

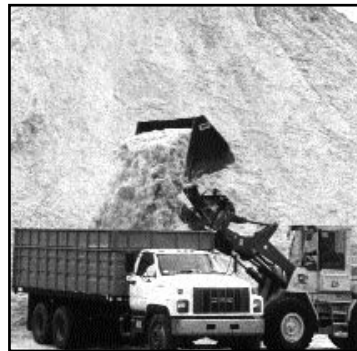


United States
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Rural Business-
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Service

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Report 60

FARMER COOPERATIVE STATISTICS, 2000



Abstract

A survey of U.S. farmer-owned cooperatives ending their business year during calendar year 2000 showed a net business volume of \$99.7 billion, up from \$99.1 billion in 1999, although net income of \$1.28 billion was down from \$1.33 billion. Gross business volume was also up for the 3,346 cooperatives surveyed. Assets and liabilities were up and net worth was about the same. Business volume by commodity handled is reported for all cooperatives. Number of cooperatives, cooperative memberships, and number of employees are classified according to marketing, farm supply, and service function. 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.

Keywords: cooperatives, statistics, business volume, employees, memberships, balance sheet, net income.

FARMER COOPERATIVE STATISTICS, 2000

Charles A. Kraenzle, Ralph M. Richardson,
Celestine C. Adams, Katherine C. DeVille,
and Jacqueline E. Penn

Rural Business-Cooperative Service, Rural Development
U.S. Department of Agriculture
STOP 3256, 1400 Independence Ave., S.W.
Washington, DC 20250-3256

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Preface

Farmer cooperative statistics are collected annually to provide information on the progress and trends in cooperatives' growth and development. These statistics are used for research, technical assistance, education, planning, and public policy. Acquiring, analyzing, and disseminating farmer cooperative statistics is 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 employees of farmer cooperatives for their business years that ended in calendar year 2000. Cooperatives are classified by principal product marketed and major function. Fishery and ethanol cooperatives are included as miscellaneous marketing cooperatives. Both gross (includes inter-cooperative business) and net (excludes inter-cooperative business) dollar volumes are reported.

Statistics for 2000 were compiled only on a national basis. State data are collected every other year and are included for 1999 in the appendix.

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' 2000 business year.

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

Statistics for all cooperatives were derived by adding data estimated for nonrespondents to respondent data. Data from respondents and other sources accounted for 90.8 percent of the total gross sales of farmer cooperatives in 2000.

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

Both gross and net business volumes increased while net income declined according to the 2000 survey of marketing, farm supply, and related-service cooperatives by USDA's Rural Business-Cooperative Service (RBS). Although the number of cooperatives and memberships declined, total assets, total liabilities, and net worth increased. The number of full-time employees increased, while the use of part-time and seasonal employees was down.

- Total gross business volume (includes inter-cooperative business) handled by cooperatives rose 4.7 percent, from \$115.3 billion in 1999 to \$120.7 billion in 2000.
- Total net business (excludes inter-cooperative business) increased slightly (0.6 percent) from \$99.1 billion to \$99.7 billion.
- Total net income of \$1.28 billion was down 3.9 percent from the \$1.33 billion for 1999. The 2000 net included inter-cooperative dividends and refunds of \$235.1 million—down 38.7 percent from \$383.5 million.
- The number of cooperatives declined 3.5 percent, from 3,466 to 3,346.
- Grain and farm supply cooperatives operated an estimated 5,327 branches in 2000, compared with 5,330 in 1999.
- Cooperative memberships were 3,085,052, down 2.8 percent from 3,173,323 in 1999.
- Cooperatives employed 176,665 full-time (up 2.2 percent) and 77,993 part-time and seasonal employees in 2000. Numbers of part-time and seasonal employees decreased significantly.
- Gross value of farm products marketed by cooperatives in 2000 decreased slightly, 0.1 percent, from \$80.5 billion to \$80.4 billion. Net value of these farm products, after eliminating duplication from inter-cooperative business, was \$72.1 billion, up 0.1 percent from nearly \$72 billion in 1999.
- Gross value of farm supplies handled by farmer cooperatives was up 19.2 percent, from \$30.9 billion to \$36.8 billion. After adjusting for inter-cooperative business, the increase was 3.9 percent, from \$23.2 billion to \$24.1 billion.
- Receipts for services related to marketing farm products and handling farm supplies, plus other income, decreased 10.1 percent, from \$3.9 billion to \$3.5 billion.
- Combined assets for all farmer cooperatives increased 4.3 percent, from \$47.7 billion to \$49.7 billion. Net assets, after eliminating inter-cooperative investments, was up 5.4 percent, from \$42.3 billion to \$44.6 billion. This included investments in CoBank.
- Total liabilities of \$29.4 billion was up 7.4 percent from \$27.4 billion.
- Net worth, or member and patron equity, rose slightly from \$20.26 billion to

Highlights

\$20.28 billion. Member and patron equity financed 40.8 percent of total assets, down from 42.5 percent in 1999

HIGHLIGHTS CAPSULE

	1999	2000	Change
Number of cooperatives	3,466	3,346	-120
Memberships	3,173,323	3,085,052	-88,271
Gross business volume (mil. dol.)	115,291	120,719	5,428
Net business volume (mil. dol.)	99,064	99,659	595
Net income (mil. dol.)	1,328	1,276	-52
Total assets (mil. dol.)	47,682	49,722	2,040
Net worth (mil. dol.)	20,263	20,275	12
Full-time employees	172,951	176,665	3,714
Part-time and seasonal employees	102,473	77,993	-24,480

Leading States	1997	1999	
Number of cooperatives	MN/368	MN/305	-63
Memberships	MN/296,058	KY/231,862	N/A
Net business volume (mil. dol.)	IA/10,941	MN/9,306	N/A

FARMER COOPERATIVE STATISTICS, 2000

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Rural Business-Cooperative Service

I-Definition of a Farmer Cooperative

The Rural Business-Cooperative Service (RBS) in 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; and (4) the cooperative operates for the mutual interest of members by providing member benefits on the basis of patronage.

These criteria may create larger or smaller numbers of farmer cooperatives than found in lists or directories of State agencies or cooperative councils. RBS includes only marketing, farm supply, and related-service cooperatives on its list. Fishery and ethanol cooperatives are included with miscellaneous marketing cooperatives. Wool pools are included as marketing cooperatives. Livestock shipping associations and rice drying cooperatives, beginning with 1992 and 1993, respectively, are considered service cooperatives.

Many State lists include other types, such as production, credit, telephone, electric, and consumer cooperatives, as well as those that do not meet RBS' definition. Other reasons for possible differences in the number of cooperatives are that: (1) RBS may not learn of certain cooperatives operating in a State for a considerable period of time; (2) a cooperative may not

have completed and returned an initial questionnaire or (3) no notice is received that a cooperative discontinued operating.

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

Classification of Cooperatives

Statistics are presented according to a cooperative's major function or classification--marketing, farm supply, and related-service.

Marketing cooperatives derive most of their total dollar volume from the sale of members' farm products. RBS classifies these cooperatives 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 were reclassified from marketing to service in 1992 and 1993, respectively.

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 types of service cooperatives, such as Farm Credit System institutions, rural credit unions, rural electric cooperatives, and dairy herd improvement associations, is presented separately.

Organizational Membership Structures

Centralized

Of the 3,346 farmer cooperatives in 2000, 3,263 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. They often 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

Federated cooperatives comprise two or more member associations organized to market farm products, purchase production supplies, or perform bargaining functions.

The 57 federated associations often operate at points quite distant from their headquarters. Members are usually local cooperatives, although some are interregional associations with regional cooperative members.

Table 1— Number of cooperatives and memberships, by major business activity, 2000

Major business activity	Number	
	Cooperatives	Memberships
Beans and peas, dry edible	8	2,835
Cotton	14	45,386
Dairy	208	96,852
Fruits and vegetables	232	41,052
Grains and oilseeds ¹	826	615,315
Livestock	74	132,136
Nuts	18	41,660
Poultry ²	19	29,166
Rice	16	12,182
Sugar ³	48	15,613
Tobacco	25	165,924
Wool and mohair	83	12,958
Miscellaneous	101	31,934
Total marketing	1,672	1,243,013
Farm supply	1,277	1,717,769
Service	397	124,270
Total	3,346	3,085,052

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

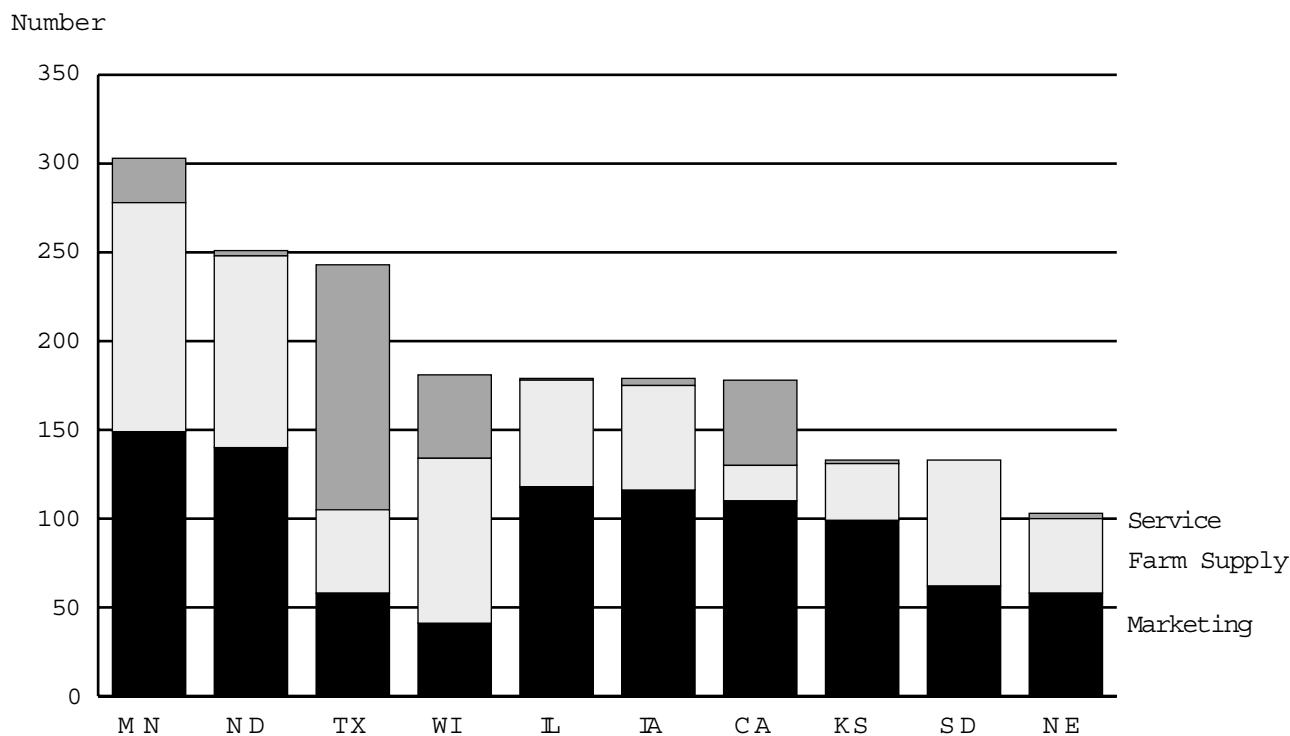
Mixed

A few 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. RBS has identified 26 such cooperatives.

II-2000 Statistics

Cooperatives' net business volume was \$99.7 billion in 2000, up slightly from \$99.1 billion in 1999. Net income of \$1.28 billion was down 3.9 percent from \$1.33 billion in 1999. Net income was the lowest since 1986, according to RBS records. Numbers of cooperatives and memberships, at 3,346 and 3,085,052, respectively, were down. Combined assets and liabilities were up. Net worth was stable.

Figure 1— Number of Cooperatives by Function, Leading States, 2000



Number of Cooperatives

The 2000 survey accounted for 3,346 marketing, farm supply, and related-service¹ cooperatives, compared with 3,466 in 1999. The net decrease of 120 associations (3.5 percent) largely reflects a continuing trend involving dissolution, merger, or acquisition. The largest decrease was in grain and oilseed (grain) cooperatives (70), followed by farm supply (36) and dairy (13) cooperatives.

Of the 3,346 cooperatives, 1,672 primarily marketed farm products, 1,277 primarily handled farm production supplies, and 397 provided services related to marketing or purchasing activities (table 1).

Marketing cooperatives decreased slightly, from 50.5 percent in 1999 to 50 percent of the total number of cooperatives in 2000, while farm supply cooperatives increased slightly, from 37.9 to 38.2 percent. Related-service cooperatives increased slightly, from 11.7 to 11.9 percent of the total.

¹ Services include 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.

These percentage changes to some extent reflect reclassification because of annual dollar volume changes. In any given year, sales of farm supplies or grains and oilseeds can be higher due to market supply and demand conditions.

Cooperative numbers by marketing and farm supply and service functions by State are shown in table 2. Minnesota had the most marketing cooperatives (148), followed closely by North Dakota (140). Texas had the most farm supply and service cooperatives.

The 10 leading States in terms of number of cooperatives by function are shown in figure 1. For example, Minnesota had about the same number of marketing and farm supply cooperatives, while the majority in Texas were service cooperatives, mainly cotton gins. Wisconsin, the fourth leading State, had the largest percentage of farm supply cooperatives.

Grain and Farm Supply Branches

Many cooperatives operate branches to better serve their members. Most are owned. Some are leased. A number are formerly independent cooperatives that served a local community. For economic or other reasons, many were acquired by or merged with

Table 2—Number of cooperatives,¹ by major function and State, 2000²

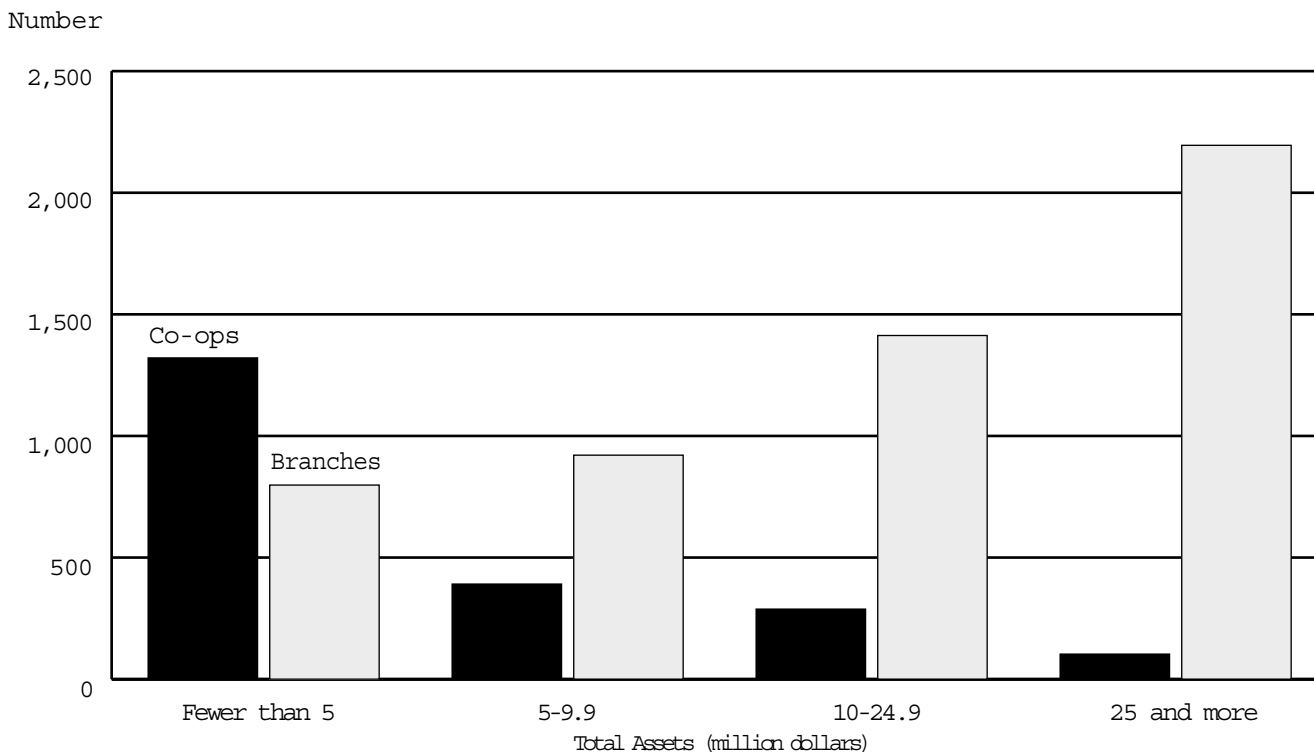
State	Major function		Total
	Marketing	Farm Supply and Service	
	Number		
Alabama	9	54	63
Arizona	5	4	9
Arkansas	11	41	52
California	110	68	178
Colorado	25	21	46
Florida	33	7	40
Georgia	8	8	16
Hawaii	18	8	26
Idaho	24	14	38
Illinois	116	63	179
Indiana	20	32	52
Iowa	118	61	179
Kansas	99	34	133
Kentucky	14	28	42
Louisiana	17	31	48
Maryland	4	14	18
Massachusetts	8	5	13
Michigan	35	27	62
Minnesota	148	154	302
Mississippi	15	58	73
Missouri	19	47	66
Montana	36	32	68
Nebraska	58	45	103
New Jersey	13	3	16
New Mexico	4	5	9
New York	81	14	95
North Carolina	18	6	24
North Dakota	140	111	251
Ohio	51	27	78
Oklahoma	41	48	89
Oregon	18	15	33
Pennsylvania	41	14	55
South Dakota	62	71	133
Tennessee	8	71	79
Texas	59	185	244
Utah	10	7	17
Virginia	20	39	59
Washington	48	34	82
West Virginia	13	13	26
Wisconsin	41	140	181
Wyoming	7	5	12
Other States ³	47	10	57
United States	1,672	1,674	3,346

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

² Data covering operations of cooperatives for fiscal years that ended in 2000.

³ Includes States with fewer than three cooperatives for any function. States with at least three cooperatives were: Alaska, 9; Connecticut, 4; Delaware, 3; Maine, 27; South Carolina, 5; and Vermont, 5.

Figure 2— Branches of Grain and Farm Supply Cooperatives, by Size, 2000



other cooperatives and operated as branches from which to serve members and patrons at outlying locations.

In 2000, grain and farm supply cooperatives operated an estimated 5,327 branches—1,915 and 3,412, respectively. There were 248 fewer grain cooperatives branches and 245 more farm supply cooperatives branches. Grain cooperatives averaged 2.3 and farm supply cooperatives averaged 2.7 branches per cooperative in 2000. In 1999, grain and farm supply cooperatives operated an estimated 5,330 branches.

Figure 2 shows that several of the largest cooperatives (mainly regional) had more branches than many smaller (local) cooperatives combined. The 59 largest grain cooperatives—7.1 percent of all grain cooperatives—accounted for 27 percent of the total number of branches operated by grain cooperatives. The 44 largest farm supply cooperatives—3.5 percent of all farm supply cooperatives—had 1,678 branches, 49.2 percent of all farm supply branches.

Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled an estimated 3,085,052 in 2000, down 2.8 percent from 3,173,323 in 1999.

By major business activity, 55.7 percent and 20 percent were memberships of farm supply (figure 3) and grain cooperatives, respectively. Dairy cooperative memberships (96,852) were only 3.1 percent of total memberships, but accounted for 22.8 percent, or \$22.7 billion, of cooperatives' net business volume in 2000, down from 26.2 percent in 1999.

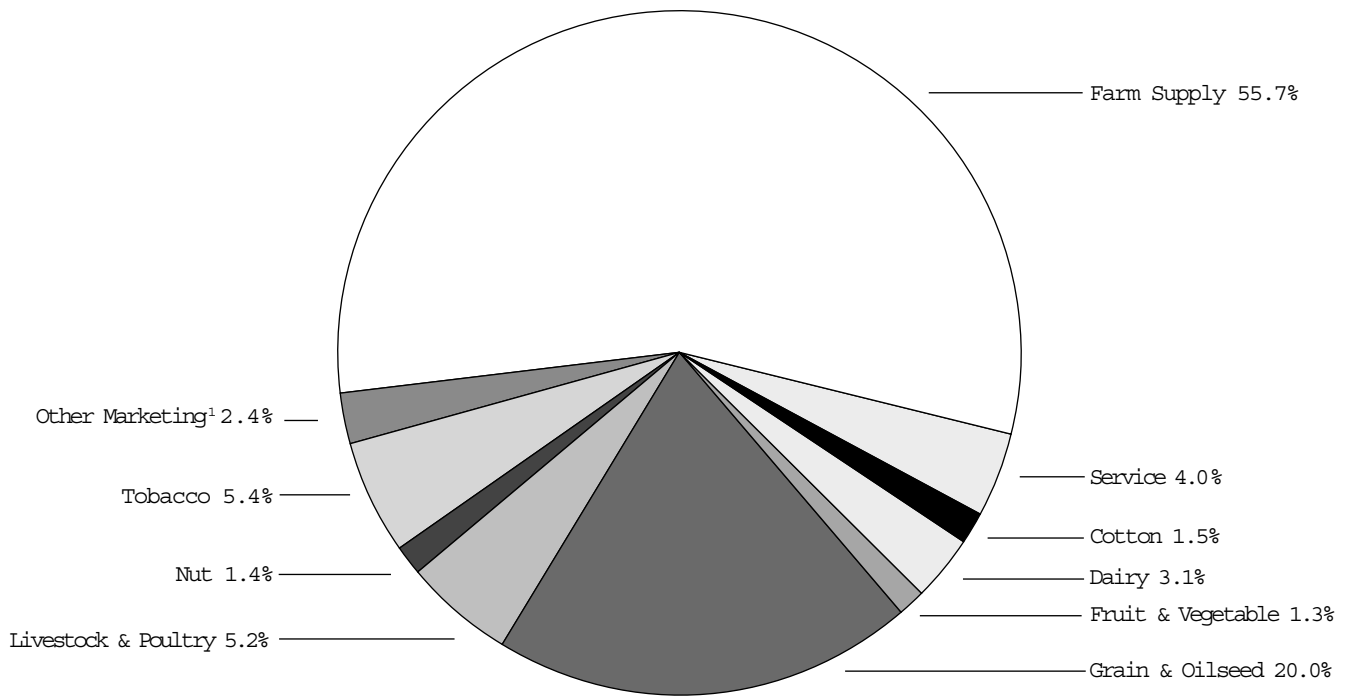
The largest proportions of memberships in farm supply cooperatives were among the smallest and largest cooperatives (figure 4). Memberships in marketing cooperatives were the greatest proportion of total memberships among those cooperatives with gross business volumes of \$15 million to \$100 million.

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 2000, farmer cooperatives employed an estimated 254,658 full-time and part-time and seasonal employees, down from 275,424 in 1999 (table 3). By type, marketing cooperatives had 171,257 employees

Figure 3- Distribution of Memberships, by Type of Cooperative, 2000



Percent based on 3,085,052 total memberships.

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

Figure 4- Cooperative Memberships Grouped by Function and Gross Business Volume, 2000

1,000 Memberships

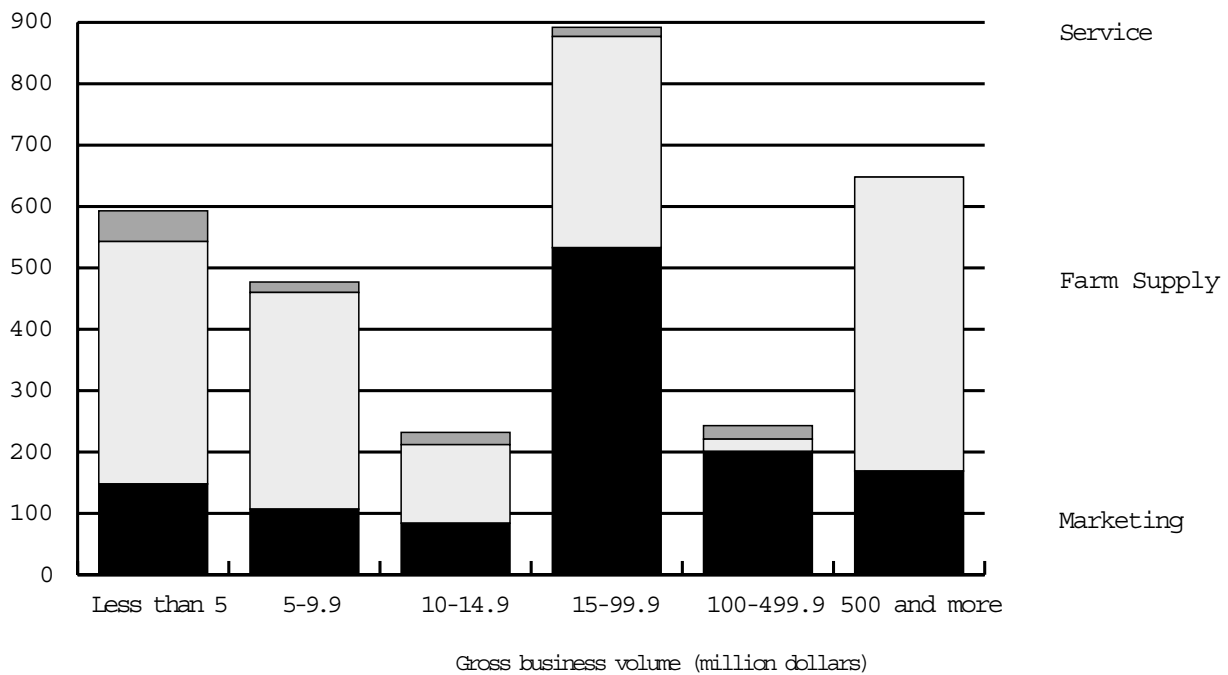


Table 3- Full-time and part-time and seasonal employees of farmer cooperatives, by type of co-op, 1999-2000

Principal product(s) marketed or major function	Full-time employees		Part-time and seasonal ¹	
	1999	2000	1999	2000
	Number			
Products marketed:				
Cotton	1,787	1,759	1,409	1,138
Dairy	24,598	23,408	1,875	906
Fruits & vegetables	23,329	25,108	48,004	31,708
Grains and oilseeds, excluding cottonseed	20,998	20,309	7,916	7,238
Livestock and poultry	32,690	34,592	2,666	2,289
Rice	2,600	2,606	1,443	572
Sugar	4,459	4,523	4,431	4,364
Other products ²	<u>8,525</u>	<u>8,831</u>	<u>6,190</u>	<u>1,906</u>
Marketing	118,986	121,136	73,934	50,121
Farm supply	49,466	51,321	20,774	18,701
Service	<u>4,499</u>	<u>4,208</u>	<u>7,765</u>	<u>9,171</u>
Total	172,951	176,665	102,473	77,993

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 Includes dry edible beans and peas, nuts, tobacco, wool, fishery, and miscellaneous marketing cooperatives.

(67.2 percent of total); farm supply cooperatives had 70,022 (27.5 percent); and related-service cooperatives had 13,379 (5.3 percent).

Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (56,816), followed by livestock and poultry (36,881) and grain and oilseed (27,547).

Figure 5 shows the number of full-time and part-time and seasonal employees by type of cooperative for 2000. Farm supply and fruit and vegetable cooperatives used the most employees and cotton cooperatives the fewest. Dairy cooperatives had the smallest proportion of total part-time and seasonal employees. Fruit and vegetable cooperatives, followed by cotton gins and sugar cooperatives, had the largest proportion of part-time and seasonal employees.

Full-time employees totaled 176,665 in 2000, up from 172,951 in 1999 (2.2 percent). The number per association, however, was nearly 52.8, up from 50 in 1999, due to fewer cooperatives. The 1,672 marketing cooperatives employed 121,136 persons, up 1.8 percent from 1999. Livestock and poultry cooperatives, with 34,592, had the most full-time employees, while the

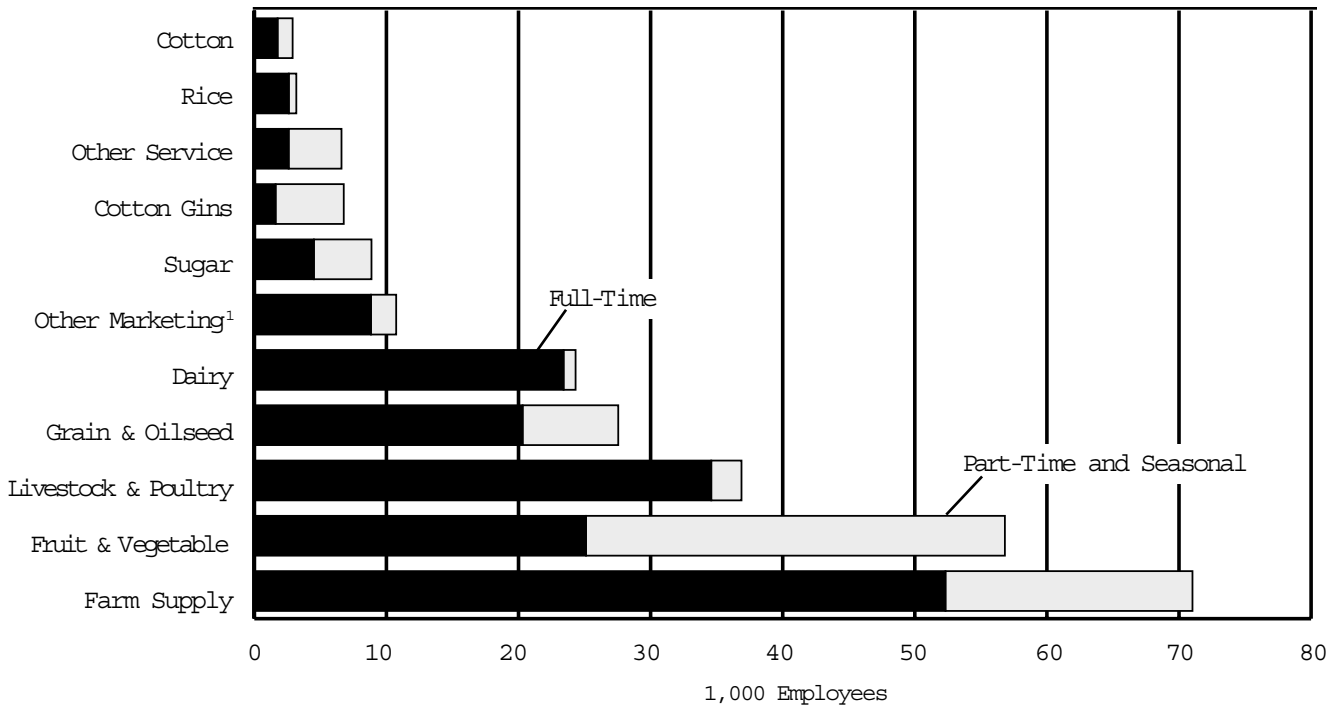
25,108 fruit and vegetable cooperatives ranked second. Together, they accounted for 49.3 percent of the full-time employees of marketing cooperatives.

The 1,277 farm supply cooperatives hired 51,321 full-time employees, up 3.8 percent from 49,466 reported by 1,313 farm supply cooperatives for 1999. Full-time employees of the 397 related-service cooperatives totaled 4,208 in 2000, down from 4,499, or nearly 6.5 percent, from 404 related-service cooperatives in 1999.

Cooperatives used 77,993 part-time and seasonal employees in 2000, down 24,480, or 23.9 percent, from 1999. The largest decrease was in fruit and vegetables cooperatives, down 16,296. Related-service cooperatives increased their use of part-time and seasonal employees.

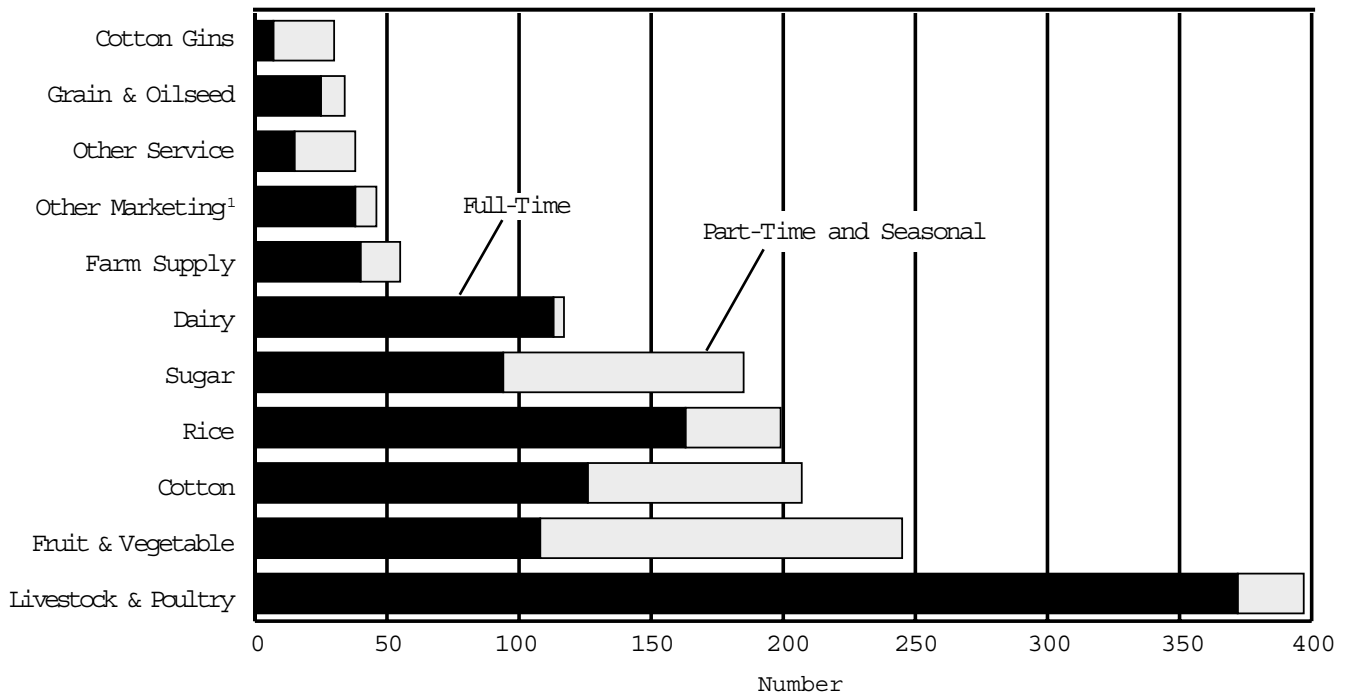
In 2000, marketing cooperatives reported 50,121 part-time and seasonal employees, or 64.3 percent of the total. Number per cooperative averaged nearly 30. Fruit and vegetable and grain cooperatives, with 38,946, accounted for 50 percent of the total. Farm supply cooperatives had 18,701 part-time and seasonal employees, an average of 15.

Figure 5- Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 2000



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

Figure 6- Average Number of Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 2000



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

Most types of marketing cooperatives operated with more employees than did farm supply cooperatives. For example, livestock and poultry cooperatives averaged nearly 397 employees (figure 6).

Total Labor Expenses

Like 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, etc.

The average total labor expense per cooperative for those reporting in both 1999 and 2000 is shown in tables 4 and 5 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. For those where no size grouping is shown, labor expense may not be a good barometer because of the mix of sizes included in the group.

Overall, total labor expense for the cooperatives reporting total wages and benefits both years was up 8 percent. The average total labor expense varied from 1999 to 2000 (table 4). The change ranged from a 33.5-percent decrease for miscellaneous marketing cooperatives to an increase of 45.8 percent for fruit and vegetable processing cooperatives. As expected, the average total labor expense increased as size of cooperative increased, especially for dairy, fruit and vegetable and cotton gins. Average total labor expenses for cooperatives involved in processing or manufacturing activities would be expected to be high.

Average total labor expense for grain and oilseed and farm supply cooperatives, by region and size, is shown in table 5.

Total Sales per Dollar of Total Labor Expense

One measure of labor productivity is the relationship between total sales and total labor expense. Tables 6 and 7 show total sales per dollar of total labor expense by type, region, and size of cooperative, where applicable.

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. Surveyed cooperatives reported the value of the product for which they bargained or

which they auctioned off. Total sales per dollar of total labor expense was down 4.1 percent from \$13.20 in 1999 to \$12.66 in 2000.

Livestock cooperatives accounted for the highest sales per dollar of labor expense, \$80.69 in 2000 (table 6). Other service cooperatives with assets of \$0.5 million to \$0.99 million had the lowest sales per dollar of labor expense, \$2.62.

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 \$27.79 to \$59.82 in 2000; fruit and vegetable cooperatives from \$9.09 to \$50.83; grain and oilseed cooperatives from \$16.84 to \$28.10; and farm supply cooperatives ranged from \$9.40 to \$11.88.

Total sales per dollar of total labor expense for grain and oilseed and farm supply cooperatives by region is shown in table 7. This information was provided because more homogeneity exists among cooperatives by location than by type.

Total sales per \$1 of total labor expense varied by size, region, and year. Among the regions, grain and oilseed cooperatives in the Pacific with assets of \$1.0 million to \$2.5 million had the largest sales per \$1 total labor expense both in 1999 and 2000. The largest sales per \$1 total labor expense among farm supply cooperatives was reported by those with total assets of less than \$0.5 million in the Corn Belt in both 1999 and 2000. In most regions, the sales per \$1 of total labor expense did not vary significantly among the farm supply cooperatives.

Cooperative leaders may want to calculate their total sales per dollar of total labor expense and compare it with the appropriate figure in table 6 to see how well their cooperative is performing.

Business Size

Most farmer cooperatives, as measured by annual gross business volume, are relatively small and serve local areas. Some are actively seeking regional, national, and even international markets to increase business volume. These larger cooperatives account for much of cooperatives' business volume.

The increased size comes partly from mergers, consolidations, and acquisitions. Data used were not adjusted for changes in price levels. Some size changes resulted from inflation.

In 2000, 76 percent of all farmer cooperatives reported a business volume of less than \$15 million. However, they accounted for only 9.3 percent of the total gross dollar volume, down from 10.2 percent in

Table 4—Average total labor expense for cooperatives reporting, by selected type and size, 1999–2000

Type of co-op and asset group (Mil. Dol.)	Average total labor expense ¹		Change
	1999	2000	
	-----\$1,000-----		
			Percent
Dry bean and pea	2,392.5	3,355.4	40.2
Cotton	3,968.8	4,774.9	20.3
Less than 25.0	1,039.9	1,044.8	0.5
25.0 and more	7,629.9	9,437.6	23.7
Dairy	2,599.6	2,800.8	7.7
Less than 0.5	83.4	78.9	-5.4
0.5 - .99	91.1	89.6	-1.6
1.0 - 2.49	173.6	169.7	-2.3
2.5 - 24.99	1,382.2	1,612.6	16.7
25.0 - 99.99	11,203.1	11,831.1	5.6
Fruit and vegetable	1,968.1	2,022.9	2.8
Less than 0.5	127.9	121.3	-5.2
0.5 - .99	226.0	244.1	8.0
1.0 - 2.49	655.9	646.2	-1.5
2.5 - 24.99	2,625.3	2,838.6	8.1
25.0 - 99.99	7,683.6	7,644.4	-0.5
Fruit and vegetable	1,968.1	2,022.9	2.8
Fresh only	1,999.6	1,986.3	-0.7
Processed only	1,313.3	1,915.2	45.8
Fresh and processed	2,184.0	2,350.4	7.6
Grain and oilseed	1,219.9	1,315.1	7.8
Less than 0.5	28.8	26.3	-8.6
0.5 - .99	128.5	131.1	2.0
1.0 - 2.49	206.1	212.7	3.2
2.5 - 24.99	1,035.6	1,097.2	6.0
25.0 - 499.99	4,085.6	4,532.1	10.9
Livestock	1,170.1	1,245.8	6.5
Poultry	99,479.5	123,743.6	24.4
Sugar	22,741.6	24,206.0	6.4
Tobacco	156.1	137.7	-11.8
Fishery	1,861.7	1,712.7	-8.0
Miscellaneous marketing	6,069.4	4,039.0	-33.5
Farm supply	1,304.2	1,373.7	5.3
Less than 0.5	81.1	81.3	0.3
0.5 - .99	183.3	191.1	4.4
1.0 - 2.49	322.8	338.2	4.8
2.5 - 24.99	1,360.8	1,419.3	4.3
25.0 - 99.99	5,249.8	5,509.3	4.9
100.0 - 499.99	25,452.2	28,015.0	10.1
Cotton gin	523.4	560.0	7.0
Less than 0.5	179.7	188.8	5.1
0.5 - .99	182.6	202.5	11.0
1.0 - 2.49	309.5	338.5	9.4
2.5 - 99.99	959.7	1,017.9	6.1
Service	956.8	1,050.1	9.8
Less than 0.5	132.7	139.1	4.8
0.5 - .99	392.0	425.9	8.6
1.0 - 2.49	492.3	451.1	-8.4
2.5 - 99.99	2,370.0	2,642.0	11.5

¹ Includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years.

Table 5- Average total labor expense for grain and oilseed and farm supply cooperatives, by region and size, 1999-2000

Type of co-op, region and asset group (Mil. Dol.)	Average total labor expense ¹		Change
	1999	2000	
	-----\$1,000-----		
Grain and Oilseed Cooperatives:			
Corn Belt	1,478.8	1,561.1	5.6
Less than 1.0	184.8	179.4	-2.9
1.0 - 2.49	225.5	237.4	5.3
2.5 - 24.99	1,163.9	1,194.8	2.7
25.0 - 499.99	4,790.1	5,235.1	9.3
Lake States	1,251.1	1,367.6	9.3
0.5 - 2.49	178.0	159.4	-10.5
2.5 - 24.99	876.8	900.2	2.7
25.0 - 499.99	3,599.8	4,201.6	16.7
Mountain	882.6	940.6	6.6
Northern Plains	1,117.8	1,188.9	6.4
Less than 1.0	110.3	116.9	6.0
1.0 - 2.49	199.8	203.0	1.6
2.5 - 24.99	1,016.9	1,074.5	5.7
25.0 - 99.99	4,021.1	4,344.0	8.0
Southern Plains	565.0	616.6	9.1
Less than 1.0	93.4	93.5	0.1
1.0 - 2.49	186.0	195.6	5.2
2.5 - 99.99	890.3	977.8	9.8
Pacific	1,063.0	1,112.5	4.7
1.0 - 2.49	169.2	161.8	-4.4
2.5 - 99.99	1,331.2	1,397.7	5.0
Farm Supply Cooperatives:			
Appalachian	876.3	961.5	9.7
Less than 1.0	169.1	183.3	8.4
1.0 - 2.49	377.9	404.9	7.1
2.5 - 24.99	1,176.6	1,295.4	10.1
Corn Belt	2,362.5	2,425.4	2.7
Less than 0.5	66.6	68.6	3.0
0.5 - .99	196.6	201.3	2.4
1.0 - 2.49	393.0	402.2	2.3
2.5 - 24.99	1,737.7	1,809.2	4.1
25.0 - 499.99	12,989.8	13,133.8	1.1
Delta States	593.7	633.0	6.6
Less than 1.0	162.9	161.1	-1.1
1.0 - 2.49	351.0	381.1	8.6
2.5 - 24.99	861.7	918.0	6.5

Continued

Table 5- Average total labor expense for grain and oilseed and farm supply cooperatives, by region and size, 1999-2000 (continued)

Type of co-op, region and asset group (Mil. Dol.)	Average total labor expense ¹		Change
	1999	2000	
	-----\$1,000-----		Percent
Lakes States	1,358.8	1,404.5	3.4
Less than 0.5	86.4	79.6	-7.9
0.5 - .99	193.3	194.8	0.8
1.0 - 2.49	337.4	344.6	2.1
2.5 - 24.99	1,400.6	1,448.1	3.4
25.0 - 99.99	5,446.5	5,648.6	3.7
Mountain	957.6	1,044.1	9.0
Less than 1.0	109.2	115.3	5.6
1.0 - 2.49	348.0	351.3	0.9
2.5 - 24.99	1,232.1	1,350.4	9.6
Northeast	638.9	672.8	5.3
Less than 1.0	219.6	254.1	15.7
1.0 - 2.49	848.5	882.1	4.0
Northern Plains	673.7	713.4	5.9
Less than 0.5	89.2	94.4	5.9
0.5 - .99	153.8	158.0	2.7
1.0 - 2.49	261.1	274.0	4.9
2.5 - 24.99	915.6	959.0	4.7
25.0 - 99.99	4,390.0	4,981.1	13.5
Pacific	1,872.9	1,857.6	-0.8
0.5 - 2.49	324.0	358.0	10.5
2.5 - 24.99	2,561.3	2,524.1	-1.5
Southeast	285.1	312.5	9.6
Less than 1.0	136.6	137.9	1.0
1.0 - 2.49	216.6	253.5	17.0
2.5 - 24.99	484.9	531.3	9.6
Southern Plains	634.1	660.4	4.2
Less than 0.5	102.5	102.4	-0.1
0.5 - .99	240.8	256.6	6.6
1.0 - 2.49	280.2	286.9	2.4
2.5 - 24.99	1,224.2	1,279.8	4.6

¹ Includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years.

Note: The average total labor expense is derived by dividing total wages and benefits by the number of cooperatives where the information was provided.

Table 6- Total sales per dollar of total labor expense for cooperatives reporting, by selected type and size, 1999-2000

Type of co-op and asset group (Mil. Dol.)	Sales per \$1 labor expense ¹		Change
	1999	2000	
	Dollars		
Dry bean and pea	14.95	11.01	-26.4
Cotton	42.40	48.19	13.7
Less than 25.0	39.95	38.03	-4.8
25.0 and more	42.82	49.59	15.8
Dairy	40.73	35.25	-13.5
Less than 0.5	53.79	46.85	-12.9
0.5 - .99	28.84	27.79	-3.6
1.0 - 2.49	66.15	59.82	-9.6
2.5 - 24.99	50.01	39.04	-21.9
25.0 - 99.99	37.76	33.69	-10.8
Fruit and Vegetable	13.95	12.34	-11.5
Less than 0.5	32.55	31.99	-1.7
0.5 - .99	14.16	13.23	-6.6
1.0 - 2.49	65.07	50.83	-21.9
2.5 - 24.99	11.68	10.31	-11.7
25.0 - 99.99	9.34	9.09	-2.7
Fruit and Vegetable	13.95	12.34	-11.5
Fresh only	13.86	12.12	-12.6
Processed only	26.14	18.43	-29.5
Fresh and processed	9.64	10.37	7.6
Grain and oilseed	20.98	20.92	-0.3
Less than 0.5	30.19	26.40	-12.5
0.5 - 0.99	19.06	16.84	-11.6
1.0 - 2.49	29.18	28.10	-3.7
2.5 - 24.99	20.22	19.92	-1.5
25.0 - 499.99	21.55	21.90	1.6
Livestock	77.50	80.69	4.1
Poultry	6.70	5.34	-20.3
Sugar	8.71	7.77	-10.9
Tobacco	66.89	67.60	1.1
Wool	6.69	6.13	-8.3
Fishery	7.78	7.33	-5.7
Miscellaneous marketing	4.87	6.93	42.2
Farm Supply	10.24	10.60	3.5
Less than 0.5	11.07	11.59	4.7
0.5 - .99	8.75	9.40	7.4
1.0 - 2.49	9.86	10.19	3.3
2.5 - 24.99	9.70	10.25	5.7
25.0 - 99.99	10.20	10.84	6.3
100.0 - 499.99	12.63	11.88	-6.0

Continued

Table 6— Total sales per dollar of total labor expense for cooperatives reporting, by selected type and size, 1999-2000 (continued)

Type of co-op and asset group (Mil. Dol.)	Sales per \$1 labor expense ¹		Change
	1999	2000	
	Dollars		
Cotton gin	7.65	7.55	-1.4
Less than 0.5	5.21	4.71	-9.4
0.5 - .99	7.06	6.70	-5.2
1.0 - 2.49	6.37	6.10	-4.1
2.5 - 99.99	8.17	8.16	-0.1
Other service	2.78	2.78	-
Less than 0.5	2.97	2.76	-7.1
0.5 - .99	3.31	2.62	-20.7
1.0 - 2.49	3.16	3.55	12.2
2.5 - 99.99	2.70	2.75	1.7

¹ 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.

1999 (table 8 and figure 7). Only 2.2 percent of farmer cooperatives reported a business volume of at least \$200 million, but they accounted for 66.2 percent of the total sales, up from 64.7 percent in 1999. Cooperatives with a business volume in the range of \$15 million to \$200 million in 1999 accounted for a smaller share of all cooperatives' total gross dollar volume. In 2000, they accounted for 24.5 percent compared with 25.1 percent in 1999.

Business Volume

Total gross business volume of the 3,346 marketing, farm supply, and related-service cooperatives for 2000 was \$120.7 billion (table 9), up 4.7 percent from \$115.3 billion in 1999. Cooperatives' gross business volume peaked at \$128.1 billion in 1996.

Total net business volume of farmer cooperatives in 2000 was \$99.7 billion—\$72.1 billion from farm products marketed, \$24.1 billion from farm supply sales, and \$3.5 billion from services performed and from other income sources. The total net figure, excluding inter-cooperative business, was up slightly (0.6 percent) from \$99.1 billion in 1999. Cooperatives' net business volume reached a high of \$106.7 billion in 1997.

However, adjusting for price change, net business volume actually decreased 2 percent,² due to lower commodity prices in 2000.

Gross dollar volume of farm products marketed by cooperatives decreased slightly (0.1 percent), from \$80.5 billion in 1999 to \$80.4 billion in 2000. The net volume of farm products marketed was up 0.1 percent from 1999, from \$72 billion to \$72.1 billion. Net marketing business volume accounted for 72.3 percent of the total in 2000.

Figure 8 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy (milk and milk products) led with 31.5 percent, followed by grains and oilseeds (excluding cottonseed) with 25.5 percent, and fruits and vegetables with 13.3 percent. The proportions of grain and oilseeds and fruit and vegetables were up compared with 1999, while milk and milk products dropped.

Gross volume of all farm supplies handled by cooperatives was \$36.8 billion, up 19.2 percent from \$30.9 billion in 1999. Net farm supply volume of \$24.1 billion, up 3.9 percent from \$23.2 billion, accounted for 24.2 percent of the total net business volume.

The leading farm production supplies handled by cooperatives in terms of net business volume were petroleum, 31 percent; feed, 19.5; and fertilizer, 19 percent (figure 9). While sales of seed, petroleum, and crop protectants increased in 2000, feed, fertilizer and "other" supplies were down 3.5 percent.

Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus

² Deflated 2000 cooperative business volume was \$97.7 billion, down 2 percent from the actual \$99.7 billion in 2000. The \$97.7 billion was derived by deflating farm products marketed by the index of prices received for all farm products and farm supplies (inputs) and service income by the index of prices paid by farmers for all production items adjusted for 1999 = 100.

Table 7- Total sales per dollar of total labor expense for grain and oilseed and farm supply cooperatives, by region and size, 1999-2000

Type of co-op, region and asset group (Mil. Dol.)	Sales per \$1 labor expense ¹		Change
	1999	2000	
	Dollars		
Grain and Oilseed Cooperatives:			
Corn Belt	20.70	21.10	1.9
Less than 1.0	15.87	15.28	-3.7
1.0 - 2.49	35.16	33.82	-3.8
2.5 - 24.99	20.25	20.68	2.1
25.0 - 99.99	20.48	20.94	2.2
Lakes States	21.82	22.44	2.9
0.5 - 2.49	21.66	26.36	21.7
2.5 - 24.99	20.61	21.18	2.8
25.0 - 499.99	23.45	23.45	1.8
Mountain	21.19	19.66	-7.2
Northern Plains	19.80	19.75	-0.2
Less than 1.0	19.75	16.95	-14.2
1.0 - 2.49	24.84	24.69	-0.6
2.5 - 24.99	19.51	18.80	-3.6
25.0 - 99.99	19.90	21.11	6.1
Southern Plains	17.45	17.76	1.8
Less than 1.0	25.47	16.91	-33.6
1.0 - 2.49	19.40	19.57	0.9
2.5 - 99.99	17.03	17.55	3.0
Pacific	27.92	22.79	-18.4
1.0 - 2.49	47.73	36.45	-23.6
2.5 - 99.99	27.16	22.32	-17.8
Farm Supply Cooperatives:			
Appalachian	8.60	8.05	-6.4
Less than 1.0	8.32	7.80	-6.3
1.0 - 2.49	8.29	7.89	-4.8
2.5 - 24.99	8.64	8.08	-6.6
Corn Belt	10.34	10.49	1.5
Less than 0.5	35.43	31.77	-10.3
0.5 - .99	7.59	8.93	17.7
1.0 - 2.49	11.19	11.61	3.7
2.5 - 24.99	10.36	10.91	5.4
25.0 - 499.99	10.25	9.94	-3.0
Delta States	11.77	11.57	-1.7
Less than 1.0	10.43	10.10	-3.2
1.0 - 2.49	11.59	11.08	-4.4
2.5 - 24.99	11.89	11.77	-1.0

Continued

Table 7- Total sales per dollar of total labor expense for grain and oilseed and farm supply cooperatives, by region and size, 1999-2000 (continued)

Type of co-op, region and asset group (Mil. Dol.)	Sales per \$1 labor expense ¹		Change
	1999	2000	
	Dollars		
Lake States	8.77	9.87	12.5
Less than 0.5	6.91	8.43	22.2
0.5 - .99	9.51	10.28	8.1
1.0 - 2.49	8.30	9.05	9.0
2.5 - 24.99	8.71	9.53	9.4
25.0 - 499.99	9.01	10.92	21.2
Mountain	10.31	11.10	7.7
Less than 1.0	10.20	11.56	13.4
1.0 - 2.49	9.32	10.49	12.6
2.5 - 24.99	10.37	11.13	7.3
Northeast	7.65	7.66	.03
Less than 1.0	8.11	7.19	-11.4
1.0 - 24.99	7.59	7.72	1.7
Northern Plains	10.60	10.97	3.5
Less than 0.5	7.52	8.90	18.4
0.5 - .99	8.39	9.96	18.7
1.0 - 2.49	9.81	10.36	5.6
2.5 - 24.99	10.52	11.32	7.6
25.0 - 99.99	12.28	9.98	-18.7
Pacific	8.14	8.57	5.3
0.5 - 2.49	8.72	9.19	5.4
2.5 - 24.99	8.11	8.53	5.2
Southeast	14.48	13.39	-7.5
Less than 1.0	8.75	8.29	-5.4
1.0 - 2.49	11.86	11.53	-2.8
2.5 - 24.99	16.96	15.38	-9.3
Southern Plains	10.97	10.83	-1.3
Less than 0.5	9.96	9.91	-0.5
0.5 - .99	8.33	8.99	8.0
1.0 - 2.49	11.85	12.08	2.0
2.5 - 24.99	10.91	10.65	-2.4

¹ 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 wages and benefits.

The region and State included are as follows.

Region	State
Northeast	ME, NJ, VT, NY, MA, RI, CT, PA, NH, DE, MD, and DC
Lake States	MI, WI, and MN
Com 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

Table 8- Farmer cooperatives and memberships, by gross business volume, 2000¹

Volume group (mil. dbl.)	Cooperatives		Dollar volume		Memberships ²	
	Number	Percent of total	Gross ³ (mil. dbl.)	Percent of total	Number (1,000)	Percent of total
Less than 5.0	1,616	48.3	3,054	2.5	593	19.2
5 - 9.9	628	18.8	4,454	3.7	477	15.5
10 - 14.9	299	8.9	3,690	3.1	232	7.5
15 - 24.9	287	8.6	5,566	4.6	297	9.6
25 - 49.9	268	8.0	9,317	7.7	328	10.6
50 - 99.9	133	4.0	9,117	7.6	268	8.7
100 - 199.9	39	1.2	5,535	4.6	51	1.7
200 - 499.9	38	1.1	11,042	9.1	191	6.2
500 - 999.9	20	0.6	13,282	11.0	123	4.0
1,000 and more	18	0.5	55,662	46.1	526	17.0
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Total ⁴	3,346	100.0	120,719	100.0	3,085	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 7- Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 2000

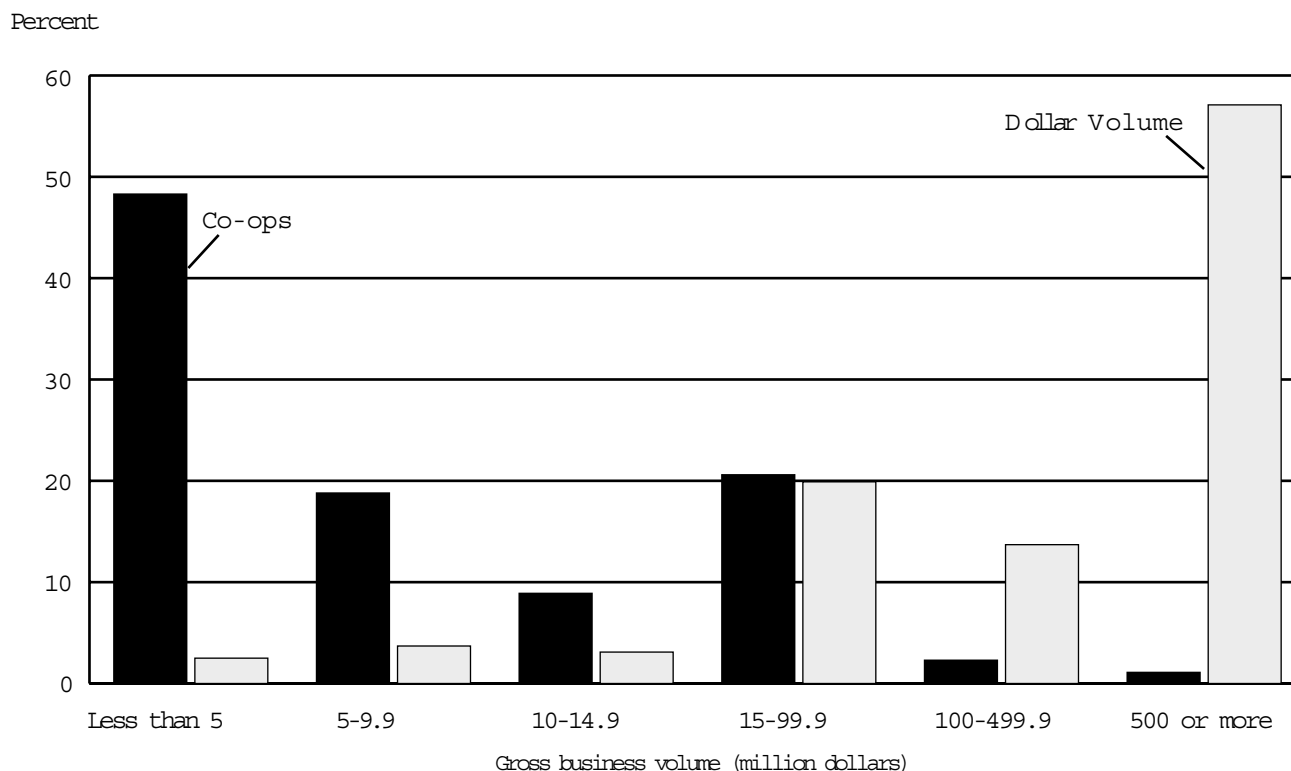


Table 9— Cooperatives' gross and net business volumes by commodity, 2000¹

Commodity	Gross volume		Net volume	
	Million dollars	Percent	Million dollars	Percent
Products marketed:				
Beans and peas (dry edible)	147.0	0.1	146.7	0.1
Cotton	2,790.6	2.3	2,730.5	2.7
Dairy	25,776.5	21.4	22,720.6	22.8
Fruits and vegetables	10,064.9	8.3	9,570.0	9.6
Grains and oilseeds, excluding cottonseed	22,851.9	18.9	18,369.6	18.4
Livestock	8,042.9	6.7	8,042.7	8.1
Nuts	720.6	0.6	720.6	0.7
Poultry ³	2,245.8	1.9	2,133.4	2.1
Rice	814.8	0.7	814.8	0.8
Sugar	2,680.8	2.2	2,680.8	2.7
Tobacco	563.1	0.5	563.1	0.6
Wool and mohair	6.3	∅	4.4	∅
Miscellaneous ⁴	3,694.5	3.1	3,567.6	3.6
	— — — —	— —	— — — —	— —
Total farm products	80,399.6	66.6	72,064.7	72.3
Supplies purchased:				
Crop protectants	4,025.5	3.3	3,027.6	3.0
Feed	6,622.2	5.5	4,691.1	4.7
Fertilizer	7,320.4	6.1	4,574.4	4.6
Petroleum	13,333.4	11.0	7,456.7	7.5
Seed	1,381.6	1.1	915.7	0.9
Other supplies ⁵	4,126.2	3.4	3,419.1	3.4
	— — — —	— —	— — — —	— —
Total farm products	36,809.3	30.5	24,084.5	24.2
Services provided:				
Trucking, cotton ginning, storage, grinding, locker plants, misc. ⁶	3,510.2	2.9	3,510.2	3.5
	— — — —	— —	— — — —	— —
Total business	120,719.1	100.0	99,659.4	100.0

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

² Less than 0.05 percent.

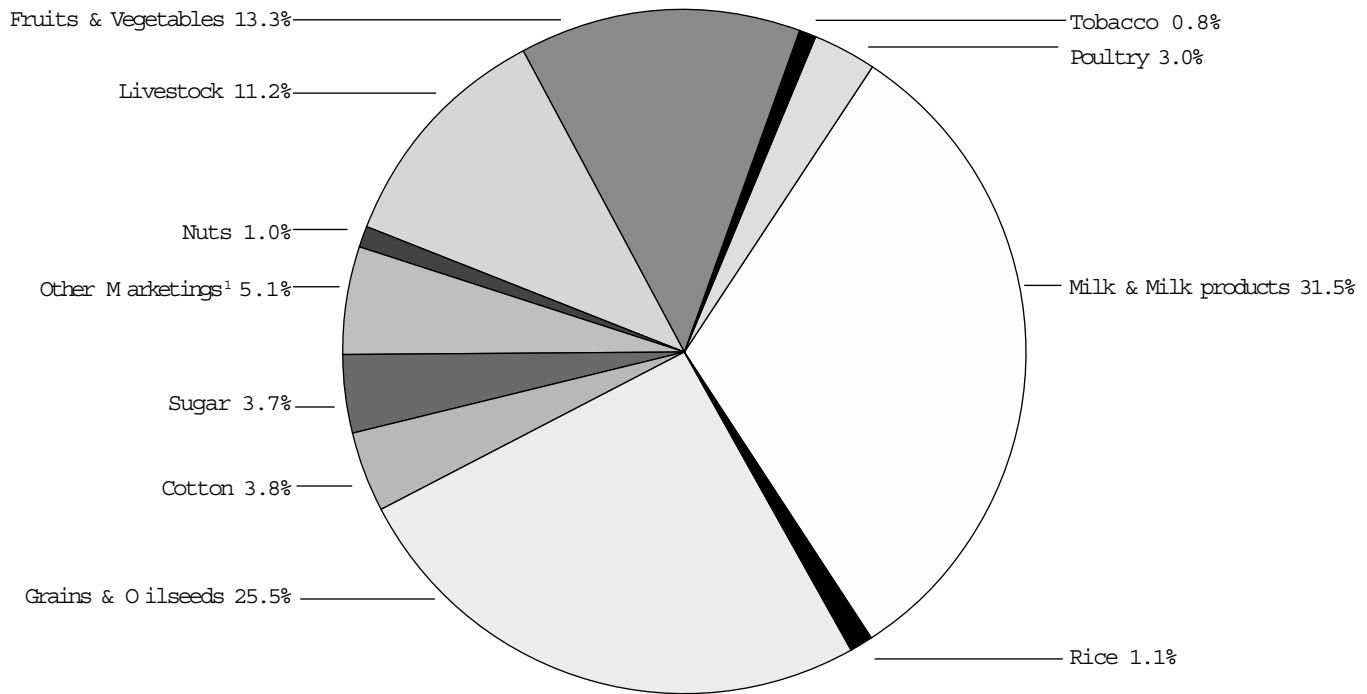
³ Includes eggs, turkeys, ratite, squab, and related products.

⁴ 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.

⁵ Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.

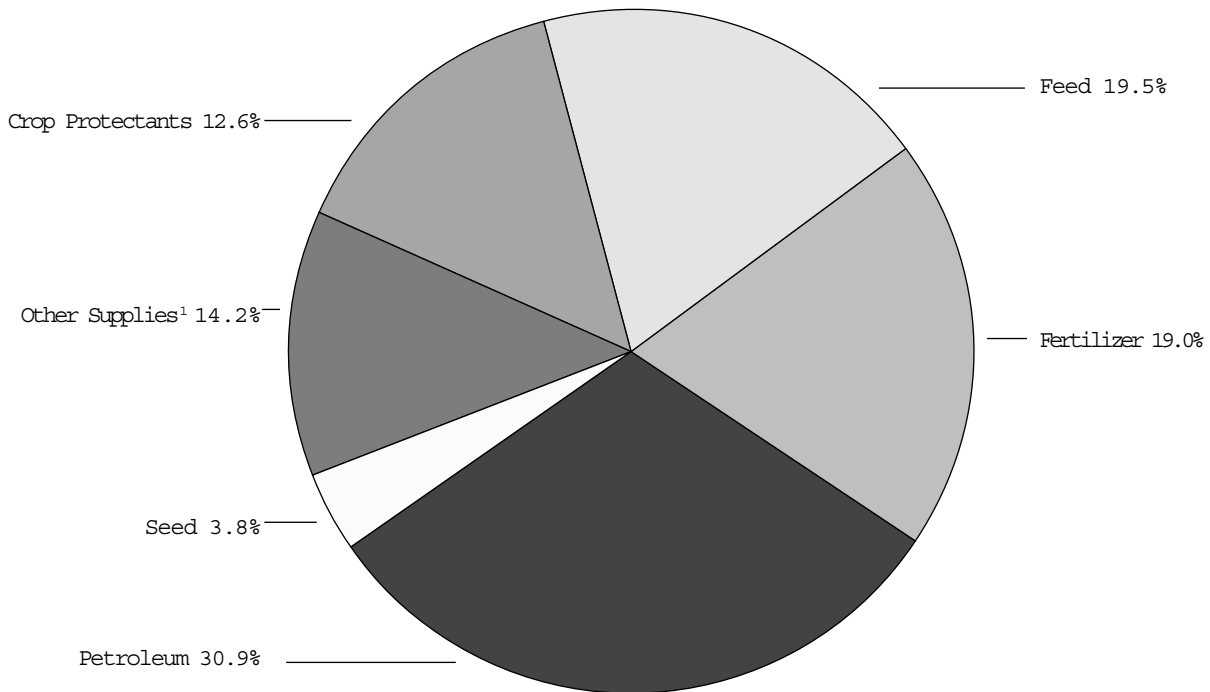
⁶ Charges for services related to marketing or purchasing, but not included in the volume reported for those activities, plus other income.

Figure 8— Relative Importance of Farm Products Marketed by Cooperatives, 2000



Percentage based on a total net marketing business volume of \$72.1 billion.
¹ Includes wool and mohair, dry beans and peas, fish, and other miscellaneous marketings.

Figure 9— Relative Importance of Farm Supplies Handled by Cooperatives, 2000



Percentage based on a net farm supply business volume of \$24.1 billion.
¹ Includes building materials; tires, batteries and accessories; equipment; animal health products; pet food; semen; hardware; food; clothing; etc.

Table 10- Farmer cooperatives' net income, 2000

Principal product(s) marketed and major function	Co-ops ¹	Total net income	Income from own operations	Income from other co-ops ²
	Number	----- Million dollars -----		
Products marketed:				
Cotton	14	65.7	63.3	2.4
Dairy	208	340.8	321.1	19.7
Fruits & vegetables	232	66.7	56.2	10.5
Grains and oilseeds, excluding cottonseed	826	274.5	201.1	73.4
Livestock and poultry	93	-56.1	-63.8	7.7
Rice	16	10.5	8.3	2.1
Sugar	48	-5.9	-7.2	1.3
Other products ³	235	171.2	168.4	2.8
Total marketing ⁴	1,672	867.4	747.3	120.0
Total farm supply	1,277	311.2	218.6	92.5
Total related-service	397	97.6	75.1	22.5
Combined total ⁴	3,346	1,276.2	1,041.1	235.1

¹ Includes number of cooperatives operating on a strictly pooling basis, but not their pool proceeds.

² Includes patronage refunds from CoBank.

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

⁴ Totals may not add due to rounding.

other income, decreased 10.1 percent to \$3.5 billion. Service receipts and other income represented 3.5 percent of total net business volume.

Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 2000 was \$1.28 billion, including inter-cooperative dividends and refunds (table 10). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 3.9 percent from the \$1.33 billion in 1999. Patronage refunds received from other cooperatives, including CoBank, totaled \$235.1 million, down 38.7 percent from \$383.5 million in 1999.

Marketing cooperatives' total net income of \$867.4 million was down slightly (0.42 percent) from the \$871.1 million generated in 1999. The drop in net income was mainly due to a decline in net income by grain and livestock and poultry cooperatives. Grain and dairy cooperatives with the largest net incomes, together, accounted for most (70.9 percent) of marketing cooperatives' net income and 48.2 percent of total net income (figure 10).

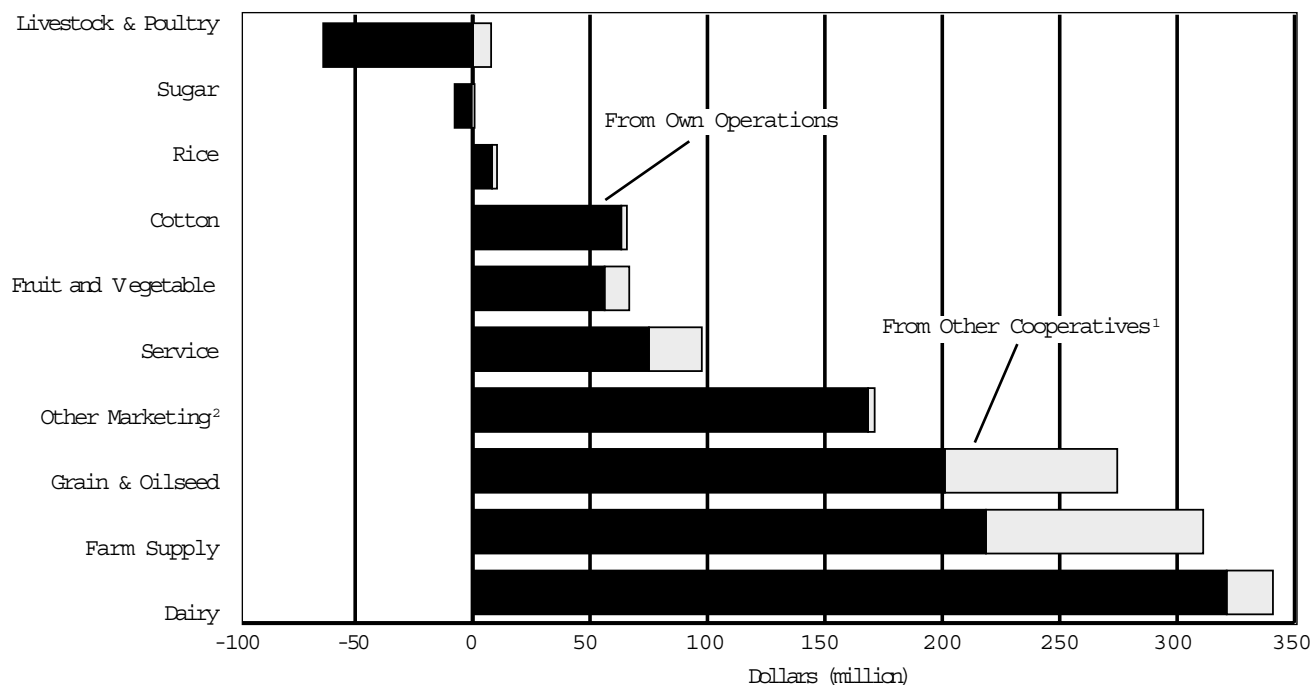
Total net income of farm supply cooperatives was \$311.2 million in 2000, down 11.7 percent from \$352.5

million in 1999. They accounted for 24.4 percent of cooperatives' total net income in 2000, compared with 26.5 percent in 1999. Income from their own operations, excluding patronage refunds from other cooperatives and CoBank, was \$218.6 million, up 19.5 percent from \$183 million in 1999.

Farmer cooperatives' net income from their operations in 2000 totaled \$1,041.1 million, up 10.2 percent from \$944.5 million. More than 18.4 percent, or \$235.1 million, of total net income (\$1,276.2 million) was generated by other cooperatives and CoBank, down 38.7 percent from \$383.5 in 1999. Marketing cooperatives' net income from other cooperatives, including CoBank, totaled \$120 million, down from \$184.2 million or 34.8 percent. Grain cooperatives' net income from other cooperatives totaled \$73.4 million, or 26.7 percent of their total net income, down from \$125.9 million, or 38.8 percent in 1999.

Income before adjusting for losses was \$1,630.1 million compared with \$1,612.2 million in 1999. Losses totaled \$353.9 million in 2000, up from \$284.1 million in 1999. Number of cooperatives with losses was up significantly, from 521 to 625. Increased losses for 2000 stemmed mainly from livestock and poultry cooperatives, from \$9.9 million loss in 1999 to \$101.5 million in

Figure 10- Net Income or Loss, by Type of Cooperative, 2000



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 miscellaneous marketing cooperatives.

2000. Fruit and vegetable cooperatives, again, suffered significant losses, \$93.5 million in 2000 compared to \$85 million in 1999.

Marketing cooperative losses totaled \$245.9 million in 2000, compared with \$153.6 million in 1999. Related-service cooperative losses totaled \$7.2 million, compared with \$6.4 million. Losses among farm supply cooperatives dropped from \$124.1 million in 1999 to \$100.7 million in 2000.

Balance Sheet

Combined assets for all farmer cooperatives totaled more than \$49.7 billion in 2000, up 4.3 percent from \$47.7 billion in 1999 (table 11). Total assets of cooperatives, excluding inter-cooperative investments, was up 5.4 percent to \$44.6 billion, compared with \$42.3 billion in 1999.

Total liabilities was \$29.4 billion, up 7.4 percent from \$27.4 billion in 1999. Net worth, or member and patron equity, was \$20.3 billion, the same as in 1999. The proportion of total assets financed by member and patron equity decreased from 42.5 percent to 40.8 percent.

Net worth, or member and patron equity, for all marketing cooperatives totaled \$12.7 billion, down 1.3 percent from 1999. Marketing cooperatives accounted

for 62.4 percent of farmer cooperatives' combined net worth, down from 63.3 percent in 1999. Net worth for farm supply cooperatives totaled \$7.1 billion, up 2.7 percent from \$6.9 billion in 1999. Their net worth accounted for nearly 35 percent of the total. For marketing cooperatives, the highest percentage of total assets represented by net worth shown in figure 11 (47 percent) was for those marketing rice. Grain and oilseed cooperatives ranked second with 46.8 percent. The lowest, 25.1 percent, was for cooperatives marketing primarily fruits and vegetables. Marketing and farm supply cooperatives had 38.5 percent and 44.5 percent, respectively, of their assets financed by net worth.

Of the \$49.7 billion in total assets, marketing cooperatives accounted for \$32.9 billion, up 1.7 percent from 1999 (table 12). Cooperatives primarily handling grains and oilseeds (excluding cottonseed) had total assets of \$7.3 billion in 2000, up 3.7 percent from \$7 billion in 1999. Among the marketing cooperatives, those primarily handling grains and oilseeds also maintained the largest proportion of their assets as investments in other cooperatives in both 2000 (16 percent) and 1999 (16.4 percent). Dairy cooperatives had 9.5 percent of their assets invested in other cooperatives, down from 15 percent in 1999.

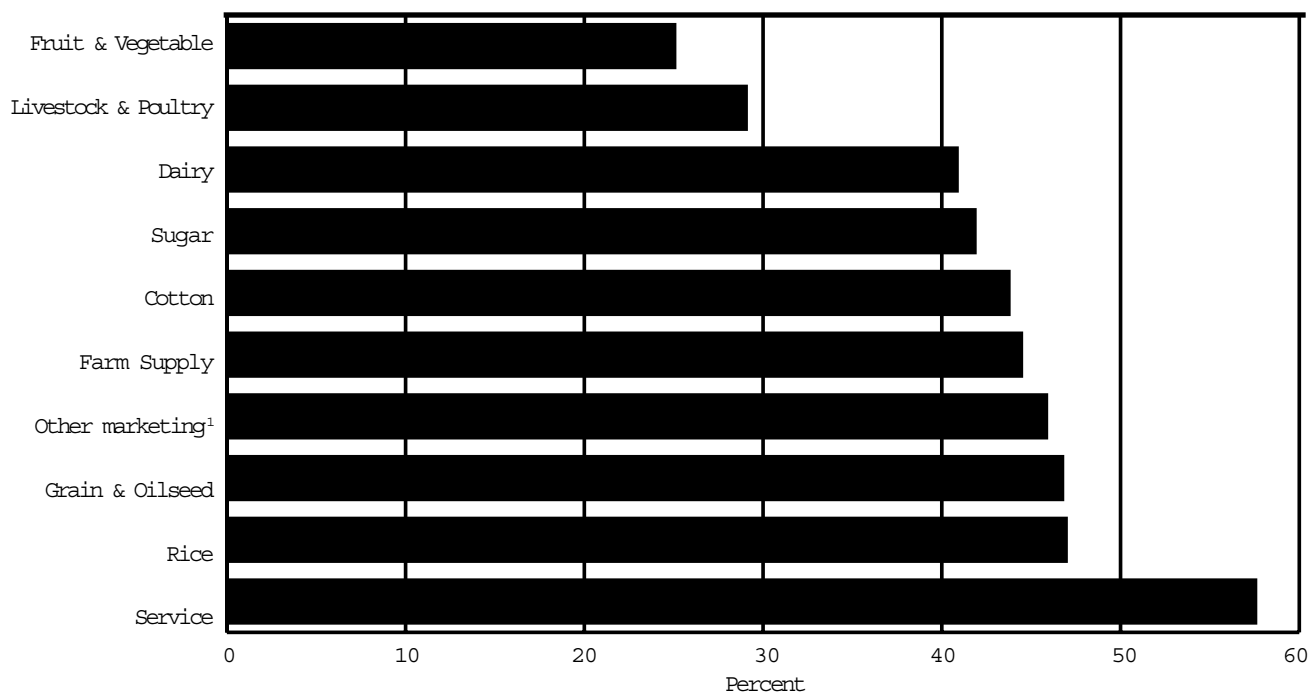
Table 11- Combined balance sheet data for farmer cooperatives, 2000¹

Principal product(s) marketed and major function	Co-ops	Total assets	Total liabilities	Net worth
	Number	----- Million dollars -----		
Products marketed:				
Cotton	14	877.2	492.8	384.4
Dairy	208	7,543.1	4,456.3	3,086.8
Fruits & vegetables	232	5,775.5	4,326.6	1,448.9
Grains and oilseeds, excluding cottonseed	826	7,272.6	3,867.4	3,405.2
Livestock and poultry	93	4,882.8	3,462.9	1,419.9
Rice	16	548.6	291.0	257.6
Sugar	48	2,250.2	1,308.2	942.0
Other products ²	235	3,727.6	2,016.6	1,711.0
Total marketing	1,672	32,877.6	20,221.8	12,655.9
Total farm supply	1,277	15,924.6	8,834.9	7,089.7
Total related-service	397	920.0	390.2	529.7
Combined total	3,346	49,722.2	29,446.9	20,275.3

¹ Totals may not add due to rounding.

² Includes dry edible beans and peas, fish, nuts, tobacco, wool, and miscellaneous products.

Figure 11- Percentage of Cooperatives' Assets Financed by Net Worth, by Type of Cooperative, 2000



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

Table 12- Combined assets for farmer cooperatives, 2000¹

Principal product(s) marketed and major function	Co-ops ²	Assets of own operations	Investments in other co-ops ³	Total assets	Investments in other co-ops as percent of total
	Number	----- Million dollars -----			Percent
Products marketed:					
Cotton	14	848.9	28.3	877.2	3.2
Dairy	208	6,830.0	713.1	7,543.1	9.5
Fruits & vegetables	232	5,594.3	181.2	5,775.5	3.1
Grains and oilseeds, excluding cottonseed	826	6,112.4	1,160.2	7,272.6	16.0
Livestock and poultry	93	4,322.1	560.7	4,882.8	11.5
Rice	16	532.6	16.0	548.6	2.9
Sugar	48	2,207.7	42.5	2,250.2	1.9
Other products ⁴	235	3,645.8	81.8	3,727.6	2.2
Total farm products	1,672	30,093.8	2,783.8	32,877.6	8.5
Total farm supplies	1,277	13,710.1	2,214.5	15,924.6	13.9
Total selected services	397	831.5	88.4	920.0	9.6
Combined total	3,346	44,635.5	5,086.8	49,722.2	10.2

¹ Totals may not add due to rounding.

² Many cooperatives have multiproduct and multifunctional operations. Most are classified according to predominant commodity or function, as indicated by business volume.

³ Also includes investments in CoBank.

⁴ Includes dry edible beans and peas, fish, nuts, tobacco, wool, and miscellaneous products.

Assets of marketing cooperatives, excluding investments in other cooperatives and CoBank, totaled \$30.1 billion, up 3.2 percent from \$29.2 billion in 1999.

Farm supply cooperatives had total assets of \$15.9 billion, compared with \$14.4 billion in 1999, up 10.3 percent. Excluding inter-cooperative investments, total assets increased 11.1 percent, from \$12.3 billion in 1999 to \$13.7 billion.

Selected Financial Ratios

Financial ratios express relationships between items in the financial and income statements of a business operation and help in analyzing a cooperative's economic and financial situation.

Financial ratios can indicate problem areas, serve as guidelines for planning, and aid in formulating actions. However, both items used to calculate a ratio are subject to considerable variation. Ratio interpretation is largely subjective.

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

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

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

Tables 13 and 14 present 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 information 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 assets (net income/assets) varied considerably. It was negative for sugar, small grain, large livestock, smaller related service, small dairy, small farm supply, and poultry cooperatives. The ratio was highest (37.9) for the smallest group of cotton ginning cooperatives. For dairy, the ratio was highest for those cooperatives with assets of \$25 million to \$99.9

Table 13- Selected financial ratios for cooperatives, 2000¹

Type of co-op and asset group (mil. dol.)	Return on assets ²	Net worth to assets ³	Return on sales ⁴	Sales to assets ⁵	Current ratio ⁶
	----- Percent -----			----- Number -----	
Cotton	7.6	43.5	2.2	3.4	1.4
Less than 25.0	10.7	39.0	4.8	2.2	1.5
25.0 and more	7.3	44.0	2.0	3.6	1.4
Dairy ⁷	4.6	41.1	1.3	3.7	1.3
Less than 1.0	-2.6	59.1	-0.4	6.5	1.7
1.0 - 2.49	5.2	50.9	0.8	6.8	1.4
2.5 - 24.99	7.1	43.0	0.8	8.6	1.2
25.0 - 99.99	7.2	41.0	1.1	6.5	1.2
100.0 and more	4.2	41.0	1.3	3.2	1.3
Fruit and vegetable	1.8	26.3	1.1	1.7	1.4
Less than 0.5	10.8	66.0	0.4	28.1	2.2
0.5 - 0.99	-3.5	42.3	-0.9	3.8	1.6
1.0 - 2.49	3.6	58.4	1.1	3.2	1.7
2.5 - 24.99	8.2	40.2	2.6	3.1	1.3
25.0 - 99.99	0.3	23.2	0.2	1.3	1.0
100.0 and more	1.6	25.5	1.0	1.6	1.6
Fruit and vegetable Fresh only	1.8	26.3	1.1	1.7	1.4
Less than 0.5	3.8	38.7	1.7	2.3	1.2
Less than 0.5	10.6	66.4	0.4	28.9	2.3
0.5 - 0.99	-6.2	35.6	-2.4	2.6	1.5
1.0 - 2.49	0.5	62.4	0.1	4.0	1.5
2.5 - 24.99	7.7	42.3	2.3	3.4	1.3
25.0 - 499.99	2.8	37.0	1.6	1.8	1.2
Processed only	1.4	22.9	1.1	1.3	1.6
Less than 99.99	-1.2	14.8	-0.6	1.9	1.1
100.0 and more	1.5	23.1	1.2	1.3	1.6
Fresh and processed	1.6	30.7	0.5	3.3	1.2
Less than 2.49	10.3	63.9	2.6	4.0	2.4
2.5 - 24.99	12.3	40.9	4.0	3.1	1.2
25.0 - 499.99	-0.6	28.4	-0.2	3.4	1.2
Grain and oilseed ⁸	4.0	46.8	1.7	2.3	1.2
Less than 0.99	-0.4	70.9	-0.1	3.5	2.4
1.0 - 2.49	4.4	66.5	1.3	3.3	1.9
2.5 - 24.99	4.2	52.4	1.7	2.5	1.3
25.0 - 99.99	4.1	44.9	1.8	2.3	1.2
100.0 - 499.99	3.0	23.4	1.7	1.8	0.9
Livestock ⁷	-0.8	28.4	-0.2	3.9	1.1
Less than 2.49	5.3	49.3	0.2	24.4	1.5
2.5 - 24.99	3.2	44.4	0.8	3.9	1.1
25.0 and more	-0.8	28.3	-0.2	3.9	1.1

Continued

Table 13- Selected financial ratios for cooperatives, 2000¹ (continued)

Type of co-op and asset group (mil. dol.)	Return on assets ²	Net worth to assets ³	Return on sales ⁴	Sales to assets ⁵	Current ratio ⁶
	----- Percent -----			----- Number -----	
Nut	1.7	36.2	1.1	1.5	1.6
Poultry	-4.5	28.2	-1.6	2.8	1.1
Rice	2.1	29.8	1.3	1.7	1.2
Sugar	-0.5	41.9	-0.5	0.9	1.1
Tobacco	9.6	68.8	0.5	18.0	3.6
Misc. marketing	3.3	48.7	1.3	2.5	1.4
Fishery	5.8	33.1	3.7	1.5	1.7
Farm supply	1.6	42.6	0.8	2.0	1.3
Less than 0.5	2.8	57.3	1.0	2.8	1.9
0.5 - 0.99	0.5	71.3	0.2	2.5	2.8
1.0 - 2.49	3.1	70.1	1.5	2.1	2.2
2.5 - 24.99	3.4	58.7	1.7	2.0	1.5
25.0 - 99.99	2.4	43.2	1.3	1.9	1.3
100.0 - 499.99	5.4	45.4	3.1	1.7	1.3
500.0 and more	0.7	36.3	0.3	2.0	1.2
Artificial insemination	0.8	57.8	0.3	2.9	1.7
Cotton gins	18.3	64.5	13.9	1.3	1.7
Less than 0.5	37.9	24.0	16.2	2.3	1.0
0.5 - 0.99	7.3	70.6	4.2	1.8	2.2
1.0 - 2.49	14.8	71.9	9.6	1.5	2.0
2.5 and more	19.5	62.9	15.9	1.2	1.6
Other service ⁹	6.5	48.5	7.2	0.9	1.5
Less than 0.5	4.0	84.8	3.5	1.1	3.1
0.5 - 0.99	-1.5	59.4	-0.7	2.1	1.0
1.0 - 2.49	21.6	62.3	24.0	0.9	2.0
2.5 - 24.99	6.5	48.5	7.2	0.9	1.5

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 five ratios. Extreme values not representative of the group were excluded.

² Includes net income before any income taxes are deducted. Calculated by dividing net income by total assets (return on 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 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. Data were taken from annual reports where provided.

⁷ Includes bargaining cooperatives.

⁸ Excludes cottonseed.

⁹ Includes cooperatives providing primarily services related to storage, transportation, livestock shipping, and rice drying.

Table 14—Times interest earned for cooperatives, by selected type and size, 2000¹

Type of co-op and asset group	Times interest earned	Type of co-op and asset group	Times interest earned
Million Dollars	Dollars	Million Dollars	Dollars
Cotton	3.2	Nut	1.6
Less than 25.0	3.7	Poultry	-0.3
25.0 and more	3.2	Rice	4.0
Dairy	3.7	Sugar	0.9
Less than 1.0	-1.1	Tobacco	4.4
1.0 - 2.49	12.3	Misc. marketing	3.6
2.5 - 24.99	7.5	Fishery	2.0
25.0 - 499.99	5.7	Farm supply	1.7
100.0 and more	3.4	Less than 0.5	2.2
Fruit and vegetable	1.5	0.5 - 0.99	0.7
Less than 0.5	7.0	1.0 - 2.49	3.0
0.5 - 0.99	-0.04	2.5 - 24.99	2.5
1.0 - 2.49	4.0	125.0 - 99.99	1.7
2.5 - 24.99	3.9	100.0 - 499.99	3.3
25.0 - 99.99	1.5	500.00 and more	1.4
100.0 and 499.99	1.4	Cotton gin	11.5
Grain and oilseed ²	2.8	Less than 0.5	13.7
Less than 1.0	0.1	0.5 - 0.99	8.6
1.0 - 2.49	3.9	1.0 - 2.49	8.4
2.5 - 24.99	2.8	2.5 - 99.99	2.4
25.0 - 99.99	2.7	Other service ³	0.9
100.0 and 499.99	3.4	Less than 0.5	-2.5
Livestock	0.8	0.5 - 0.99	0.9
Less than 25.0	2.0	1.0 - 24.99	1.0
25.0 and more	0.8	25.0 - 99.99	0.9

¹ Based on cooperatives reporting. The ratio was calculated by summing net income before taxes and interest expense and dividing by interest expense for each grouping. Extreme values not representative of the group were excluded.

² Excludes cottonseed.

³ Includes cooperatives providing services such as storage, transportation, and rice drying.

million, similar to what was reported in 1999. Among grain cooperatives, the largest return (although small) came from those in the range of \$1 to 2.5 million.

The net worth-to-assets ratio ranged from a low of 14.8 percent for the smallest processing fruit and vegetable cooperatives to a high of 84.8 percent for the smallest related-service cooperatives. Generally, as cooperatives become larger and/or do more processing, a declining percentage of their assets is financed by members, resulting in a lower net worth-to-assets ratio.

The return on sales (net income/total sales) ranged from a negative 2.4 percent for the smaller fruit

and vegetable cooperatives to a high of 24 percent for the larger related-service cooperatives. Few cooperative groups generated a return on sales above 3 percent (only 13 of the 66 groups shown in table 13).

The sales-to-assets ratio ranged from a high of 28.9 for the small fresh fruit and vegetable cooperatives to a low of 0.9 for the sugar and related-service cooperatives. Among dairy, fruit and vegetable, grain, and cotton ginning 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 dairy and fruit and vegetable cooperatives. The sales-to-assets ratios

for farm supply cooperatives varied little with cooperative size. Most are less involved in manufacturing or processing than the larger marketing cooperatives.

The generally high sales-to-assets ratios for the smaller and some types of 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 0.9 for grain cooperatives with assets greater than \$100, to 3.6 for tobacco cooperatives. Smaller cooperatives' current liabilities are generally low, but become larger in relation to current assets as business grows.

Times interest earned varied by type and size of cooperative, as shown in table 14. By type of cooperative, the ratio ranged from a low of 0.8 for livestock cooperatives to a high of 11.5 for cotton ginning cooperatives. This indicates that the net income of livestock cooperatives would not have covered their interest charges, whereas cotton gins could have covered their interest charges 11.5 times.

By size of cooperative, the ratio varied significantly by type of cooperative. For example, among dairy cooperatives, the times interest earned ratio ranged from -1.1 for those cooperatives with total assets less than \$1 million to 12.3 for those cooperatives with total assets ranging from \$1 million to \$2.5 million. No significant relationship existed between size of cooperative and times interest earned.

Problems and Issues

Two open-ended questions were included in the 2000 annual survey of farmer cooperatives to identify what management considered to be the major problem or issue facing their cooperative presently and in the next year or two, how to address them, and needed research and education. The questions were as follows. "In the past year, what did your management consider to be the major problem or issue facing your cooperative?" And, "What does your management see as the major problem or issue facing your cooperative in the next year or two?"

Questionnaires with these questions were sent to 3,058 farmer cooperatives. Responses to the past-year problems or issues totaled 1,147, or 37.5 percent, and 1,128, or 36.9 percent regarding future problems. Some cooperatives identified more than one problem—"Low farm income and excessive government regulations" or "Imports, retail consolidation, and prices."

Seventeen problem areas or classifications were identified. A report summarizing the information for all cooperatives, by type of cooperative, cooperative size, and region of the country is pending.

Some preliminary findings are as follows.

Low commodity prices, the agricultural economy, and operational difficulties were the most frequently mentioned problems faced in 2000. More than two-fifths (44.5 percent) of the responses identified these areas as their major problems. Among the three, low commodity prices, with nearly one-fifth of the responses, was the most frequently cited. This included low prices for cotton, cottonseed, sweet potatoes, almonds, apples, pears, fresh fruit, milk, sugar, grains, and eggs.

The agricultural economy was the second most often cited problem (14.2 percent). Cooperative managers were concerned about the depressed farm economy, loss of acreage and farmers, the number of dairy farmers quitting business and leaving the farm, producer profitability, size of farms getting bigger, farmers bypassing local cooperatives for supplies and sales, shrinking ag market, and too many big farmers. As a result of the changing structure of agriculture, many cooperatives found their sales and profitability declining.

Cooperative operational problems was the third most frequently cited. Nearly 11 percent of the responses fell into this category. Problems cited were more diverse than those included in the other categories: working capital, financing, debt management, equity management, increasing sales, marketing, acquisition of another company and adding its operations to ours, working through merger, loss of feed customers, reducing our expenses by closing smaller branches to meet larger farmer needs more competitively, understanding and responding to our strengths and weaknesses, and identifying and persuading directors to pursue nontraditional income opportunities.

Cooperative managers don't expect much change in the next year or two. More than 45 percent of the responses mentioned the agricultural economy, low commodity prices, and operational problems. Nearly one fifth (18.8 percent) identified the agricultural economy. Consequently, the "agricultural economy" was ranked by frequency of responses as the number-one problem cooperative managers anticipate facing in the next year or two, followed by low commodity prices (16.6 percent) and operational problems (10 percent).

A third (31.8 percent) identified low margins, increasing costs, labor, and competition most frequent-

ly as the second set of future problems. Responses ranged from 8.8 percent for low margins to 6.7 percent for labor problems.

The responses suggest several interrelationships among the problems and issues. For example, increasing costs, especially rising costs of labor, plus increasing competition make it difficult for many cooperatives to maintain the kind of margins needed to operate successfully. Managers also acknowledged that farms have become larger, and volumes per farm have increased (as number of farms has declined), but this has resulted in an increase by "farmers bypassing local cooperatives for supplies and sales" and going directly to terminals and manufacturers.

Cooperatives' Use of the Internet

Two questions on cooperatives' use of the Internet were also included in the annual survey to measure use of the Internet in purchasing and/or sales activities. "Did your cooperative make any purchases on the Internet (E-Commerce) in fiscal 2000?" And, "Did your cooperative make any sales on the Internet (E-Commerce) in fiscal 2000?" E-Commerce was defined as "...the buying and selling of goods and services on the Internet, especially the World Wide Web."

Forty-six or 1.5 percent of the 3,058 cooperatives surveyed responded. Twenty-three or less than 1 percent responded to the question on Internet sales. Cooperatives making Internet purchases were asked the percentage of farm supplies (feed, petroleum, etc.) and farm commodities (crops and livestock) they acquired via the Internet. In similar fashion, cooperatives that had Internet sales were asked the percentages for farm supplies and for farm commodities.

The results showed that, via the Internet, purchases were \$24.7 million for farm supplies and only \$3.4 million for farm commodities. Internet sales of farm supplies totaled \$3.2 million and for farm commodities, \$13.1 million.

Analysis of the respondents' data implies that cooperatives' use of the Internet in buying and selling activities was minimal. Other (nonsurvey) information shows that cooperatives do use the Internet to obtain weather, commodity prices, and other information. In some cases, personal computers are made available for use by members and nonmember patrons. However, the extent of computer use for activities not related to buying and selling activities is not known.

III-Cooperative Trends, 1991-2000

Although the number of cooperatives decreased during the past decade, their dollar business volume increased, until recent years. Cooperatives continue to adjust to the changing economic environment through dissolution, merger, consolidation, acquisition, and the sale of assets. In some cases, farmers organized new-generation cooperatives and formed joint ventures and alliances to become involved in value-added activities. In 1991, the net business volume of 4,494 cooperatives totaled \$76.6 billion. A decade later, net business volume generated by 3,346 cooperatives was \$99.7 billion.

Number of Cooperatives

The total number of marketing, farm supply, and related-service cooperatives declined from 4,494 in 1991 to 3,346 in 2000 (table 15 and figure 12). Marketing cooperatives declined from 2,384 to 1,672, farm supply cooperatives from 1,689 to 1,277, and service cooperatives from 421 to 397.

From 1991 through 2000, 1,803 cooperatives (about 180 per year) were removed from RBS' list of farmer cooperatives. Of those, 42.7 percent were dissolved, 35.3 percent merged or consolidated, 14 percent were acquired by other cooperatives or investor-owned firms, and the remaining 8 percent were removed for other reasons (figure 13).

Even while cooperatives were disappearing from RBS' list, newly formed ones or others not previously listed were added. From 1991 through 2000, 486 cooperatives (about 49 per year) were added. Forty-four cooperatives were added during 2000, the largest increase since 1994.

Grain and Farm Supply Branches

In 1995, 2,548 grain and farm supply cooperatives had an estimated 5,101 branches, 2,172 owned by grain cooperatives and 2,929 by farm supply cooperatives. In 2000, grain and farm supply cooperative numbers had dropped to 2,103, but branches had increased to 5,327 (table 16 and figure 14).

Average number of branches per cooperative was 2 in 1995 and 2.5 in 2000. Larger cooperatives, particularly the farm supply cooperatives, accounted for most of the branches. Of those with assets of \$25 million or more in 2000, 44 farm supply cooperatives had an estimated 1,678 branches and 59 grain cooperatives had 517 branches.

Table 15- Number of farmer cooperatives, 1991-2000

Year ¹	Marketing	Farm supply	Service	Total
	Number			
1991	2,384	1,689	421	4,494
1992	2,218	1,618	479	4,315
1993	2,214	1,547	483	4,244
1994	2,173	1,496	505	4,174
1995	2,074	1,458	474	4,006
1996	2,012	1,403	469	3,884
1997	1,941	1,386	464	3,791
1998	1,863	1,347	441	3,651
1999	1,749	1,313	404	3,466
2000	1,672	1,277	397	3,346

¹ Prior to 1991, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998.

Memberships

Memberships in farmer cooperatives dropped from 4.1 million in 1991 to 3.1 million in 2000 (table 17 and figure 15). The long-term decline largely reflects the decreasing number of farms, farmers, and ranchers in the United States. 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

Figure 12- Farmer Cooperatives in the United States, 1991-2000

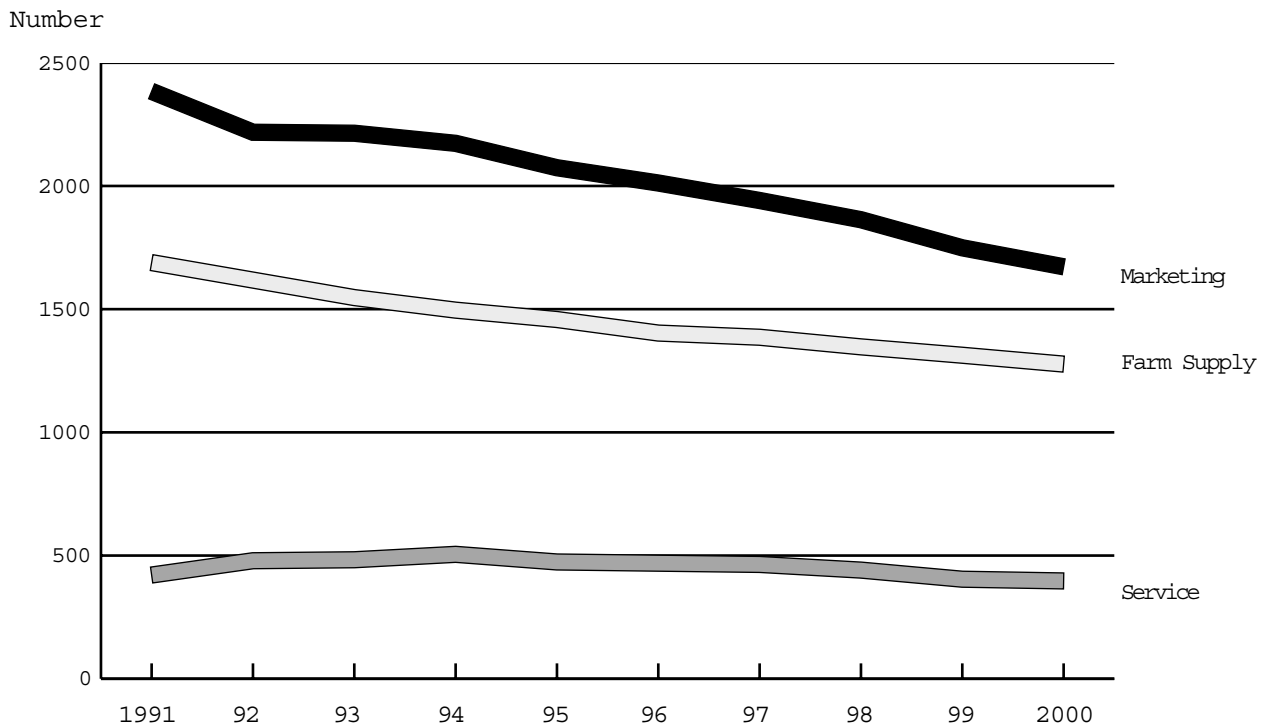
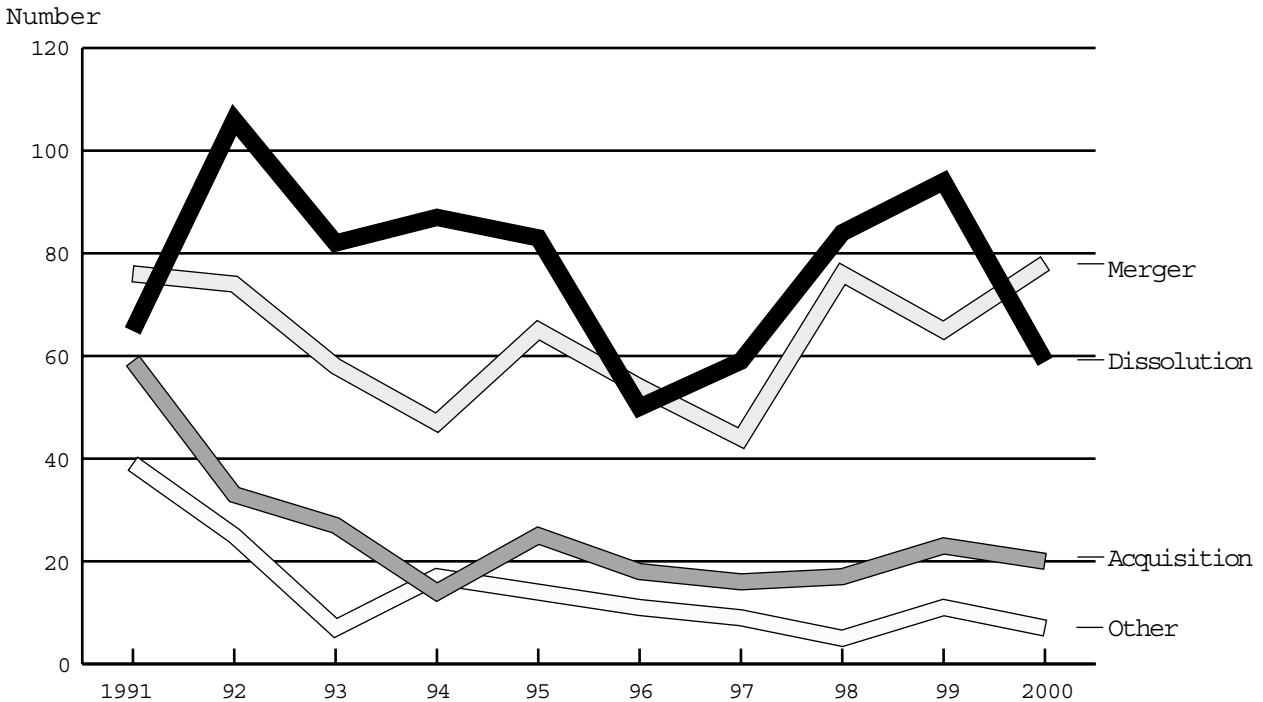


Figure 13— Cooperatives Removed from RBS' List, 1991-2000



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

cooperatives. Memberships in marketing cooperatives dropped 599,400 (32.5 percent) while memberships in farm supply cooperatives decreased 306,931 (15.2 percent).

Employees

Farmer cooperatives had an estimated 176,665 full-time employees in 2000, up from 172,951 in 1999 (table 18) and greater than the 1995 peak of 175,399. The number of full-time employees working in marketing and related-service cooperatives declined between 1995-2000. However, full-time employees increased among farm supply cooperatives for that same period.

Overall, the trend appears to be the same, with marketing and related-service cooperatives decreasing their use of full-time employees and farm supply cooperatives increasing their use. This is, in part, related to many grain cooperatives being reclassified as farm supply cooperatives, largely because of sharply declining grain prices during the past 3 to 4 years.

Business Volume

Net cooperative business, unadjusted for price change, increased from \$76.6 billion in 1991 to \$99.7 billion in 2000 (table 19). When adjusted, ³ net business

totalled \$98 billion in 2000 (figure 16). Consequently, the difference between actual and real net business volume in 2000 was nearly \$1.7 billion. The real net business volume was slightly lower than the actual value in 2000 due to lower prices received for farm products. Prices received for all farm commodities from 1991 to 2000 dropped 2.8 percent, while prices paid for production items increased 15.7 percent from 1991 to 2000. However, farm supply net business volume and service receipts and other income accounted for only 27.7 percent of the total net business volume in 2000.

Marketing sales of four major commodity groups--dairy; grains and oilseeds, excluding cottonseed; fruits and vegetables; and livestock--decreased as a proportion of marketing sales, from 82.9 percent in 1991 to 81.5 percent in 2000 (figure 17). In 1991 and a decade later, net volume (among commodity groups) was highest for dairy. In terms of net volume, dairy was the leader with \$22.7 billion (\$18.8 billion in 1991),

³ 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 14- Grain and Farm Supply Cooperatives and Branches, 1992-2000

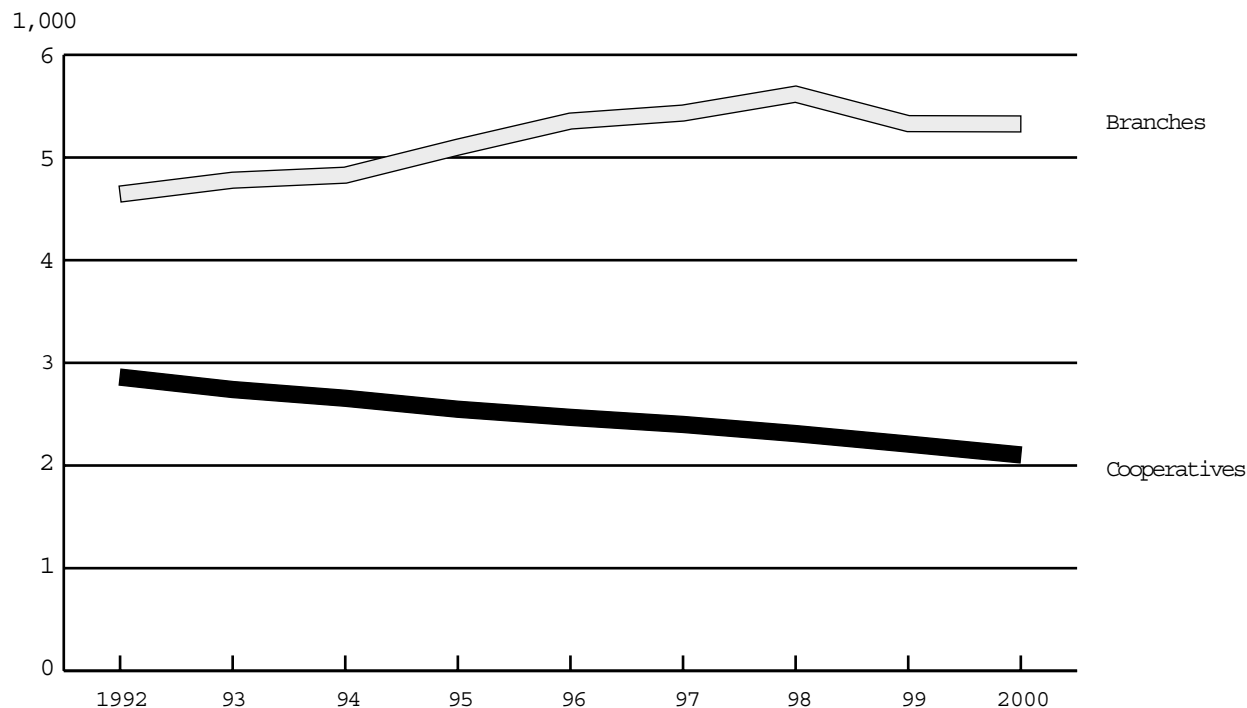
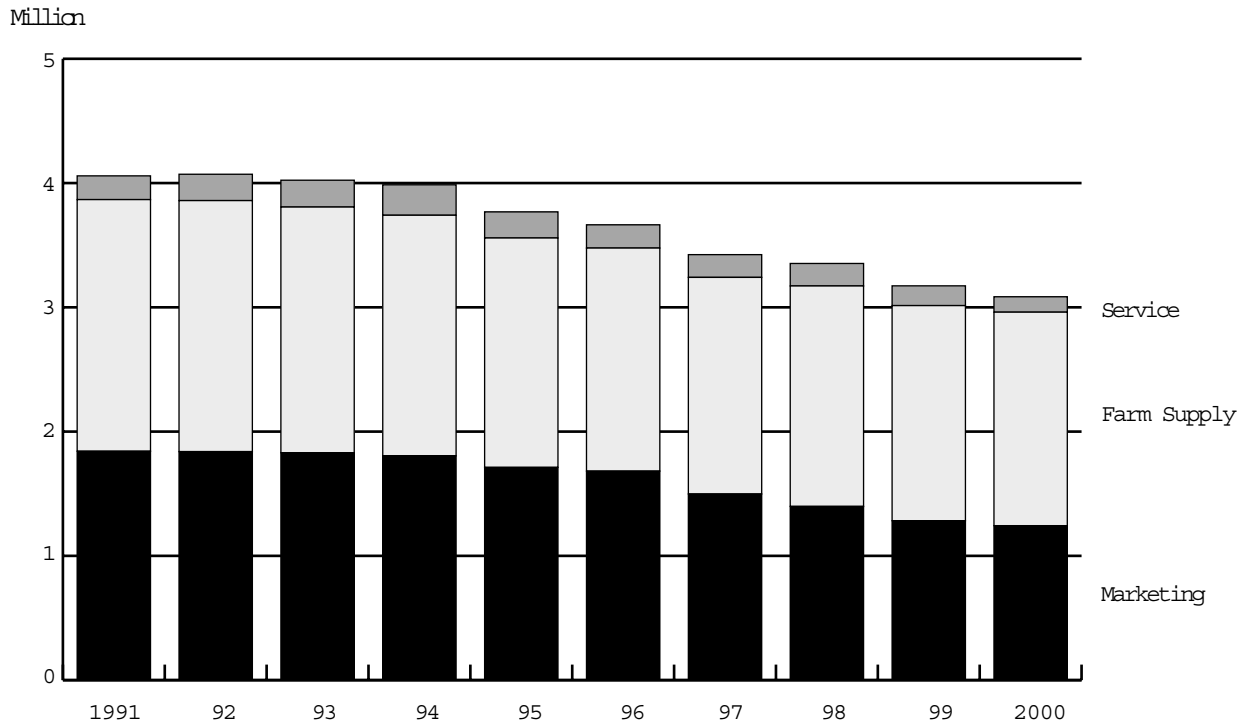


Table 16- Estimated number of branches operated by grain and farm supply cooperatives, 1995-2000

Year	Asset Group (million dollars)				Total
	Less than 5	5 - 9.9	10 - 24.9	25 or more	
Grain Cooperatives					
1995	658	223	174	35	1,090
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
Branches					
1995	399	440	756	577	2,172
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
Farm Supply Cooperatives					
1995	1,134	211	97	16	1,458
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
Branches					
1995	571	502	460	1,396	2,929
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	1,678	3,412

Figure 15- Cooperative Memberships by Function, 1991-2000



followed by grains and oilseeds with \$18.4 billion in 2000. In 1996 and 1997, higher grain prices helped grain and oilseed cooperatives top the other commodity groups.

Milk and milk product sales showed the strongest absolute dollar growth during 1991-2000. Prior to 1997, grain and oilseed sales surged due to strong demand, but subsequently dropped.

In the farm supply group, petroleum, feed, and fertilizer sales were especially important (figure 18). They accounted for 71.7 percent of cooperatives' total farm supply sales in 1991 and 69.4 percent in 2000. Their overall importance dropped due to increased sales of crop protectants and "other." In 1991, crop protectants and "other" accounted for 25.2 percent of farm supply sales versus 26.8 percent in 2000.

Cooperatives' sales of petroleum, feed, fertilizer, and crop protectants grew steadily until 1998. In 1999 and 2000, feed and fertilizer sales dropped, due to decreased demand. Seed sales remained fairly stable until increases in 1999 and 2000.

Net marketing of farm products totaled \$56.2 billion in 1991 and increased annually through 1996. Since 1997, the net marketing dollar volume has declined as demand for farm commodities has dropped. In 2000, net business volume of farm prod-

ucts marketed rose slightly, from \$72 billion in 1999 to \$72.1 billion (table 20). Aggregate farm supply sales increased every year, from \$17.9 billion in 1991 to \$25.2 billion in 1997, dropped in 1998 and 1999, then rose again in 2000. Service receipts (includes other income and revenue) increased from \$2.5 billion in 1991 to \$3.9 billion in 1999, the highest on record, then dropped to \$3.5 billion in 2000.

Gross business volume grew from \$90.8 billion in 1991 to \$120.7 billion in 2000, up from \$115.3 billion in 1999, but down from a record \$128.1 billion in 1996. The volume increase (\$15.9 billion) in 1996 was due mainly to higher prices for grains and oilseeds.

Net Income

Starting with \$1.57 billion in 1991, total net income fluctuated annually setting a record at \$2.36 billion in 1995 (table 21 and figure 19). It dipped in 1996, climbed back in 1997, but then dropped significantly to \$1.28 billion in 2000. Low prices and margins along with increased losses with overproduction in agriculture were major factors.

Net income received from operations and from other cooperatives varied over time. Both reflected better economic times in agriculture in the mid-1990s compared with conditions in the early and late 1990s.

Table 17—Memberships in marketing, farm supply, and related-service cooperatives, 1991-2000

Period ¹	Marketing	Farm supply	Service	Total
		1,000		
1991	1,842	2,025	191	4,059
1992	1,839	2,020	212	4,072
1993	1,830	1,977	216	4,023
1994	1,805	1,936	245	3,986
1995	1,712	1,846	210	3,767
1996	1,682	1,795	187	3,664
1997	1,498	1,743	183	3,424
1998	1,398	1,774	181	3,353
1999	1,283	1,731	159	3,173
2000	1,243	1,718	124	3,085

¹ Prior to 1991, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998.

In 1991, refunds from other cooperatives totaled \$418 million, or 26.6 percent of total net income. In 2000, refunds were \$235.1 million, or 18.4 percent of total net income.

Balance Sheet

Cooperatives' total assets grew by \$18.4 billion, from \$31.3 billion in 1991 to \$49.7 billion in 2000 (table 22 and figure 20), reflecting growth in their own operations and investments in other cooperatives. In 1991, nearly \$3.4 billion (10.8 percent of total assets) was invested in other cooperatives, including CoBank. In 2000, these investments were \$5.1 billion, up \$1.7 billion from 1991, or 10.2 percent of total assets.

Cooperatives' total liabilities also grew from \$17.2 billion in 1991 (55.1 percent of total assets) to \$29.4 billion, up \$12.2 billion in 10 years.

Total liabilities financed 59.2 percent of total assets in 2000. The strength of a balance sheet depends on the proportion of assets financed by net worth or equity capital. In 1991, cooperatives' net worth totaled \$14 billion, financing 44.9 percent of total assets. By 2000, total net worth climbed to nearly \$20.3 billion, but financed only 40.8 percent of cooperatives' assets. During the decade, the proportion of net worth used to finance total assets peaked at 44.9 percent in 1991, declining to a low of 40.8 percent in 1996 and 2000. Most would say farmer cooperatives, overall, have a strong balance sheet, but the trend toward increased use of debt and less equity capital to finance assets is of some concern.

IV—Other Service Cooperatives

In 2000, 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 agriculture and 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.

By 2000, FCS was represented by 38 Federal Land Credit Associations (FLCAs), 28 Production Credit Associations (PCAs), and 67 Agricultural Credit Associations (ACAs) (table 23). The combined assets of FCS for 2000 totaled \$94 billion—up 6 percent from \$88.7 billion in 1999 (table 24). Net worth was \$14.4 billion, up 8.1 percent from 1999, and net income was \$1.42 billion, up from \$1.23 billion, or 15.3 percent.

Of the 38 FLCAs operating on Jan. 1, 2001, 11 were in the Farm Credit Bank (FCB) of Wichita and 10 each in the AgriBank, FCB, and FCB of Texas Districts. FLCAs (former FLBAs) were authorized by the Agricultural Credit Act of 1987 and given direct-lending authority by FCBs.

PCAs provide farmers and ranchers with short- and intermediate-term loans for various purposes, such as operating expenses, farm equipment and live-stock purchases, and farm buildings and other capital improvements. Of the 28 PCAs, 11 were located in the AgriBank, FCB, District and 8 in the FCB of Wichita.

ACAs resulted from the merger of FLBAs or FLCAs with PCAs and offer both long- and short-term loans. Of the 67 ACAs operating on Jan. 1, 2001, 24 were in AgFirst, FCB, territory and 11 in the AgriBank, FCB, district. The FCBs provide loans and support services to ACAs, FLCAs, and PCAs within their districts.

CoBank, ACB, provides short-, intermediate-, and long-term credit to agricultural cooperatives, rural utility systems, and other rural businesses nationwide. It also provides credit to the Farm Credit Associations serving agricultural producers in the Northeast. CoBank, ACB, is owned by about 2,300 stockholders, consisting of U.S. farmer cooperatives, rural utilities,

Table 18- Cooperatives' number of full-time employees, 1995-2000

Commodity	Full-time Employees					
	1995	1996	1997	1998	1999	2000
	Number					
Cotton	2,136	1,787	1,995	1,844	1,787	1,759
Dairy	29,828	27,621	28,323	27,056	24,598	23,408
Fruits & vegetables	24,944	26,456	22,847	23,734	23,329	25,108
Grains & oilseeds	24,811	25,981	23,538	23,873	20,998	20,309
Livestock & poultry	28,635	28,453	26,399	28,031	32,690	34,592
Rice	2,785	2,636	2,713	2,655	2,600	2,606
Sugar	3,422	3,482	3,473	4,402	4,459	4,523
Other products	7,590	7,109	9,191	8,474	8,525	8,831
Marketing	124,151	123,525	118,479	120,069	118,986	121,136
Farm supply	45,302	45,566	47,870	48,171	49,466	51,321
Service	5,946	5,704	5,850	5,551	4,499	4,208
Total	175,399	174,795	172,199	173,791	172,951	176,665

ACAs, and other businesses serving rural America. CoBank also finances U.S. agricultural exports and provides international banking services for farmer cooperatives.

The combined assets of CoBank increased from \$24.1 billion in 1999 to \$24.3 billion in 2000, or nearly 0.7 percent. Net worth totaled nearly \$1.8 billion, up from \$1.7 billion, or 7.6 percent. As of Jan. 1, 2001, CoBank had net loans of \$19.2 billion and net income of \$185 million, up from \$121 million in 1999, or 52.9 percent (table 25).

Rural Electric Cooperatives

Rural electric cooperatives decreased in number from 672 in 1999 to 614 in 2000. Consumer members, however, increased to 10.7 million from 10.5 million, but revenue decreased to \$14.7 billion (table 26) from \$23.7 billion in 1999. Texas and Minnesota had the most associations, with 36 each (11.7 percent of the total), while Georgia had the most consumer members, with 1,112 (10.4 percent), and the largest revenue, at \$1,112 million (10.5 percent).

Rural Credit Unions

The 569 rural credit unions reported 3.8 million members and savings of more than \$18 billion. There were 595 credit unions in 1999. Number of members was down from 3.9 million, but savings was up slightly. Wisconsin, with 61, had the most associations, or

10.7 percent of the total, while California had the most members (800,000) and credit union savings (\$4.6 billion). California, Wisconsin, and Michigan accounted for nearly 1.8 million memberships (46.8 percent of the total) and \$8.7 billion in savings, or 48.3 percent of the total (table 27).

Dairy Herd Improvement Associations

Dairy Herd Improvement Associations (DHIA) had 31,196 memberships in 2000 (table 28), down from 33,539 in 1999. The DHIA tested nearly 4.3 million cows in 2000, down slightly from 1999. Wisconsin (7,691), Pennsylvania (4,604), Minnesota (3,487), and New York (2,721), combined, accounted for 59.3 percent of total members, down from 59.6 percent in 1999. About 20.9 percent (893,300) of the cows tested were in California, up from 20.4 percent in 1999.

Table 19- Cooperatives' net business volume, 1991
and 2000¹

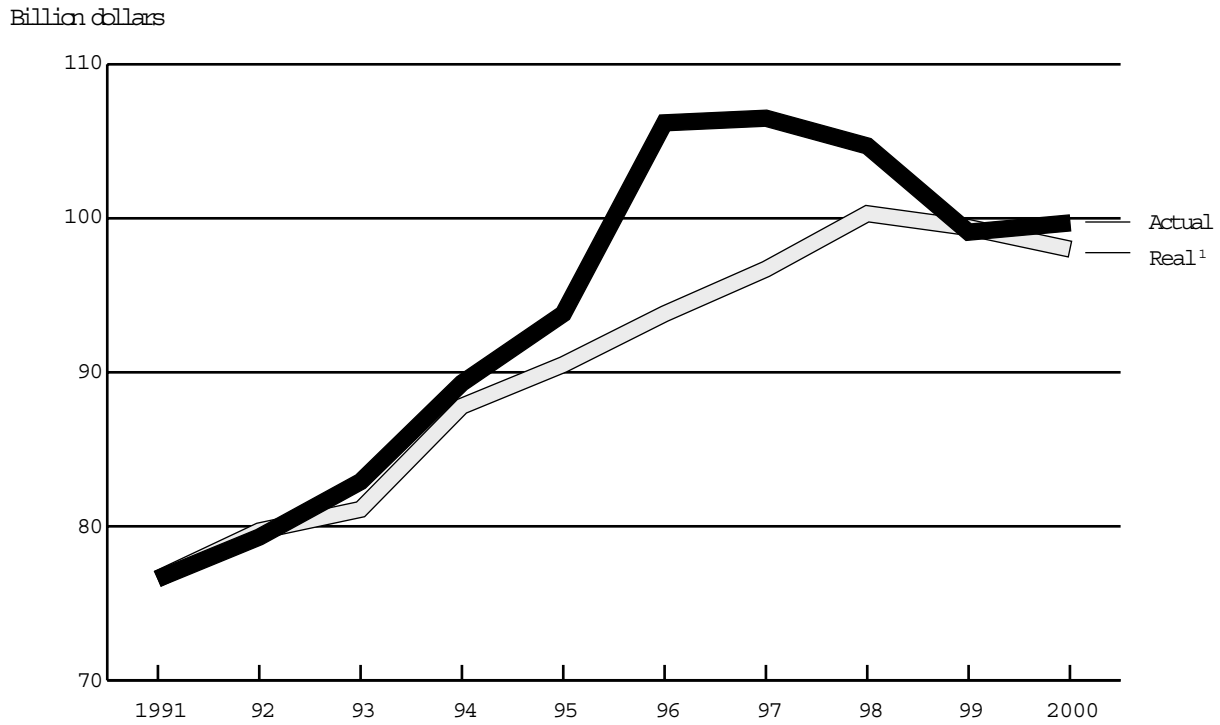
Function	Net Business Volume	
	1991	2000
	Million dollars	
Products marketed:		
Beans and peas (dry edible)	219.2	146.7
Cotton	2,343.3	2,730.5
Dairy	18,819.1	22,720.6
Fruits and vegetables	8,170.3	9,570.0
Grains and oilseeds ²	14,471.8	18,369.6
Livestock	5,110.7	8,042.7
Nuts	823.2	720.6
Poultry	1,170.7	2,133.4
Rice	705.7	814.8
Sugar	1,839.5	2,680.8
Tobacco	570.7	563.1
Wool and mohair	13.7	4.4
Other products ³	<u>1,945.0</u>	<u>3,567.6</u>
Total farm products	56,202.9	72,064.7
Supplies purchased:		
Crop protectants	1,825.3	3,027.6
Feed	4,096.9	4,691.1
Fertilizer	3,631.4	4,574.4
Petroleum	5,117.6	7,456.7
Seed	552.2	915.7
Other supplies	<u>2,692.7</u>	<u>3,419.1</u>
Total farm supplies	17,916.0	24,084.5
Services provided:		
Trucking, cotton ginning, storage, grinding, locker plants, misc.	<u>2,517.3</u>	<u>3,510.2</u>
Total business	76,636.3	99,659.4

¹ Excludes inter-cooperative business volume. Totals may not add due to rounding.

² Excludes cottonseed. Cottonseed sales were included with cotton. Cottonseed meal and oil sales were included with feed and other products, respectively.

³ Includes value of processed oilseeds.

Figure 16- Cooperatives' Net Business Volume, 1991-2000



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

Figure 17- Cooperatives' Net Sales of Selected Commodities, 1991-2000

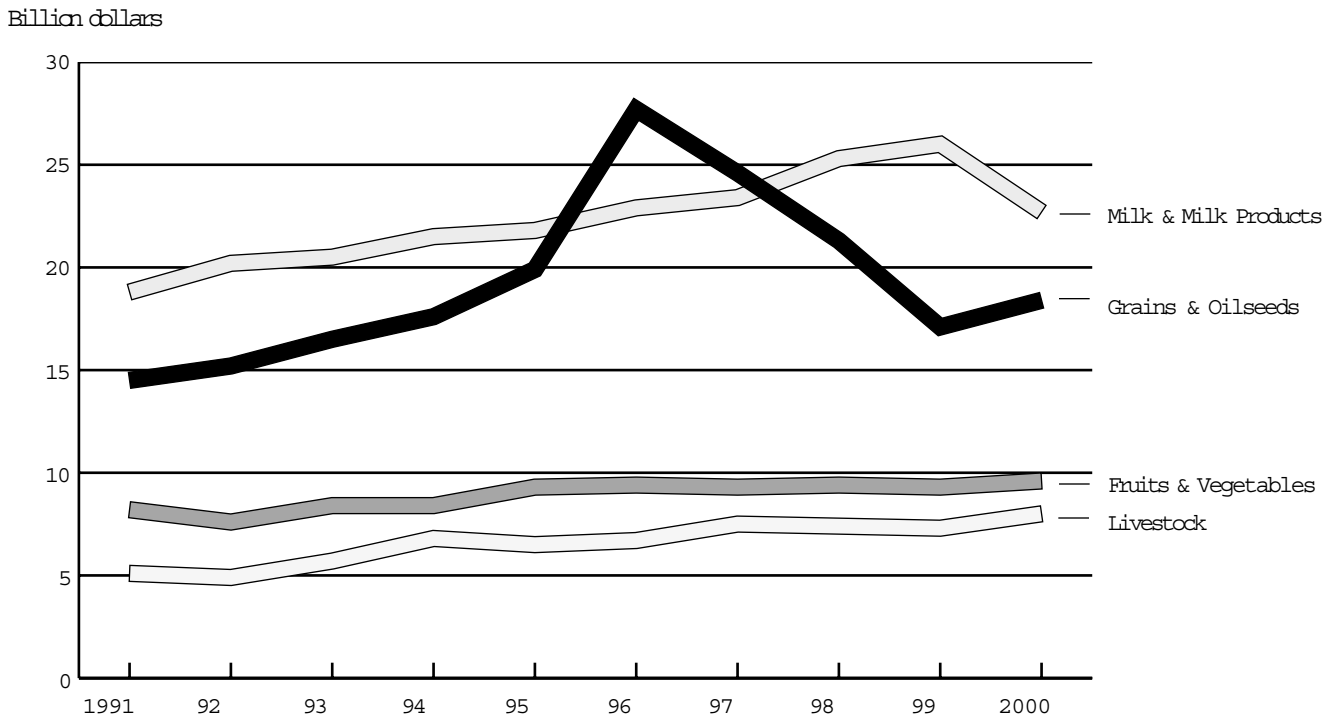


Figure 18- Cooperatives' Net Sales of Selected Farm Supplies, 1991-2000

Billion dollars

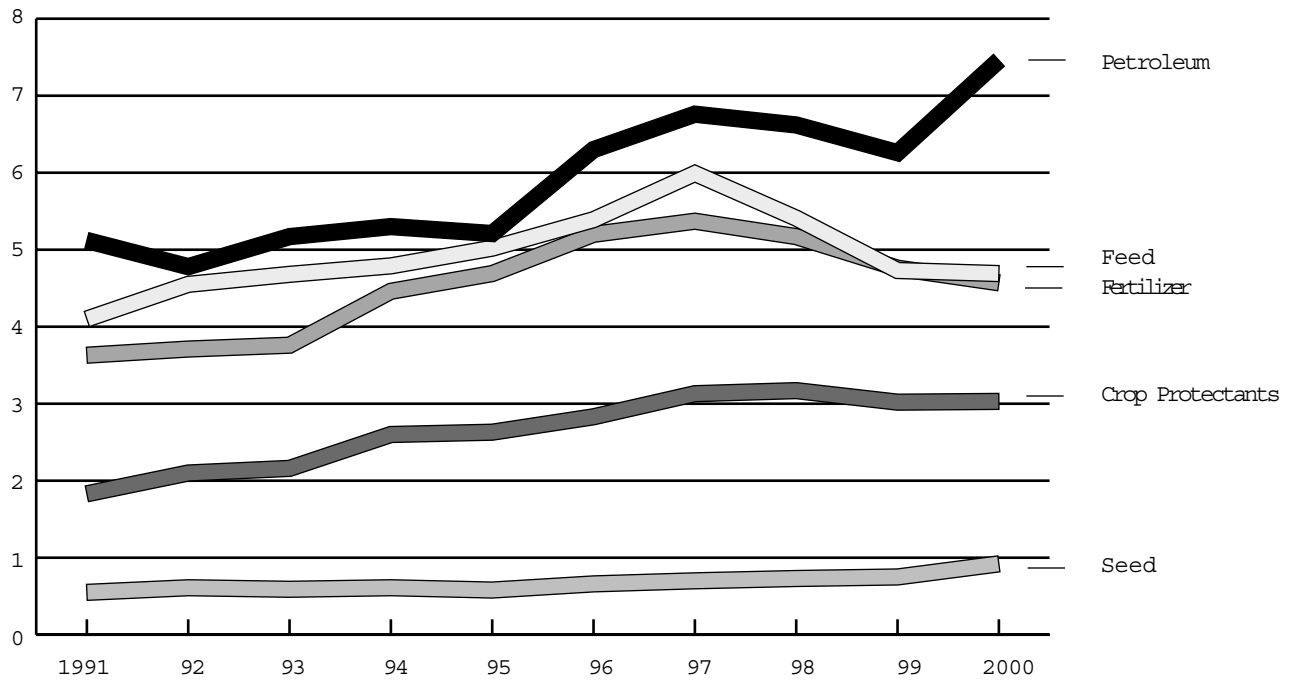


Table 20- Cooperatives' gross and net business volumes, 1991-2000¹

Period ²	Gross volume				Net volume			
	Farm products	Farm supplies	Services ³	Total	Farm products	Farm supplies	Services ³	Total
Billion dollars								
1991	61.4	26.8	2.5	90.8	56.2	17.9	2.5	76.6
1992	63.8	27.0	2.6	93.4	58.2	18.5	2.6	79.3
1993	66.8	28.2	2.7	97.7	60.9	19.2	2.7	82.9
1994	72.1	30.4	3.0	105.5	65.5	20.8	3.0	89.3
1995	77.9	31.0	3.3	112.2	69.3	21.2	3.3	93.8
1996	90.3	34.7	3.1	128.1	79.4	23.7	3.1	106.2
1997	85.9	37.1	3.6	126.7	77.8	25.2	3.6	106.7
1998	84.5	33.0	3.5	121.0	76.6	24.6	3.5	104.7
1999	80.5	30.9	3.9	115.3	72.0	23.2	3.9	99.1
2000	80.4	36.8	3.5	120.7	72.1	24.1	3.5	99.7
Percent								
1991	67.7	29.5	2.8	100	73.3	23.4	3.3	100
1992	68.3	28.9	2.8	100	73.4	23.4	3.2	100
1993	68.4	28.8	2.8	100	73.5	23.2	3.3	100
1994	68.4	28.8	2.8	100	73.4	23.3	3.3	100
1995	69.5	27.6	2.9	100	73.9	22.6	3.5	100
1996	70.5	27.1	2.4	100	74.8	22.3	2.9	100
1997	67.8	29.3	2.9	100	72.9	23.7	3.4	100
1998	69.9	27.2	2.9	100	73.2	23.5	3.3	100
1999	69.8	26.8	3.4	100	72.7	23.4	3.9	100
2000	66.6	30.5	2.9	100	72.3	24.2	3.5	100

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

² Prior to 1991, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998. Data for prior years are not entirely comparable due to revisions in statistical procedures.

³ Services related to marketing or supply purchasing, but not included in the volumes reported for these activities. Beginning with 1990, other income and revenue were included with service receipts.

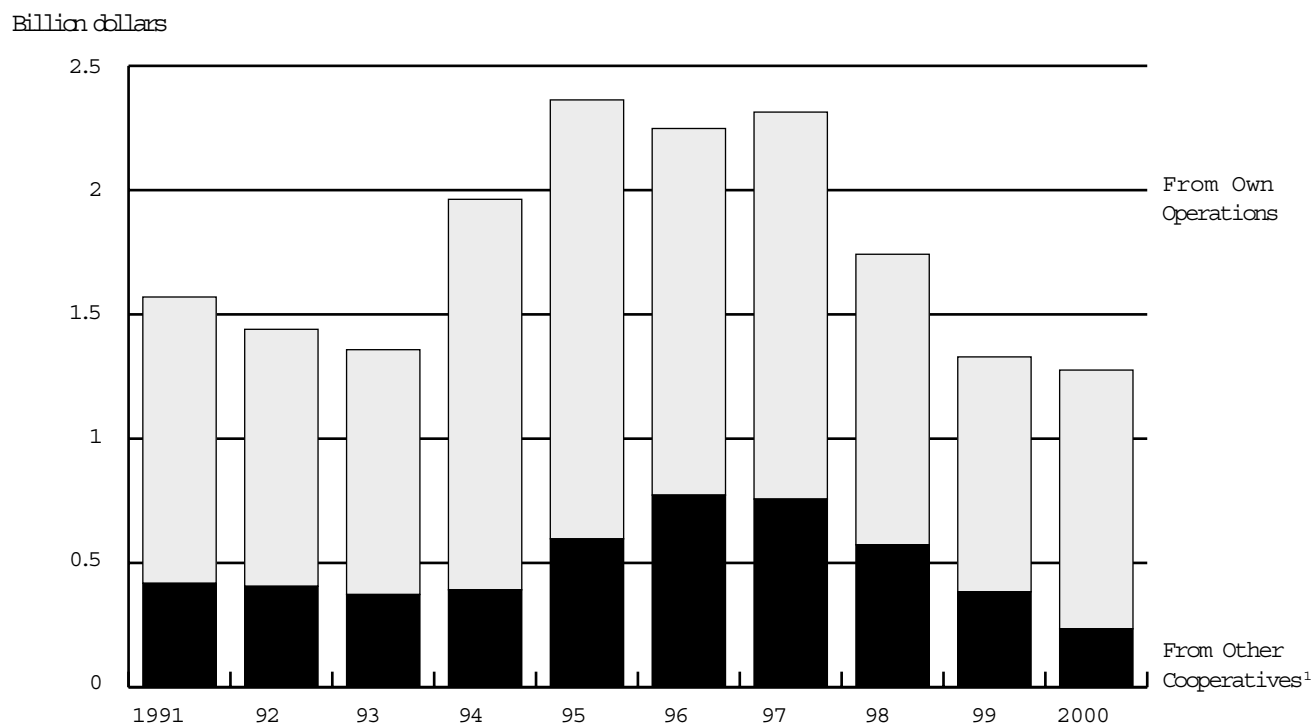
Table 21- Net income of farmer cooperatives,
1991-2000¹

Year	From own operations	From other cooperatives ²	Total
Million dollars			
1991	1,152	418	1,570
1992	1,034	406	1,440
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

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.

Figure 19- Cooperatives' Net Income, 1991-2000



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

Table 22- Combined balance sheet data for farmer cooperatives, 1991-2000

Year	Assets from own operations	Investments in other co-ops ¹	Total assets	Total liabilities	Net worth
Million dollars					
1991	27,887	3,381	31,268	17,227	14,040
1992	28,967	3,027	31,994	17,780	14,213
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
Percent of total assets					
1991	89.2	10.8	100	55.1	44.9
1992	90.5	9.5	100	55.6	44.4
1993	91.1	8.9	100	55.7	44.3
1994	91.2	8.8	100	56.6	43.4
1995	92.0	8.0	100	58.7	41.3
1996	91.6	8.4	100	59.2	40.8
1997	90.7	9.3	100	57.9	42.1
1998	90.0	10.0	100	57.1	42.9
1999	88.8	11.2	100	57.5	42.5
2000	89.8	10.2	100	59.2	40.8

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

Figure 20- Cooperatives' Net Worth and Liabilities, 1991-2000

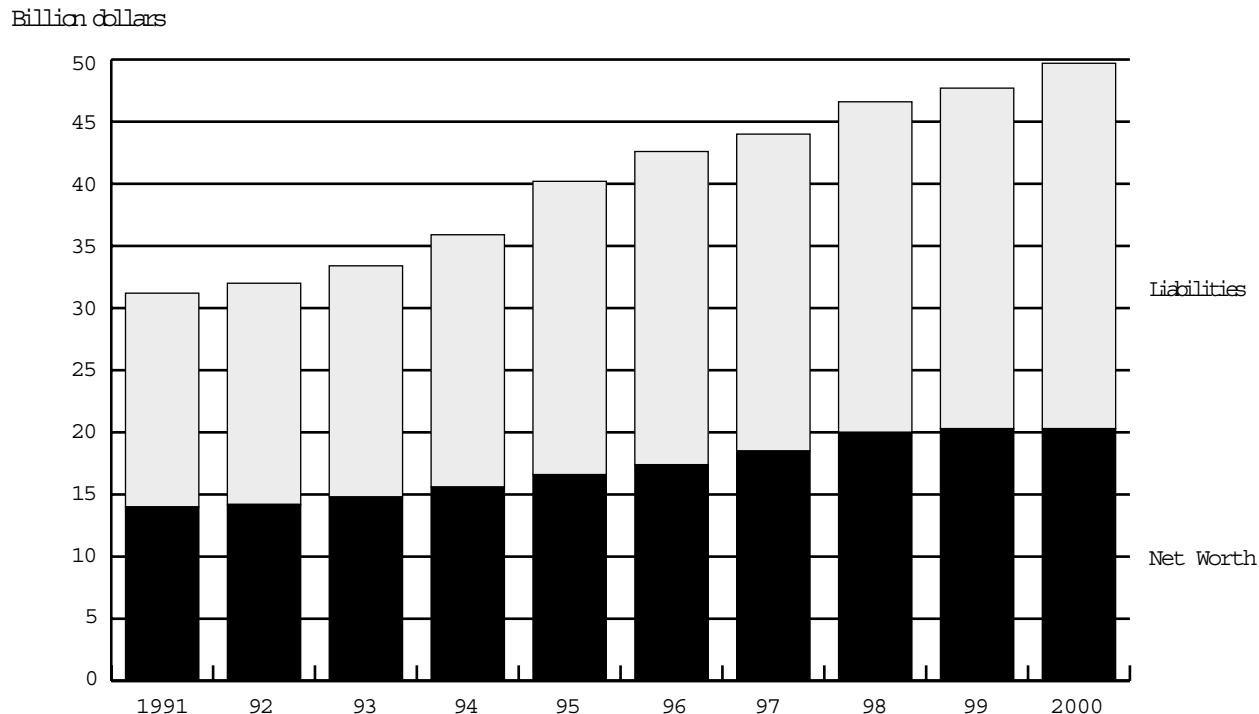


Table 23- Farm Credit Association Structure, Jan 1, 2001¹

District or bank affiliation	PCA	ACA	FLCA
	Number		
CoBank, ACB	-	4	-
AgFirst FCB	-	24	-
AgriBank, FCB	11	11	10
FCB of Wichita	8	7	11
FCB of Texas	3	10	10
Western FCB	5	10	6
AgAmerica, FCB	1	1	1
	--	--	--
Total	28	67	38

- = No bank affiliation.

¹ PCA = Production Credit Association, ACA = Agricultural Credit Association, FCB=Farm Credit Bank, FLCA = Federal Land Credit Association, ACB=Agricultural Credit Bank, the successor Bank resulting from a BC/FCB merger. During 2000, the remaining Federal Land Bank Associations became direct lenders through conversions to FLCAs. Included in the net changes through January 1, 2001, were the reorganizations in which a majority of the ACAs adopted the ACA Parent structure.

Source: Farm Credit Administration, Accountability Report FY 2000, McLean, VA, p. 33
Farm Credit System, Annual Information Statement - 2000 Jersey City, NJ, p. 27

Table 24- Farm Credit System's combined assets, net worth, and net income, 1996-2000¹

Year	Assets	Net worth	Net income
Million dollars			
1996	74,917	10,729	1,201
1997	78,144	11,694	1,267
1998	84,139	12,522	1,251
1999	88,692	13,319	1,233
2000	94,036	14,397	1,422

¹ Farm Credit System, Annual Information Statement, 2000, Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ, Feb. 23, 2001, p. 3.

Table 25- Combined assets, net worth, net loans, and net income of CoBank, ACB, 1996-2000¹

Year	Assets	Net worth	Net loans	Net income
Million dollars				
1996	20,771	1,504	16,871	145
1997	21,207	1,600	16,821	164
1998	22,104	1,671	17,513	145
1999	24,089	1,665	18,398	121
2000	24,255	1,791	19,230	185

¹ As of December 31 of each year. Source: CoBank, ACB, Creating Customer Value in the 21st Century, 2000 Annual Report, Englewood, CO.

Table 26- Number, participation, and level of activity of rural electric¹ cooperatives, by State, Dec. 31, 2000²

State	Cooperatives	Members	Revenue	State	Cooperatives	Members	Revenue
	Number	1,000	Mil. dl.		Number	1,000	Mil. dl.
Alabama	18	385	533	Montana	21	95	104
Alaska	8	54	143	Nebraska	2	9	20
Arizona	5	130	184	New Mexico	16	185	253
Arkansas	14	297	443	New York	4	16	14
California	3	16	20	North Carolina	23	730	960
Colorado	17	305	423	North Dakota	18	120	205
Florida	10	450	576	Ohio	20	298	356
Georgia	35	1,112	1,545	Oklahoma	18	266	328
Idaho	4	31	39	Oregon	8	54	81
Illinois	7	54	81	Pennsylvania	10	163	179
Indiana	22	251	319	South Carolina	19	540	804
Iowa	26	134	212	South Dakota	28	129	173
Kansas	29	154	254	Tennessee	20	837	1,211
Kentucky	24	682	1,062	Texas	36	598	805
Louisiana	10	306	421	Virginia	12	377	581
Maine	3	14	10	Washington	5	33	50
Michigan	7	211	180	Wisconsin	16	136	135
Minnesota	36	403	465	Wyoming	9	60	133
Mississippi	14	415	615	Other States ³	5	206	315
Missouri	32	460	513		--	--	--
				United States	614	10,716	14,744

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.

Table 27- Number, participation, and level of activity of rural credit unions,¹ by State, Dec. 31, 2000²

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	Number	1,000	Mil. dl.		Number	1,000	Mil. dl.
Alabama	8	22	87	New Jersey	5	9	16
Arizona	4	19	52	New Mexico	3	46	196
Arkansas	3	9	35	New York	27	188	880
California	50	800	4,637	North Carolina	13	29	70
Colorado	13	21	85	North Dakota	28	94	580
Florida	14	113	431	Ohio	12	36	73
Georgia	10	36	102	Oklahoma	4	7	32
Hawaii	13	104	640	Oregon	9	65	228
Idaho	9	18	54	Pennsylvania	19	33	88
Illinois	11	66	303	Rhode Island	3	85	686
Indiana	14	50	413	South Carolina	3	9	59
Iowa	6	7	20	South Dakota	7	11	33
Kansas	15	75	243	Tennessee	7	15	41
Kentucky	7	31	88	Texas	31	108	391
Louisiana	8	16	44	Utah	9	15	51
Maine	7	21	89	Vermont	3	22	54
Maryland	5	61	292	Virginia	6	53	189
Massachusetts	3	7	19	Washington	12	157	734
Michigan	23	385	1,387	West Virginia	3	5	10
Minnesota	35	218	1,145	Wisconsin	61	614	2,685
Mississippi	4	13	36	Other States ³	7	31	134
Missouri	6	21	61		--	--	--
Montana	9	32	143	United States	569	3,845	18,043
Nebraska	15	21	94				
Nevada	5	46	316				

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 three cooperatives - Alaska, Connecticut, Delaware, New Hampshire, and Wyoming

Table 28- Number, participation, and level of activity of dairy herd improvement associations,¹ by State, Dec. 31, 2000²

State	Members (herds)	Cows tested	State	Members (herds)	Cows tested
	Number	1,000		Number	1,000
Alabama	57	9.5	Nebraska	263	33.9
Arizona	61	85.5	Nevada	19	9.1
Arkansas	76	7.6	New Hampshire	108	10.6
California	1,118	893.3	New Jersey	82	7.5
Colorado	80	49.4	New Mexico	28	42.9
Connecticut	119	13.5	New York	2,721	324.9
Delaware	28	4.0	North Carolina	234	39.2
Florida	109	70.0	North Dakota	77	7.8
Georgia	223	54.7	Ohio	1,100	102.7
Hawaii	5	2.7	Oklahoma	127	17.2
Idaho	223	97.2	Oregon	274	55.7
Illinois	662	57.1	Pennsylvania	4,604	327.2
Indiana	511	45.6	Rhode Island	6	4
Iowa	1,300	112.0	South Carolina	82	15.8
Kansas	312	38.2	South Dakota	285	30.6
Kentucky	296	27.4	Tennessee	281	34.6
Louisiana	135	19.1	Texas	304	129.1
Maine	161	15.8	Utah	230	48.1
Maryland	407	38.3	Vermont	509	57.0
Massachusetts	118	11.0	Virginia	538	71.3
Michigan	993	151.8	Washington	263	75.5
Minnesota	3,487	296.4	West Virginia	61	6.4
Mississippi	76	12.3	Wisconsin	7,691	623.7
Missouri	518	48.2	Wyoming	7	1.3
Montana	54	7.9		-----	--
			United States ³	31,196	4,282.2

¹ Source: Agricultural Research Service, USDA. Totals may not add due to rounding.

² Totals may not add due to rounding.

³ Includes Alaska, Puerto Rico, and Virgin Islands with 173 members and 41,219 cows tested.

Appendix Tables

Appendix Table 1— Number of co-ops,¹ and memberships,² by major business activity and State, 1999³

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
BEANS AND PEAS, DRY EDIBLE			FRUITS AND VEGETABLES (Continued)		
California	3	666	Massachusetts	3	312
North Dakota	3	1,000	Michigan	14	3,379
Other States	2	1,130	Minnesota	3	221
United States	8	2,796	New Jersey	9	713
			New York	9	975
COTTON ⁴			North Carolina	4	72
California	3	1,537	North Dakota	3	214
Mississippi	3	2,786	Ohio	5	457
Texas	4	24,081	Oregon	11	1,101
Other States	5	15,152	Pennsylvania	6	555
Foreign ⁵	-	198	Texas	3	247
United States	15	43,754	Washington	19	5,367
			Other States	20	2,572
			Foreign ⁵	-	91
DAIRY			United States	231	40,876
California	8	1,215	GRAINS AND OILSEEDS, EXCLUDING COTTONSEED ⁶		
Illinois	4	2,609	California	3	231
Iowa	8	4,717	Colorado	15	9,091
Massachusetts	3	243	Idaho	5	1,141
Minnesota	35	17,097	Illinois	110	94,841
New Mexico	5	316	Indiana	19	29,224
New York	67	6,433	Iowa	106	87,897
North Dakota	5	1,108	Kansas	113	113,038
Ohio	5	845	Michigan	6	2,758
Oregon	3	794	Minnesota	94	52,651
Pennsylvania	19	2,612	Mississippi	5	2,711
Texas	4	1,913	Missouri	17	22,637
Virginia	4	1,187	Montana	12	3,121
Wisconsin	30	25,266	Nebraska	60	61,592
Other States	21	24,320	North Dakota	119	45,786
United States	221	90,675	Ohio	41	28,899
FRUITS AND VEGETABLES			Oklahoma	41	30,821
Arizona	4	752	South Dakota	60	36,813
Arkansas	3	98	Texas	37	17,577
California	67	18,652	Washington	21	11,568
Colorado	9	471	Other States	12	5,524
Florida	23	1,738	United States	896	657,921
Hawaii	7	343			
Idaho	4	2,002			
Maine	5	544			

Continued

Appendix Table 1— Number of co-ops,¹ and memberships,² by major business activity and State, 1999³ (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
LIVESTOCK			TOBACCO ⁷		
Alabama	6	5,240	Kentucky	5	76,989
Hawaii	4	81	North Carolina	7	24,852
Idaho	3	4,355	Tennessee	7	67,112
Illinois	3	19,122	Virginia	3	739
Indiana	3	2,081	Other States	3	334
Kentucky	4	868			
Mississippi	4	4,225	United States	25	170,026
Missouri	6	5,366	WOOL AND MOHAIR		
North Dakota	8	567	Idaho	4	159
Ohio	4	7,425	Montana	19	861
Virginia	4	810	North Dakota	4	412
West Virginia	3	426	Ohio	3	1,518
Wisconsin	5	60,617	Pennsylvania	14	1,901
Other States	24	25,871	Utah	3	125
United States	81	137,054	Virginia	8	590
			West Virginia	10	899
NUT ⁷			Wyoming	3	183
California	7	6,764	Other States	16	8,710
Other States	11	36,985	Foreign ⁵	-	82
United States	18	43,749	United States	84	15,440
POULTRY ⁸			MISCELLANEOUS ¹⁰		
California	3	82	Alaska	9	1,603
Utah	3	65	California	10	1,383
Other States	9	28,954	Florida	6	325
Foreign ⁵	-	89	Georgia	3	80
United States	15	29,190	Hawaii	6	562
			Maine	15	924
RICE			Minnesota	5	11,069
California	5	1,789	Mississippi	3	186
Louisiana	3	186	North Dakota	6	2,322
Texas	6	918	Washington	5	707
Other States	3	8,905	Other States	22	4,695
Foreign ⁵	-	1	United States	90	23,856
United States	17	11,799	TOTAL MARKETING		
			Alabama	10	14,498
SUGAR ⁹			Alaska	9	1,815
Idaho	7	2,051	Arizona	5	2,191
Louisiana	9	583	Arkansas	11	12,460
Michigan	7	2,117	California	113	34,903
Minnesota	3	2,467	Colorado	27	12,936
Montana	3	517	Florida	32	5,696
Wyoming	4	455	Georgia	8	23,931
Other States	15	7,511	Hawaii	21	1,300
Foreign ⁵	-	2	Idaho	25	10,249
United States	48	15,703	Illinois	119	116,926
			Indiana	23	32,774
			Iowa	121	99,245

Continued

Appendix Table 1— Number of co-ops¹, and memberships,² by major business activity and State, 1999³ (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
TOTAL MARKETING (Continued)			FARM SUPPLY (Continued)		
Kansas	113	116,201	Kentucky	28	147,137
Kentucky	12	80,984	Louisiana	19	6,529
Louisiana	17	3,946	Maryland	15	70,647
Maine	22	1,878	Massachusetts	5	4,371
Maryland	4	789	Michigan	23	11,344
Massachusetts	8	846	Minnesota	142	96,651
Michigan	34	13,636	Mississippi	37	86,153
Minnesota	143	85,225	Missouri	45	109,267
Mississippi	18	11,782	Montana	35	23,704
Missouri	25	32,734	Nebraska	39	26,848
Montana	38	5,016	New Jersey	3	4,636
Nebraska	68	65,505	New York	11	1,805
New Jersey	13	2,647	North Dakota	114	57,853
New Mexico	5	1,259	Ohio	20	13,225
New York	82	9,630	Oklahoma	28	18,633
North Carolina	19	27,635	Oregon	14	19,288
North Dakota	151	55,582	Pennsylvania	7	28,262
Ohio	59	39,183	South Dakota	74	60,713
Oklahoma	45	41,832	Tennessee	70	68,265
Oregon	20	5,348	Texas	48	33,106
Pennsylvania	42	5,167	Utah	6	5,642
South Carolina	4	3,040	Virginia	35	142,171
South Dakota	62	41,333	Washington	30	11,919
Tennessee	8	69,266	West Virginia	13	73,498
Texas	61	50,694	Wisconsin	102	97,009
Utah	10	2,759	Wyoming	6	4,129
Vermont	5	1,614	Other States	12	155,185
Virginia	21	26,517	Foreign ⁵	-	4,326
Washington	50	19,262			
West Virginia	14	1,530	United States	1,313	1,731,377
Wisconsin	40	87,382			
Wyoming	7	1,016	SERVICE ¹¹		
Other States	5	2,214	Alabama	5	180
Foreign ⁵	-	463	Arizona	4	855
United States	1,749	1,282,839	Arkansas	6	1,110
			California	49	4,015
FARM SUPPLY			Georgia	3	365
Alabama	48	39,208	Hawaii	5	107
Arkansas	36	42,468	Illinois	4	255
California	19	14,686	Louisiana	12	1,819
Colorado	19	19,677	Michigan	5	4,808
Florida	6	8,823	Minnesota	20	5,026
Georgia	5	2,377	Mississippi	21	7,304
Idaho	14	8,334	New Mexico	4	1,504
Illinois	66	78,077	New York	5	6,335
Indiana	30	42,532	North Carolina	5	108
Iowa	67	75,918	North Dakota	3	5,000
Kansas	22	16,961	Ohio	4	3,562
			Oklahoma	21	8,146

Continued

Appendix Table 1— Number of co-ops,¹ and memberships,² by major business activity and State, 1999³ (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
SERVICE ¹¹ (Continued)			TOTAL (Continued)		
Pennsylvania	7	11,579	Ohio	83	55,970
Texas	142	34,264	Oklahoma	94	68,611
Virginia	3	5,620	Oregon	35	24,638
Washington	4	2,722	Pennsylvania	56	45,008
Wisconsin	49	21,299	South Carolina	6	3,458
Other States	23	33,124	South Dakota	136	107,046
United States	404	159,107	Tennessee	79	139,124
			Texas	251	118,064
TOTAL			Utah	17	10,013
Alabama	63	53,886	Vermont	5	5,981
Alaska	9	1,815	Virginia	59	174,308
Arizona	9	3,376	Washington	84	33,903
Arkansas	53	56,038	West Virginia	27	75,083
California	181	53,604	Wisconsin	191	205,690
Colorado	47	32,613	Wyoming	13	5,145
Connecticut	4	2,728	Other States	4	30,121
Delaware	3	43,422	Foreign ⁵	—	4,789
Florida	39	26,050	United States	3,466	3,173,323
Georgia	16	26,673			
Hawaii	28	2,768			
Idaho	40	18,583			
Illinois	189	195,258			
Indiana	55	75,409			
Iowa	189	180,168			
Kansas	137	133,269			
Kentucky	41	231,862			
Louisiana	48	12,294			
Maine	24	8,348			
Maryland	21	71,953			
Massachusetts	13	5,551			
Michigan	62	29,788			
Minnesota	305	186,902			
Mississippi	76	105,239			
Missouri	71	142,771			
Montana	73	28,720			
Nebraska	110	92,353			
New Jersey	18	7,347			
New Mexico	10	2,974			
New York	98	17,770			
North Carolina	26	98,404			
North Dakota	268	118,435			

¹ Includes centralized and federated cooperatives and those with mixed organizational structures.

² Includes farmer-members (entitled to vote for directors), but not nonvoting patrons. (Duplication in these membership figures occurs because many farmers belong to more than one cooperative.) Totals may not add due to rounding.

³ Data covering operations of cooperatives for fiscal years that ended in 1999. States listed are those with more than two cooperatives or where disclosure is not a problem.

⁴ Cotton ginning cooperatives are included as service cooperatives.

⁵ Includes memberships located in other countries.

⁶ Excludes soybean meal and oil.

⁷ Membership fluctuates annually and is affected by the extent to which producers participate in price stabilization programs.

⁸ Includes eggs, turkeys, ratite, squab, and related products.

⁹ Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.

¹⁰ Includes forest products, hay, hops, nursery stock, coffee, and other farm products not separately classified.

¹¹ Cooperatives providing services such as cotton ginning, livestock shipping, storing, grinding, drying, and artificial insemination.

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	1,000 dollars			1,000 dollars	
LIVESTOCK			SUGAR		
Alabama	58,490	58,490	Idaho	474,175	474,175
Hawaii	17,490	17,490	Louisiana	353,946	202,547
Idaho	81,420	81,420	Michigan	103,740	103,740
Illinois	473,529	473,438	Minnesota	728,081	728,081
Indiana	115,107	115,098	Montana	61,962	61,962
Kentucky	117,388	117,388	Wyoming	41,178	41,178
Mississippi	52,320	52,320	Other States	922,995	922,995
Missouri	890,096	890,096	Foreign ³	<u>5,314</u>	<u>5,314</u>
North Dakota	95,529	95,529	United States	2,691,391	2,539,992
Ohio	460,160	460,160			
Virginia	17,666	17,666	TOBACCO		
West Virginia	3,245	3,245	Kentucky	133,615	133,615
Wisconsin	526,085	526,077	North Carolina	109,145	109,145
Other States	4,462,191	4,410,063	Tennessee	27,550	27,550
Foreign ³	<u>376</u>	<u>376</u>	Virginia	4,559	4,559
United States	7,371,091	7,318,854	Other States	<u>3,554</u>	<u>3,554</u>
			United States	278,422	278,422
NUTS			WOOL AND MOHAIR		
California	602,102	602,102	Idaho	11	11
Other States	<u>297,008</u>	<u>297,008</u>	Montana	224	224
United States	899,111	899,111	North Dakota	10	10
			Ohio	678	235
POULTRY⁴			Pennsylvania	112	112
California	37,256	37,256	Utah	692	692
Utah	114,732	114,732	Virginia	26	26
Other States	<u>2,073,892</u>	<u>2,073,892</u>	West Virginia	135	135
United States	2,225,880	2,225,880	Wyoming	157	157
			Other States	6,989	4,662
RICE			Foreign ³	<u>87</u>	<u>87</u>
California	217,711	217,711	United States	9,121	6,350
Louisiana	21,179	21,179			
Texas	60,682	60,682	MISCELLANEOUS MARKETING⁵		
Other States	<u>612,160</u>	<u>612,160</u>	Alaska	14,119	14,119
United States	911,732	911,732	California	91,664	91,664
			Florida	18,231	18,231
			Georgia	6,050	6,050
			Hawaii	26,572	26,572
			Maine	31,859	31,859
			Minnesota	920,260	810,166

Continued

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
MISCELLANEOUS MARKETING ⁵ (Continued)			TOTAL FARM PRODUCTS MARKETED (Continued)		
Mississippi	137,475	120,447	Tennessee	151,720	138,347
North Dakota	197,694	197,694	Texas	2,961,504	2,615,597
Washington	87,543	74,133	Utah	210,790	195,101
Other States	1,898,039	1,728,164	Vermont	416,484	408,176
Foreign ³	26,813	26,402	Virginia	469,349	437,104
United States	3,456,319	3,145,501	Washington	2,701,409	2,610,720
			West Virginia	42,768	40,134
			Wisconsin	7,156,158	6,481,057
			Wyoming	63,376	62,901
			Other States	279,961	220,195
			Foreign ³	391,500	284,501
			United States	80,506,288	71,981,941
TOTAL FARM PRODUCTS MARKETED			FARM SUPPLIES PROVIDED:		
Alabama	706,811	706,785	CROP PROTECTANTS		
Alaska	14,495	14,495	Alabama	76,511	28,434
Arizona	949,078	883,380	Arkansas	99,802	83,236
Arkansas	1,206,982	1,194,894	California	28,938	28,755
California	7,328,083	6,799,736	Colorado	44,013	41,232
Colorado	497,514	470,911	Florida	15,316	11,805
Florida	2,114,760	1,968,093	Georgia	193,722	188,963
Georgia	1,387,585	1,340,123	Idaho	28,636	20,144
Hawaii	95,283	92,077	Illinois	476,224	301,045
Idaho	1,134,005	1,108,352	Indiana	168,290	160,106
Illinois	4,028,635	3,654,165	Iowa	481,081	380,386
Indiana	1,108,416	1,008,123	Kansas	133,663	118,893
Iowa	6,073,909	5,354,438	Kentucky	59,628	53,475
Kansas	4,093,908	3,528,022	Louisiana	26,174	22,300
Kentucky	366,517	364,617	Maryland	16,928	15,933
Louisiana	651,920	438,089	Massachusetts	2,339	2,339
Maine	98,113	95,839	Michigan	30,681	29,834
Maryland	194,035	169,140	Minnesota	323,664	263,001
Massachusetts	570,759	568,203	Mississippi	33,150	28,498
Michigan	1,707,249	1,539,374	Missouri	112,255	85,933
Minnesota	8,571,499	7,082,996	Montana	40,086	31,603
Mississippi	710,559	682,767	Nebraska	212,021	177,112
Missouri	4,003,112	3,614,577	New Jersey	4,801	4,801
Montana	428,821	309,623	New York	35,419	34,507
Nebraska	3,863,529	3,266,602	North Dakota	147,742	120,103
New Jersey	222,141	221,001	Ohio	100,210	100,004
New Mexico	536,011	535,769	Oklahoma	24,780	23,688
New York	2,872,867	2,441,145	Oregon	54,397	47,509
North Carolina	579,016	536,358	Pennsylvania	31,100	31,100
North Dakota	2,593,092	2,195,322	South Dakota	157,591	131,956
Ohio	1,677,851	1,622,999			
Oklahoma	1,152,622	1,007,188			
Oregon	1,281,292	1,175,412			
Pennsylvania	878,293	830,383			
South Carolina	112,160	108,589			
South Dakota	1,850,348	1,558,521			

Continued

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
CROP PROTECTANTS (Continued)			FEED (Continued)		
Tennessee	120,347	65,042	Virginia	122,279	113,706
Texas	63,024	60,612	Washington	114,811	39,955
Utah	11,213	11,035	West Virginia	18,851	17,202
Virginia	29,353	24,809	Wisconsin	462,008	289,175
Washington	72,122	60,674	Wyoming	6,888	6,170
West Virginia	884	884	Other States	324,854	266,094
Wisconsin	170,560	131,859	Foreign ³	136,482	66,912
Wyoming	8,874	8,726			
Other States	94,179	87,099	United States	6,383,838	4,725,594
Foreign ³	26,759	840			
United States	3,756,479	3,018,275	FERTILIZER		
			Alabama	106,041	65,268
FEED			Arkansas	110,609	87,431
Alabama	263,928	228,724	California	105,663	94,500
Arkansas	103,677	79,012	Colorado	113,784	93,730
California	157,821	107,580	Florida	132,638	44,237
Colorado	55,732	41,067	Georgia	69,799	58,946
Florida	90,307	88,484	Idaho	61,685	40,416
Georgia	285,619	281,326	Illinois	742,559	415,740
Idaho	35,826	10,517	Indiana	263,891	209,884
Illinois	250,515	188,676	Iowa	790,378	500,807
Indiana	101,665	85,891	Kansas	354,083	285,234
Iowa	960,511	650,494	Kentucky	130,979	105,667
Kansas	226,131	167,029	Louisiana	28,041	24,233
Kentucky	57,589	51,965	Maryland	27,252	25,638
Louisiana	41,692	27,049	Massachusetts	3,360	3,360
Maryland	41,252	38,556	Michigan	55,056	50,439
Massachusetts	18,707	18,707	Minnesota	609,418	358,865
Michigan	63,746	61,145	Mississippi	57,198	47,900
Minnesota	604,214	420,152	Missouri	323,851	225,478
Mississippi	82,863	53,268	Montana	92,778	62,926
Missouri	214,496	158,005	Nebraska	407,408	301,907
Montana	18,857	18,450	New Jersey	6,422	6,422
Nebraska	234,824	158,613	New York	60,900	54,112
New Jersey	14,588	14,469	North Dakota	354,210	203,830
New York	129,218	121,263	Ohio	203,347	140,411
North Dakota	56,216	44,431	Oklahoma	136,871	95,680
Ohio	120,657	119,631	Oregon	114,014	90,085
Oklahoma	86,334	64,833	Pennsylvania	44,002	43,857
Oregon	126,407	37,526	South Dakota	254,979	167,937
Pennsylvania	106,980	106,257	Tennessee	218,588	105,624
South Dakota	218,976	179,752	Texas	226,566	143,789
Tennessee	185,282	111,062	Utah	28,442	26,883
Texas	168,508	121,695	Virginia	78,629	74,311
Utah	74,524	70,754	Washington	95,257	76,540
			West Virginia	11,553	9,359

Continued

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	1,000 dollars			1,000 dollars	
FERTILIZER (Continued)			PETROLEUM (Continued)		
Wisconsin	284,719	193,122	Wisconsin	551,439	484,625
Wyoming	26,225	21,814	Wyoming	114,149	104,007
Other States	156,703	140,832	Other States	95,742	91,813
Foreign ³	363,930	61,392	Foreign ³	91,774	60,790
United States	7,251,827	4,758,603	United States	8,142,266	6,259,807
PETROLEUM			SEED		
Alabama	5,394	4,665	Alabama	66,868	15,143
Arkansas	64,938	57,075	Arkansas	28,446	28,253
California	6,049	4,851	California	17,792	17,792
Colorado	240,186	179,988	Colorado	4,090	4,089
Florida	6,965	6,790	Florida	19,855	15,910
Georgia	55,256	43,603	Georgia	6,367	5,856
Idaho	112,241	95,430	Idaho	20,703	6,181
Illinois	508,820	417,297	Illinois	111,449	67,215
Indiana	373,357	279,410	Indiana	35,995	26,032
Iowa	734,837	522,885	Iowa	103,810	62,304
Kansas	899,544	321,019	Kansas	14,401	14,401
Kentucky	134,477	85,481	Kentucky	30,616	28,830
Louisiana	9,364	8,544	Louisiana	9,498	9,370
Maryland	56,698	51,487	Maryland	9,878	9,240
Massachusetts	11,675	11,675	Massachusetts	1,100	1,100
Michigan	91,825	80,083	Michigan	9,404	9,404
Minnesota	712,220	543,442	Minnesota	64,306	48,170
Mississippi	18,336	16,303	Mississippi	18,776	18,521
Missouri	429,060	391,454	Missouri	91,694	35,630
Montana	207,832	179,308	Montana	10,006	6,779
Nebraska	471,912	376,582	Nebraska	20,752	15,912
New Jersey	26,389	26,389	New Jersey	2,121	2,121
New York	186,910	182,510	New York	17,128	17,128
North Dakota	336,612	288,090	North Dakota	33,565	28,723
Ohio	110,336	97,568	Ohio	29,330	29,330
Oklahoma	150,965	109,539	Oklahoma	4,777	4,777
Oregon	168,271	151,795	Oregon	12,014	12,014
Pennsylvania	168,729	166,927	Pennsylvania	14,339	14,339
South Dakota	273,185	239,992	South Dakota	26,959	21,796
Tennessee	137,210	98,379	Tennessee	68,588	37,777
Texas	146,197	102,218	Texas	16,577	16,577
Utah	57,289	47,187	Utah	3,201	3,144
Virginia	166,058	144,544	Virginia	26,501	25,097
Washington	203,649	179,684	Washington	25,636	24,023
West Virginia	6,378	6,378	West Virginia	4,267	4,011

Continued

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	1,000 dollars			1,000 dollars	
SEED (Continued)			MISCELLANEOUS SUPPLIES ⁶ (Continued)		
Wisconsin	52,722	33,778	Wisconsin	249,551	242,808
Wyoming	627	624	Wyoming	54,225	53,265
Other States	32,229	30,182	Other States	207,871	189,785
Foreign ³	5,607	552	Foreign ³	44,437	15,176
United States	1,071,992	752,122	United States	4,272,821	3,662,883
MISCELLANEOUS SUPPLIES ⁶			TOTAL FARM SUPPLIES		
Alabama	116,632	103,322	Alabama	635,375	445,556
Arkansas	61,749	58,877	Arkansas	469,222	393,884
California	99,876	76,767	California	416,139	330,245
Colorado	69,273	59,225	Colorado	527,078	419,331
Florida	170,667	166,225	Florida	435,748	333,451
Georgia	87,841	81,378	Georgia	698,605	660,072
Idaho	40,883	38,234	Idaho	299,975	210,921
Illinois	137,753	97,059	Illinois	2,227,319	1,487,032
Indiana	80,034	68,397	Indiana	1,023,231	829,719
Iowa	243,751	183,790	Iowa	3,314,367	2,300,666
Kansas	114,718	86,875	Kansas	1,742,539	993,451
Kentucky	84,764	73,832	Kentucky	498,052	399,250
Louisiana	16,753	15,801	Louisiana	131,522	107,296
Maryland	39,641	36,132	Maryland	191,650	176,986
Massachusetts	13,266	13,222	Massachusetts	50,447	50,402
Michigan	106,022	102,041	Michigan	356,735	332,947
Minnesota	262,306	222,648	Minnesota	2,576,129	1,856,279
Mississippi	53,583	51,359	Mississippi	263,907	215,849
Missouri	119,371	75,119	Missouri	1,290,727	971,618
Montana	72,820	69,963	Montana	442,381	369,030
Nebraska	125,668	108,379	Nebraska	1,472,585	1,138,503
New Jersey	35,849	34,936	New Jersey	90,169	89,137
New York	156,367	152,157	New York	585,942	561,676
North Dakota	116,651	109,274	North Dakota	1,044,995	794,451
Ohio	88,828	82,051	Ohio	652,709	568,996
Oklahoma	43,323	35,065	Oklahoma	447,050	333,582
Oregon	163,777	159,685	Oregon	638,881	498,615
Pennsylvania	149,560	149,152	Pennsylvania	514,709	511,630
South Dakota	105,497	94,922	South Dakota	1,037,186	836,355
Tennessee	258,295	145,399	Tennessee	988,311	563,283
Texas	96,177	83,168	Texas	717,048	528,060
Utah	47,411	44,381	Utah	222,080	203,383
Virginia	169,526	145,370	Virginia	592,347	527,837
Washington	158,201	127,739	Washington	669,676	508,614
West Virginia	9,904	9,904			

Continued

Appendix Table 2— Cooperatives' gross and net business volume,¹ by commodity and State, 1999² (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
1,000 dollars			1,000 dollars		
TOTAL FARM SUPPLIES (Continued)			TOTAL: (Continued)		
West Virginia	51,837	47,739	Hawaii	122,525	103,807
Wisconsin	1,770,999	1,375,366	Idaho	1,446,412	1,331,705
Wyoming	210,987	194,606	Illinois	6,430,795	5,316,036
Other States	911,577	805,806	Indiana	2,225,018	1,931,213
Foreign ³	668,988	205,662	Iowa	9,665,341	7,932,170
United States	30,879,223	23,177,285	Kansas	5,973,848	4,658,873
			Kentucky	873,968	773,265
			Louisiana	802,249	564,193
SERVICES PROVIDED: ⁷			Maine	205,558	203,284
Alabama	17,252	17,252	Maryland	391,835	352,277
Arizona	23,858	23,858	Massachusetts	630,330	627,730
Arkansas	54,421	54,421	Michigan	2,116,737	1,925,074
California	693,568	693,568	Minnesota	11,514,242	9,305,888
Georgia	6,337	6,337	Mississippi	1,025,276	949,425
Hawaii	8,248	8,248	Missouri	5,568,086	4,860,441
Illinois	174,840	174,840	Montana	878,274	685,725
Louisiana	18,807	18,807	Nebraska	5,474,400	4,543,391
Michigan	52,753	52,753	New Jersey	315,157	312,984
Minnesota	366,614	366,614	New Mexico	566,459	554,906
Mississippi	50,809	50,809	New York	3,691,278	3,235,290
New Mexico	3,467	3,467	North Carolina	908,477	825,510
New York	232,470	232,470	North Dakota	3,689,653	3,041,338
North Carolina	24,438	24,438	Ohio	2,415,868	2,277,303
North Dakota	51,565	51,565	Oklahoma	1,645,397	1,386,496
Ohio	85,309	85,309	Oregon	1,962,678	1,716,532
Oklahoma	45,725	45,725	Pennsylvania	1,404,029	1,353,040
Pennsylvania	11,027	11,027	South Carolina	255,424	246,516
Texas	257,212	257,212	South Dakota	2,943,710	2,451,052
Virginia	31,746	31,746	Tennessee	1,168,383	729,982
Washington	205,828	205,828	Texas	3,935,764	3,400,868
Wisconsin	162,042	162,042	Utah	495,847	461,461
Other States	1,326,757	1,326,757	Vermont	480,544	471,561
United States	3,905,094	3,905,094	Virginia	1,093,442	996,687
			Washington	3,576,913	3,325,162
TOTAL:			West Virginia	95,435	88,703
Alabama	1,359,438	1,169,594	Wisconsin	9,089,199	8,018,466
Alaska	92,867	76,496	Wyoming	275,669	258,813
Arizona	1,002,570	927,983	Other States	101,652	96,004
Arkansas	1,730,624	1,643,198	Foreign ³	1,060,487	490,163
California	8,437,790	7,823,548	U.S.	115,290,605	99,064,320
Colorado	1,063,167	928,817			
Connecticut	228,238	175,897			
Delaware	98,885	89,741			
Florida	2,668,142	2,419,178			
Georgia	2,092,527	2,006,532			

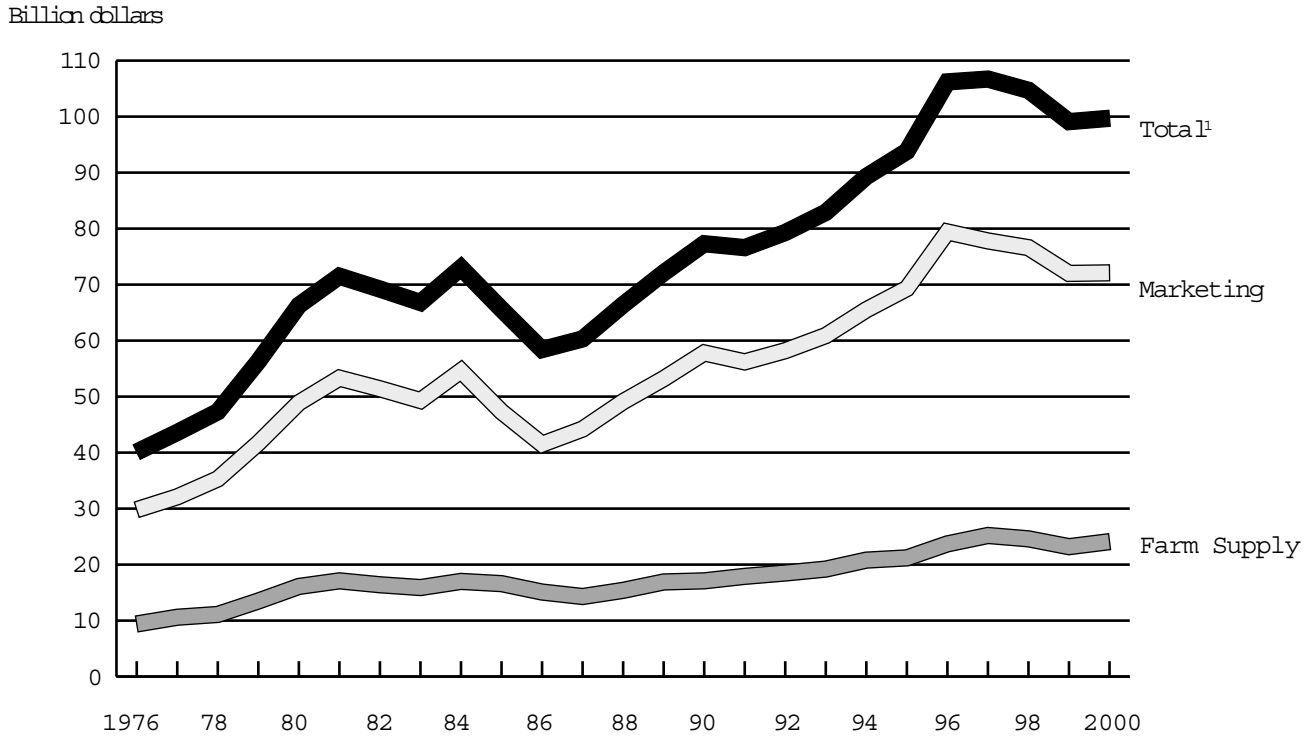
See footnotes next page

Appendix Table 2

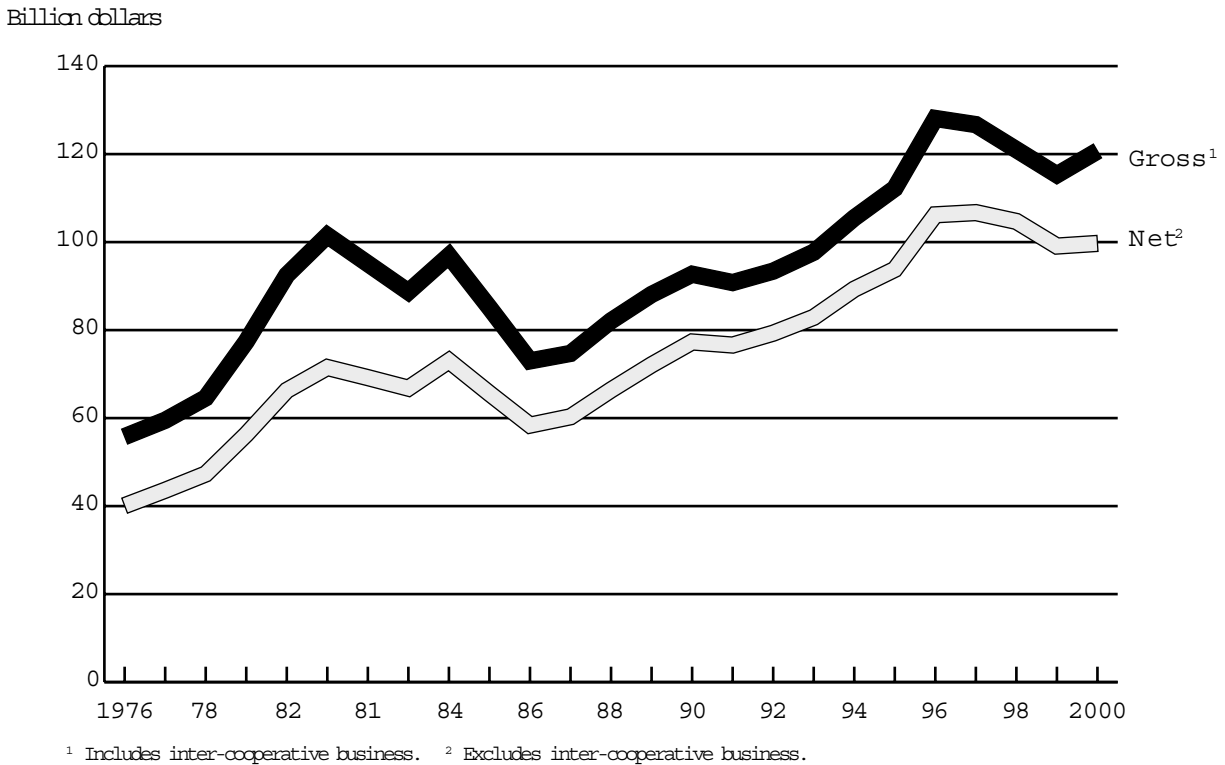
- ¹ Data covering operations of cooperatives whose business years ended in calendar 1999. Includes independent local cooperatives, federations, centralized regionals, and those with mixed organizational structures. Products marketed were allocated to the States in which they were originated and farm supply sales were allocated to the States in which they were sold; service volume and other income were allocated to the States of origin when services related to farm products marketed or to the State of destination when related to farm supplies sold.
- ² Gross business volume includes sales between cooperatives while net business volume excludes such sales. States listed had more than two cooperatives handling the commodity or farm supply or where disclosure was not a problem. Totals may not add due to rounding.
- ³ Includes value of farm products imported, farm supplies exported, services related to imported farm products or exported farm supplies, sales to domestic military installations, or sales of farm products not received directly from member-patrons.
- ⁴ Includes eggs, turkeys, ratite, squab, and related products.
- ⁵ Includes forest products, hay, hops, nursery stock, fish, coffee, seed marketed for growers, and other farm products not separately classified. Also includes manufactured food products and resale items marketed by cooperatives.
- ⁶ Includes building supplies, containers and packaging supplies, farm machinery and equipment, animal health products, automotive supplies, food, hardware, chicks, and other supplies not separately classified.
- ⁷ Income from services related to marketing and purchasing activities not included in the volumes reported for these activities.

Appendix Figures

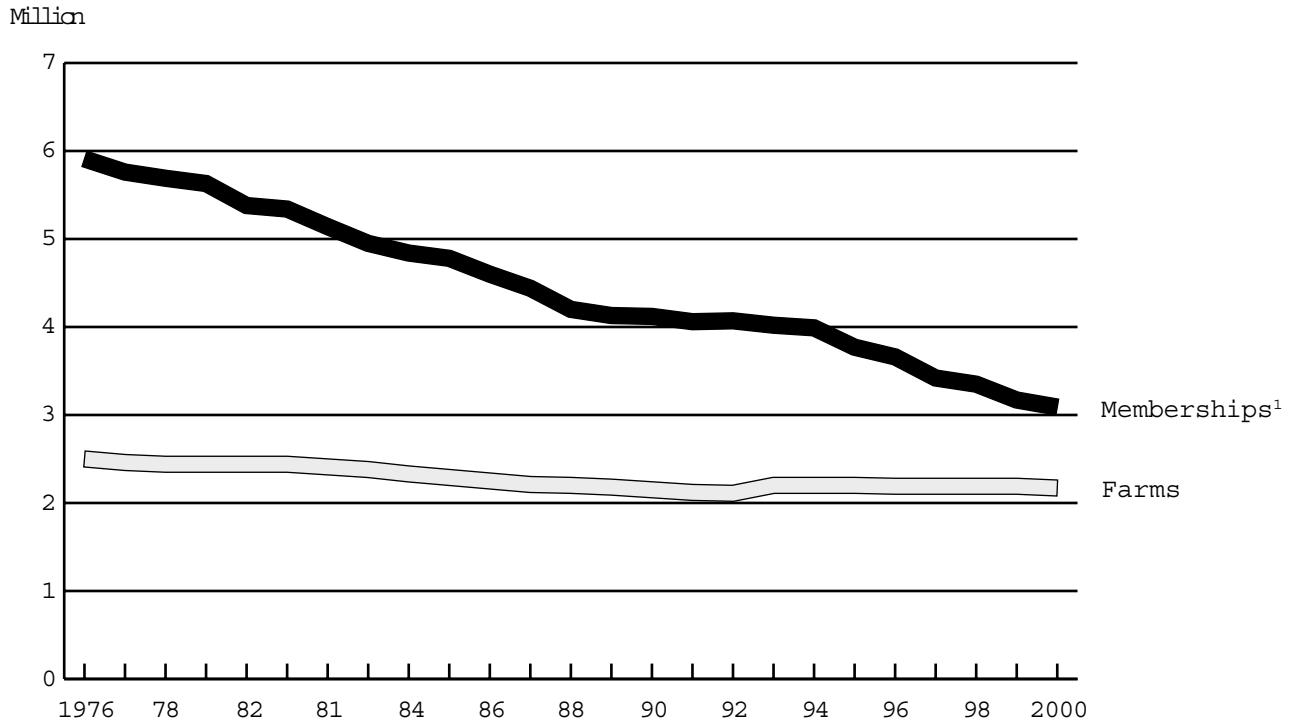
Appendix Figure 1- Cooperatives' Net Business Volume, 1976-2000



Appendix Figure 2- Cooperatives' Gross and Net Business Volumes, 1976-2000

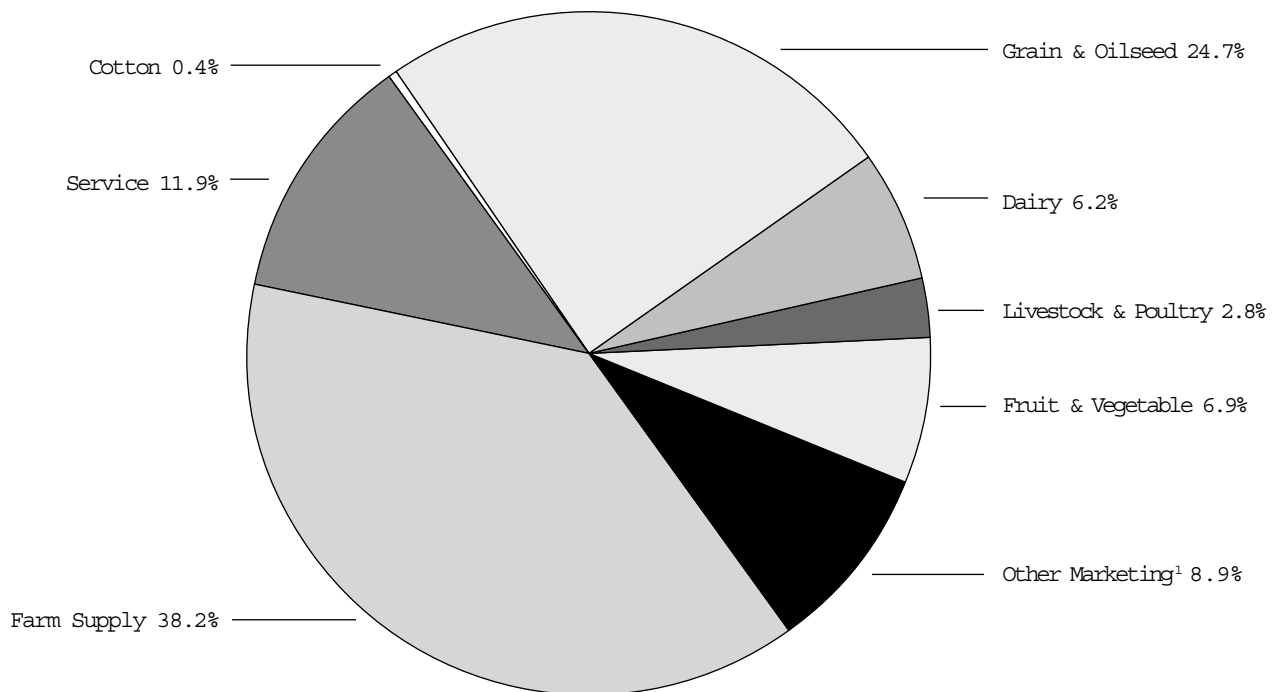


Appendix Figure 3— U.S. Farms and Farmer Cooperative Memberships, 1976-2000



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

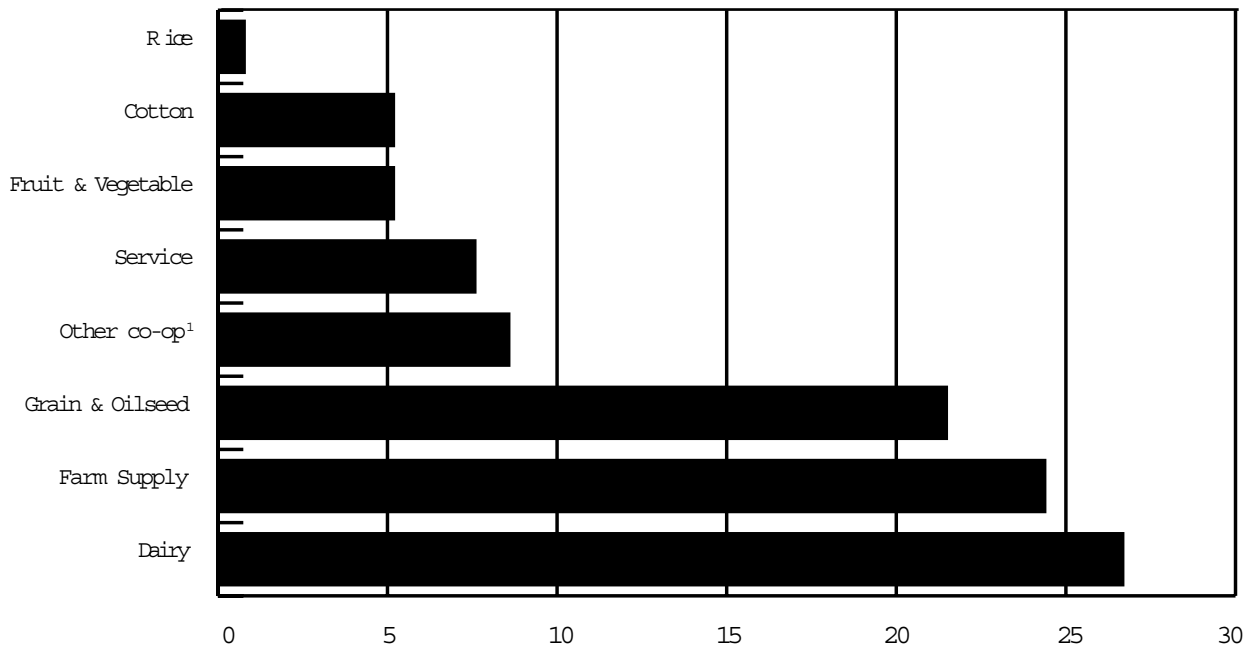
Appendix Figure 4— Distribution of Farmer Cooperatives, by Type, 2000



Percentage based on 3,346 cooperatives.

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

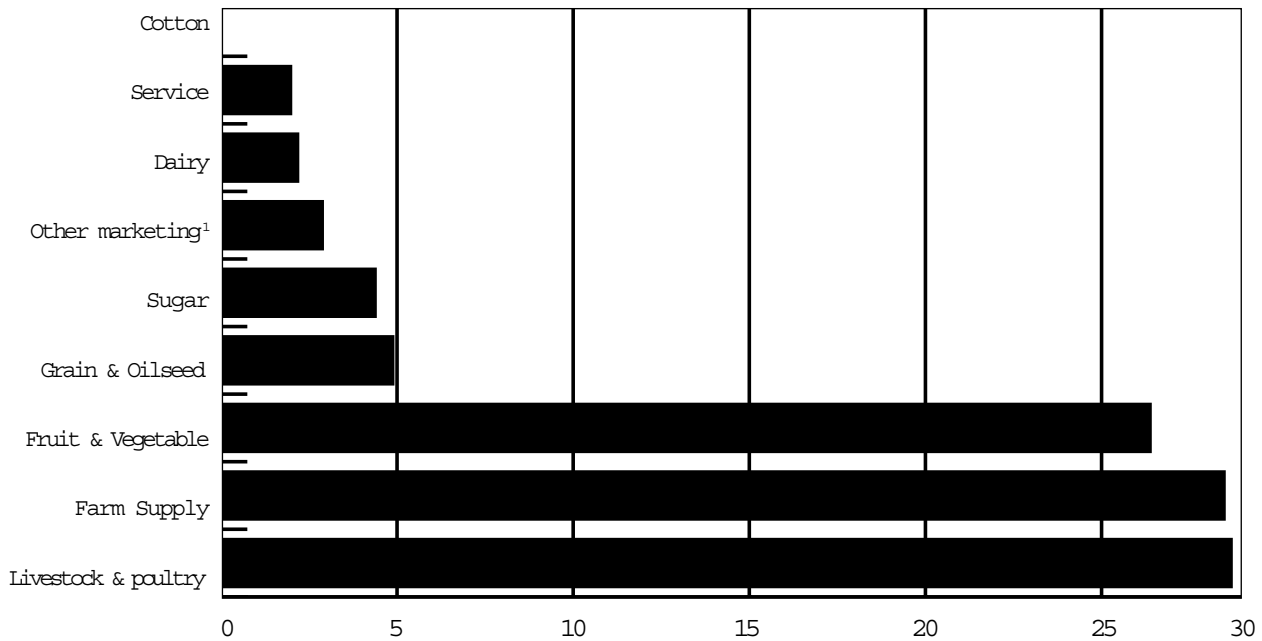
Appendix Figure 5– Distribution of Total Net Income, by Type of Cooperative, 2000



Percentage based on net income of \$1.28 billion.

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

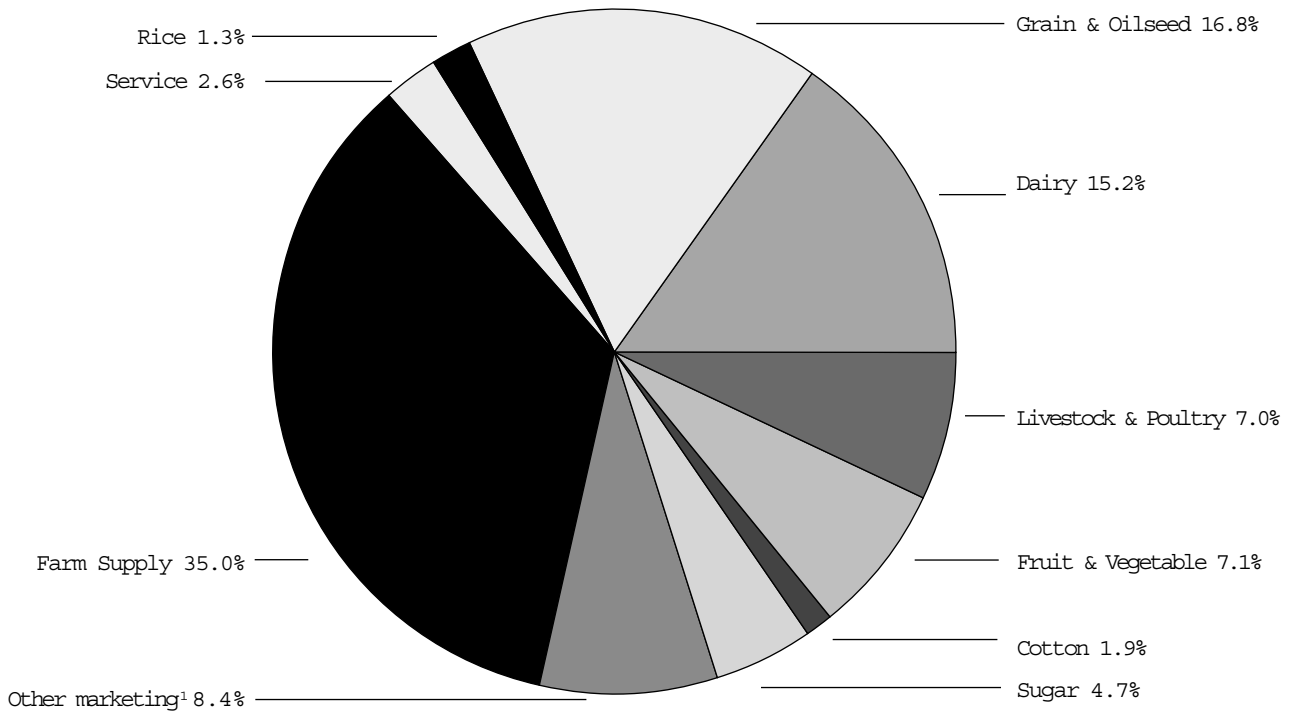
Appendix Figure 6– Distribution of Total Losses, by Type of Cooperative, 2000



Percentage based on losses of \$353.9 billion.

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

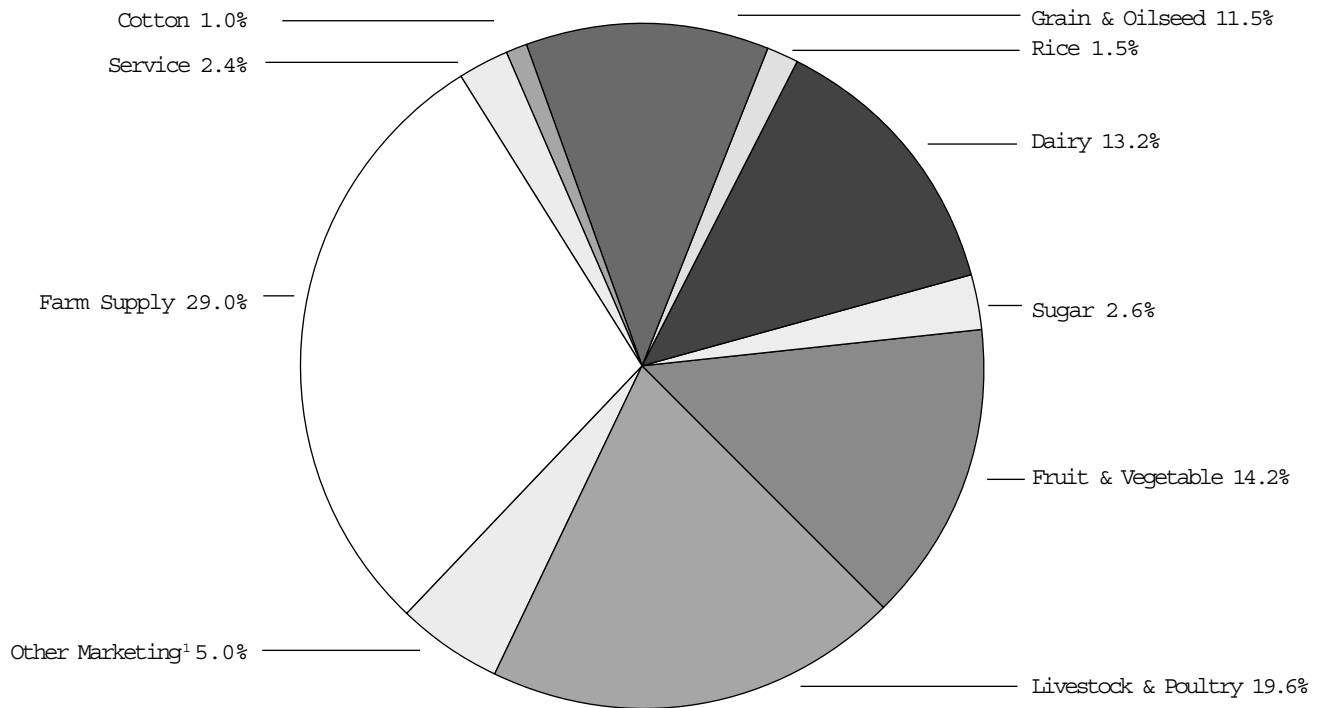
Appendix Figure 7— Distribution of Total Net Worth, by Type of Cooperative, 2000



Percentage based on total net worth of \$20.3 billion.

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

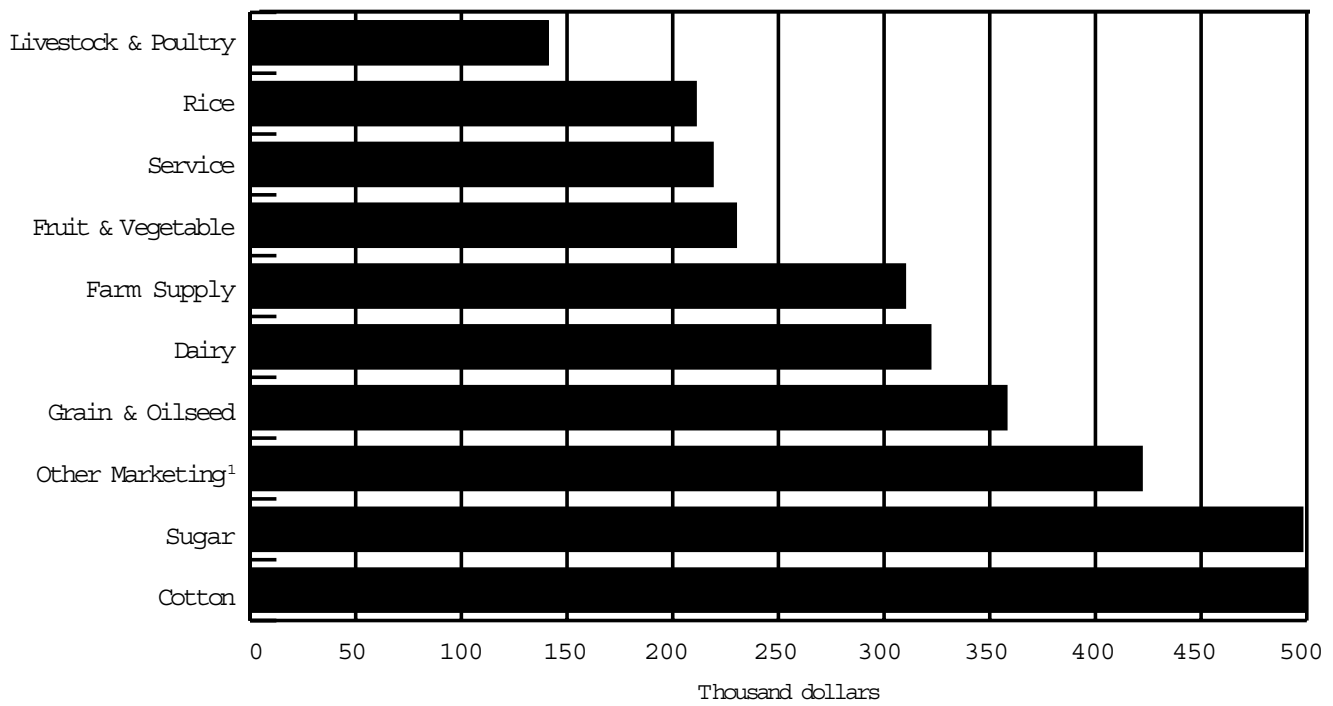
Appendix Figure 8— Distribution of Total Full-Time Employees, by Type of Cooperative, 2000



Percentage based on 176,665 full-time employees.

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

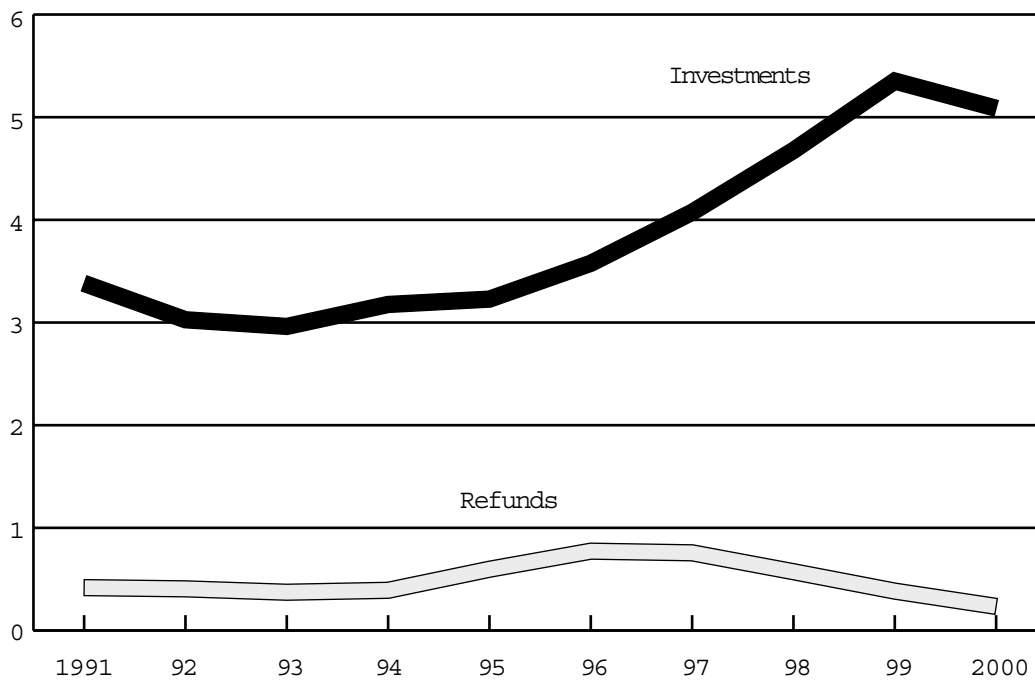
Appendix Figure 9— Assets Per Full-Time Employee, by Type of Cooperative, 2000



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

Appendix Figure 10— Cooperatives' Investments in and Patronage Refunds Received from Other Cooperatives¹ 1991-2000

Billion dollars



¹ Includes other farmer cooperatives, CoBank, and Banks for Cooperatives.

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Stop 3250
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The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues Rural Cooperatives magazine.

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