7	65.4	2,585.1	2.5
Total marketing	1,559	28,287.6	2,638.5	30,926.1	8.5
Total farm supply	1,201	12,677.1	2,818.2	15,495.4	18.2
Service	380	981.9	82.3	1,064.2	7.7
Total	3,140	41,946.6	5,539.1	47,485.7	11.7

¹ Totals may not add due to rounding.

² Many cooperatives have multi-product and multi-functional operations. Most are classified according to predominant commodity or function as indicated by business volume.

³ Also includes investments in CoBank.

⁴ Excludes cottonseed. Cottonseed oil is included in other marketings while cottonseed meal is included in farm supplies (feed).

⁵ Includes dry edible beans and peas, fish, nuts, tobacco, wool, and other products.

cent from \$317.6 million in 2001. Marketing cooperatives' net income from other cooperatives, including CoBank, totaled \$207.9 million, up 19.9 percent from \$173.4 million. Grain cooperatives' net income from other cooperatives totaled \$76.6 million, down 10 percent from \$85.1 million in 2001.

Income before adjusting for losses was \$1,873.6 million, compared with \$1,798.9 million in 2001. Losses totaled \$664 million in 2002, up about 50 percent from \$444 million in 2001. The number of cooperatives with losses was up significantly, from 623 to 706, or an increase of 13.3 percent. Increased losses for 2002 stemmed mainly from fruit and vegetable cooperatives, which went from a \$20.7 million loss in 2001 to \$312.9 million in 2002. Grain and oilseed and livestock and poultry cooperatives also had losses of at least \$50 million in 2002 (appendix figure 9).

Marketing cooperative losses totaled \$429.6 million in 2002, compared with \$242.3 million in 2001. Losses among farm supply cooperatives increased

from \$196.2 million to \$220.3 million. Related-service cooperative losses totaled \$14.4 million in 2002, compared with \$5.5 million the year before.

Balance Sheet

Combined assets for all farmer cooperatives totaled \$47.5 billion in 2002, down 2 percent from \$48.5 billion in 2001 (table 11). Total assets of cooperatives, excluding inter-cooperative investments, was down 3.1 percent to \$41.9 billion, compared with \$43.3 billion in 2001. Cooperatives' total assets grew from \$33.4 in 1993 to \$47.5 in 2002 (appendix table 6 and figure 19), reflecting growth in their own operations and investments in other cooperatives. In 1993, nearly \$3 billion (8.9 percent of total assets) was invested in other cooperatives, including CoBank. In 2002, these investments were \$5.5 billion, up \$2.5 billion from 1993, or 11.7 percent of total assets.

Total liabilities was \$27.9 billion, down 1.5 percent from \$28.3 billion in 2001 (table 12). Cooperatives'

Figure 19— **Cooperatives' Assets, Liabilities, and Net Worth, 1993-2002**

Billion dollars

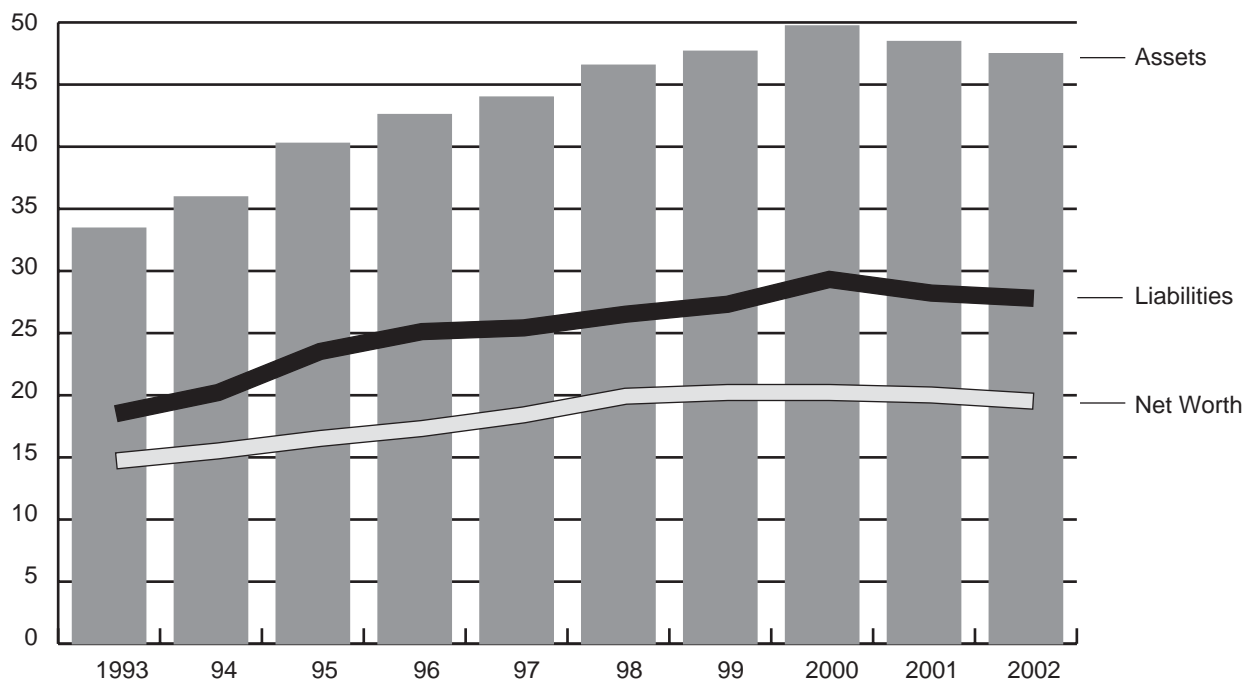


Table 12— **Combined balance sheet data for farmer cooperatives, 2002** ¹

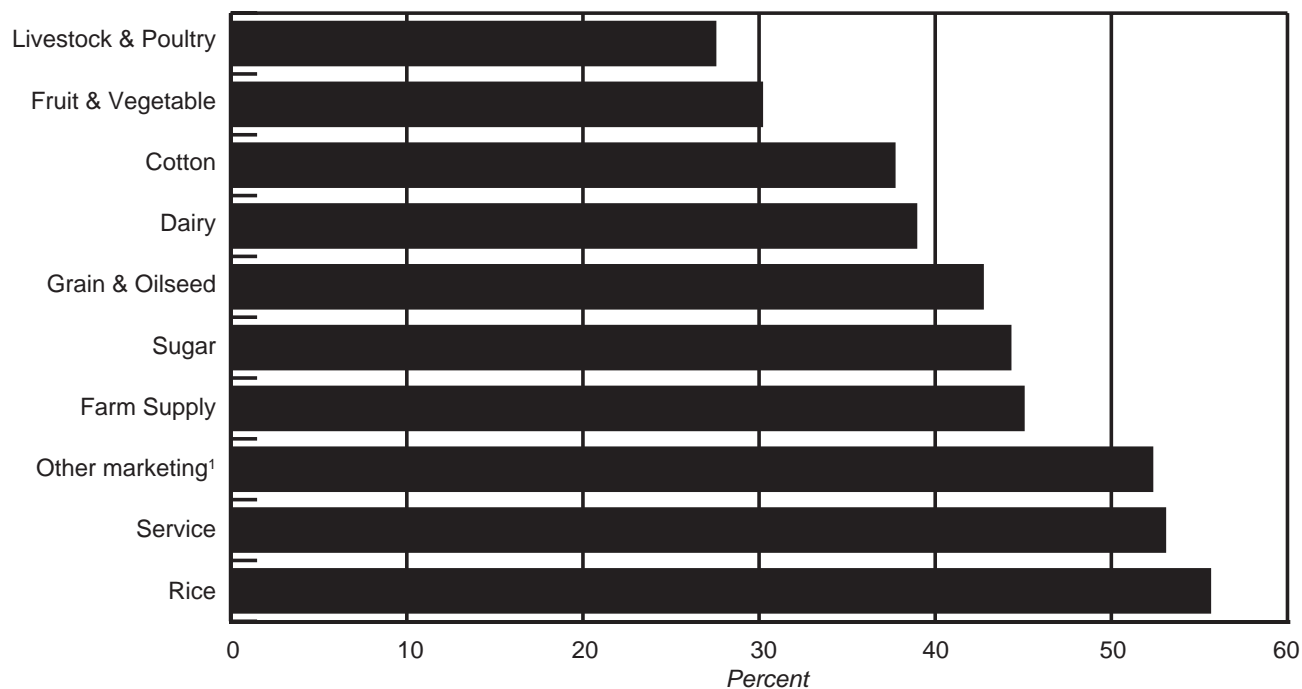
Principal product(s) marketed and major function	Cooperatives	Total assets	Total liabilities	Net worth
	<i>Number</i>	<i>-----Million \$-----</i>		
Products marketed:				
Cotton	14	901.4	561.6	339.8
Dairy	198	8,511.2	5,197.7	3,313.5
Fruits and vegetables	212	4,593.7	3,207.4	1,386.2
Grains and oilseeds ²	769	7,996.4	4,581.0	3,415.4
Livestock and poultry	85	3,643.9	2,640.9	1,003.0
Rice	15	498.0	221.0	276.9
Sugar	48	2,196.4	1,223.9	972.5
Other products ³	218	2,585.1	1,232.3	1,352.8
Total marketing	1,559	30,926.1	18,865.9	12,060.2
Total farm supply	1,201	15,495.4	8,517.9	6,977.5
Service	380	1,064.2	499.5	564.7
Total	3,140	47,485.7	27,883.3	19,602.4

¹ Totals may not add due to rounding.

² Excludes cottonseed. Cottonseed oil is included in other marketings while cottonseed meal is included in farm supplies (feed).

³ Includes dry edible beans and peas, fish, nuts, tobacco, wool, cottonseed, and other products.

Figure 20— **Percentage of Assets Financed by Net Worth, by Cooperative Type, 2002**



¹ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

total liabilities grew from \$18.6 billion in 1993 (55.7 percent of total assets) to 58.7 percent of total assets in 2002.

A measure of balance sheet strength is the proportion of assets financed by net worth or equity capital. Net worth, or member and patron equity, was \$19.6 billion, down by \$545 million from \$20.1 billion in 2001. The proportion of total assets financed by member and patron equity was virtually unchanged at 41.3 percent compared to 41.6 percent in 2001. As assets and liabilities increased over the 10-year period on cooperative balance sheets, net worth has fallen. In dollar terms, net worth rose from \$14.8 billion in 1993 to \$19.6 billion in 2002, but the proportion of assets financed by net worth fell from 44.3 percent to 41.3 percent during that time period.

Net worth, or member and patron equity, for all marketing cooperatives totaled \$12.1 billion, down 2.5 percent from 2001. Marketing cooperatives accounted for 61.5 percent of farmer cooperatives' combined net worth, about the same as 2001, when it was 61.4. Net worth for farm supply cooperatives totaled \$7 billion, down 2.8 percent from \$7.2 billion in 2001. Their net worth accounted for almost 36 percent of the total (appendix figure 10). For marketing cooperatives, the highest percentage of total assets represented by net

worth shown in figure 20 (55.6 percent) was for those marketing rice. Service cooperatives ranked second with 53.1 percent. The lowest, 27.5 percent, was for cooperatives marketing livestock and poultry. Marketing and farm supply cooperatives had 39 percent and 45 percent, respectively, of their assets financed by net worth.

Of the \$47.5 billion in total assets, marketing cooperatives accounted for \$30.9 billion, down 2.9 percent from 2001. Cooperatives primarily handling grains and oilseeds had the second largest assets (\$8 billion in 2002, up 7.7 percent from \$7.4 billion in 2001) and maintained the largest proportion of their assets as investments in other cooperatives in both 2002 (14 percent) and 2001 (16.1 percent). Assets of marketing cooperatives, excluding investments in other cooperatives and CoBank, totaled \$28.3 billion, down 2.7 percent from \$29.1 billion in 2001.

Farm supply cooperatives had total assets of \$15.5 billion, unchanged from 2001. Excluding inter-cooperative investments, total assets decreased 3.7 percent, from \$13.2 billion in 2001 to \$12.7 billion.

Selected Financial Ratios

Financial ratios express relationships between items in the financial and income statements of a busi-

Table 13—Selected financial ratios for cooperatives, 2002

Type of cooperative and by size of assets in million \$	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
	----- Percent -----			----- Number -----		
Cotton—all sizes	8.5	39.1	3.6	2.4	1.2	4.9
Assets less than \$25.0	13.1	51.8	7.8	1.7	2.5	n/a
25.0 - 499.99	8.2	38.4	3.4	2.4	1.2	n/a
Cotton gin—all sizes	14.5	66.2	12.7	1.1	1.6	13.5
Assets less than \$0.99	8.0	66.0	4.1	1.9	1.7	1.6
1.0 - 2.49	16.5	68.0	12.7	1.3	1.4	9.8
2.5 - 99.99	14.4	65.9	13.5	1.1	1.7	15.7
Dairy—all sizes	3.1	38.1	1.0	3.1	1.2	3.0
Assets less than \$2.49	3.7	57.8	0.4	8.4	1.4	14.2
2.5 - 24.99	7.0	34.3	0.9	7.5	1.2	11.9
25.0 - 99.99	4.3	44.7	0.6	6.8	1.3	4.4
100.0 and more	2.9	37.8	1.1	2.8	1.2	2.9
Dry beans and peas—all sizes	4.9	40.8	3.9	1.3	1.4	3.5
Fruit and vegetable—all sizes	-2.0	24.8	-1.1	1.9	1.6	3.6
Assets less than \$0.5	-8.6	40.1	-0.6	13.4	1.4	8.8
0.5 - 2.49	1.3	48.5	0.1	13.9	2.0	1.6
2.5 - 24.99	3.7	41.8	1.1	3.3	1.4	3.9
25.0 - 99.99	2.1	28.7	1.1	1.8	1.1	1.5
100.0 and more	-2.7	23.7	-1.5	1.8	1.8	3.8
Fresh only—all sizes	3.8	44.6	1.7	2.2	1.4	n/a
Assets less than \$1.0	15.1	68.1	4.5	3.3	2.3	n/a
1.0 - 2.49	-1.7	33.0	-0.4	4.4	1.8	n/a
2.5 - 24.99	5.4	46.4	1.6	3.4	1.5	n/a
25.0 - 499.99	3.8	44.7	1.8	2.1	1.3	n/a
Processed only—all sizes	7.1	28.6	4.4	1.6	1.4	n/a
Assets less than \$99.99	1.3	10.1	0.8	1.7	1.1	n/a
100.0 and more	7.6	30.4	4.7	1.6	1.5	n/a
Fresh and processed—all sizes	-14.6	11.7	-7.6	1.9	2.3	n/a
Grain and oilseed—all sizes ⁸	2.7	44.2	1.2	2.3	1.2	2.6
Assets of 0.5 - \$2.49	1.2	63.2	0.4	3.0	1.8	3.3
2.5 - 24.99	2.5	49.0	1.0	2.4	1.3	2.9
25.0 - 99.99	2.4	39.7	1.1	2.2	1.2	2.4
100.0 - 499.99	5.0	38.6	2.6	2.0	1.3	2.6
Livestock—all sizes	-1.3	23.6	-0.3	4.5	1.3	0.6
Assets of less than \$25.0	4.9	52.6	0.8	5.9	1.4	6.9
25.0 and more	-1.3	23.3	-0.3	4.5	1.3	0.6

continued

Table 13—Selected financial ratios for cooperatives, 2002 ¹, Continued

Type of cooperative and by size of assets in million \$	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
	----- Percent -----			----- Number -----		
Nut—all sizes	2.7	37.0	1.3	2.1	1.6	2.0
Poultry—all sizes	8.3	36.2	3.6	2.3	1.8	3.4
Sugar—all sizes	3.5	45.2	3.3	1.0	1.2	2.4
Other products—all sizes ⁹	1.4	43.5	1.0	1.3	1.1	7.3
Assets of less than \$25.0	-0.8	44.6	-0.5	1.6	1.2	4.5
25.0 and more	2.2	43.0	1.8	1.2	1.1	7.4
Other service—all sizes ¹⁰	15.8	59.7	10.7	1.5	1.7	7.3
Assets of less than \$2.5	0.6	58.6	0.4	1.5	1.8	4.5
2.5 and more	19.7	60.0	13.3	1.5	1.7	7.4
Artificial insemination—all sizes	8.1	60.7	2.4	3.4	1.8	n/a
Farm supply—all sizes	0.5	38.2	0.3	1.7	1.4	1.1
Assets of less than \$0.5	-5.5	66.7	-1.8	3.0	2.4	-1.9
0.5 - 0.99	-1.9	72.7	-0.9	2.2	2.7	-1.7
1.0 - 2.49	1.2	68.0	0.6	2.2	2.1	1.8
2.5 - 24.99	3.2	57.1	1.7	1.9	1.5	3.5
25.0 - 99.99	2.3	44.3	1.2	1.8	1.2	2.4
100.0 - 499.99	5.5	47.0	3.2	1.7	1.4	2.4
500.0 and more	-2.1	22.9	-1.5	1.4	1.3	0.8

¹ Based on cooperatives reporting. Excludes strictly pooling cooperatives. Ratios were calculated by adding the individual items and dividing. The same cooperatives were included in each group to calculate all ratios. Extreme values not representative of the group were excluded.

² Calculated by dividing net income (before taxes) by total assets.

³ Net worth, or member equity, is the book value of the assets owned by members. The ratio was calculated by dividing total net worth by total assets.

⁴ Total sales includes service receipts, other income, and patronage refunds received from other cooperatives and CoBank. The return on sales was found by dividing net income (before taxes) by total sales.

⁵ Calculated by dividing total sales by total assets.

⁶ The current ratio was derived by dividing current assets by current liabilities.

⁷ The ratio was calculated by summing net income before taxes and interest expense and dividing by interest expense for each grouping.

⁸ Excludes cottonseed.

⁹ Includes other products marketing and fishery cooperatives.

¹⁰ Includes cooperatives providing services such as storage, transportation, and rice drying.

ness operation and help in analyzing a cooperative's economic and financial situation. Ratios can indicate problem areas, serve as guidelines for planning, and aid in formulating actions. However, ratio interpretation is largely subjective.

Six financial ratios were used to measure cooperative performance or financial condition—return on total assets, net worth-to-total assets, return on total sales, total sales-to-total assets, the current ratio, and times interest earned.

The return on total assets and return on total sales ratios indicate profitability. The net worth-to-total

assets ratio shows a cooperative's ability to meet long-term financial obligations. The total sales-to-total assets ratio (asset turnover ratio) indicates how efficiently a cooperative is using its assets. The current ratio measures a cooperative's ability to meet short-run obligations. Times interest earned shows the number of times interest charges were covered by net income.

Table 13 presents the values of these ratios. Extreme high and low values were excluded so those used would be more representative of the cooperatives reporting. Ratios are also shown by selected asset category for those cooperatives where sufficient informa-

tion was available. These ratios offer cooperative leaders a general barometer to use in comparing their operations with others of the same type and/or size.

The return on total assets (net income/total assets) varied considerably. It was negative for large livestock, smaller other products, large and small fruit and vegetable, and large and small farm supply cooperatives. The ratio was highest (19.7) for large other service cooperatives and cotton gins (14.5). For dairy, the ratio was highest for those cooperatives with assets between \$2.5 and \$24.99 million. Among grain cooperatives, the largest return came to the largest cooperatives.

The net worth-to-total assets ratio (net worth/total assets) ranged from a low of 10 percent for the smallest processing fruit and vegetable cooperatives to a high of 73 percent for small farm supply cooperatives. Large livestock, fruit and vegetable, and farm supply cooperatives all had net worth to total assets of 23 percent. Generally, as cooperatives become larger and/or do more processing, fewer of their assets are financed by members, which lowers the net worth-to-assets ratio.

The return on total sales (net income before taxes/total sales) ranged from a negative 1.8 percent for small farm supply cooperatives to a high of 13 percent for larger other service and larger cotton gin cooperatives. Few cooperative groups generated a return on sales above 3 percent (only 12 of the 41 groups shown in table 13).

The total sales-to-total assets ratio (total sales/total assets) ranged from a high of 13.9 for the small fresh fruit and vegetable cooperatives to a low of 1 for the sugar cooperatives. Among most cooperatives, the ratio tended to decrease as cooperative size increased. Generally, this reflects the large investment in processing or manufacturing equipment typical of the larger cooperatives that engage in these types of activities. The high total sales-to-total assets ratios for smaller fruit and vegetable cooperatives is due to bargaining activity or other marketing functions not requiring major investments in plant and equipment.

The current ratio (current assets/current liabilities) ranged from a low of 1.1 for other products cooperatives, to 2.5 for smaller farm supply and smaller cotton cooperatives. Almost all sizes and types of cooperatives have a current ratio of less than 2, which is considered low.

Times interest earned ((net income before taxes + interest expense)/interest expense) varied most by type of cooperative, with a negative value for small farm supply cooperatives with losses to a high of

almost 16 for large cotton gin cooperatives. Farm supply cooperatives averaged a 1.1 times interest earned. This means that farm supply cooperatives had net incomes before taxes just slightly larger than their interest expenses.

IV—OTHER SERVICE COOPERATIVES

Service cooperatives, other than those directly related to marketing and purchasing, included farm credit system cooperatives, rural electric cooperatives, rural credit unions, and dairy herd improvement associations.

Farm Credit System

The Farm Credit System (FCS) is a nationwide network of financial cooperatives that lends to agricultural businesses and other entities in rural America. FCS provides credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives, rural utilities, and certain foreign and domestic entities in connection with international transactions. Information on their structure, assets, net worth, and income can be found in appendix tables 7-9.

Rural Electric Cooperatives

Rural electric cooperatives provide electricity primarily to rural customers. There are electric distribution cooperatives and generation and transmission cooperatives. The 644 rural electric cooperatives in 2002 served about 11 million customers in 43 States (appendix table 10).

Rural Credit Unions

The 512 rural credit unions reported 3.7 million members and savings of more than \$21 billion. Rural credit unions supply financial services to members in rural areas. Their number, members, and savings are listed by State in appendix table 11.

Dairy Herd Improvement Associations

Dairy Herd Improvement Associations (DHIA) test dairy herds to maintain accurate records. The records include production and genetic records of cows and sires. In 2002, DHIA had almost 28,000 member herds and 4.2 million cows were tested (appendix table 12).

APPENDIX TABLES

Appendix Table 1—Number of cooperatives by major business activity, 2002-1993

Major business activity	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
<i>Number</i>										
Products marketed:										
Bean and pea (dry edible)	8	9	8	8	8	8	9	10	10	10
Cotton	14	14	14	15	15	16	16	16	17	16
Dairy	198	204	208	221	228	236	237	241	247	258
Fruit and vegetable	212	220	232	231	249	259	267	281	288	282
Grain and oilseed ¹	769	789	826	896	964	1,014	1,066	1,090	1,159	1,193
Livestock	66	70	74	81	80	88	89	94	100	106
Nuts	18	18	18	18	18	18	19	21	21	20
Poultry ²	19	19	19	15	18	20	16	18	17	13
Rice	15	15	16	17	17	18	19	19	21	21
Sugar ³	48	48	48	48	52	51	49	51	52	55
Tobacco	22	24	25	25	26	26	26	26	25	25
Wool and mohair	78	80	83	84	91	88	97	98	100	107
Other products	92	96	101	90	97	99	102	109	116	108
Total farm products	1,559	1,606	1,672	1,749	1,863	1,941	2,012	2,074	2,173	2,214
Total farm supplies	1,201	1,234	1,277	1,313	1,347	1,386	1,403	1,458	1,496	1,547
Total related services	380	389	397	404	441	464	469	474	505	483
Total business	3,140	3,229	3,346	3,466	3,651	3,791	3,884	4,006	4,174	4,244

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Appendix Table 2—Cooperative memberships, by major business activity, 2002-1993

Major business activity	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
<i>Thousands</i>										
Products marketed:										
Bean and pea (dry edible)	2.2	2.7	2.8	2.8	2.9	2.9	4.0	3.3	2.5	2.5
Cotton	43.5	45.9	45.4	43.8	41.3	42.7	42.6	41.9	40.2	37.8
Dairy	81.7	91.0	96.9	90.7	92.9	104.9	111.4	117.3	124.7	122.4
Fruit and vegetable	32.5	37.8	41.1	40.9	44.0	44.0	46.8	49.1	50.6	50.9
Grain and oilseed ¹	542.5	581.5	615.3	657.9	728.7	745.0	783.4	805.9	828.5	876.8
Livestock	94.0	105.3	132.1	137.1	161.5	236.0	278.8	273.6	330.6	340.6
Nuts	35.8	40.1	41.7	43.7	46.0	41.7	48.0	48.4	49.0	50.5
Poultry ²	26.1	19.1	29.2	29.2	36.3	34.3	32.3	28.6	30.0	24.7
Rice	12.4	13.9	12.2	11.8	12.9	14.0	14.8	15.9	16.8	16.9
Sugar ³	13.9	16.3	15.6	15.7	15.9	13.8	11.8	15.3	12.5	13.2
Tobacco	127.8	165.7	165.9	170.0	172.8	172.9	266.7	270.1	275.3	261.1
Wool and mohair	11.1	12.6	13.0	15.4	17.9	16.7	17.5	19.7	24.8	27.7
Other products	25.5	28.0	31.9	23.9	25.3	29.0	24.2	22.5	19.7	4.5
Total farm products	1,049.1	1,160.0	1,243.0	1,282.8	1,398.4	1,497.8	1,682.4	1,711.5	1,805.2	1,829.5
Total farm supplies	1,637.1	1,745.8	1,717.8	1,731.4	1,773.7	1,743.2	1,794.7	1,845.5	1,935.6	1,977.3
Total related services	107.4	128.1	124.3	159.1	180.6	183.1	186.5	210.3	245.3	216.4
Total business	2,793.6	3,033.9	3,085.1	3,173.3	3,352.6	3,424.2	3,663.6	3,767.3	3,986.0	4,023.3

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Appendix Table 3—Cooperatives' gross business volume, by type of cooperative, 2002-1993

Major business activity	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
<i>Billion \$</i>										
Products marketed:										
Beans and peas (dry edible)	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
Cotton	2.5	2.5	2.8	2.2	3.0	3.1	2.7	2.9	2.5	2.0
Dairy	25.9	29.4	25.8	28.5	27.8	26.3	26.0	23.7	23.1	22.7
Fruits and vegetables	8.4	9.7	10.1	10.1	9.9	9.8	9.9	9.9	9.3	8.9
Grains and oilseeds	20.1	22.6	22.9	21.7	25.3	28.8	33.9	25.2	21.2	19.1
Livestock	9.9	9.6	8.0	7.4	7.6	7.5	6.7	6.5	6.8	5.7
Nuts	.9	.9	.7	.9	.9	.9	1.0	.9	1.0	.9
Poultry	2.5	2.2	2.2	2.2	2.1	2.1	2.1	1.9	1.8	1.6
Rice	.8	.8	.8	.9	.9	.9	.9	.9	.9	.8
Sugar	2.4	2.7	2.7	2.7	2.7	2.4	2.0	2.0	1.9	2.1
Tobacco	.2	.4	.6	.3	.3	.6	1.4	1.2	.4	.6
Wool and mohair	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other products	2.8	3.0	3.7	3.5	3.7	3.3	3.4	2.7	3.0	2.3
Total farm products	76.6	84.0	80.4	80.5	84.5	85.9	90.3	77.9	72.1	66.8
Supplies purchased:										
Crop protectants	3.1	3.6	4.0	3.8	4.1	4.4	3.9	3.6	3.5	3.0
Feed	6.7	5.5	6.6	6.4	7.2	8.1	7.4	6.6	6.5	6.3
Fertilizer	5.2	7.4	7.3	7.3	7.8	8.9	8.7	7.9	7.4	6.2
Petroleum	11.4	14.1	13.3	8.1	8.8	10.6	9.8	8.1	8.4	8.3
Seed	1.6	1.5	1.4	1.1	1.0	.9	.9	.8	.8	.8
Other supplies	3.6	4.0	4.1	4.3	4.1	4.2	4.1	3.9	3.8	3.6
Total farm supplies	31.5	36.1	36.8	30.9	33.0	37.1	34.7	31.0	30.4	28.2
Services and other income	3.4	3.5	3.5	3.9	3.5	3.6	3.1	3.3	3.0	2.7
Total business	111.6	123.6	120.7	115.3	121.0	126.7	128.1	112.2	105.5	97.7

Appendix Table 4—Cooperatives' net business volume, by type of cooperative, 2002-1993

Major business activity	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
<i>Billion \$</i>										
Products marketed:										
Beans and peas (dry edible)	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
Cotton	2.5	2.4	2.7	2.1	3.0	3.0	2.7	2.8	2.5	1.9
Dairy	23.0	26.2	22.7	26.0	25.3	23.4	22.9	21.8	21.5	20.5
Fruits and vegetables	7.3	8.8	9.6	9.3	9.4	9.3	9.4	9.3	8.4	8.4
Grains and oilseeds	17.5	18.1	18.4	17.1	21.3	24.6	27.7	19.9	17.6	16.5
Livestock	9.9	9.6	8.0	7.3	7.4	7.5	6.7	6.5	6.8	5.7
Nuts	.9	.9	.7	.9	.9	.9	1.0	.9	1.0	.9
Poultry	2.4	2.2	2.1	2.2	2.1	2.1	1.8	1.6	1.5	1.4
Rice	.7	.8	.8	.9	.9	.9	.9	.9	.9	.8
Sugar	2.4	2.6	2.7	2.5	2.4	2.3	1.9	1.9	1.8	1.8
Tobacco	.2	.4	.6	.3	.3	.6	1.4	1.2	.4	.6
Wool and mohair	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other products	2.6	2.9	3.6	3.1	3.3	3.1	2.9	2.5	2.9	2.3
Total farm products	69.7	75.0	72.1	72.0	76.6	77.8	79.4	69.3	65.5	60.9
Supplies sold:										
Crop protectants	2.7	3.0	3.0	3.0	3.2	3.1	2.8	2.6	2.6	2.2
Feed	5.4	4.0	4.7	4.7	5.4	6.0	5.4	5.0	4.8	4.7
Fertilizer	4.3	5.0	4.6	4.8	5.2	5.4	5.2	4.7	4.5	3.8
Petroleum	7.2	8.4	7.5	6.3	6.6	6.8	6.3	5.2	5.3	5.2
Seed	1.1	1.1	.9	.8	.7	.7	.7	.6	.6	.6
Other supplies	3.0	3.3	3.4	3.7	3.5	3.2	3.3	3.1	3.0	2.9
Total farm supplies	23.7	24.8	24.1	23.2	24.6	25.2	23.7	21.2	20.8	19.2
Services and other income	3.4	3.5	3.5	3.9	3.5	3.6	3.1	3.3	3.0	2.7
Total business	96.8	103.3	99.7	99.1	104.7	106.7	106.2	93.8	89.3	82.9

Appendix Table 5—**Net income of farmer cooperatives, 1993-2002¹**

Year	From own operations	From other cooperatives ²	Total
		<i>Million \$</i>	
1993	985	373	1,358
1994	1,571	392	1,963
1995	1,766	597	2,363
1996	1,475	773	2,248
1997	1,557	757	2,314
1998	1,169	573	1,742
1999	944	384	1,328
2000	1,041	235	1,276
2001 ³	1,039	318	1,357
2002	847	362	1,210

¹ Totals may not add due to rounding. Excludes income from cooperative pooling operations.

² Dividends and patronage refunds received from other marketing, farm supply, and related-service cooperatives, CoBank, and Banks for Cooperatives, where applicable.

³ Revised

Appendix Table 6—Combined balance sheet data for farmer cooperatives, 1993-2002

Year	Assets from own operations	Investments in other cooperatives ¹	Total assets	Total liabilities	Net worth
<i>Million \$</i>					
1993	30,484	2,962	33,446	18,634	14,812
1994	32,784	3,176	35,960	20,339	15,621
1995	37,046	3,228	40,274	23,643	16,631
1996	39,011	3,577	42,588	25,195	17,392
1997	39,922	4,074	43,996	25,459	18,537
1998	41,884	4,676	46,560	26,606	19,954
1999	42,330	5,352	47,682	27,418	20,263
2000	44,635	5,087	49,722	29,447	20,275
2001	43,270	5,195	48,465	28,317	20,148
2002	41,947	5,539	47,486	27,883	19,602
<i>Percent of total assets</i>					
1993	91.1	8.9	100.0	55.7	44.3
1994	91.2	8.8	100.0	56.6	43.4
1995	92.0	8.0	100.0	58.7	41.3
1996	91.6	8.4	100.0	59.2	40.8
1997	90.7	9.3	100.0	57.9	42.1
1998	90.0	10.0	100.0	57.1	42.9
1999	88.8	11.2	100.0	57.5	42.5
2000	89.8	10.2	100.0	59.2	40.8
2001	89.3	10.7	100.0	58.4	41.6
2002	88.3	11.7	100.0	58.7	41.3

¹ Includes investments in other farmer cooperatives, CoBank, and Banks for Cooperatives, where applicable.

Appendix Table 7—Farm Credit Association Structure, September 30, 2002¹

District or bank affiliation	PCA	ACA	FLCA
	<i>Number</i>		
CoBank, ACB	-	4	-
AgFirst FCB	-	24	-
AgriBank, FCB	1	17	1
FCB of Wichita	3	13	4
FCB of Texas	-	12	10
Western FCB	-	12	1
AgAmerica, FCB	-	2	-
	—	—	—
Total	4	84	16

- = No bank affiliation.

¹ PCA = Production Credit Association, ACA = Agricultural Credit Association, FLCA = Federal Land Credit Association, ACB=Agricultural Credit Bank, the successor Bank resulting from a BC/FCB merger. During 2002, the remaining Federal Land Bank Associations became direct lenders through conversions to FLCAs. Included in the changes were the reorganizations in which a majority of the ACAs adopted the ACA Parent structure.

Source: Farm Credit Administration, *Accountability Report FY 2002*, McLean, VA, p. 48.
Farm Credit System, *Annual Information Statement - 2002*, Jersey City, NJ, p. 24.

Appendix Table 8—**Farm Credit System's combined assets, net worth, and net income, 1998-2002¹**

Year	Assets	Net worth	Net income
<i>Million \$</i>			
1998	84,139	12,522	1,251
1999	88,692	13,319	1,233
2000	94,036	14,397	1,422
2001	100,810	15,999	1,785
2002	110,647	17,089	1,773

¹ Farm Credit System, *Annual Information Statement, 2002*, Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ, Feb. 23, 2002, p. 3.

Appendix Table 9—**Combined assets, net worth, net loans and net income of CoBank, ACB, 1998-2002¹**

Year	Assets	Net worth	Net loans	Net income
<i>Million \$</i>				
1998	22,104	1,671	17,513	145
1999	24,089	1,665	18,398	121
2000	24,255	1,791	19,230	185
2001	25,160	2,197	19,944	221
2002	26,961	2,293	20,817	234

¹ As of December 31 of each year. Source: CoBank, ACB, *Creating Customer Value in the 21st Century, 2002 Annual Report*, Englewood, CO.

Appendix Table 10—Number, participation, and level of activity of rural electric¹ cooperatives, by State, December 31, 2002²

State	Cooperatives	Members (consumers)	Revenue	State	Cooperatives	Members (consumers)	Revenue
	<i>Number</i>	<i>1,000</i>	<i>Million \$</i>		<i>Number</i>	<i>1,000</i>	<i>Million \$</i>
Alabama	19	395	964	Montana	23	98	149
Alaska	8	56	148	Nebraska	3	9	143
Arizona	6	136	316	New Mexico	16	189	260
Arkansas	16	305	1,010	New York	4	17	15
California	3	16	26	North Carolina	24	758	1,833
Colorado	19	329	1,098	North Dakota	21	124	926
Florida	11	473	1,367	Ohio	20	306	412
Georgia	38	1,242	3,141	Oklahoma	17	235	516
Idaho	4	34	47	Oregon	7	39	81
Illinois	7	52	149	Pennsylvania	10	159	337
Indiana	24	262	1,004	South Carolina	20	552	1,547
Iowa	28	126	449	South Dakota	29	132	251
Kansas	27	156	459	Tennessee	19	767	1,189
Kentucky	25	704	1,742	Texas	39	609	1,593
Louisiana	10	316	434	Virginia	12	395	717
Maine	3	14	10	Washington	5	34	59
Michigan	7	215	202	Wisconsin	16	131	343
Minnesota	37	416	989	Wyoming	9	63	156
Mississippi	15	425	1,058	Other States ³	4	207	307
Missouri	38	472	1,575				
				United States	644	10,976	27,030

¹ Source: Rural Utilities Service, USDA.

² Totals may not add due to rounding.

³ Includes States with fewer than three cooperatives – Delaware, Maryland, New Jersey, Vermont, and West Virginia.

Appendix Table 11—Number, participation, and level of activity of rural credit unions ¹, by State, December 31, 2002 ²

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	<i>Number</i>	<i>1,000</i>	<i>Million \$</i>		<i>Number</i>	<i>1,000</i>	<i>Million \$</i>
Alabama	7	22	98	New Hampshire	2	1	1
Arizona	4	20	63	New Jersey	3	46	250
Arkansas	2	4	17	New York	22	141	1,026
California	46	677	4,859	North Carolina	7	23	60
Colorado	11	23	98	North Dakota	27	98	668
Florida	13	68	290	Ohio	12	37	88
Georgia	9	36	136	Oklahoma	4	7	44
Hawaii	11	109	862	Oregon	7	33	164
Idaho	7	15	67	Pennsylvania	16	29	103
Illinois	9	69	389	Rhode Island	3	86	886
Indiana	13	48	524	South Carolina	6	10	34
Iowa	6	7	24	Tennessee	7	16	51
Kansas	14	61	263	Texas	30	112	477
Kentucky	6	30	112	Utah	8	17	66
Louisiana	8	17	55	Vermont	2	20	56
Maine	7	25	108	Virginia	5	42	200
Maryland	5	64	369	Washington	11	157	879
Massachusetts	2	1	1	West Virginia	2	5	13
Michigan	22	374	1,634	Wisconsin	56	689	3,760
Minnesota	34	238	1,456	Wyoming	2	3	7
Mississippi	4	12	35	Other States ³	3	29	166
Missouri	3	8	22	Other ⁴	7	18	89
Montana	8	36	184		—	—	—
Nebraska	14	21	124				
Nevada	5	50	418	United States	512	3,655	21,299

¹ Source: Credit Union National Association, Inc. (Includes federally chartered and State-chartered credit unions.)

² Totals may not add due to rounding.

³ Includes States with fewer than two cooperatives – Alaska, Connecticut, and Delaware.

⁴ Puerto Rico and Guam.

Appendix Table 12—Number, participation, and level of activity of dairy herd improvement associations ¹, by State, December 31, 2002 ²

State	Members (herds)	Cows tested	State	Members (herds)	Cows tested
	<i>Number</i>	<i>1,000</i>		<i>Number</i>	<i>1,000</i>
Alabama	42	7.5	Nebraska	211	30.3
Arizona	56	85.5	Nevada	17	9.9
Arkansas	63	8.4	New Hampshire	101	10.0
California	1,063	914.3	New Jersey	69	6.7
Colorado	68	44.6	New Mexico	33	57.2
Connecticut	106	12.1	New York	2,492	326.7
Delaware	36	4.4	North Carolina	226	37.0
Florida	95	63.0	North Dakota	58	6.4
Georgia	217	53.2	Ohio	1,032	108.4
Hawaii	3	2.0	Oklahoma	100	15.9
Idaho	197	129.0	Oregon	258	71.3
Illinois	579	54.8	Pennsylvania	4,481	339.4
Indiana	449	46.2	Rhode Island	6	.4
Iowa	1,115	104.7	South Carolina	77	14.9
Kansas	278	49.1	South Dakota	210	25.7
Kentucky	260	24.5	Tennessee	246	30.5
Louisiana	111	15.4	Texas	239	119.1
Maine	142	13.8	Utah	194	41.2
Maryland	394	41.1	Vermont	463	58.4
Massachusetts	108	10.8	Virginia	508	70.6
Michigan	856	144.8	Washington	241	72.0
Minnesota	2,932	262.6	West Virginia	57	6.6
Mississippi	68	10.6	Wisconsin	6,545	579.2
Missouri	448	41.1	Wyoming	3	.8
Montana	55	8.4			
			United States ³	27,784	4,232.6

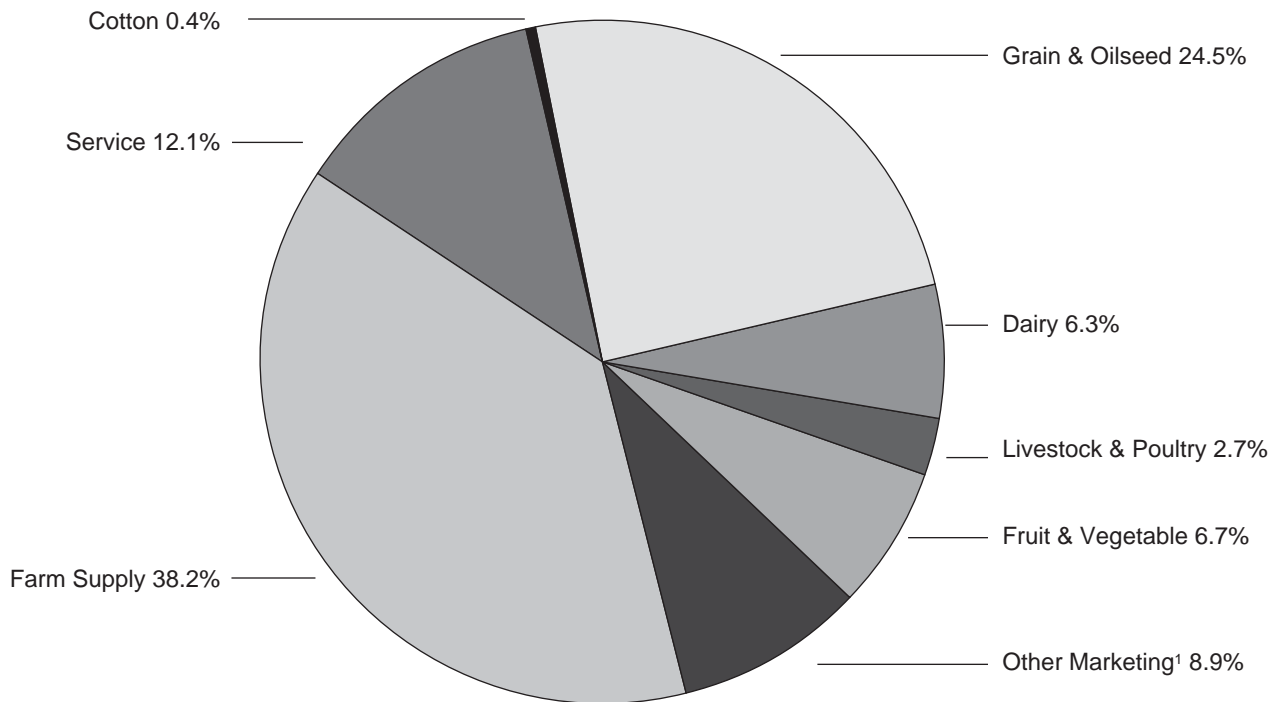
¹ Source: Agricultural Research Service, USDA.

² Totals may not add due to rounding.

³ Includes Alaska, Puerto Rico, and the Virgin Islands, with 176 members and 42,140 cows tested.

APPENDIX FIGURES

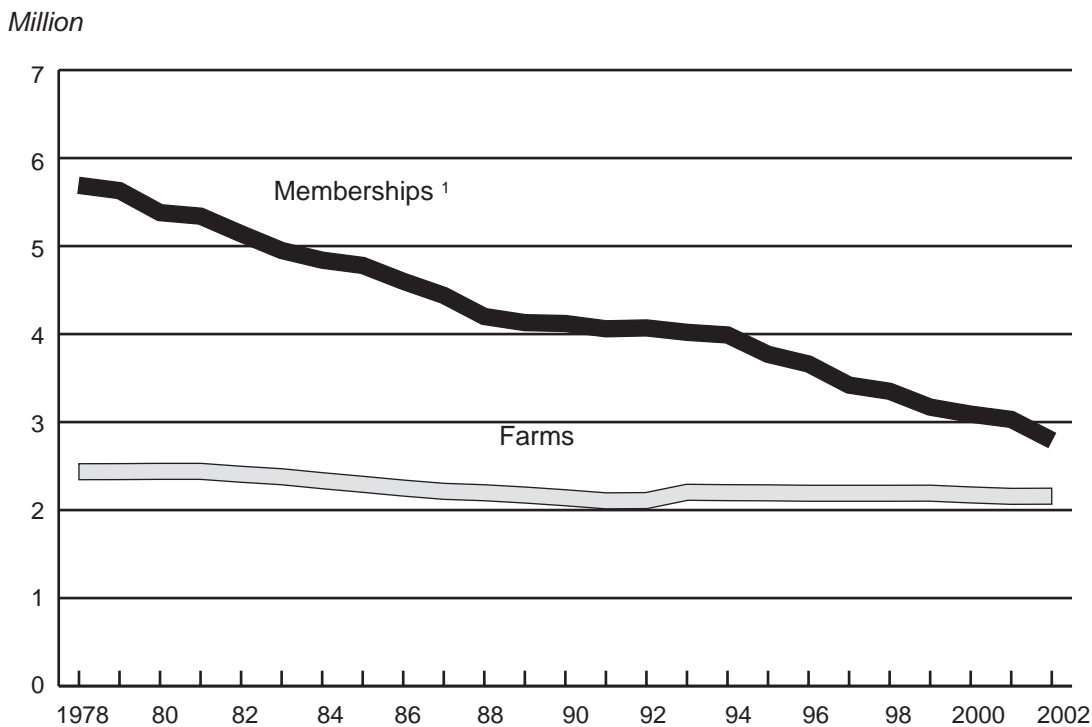
Appendix Figure 1— **Distribution of Farmer Cooperatives, by Type, 2002**



Percentages based on a total of 3,140 cooperatives.

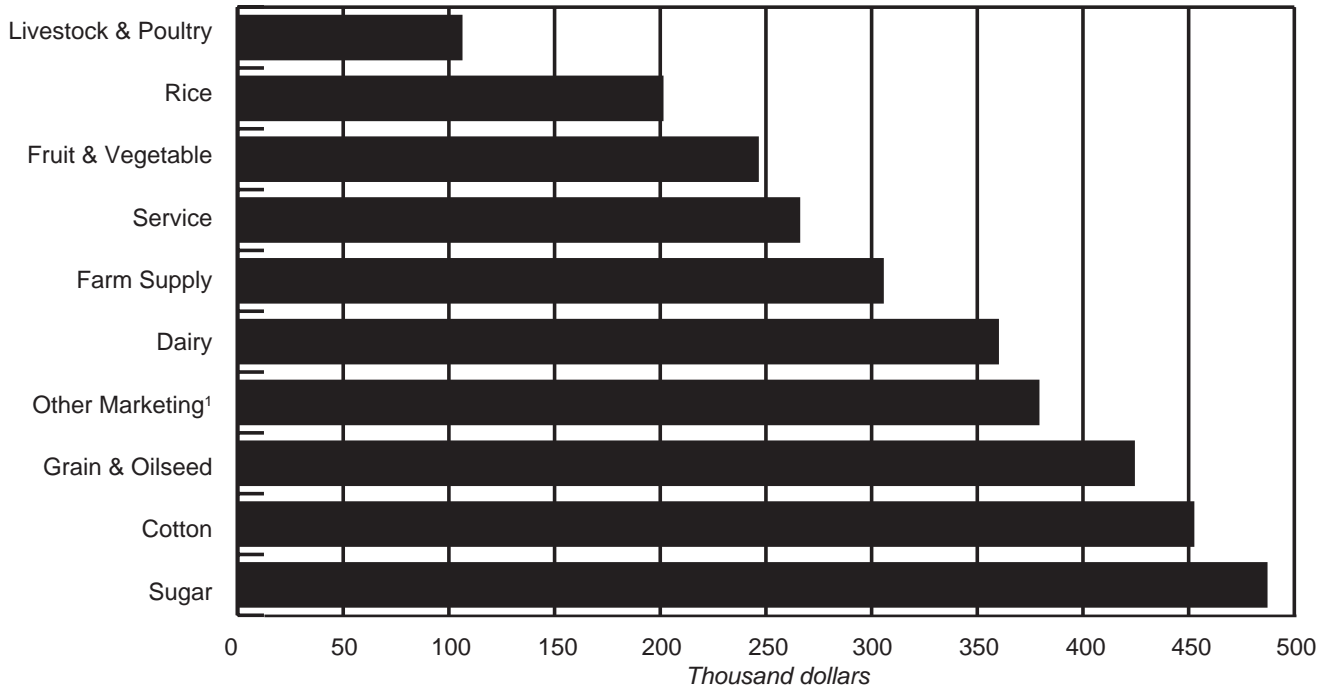
¹ Includes dry bean and pea, nut, wool and mohair, tobacco, rice, sugar, fishery, and other products marketing cooperatives.

Appendix Figure 2— **U.S. Farms and Farmer Cooperative Memberships, 1978-2002**



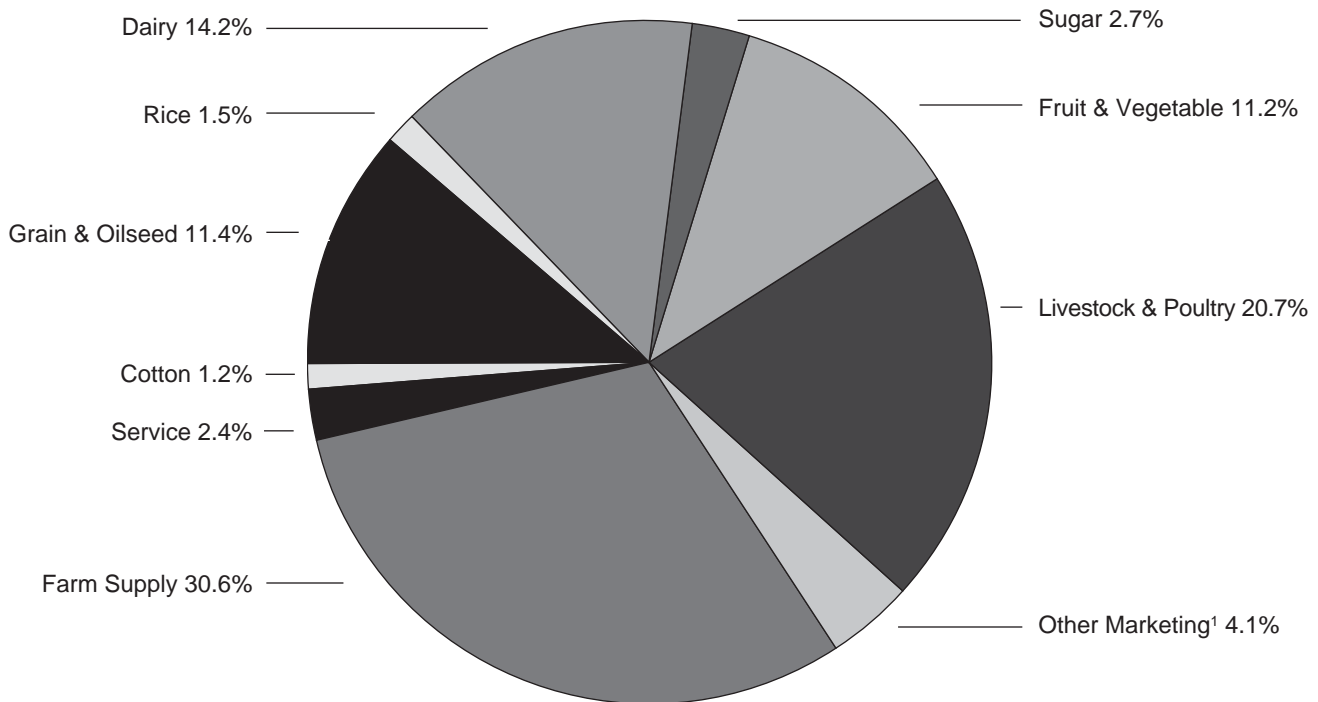
¹ Memberships were higher than farm numbers because many farmers belonged to more than one cooperative.

Appendix Figure 3— **Assets Per Full-Time Employee, by Type of Cooperative, 2002**



¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

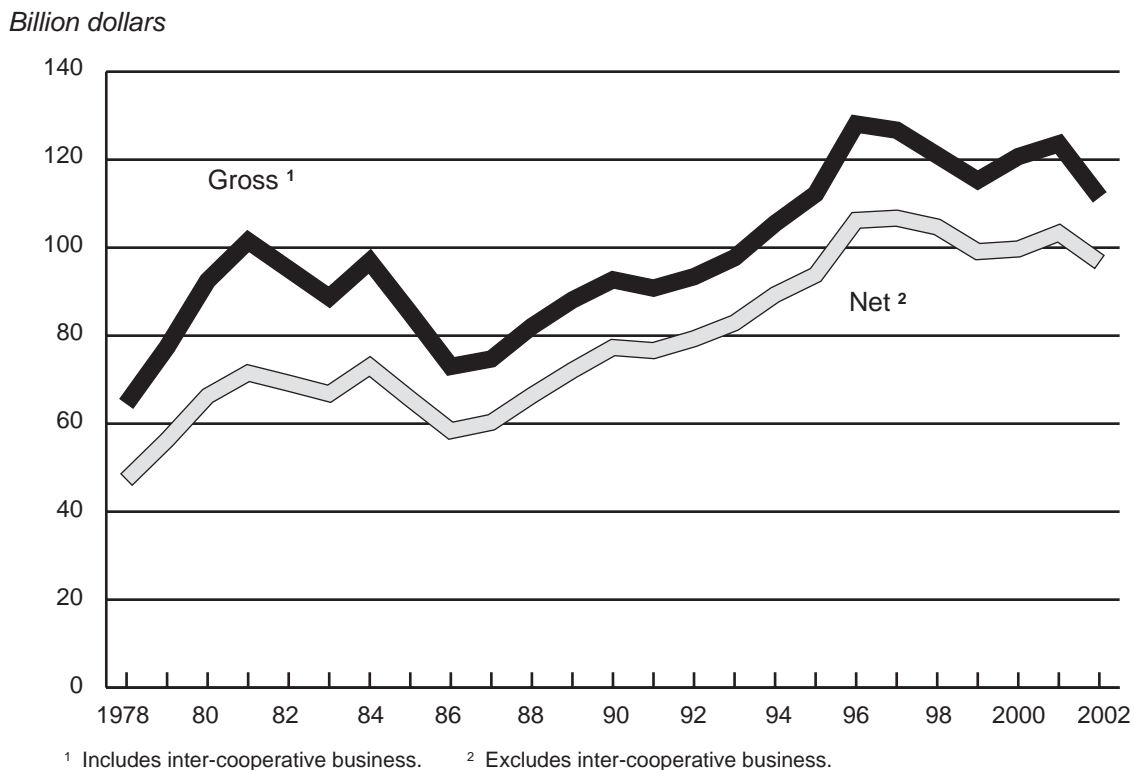
Appendix Figure 4— **Distribution of Total Full-Time Employees, by Type of Cooperative, 2002**



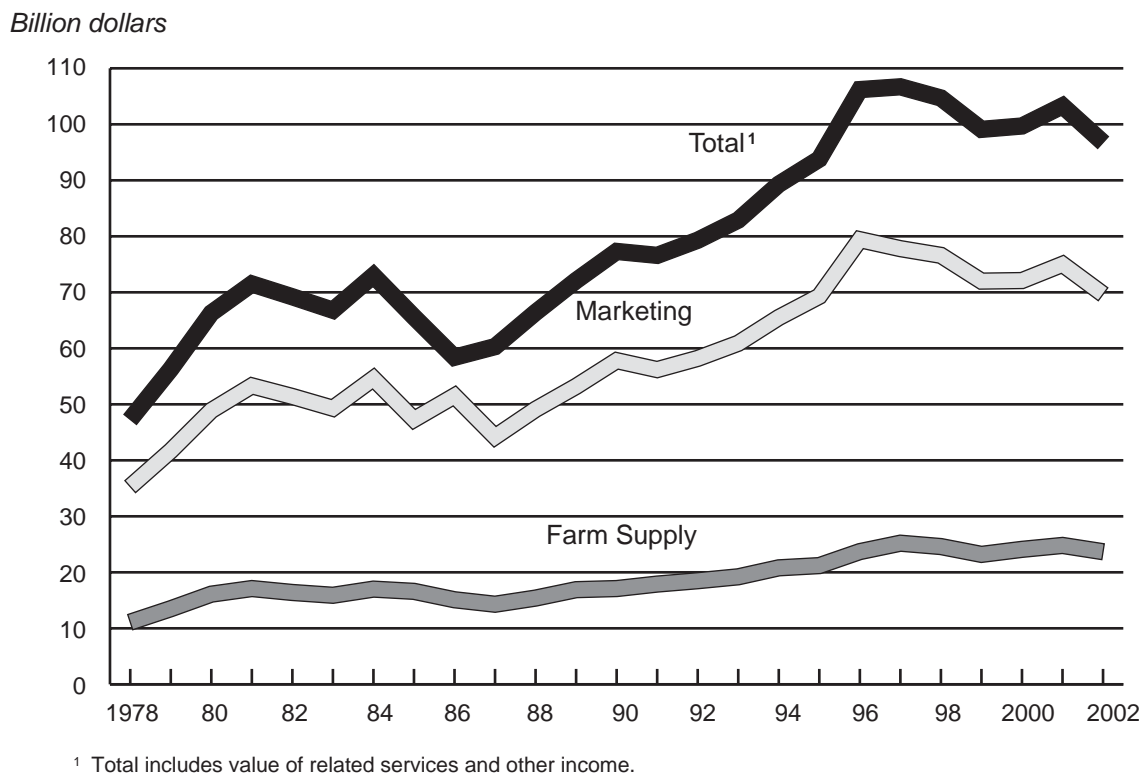
Percentages are based on a total of 166,087 full-time employees.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

Appendix Figure 5— Cooperatives' Gross and Net Business Volumes, 1978-2002

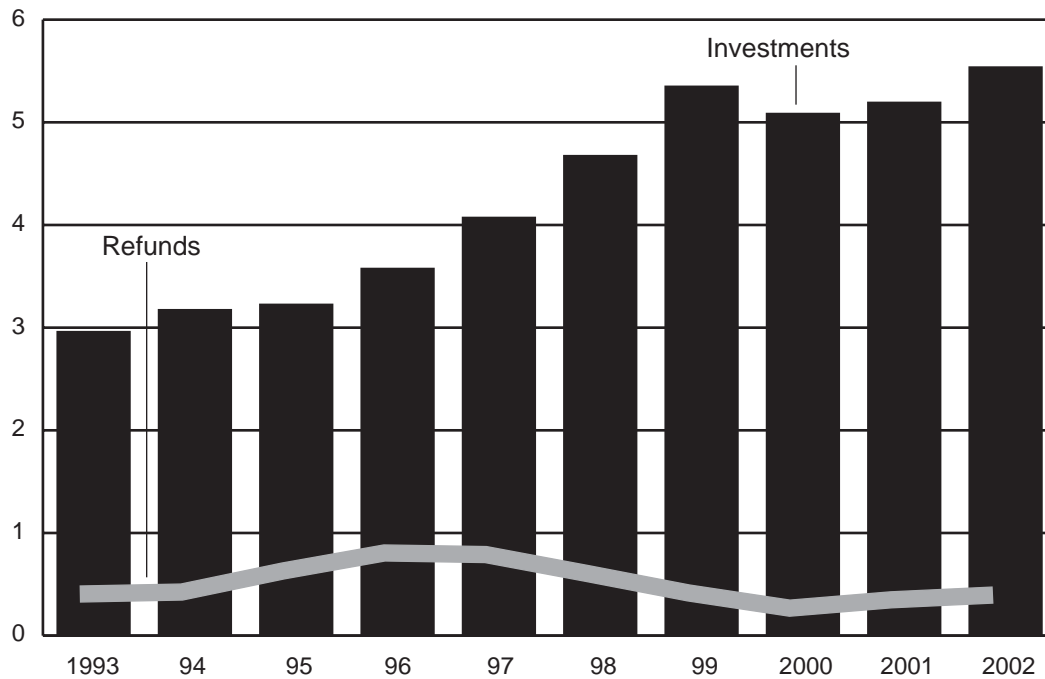


Appendix Figure 6— Cooperatives' Net Business Volume, 1978-2002



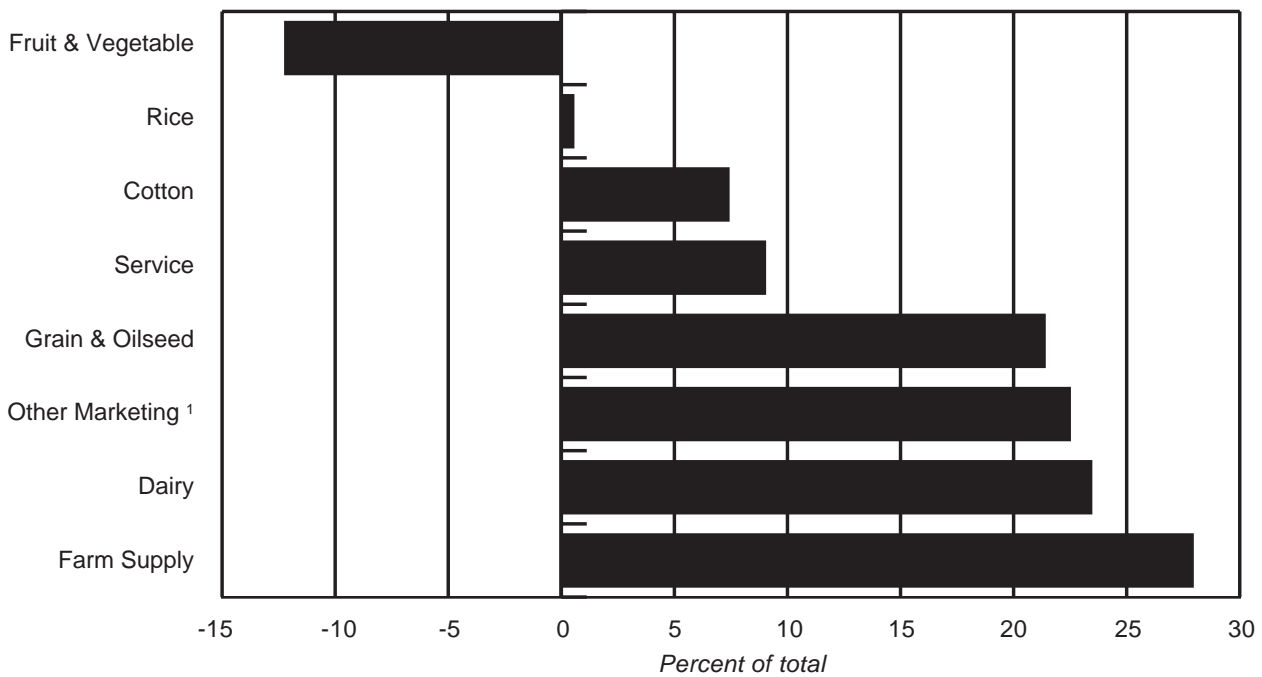
Appendix Figure 7—**Cooperatives' Investments in Other Cooperatives and Patronage Refunds Received from Other Cooperatives,¹ 1993-2002**

Billion dollars



¹ Includes other farmer cooperatives and CoBank.

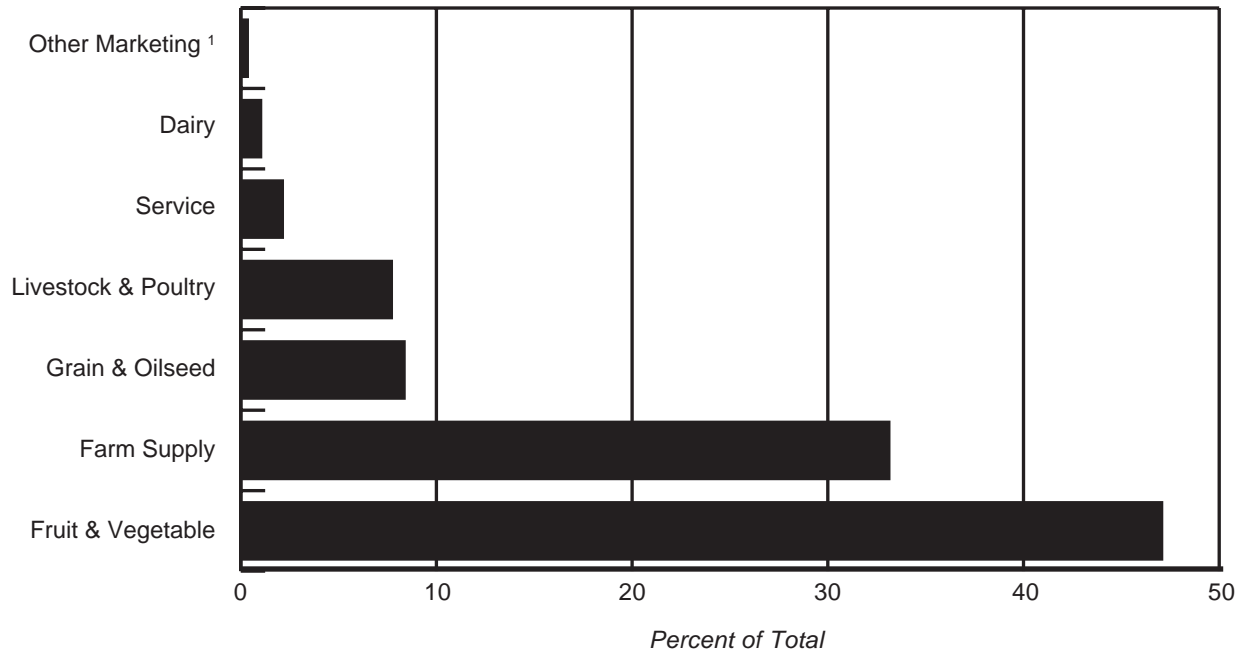
Appendix Figure 8—**Distribution of Total Net Income, by Type of Cooperative, 2002**



Percentage based on net income of \$1.21 billion.

¹ Includes dry bean and pea, livestock, poultry, nut, wool and mohair, tobacco, sugar, fishery, and other products marketing cooperatives.

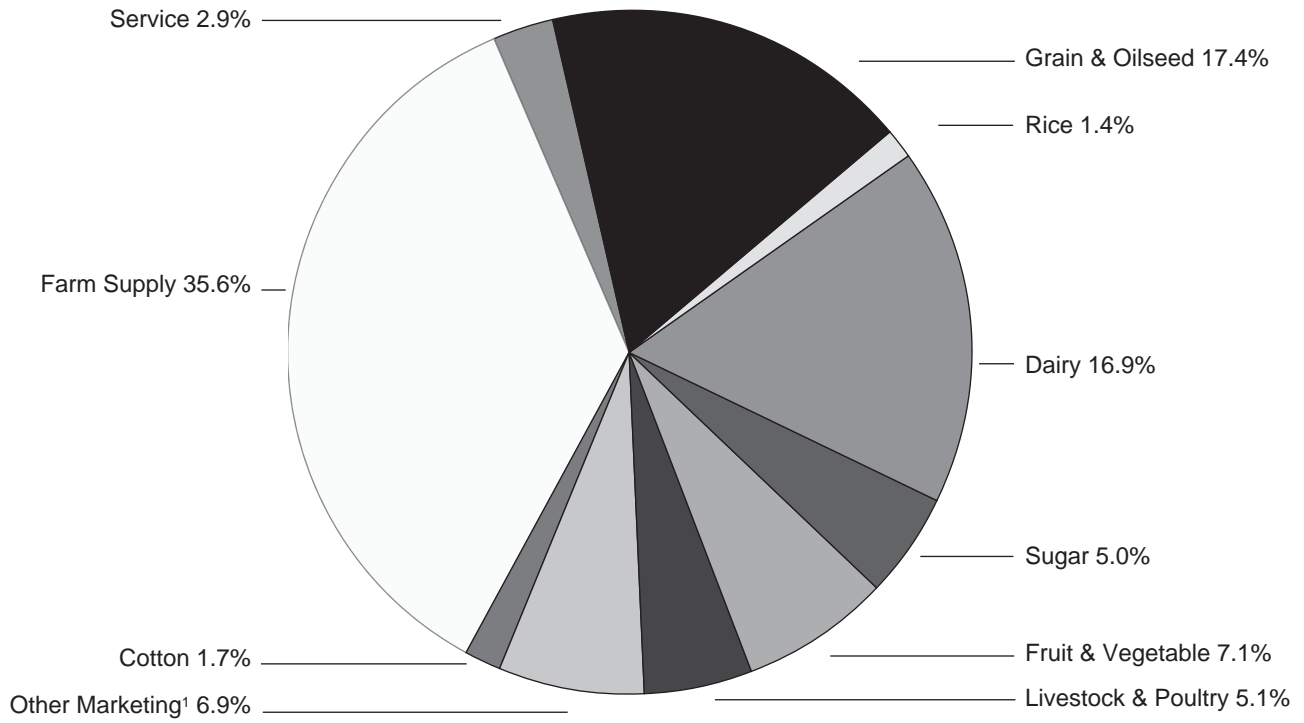
Appendix Figure 9—**Distribution of Total Losses, by Type of Cooperative, 2002**



Percentage based on losses of \$664.3 million.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, rice, sugar, fishery, and other products marketing cooperatives.

Appendix Figure 10— **Distribution of Total Net Worth, by Type of Cooperative, 2002**



Percentages are based on total net worth of \$19.6 billion.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

U.S. Department of Agriculture

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