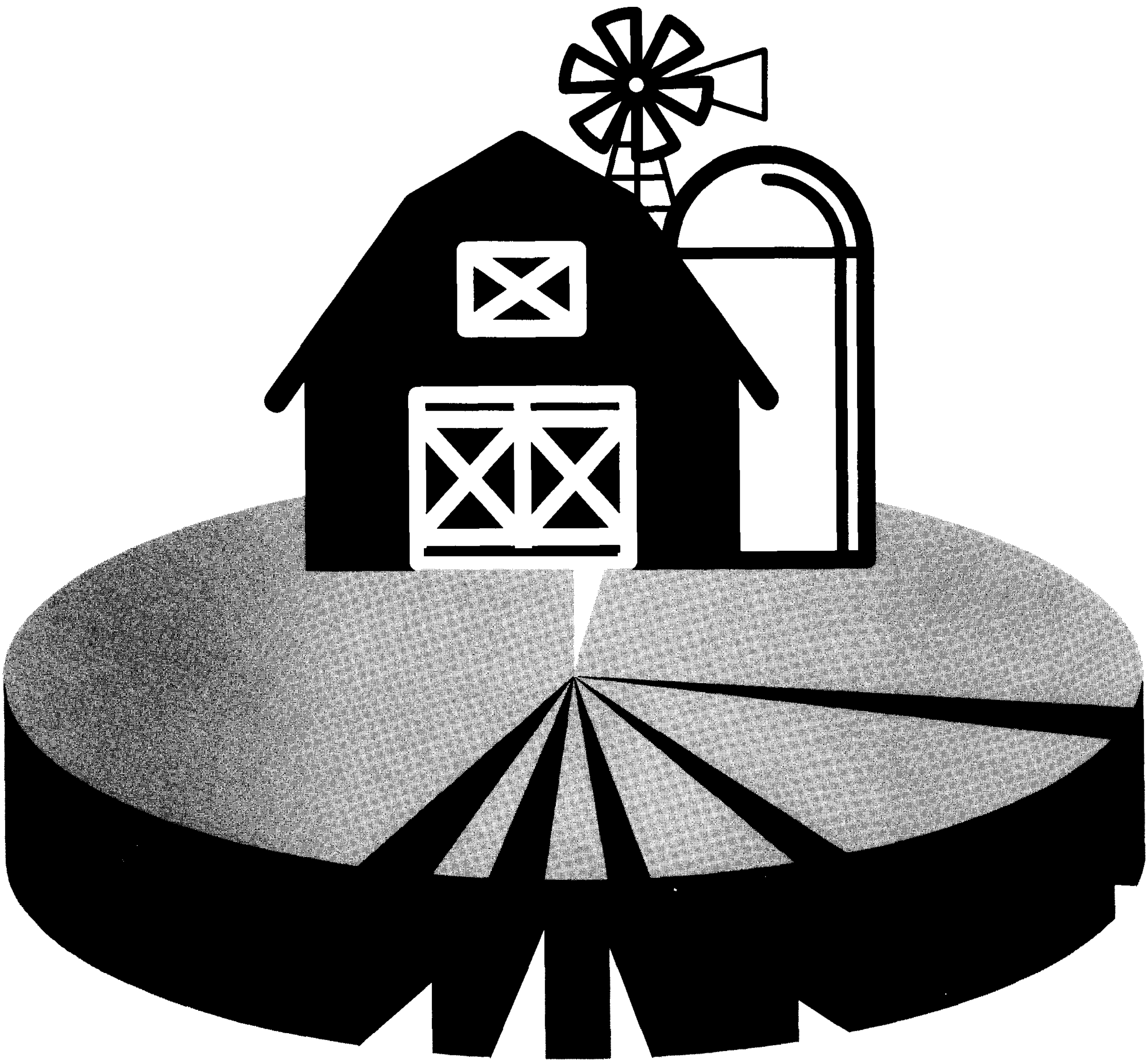
United States
Department of
Agriculture

Rural Business-
Cooperative
Service

RBS Service
Report 53

Farmer Cooperative Statistics, 1996



Abstract

A survey of U.S. farmer cooperatives for 1996 showed a record gross business volume of $128.1 billion and a record net business volume of $106.2 billion for the 3,884 cooperatives in the survey. Net income of $2.25 billion in 1996 was down 4.9 percent from the record $2.36 billion in 1995. Assets, liabilities, and net worth were up. Business volume by commodity handled is reported for all cooperatives. Cooperatives are classified according to marketing, farm supply, and service function. Trends in cooperative numbers, memberships, business size, sales volume, net income, assets, liabilities, and net worth are reported, along with data on selected activities of other service organizations.

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

Farmer Cooperative Statistics, 1996

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

Rural Business-Cooperative Service

RBS Service Report 53

October 1997

Price: **Domestic—$5.00; foreign—$5.50**

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 by USDA is authorized by the Cooperative Marketing Act of 1926.

This report provides aggregate information on the number, membership, business volume, and net income of farmer cooperatives. Cooperatives are classified by principal product marketed and major functional type. Fishery cooperatives are included as miscellaneous marketing cooperatives. Both gross (includes intercooperative business) and net (excludes intercooperative business) dollar volumes are reported.

Statistics for 1996 were compiled on a national basis only. Data by State are compiled and reported every other year. State data for 1995 appear 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 farmer or aquacultural cooperatives. Additional information was collected from local farm supply and marketing cooperatives for a special study of their fertilizer operations. Information was requested for their 1996 business year.

RBS conducts an annual census because of the need to make accurate estimates for all cooperatives and the need for current data on individual cooperatives for research, education, and technical assistance purposes.

Statistics for all cooperatives were generated by adding data estimated for nonrespondents to respondent data. Responses to the 1996 survey accounted for 87.7 percent of the total gross sales of farmer cooperatives.

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 taken by cooperatives to provide information and the timeliness with which it is furnished are greatly appreciated.

Contents

Contents

Highlights

The 1996 survey of marketing, farm supply, and related-service cooperatives showed a record net business volume, but a decrease in net income, memberships, and number of organizations.

- Total net income of $2.25 billion was down from the record $2.36 billion reported for 1995. The 1996 net included intercooperative dividends and refunds of $711.9 million-up 30.9 percent from $543.8 million.

- Total gross business volume (includes intercooperative business) handled by cooperatives increased 14.2 percent, to a record $128.1 billion from $112.2 billion.

- Total net business (excludes intercooperative business) was up 13.2 percent, to $106.2 billion from $93.8 billion.

- The number of cooperatives declined more than 3 percent, from 4,006 to 3,884.

- Grain and farm supply cooperatives operated an estimated 5,355 branches in 1996, up from 5,101 in 1995.

- Total cooperative memberships of 3,663,584 decreased 2.8 percent from 3,767,295.

- Gross value of farm products marketed by cooperatives in 1996 increased 15.8 percent from nearly $78 billion to $90.3 billion. Net value of these farm products, after deducting intercooperative business, was $79.4 billion, up 14.6 percent from $69.3 billion.

- Gross value of farm supplies handled by farmer cooperatives was up 12.2 percent, from $31 billion to $34.7 billion. After adjusting for intercooperative business, the increase was 11.5 percent, from $21.2 billion to $23.7 billion.

- Receipts for services related to marketing farm products and handling farm supplies, plus other income, were down 5.6 percent to $3.1 billion.

- Number of full-time employees totaled 174,795 — down 0.3 percent from the 175,399 reported for 1995.

- Combined assets for all farmer cooperatives increased 5.7 percent to $42.6 billion. Net assets, after eliminating intercooperative investments, were up 5 percent, from $37.3 billion to 639.2 billion.

- Total liabilities of $25.2 billion were up 6.6 percent from $23.6 billion.

- Net worth, or member and patron equity, was up 4.6 percent, to $17.4 billion. Member and patron equity financed 40.8 percent of total assets, down from 41.3 percent in 1995 and 43.4 percent in 1994.

- Leading States in terms of number of cooperatives were Minnesota, North Dakota, Texas, and Iowa. They accounted for 1,178, or 30.3 percent, of the 3,884 farmer cooperatives.

Highlights Capsule

	1996	*1995*	*Change*
Number of cooperatives	3,884	4,006	(122)
Memberships	3,663,584	3,767,295	(103,711)
Gross business volume (mil. dol.)	128,098	112,195	15,903
Net business volume (mil. dol.)	106,182	93,818	12,364
Net income (mil. dol.)	2,248	2,363	(115)
Total assets (mil. dol.)	42,588	40,274	2,314
Net worth (mil. dol.)	17,392	16,631	761
Full-time employees	174,795	175,399	(604)

Leading States	*1996*	*1995*	
Number of cooperatives	Minnesota 378	Minnesota 389	(11)
	1995	*1993*	
Memberships	Minnesota 329,241	Minnesota 392,815	(63,574)
Net business volume (mil. dol.)	California 8,891	California 8,349	542

Farmer Cooperative Statistics, 1996

Ralph M. Richardson, Celestine C. Adams,
Katherine C. DeVille, Jacqueline E. Penn,
and Charles A. Kraenzle [1]

I-Definition of a Farmer Cooperative

The Rural Business-Cooperative Service (RBS) of USDA's Rural Development considers four major criteria in identifying an organization as a farmer 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 despite 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 done with members; and (4) the cooperative operates for the mutual interest of members by providing 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 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 the USDA definition. Other reasons for possible differences between the USDA list and State lists in the number of cooperatives is that: (1) USDA may not learn until sometime later of certain cooperatives operating in a State; (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 for 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. USDA classifies these cooperatives into one of 13 commodities or commodity groups depending upon which accounts for most of its business volume. USDA reclassifies a cooperative if its primary business volume changes.

Farm supply cooperatives derive most of their business volume from farm production supply sales including farmstead 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 business 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 were reclassified from marketing to service in 1992. Rice drying cooperatives, previously listed with rice marketing cooperatives, were added in 1993.

Many cooperatives handle multiple commodities

[1] **Ralph M. Richardson, agricultural statistician; Celestine C. Adams, agricultural statistician; Katherine C. DeVille, statistical assistant; Jacqueline E. Penn, statistical assistant; and Charles A. Kraenzle, director, Statistics.**

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 3,884 farmer cooperatives in 1996, 3,775 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 large geographic areas and have members in several States. They often provide more vertically integrated services, such as processing farm products or manufacturing feed and fertilizer.

Bargaining associations also have a centralized organizational structure. 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 and 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 70 associations identified as federated often operate at points quite distant from their headquarters. Federated cooperative members are usually local cooperatives. Some federations are interregional associations whose members are regional cooperatives.

Mixed

A few cooperatives have both individual farmer-members and autonomous cooperative members. These associations, a combination of centralized and federated structures, serve large geographic areas, with members in many States, and provide a variety of integrated services. USDA has identified 39 such cooperatives.

II—1996 Statistics

Cooperatives' net business volume of $106.2 billion in 1996 was a record high. Net income of $2.25 billion,[2] however, was down from the $2.36 billion reported for 1995. Number of cooperatives and memberships, at 3,884 and 3,663,584, respectively, were also down. Combined assets, net worth, and liabilities were all up.

Number of Cooperatives

The 1996 survey accounted for 3,884 marketing, farm supply, and related-service [3] cooperatives, compared with 4,006 in 1995. The net decrease of 122 associations (3 percent) largely reflects a continuing trend involving dissolution, merger, or acquisition.

Of the 3,884 cooperatives, 2,012 primarily marketed farm products, 1,403 handled primarily farm production supplies, and 469 provided services related to marketing or purchasing activities (table 1).

Marketing cooperatives accounted for 51.8 percent of the total number of cooperatives, unchanged from 1995; farm supply cooperatives decreased slightly from 36.4 percent to 36.1 percent; and related-service cooperatives increased from 11.8 percent to 12.1 percent.

These changes to some extent reflect reclassification because of dollar volume changes. In any given year, sales of farm supplies or grains and oilseeds

[2] Preliminary information released earlier in the year showed cooperatives' net income a record high in 1996. However, net income for 1996 was later revised downward due to additional information received. Net income for 1995 was also revised.

[3] 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.

could be higher due to market supply and demand conditions. During 1996, for example, grain and oilseed prices were significantly higher, resulting in a larger dollar volume of grain sales for many cooperatives.

Cooperative numbers by State and major function are shown in table 2. The leading States were Minnesota (3781, North Dakota (288), Texas (277), and Iowa (235). These four States accounted for 1,178 cooperatives, or 30.3 percent of the total. A cooperative's location is based on its headquarters.

The 10 leading States in terms of number of cooperatives are shown in figure 1. It also shows the number of cooperatives by function in each State. For example, Minnesota had about the same number of marketing and farm supply cooperatives. Texas' majority were service cooperatives, mainly cotton gins. In Wisconsin, the fifth leading State, farm supply cooperatives were the most numerous. South Dakota, Iowa, and Nebraska had the fewest service cooperatives. California, on the other hand, had the smallest number of farm supply cooperatives.

Table 1— **Number of cooperatives and memberships, by major business activity, 1996**

Major business activity	Cooperatives	Memberships
	Number	
Beans and peas, dry edible	9	4,013
Cotton	16	42,561
Dairy	237	111,374
Fruits and vegetables	267	46,799
Grains and oilseeds [1]	1,066	783,427
Livestock	69	278,826
Nuts	19	48,036
Poultry [2]	16	32,320
Rice	19	14,831
Sugar	49	11,800
Tobacco	26	266,693
Wool and mohair	97	17,492
Miscellaneous	102	74,236
Total marketing	2,012	1,682,408
Farm supply	1,403	1,794,671
Service	469	186,505
Total	3,884	3,663,584

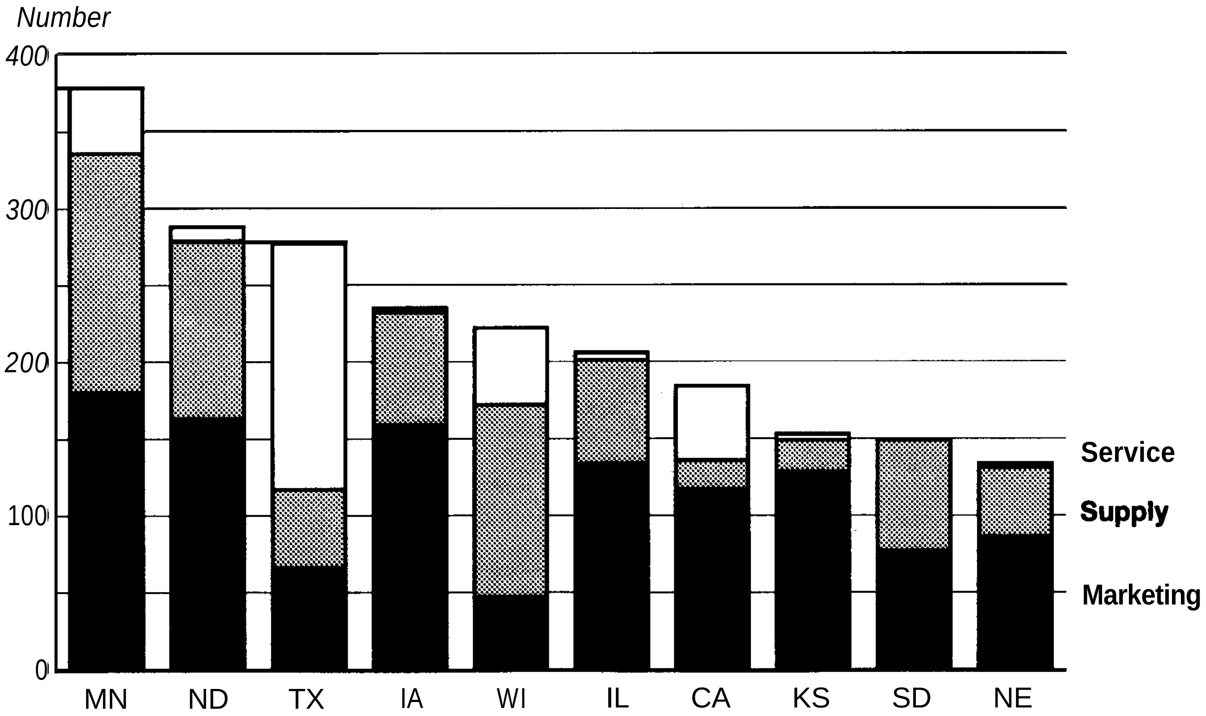
[1] Excludes cottonseed. Cottonseed sales were included with cotton. Cottonseed meal and oil were included with feed and miscellaneous, respectively.
[2] Includes eggs, turkeys, ratite, squab, and related products.

Table 2— **Number of cooperatives,[1] by major function and State, 1996 [2]**

State	Major function: Marketing	Farm Supplies	Service	Total
	Number			
Alabama	11	48	5	64
Alaska	10	—	—	10
Arkansas	15	41	6	62
California	117	19	48	184
Illinois	134	67	5	206
Iowa	159	73	3	235
Kansas	128	21	4	153
Louisiana	18	22	13	53
Maryland	3	15	3	21
Massachusetts	10	4	—	14
Michigan	46	30	5	81
Minnesota	180	156	42	378
Mississippi	23	38	25	86
Montana	42	39	—	81
Nebraska	86	45	3	134
New York	76	11	5	92
North Dakota	163	116	9	288
Ohio	70	20	7	97
Oklahoma	51	30	26	107
Pennsylvania	48	7	7	62
South Dakota	77	72	—	149
Texas	66	51	160	277
Vermont	6	—	—	6
Washington	57	31	4	92
West Virginia	14	13	—	27
Wisconsin	47	125	50	222
Wyoming	7	6	—	13
Other States [3]	348	303	39	690
United States	2,012	1,403	469	3,884

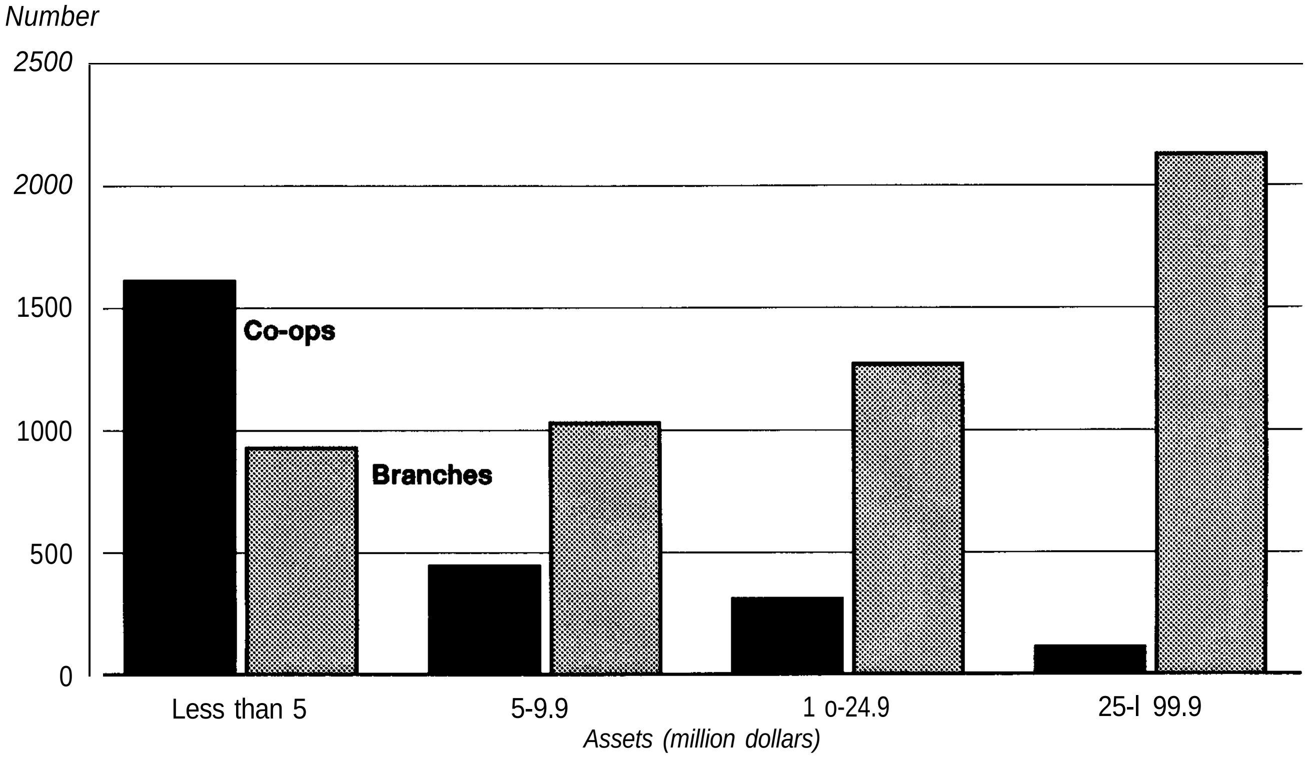
— = None identified.
1 Includes centralized and federated cooperatives and those with mixed organizational structures.
2 Data covering operations of cooperatives for fiscal years that ended in 1996.
3 Includes States with fewer than three cooperatives for any function. States with three or more cooperatives were: Arizona, 10; Colorado, 64; Connecticut, 4; Delaware, 3; Florida, 50; Georgia, 21; Hawaii, 33; Idaho, 42; Indiana, 62; Kentucky, 44; Maine, 23; Missouri, 72; New Jersey, 19; New Mexico, 9; North Carolina, 26; Oregon, 39; South Carolina, 6; Tennessee, 79; Utah, 21; Virginia, 66.

Figure **1— Number of Cooperatives by Function, Leading States, 1996**



These ten States accounted for 57.3 percent of the 3,884 cooperatives.

Figure **2— Branches of Grain and Farm Supply Cooperatives by Size, 1996**



Grain and Farm Supply Branches

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

As shown in table 3 and figure 2, grain and farm supply cooperatives operated an estimated 5,355 branches-2,326 and 3,029, respectively. In 1995, grain and farm supply cooperatives operated an estimated 5,101 branches.

Figure 2 shows that several of the largest (mainly regional) cooperatives had more branches than many smaller (local) cooperatives combined. For example, the 43 largest grain cooperatives, or 4 percent of their total number, accounted for 29.7 percent of the total number of branches operated by grain cooperatives.

Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled **3,663,584** in 1996, down 2.8 percent from **3,767,295** in 1995 (table 1).

By type, 49 percent were memberships of farm supply cooperatives (figure 3), 21.4 percent of grain, and 20 percent of livestock, tobacco, and service. Only 3 percent of cooperatives' total memberships were of dairy cooperatives, which accounted for 21.6 percent of cooperatives' net business volume in 1996.

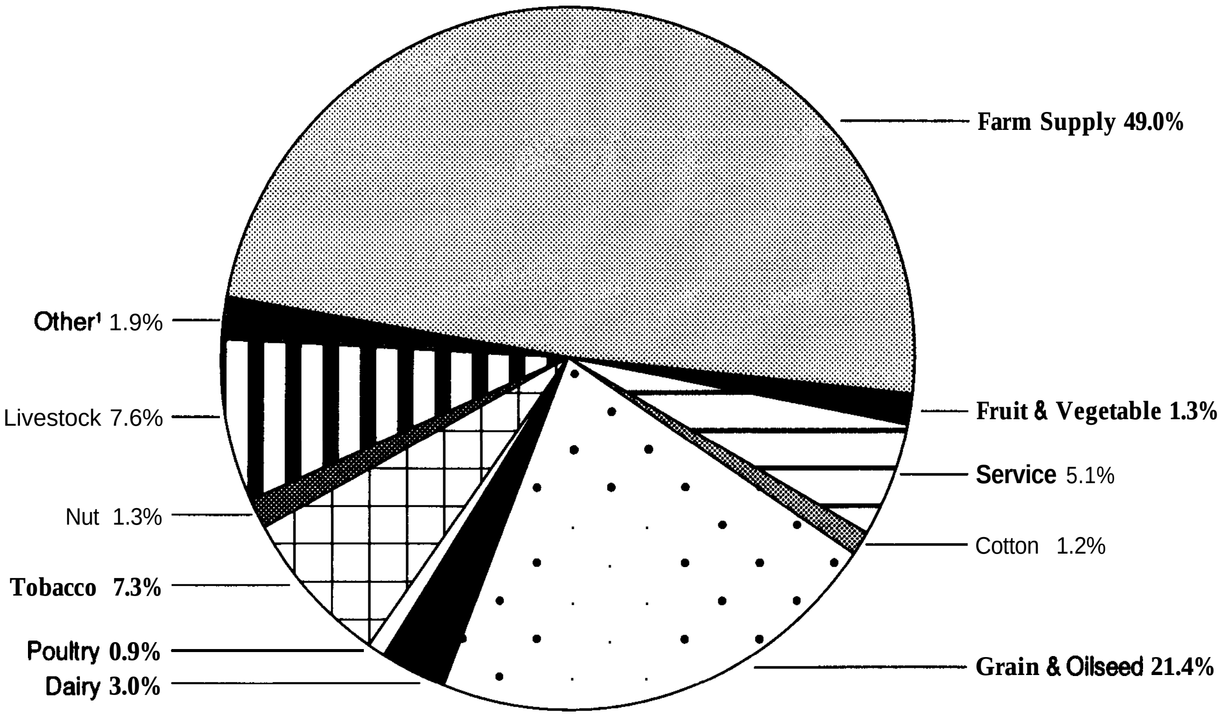
Business Size

Farmer cooperatives, measured by gross business volume, increased in size. Most remain small and serve local areas. Several are actively seeking regional,

Table 3— **Estimated number of branches operated by grain and farm supply cooperatives, 1992-96**

Year	Asset Group (million dollars) Less than 5	5 - 9.9	10 - 24.9	25 or more	Total
			Number of Grain Cooperatives		
1992	902	211	114	16	1,243
1993	808	233	131	21	1,193
1994	772	226	138	24	1,160
1995	658	223	174	35	1,090
1996	618	229	176	43	1,066
			Number of Branches		
1992	441	480	529	417	1,867
1993	410	479	688	488	2,065
1994	408	535	674	424	2,041
1995	399	440	756	577	2,172
1996	387	505	743	691	2.328
			Number of Farm Supply Cooperatives		
1992	1,332	176	45	65	1,618
1993	1,206	185	96	60	1,547
1994	1,129	201	99	68	1,497
1995	1,060	213	120	65	1,458
1996	991	215	131	66	1,403
			Number of Branches		
1992	724	482	208	1,363	2,777
1993	642	455	297	1,320	2,714
1994	610	468	344	1,365	2,787
1995	571	502	460	1,396	2,929
1996	542	523	526	1,438	3,029

Figure 3— **Distribution of Total Cooperative Memberships by Type of Cooperative, 1996**



Percent based on **3,663,584** memberships.
[1] Includes dry bean and pea, wool and mohair, rice, sugar, and miscellaneous marketing cooperatives.

national, and even international markets to increase business volume.

The increased size of individual cooperatives comes in part from mergers and acquisitions. However, data used were not adjusted for changes in price levels, and some size changes resulted from inflationary effects.

In 1996, 75.4 percent of all farmer cooperatives reported business volumes of less than $15 million, down from 78.5 percent in 1995. They accounted for only 10.2 percent of the total gross dollar volume (table 4 and figure 4). Only 1.8 percent of farmer cooperatives reported business volumes of at least $250 million in 1996. These cooperatives, however, accounted for 59.3 percent of the total business volume, up from 57.9 percent in 1995.

Business Volume

Total gross business volume of the 3,884 marketing, farm supply, and related-service cooperatives for 1996 was a record $128.1 billion (table 5), up 14.2 percent from the previous record of $112.2 billion in 1995.

Total net business volume of farmer cooperatives in 1996 was $106.2 billion-$79.4 billion for farm products marketed, $23.7 billion for farm supplies sold, and $3.1 billion for services provided and from other income. The total net figure, which excludes intercooperative business (the difference between gross and net business volumes), increased 13.2 percent from $93.8 billion in 1995. However, adjusting for price change, net business volume increased only 5.7 percent. [4]

Gross volume of farm products marketed by cooperatives increased 15.8 percent, from $77.9 billion in 1995 to $90.3 billion in 1996. The net volume of farm products marketed was $79.4 billion, or 74.8 percent of the total net volume of cooperatives. This represents an increase of 14.6 percent from $69.3 billion.

Figure 5 illustrates the leading products marketed by cooperatives based on net marketing business volume. Grains and oilseeds (excluding cottonseed) led with 34.8 percent, followed by milk and milk products with 28.9 percent. Fruits and vegetables ranked third with 11.8 percent of net marketing business

[4] Deflated 1996 cooperative business volume was $99.2 billion, up 5.7 percent from the actual $93.8 billion in 1995. The $99.2 billion was derived by deflating farm products marketed by the index of prices received for all farm products (1982 = 100), and farm supplies (inputs) and service income by the index of prices paid by farmers for production items (1982 = 100).

Figure 4— **Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 1996**

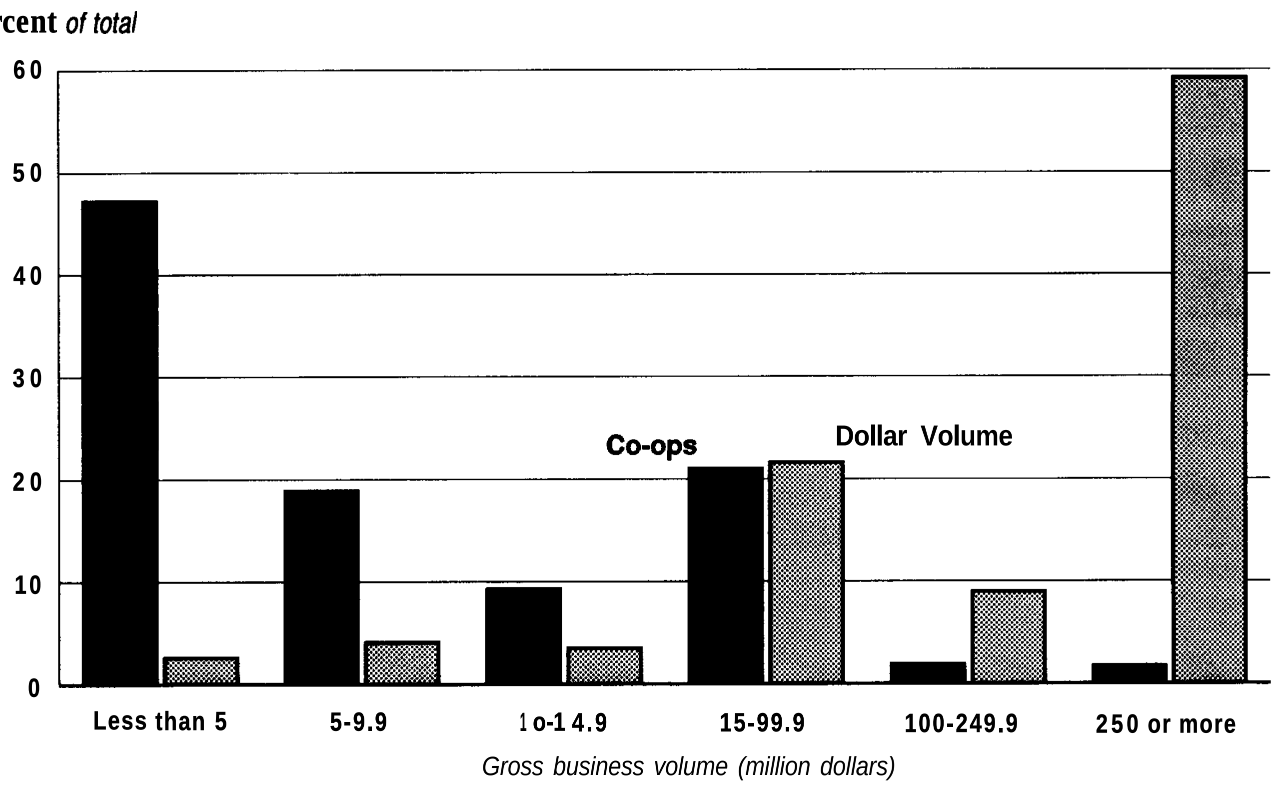


Table 4— **Farmer cooperatives grouped by gross business volume, 1996** [1]

Volume group (mil. dol.)	Cooperatives		Dollar volume	
	Number	Percent of total	Gross [2] (mil. dol.)	Percent of total
Less than 5.0	1,834	47.2	3,375.3	2.6
5 - 9.9	733	18.9	5,254.8	4.1
10 - 14.9	362	9.3	4,458.9	3.5
15 - 24.9	349	9.0	6,723.3	5.2
25 - 49.9	326	8.4	11,354.1	8.9
50 - 99.9	140	3.6	9,525.6	7.4
100 - 199.9	56	1.4	7,947.9	6.2
200 - 249.9	16	0.4	3,591.4	2.8
250 - 499.9	30	0.8	11,237.4	8.8
500 - 999.9	20	0.5	13,962.7	10.9
1,000 and more	18	0.5	50,667.1	39.6
Total	3,884	100.0	128,098.5	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 intercooperative business volume. Total may not add due to rounding.

volume. In 1995, grains and **oilseeds** accounted for 28.7 percent and milk and milk products 31.4 percent.

Gross volume of all farm supplies handled by cooperatives was $34.7 billion, up 12.2 percent from $31 billion in 1995. Net farm supply volume of $23.7 billion accounted for 22.3 percent of the total net business volume, up 11.5 percent from $21.2 billion.

Sales of all farm supply items were up from 1996. The leading farm supplies handled by cooperatives in terms of net farm supply business volume were petroleum, 26.6 percent, up from 24.6 percent in 1995; feed, 22.8 percent; and fertilizer, 22 percent (figure 6).

Receipts for services performed by marketing, farm supply, and related-service cooperatives, plus other income, amounted to $3.1 billion, down 5.6 percent. Service receipts and other income represented 2.9 percent of total net business volume.

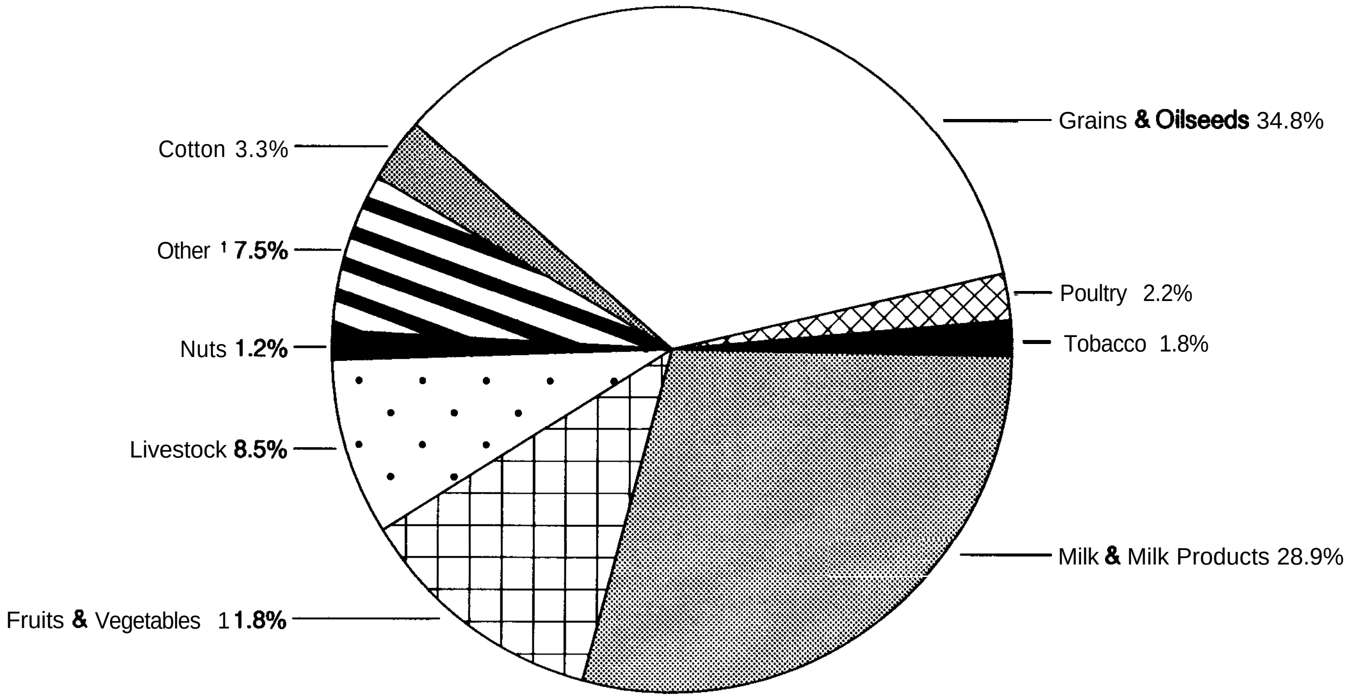
The 1995 estimated volume of farm products

Tables- **Cooperatives' gross and net business volumes by commodity, 1996** [1]

Commodity	Gross volume		Net volume	
	Million dollars	*Percent*	*Million dollars*	*Percent*
Products marketed:				
Beans and peas (dry edible)	179.0	0.1	179.0	0.2
Cotton	2,734.9	2.1	2,658.6	2.5
Dairy	25,969.5	20.3	22,934.5	21.6
Fruits and vegetables	9,914.3	7.7	9,392.0	8.8
Grains and oilseeds excluding cottonseed	33,889.4	26.5	27,656.9	26.1
Livestock	6,745.6	5.3	6,725.2	6.3
Nuts	951.6	.7	951.6	.9
Poultry [3]	2,122.7	1.7	1,754.1	1.7
Rice	901.1	0.7	899.6	0.6
Sugar	2,015.8	1.6	1,933.3	1.8
Tobacco	1,412.0	1.1	1,412.0	1.3
Wool and mohair	13.3	([2])	7.9	([2])
Miscellaneous [4]	3.420.5	2.7	2,923.6	2.8
Total farm products	90.269.7	70.5	79,428.6	*74.6*
Supplies purchased:				
Crop protectants	3,929.1	3.1	2,829.2	*2.7*
Feed	7,367.3	5.8	5,388.0	*5.1*
Fertilizer	8,727.2	6.8	5,200.6	*4.9*
Petroleum	9,752.7	7.6	6,295.2	*5.9*
Seed	879.0	0.7	658.5	*0.6*
Other supplies [5]	4,072.9	3.2	3,281.3	*3.1*
Total farm supplies	34,728.3	27.1	23,652.6	*22.3*
Services provided:				
Trucking, cotton ginning, storage, grinding, locker plants, misc. [6]	3,100.4	2.4	3,100.4	*2.9*
Total business	128,098.5	100.0	106,181.6	100.0

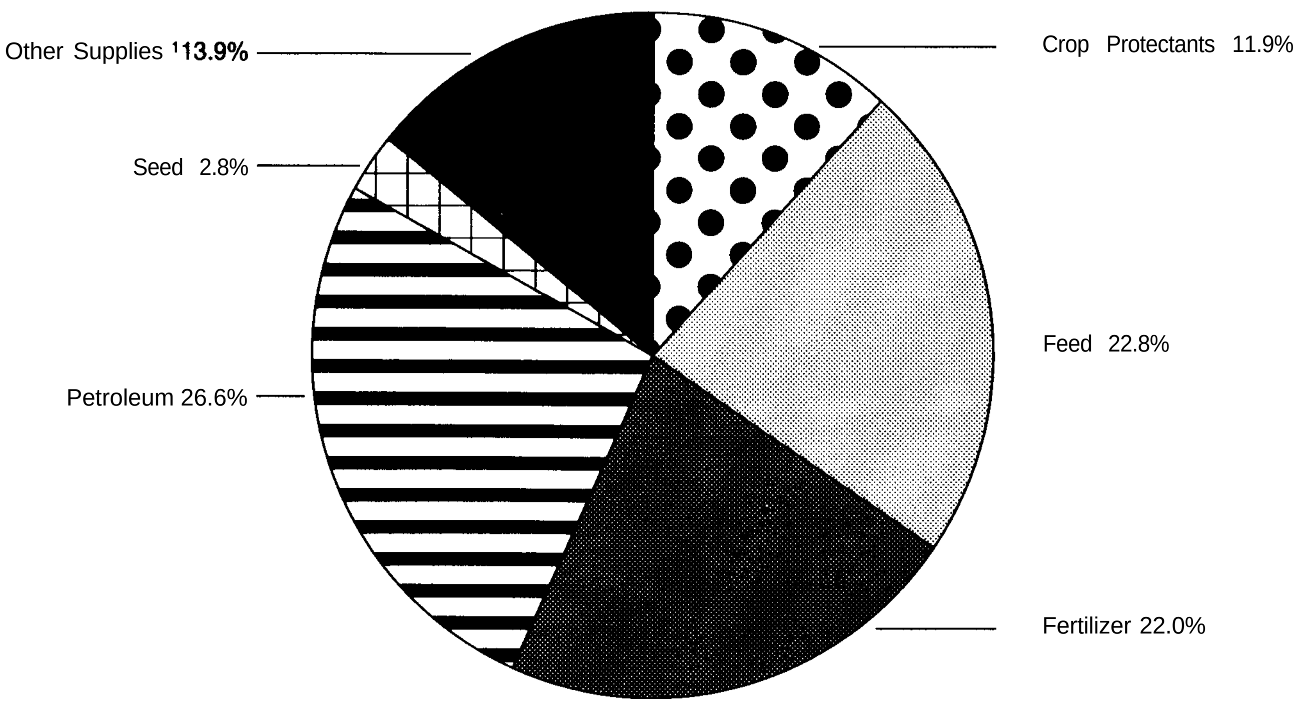
[1] Gross includes and net excludes intercooperative business. Totals may not add due to rounding.
[2] Less than 0.05 percent.
[3] Includes eggs, turkeys, ratite, squab, and related products.
[4] Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, other farm products 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 not included in the volume reported for those activities, plus other income.

Figure 5— **Relative Importance of Farm Products Marketed by Cooperatives, 1996**



Percent based on a net marketing business volume of $79.4 billion.
[1] Includes dry beans and peas, wool and mohair, rice, sugar and miscellaneous marketings.

Figure 6— **Relative Importance of Farm Supplies Handled by Cooperatives, 1996**



Percent based on a net farm supply business volume of $23.7 billion.
[1] Includes building materials; tires, batteries, and accessories: equipment; animal health products; pet food; semen; hardware; food; clothing; etc.

marketed, farm supplies sold, and services provided by cooperatives is shown by State in appendix table 2.

Net Income

Total net income (considering losses and before taxes) for all cooperatives in 1996 was $2.25 billion. This includes intercooperative dividends and refunds (table 6). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 4.9 percent from the record of $2.36 billion in 1995. Patronage refunds received from other cooperatives of $711.9 million was up a robust 30.9 percent from $543.8 million. Most of the increase, $168.1 million, in patronage refunds was received by grain and farm supply cooperatives. In 1996, farm supply and grain cooperatives accounted for 46.2 percent and 31.2 percent, respectively, of the patronage refunds received from other cooperatives.

Marketing cooperatives' net income of $1,181 million was down 16.8 percent from the $1,418.7 million generated in 1995. Cooperatives handling primarily grains and oilseeds accounted for 31.9 percent of the net income in 1996, milk and milk products 31.7 percent, and livestock and poultry 18.9 percent. Together, they accounted for the largest proportion (82.5 percent) of marketing cooperatives' net income and 43.4 percent of total net income of all cooperatives.

Farm supply cooperatives accounted for 41.9 percent of cooperatives' total net income in 1996, compared with 34.2 percent in 1995. Income from farm supply cooperatives' own operations was $612.4 million (figure 7), compared with $557.8 million in 1995, an increase of 9.8 percent. Refunds from other cooperatives of $329 million was up from $250.4 million.

Farmer cooperatives' net income from own operations in 1996 totaled $1,536.6 million-down 15.6 percent from $1,819.7 million. Nearly 31.7 percent, or $711.9 million, of total net income was dividends and patronage refunds from other cooperatives, up from $543.8 million in 1995. Marketing cooperatives' net income from other cooperatives totaled $352.1 million and accounted for 29.8 percent of their total. Grain cooperatives' net income from other cooperatives was $222.2 million, or 58.9 percent of their total.

Income before losses equaled $2435.3 million. Losses from an estimated 530 cooperatives totaled $187.8 million in 1996, compared with $98.1 million in 1995.

Table 6—**Cooperatives' net income, 1996** [1]

Principal products marketed and major function	co-ops [2]	Total net income	Income from own operations	Income from other coops [3]
	Number	*Million dollars*		
Products marketed:				
Cotton	16	84.2	83.5	0.7
Dairy	237	373.9	265.7	106.2
Fruits & vegetables	267	56.0	52.7	5.3
Grains and oilseeds excluding cottonseed	1,066	377.0	154.9	222.2
Livestock and poultry	105	223.5	212.5	11.0
Rice	19	12.3	12.3	—
Sugar	49	9.1	9.0	0.04
Other products [4]	253	42.9	36.3	4.7
Total farm products	2,012	1,181.0	829.0	352.1
Total farm supplies	1,403	941.5	612.4	329.0
Total related services	469	125.0	94.2	30.8
Combined total	3,884	2,247.5	1,535.6	711.9

— = Less than .05 million.

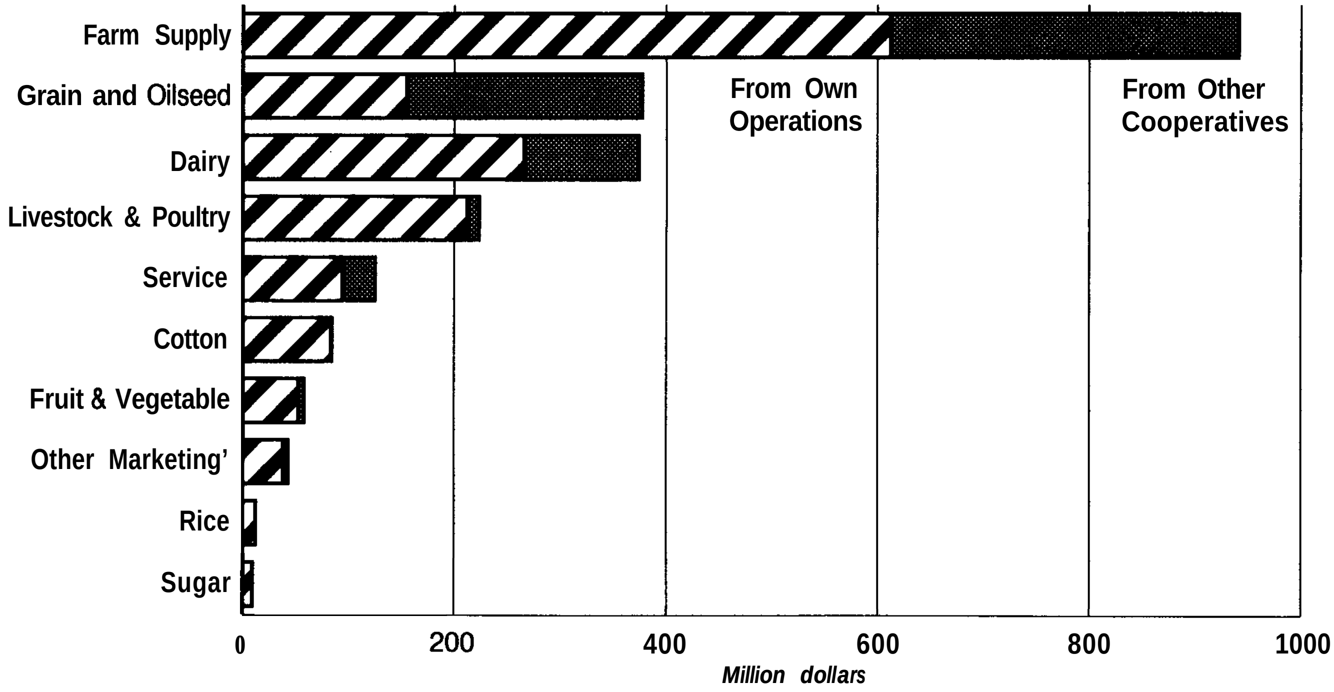
[1] Number of cooperatives includes those operating on a pooling rather than a net margin basis. Totals may not add due to rounding.

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

[3] Excludes patronage refunds from CoBank and Bank for Cooperatives.

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

Figure 7— **Cooperatives' Net Income by Cooperative Type, 1996**



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

Table 7— **Combined balance sheet data for farmer cooperatives, 1996** [1]

Principal products marketed and major function	co-ops [2]	Total assets	Total liabilities	Net worth
	Number		*Million dollars*	
Products marketed:				
Cotton	16	778.4	428.2	350.2
Dairy	237	5,679.3	3,506.9	2,172.4
Fruits & vegetables	267	5,275.2	3,682.2	1,593.0
Grains and oilseeds excluding cottonseed	1,066	9,445.8	5,612.7	3,833.0
Livestock and poultry	105	4,048.6	2,788.0	1,260.6
Rice	19	578.1	343.1	235.0
Sugar	49	1,085.5	648.7	436.7
Other products [3]	253	3,015.2	1,831.8	1,183.4
Total farm products	2,012	29,906.0	18,841.6	11,064.3
Total farm supplies	1,403	11,848.1	6,065.1	5,782.9
Total related services	469	833.4	288.6	544.8
Combined total	3,684	42,587.5	25,195.4	17,392.1

[1] Totals may not add due to rounding.
[2] Many cooperatives have multi-product and multi-functional operations. Most are classified according to predominant commodity or function, as indicated by business volume.
[3] Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Balance Sheet

Combined assets for all farmer cooperatives totaled nearly $42.6 billion in 1996, up 5.7 percent from $40.3 billion in 1995 (table 7). Excluding intercooperative investments, assets of cooperatives totaled $39.2 billion, compared with $37.3 billion, a 5-percent increase.

Total liabilities were $25.2 billion, up 6.6 percent from $23.6 billion in 1995. Net worth, or member and patron equity, was $17.4 billion, up 4.6 percent from $16.6 billion in 1995. The proportion of total assets financed by member and patron equity decreased from 41.3 percent to 40.8 percent.

Net worth of all marketing cooperatives totaled $11.1 billion, up 3.4 percent from 1995. Marketing cooperatives accounted for 63.6 percent of farmer cooperatives' combined net worth, down from 64.3 percent in 1995. The net worth figure for farm supply cooperatives was 33.3 percent of the total, up from 32.6 percent.

For marketing cooperatives, the highest percentage of total assets represented by net worth shown in table 7 (45 percent) was for those primarily marketing cotton and cotton products. The lowest, 30.2 percent, was for cooperatives primarily marketing fruits and vegetables (figure 8). Cooperatives classified as farm marketing and farm supply had 37 percent and 48.8 percent, respectively, of their assets financed by net worth.

Of the $42.6 billion in total assets, marketing cooperatives accounted for $29.9 billion, up 6.9 percent from 1995. Cooperatives principally handling grains and oilseeds (excluding cottonseed) had total assets of $9.4 billion in 1996 and $8.8 billion in 1995, up 7.4 percent. Among marketing cooperatives, those with primarily grain also maintained the largest proportion of investments in other cooperatives in both 1996 (11.4 percent) and 1995 (10.8 percent). Dairy cooperatives had 9 percent of their assets invested in other cooperatives (table 8).

Assets of marketing cooperatives, excluding investments **in other cooperatives, were $28.1 billion, up 6 percent from 1995.**

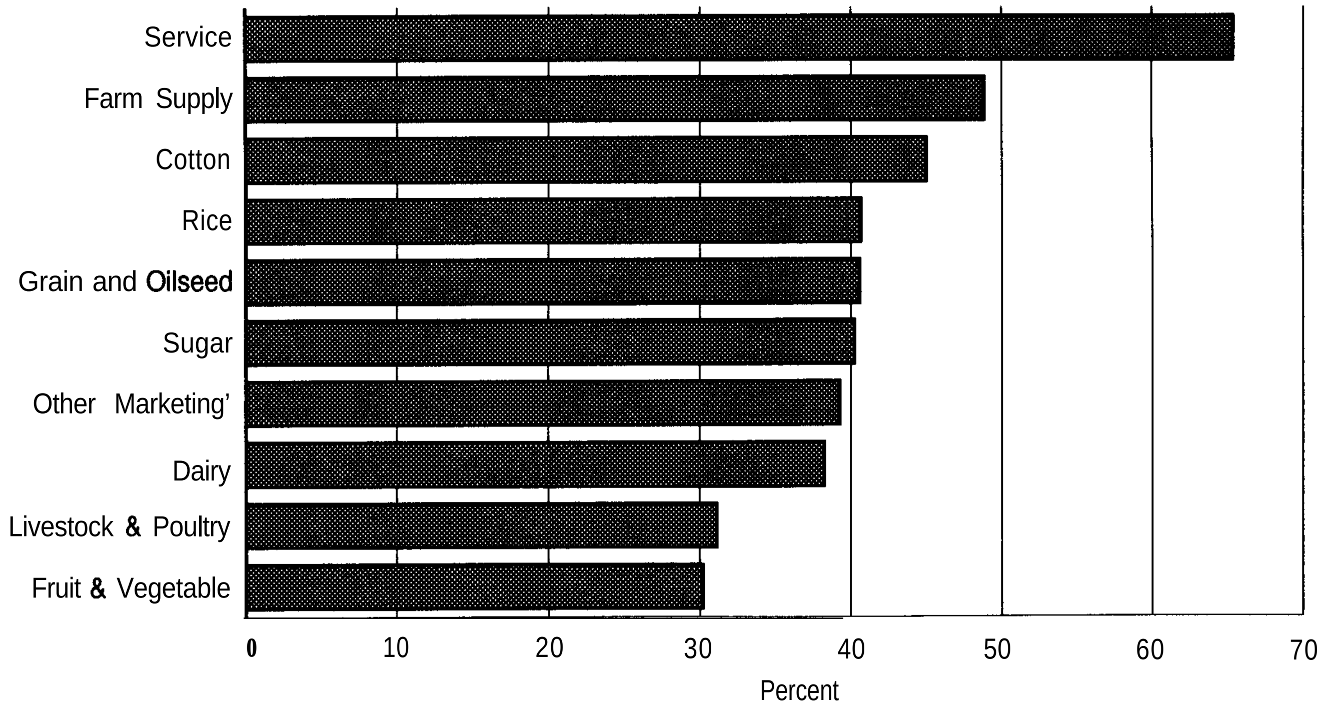
Farm supply cooperatives had total assets of $11.8 billion, compared with $11.5 billion in 1995, up 3.3 percent. Excluding intercooperative investments, assets amounted to $10.3 billion in 1996, up 2.9 percent from 1995.

Table 8— Combined assets of farmer cooperatives, 1996 [1]

Principal products marketed and major function	co-ops [2]	Assets of own operations	Investments in other co-ops	Total assets	Investments in other co-ops as percent of total
	Number	*Million dollars*			*Percent*
Products marketed:					
Cotton	16	776.5	1.9	776.4	0.2
Dairy	237	5,170.1	509.1	5,679.3	9.0
Fruits & vegetables	267	5,204.9	70.3	5,275.2	1.3
Grains and oilseeds excluding cottonseed	1,066	8,370.6	1,075.1	9,445.8	11.4
Livestock and poultry	105	3,969.3	79.4	4,048.6	2.0
Rice	19	577.6	.5	578.1	.1
Sugar	49	1,043.9	41.5	1,085.5	3.6
Other products [3]	253	2,982.4	32.6	3,015.2	1.1
Total farm products	2,012	28,095.3	1,810.7	29,906.0	6.1
Total farm supplies	1,403	10,341.4	1,506.7	11,848.1	12.7
Total selected services	469	756.3	77.2	633.4	9.3
Combined total	3,664	39,193.0	3,394.5	42,587.5	6.0

[1] Totals may not add due to rounding.
[2] Many cooperatives have multi-product and multi-functional operations. Most are classified according to predominant commodity or function indited by business volume.
[3] Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Figure 8— **Percentage of Cooperatives' Assets Financed by Net Worth, by Cooperative Type, 1996**



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

Selected Financial Ratios

Financial ratios are often used to show the relationship between items in the financial and income statements of a business operation and help in analyzing a cooperative's economic and financial situation.

While financial ratios can indicate problem areas, they cannot solve problems. They do serve as a guideline for planning purposes and aid in formulating actions. Care must be taken in their use because both items used to calculate a ratio are subject to considerable variation. How a ratio is interpreted is largely subjective.

Several financial ratios were selected to give some indication of cooperative performance-return on assets, net worth-to-assets, return on sales, total sales-to-assets, and the current ratio.

The return on assets and return on sales ratios indicate profitability. The net worth-to-assets ratio provides some indication of a cooperative's ability to meet long-term financial obligations. The total sales-to-assets ratio (asset turnover ratio) shows how efficiently a cooperative is using its assets. The current ratio (current assets divided by current liabilities) measures a cooperative's ability to meet current obligations.

Table 9 lists the values of these ratios for the cooperatives reporting to USDA. Extreme values (high and low ratios) were excluded so that the ratios would be more representative of the cooperatives reporting. For the predominant types of cooperatives (dairy, fruit and vegetable, grain, and farm supply), ratios are also shown for cooperatives by selected asset category. These ratios offer cooperative leaders a general barometer when comparing their operations with others of the same type (and/or size).

The return on assets (net income/assets) varied considerably. Generally, cooperatives with assets in the $2.5 million to $25 million range had the highest return on assets. It was 8.9 percent for dairy, 6 percent for fruit and vegetable, 4.5 percent for grain, and 6.8 percent for farm supply cooperatives.

The return on sales (net income/total sales) ranged from a negative 0.2 percent for the smallest grain cooperatives to a high of 15.1 percent for cotton ginning cooperatives. However, it was between 1 percent and 3 percent for most type and size groups.

The sales-to-assets ratio ranged from 1 for service cooperatives to 11.9 for livestock cooperatives. Among dairy, fruit and vegetable, and grain cooperatives to some extent, the ratio tended to decrease as size of

Table 9—Selected financial ratios of cooperatives, 1996 [1]

Type of co-op and assets group (mil. dol.)	Return on assets [2]	Net worth to assets [3]	Return on sales [4]	Sales to assets [4]	Current ratio [5]
	---------- Percent ----------			Number-----	
Dry beans and peas	3.3	32.9	1.8	1.8	1.2
Cotton	11.6	45.4	3.2	3.6	1.4
Dairy	6.6	35.9	1.5	4.4	1.2
Less than $0.5	6.1	54.1	.4	4.9	—
$0.5 – .99	3.5	64.4	.6	5.5	1.6
$1 .0 – 2.49	7.8	53.6	1.1	7.0	1.3
$2.5 – 24.99	8.9	40.7	1.3	6.8	1.1
$25.0 – 99.99	8.0	36.2	1.6	5.2	1.2
$100.0 – 499.99	4.6	35.8	1 .0	4.7	1.2
Fruit and vegetable	.5	29.1	.3	1.8	1.3
Less than $0.5	2.8	52.0	.5	5.6	1.9
$0.5 – .99	7.0	70.1	2.0	3.6	2.4
$1 .0 – 2.49	-4.0	61.4	–.03	4.7	2.1
$2.5 – 24.99	6.0	40.3	1.8	3.3	1 .0
$25.0 – 99.99	.3	40.7	.2	1.9	1.2
$100.0 – 499.99	1.7	27.6	.9	2.0	1.2
Grain and oilseed [6]	3.8	38.7	1 .0	4.0	1.2
Less than $0.5.	-1 .0	71.7	–.2	5.1	6.8
0.5 – .99	2.4	78.2	.5	5.4	2.8
$1 .0 – 2.49	3.8	66.2	1 .0	4.0	1.6
$2.5 – 24.99	4.5	47.9	1.3	3.5	1.3
$25.0 – 99.99	4.2	31.6	1.6	2.7	1.1
Livestock	.9	28.5	.1	11.9	1.2
Nut	.3	37.3	.2	2.2	1.5
Poultry	4.1	33.6	1.6	2.6	1.2
Rice	4.2	42.0	2.0	2.1	1.3
Sugar	1.2	40.3	.9	1.4	1.3
Tobacco	3.6	61.7	2.3	1.6	—
Miscellaneous marketing	8.2	43.8	2.2	3.6	1.9
Fishery	2.1	47.0	—	2.4	—
Farm supply	9.4	51.7	4.7	2.0	1.5
Less than $0.5	1.5	75.3	.4	3.8	2.5
SO.5 – .99	4.4	74.1	1.4	3.1	2.3
$1 .0 – 2.49	6.6	71 .0	3.1	2.2	2.2
$2.5 – 24.99	6.8	57.9	3.2	2.2	1.5
$25.0 – 99.99	3.5	38.0	1.4	2.5	1.4
$100.0 – 499.99	7.4	43.0	3.0	2.5	1.4
Service	9.5	67.2	9.0	1.0	1.8
Cotton gins	21.1	64.9	15.1	1.4	1.5

— = Data not available.

[1] Based on cooperatives reporting. Excludes strictly bargaining or pooling cooperatives. Ratios were calculated by summing the individual items and dividing. No attempt was made to include the same cooperatives in each group to calculate all flve ratios. Extreme values not representative of the group were excluded.

[2] Calculated by dividing net income (before any income taxes are deducted) by total assets. In calculating a return on assets, some financial experts would include interest paid in net income. Interest paid was not included in net income.

[3] Net worth, or member equity, is the 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 and other income and patronage refunds received from other cooperatives, CoBank and Bank for Cooperatives. The return on sales was found by dividing net income by total sales.

[5] The current ratio was derived by dividing current assets by current liabilities. These data were taken from annual reports where provided. In some cases, data were not available.

[6] Exdudes cottonseed.

cooperative 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 did not vary much with size of cooperative. Most farm supply cooperatives are not as involved in manufacturing or processing as are the dairy and fruit and vegetable cooperatives.

The generally high sales-to-assets ratios for the smaller cooperatives as well as for some types of cooperatives is due to their involvement in bargaining or other marketing functions not requiring major investments in plant and equipment.

The current ratio (current assets/current liabilities) ranged from 1 for fruit and vegetable cooperatives with assets of $2.5 million to $25 million to 6.8 for the smallest grain cooperatives. Current ratios tended to be higher for the medium- and smaller-sized cooperatives than for the larger ones because larger cooperatives generally finance a greater proportion of their assets with borrowed capital.

Fertilizer Operations of Local Cooperatives

Additional information was requested of local cooperatives with estimated fertilizer sales in excess of $0.5 million. Data were gathered on fertilizer sales, fertilizer sources, competition, type of competition, services provided, and how they paid for services. The fertilizer operations of 497 local farm supply and marketing cooperatives were analyzed. The information was combined with fertilizer sales during the past 11 years, with comparisons by region, growth in sales, services offered, and comparisons to a 1985 agronomy study.

In 1996, average sales figures for the 497 local cooperatives were fertilizer, $2.2 million; farm supplies, $8.6 million; and farm products marketed, $9.9 million. Findings from the survey of local cooperative fertilizer operations[5] revealed the following:

- Fertilizer sales included 54 percent dry, mixtures and lime, 27 percent anhydrous ammonia, and 19 percent liquid.
- Most fertilizer was purchased from regional cooperatives-88 percent of anhydrous ammonia and dry, mixtures and lime and nearly 83 percent of liquid.
- Investor-owned fertilizer suppliers were the number one competitor. Other cooperatives were a close second. Most often, price was the major competitive factor.
- More than 90 percent of the cooperatives provided fertilizer applications, 88 percent soil testing, 74 percent fertilizer specialists, and 62 percent fertilizer records. Services offered varied by cooperative size, with larger local cooperatives offering services more often. Growth in fertilizer sales for the 11-year study period did not have a large impact on the frequency of services offered. However, services offered varied greatly by region. Cooperatives in the Corn Belt and Lake States offered services more frequently.
- Thirty-one percent of the local cooperatives offered precision agriculture-global positioning system and global information system (GPS/GIS)—in applying fertilizer. This included computer record keeping for 26 percent of the fertilizer volume and 24 percent for application equipment. Fourteen percent of the local cooperatives sold, rented, or leased the new GPS/GIS units to patrons.

[5] **For a more detailed discussion of the study on the fertilizer operations of local cooperatives, see Eversull, E. Eldon, Fertilizer Operations of Local Farm Supply and Marketing Cooperatives, RBS, USDA, Wash., DC, Forthcoming.**

Ill-Cooperative Trends, 198748

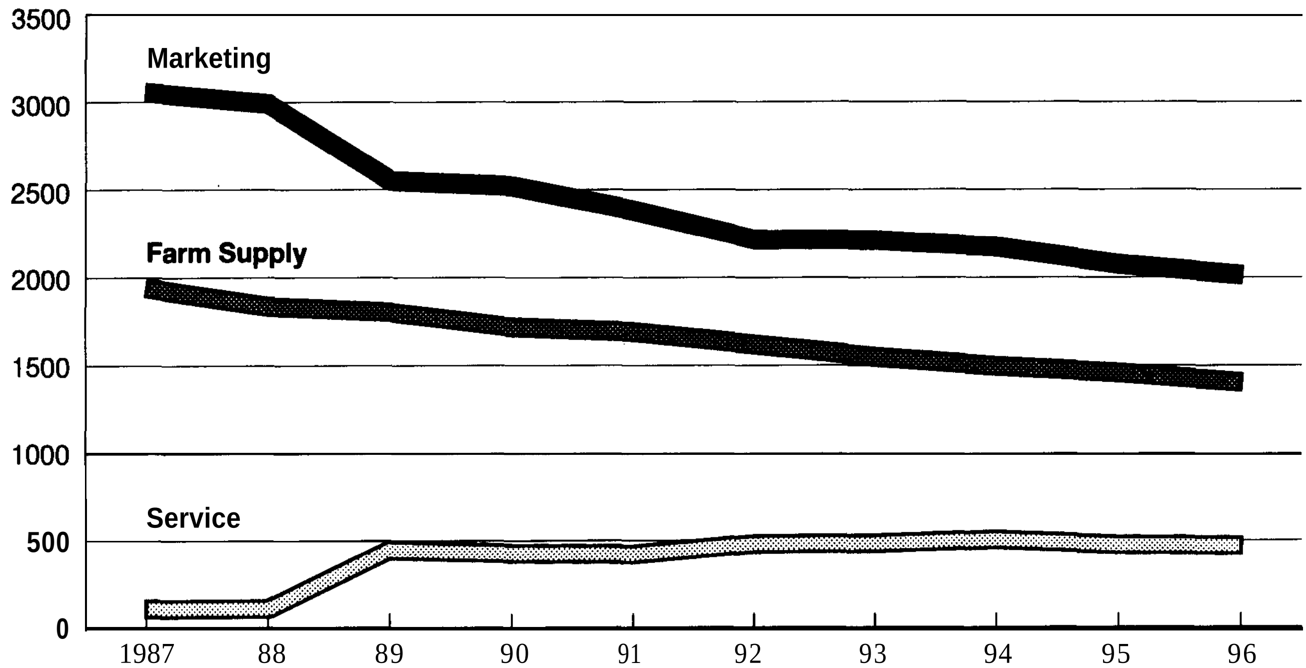
Although the number of cooperatives decreased by 1,225 net during the past decade, business volume of the survivors has increased. Cooperatives continue to adjust to the changing economic environment through dissolution, mergers or consolidations, acquisitions, and sale of assets. In some cases, farmers have organized new-generation cooperatives as a way of becoming more involved in value-added activities. In 1987, the net business volume of 5,109 cooperatives totaled $60.3 billion. **In 1996, net business volume generated by 3,884 cooperatives hit a record $106.2 billion (appendix figure 1).**

Number of Cooperatives

The **total number of marketing, farm supply, and related-service cooperatives declined from 5,109 in** 1987 to 3,884 in 1996 (table 10 and figure 9). Marketing cooperatives declined from 3,054 to 2,012 and farm supply cooperatives from 1,941 to 1,403. Number of service cooperatives, **however, increased from 114 to 469, due primarily to reclassifying cotton ginning cooperatives, livestock shipping associations, and rice driers from marketing to service.**

From 1987 through 1996, 1,947 were removed from CS' list of farmer cooperatives, an average loss of nearly 195 per year. Of those, 39.7 percent were dissolved, 28.2 percent resulted from merger or consolidation, 16.4 percent were acquired by other cooperatives

Figure 9— Farmer Cooperatives in the United States, 1987-96



cotton ginning cooperatives, livestock shipping associations, and rice driers reclassified from marketing to service cooperatives in 1989, 1992, and 1993, respectively.

Table 10— Number of farmer cooperatives, 198748

Period [1]	Marketing	Farm supply	Service	Total
		Number		
1987	3,054	1,941	114	5,109
1988	2,988	1,836	113	4,937
1989	2,550	1,803	446	4,799
1990	2,519	1,717	427	4,663
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

[1] For years before 1987, see *Cooperative Historical Statistics,* CIR1, Section 26, USDA, ACS, Washington, DC, Revised January 1993. Cotton ginning cooperatives. livestock shipping associations, and rice drying cooperatives were reclassified from marketing to service in 1989, 1992, and 1993, respectively.

or investor-owned firms, and the remaining 15.7 percent were removed for miscellaneous reasons (figure 10).

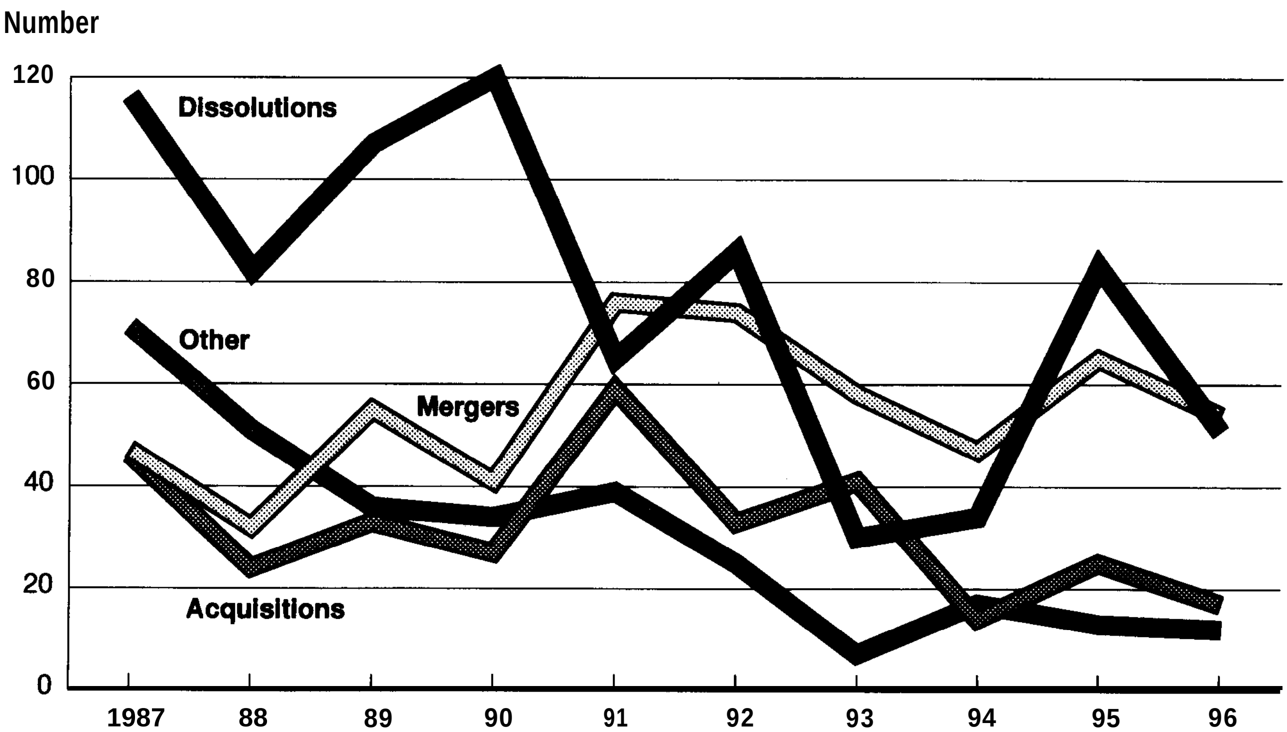
Meanwhile, new cooperatives are being formed. From 1987 through 1996,464 cooperatives, or an average of more than 46 cooperatives per year, were added to CS' list.

Memberships

Memberships in farmer cooperatives dropped from 4.4 million in 1987 to nearly 3.7 million in 1996 (table 11 and figure 11) reflecting, in part, declining farm and farmer numbers in the United States. Many farmers are members of more than one cooperative and each membership is counted. Total membership contains duplication that cannot be eliminated with current reporting methods. Consequently, number of memberships exceeds the number of farmers.

Member classification depends on the type of cooperative they use and may not be related to the member's products marketed or supplies purchased. For example, a member may use a cooperative to market only one of the farm products handled by the cooperative, or a member may use a cooperative classified in the marketing group to purchase production supplies. A member's business with the cooperative, therefore, may not be in the group that represents the

Figure 10— Cooperatives Removed from CS' List, 1987-98



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

cooperative's major business volume (the criterion for classifying cooperatives in this report). The member, however, will be included arbitrarily in that classification.

Employees

Farmer cooperatives had 174,795 employees in 1996, an average of 45 persons per association on a full-time basis--down 0.3 percent from 175,399 in 1995 (table **12**). The 2,012 marketing cooperatives employed 123,525 persons, down 0.5 percent from 1995. Livestock and poultry cooperatives had the most **full-**time employees, **28,453—down** 0.6 percent. Dairy cooperatives ranked second with 27,621, a **7.4-percent** decrease. Together, these cooperatives accounted for 45.4 percent of the full-time employees of all marketing cooperatives. In 1986, one of the few years where data were collected on full-time employees, 5,369 cooperatives had 166,560 full-time employees.

The 1,403 farm supply cooperatives employed 45,566 persons on a full-time basis, up only 0.6 percent from the 45,302 reported in 1995. These cooperatives had an average of 32 full-time employees in 1996.

Full-time employees of the 469 related-service

Table 1- **Memberships In marketing, farm supply, and service cooperatives, 1987–96**

Period [1]	Marketing	Farm supply	Service	Total
		Number		
1987	2,028	2,282	132	4,440
1988	1,912	2,142	141	4,195
1989	1,858	2,035	243	4,134
1990	1,882	2,008	232	**4,119**
1991	**1,542**	**2,025**	**191**	**4,059**
1992	**1,839**	2,020	212	4,072
1993	1,830	1,977	218	4,023
1994	1,805	1,938	245	3,988
1995	1,712	1,848	210	3,787
1998	1,882	1,795	187	3,864

[1] For years before 1987, see ***Cooperative Historical Statistics*, CIR 1,** Section 28, USDA, ACS, Washington, DC, Revised January 1993. Cotton ginning cooperatives, **livestock** shipping associations, and rice drying cooperatives were **reclassified** from marketing to service in 1989, 1992, and 1993, respectively.

Figure 11- **Total Cooperative Memberships by Function, 1987-96**

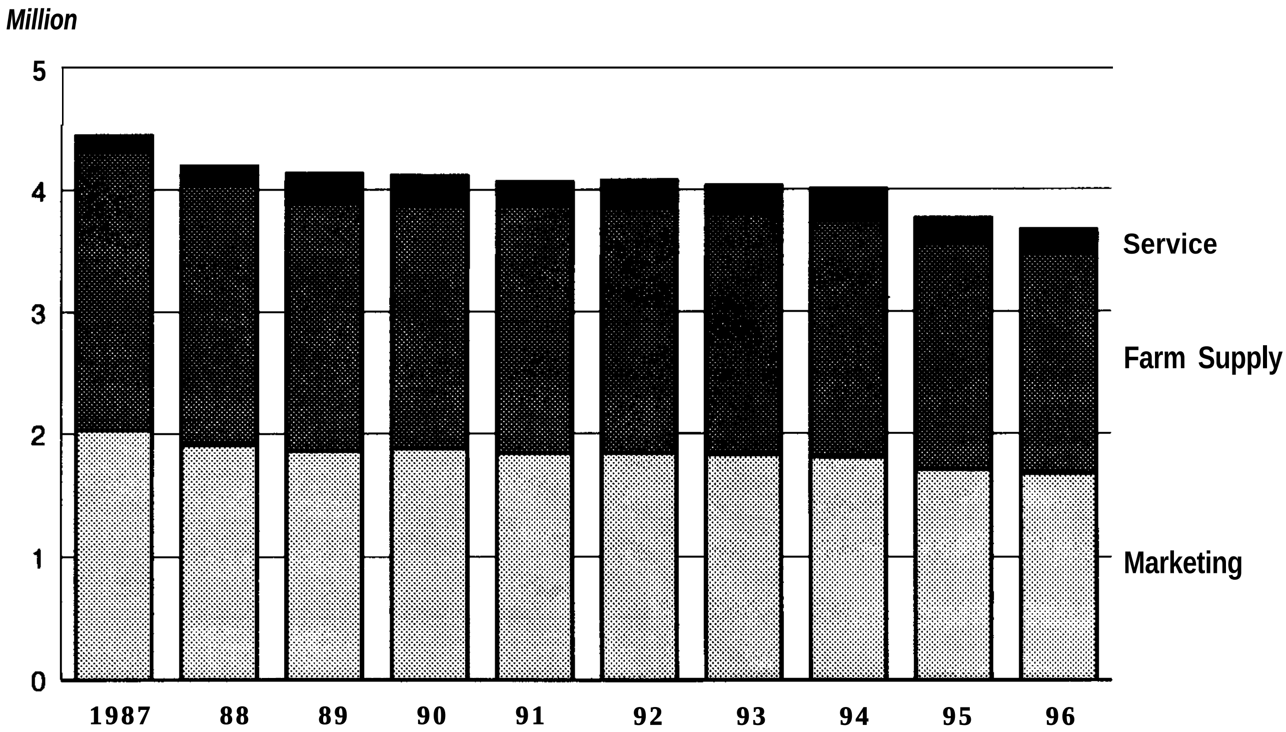


Table 12— **Number of farmer cooperatives and full-time employees, 1994–1996** [1]

Commodity	Cooperatives 1994	Cooperatives 1995	Cooperatives 1996	Full-time Employees 1994	Full-time Employees 1995 [2]	Full-time Employees 1996
			Number			
Cotton	17	16	16	2,105	2,136	1,787
Dairy	247	241	237	31,261	29,828	27,621
Fruits & vegetables	288	281	267	21,201	24,944	26,456
Grains & oilseeds	1,159	1,090	1,066	24,759	24,811	25,981
Livestock, & poultry	117	112	105	26,408	28,635	28,453
Rice	21	19	19	2,796	2,785	2,636
Sugar	52	51	49	3,264	3,422	3,482
Other products	272	264	253	5,795	7,590	7,109
Marketing	2,173	2,074	2,012	117,589	124,151	123,525
Farm supply	1,496	1,458	1,403	50,524	45,302	45,566
Service	505	474	469	6,906	**5,946**	**5,704**
Total	4,174	4,006	3,884	175,019	175,399	174,795

[1] Totals may not add to rounding.
[2] Data for 1995 were revised.

cooperatives dropped from 5,946 in 1995 to 5,704 in 1996, a 4.1-percent decrease.

Business Volume

Net cooperative business volume, unadjusted for changes in the price level, increased from $60.3 billion in 1987 to $106.2 billion in 1996—up 76.1 percent (table 13). Adjusted for price change,[6] net cooperative business totaled $83.1 billion in 1996—up 37.8 percent (figure 12). In 1996, the difference between actual and real net business volume totaled $23.1 billion.

Four major commodity groups-dairy; grains and oilseeds, excluding cottonseed; fruits and vegetables; and livestock-increased from 81.3 percent of all marketing sales in 1987 to 84 percent in 1996. Grains and oilseeds (excluding cottonseed) increased from 22.8 percent to 34.8 percent. Dairy and fruits and vegetables, as a percentage of total cooperative business volume, decreased from 37.6 percent in 1987 to 30.4 percent in 1996.

Trends in cooperatives' sales of these major commodity groups for 1987-96 are shown in figure 13. Grains and oilseeds sales show the largest variation during this period and a significant increase in grain sales in 1996, mainly due to higher prices.

In the farm supply group, petroleum, feed, and fertilizer were especially important. They accounted for 69.3 percent of cooperatives' total farm supply sales in 1987 and 71.4 percent in 1996.

Beginning with 1987, cooperative sales of petroleum, feed, fertilizer, and crop protectants have been increasing (figure 14). Fertilizer and crop protectants sales were at their lowest points in 1987. All rebounded except seed sales, which remained fairly steady.

Net marketing of farm products totaled $44.2 billion in 1987 and increased every year except in 1991. In 1996, net business volume of farm products marketed reached a record $79.4 billion (table 14). Aggregate farm supply sales were $14.3 billion in 1987 and $23.7 billion in 1996-1987 showed the lowest farm supply sales of the period. Service receipts increased from $1.9 billion in 1987 to $3.1 billion in 1996. Beginning in 1990, service receipts were expanded to include other income and revenue.

Gross business volume was $74.7 billion in 1987 and reached $92.7 billion in 1990 before dropping to $90.8 billion in 1991. From 1991, gross business volume increased every year to a record $128.1 billion in 1996. Farm product marketings ranged from 67.3 percent to 70.5 percent of cooperatives' total gross business volume during 1987-96. Net business volume of farm

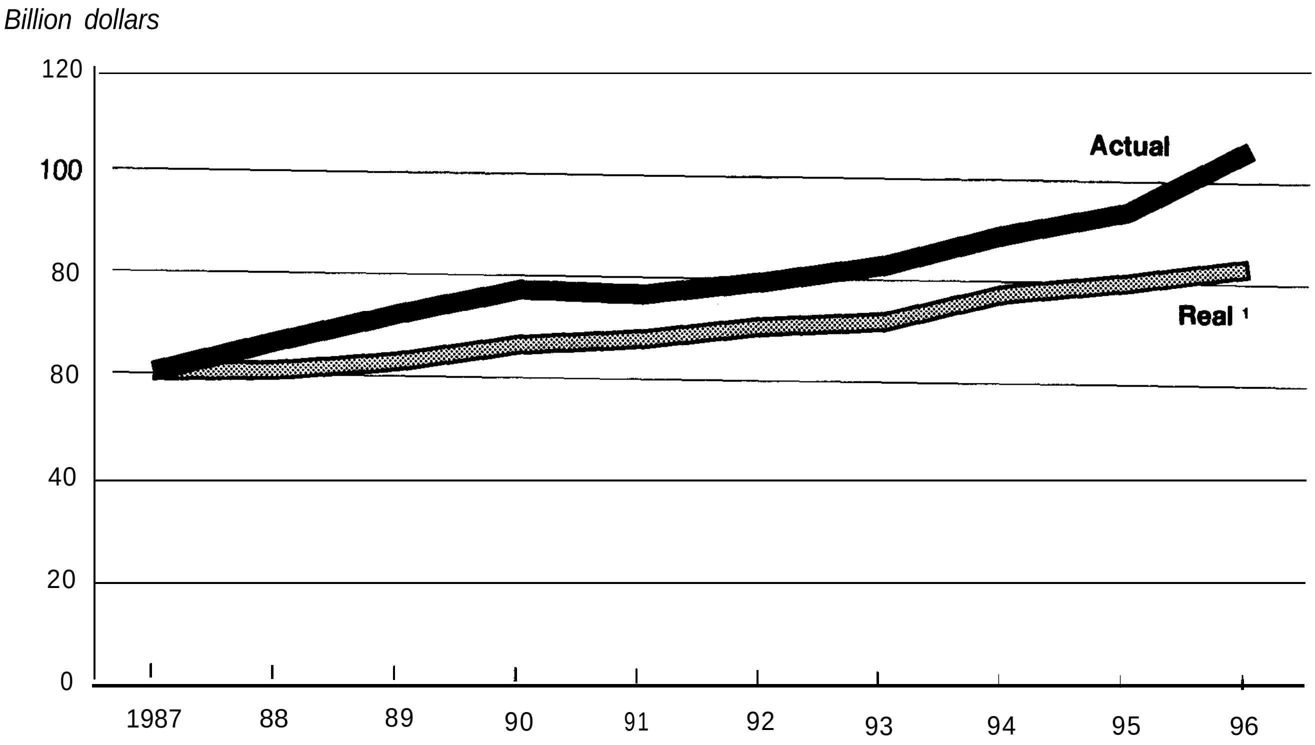
Table 13-Cooperatives' net buslness volume, 1997 and 1996 [1]

Commodity or function	Net Volume 1985	1994	Change
	-- Million dollars --		Percent
Products marketed:			
Beans and peas (dry edible)	127.7	179.0	40.2
Cotton	1,542.6	2,658.6	72.3
Dairy	16,548.3	22,934.5	36.6
Fruits and vegetables	6,113.6	9,392.0	53.6
Grains and oilseeds [2]	10,058.6	27,656.9	175.0
Livestock	3,158.4	6,725.2	112.9
Nuts	941 .0	951.6	1.1
Poultry	1,146.2	1,754.1	53.0
Rice	647.7	699.6	6.1
Sugar	1,714.1	1,933.3	12.6
Tobacco	607.7	1,412.0	132.4
Wool and mohair	22.6	7.9	-65.0
Other products	1,327.1	[3] 2,923.6	120.3
Total farm products	44,155.8	79,428.6	79.9
Supplies sold:			
Crop protectants	1,291.2	2,829.2	119.1
Feed	2,986.8	5,366.0	60.4
Fertilizer	2,731.8	5,200.6	90.4
Petroleum	4,175.1	6,295.2	50.6
Seed	576.6	656.5	14.2
Other supplies	2,509.4	3,281.3	30.6
Total farm supplies	14,270.8	23,652.6	65.7
Services provided:			
Trucking, cotton ginning, storage, grinding, locker plants, misc	1,891.2	3,100.4	63.9
Total business	60,317.7	106,181.6	76.0

[1] Excludes intercooperative 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.

[6] **Marketing sales was deflated by the index of producer prices received for "farm products, processed foods and feeds" (1987 = 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 (1987 = 100).**

Figure 12—**Cooperatives' Net Business Volume, 1987-98**



[1] Actual sales were adjusted for price change based on 1987 = 100.

Figure 13— **Cooperatives' Net Sales of Selected Commodities, 1987-96**

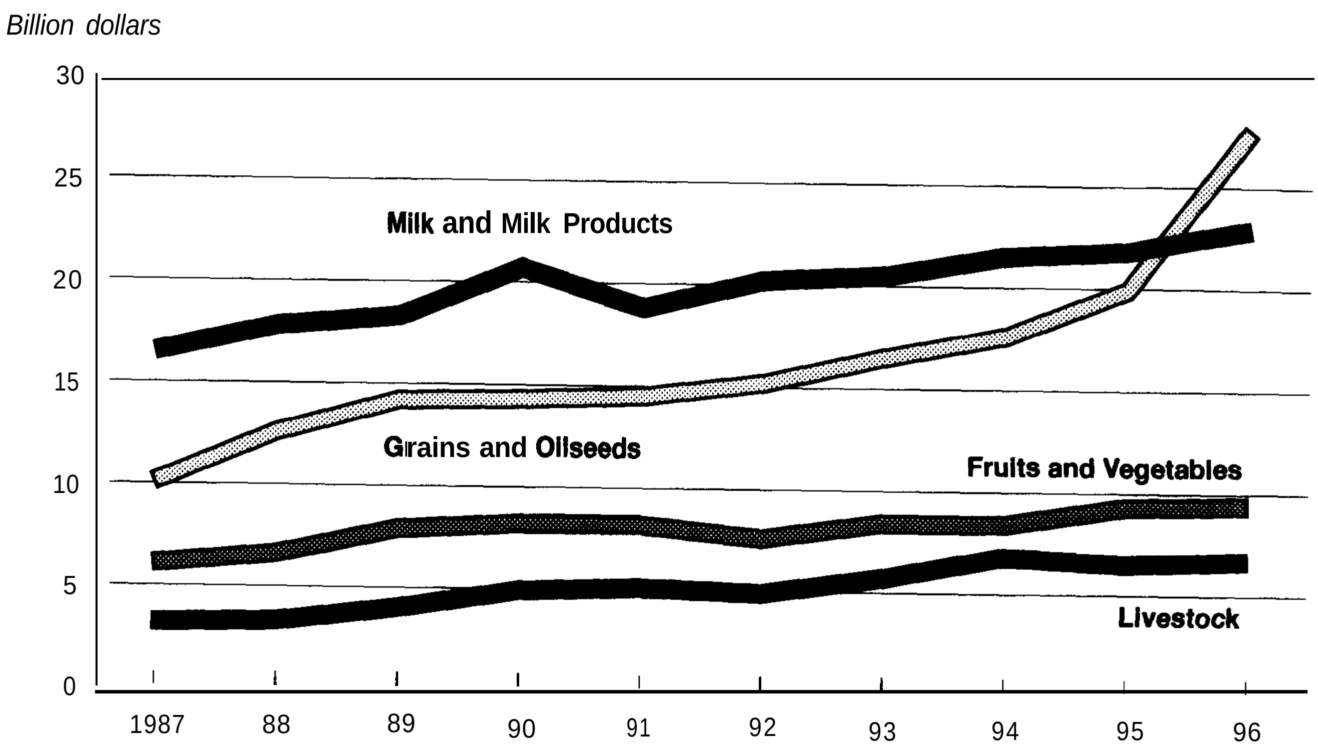
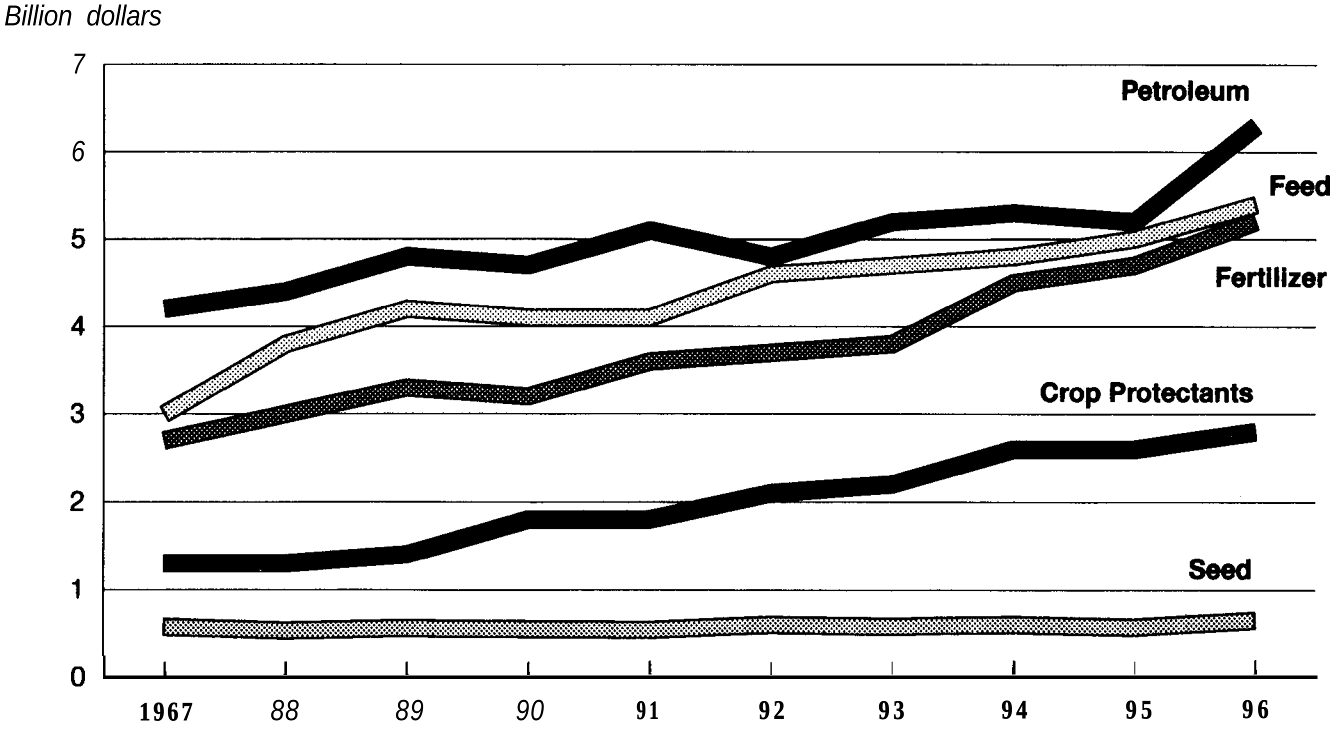


Figure 14— Cooperatives' Net Sales of Selected Farm Supplies, 1987-98



products marketed ranged from 73.2 percent to 74.8 percent of cooperatives' total net business volume.

Net Income

Although net income has fluctuated since 1987, the general trend has been an increase. In 1987, net income was $1,486 million, rose to $1.85 billion in 1989, dropped to $1.36 billion in 1993, reached a record $2.36 billion in 1995, and dropped to $2.25 billion in 1996 (table 15 and figure 15).

Net income from other cooperatives and from own operations varied over time, but reflected better recent economic times in agriculture compared with the mid-1980s. In 1996, refunds from other cooperatives totaled $711.9 million, or 31.7 percent of total net income. From 1987 to 1995, the percentage of total net income received from other cooperatives ranged from 4.2 percent in 1987 to 24.7 percent in 1992. The significant increase in net income from patronage refunds received from other cooperatives indicates the importance of cooperatives working together.

Balance Sheet

In 1987, farmer cooperatives financed 46.4 percent of their assets through member and patron equity, or net worth. From 1988 through 1993, member and patron equity used to finance assets ranged from 43.8 percent to 44.9 percent. In 1994, it dropped to 43.4 percent, continuing its downward trend to 40.8 percent in 1996 (table 16 and figure 16).

This drop in assets financed by net worth should be of some concern to cooperative leaders. If cooperatives continue to finance their assets with larger proportions of debt, and interest rates increase as happened in the late 1970s and early 1980s, some cooperatives could find themselves in a financial squeeze.

Investments in other cooperatives, as a percentage of total assets, increased in 1996 for the first time since 1993. They had dropped to 8.7 percent in 1989 before increasing to 9.6 percent in 1990. In both 1994 and 1995, they were only 7.4 percent, before increasing to 8 percent in 1996.

IV-Other Service Cooperatives

Other types of service cooperatives were operating in 1996 besides those directly related to marketing and purchasing.

Table 14— Cooperatives' gross and net business volumes, 1987–96 [1]

Period [2]	Gross volume: Farm products	Farm supplies	Services [3]	Total	Net volume: Farm products	Farm supplies	Services [3]	Total
				Billion dollars				
1987	50.3	22.5	1.9	74.7	44.2	14.3	1.9	60.3
1988	56.2	24.0	1.9	82.1	49.1	15.4	1.9	66.4
1989	60.3	25.8	2.0	88.1	53.2	16.9	2.0	72.1
1990	64.1	26.3	2.3	92.7	57.8	17.1	2.3	77.3
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	89.3	21.2	3.3	93.8
1996	90.3	34.7	3.1	128.1	79.4	23.7	3.1	106.2
				Percent				
1987	67.3	30.2	2.5	100	73.2	23.7	3.1	100
1988	68.4	29.2	2.4	100	73.9	23.2	2.9	100
1989	68.4	29.3	2.3	100	73.8	23.4	2.8	100
1990	69.1	28.4	2.5	100	74.9	22.1	3.0	100
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	2.6	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

[1] Gross includes and net excludes intercooperative business.
[2] For years before 1987, see *Cooperative Historical Statistics,* CIR 1, Section 28, USDA, ACS, Washington, DC, Revised January 1993. 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 15— Cooperatives' net Income, 1987-96 [1]

Year	From own operations	From other cooperatives [2]	Total
		Million dollars	
1987	1,423	63	1,466
1986	1,532	148	1,680
1989	1,543	308	1,851
1990	1,110	330	1,440
1991	1,189	381	1,570
1992	1,064	356	1,440
1993	1,041	318	1,358
1994	1,628	335	1,963
19953	1,820	544	2,363
1996	1,536	712	2,246

[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.
[3] Revised.

Farm Credit System

The Farm Credit System (FCS) is a nationwide network of financial cooperatives that lend 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 to certain foreign or domestic entities in connection with international transactions.

On January 1, 1997, the FCS represented 60 Federal Land Bank Associations (FLBAs); 31 Federal Land Credit Associations (FLCAs); 65 Production Credit Associations (PCAs); 1 Agricultural Credit Bank (ACB), (CoBank, ACB); 61 Agricultural Credit Associations (ACAs); 6 Farm Credit Banks (FCBs); and 1 Bank for Cooperatives (BC) (table 17).

On December 31, 1996, the combined assets of the FCS totaled $74.9 billion-up 4.9 percent from $71.4

Figure 15— Cooperatives' Net Income, 1987-98

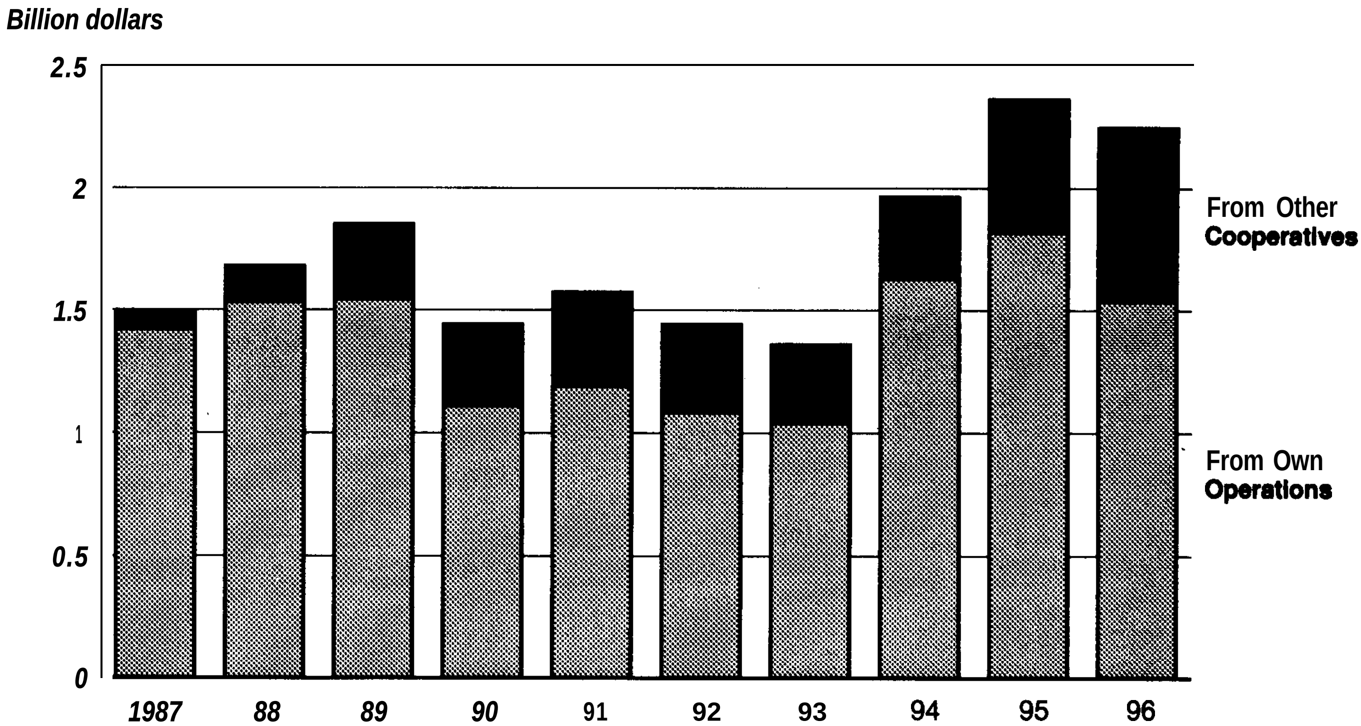


Figure 16— Cooperatives' Net Worth and Total Liabilities, 1987-98

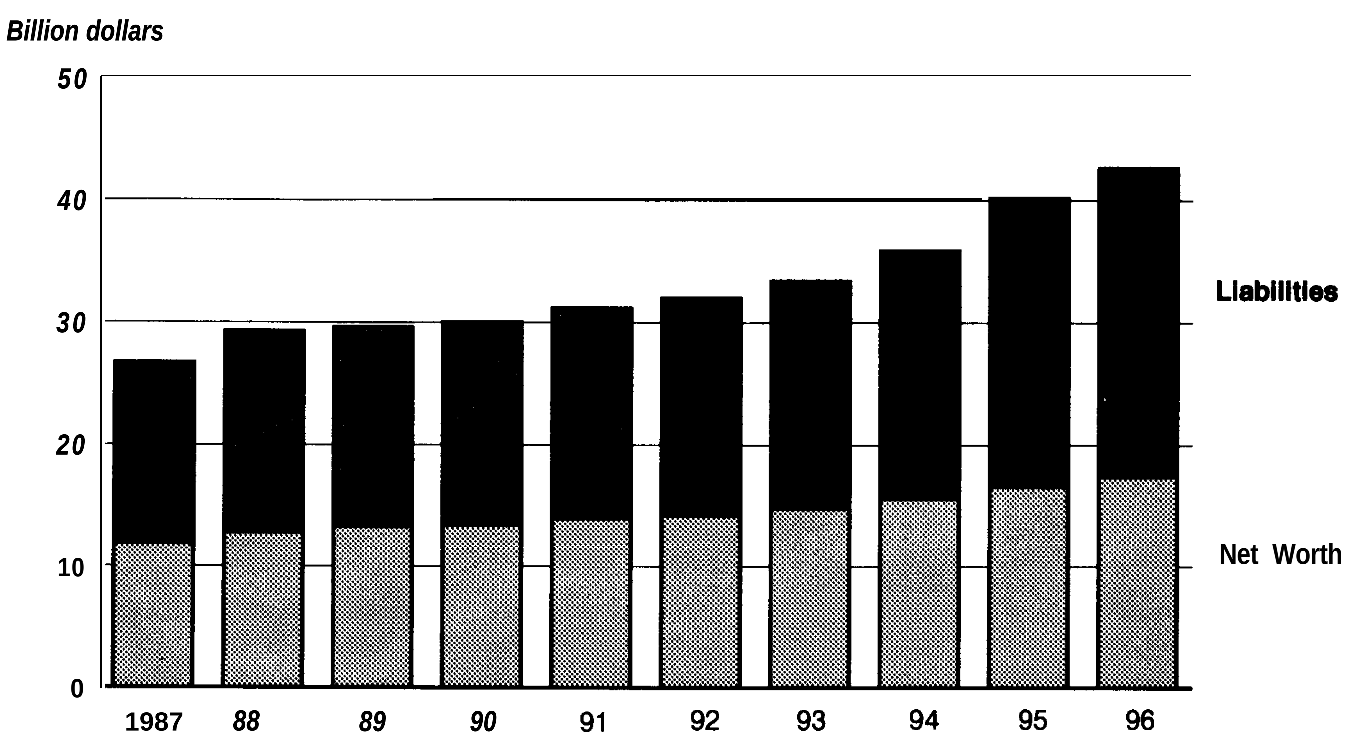


Table 16— Combined balance sheet data for farmer cooperatives, 1987–96[1]

Year	Assets from own operations	Investments in other co–ops	Total assets	Total liabilities	Net worth
			Million dollars		
1987	24,823	2,820	27,843	14,819	12,824
1988	28,524	2,782	29,288	18,481	12,825
1989	27,078	2,571	29,849	18,337	13,313
1990	27,155	2,889	30,024	18,575	13,449
1991	28,788	2,501	31,288	17,227	14,040
1992	29,572	2,422	31,994	17,780	14,213
1993	30,844	2,802	33,448	18,834	14,812
1994	33,304	2,858	35.980	20,339	15,821
1995	37,314	2,980	40,274	23,843	18,831
1998	39,193	3,395	42,588	25,195	17,392
			Percent of total assets		
1987	89.8	10.2	100.0	53.8	48.4
1988	90.8	9.4	100.0	58.2	43.8
1989	91.3	8.7	100.0	55.1	44.9
1990	90.4	9.8	100.0	55.2	44.8
1991	92.0	8.0	100.0	55.1	44.9
1992	92.4	7.8	100.0	55.8	44.4
1993	92.2	7.8	100.0	55.7	44.3
1994	92.6	7.4	100.0	58.8	43.4
1995	92.6	7.4	100.0	58.7	41.3
1998	92.0	8.0	100.0	59.2	40.8

[1] Totals may not add due to rounding.

Table 17— Farm Credit Association structure, January 1, 1997[1]

District or bank affiliation	FLBA	FLCAs	PCA	ACB	ACA	FCB	BC
			Number				
CoBank, ACB [2]				1	5		
AgFirst FCB			1		39	1	
AgriBank, FCB		19	19		11	1	
FCB of Wichita	22		18			1	
FCB of Texas	38		18			1	
Western FCB		11	10		5	1	
St. Paul BC [3]							1
AgAmerica, FCB		1	1		1	1	
Total	80	31	85	1	81	8	1

= No bank affiliation.

[1] FLBA = Federal Land Bank Association; PCA = Production Credii Association; ACA = Agricultural Credit Association; FLCA = Federal Land Credit Association; ACB = Agricultural Credit Bank; FCB = Farm Credit Bank; and BC= Bank for Cooperatives

[2] CoBank, ACB serves cooperatives nationwide and ACAs in the former Springfield District.

[3] The St. Paul BC serves cooperatives nationwide.

Source: Farm Credit Administration, 1996 *Annual Report on the Financial Condition and Performance of the Farm Credit System,* McLean, VA, p. 26.

billion in 1995 (table 18). Net worth totaled $10.7 billion, up 8.8 percent, and net income was $1.2 billion, up 3.1 percent from 1995.

The FLBAs originate and service long-term loans made by FCBs. Loan proceeds are used to purchase agricultural real estate and rural homes and refinance agricultural real estate and rural home mortgages.

Of the 31 FLCAs operating on January 1, 1997, 19 were in AgriBank, 11 in Western and one in AgAmerica districts. FLCAs were authorized by the Agricultural Credit Act of 1987. FLCAs are former FLBAs that were given direct lending authority by FCBs.

PCAs provide farmers and ranchers short- and intermediate-term loans for various purposes, such as operating expenses, farm equipment, livestock, farm buildings, and other capital improvements. Four of the six FCB districts contained 63 of the 65 PCAs.

ACAs resulted from the merger of FLBAs or FLCAs with PCAs. ACAs offer both long- and short-term loans. Of the 61 ACAs operating on January 1, 1997, 39 of them were in AgFirst territory and 11 in the AgriBank district.

The FCBs provide loan funds and support services to FLBAs, ACAs, FLCAs, and PCAs within their districts. Combined assets of six FCBs, one ACB, and one BC totaled $68.5 billion in 1997, up from $65.8 billion in 1995 (table 19). Net worth in 1996 was $5.8 billion and net loans totaled nearly $56.6 billion. Net income was $622 million in 1996, a record for the past 5 years.

St. Paul Bank for Cooperatives, the sole BC, is based in Minnesota. It offers a complete line of credit and related financial services to agricultural cooperatives, rural utilities, and other eligible customers nationwide.

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, ACAs, and other businesses serving rural America. CoBank is also authorized to finance U.S. agricultural exports and to provide international banking services for farmer cooperatives.

Rural Telephone Cooperatives

On December 31, 1996, 236 rural telephone cooperatives were borrowing from the Rural Electrification Administration (REA), with revenues of $1,201 million and 1,457,000 subscriber members. Iowa had the most cooperatives, 32, or 13.6 percent of the total. South Carolina had more subscriber memberships (11.1 percent) than any other State (table 20). Texas led all States in revenue, with $143 million, or 11.9 percent of the total.

Rural Electric Cooperatives

The Nation's 804 rural electric cooperatives reported 11.1 million consumer members and revenue of $24.4 billion (table 21). Texas led all States, with 55 associations, or 6.8 percent of the total, while Georgia led with the most consumer members (9.1 percent) and revenue (9.9 percent).

Table is- **Farm Credit System combined assets, net worth, and net income, 1992–96**[1]

Year	Assets	Net worth	Net income
		Million dollars	
1992	63,197	7,214	986
1993	64,798	8,312	1,217
1994	66,376	8,980	1,005
1995	71,438	9,863	1,165
1996	74,917	10,729	1,201

[1] As of December 31. Data for 1992-93 were taken from Farm Credit System, Annual Information Statements, Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ. Data for *1994-96* were taken from *Farm Credit System, Annual Information Statement-1996,* Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ, February 27, 1997, p. F-3.

Table IQ- **Farm Credit System banks' and associations' combined assets, net worth, net loans, and net income, 1992-96**[1]

Year	Assets	Net worth	Net loans	Net income
		Million dollars		
1992	59,633	4,937	49,440	506
1993	60,382	5,231	50,327	590
1994	61,174	5,254	50,763	452
1995	65,754	5,629	54,525	555
1996	68,549	5,798	56,571	622

[1] As of December 31. Includes six Farm Credit Banks, one Agricultural Credit Bank, and one Bank for Cooperatives.

Source: Farm Credit Administration, *Report on the Financial Condition and Performance of the Farm Credit System,* McLean, VA, pp. 41-42.

Table 20— **Number, participation, and level of activity of rural telephone cooperatives by State, December 31, 1996**[1]

State	Cooperatives	Members (subscribers)	Revenue	State	Cooperatives	Members (subscribers)	Revenue
	Number	*1,000*	*Mil. dol.*		*Number*	*1,000*	*Mil. dol.*
Alabama	3	26	16	New Hampshire			
Alaska	7	59	66	New Jersey			
Arizona	1	4	6	New Mexico	5	28	49
Arkansas	2	6	8	New York			
California	–		–	North Carolina	9	138	75
Colorado	5	9	9	North Dakota	10	59	53
Delaware	–		–	Ohio	6	4	3
Florida	–		–	Oklahoma	1	9	14
Georgia	4	32	21	Oregon	9	46	35
Idaho	2	10	7	Pennsylvania			
Illinois	7	23	22	South Carolina	6	161	99
Indiana	8	34	25	South Dakota	13	50	45
Iowa	32	63	52	Tennessee	7	136	82
Kansas	10	56	71	Texas	20	126	143
Kentucky	8	97	64	Utah	3	19	17
Louisiana	–	–	–	Vermont			
Maine	–	–	–	Virginia	5	19	12
Maryland	–	–	–	Washington			
Michigan				West Virginia	2	4	4
Minnesota	19	76	57	Wisconsin	11	44	30
Mississippi				Wyoming	1	1	2
Missouri	8	49	43				
Montana	7	56	64	United States	236	1,457	1,201
Nebraska	5	10	7				
Nevada			–				

- = None reported in the State.
[1] Source: Rural Utilities Service, USDA. Totals may not add due to rounding.

Rural Credit Unions

The 690 rural credit unions reported 4.2 million members and savings of $16.4 billion. Wisconsin led all States in number of associations, with 69 (10 percent), while California had the most members, with 990,000 (23.3 percent). California also led all States in credit union savings, with $4.5 billion, or 27.5 percent of the $16.4 billion (table 22).

Dairy Herd Improvement Associations

Dairy Herd Improvement Associations (DHIA) had 41,277 members (table 23). The DHIAs tested 4.5 million cows. Wisconsin (10,628), Pennsylvania (5,219), Minnesota (4,828), and New York (3,351), combined, accounted for 58.2 percent of total members. About 845,600, or 18.7 percent, of the cows tested were in California.

Table 21— **Number, participation, and level of activity of rural electric cooperatives by State, December 31, 1996** [1]

State	Cooperatives	Members (subscribers)	Revenue	State	Cooperatives	Members (subscribers)	Revenue
	Number	*1,000*	*Mil. dol.*		*Number*	*1,000*	*Mil. dol.*
Alabama	22	422	770	New Hampshire	1	69	96
Alaska	11	71	206	New Jersey	1	10	14
Arizona	6	113	374	New Mexico	17	167	374
Arkansas	19	365	1,006	New York	4	15	13
California	3	14	20	North Carolina	26	644	1,516
Colorado	21	306	642	North Dakota	26	113	666
Delaware	1	53	60	Ohio	24	275	530
Florida	14	559	1,259	Oklahoma	24	310	553
Georgia	38	1,006	2,417	Oregon	13	96	146
Idaho	7	46	66	Pennsylvania	13	168	344
Illinois	21	167	296	South Carolina	22	519	1,171
Indiana	31	307	620	South Dakota	32	121	223
Iowa	43	178	435	Tennessee	21	750	1,013
Kansas	33	152	408	Texas	55	666	1,407
Kentucky	26	614	1,573	Utah	1	7	6
Louisiana	12	284	796	Vermont	3	9	6
Maine	3	14	13	Virginia	12	335	508
Maryland	2	146	252	Washington	7	32	47
Michigan	13	204	251	West Virginia	1	5	5
Minnesota	48	411	639	Wisconsin	21	145	323
Mississippi	19	444	923	Wyoming	12	60	127
Missouri	45	515	1,416				
Montana	23	93	142	United States	804	11,084	24,441
Nebraska	3	6	109				
Nevada	2	11	52				

[1] Source: Rural Utilities Service, USDA. Totals may not add due to rounding.

Table 22— **Number, participation, and level of activity of rural credit unions by State, December 31, 1996**[1]

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	Number	1,000	Mil. dol.		Number	1,000	Mil. dol.
Alabama	11	21	70	Montana	12	55	187
Alaska	1	19	78	Nebraska	16	13	37
Arizona	4	15	36	Nevada	6	44	251
Arkansas	3	7	20	New Hampshire	2	1	1
California	59	990	4,509	New Jersey	6	12	20
Colorado	14	20	69	New Mexico	3	35	133
Connecticut	1	1	1	New York	29	164	635
Delaware	1	2	8	North Carolina	14	32	68
Florida	16	92	336	North Dakota	32	99	500
Georgia	12	31	77	Ohio	12	39	60
Hawaii	17	97	537	Oklahoma	5	8	34
Idaho	9	14	33	Oregon	10	75	262
Illinois	13	60	208	Pennsytvania	21	31	68
Indiana	17	65	455	Rhode Island	3	55	446
Iowa	7	6	16	South Carolina	3	8	44
Kansas	16	75	214	South Dakota	8	10	24
Kentucky	7	31	73	Tennessee	8	14	34
Louisiana	9	15	35	Texas	34	111	345
Maine	10	23	82	Utah	9	14	40
Maryland	5	52	221	Vermont	4	17	43
Massachusetts	6	10	21	Virginia	6	43	134
Michigan	27	410	1,068	Washington	15	150	617
Minnesota	36	195	699	West Virginia	3	4	9
Mississippi	4	11	26	Wisconsin	69	573	1,915
Missouri	7	18	47	Wyoming	2	2	4
				United States[2]	690	4,240	16,383

[1] Source: Credit Union National Association, Inc. (Includes federally chartered and State-chartered credit unions.) Totals may not add due to rounding.

[2] Includes Puerto Rico with 44 cooperatives, 352 members, and savings of $1,533 million.

Table 23— **Number, participation, and level of activity of dairy herd Improvement associations by State, December 31, 1996**[1]

State	Members (herds)	cows tested	State	Members (herds)	cows tested
	Number	*1,000*		*Number*	*1,000*
Alabama	86	14.4	Montana	74	8.6
Alaska	2	([2])	Nebraska	352	34.2
Arizona	61	59.7	Nevada	27	9.1
Arkansas	114	10.8	New Hampshire	132	11.3
California	1,256	645.6	New Jersey	117	9.5
Colorado	112	41 .o	New Mexico	54	56.5
Connecticut	141	16.0	New York	3,351	329.6
Delaware	33	4.4	North Carolina	305	50.8
Florida	126	65.5	North Dakota	125	10.2
Georgia	265	60.0	Ohio	1,701	123.0
Hawaii	6	2.5	Oklahoma	191	21.6
Idaho	316	74.8	Oregon	293	51.3
Illinois	936	66.6	Pennsylvania	5,219	336.8
Indiana	al5	64.8	Rhode Island	6	.4
Iowa	1,816	121.3	South Carolina	111	21.1
Kansas	440	39.3	South Dakota	422	33.7
Kentucky	367	31 .o	Tennessee	352	42.5
Louisiana	200	25.6	Texas	583	188.8
Maine	190	16.3	Utah	305	52.0
Maryland	529	44.1	Vermont	639	58.7
Massachusetts	151	12.6	Virginia	612	77.1
Michigan	1,445	148.3	Washington	398	93.8
Minnesota	4,828	320.2	West Virginia	a9	9.2
Mississippi	113	18.5	Wisconsin	10,628	685.7
Missouri	655	55.3	Wyoming	11	1.4
			United States[3]	41,277	4,516.7

[1] Source: Agricultural Research Service, USDA. Totals may not add due to rounding.
[2] Fewer than 500.
[3] Includes Puerto Rico and the Virgin Islands with 177 members and 38,772 cows tested.

Appendix Table 1— Number [1] of co-ops and memberships* by major business activity and State,1995[3]

State	Hqts. in State	Memberships
BEANS AND PEAS, DRY EDIBLE		
California	5	834
Other States	5	2.419
United States	10	3,253
COTTON [4]		
California	3	2,711
Mississippi	3	3,315
Texas	4	24,300
Other States	6	11,490
Foreign	—	68
United States	16	41,884
DAIRY		
California	10	1,979
Hawaii	3	45
Illinois	4	2,423
Iowa	10	10,742
Michigan	3	4,334
Minnesota	48	17,519
New York	61	6,349
North Dakota	5	1,040
Ohio	6	3,692
Oregon	3	661
Pennsylvania	21	7,920
Virginia	4	1,219
Wisconsin	35	32,769
Other States	28	26,621
United States	241	117,313
FRUITS AND VEGETABLES [5]		
Arizona	4	734
Arkansas	6	440
California	75	21,710
Colorado	10	421
Florida	33	2,376
Georgia	5	189
Hawaii	10	512
Kentucky	4	334
FRUITS AND VEGETABLES [5] (Continued)		
Maine	4	485
Massachusetts	4	508
Michigan	18	3,759
Mississippi	4	283
New Jersey	10	864
New York	10	1,120
North Carolina	3	56
Ohio	5	1,376
Oregon	12	1,637
Pennsylvania	6	1,673
Texas	5	337
Vermont	3	108
Virginia	4	207
Washington	23	5,644
Other States	23	4,258
Foreign [6]		81
United States	281	49,112
GRAINS AND OILSEEDS EXCLUDING COTTONSEED [7]		
Arkansas	3	1,362
Colorado	16	10,029
Idaho	6	1,633
Illinois	125	94,706
Indiana	26	40,855
Iowa	152	99,608
Kansas	129	123,535
Michigan	12	6,351
Minnesota	111	75,218
Mississippi	6	2,332
Missouri	21	30,040
Montana	15	11,199
Nebraska	77	68,687
North Dakota	142	75,104
Ohio	49	37,815
Oklahoma	48	36,201
Oregon	3	3,562
South Dakota	77	55,119
Texas	38	18,311
Washington	25	10,136
Other States	9	3,732
Foreign [6]		327
United States	1,090	805,862

Continued

Appendix Table 1- Number [1] Of co-ops and memberships [2] by major business activity and State, 1995 [3] (continued)

State	Hqts. in State	Memberships
LIVESTOCK [5]		
Alabama	7	6,666
Hawaii	4	10,476
Idaho	3	6,939
Illinois	3	23,332
Indiana	3	2,247
Kentucky	4	377
Michigan	4	29,504
Mississippi	7	6,921
Missouri	5	6,652
North Dakota	7	9,359
Ohio	4	7,832
Virginia	6	1,312
West Virginia	3	606
Wisconsin	7	24,422
Other States	27	131,236
Foreign [6]	—	1,736
United States	94	273,619
NUT [8]		
California	6	6,556
Hawaii	3	547
Other States	12	41,315
United States	21	46,416
POULTRY [9]		
California	3	76
Utah	3	113
Other States	12	26,319
Foreign [6]	—	42
United States	16	26,552
RICE [5]		
California	5	2.206
Louisiana	3	166
Texas	7	1,233
Other States	4	12,266
Foreign [6]	—	1
United States	19	15,914
SUGAR [10]		
Idaho	7	941
Louisiana	10	604
Michigan	6	2,675
Minnesota	3	2,066
Montana	3	535
Wyoming	4	466
Other States	16	7,950
Foreign [6]	—	2
United States	51	15,261
TOBACCO [8]		
Kentucky	5	70,889
North Carolina	8	66,460
Tennessee	7	74,510
Virginia	3	14,708
Other States	3	43,189
Foreign [6]	—	277
United States	26	270,053
WOOL AND MOHAIR		
Idaho	6	232
Montana	20	998
North Dakota	6	247
Pennsylvania	17	2,230
Utah	4	515
Virginia	6	674
West Virginia	10	767
Wyoming	4	108
Other States	23	13,960
United States	96	19,731
MISCELLANEOUS [11]		
Alaska	13	6,245
California	11	1,352
Florida	7	309
Georgia	4	353
Hawaii	7	399
Maine	15	832
Massachusetts	4	278
Michigan	3	109
Minnesota	7	5,113
Mississippi	4	262
North Dakota	3	2,834
Oregon	3	152
Washington	5	461
Other States	23	3,837
United States	109	22,536
TOTAL MARKETING		
Alabama	11	14,411
Alaska	13	6,246
Arizona	5	2,015
Arkansas	16	15,142
California	122	41,419
Colorado	32	14,246
Florida	45	8,164
Georgia	15	37,041
Hawaii	26	12,082
Idaho	26	12,289
Illinois	136	120,837
Indiana	29	49,277

Continued

Appendix Table 1— **Number [1] of co-ops and memberships [2] by major business activity and State, 1995 [3]** (continued)

State	Hqts. in State	Memberships
TOTAL MARKETING (Continued)		
Iowa	167	139,509
Kansas	129	129,223
Kentucky	15	74,924
Louisiana	20	5,543
Maine	20	1,746
Massachusetts	11	1,433
New Mexico	4	1,539
Michigan	49	47,858
Minnesota	177	155,439
Mississippi	25	17,566
Missouri	29	44,172
Montana	44	14,487
Nebraska	66	82,513
New Jersey	15	3,101
New York	76	10,031
North Carolina	20	69,009
North Dakota	170	91,897
Ohio	70	67,083
Oklahoma	53	50,996
Oregon	24	9,984
Pennsylvania	48	11,991
South Carolina	5	19,170
South Dakota	79	63,682
Tennessee	8	76,376
Texas	67	52,906
Utah	13	5,626
Vermont	7	2,156
Virginia	27	41,323
Washington	57	17,725
West Virginia	14	3,558
Wisconsin	47	58,981
Wyoming	8	611
Other States	9	3,867
Foreign [6]	—	2,534
United States	2,074	1,711,508
FARM SUPPLY		
Alabama	48	41,347
Arkansas	42	46,699
California	20	13,915
Colorado	22	19,694
Florida	6	8,332
Georgia	8	2,737
Hawaii	6	2,739
Idaho	16	14,152
Illinois	69	114,091
Indiana	30	62,576
Iowa	87	100,149
Kansas	26	22,165

State	Hqts. in State	Memberships
FARM SUPPLY (Continued)		
Kentucky	29	123,237
Louisiana	21	7,237
Maryland	15	52,324
Massachusetts	4	3,910
Michigan	33	16,638
Minnesota	170	147,767
Mississippi	38	86,391
Missouri	44	135,422
Montana	39	20,820
Nebraska	51	38,281
New York	12	37,144
North Dakota	115	51,451
Ohio	22	14,806
Oklahoma	29	21,024
Oregon	15	21,319
Pennsyfvania	7	33,164
South Dakota	72	52,034
Tennessee	70	71,110
Texas	53	35,480
Utah	8	5,322
Virginia	38	121,687
Washington	31	13,278
West Virginia	14	60,190
Wisconsin	129	123,088
Wyoming	6	4,008
Other States	13	99,471
Foreign [6]	—	626
United States	1,458	1,845,535
SERVICE [12]		
Alabama	5	180
Arizona	4	922
Arkansas	6	1,191
California	48	4,217
Hawaii	6	107
Illinois	5	311
Iowa	3	1,690
Kansas	4	144
Louisiana	14	2,306
Maryland	3	104
Michigan	5	6,225
Minnesota	42	26,035
Mississippi	26	8,346
New Mexico	4	1,527
New York	5	14,755
North Carolina	6	123
North Dakota	9	496
Ohio	7	4,993
Oklahoma	26	8,757

Continued

Appendix Table I- Number [1] of co-ops and memberships* by major business activity and State,1995 [3] (continued)

State	Hqts. in State	Memberships
SERVICE [12] (Continued)		
Pennsylvania	8	16,916
Texas	162	42,343
Washington	4	5,676
Wisconsin	49	32,450
Other States	23	30,434
United States	474	210,252
TOTAL		
Alabama	64	55,938
Alaska	13	6,246
Arizona	10	10,017
Arkansas	64	63,032
California	192	59,551
Colorado	55	33,665
Connecticut	4	3,310
Delaware	3	29,072
Florida	53	26,362
Georgia	25	40,156
Hawaii	40	14,928
Idaho	43	26,441
Illinois	210	235,239
Indiana	61	111,952
Iowa	257	24 1,348
Kansas	159	151,532
Kentucky	45	203,061
Louisiana	55	15,086
Maine	22	9,527
Maryland	20	53,464
Massachusetts	15	5,343
Michigan	67	70.521
Minnesota	369	329,241
Mississippi	69	112,303
Missouri	74	180,235
Montana	63	35,107
Nebraska	139	121,266
New Jersey	19	8,220
New Mexico	9	3,330
New York	95	61,930
North Carolina	26	113,082
North Dakota	294	143,844
Ohio	99	90,447
Oklahoma	106	77,651
Oregon	41	30,877
Pennsylvania	63	62,073
South Carolina	7	19,612
South Dakota	151	116,128
Tennessee	79	148,933
Texas	262	130,729
TOTAL (Continued)		
Utah	22	13,268
Vermont	7	7,454
Virginia	67	167,890
Washington	92	36,681
West Virginia	28	63,748
Wisconsin	225	214,519
Wyoming	14	4,619
Other States	5	2,937
Foreign [6]		3,160
United States	4,006	3,767,295

[1] Indudes centralized and federated cooperatives and those with mixed organizational structures.

[2] Indudes 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 1995. States listed are those with more than two cooperatives or where disclosure is not a problem.

[4] Cotton ginning cooperatives in previous reports were included in this classification but reclassified as service cooperatives in 1989.

[5] Cooperatives performing specific services related to a commodity are included. incorporated local associations of a federation that perform the actual marketing or processing are counted.

[6] Includes foreign memberships.

[7] Excludes soybean meal and oil.

[8] Membership fluctuates annually depending upon producer participation in price stabilization programs.

[9] includes eggs, turkeys, ratite, squab, and related products.

[10] includes sugar, sugarcane, sugar beats, honey, maple syrup, molasses, and sorghum.

[11] includes forest products, hay, hops, nursery stock, coffee, and other farm products not separately classified.

[12] Cooperatives providing services related to marketing or purchasing activities. Major services provided are cotton ginning, truddng, storing, grinding, drying, and artificial insemination.

Appendix Table 2— Cooperative business volume [1] by commodity and State, 1995 [2]

State	Business volume: Gross	Business volume: Net
	1.000 dollars	
PRODUCTS MARKETED:		
BEANS AND PEAS, DRY EDIBLE		
California	120,504	117,737
Other States	90.717	90,718
United States [3]	211,221	208,455
COTTON		
California	635,298	587,321
Mississippi	421,460	418,634
Texas	1,057,201	1,006,424
Other States	788,926	786,704
United States	2,902,885	2,799,083
DAIRY		
California	2,791,553	2,662,609
Hawaii	21,433	21,433
Illinois	931,340	811,771
Iowa	930,828	862,796
Michigan	652,961	624,033
Minnesota	2,052,404	1,788,794
New York	1,621,652	1,228,835
North Dakota	173,157	157,713
Ohio	651,465	623,028
Oregon	256,390	241,765
Pennsylvania	1,280,285	965,356
Virginia	113,643	111,397
Wisconsin	4,677,481	4,383,774
Other States	7,513,893	7,300,505
United States	23,668,484	21,783,809
FRUITS AND VEGETABLES		
Arizona	159,451	139,156
Arkansas	1,355	1,355
California	3846,187	3,469,272
Colorado	27,055	27,055
Floriia	1,338,037	1,281,838
Georgia	24,359	20,402
Hawaii	25,446	25,446
Kentucky	7,894	7,894
Maine	33,683	33,683
Massachusetts	504,103	504,103
Michigan	502,198	411,307

State	Business volume: Gross	Business volume: Net
	1,000 dollars	
FRUITS AND VEGETABLES (Continued)		
Mississippi	13,657	13,262
New Jersey	211,438	211,062
New York	298,802	293,002
North Carolina	21,003	19,447
Ohio	6,953	6,953
Oregon	575,884	575,647
Pennsyhrania	289,416	279,438
Texas	44,487	16,301
Vermont	9,427	9,427
Virginia	13,754	13,145
Washington	818,620	771,572
Other States	1,155,054	1,122,360
Foreign [4]	19,629	18,826
United States	9,947,892	9,271,953
GRAINS AND OILSEEDS EXCLUDING COTTONSEED		
Arkansas	187,296	186,213
Colorado	280,851	249,146
Idaho	43,315	43,315
Illinois	2,076,317	2,068,292
Indiana	1,301,046	967,560
Iowa	3,803,565	2,825,505
Kansas	2,073,069	1,773,049
Michigan	412,655	270,923
Minnesota	3,219,309	2,377,433
Mississippi	86,430	80,775
Missouri	820,718	570.775
Montana	453,804	284,345
Nebraska	2,012,738	1,737,404
North Dakota	2,256,260	1,831,526
Ohio	1,321,884	988,399
Oklahoma	615,396	447,918
Oregon	150,380	150,150
South Dakota	1548,192	1,198,988
Texas	1,070,349	644,652
Washington	845,660	631,773
Other States	570,750	510.555
Foreign [4]	47,655	25,734
United States	25,197,639	19,864,430

Continued

Appendix Table 2— Cooperative business volume[1] by commodity and State, 1995[2] (continued)

State	Business volume Gross	Net
	1,000 dollars	
LIVESTOCK		
Alabama	69,804	69,804
Hawaii	4,086	4,086
Idaho	64,206	62,336
Illinois	524,734	524,734
Indiana	116,694	116,894
Kentucky	24,062	24,082
Michigan	675,979	675,979
Mississippi	94,524	94,524
Missouri	244.316	244,316
North Dakota	91,244	84,119
Ohio	304,856	304,858
Virginia	31,777	31,777
West Virginia	3,261	3,261
Wisconsin	555,291	548,166
Other States	3,711,482	3,669,258
Foreign [4]	15,549	15,549
United States	6,532,089	6,473,743
NUTS		
California	618,904	618,904
Hawaii	24,056	24,056
Other States	222,640	222,640
United States	865,600	865,600
POULTRY [5]		
California	41,882	41,882
Utah	214,707	78,504
Other States	1,618,698	1,471,144
United States	1,875,287	1,591,530
RICE		
California	230,729	229,439
Louisiana	25,954	25,954
Texas	58,151	58,151
Other States	585,998	585,998
United States	900,832	899,542

State	Business volume Gross	Net
	1,000 dollars	
SUGAR		
Idaho	139,942	139,942
Louisiana	260,472	260,472
Michigan	113,261	113,261
Minnesota	590,726	522,467
Montana	71,881	71,881
Wyoming	41,353	41,353
Other States	748,885	718,929
Foreign [4]	298	298
United States	1,966,818	1,868,603
TOBACCO		
Kentucky	528,550	528,550
North Carolina	231,834	231,834
Tennessee	292,463	292,463
Virginia	24,683	24,683
Other States	83,387	83,387
United States	1,160,917	1,160,917
WOOL AND MOHAIR		
Idaho	116	116
Montana	1,111	1,111
North Dakota	95	95
Pennsylvania	264	264
Utah	430	430
Virginia	124	124
West Virginia	168	168
Wyoming	82	82
Other States	20,014	13,031
United States	22,404	15,421
MISCELLANEOUS MARKETING [6]		
Alaska	13,040	13,040
California	247,692	247,848
Florida	18,766	18,677
Georgia	17,145	17,145
Hawaii	13,792	13,792
Maine	23,056	23,056
Massachusetts	2,345	2,345
Michigan	65,414	64,680
Minnesota	476,466	391,143

Continued

Appendix Table 2— **Cooperative business volume [1] by commodity and State, 1995[2] (continued)**

State	Business volume Gross	Business volume Net
	7,000 dollars	
MISCELLANEOUS MARKETING[6] (continued)		
Mississippi	163,493	159,451
North Dakota	59,320	45,666
Oregon	61,097	61,097
Washington	199,037	198,993
Other States	1,116,214	1,049,521
Foreign [4]	216,993	211,305
United States	2,694,070	2,517,761
TOTAL FARM PRODUCTS MARKETED		
Alabama	1,017,012	970,180
Alaska	13,040	13,040
Arizona	704,420	666,601
Arkansas	1,172,449	1,164,760
California	8,705,309	8,146,437
Colorado	614,683	581,642
Florida	2,227,104	2,165,583
Georgia	774,767	767,566
Hawaii	92,606	92,606
Idaho	856,545	849,727
Illinois	3,563,710	3,436,117
Indiana	1,903,130	1,530,556
Iowa	6,586,714	5,522,612
Kansas	2,782,406	2,482,386
Kentucky	813,399	783,664
Louisiana	454,128	450,447
Maine	76,014	75,557
Massachusetts	909,132	904,852
Michigan	2,472,931	2,210,646
Minnesota	6,765,968	5,386,882
Mississippi	854,029	841,110
Missouri	2,220,784	1,956,533
Montana	596,106	426,647
Nebraska	3,579,743	3,281,694
New Jersey	256,869	252,541
New Mexico	163,275	162,784
New York	2,003,628	1,605,012
North Carolina	531,132	525,277
North Dakota	2,902,811	2,411,840
Ohio	2,433,507	2,064,600
Oklahoma	1,006,510	836,959
Oregon	1,159,840	1,120,445
Pennsylvania	1,680,201	1,355,293
South Carolina	61,930	61,558
South Dakota	1,968,806	1,571,116

State	Business volume Gross	Business volume Net
	1,000 dollars	
TOTAL FARM PRODUCTS MARKETED (continued)		
Tennessee	392,574	391,217
Texas	3,175,371	2,620,836
Utah	523,774	380,434
Vermont	390,774	382,984
Virginia	254,445	249,550
Washington	2,732,649	2,420,036
West Virginia	58,382	55,373
Wisconsin	5,814,239	5,510,694
Wyoming	47,044	47,044
Other States	332,124	315,697
Foreign [4]	300,124	271.712
United States	77,946,138	69,320,846
FARM SUPPLIES PROVIDED:		
CROP PROTECTANTS		
Alabama	90,610	45,871
Arkansas	161,261	84,517
California	23,138	19,115
Colorado	41,308	26,171
Florida	16.200	15,970
Georgia	59,895	56,922
Hawaii	1,671	1,671
Idaho	34,049	16,812
Illinois	398,906	268,829
Indiana	235,406	164,213
Iowa	463,370	369,544
Kansas	136,721	92,939
Kentucky	44,466	40,096
Louisiana	64,795	33,279
Maryland	20,813	18,783
Massachusetts	2,433	2,346
Michigan	40,721	29,633
Minnesota	340,786	286,763
Mississippi	58,812	57,892
Missouri	86,274	67,803
Montana	46,680	30,907
Nebraska	191,704	152,777
New York	16,409	13,411
North Dakota	140,348	106,599
Ohio	94,079	82,396
Oklahoma	27,256	19,544
Oregon	37,742	26,900
Pennsylvania	12,576	12,041
South Dakota	132,044	102,895

Continued

Appendix Table 2— **Cooperative business volume[1] by commodity and state, 1995[2]** (continued)

State	Business volume Gross	Business volume Net
	1,000 dollars	
CROP PROTECTANTS (Continued)		
Tennessee	123,169	68,002
Texas	76,139	57,035
Utah	20,316	9,928
Virginia	22,290	18,857
Washington	51,958	37,213
West Virginia	3,165	2,861
Wisconsin	169,996	117,440
Wyoming	15,357	4,969
Other States	75,428	67,434
Foreign [4]	33,816	3,307
United States	**3,612,107**	**2,627,685**
FEED		
Alabama	188,607	171,139
Arkansas	152,189	94,331
California	166,732	131,843
Colorado	47,593	36,481
Florida	84,930	83,125
Georgia	247,388	245,663
Hawaii	17,428	5,798
Idaho	40,105	21,789
Illinois	275,550	202,332
Indiana	285,714	140,275
Iowa	1,020,081	778,024
Kansas	262,819	177,338
Kentucky	57,694	47,825
Louisiana	49,836	30,736
Maryland	40,711	36,397
Massachusetts	32,898	31,623
Michigan	64,578	60,800
Minnesota	617,285	463,391
Mississippi	75,218	57,462
Missouri	233,188	188,749
Montana	23,279	17,714
Nebraska	225,110	157,884
New York	138,048	123,817
North Dakota	59,887	40,797
Ohio	131,299	128,663
Oklahoma	81,050	59,974
Oregon	108,220	42,512
Pennsylvania	117,973	110,069
South Dakota	151,959	110,603
Tennessee	202,128	118,521
Texas	157,238	127,809
Utah	78,705	77,833
FEED (Continued)		
Virginia	102,796	88,793
Washington	87,398	33,320
West Virginia	16,112	13,721
Wisconsin	397,122	268,351
Wyoming	1,607	1,807
Other States	465,634	427,750
Foreign [4]	133,127	61,953
United States	**6,639,436**	**5,017,012**
FERTILIZER		
Alabama	126,082	69,972
Arkansas	168,321	90,385
California	77,151	75,906
Colorado	114,665	80,437
Florida	165,604	41,809
Georgia	81,403	74,541
Hawaii	20,878	2,402
Idaho	59,784	32,329
Illinois	794,485	414,224
Indiana	555,430	264,877
Iowa	800,698	491,633
Kansas	495,982	339,456
Kentucky	147,336	98,983
Louisiana	52,212	28,417
Maryland	31,673	28,944
Massachusetts	4,354	4,193
Michigan	69,044	46,447
Minnesota	613,307	379,525
Mississippi	69,878	65,956
Missouri	370,395	226,764
Montana	91,067	61,022
Nebraska	386,904	288,337
New York	24,979	24,097
North Dakota	348,456	208,504
Ohio	188,759	129,446
Oklahoma	147,770	104,914
Oregon	63,669	42,270
Pennsylvania	22,324	21,549
South Dakota	227,186	145,290
Tennessee	237,085	125,032
Texas	243,092	158,113
Utah	31,280	20,160
Virginia	67,174	61,034
Washington	46,572	30,394
West Virginia	9,279	8,462

Continued

Appendix Table 2— Cooperative business volume [1] by commodity and State, 1995 [2] (continued)

State	Business volume Gross	Business volume Net
	7.000 dollars	
FERTILIZER (continued)		
Wisconsin	323,328	181,176
Wyoming	27,418	9,080
Other States	131,246	118,044
Foreign [4]	475,446	97,992
United States	**7,911,716**	**4,692,116**
PETROLEUM		
Alabama	7,626	7,400
Arkansas	105,198	62,597
California	7,054	6,984
Colorado	209,945	124,523
Florida	3,449	3,449
Georgia	7,983	7,983
Hawaii	488	488
Idaho	122,121	61,515
Illinois	634,458	377,794
Indiana	369,870	238,527
Iowa	705,653	426,448
Kansas	884,936	317,091
Kentucky	81,362	64,413
Louisiana	20,533	13,867
Maryland	62,309	56,085
Massachusetts	25,577	21,165
Michigan	145,745	70,835
Minnesota	556,398	461,857
Mississippi	20,876	19,614
Missouri	511,977	361,768
Montana	174,238	128,565
Nebraska	404,901	276,656
New York	173,518	143,233
North Dakota	296,656	228,075
Ohio	112,636	91,873
Oklahoma	261,547	90,505
Oregon	142,690	93,987
Pennsyivania	152,812	126,512
South Dakota	306,112	220,221
Tennessee	101,926	64,691
Texas	157,682	106,931
Utah	78,342	15,879
Virginia	111,486	94,938
Washington	159,598	115,918
West Virginia	27,091	25,351
Wisconsin	486,518	394,295
Wyoming	100,816	55,279

State	Business volume Gross	Business volume Net
	1,000 dollars	
PETROLEUM (Continued)		
Other States	**205,966**	174,516
Foreign [4]	195,842	59,064
United States	**8,133,935**	**5,210,892**
SEED		
Alabama	47,398	19,806
Arkansas	36,701	21,695
California	19,393	19,393
Colorado	3,192	3,192
Florida	7,493	5,818
Georgia	15,707	14,987
Hawaii	313	313
Idaho	12,646	6,127
Illinois	59,589	39,775
Indiana	44,115	25,173
Iowa	60,239	38,786
Kansas	10,113	10,113
Kentucky	22,695	20,591
Louisiana	20,508	10,676
Maryland	10,641	9,656
Massachusetts	2,332	2,279
Michigan	11,536	11,228
Minnesota	47,612	40,229
Mississippi	13,682	13,682
Missouri	49,511	22,475
Montana	5,933	4,512
Nebraska	9,279	7,021
New York	8,006	7,656
North Dakota	24,448	22,272
Ohio	20,207	20,207
Oklahoma	4,306	4,306
Oregon	12,782	12,782
Pennsylvania	7,015	6,707
South Dakota	13,396	10,905
Tennessee	53,807	33,400
Texas	16,067	16,067
Utah	2,387	2,387
Virginia	21,585	19,635
Washington	19,739	19,029
West Virginia	4,119	3,701

Continued

Appendix Table 2— **Cooperative business volume [1] by commodity and State, 1995 [2] (continued)**

State	Business volume Gross	Net	State	Business volume Gross	Net
	1,000 *dollars*			1,000 *dollars*	
SEED (continued)			MISCELLANEOUS SUPPLIES [7] (continued)		
Wisconsin	33,358	23,729	Wisconsin	232,943	215,918
Wyoming	809	591	Wyoming	29,378	27,610
Other States	34,238	30,889	Other States	271,607	244,816
Foreign [4]	4,289	912	Foreign [4]	30,231	7,873
United States	790,984	582,702	United States	3,876,369	3,082,977
MISCELLANEOUS SUPPLIES'			TOTAL FARM SUPPLIES		
Alabama	92,211	80,775	Alabama	552,534	394,963
Arkansas	128,148	88,907	Arkansas	749,818	442,432
California	187,328	91,990	California	460,794	345,232
Colorado	54,258	45,473	Colorado	470,960	316,277
Florida	95,318	95,312	Florida	372,993	245,482
Georgia	82,718	79,168	Georgia	495,092	479,263
Hawaii	8,833	5,109	Hawaii	49,410	15,781
Idaho	41,110	35,895	Idaho	309,816	174,467
Illinois	149,049	80,274	Illinois	2,312,037	1,383,228
Indiana	88,593	48,692	Indiana	1,557,128	881,757
Iowa	200,089	148,125	Iowa	3,250,110	2,252,561
Kansas	114,831	80,243	Kansas	1,905,403	1,017,180
Kentucky	70,440	60,319	Kentucky	423,992	332,226
Louisiana	49,484	34,051	Louisiana	257,349	151,025
Maryland	35,788	32,288	Maryland	201,915	182,153
Massachusetts	23,748	23,065	Massachusetts	91,340	84,671
Michigan	90,392	76,377	Michigan	422,016	295,321
Minnesota	249,235	198,647	Minnesota	2,424,623	1,824,412
Mississippi	45,298	45,296	Mississippi	283,761	259,901
Missouri	107,928	67,209	Missouri	1,359,271	934,768
Montana	49,402	45,445	Montana	390,599	288,165
Nebraska	93,557	75,734	Nebraska	1,311,455	958,409
New York	187,310	136,042	New York	528,270	448,256
North Dakota	115,151	107,019	North Dakota	984,947	713,266
Ohio	85,258	66,594	Ohio	632,236	519,178
Oklahoma	42,350	31,687	Oklahoma	564,280	310,929
Oregon	112,625	108,711	Oregon	477,728	327,162
Pennsylvania	100,371	96,340	Pennsylvania	413,071	373,217
South Dakota	77,879	68,416	South Dakota	908,576	658,329
Tennessee	165,714	97,545	Tennessee	883,828	507,192
Texas	99,582	80,374	Texas	749,800	546,329
Utah	43,955	41,318	Utah	254,985	167,505
Virginia	155,407	115,407	Virginia	480,738	398,665
Washington	105,062	74,089	Washington	470,327	309,962
West Virginia	28,062	24,824			

Continued

Appendix Table 2— **Cooperative business volume [1] by commodity and State, 1995 [2]** (continued)

State	Business volume Gross	Net
	1,000 dollars	
TOTAL FARM SUPPLIES (continued)		
West Virginia	87,828	78,919
Wisconsin	1,643,265	1,200,910
Wyoming	175,384	99,336
Other States	1,184,118	1,063,453
Foreign [4]	872,750	231,102
United States	30,964,547	21,213,384
SERVICES PROVIDED: [8]		
Alabama	15,280	15,260
Arizona	28,633	28,633
Arkansas	125,359	125,359
California	399,299	399,299
Hawaii	10,355	10,355
Illinois	202,054	202,054
Iowa	219,954	219,954
Kansas	107,691	107,891
Louisiana	21,839	21,839
Maryland	3,895	3,895
Michigan	72,066	72,066
Minnesota	211,144	211,144
Mississippi	55,214	55,214
New Mexico	3,683	3,663
New York	201,946	201,946
North Carolina	20,916	20,916
North Dakota	46,506	46,506
Ohio	90,588	90,588
Oklahoma	37,192	37,192
Pennsylvania	40,944	40,944
Texas	340,518	340,518
Washington	154,096	154,096
Wisconsin	88,871	88,871
Other States	785,794	785,794
United States	3,284,017	3,284,017
TOTAL:		
Alabama	1,584,806	1,380,403
Alaska	52,313	41,846
Arizona	774,972	721,816
Arkansas	2,047,625	1,732,551
California	9,565,402	8,890,968
Colorado	1,111,800	924,076
Connecticut	135,552	126,710
Delaware	94,375	86,123
Florida	2,687,777	2,498,745
Georgia	1,305,067	1,282,038

State	Business volume Gross	Net
	1,000 dollars	
TOTAL: (continued)		
Hawaii	152,372	118,743
Idaho	1,174,433	1,032,266
Illinois	6,077,801	5,021,399
Indiana	3,539,946	2,492,001
Iowa	10,056,777	7,995,126
Kansas	4,795,699	3,607,457
Kentucky	1,247,313	1,125,812
Louisiana	733,316	623,311
Maine	235,597	226,460
Maryland	427,835	396,489
Massachusetts	1,008,168	997,220
Michigan	2,967,013	2,578,034
Minnesota	9,401,735	7,422,439
Mississippi	1,193,004	1,156,226
Missouri	3,780,417	3,091,663
Montana	993,521	721,629
Nebraska	5,006,270	4,355,176
New Jersey	392,934	373,128
New Mexico	179,428	178,066
New York	2,733,844	2,255,214
North Carolina	802,832	760,505
North Dakota	3,934,263	3,171,612
Ohio	3,156,330	2,674,366
Oklahoma	1,607,982	1,185,081
Oregon	1,683,264	1,493,302
Pennsylvania	2,134,216	1,769,454
South Carolina	276,064	270,859
South Dakota	2,922,705	2,274,768
Tennessee	1,304,892	926,899
Texas	4,265,690	3,507,682
Utah	810,199	579,378
Vermont	503,741	466,653
Virginia	771,113	664,145
Washington	3,357,072	2,884,094
West Virginia	146,921	135,003
Wisconsin	7,546,376	6,800,475
Wyoming	223,226	147,178
Other States	117,810	110.646
Foreign [4]	1,172,874	502,814
U.S.	112,194,702	93,818,247

See footnotes next page

Footnotes to appendix Table 2.

---

[1] Data covering operations of cooperatives whose business years ended in 1995. Includes independent local cooperatives, federations, centralized regional cooperatives, and cooperatives with mixed organizational structures. The volume of products marketed is allocated to the State in which they were originated and the volume of farm supplies is allocated to the State in which they were sold; service volume and other income is allocated to the State of origin when services relate to farm products marketed or to the State of destination when related to farm supplies sold.

[2] Gross business volume includes sales between cooperatives. Net business volume excludes sales between cooperatives. States listed are those where more than two cooperatives handle the commodity or farm supply or where disclosure is not a problem. Totals may not add due to rounding.

[3] Revised.

[4] 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.

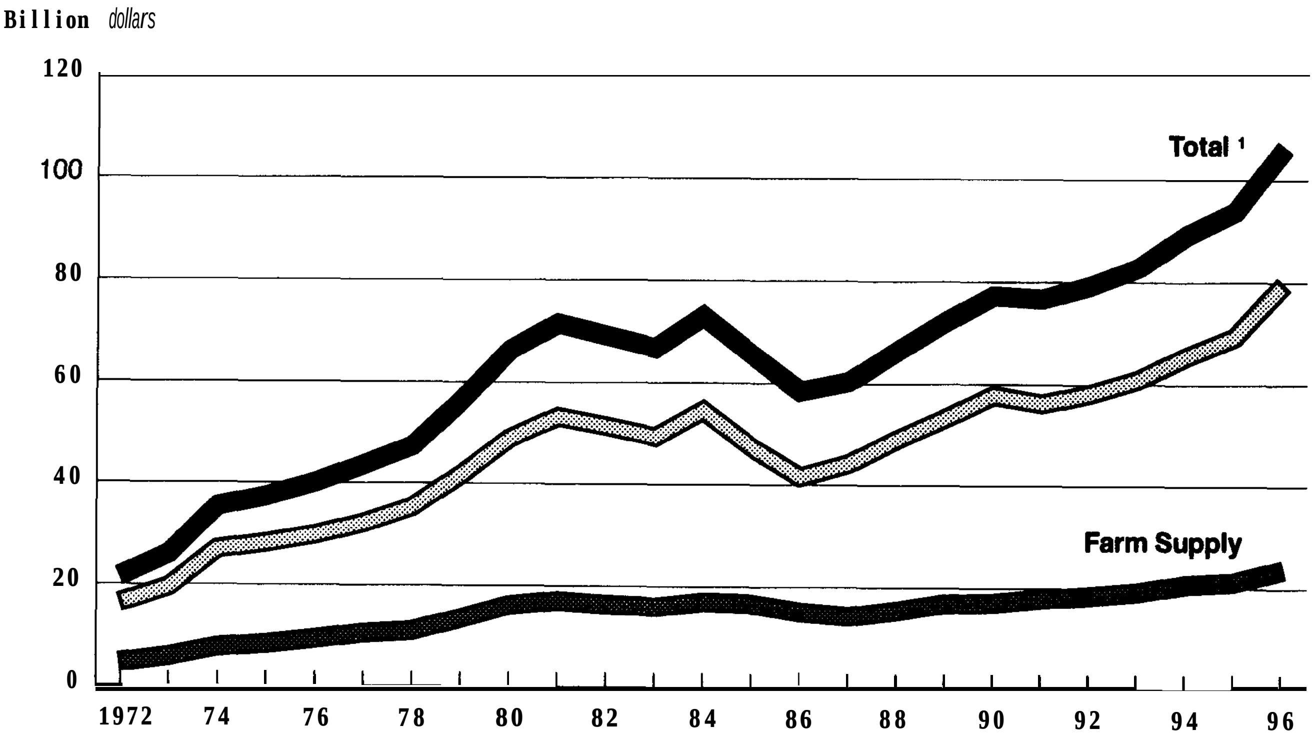
[5] Includes eggs, turkeys, ratite, squab, and related products.

[6] Includes forest products, hay, hops, nursery stock, fish, coffee, seed marketed for growers, and other farm products not separately classified plus manufactured food products and resale items marketed by cooperatives.

[7] 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.

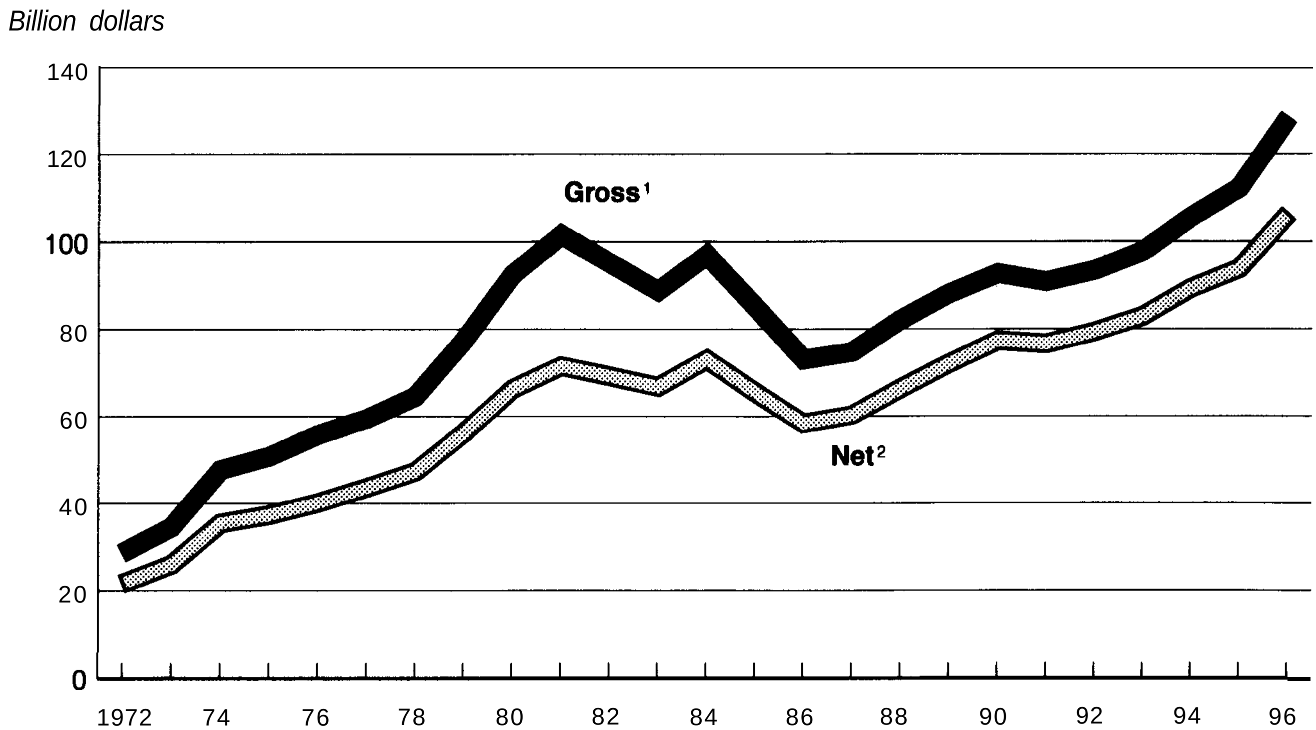
[8] Income from services related to marketing and purchasing activities not included in these volumes.

Appendix Figure 1— **Cooperatives' Net Business Volume, 1972-96**



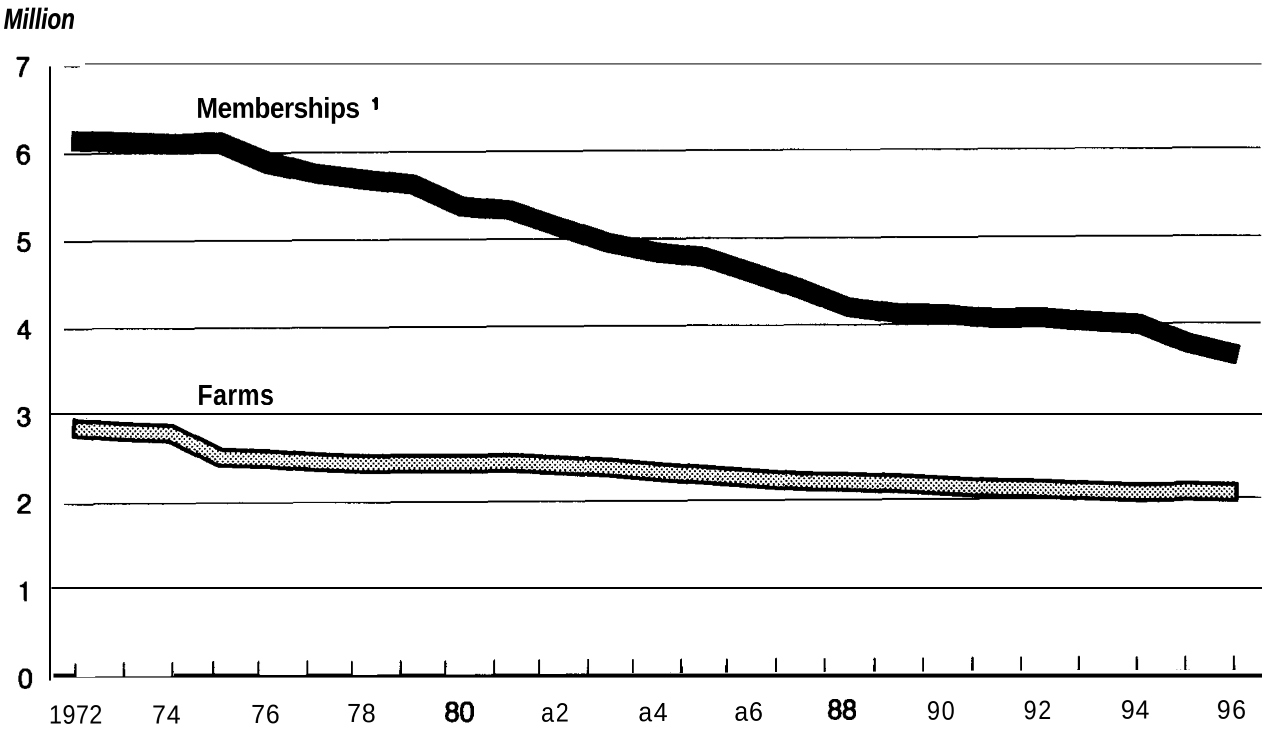
[1] Total includes value of related services and other income.

Appendix Figure 2— **Cooperatives' Gross and Net Business Volumes, 1972-96**



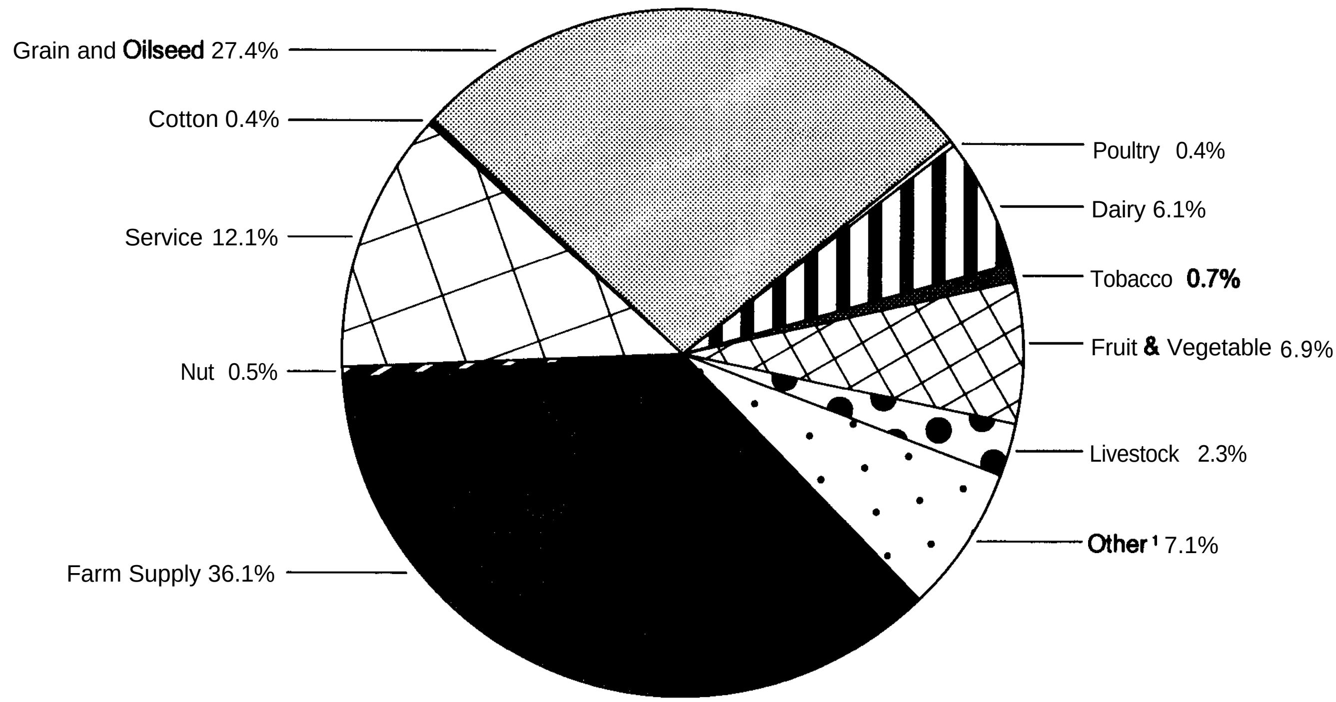
[1] Includes intercooperative business. [2] Excludes intercooperative business.

Appendix Figure 3— **U.S. Farms and Farmer Cooperative Memberships, 1972-96**



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

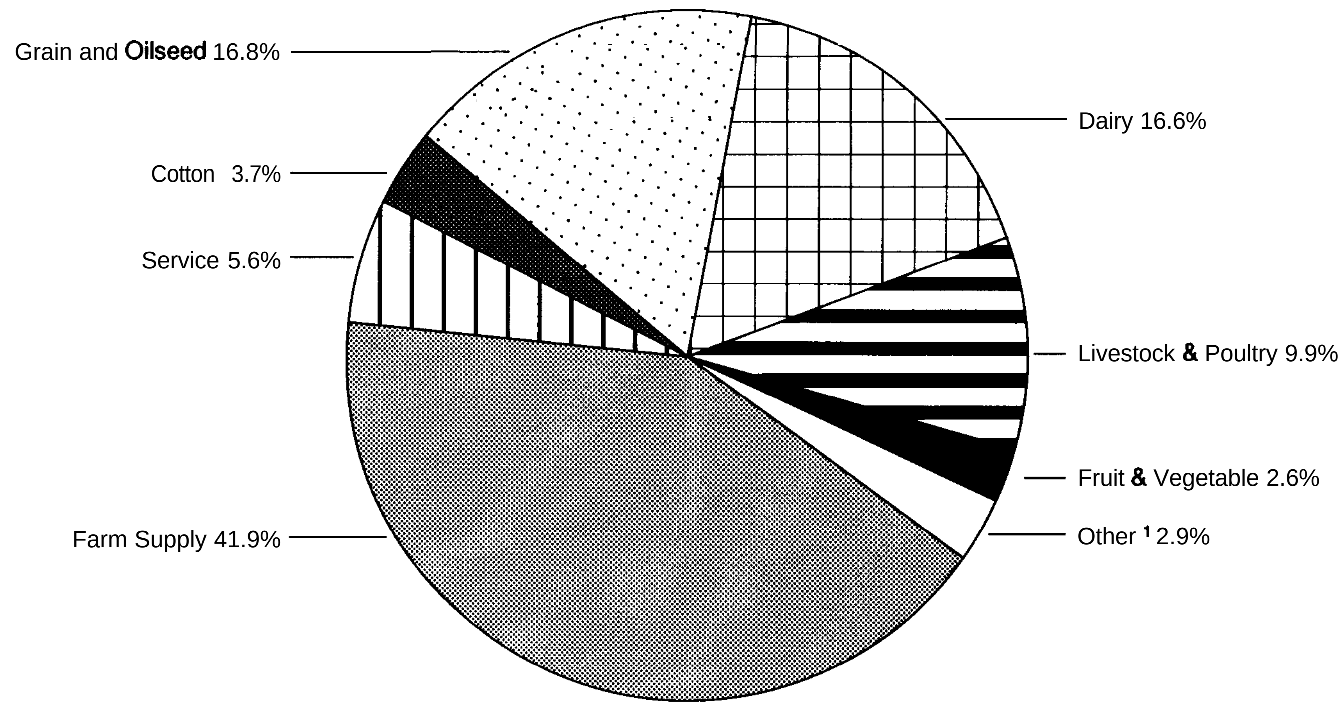
Appendix Figure 4— **Distribution of Farmer Cooperatives by Type of Cooperative, 1996**



Percent based on 3,884 cooperatives.

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

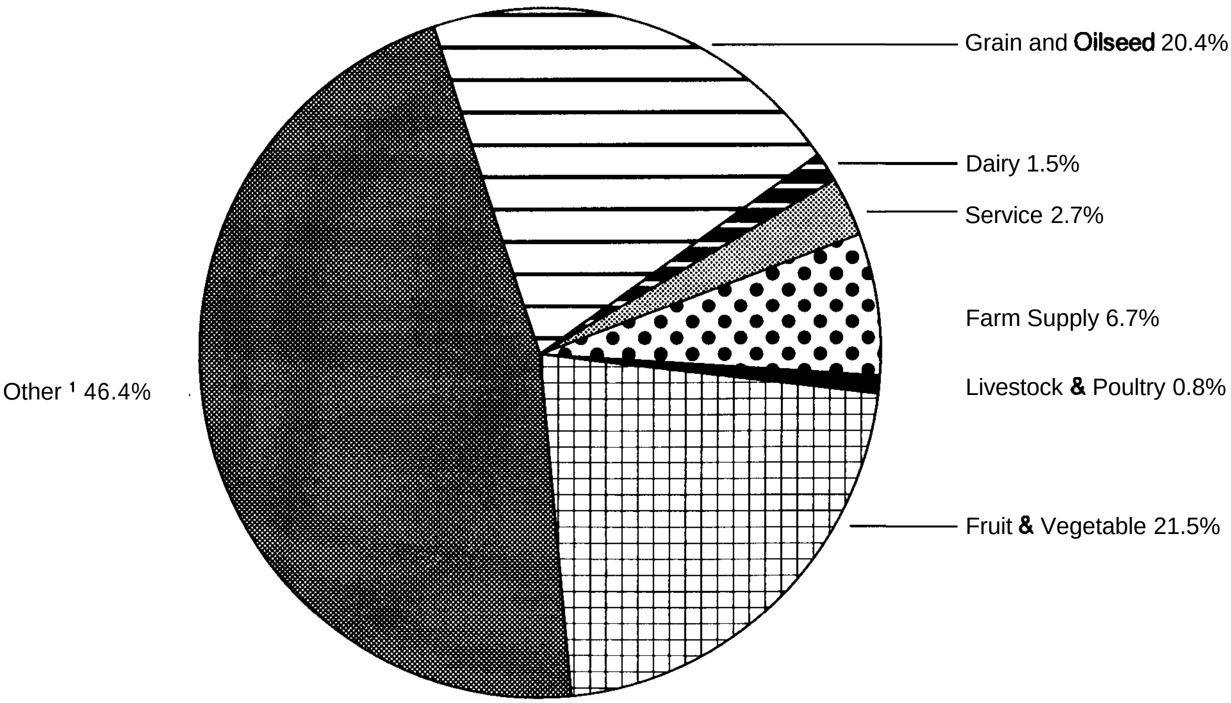
Appendix Figure 5— **Distribution of Net Income by Type of Cooperative, 1996**



Percent based on total net income of $2.25 billion.

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

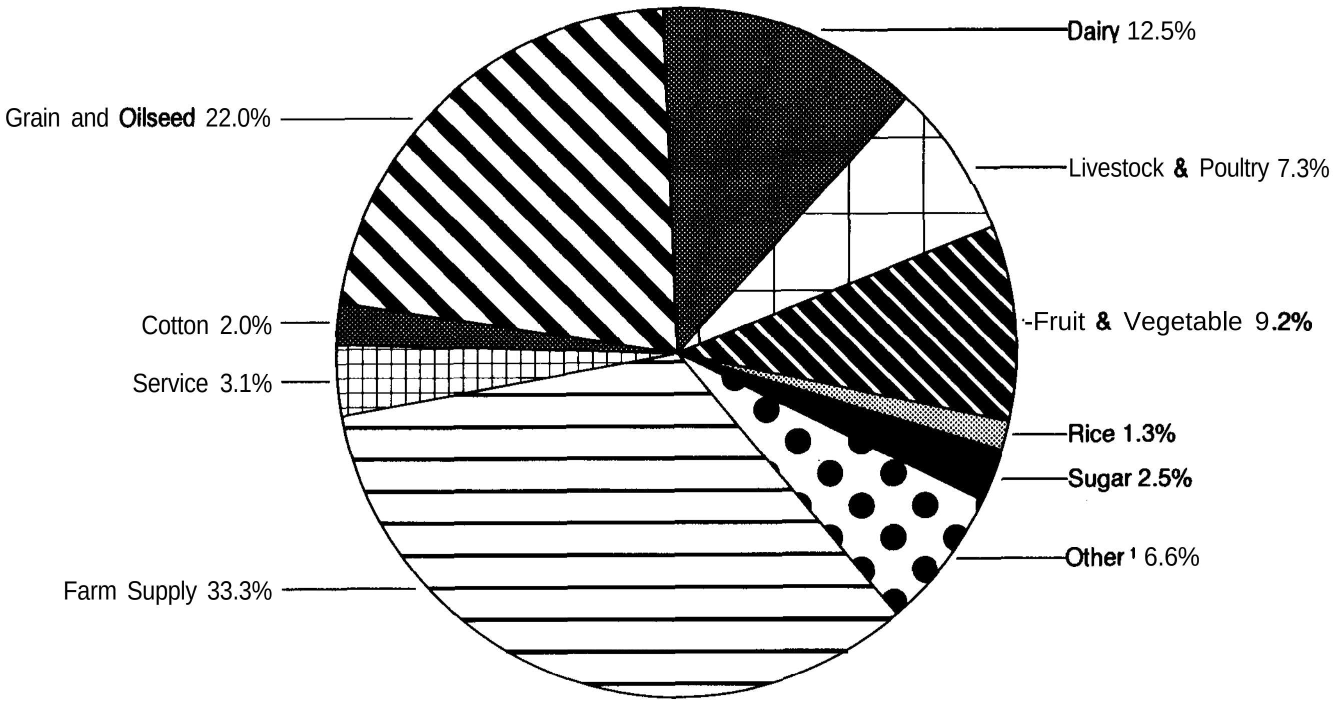
Appendix Figure 6— **Distribution of Losses by Type of Cooperative, 1996**



Percent based on losses of $187.8 million.

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

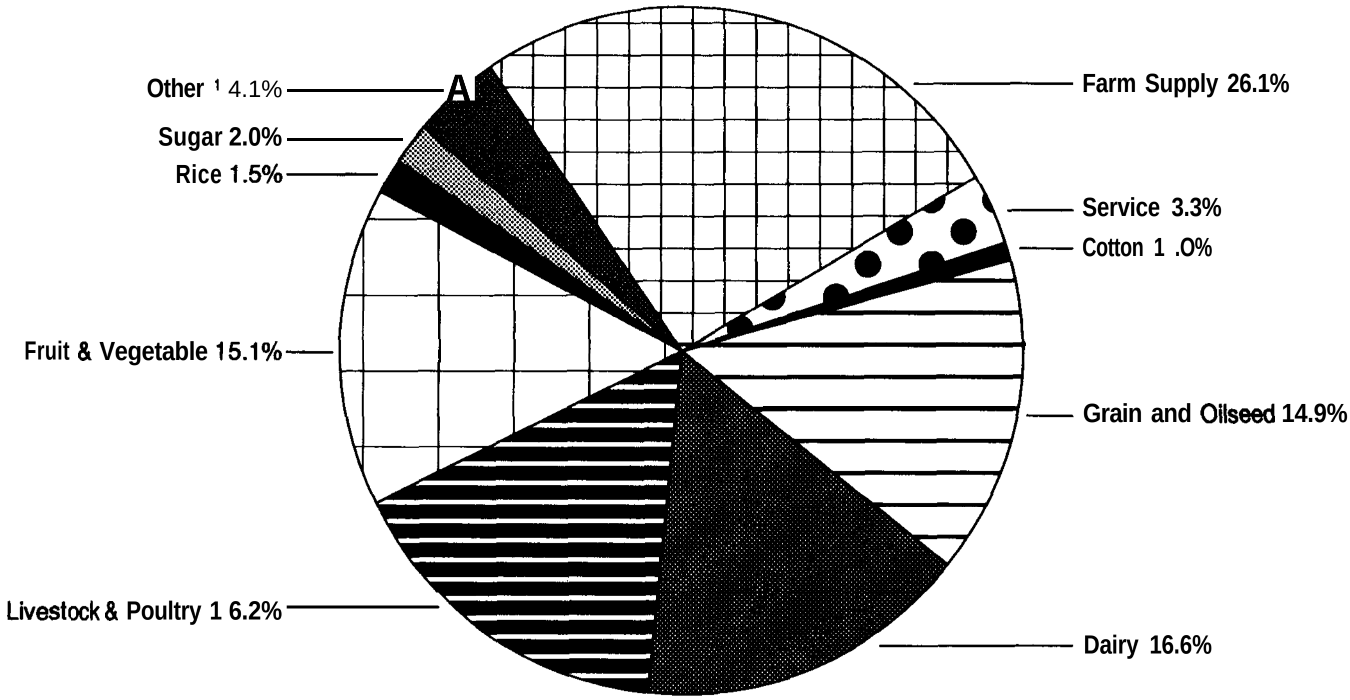
Appendix Figure 7— **Distribution of Net Worth by Type of Cooperative, 1996**



Percent based on total net worth of $17.4 billion.

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

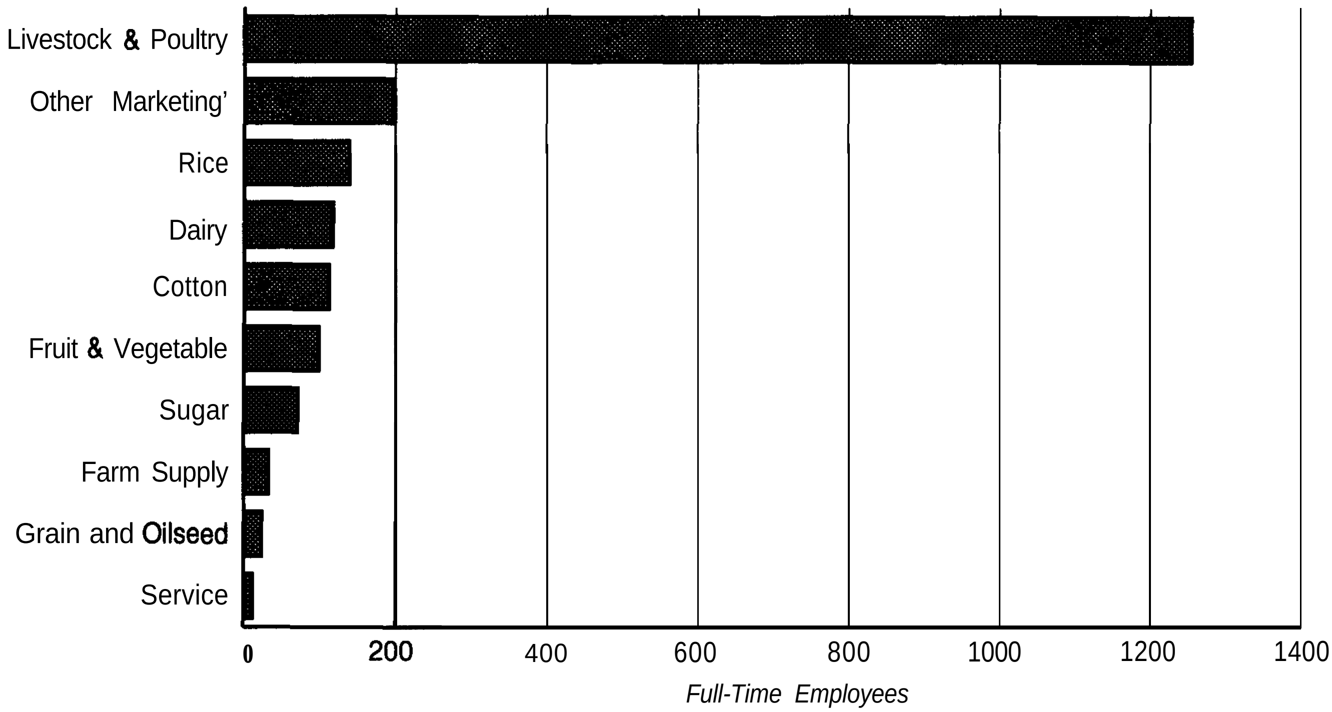
Appendix Figure 8— Distribution of Full-Time Employees by Type of Cooperative, 1996



Percent based on 174,795 full-time employees.

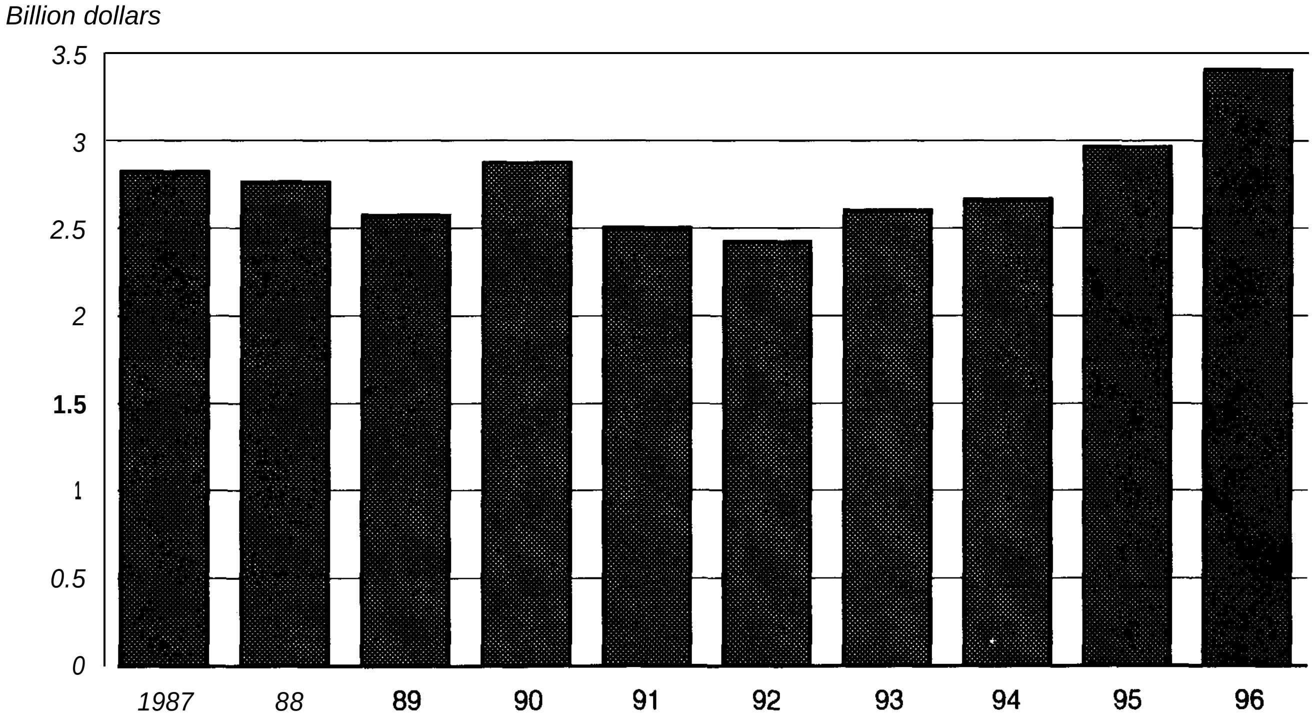
[1] Includes dry bean and pea, nut, sugar, tobacco, wool and mohair, and other miscellaneous marketing cooperatives.

Appendix Figure 9— **Average Number of Full-Time Employees Per Cooperative, by Co-op Type, 1996**



[1] Includes dry bean and pea, nut, tobacco, wool and mohair, and other miscellaneous marketing co-ops.

Appendix Figure 10— Cooperatives' Investments in Other Cooperatives, 1987-96



U.S. Department of Agriculture
Rural Business-Cooperative Service
1400 Independence Ave., SW, Stop 3257
Washington, D.C. 20250-3257

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

The 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.